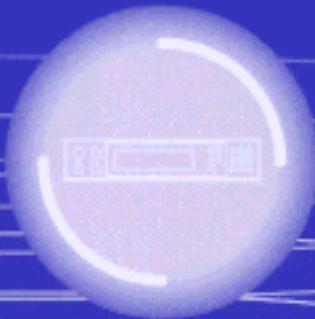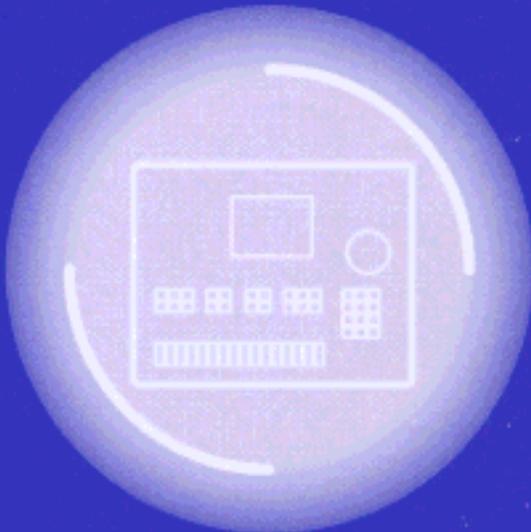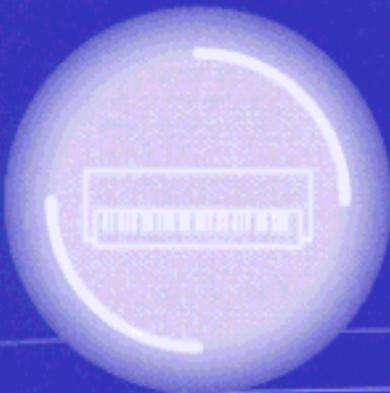MUSIC SEQUENCER

QY700

OWNER'S MANUAL

YAMAHA

GENERAL MIDI XG

FCC INFORMATION (U.S.A)

1. **IMPORTANT NOTICE : DO NOT MODIFY THIS UNIT!**
   This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

2. **IMPORTANT:** When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3. **NOTE:** This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the user's manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

   Relocate either this product or the device that is being affected by the interference.

   Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

   In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

   If these corrective measures do not produce satisfactory results, please contact the your local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park, CA 90620

* The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

ADVARSEL!
Lithiumbatteri—Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandoren.

VARNING
Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS
Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

NEDERLAND
NETHERLAND

● Dit apparaat bevat een lithium batterij voor geheugen back-up.
● This apparatus contains a lithium battery for memory back-up.

● Raadpleeg uw leverancier over de verwijdering van de batterij op het moment dat u het apparaat aan het einde van de levensduur afdankt of de volgende Yamaha Service Afdeling:
   Yamaha Music Nederland Service Afdeling
   Kanaalweg 18-G, 3526 KL UTRECHT
   Tel. 030-2828425
● For the removal of the battery at the moment of the disposal at the end of the service life please consult your retailer or Yamaha Service Center as follows:
   Yamaha Music Nederland Service Center
   Address : Kanaalweg 18-G, 3526 KL UTRECHT
   Tel   : 030-2828425

● Gooi de batterij niet weg, maar lever hem in als KCA.
● Do not throw away the battery. Instead, hand it in as small chemical waste.

SPECIAL MESSAGE SECTION

This product utilizes batteries or an external power supply (adapter). DO NOT connect this product to any power supply or adapter other than one described in the manual, on the name plate, or specifically recommended by Yamaha.

WARNING: Do not place this product in a position where anyone could walk on, trip over, or roll anything over power or connecting cords of any kind. The use of an extension cord is not recommended! If you must use an extension cord, the minimum wire size for a 25' cord (or less) is 18 AWG. NOTE: The smaller the AWG number, the larger the current handling capacity. For longer extension cords, consult a local electrician.

This Product should be used only with the components supplied or; a cart, rack, or stand that is recommended by Yamaha. If a cart, etc., is used, please observe all safety markings and instructions that accompany the accessory product.

SPECIFICATIONS SUBJECT TO CHANGE: The information contained in this manual is believed to be correct at the time of printing. However, Yamaha reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

This product, either alone or in combination with an amplifier and headphones or speaker/s, may be capable of producing sound levels that could cause permanent hearing loss. DO NOT operate for long periods of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist. **IMPORTANT:** The louder the sound, the shorter the time period before damage occurs.

Some Yamaha products may have benches and/or accessory mounting fixtures that are either supplied with the product or as optional accessories. Some of these items are designed to be dealer assembled or installed. Please make sure that benches are stable and any optional fixtures (where applicable) are well secured BEFORE using. Benches supplied by Yamaha are designed for seating only. No other uses are recommended.

NOTICE: Service charges incurred due to lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacturer's warranty, and are therefore the owners responsibility. Please study this manual carefully and consult your dealer before requesting service.

ENVIRONMENTAL ISSUES: Yamaha strives to produce products that are both user safe and environmentally friendly. We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

Battery Notice: This product MAY contain a small non-rechargeable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

This Product may also use "household" type batteries. Some of these may be rechargeable. Make sure that the battery being charged is a rechargeable type and that the charger is intended for the battery being charged.
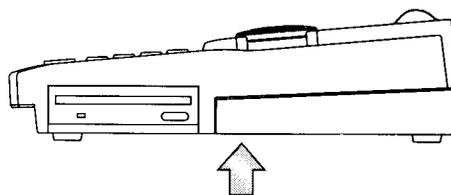
When installing batteries, do not mix old batteries with new, or with batteries of a different type. Batteries MUST be installed correctly. Mismatches or incorrect installation may result in overheating and battery case rupture.

Warning: Do not attempt to disassemble, or incinerate any battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by the laws in your area.

Note: Check with any retailer of household type batteries in your area for battery disposal information.

Disposal Notice: Should this Product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc. If your dealer is unable to assist you, Please contact Yamaha directly.

NAME PLATE LOCATION: The name Plate is located on the bottom of the product. The model number, serial number, power requirements, etc., are located on this plate. You should record the model number, serial number, and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.

Model _____

Serial No. _____

Purchase Date _____

PLEASE KEEP THIS MANUAL

YAMAHA

QY700

MUSIC SEQUENCER

Owner's Manual

Reference

Thank you for purchasing the Yamaha QY700 music sequencer.

The QY700 is a 20 song / 32 track sequencer with 1/480th quarter note resolution featuring a built-in XG- and GM-compatible high-quality AWM2 tone generator, all contained in a newly-designed package. The Style Sequencer functions that were so popular on the QY300 etc. have been enhanced and made easier to use. A large LCD display also makes operation easier and more intuitive.

In order to take full advantage of the QY700's functionality, please make good use of this owner's manual. Once you have read it, keep it in a safe and convenient place for reference should any questions arise later.

Features of the QY700

Powerful sequencer functionality

The sequencer of the QY700 provides 32 sequence tracks and 16 pattern tracks, and up to 110,000 notes of storage capacity for professional-level sequencing power. Note timing resolution is 1/480th of a quarter note. Memory is backed up, so your data will not disappear when the power is turned off. Play Effect functions and a full complement of editing jobs allow you to edit and modify your data as desired. Play Effects provide a Groove Quantize function that lets you instantly produce a variety of different groove feelings. Also provided are jobs such as Chord Sort and Chord Separate, convenient for entering guitar strokes.

Functional music production environment with Songs, Patterns, and Phrases

The QY700's Auto-Accompaniment functionality provides a highly practical music production environment that lets you use patterns and phrases to create your song.

Easy operation with large display, dials, function buttons, and direct buttons

The large 320×240 dot full-graphic display provides you with plenty of information for efficient music-making. For example, playback data can be viewed not only as an event list, but also graphically in a track-view or piano-roll display.

The jog dial provides an easy way to modify data, and the shuttle dial lets you rewind/fast-forward intuitively through data just as on a VTR.

Full assortment of preset phrases

The QY700 provides a vast 3,876 types of preset phrases from all musical genres. All preset phrases have been carefully selected for immediate musical usefulness. Simply by combining preset phrases into patterns, you can create backing data with infinite variety.

Undo/redo function

The QY700 provides an Undo/Redo job. Even if recording, editing, or job execution has caused your important data to disappear, you will always be able to recover it.

XG tone generator for rich expressiveness

The QY700 features an XG-compatible tone generator with 491 high-quality voices and 3 high-quality effect systems, providing the rich expressiveness that you expect from XG.

Wide range of compatibility

The QY700's tone generator section is compatible with XG and with the GM system level 1 tone generator format. The sequencer section is compatible with ESEQ and SMF (Standard MIDI File) formats 0/1. Playback data that was created on the QS300 music synthesizer can also be played back on the QY700. You can also playback commercially available "XG-compatible song data" for additional enjoyment.

GENERAL MIDI

GM System Level 1

"GM System Level 1" is a standard specification that defines the arrangement of voices in a tone generator and its MIDI functionality, ensuring that data can be played back with substantially the same sounds on any GM-compatible tone generator, regardless of its manufacturer or model.
Tone generators and song data that meet the "GM System Level 1" bear this GM logo.

XG

XG

"XG" is a tone generator format that expands the voice arrangement of the "GM System Level 1" specification to meet the ever-increasing demands of today's computer peripheral environment, providing richer expressive power while maintaining upward compatibility of data. "XG" greatly expands "GM System Level 1" by defining the ways in which voices are expanded or edited and the structure and type of effects.
When commercially available song data bearing the XG logo is played back on a tone generator which bears the XG logo, you will enjoy a full musical experience that includes unlimited expansion voices and effect functions.

How to use the manuals

The documentation for the QY700 consists of the following two manuals. Understand the role of each manual, and refer to them as necessary.

Owner's Manual: Reference (this manual)

This explains precautions for use, how to make connections, and all parameters and commands. Use this manual like a dictionary whenever you need to.

Chapter 1. BASIC CONCEPTS
Chapter 2. SONG MODE
Chapter 3. VOICE MODE
Chapter 4. EFFECT MODE
Chapter 5. PATTERN MODE
Chapter 6. UTILITY MODE
Chapter 7. DISK MODE

"Song mode" and "Pattern mode" have several functions in common.
In this manual, explanations for these common functions is given in greatest detail in chapter 2 "SONG MODE". Some of the overlapping explanation in chapter 5 "PATTERN MODE" is omitted. In such cases, the appropriate page of chapter 2 "SONG MODE" is indicated so that you can refer to it.

Owner's Manual: QY700 Reference Listings

This is a booklet that contains various lists such as the Voice list, Preset Phrase list, Effect list, Chord Type list, MIDI data format, and MIDI implementation chart.

Printing conventions in this manual

This manual uses the following icons to indicate buttons and to distinguish different types of information.

SONG   This indicates a panel button. The characters in the box indicate the characters printed on the panel. Buttons for which there are no characters printed on the panel are indicated by the symbol printed on the panel, such as ◄ . In the case of the function buttons F1 – F6 , the function corresponding to each button is also given; for example, F3 (Effect).

[Explanation]
This icon indicates an explanation of the function.

[Setting values]
This icon indicates the range of values that can be set for that function.

[Procedure]
This icon indicates the actual procedure for using the function.

[Supplementary comments]
This icon indicates supplementary explanations related to the function, examples of use, and hints.

[Caution]
This icon indicates a caution. To avoid erasing or damaging important data, be sure to read such sections.

\+   This icon means that an operation needs to be performed while doing something else. For example, <kbd>SHIFT</kbd> + <kbd>YES</kbd> means "hold down <kbd>SHIFT</kbd> and press <kbd>YES</kbd> ".

/   This icon means "or". For example, <kbd>NO</kbd> / <kbd>YES</kbd> means that you should press either the <kbd>NO</kbd> or the <kbd>YES</kbd> key.

→   This icon indicates the sequence in which buttons must be pressed. For example, numeric keys → <kbd>↵</kbd> means that you must use the numeric keys to select a value and then press the <kbd>↵</kbd> button.

▼   This icon indicates the result of an operation.

→ p.●●   This indicates the page on which a related function or item is explained. Refer to these pages as necessary.

Finding the information that you need

In order to find the information that you need, you can make use of the following pages.

Table of contents (→ p.9)

Locate the desired information within the flow of the entire manual.

Front and rear panels (→ p.12)

Here you can read about the name and location of each button and control, and read about their function.

Function tree (→ p.34)

This lets you locate the desired information within the structure of the command hierarchy.

Glossary (→ p.324)

This section contains unfamiliar terms or phrases in alphabetical order with their explanations.

Index (→ p.328)

This lets you search alphabetically for unfamiliar terms to find pages on which they are discussed and pages on which related topics appear.

Table of contents

Chapter 7. DISK MODE

APPENDIX

1. Front and rear panels

Top panel

1. PITCH wheel

This controller is used to continuously modify the pitch or tone etc. while you play. The controller will return to the center position when you release it. (→ p.290)

2. ASSIGNABLE wheel

This controller is used to continuously modify the tone etc. while you play. You can specify how this controller will affect the sound. (→ p.290)

3. Mode keys

Use these buttons to switch between modes.

> SONG key
> Switch to Song mode. (→ p.70)
>
> PATTERN key
> Switch to Pattern mode. (→ p.198)
>
> UTILITY key
> Switch to Utility mode. (→ p.288)
>
> VOICE key
> Switch to Voice mode. (→ p.168)
>
> EFFECT key
> Switch to Effect mode. (→ p.188)
>
> DISK key
> Switch to Disk mode. (→ p.302)

4. VOLUME control

Use this to adjust the volume of the output jacks and the headphone jack.

5. CONTRAST control

Use this to adjust the contrast of the display.

6. REC (recording) indicator

This indicator will light when the ⏺ key is pressed, indicating that you are in recording mode.

7. PLAY indicator

During playback, this indicator will blink in time with the tempo.

8. LCD display

Various types of information are displayed in this 320 x 240 pixel backlit liquid crystal display. The time after which the backlight will automatically turn off can be set in Utility mode. (→ p.289)

9. SHIFT key

This button works in conjunction with other keys to perform various functions.

10. F1 – F6 function keys

Use these keys to select from the menu that appears in the bottom line of the screen.

11. EXIT key

This key moves from a sub mode or page display to the next higher level in the command hierarchy.

12. [D1] – [D5] direct keys

Use these keys to move the cursor to the setting items that are shown in the right side of the display.

13. MIDI Data monitors

The corresponding indicator will blink when MIDI data is transmitted or received at the four MIDI connectors (IN-A, IN-B, OUT-A, OUT-B). This provides a way to confirm MIDI communications.
(Note) Since MIDI Clock messages are normally being transmitted, the MIDI OUT-A/B indicators will be blinking lightly.

14. Shuttle dial

Use this to fast-forward or rewind songs or patterns. Depending on the angle to which you rotate the dial, the speed of fast-forward or rewind will change in four steps.

15. Data dial

Use this to select voices or to continuously increase/decrease a numerical value.

22. Decrement key, Increment key

19. Locate keys

17. EDIT key

20. Track keys

16. Sequencer keys

18. JOB key

21. Cursor keys

23. Numeric keypad

25. Octave keys   26. Microkeyboard   25. Octave keys   24. Enter key

16. Sequencer keys

Use these keys to playback or record songs, patterns, and phrases. The layout of the buttons is similar to that of a conventional tape recorder.

◄ (Top)	Return to the first measure of a song or pattern.
◄◄ (Rewind)	Rewind the playback measure.
►► (Forward)	Advance the playback measure.
● (Recording)	Enter recording standby mode.
■ (Stop)	Stop playback/recording.
► (Play)	Begin playback/recording.

17. EDIT key

Switch to Song Edit (→ p.129) or Phrase Edit (→ p.254).

18. JOB key

Access the Song jobs (→ p.138) or Pattern jobs (→ p.256).

19. LOC 1 (Locate 1) key
LOC 2 (Locate 2) key

In Song mode, these keys are used to move to a previously specified measure. Use SHIFT + LOC 1 / LOC 2 to store the current measure in the corresponding locate key.

20. Track keys

Use these keys to change the currently selected track, or to mute or solo specific tracks.

TRACK DOWN key TRACK UP key	These keys switch the currently selected track.
MUTE key	This mutes the playback of the currently selected track. Press the key once again to un-mute the track.
SOLO key	This mutes the playback of all tracks other than the selected track. Press the key once again to restore playback of the other tracks. Use this button when you want to hear only the selected track.

21. Cursor keys

Use these keys to move the cursor location within the display.

22. ⬇ (Decrement) key
⬆ (Increment) key

In various setting displays you can use these buttons to increase (increment) / decrease (decrement) values, or switch settings on/off. These keys are also used to reply YES or NO to an "Are you sure?" prompt.

23. Numeric keypad

Use these to enter numerical values or note values.

24. ↵ (Enter) key

Use this key to finalize a number entered by the numeric keypad, to enter the job selected by the cursor, or to execute a job etc.

25. Octave keys

These keys modify the pitch of the microkeyboard in steps of an octave.
In addition, the left octave button sets On Bass or Original Bass for a chord, and the right octave button sets chord Syncopation.

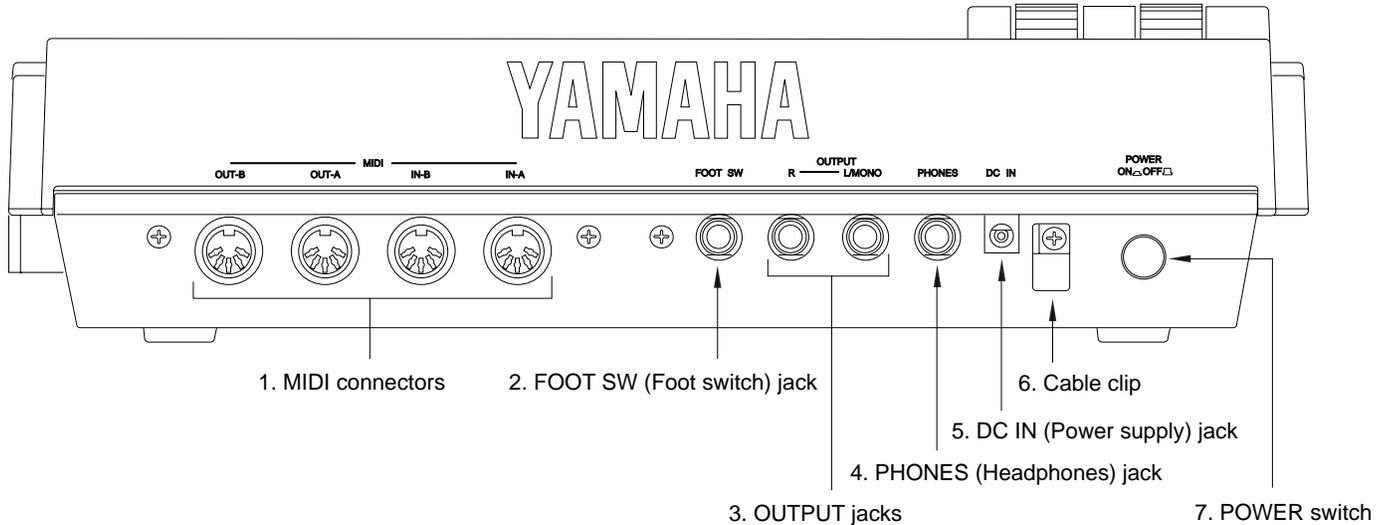|	
◁ [OCT DOWN] (Octave Down) key	Lowers the pitch of the keyboard buttons in one-octave steps.
▷ [OCT UP] (Octave Up) key	Raises the pitch of the keyboard buttons in one-octave steps.

26. Microkeyboard

These function as a keyboard for entering your performance. They are not sensitive to velocity or aftertouch. The microkeyboard are also used to specify chords and pattern sections, and to input characters.

Rear panel

1. MIDI connectors   2. FOOT SW (Foot switch) jack   6. Cable clip

5. DC IN (Power supply) jack

4. PHONES (Headphones) jack

3. OUTPUT jacks   7. POWER switch

1. MIDI connectors

These connectors are used to connect external MIDI devices via a MIDI cable. There are four MIDI connectors: IN-A, IN-B, OUT-A, and OUT-B. IN-A and IN-B are inputs, and OUT-A and OUT-B are outputs. (→ p.20)

2. FOOT SW (Foot switch) jack

A foot switch (FC4, FC5: option) can be connected to this jack. A connected foot switch can be used during performance as a sustain pedal or as a start/stop switch. (→ p.290)

3. OUTPUT jacks

These jacks are for line connections to powered speakers or a mixer. When playing in stereo, connect both jacks. When playing in mono, connect the L/MONO jack. (→ p.19)

4. PHONES (Headphones) jack

A set of headphones with a stereo phone plug can be connected to this jack. (HPE-170 or other Yamaha recommended headphones: impedance 8 – 150 ohms.) The headphone volume is adjusted by the Volume control. (→ p.19)

5. DC IN (Power supply) jack

Connect the included PA-5B AC adaptor to this jack. (→ p.18)

- Before connecting the AC adaptor, make sure that the power switch of the QY700 is turned off. First connect the AC adaptor to the power supply jack, and then plug it into an AC outlet.
- Use only the included PA-5B AC adaptor. Using other AC adaptors will cause malfunctions. Also, be sure to unplug the AC adaptor from the AC outlet if you will not be using the unit for an extended period of time.

6. Cable clip

Wrap the AC adaptor power cable around this clip as shown in the diagram. This will decrease the possibility of the power cable being pulled out accidentally.

Cable clip →

7. POWER switch

This switch turns the power on/off. The power is on when the switch is pressed in. (→ p.18)

Floppy disk drive

1. Floppy disk slot

This is where floppy disks are inserted for loading or saving data. 3.5 inch 2HD (MF2HD) or 2DD (MF2DD) floppy disks can be used. (→ p.302)

2. Disk-in-use indicator

This indicator will light while data is being read from or written to the floppy disk. Never attempt to remove the disk while this indicator is lit.

3. Eject button

Press this button to remove the floppy disk. Disks must be inserted or removed gently and firmly, and only while the access indicator is dark.

2. Disk-in-use indicator   3. Eject button

1. Floppy disk slot

• The back of a floppy disk contains a write protect tab as shown in the following illustration. When this tab is in the downward position (with the window open), it will not be possible to modify, add, or delete data. When you wish to protect important data, you should leave the tab in this position.

Write permit

Write prohibit

Write protect tab

• Be aware that Yamaha can make no guarantee regarding data damage that results from improper use.

2. Connections

In order to use the QY700, the included AC adaptor and an amp system etc. must be connected. If you use external MIDI devices or controllers, these must also be connected.

This sections explains how to make these connections.

❶ • Be sure to turn off the power before making any connections. If you make connections while the power is on, you risk damaging external equipment such as the amp or speakers.

Power supply connections

1. Make sure that the power switch of the QY700 is turned off, and connect the included AC adaptor (PA-5B) to the power supply jack.
2. Plug the AC adaptor into an AC outlet, and turn on the QY700 power switch.

❶ • Use only the included PA-5B AC adaptor. Using other AC adaptors will cause malfunctions. Also, be sure to unplug the AC adaptor from the AC outlet if you will not be using the unit for an extended period of time.

Audio equipment connections

To output the sound of the QY700, connect an amp or mixer to the output jacks.

Connection to powered speakers

Connect two powered speakers (left and right) to the output jacks (L/MONO, R).
If you are connecting only one powered speaker, use the L/MONO jack.

Connection to a mixer

Connect the output jacks (L/MONO, R) to two channels of the mixer. The channel connected to the L/MONO jack should be panned left, and the channel connected to the R jack should be panned right.
Make the same type of connections if you are connecting the QY700 to an MTR or cassette deck.

Using headphones

If you are using headphones, connect them to the rear panel PHONES (headphones) jack.
When using headphones, adjust the volume to an appropriate level that will not harm your hearing.

- Do not connect the output jacks of the QY700 to the mic input jacks of an amp or cassette deck etc. If they are connected to mic inputs, the sound quality may be impaired, and the device may be damaged. Also, when connecting the QY700 to a mixer or similar device, set the mixer channels to the Line Input position.

Connecting a foot switch

When using a separately sold FC4 or FC5 foot switch, insert the foot switch plug into the foot switch jack located on the rear panel.

FC4 or FC5

Connecting external MIDI devices

Connecting a MIDI keyboard

Realtime recording or fingered chord input will be easier if you use a MIDI keyboard.
Use a MIDI cable to connect the MIDI OUT of the external MIDI keyboard to the MIDI IN-A or IN-B connector on the rear panel.

MIDI OUT

Connecting a tone generator module

QY700 song and pattern playback data can be used to play an external tone generator module.
Use a MIDI cable to connect the MIDI OUT-A or OUT-B connector on the rear panel to the MIDI IN connector of the external MIDI device.

MIDI IN

Connecting an MTR (multi-track recorder)

Since the QY700 implements MTC (MIDI Time Code) and MMC (MIDI Machine Control), you can produce music while synchronized to an MTC- or MMC-compatible multi-track recorder.

Since the QY700 does not output MTC, you will need a device that is able to output MTC (such as the Yamaha MD4) if you wish to use MTC for synchronization. In this case, use a MIDI cable to connect the MIDI IN-A or IN-B connector of the QY700 to the MIDI OUT connector of the external device. MTC messages will be transmitted from the external device to the QY700, and the QY700 will synchronize to the clock of the external device.

If you wish to remotely control operations such as start/stop and fast-forward/rewind on an external MMC-compatible device, use a MIDI cable to connect the MIDI OUT-A or OUT-B connector of the QY700 to the MIDI IN connector of the external device. MMC messages will be transmitted from the QY700 to the external device, and the QY700 will remotely control the external device.

In this case, set MIDI Sync to "MTC:MIDI-A" or "MTC:MIDI-B" in the MIDI page of Utility mode. (→ p.291)

Synchronizing the QY700 by MTC from an external device

Controlling an external device via MMC from the QY700

Connecting two or more devices

Since the QY700 provides two sets of MIDI connectors, you can connect two or more MIDI devices.

In the example below, the rear panel MIDI IN-A is connected to a MIDI keyboard, the MIDI OUT-A to a tone generator module, and MIDI IN-B and OUT-B are connected to an MTR.

If you use MTC or MMC to control an MTR, set the Utility mode MIDI page MIDI Sync setting to "MTC:MIDI-B." (→ p.291)

If you wish to use the MIDI keyboard to record parts which use the tone generator module, set the Utility mode MIDI page Echo Back setting to "RecMonitor." (→ p.292)

3. Using the Style and Demonstration disk

Here's how to use the included "STYLE & DEMONSTRATION" disk.

Contents of the disk

- The included disk contains "STYLE," "DEMO 1" and "DEMO 2."
- "DEMO 1" and "DEMO 2" allow you to enjoy demo playback, and to playback songs while adjusting the Play Effects or Multi to experience the possibilities of the QY700.
- "STYLE" allows you to restore the factory settings of the QY700.

Listening to the demo playback

- Here's how to load a demo song file from disk and enjoy the demo playback.

- When "DEMO 1" or "DEMO 2" is loaded from disk, all internal memory will be rewritten by the demo playback data. If internal memory contains any important data that you wish to keep, save the data before loading the demo.

1. With the label facing upward, insert the disk into the floppy disk slot.
▼ Insert the disk all the way until it clicks into place.

2. Press DISK .
▼ You will enter Disk mode.

3. Press F2 (Load).
▼ You will enter Load sub-mode, and the top line of the display will indicate "DISK -- LOAD --".

4. Press [D1] (All Data).
▼ The Load All Data page will appear, and the filenames will be displayed.

5. Use the cursor keys / data dial to move the cursor to "DEMO 1" or "DEMO 2" and press ↵ .
▼ A message of "Are You Sure? (Y/N)" will appear, asking whether it is OK to erase the data in internal memory and load the data from disk.
- If you do not wish to erase the data currently in memory, press ₁/NO to halt loading. Then save the data in memory to a disk, and perform the loading procedure once again. (→ p.307)

6. Press [+1 YES] .

▼ The display will indicate "Executing..." and the data will be loaded.

7. Press [SONG] .

▼ You will return to the Song mode display.

8. Use the cursor keys to move the cursor to the song number, and use the data dial, [-1 NO] / [+1 YES] or the numeric keypad → [↵] to set the song number to 01.

9. Press [►] to playback the demo song.

▼ Playback will begin, so use the volume control to adjust the volume to a suitable level.

• Pressing [■] will stop playback.

• By changing the song number in step 8 you can playback other songs.

Restoring the factory settings

• Here's how to restore the QY700 to the factory settings.

• When you load "STYLE" from the disk, all internal memory will be rewritten to the factory settings. If internal memory contains any data that you wish to keep, save the data before loading the "STYLE" data.

1. With the label facing upward, insert the disk into the floppy disk slot.

▼ Insert the disk all the way until it clicks into place.

2. Press [DISK] .

▼ You will enter Disk mode.

3. Press [F2] (Load).

▼ You will enter Load sub-mode, and the top line of the display will indicate "DISK -- LOAD --".

4. Press ⬜ [D1] (All Data).

▼ The Load All Data page will appear, and the filenames will be displayed.

```
DISK  -- LOAD ALL DATA --
▯ > ▭ ALL DATA            ▤
▦ DEMO1   .Q7A       ▯ All Data
▦ DEMO2   .Q7A
▦ STYLE   .Q7A       ▐▶ [ Load ]

                     ▯ DISK INFORMATION
                     FILE  TOTAL   FREE
                      3   0020K  1403K
                       ▭ ALL DATA ▯ FILE
                     FILE   TOTAL
                      3   0019K  0005K
```

5. Use the cursor keys / data dial to move the cursor to "STYLE" and press ↵ .

▼ A message of "Are You Sure? (Y/N)" will appear, asking whether it is OK to erase the data in internal memory and load the data from disk.

• If you do not wish to erase the data currently in memory, press 🔲 to halt loading. Then save the data in memory to a disk, and perform the loading procedure once again. (→ p.307)
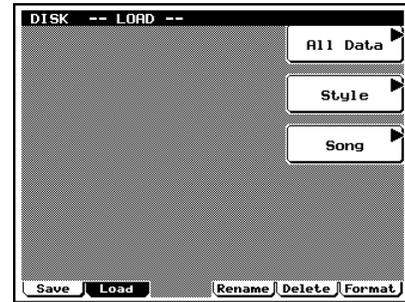
6. Press 🔲 .

▼ The display will indicate "Executing..." and the data will be loaded.

```
DISK  -- LOAD ALL DATA --
▯ > ▭ ALL DATA            ▤
▦ DEMO1   .Q7A       ▯ All Data
▦ DEMO2   .Q7A
▦ STYLE   .Q7A       ▐▶ [    ]
┌─────────────────────────┐
│ Executing...            │ N
│ ████████████░░░░░       │ EE
└─────────────────────────┘
                      3   0020K  1403K
                       ▭ ALL DATA ▯ FILE
                     FILE   TOTAL
                      3   0019K  0008K
```

Chapter 1. BASIC CONCEPTS

This chapter explains the basic concepts that you need to know before use, such as the mode structure and the internal structure of the QY700.

1. Mode structure

About modes

- The many functions of the QY700 are grouped by type into modes, sub-modes, and pages (see the diagram below). When operating the QY700, you will arrive at the desired function by first selecting the mode, then the sub-mode, and finally the page.
- Modes are the largest division of functions. Use the Mode buttons to switch between modes.
- Sub-modes are broad divisions of the functions within each mode. If the bottom line of the display shows a menu shaped like buttons, you can press the corresponding function button to select the desired sub-mode. In some cases, you will enter a sub-mode by pressing the ▪ , EDIT , or JOB keys.
- Pages contain groups of related parameters within a sub-mode. If the bottom line of the sub-mode display shows a tab-shaped menu, you can press the corresponding function button to switch pages. In some sub-modes, you can select sub-pages within a page, or move to a special page to make settings.

Mode name   Sub-mode name

Page name   Sub-page name   Special page name

- The following example shows the Song (mode) Play Effect (sub-mode) Groove Quantize (page) display.

Modes and sub-modes

The QY700 has the following modes and sub-modes.

■ Song mode

Here you can record or playback songs. (→ p.70)
The Auto-accompaniment functions allow you to create music efficiently.
Press SONG to enter this mode.

Song Play

Here you can select and playback songs. (→ p.72)
This is the first sub-mode you will enter when you press SONG .

Play Effect

Here you can make temporary adjustments to the note timing and dynamics for song playback. (→ p.80)

In Song Play, press F1 (PlayFx) to enter this sub-mode.

Track View

This display shows the measures in which data has been input in each track. (→ p.100)

In Song Play, press F2 (TrView) to enter this sub-mode.

Out Channel

Here you can set the output channel for each of the tracks and patterns which make up the song, determining how they will be transmitted to the tone generator block and to the MIDI OUT connectors. (→ p.103)

In Song Play, press F3 (OutCh.) to enter this sub-mode.

Song Recording

Here you can record song data onto the tracks of a song. (→ p.106)

In Song Play, press ● to enter this sub-mode.

Song Edit

Here you can modify the song data of a song, or insert new data. (→ p.129)

In Song Play, press EDIT to enter this sub-mode.

Song Job

Here you select and execute song jobs to edit or modify a song. (→ p.138)

In Song Play, press JOB to enter this sub-mode.

■ Voice mode

Here you can make tone generator settings such as voice and volume for each part, determining how each part will sound when the song is played back. (→ p.168)

Press VOICE to enter this mode.

Mixer

Here you can make tone generator settings such as voice, pan and volume for each part. (→ p.170)

In Voice mode, press F1 (Mixer) to enter this sub-mode.

Tune

Here you can transpose or tune each part. (→ p.174)

In Voice mode, press F2 (Tune) to enter this sub-mode.

Voice Edit

Here you can modify parameter values for each part to modify the voice. (→ p.176)

In Voice mode, press F3 (VoicEdit) to enter this sub-mode.

Drum Setup Edit

Here you can edit Drum Setup 1 and 2 to indirectly modify drum voices. (→ p.182)

After selecting Drum Setup 1 or 2 as the voice category in Voice mode, press F4 or F5 to enter this sub-mode.

■ Effect mode

Here you can make settings for the effects used in a song. (→ p.188)

Press EFFECT to enter this mode.

Effect Connection

Here you can select the way in which the Variation effect is connected. (→ p.190)

In Effect mode, press F1 (Connect) to enter this sub-mode.

Effect Reverb Edit

Here you can make settings for the Reverb effect. (→ p.193)
In Effect mode, press [F2] (Reverb) to enter this sub-mode.

Effect Chorus Edit

Here you can make settings for the Chorus effect. (→ p.193)
In Effect mode, press [F3] (Chorus) to enter this sub-mode.

Effect Variation Edit

Here you can make settings for the Variation effect. (→ p.193)
In Effect mode, press [F4] (Vari.) to enter this sub-mode.

■ **Pattern mode**

Here you can create and playback patterns or phrases. (→ p.200)
Press [PATTERN] to enter this mode.

Patch

Here you can select and playback patterns. Patterns are created
by assigning phrases to each track of the pattern. (→ p.200)
This is the sub-mode that you will enter when you first press
[PATTERN] .

Play Effect

Here you can make temporary changes in the timing and dy-
namics of pattern playback. (→ p.212)
In Patch, press [F1] (PlayFx) to enter this sub-mode.

Pattern Voice

Here you can make tone generator settings such as voice or volume for each pattern track. (→ p.225)

In Patch, press [F2] (Voice) to enter this sub-mode.

Pattern Effect

Here you can make settings for the effects used in the pattern. (→ p.239)

In Patch, press [F3] (Effect) to enter this sub-mode.

Phrase Recording

Here you can record musical data into the selected User Phrase. (→ p.247)

In Patch, move the cursor to User Phrase and press [•] to enter this sub-mode.

Phrase Edit

Here you can modify or insert data in a Preset Phrase or User Phrase. (It is possible to enter Edit mode even with a preset phrase, but the data cannot be edited.) (→ p.254)

In Patch, move the cursor to User Phrase, and press [EDIT] to enter this sub-mode.

Pattern Job

Here you can select and execute jobs to edit or modify a pattern. (→ p.256)

In Patch, press [JOB] to enter this sub-mode.

1

■ **Utility mode**
Here you can make basic settings for the QY700 and MIDI-related settings. (→ p.288)
Press ⌊UTILITY⌋ to enter this mode.

System
Here you can make basic settings for the QY700 such as master tuning and controller settings. (→ p.289)
In Utility mode, press ⌊F1⌋ (System) to enter this sub-mode.

```
UTILITY -- SYSTEM --
Master Fine Tune        = +000.0

    MASTER TUNE  BACKLITE SAVER  FOOTSWITCH

      +000.0      4 Hours      Start/Stop
                  WHEEL
    PITCH BEND        ASSIGNABLE
      P. B.         Ctrl# 001
    Pitch Bend     Modulation

System   MIDI   MIDIFltr Seqencr  Click  FngZone
```

MIDI
Here you can make MIDI-related settings. (→ p.291)
In Utility mode, press ⌊F2⌋ (MIDI) to enter this sub-mode.

```
UTILITY -- MIDI --
MIDI Sync               = Internal
    MIDI SYNC        MIDI CONTROL
                  IN        OUT
    Internal     In-A,B     Out-A,B
   XG PARAMTR OUT      ECHO BACK
                  IN-A       IN-B
      Off         Off        Off
   MTC START OFFSET
    00:00:00:00

System   MIDI   MIDIFltr Seqencr  Click  FngZone
```

MIDI Filter
Here you can specify whether or not various categories of MIDI message will be transmitted or received via the MIDI connectors. (→ p.293)
In Utility mode, press ⌊F3⌋ (MIDI Fltr) to enter this sub-mode.

```
UTILITY -- MIDI FILTER --
Note IN-A               = Pass

   IN    OUT
   A B   A B
   ☑☑   ☑☑  Note
   ☑☑   ☑☑  Pitch Bend
   ☑☑   ☑☑  Control Change
   ☑☑   ☑☑  Program Change
   ☑☑   ☑☑  Polyphonic After Touch
   ☑☑   ☑☑  Channel After Touch
   ☑☑   ☑☑  System Exclusive

System   MIDI   MIDIFltr Seqencr  Click  FngZone
```

Sequencer
Here you can make basic settings related to the sequencer block. (→ p.295)
In Utility mode, press ⌊F4⌋ (Seqencr) to enter this sub-mode.

```
UTILITY -- SEQUENCER --
Mute Tracks Level       = Off

   MUTE TRACKS  EVENT CHASE  INTERVAL TIME
      LEVEL

      Off         Off        1*100

System   MIDI   MIDIFltr Seqencr  Click  FngZone
```

Click
Here you can make basic settings for the click sound. (→ p.297)
In Utility mode, press ⌊F5⌋ (Click) to enter this sub-mode.

```
UTILITY -- CLICK --
TG Channel              = CH10

         CHANNEL    ACCENT       NORMAL
                  NOTE  LEVEL   NOTE  LEVEL
   TG      10     C 0   127    B -1  080
   MIDI
   A      Off     C 0   127    B -1  080
   MIDI
   B      Off     C 0   127    B -1  080

System   MIDI   MIDIFltr Seqencr  Click  FngZone
```

Fingered Chord Zone

Here you can specify the range of the keyboard in which Fingered Chord will function. (→ p.299)

In Utility mode, press F6 (FngZone) to enter this sub-mode.

```
UTILITY -- FINGERED CHORD ZONE --
Fingered                    = Off

      ┌──────────┬──────────┬──────────┐
      │ FINGERED │   ZONE   │   MIDI   │
      │          ├────┬─────┼─────┬────┤
      │   OFF    │LOW │HIGH │PORT │CH. │
      │   ▓▓▓    │    │     │  ◠  │ ◠  │
      │   Off    │C 0 │F#1  │In-A,B│ALL │
      └──────────┴────┴─────┴─────┴────┘

  [keyboard graphic]

 System  MIDI  MIDIFltr Seqencr  Click FngZone
```

■ Disk mode

In this mode you can transfer data to and from the floppy disk. (→ p.302)

Press DISK to enter this mode.

Save

Here you can save internal memory data to floppy disk. (→ p.307)

In Disk mode, press F1 (Save) to enter this sub-mode.

```
DISK   -- SAVE --

                        All Data ▶

                         Style   ▶

                         Song    ▶

                       Song ESEQ ▶

                       Song SMF  ▶
 Save   Load         Rename Delete Format
```

Load

Here you can load data from floppy disk into internal memory. (→ p.310)

In Disk mode, press F2 (Load) to enter this sub-mode.

```
DISK   -- LOAD --

                        All Data ▶

                         Style   ▶

                         Song    ▶


 Save   Load         Rename Delete Format
```

Rename

Here you can change the filename of a file on floppy disk. (→ p.312)

In Disk mode, press F4 (Rename) to enter this sub-mode.

```
DISK  -- RENAME --

                        All Data ▶

                         Style   ▶

                         Song    ▶


 Save   Load         Rename Delete Format
```

Delete

Here you can delete a file from the floppy disk. (→ p.314)

In Disk mode, press F5 (Delete) to enter this sub-mode.

```
DISK   -- DELETE --

                        All Data ▶

                         Style   ▶

                         Song    ▶


 Save   Load         Rename Delete Format
```

Format

Here you can format a floppy disk. ($\rightarrow$ p.316)

In Disk mode, press ⌐F6⌐ (Format) to enter this sub-mode.

```
DISK  -- FORMAT --



        🖫  DISK   ▌▐▶    [Format]




 [ Save ][ Load ]        [Rename][Delete][Format]
```

2. Function tree

Song mode

Voice mode

Effect mode

Pattern mode

Utility mode

Disk mode

3. How the QY700 is organized

Four blocks

- The QY700 consists of four blocks: the sequencer block, the tone generator block, the controller block, and the effect block.

Sequencer block (→ p.37)

- This block lets you create songs by recording/editing musical performances recorded from an external MIDI device or from the controller block, and then plays back this data, transmitting it to the tone generator block or to an external MIDI tone generator as MIDI messages.
- The sequencer block can be operated in two modes: Song mode (→ p.70) and Pattern mode (→ p.198).
- Using the Auto-Accompaniment function (→ p.37) allows you to create music efficiently.
- By recording one track at a time to create a multi-track recording, you can create songs which use up to 32 tracks (up to 48 tracks if you use the Auto-Accompaniment function).
- When songs or patterns are played back, the musical data is output to the tone generator block and to the MIDI OUT connectors. The output destination of the musical data can be specified for each track by setting the Out Channel (→ p.103).

Tone generator block (→ p.43)

- This block produces sound in response to the MIDI messages that it receives from the sequencer block, controller block, and from the MIDI IN connectors.
- Settings for this block can be made in Voice mode (→ p.168).
- This is a 32 part 32 note polyphonic multi-timbral XG-compatible tone generator.

Controller block (→ p.46)

- This block contains the microkeyboard, pitch wheel, assignable wheel, and foot switch that you use to perform, and from which MIDI messages are transmitted to the sequencer block and to the tone generator block.
- The functions of the pitch wheel, assignable wheel, and foot switch can be set in Utility mode (→ p.288).
- The output destination of the musical data transmitted from the controller block is specified by the Keyboard Track setting (→ p.74) of the sequencer block. The musical data is output as specified by the Out Channel setting of the keyboard track, either to one of the parts of the tone generator or to the MIDI OUT connectors.

Effect block (→ p.47)

- This block processes the audio signal that is output from the tone generator block, adding reverberation or ambiance etc.
- This block provides three XG-compatible effects: reverb effect, chorus effect, and variation effect.
- Settings for this block can be made in Effect mode (→ p.188).

How the blocks are connected

- The four blocks are connected as follows.

4. Sequencer block

1. About the sequencer block

- This block lets you create songs by recording/editing the musical performance that is recorded from an external MIDI device or from the controller block, and then plays back the data, transmitting it to the tone generator block or to an external MIDI tone generator as MIDI messages.
- The sequencer block can be operated in two modes: Song mode and Pattern mode.
- Using the Auto-Accompaniment function allows you to create song efficiently by joining together patterns and phrases. Patterns and phrases will be explained below.
- By recording one track at a time to create a multi-track recording, you can create songs which use up to 32 tracks (up to 48 tracks if you use the Auto-Accompaniment function).
- When songs or patterns are played back, the musical data is output to the tone generator block and to the MIDI OUT connectors. The output destination of the musical data can be specified for each track by setting the Out Channel.
- "Tracks" are memory areas in which musical performances are recorded. Musical data can be recorded, edited, and played back independently for each track.

2. Auto-Accompaniment

- Auto-Accompaniment is a function that lets you specify chords for the phrases or patterns created in Pattern mode, creating an accompaniment that is played back automatically.
- The accompaniment created using the Auto-Accompaniment function consists of three types of elements: phrases, patterns, and songs.
- "Phrases" are musical accompaniment phrases for a single instrument, such as a rhythm pattern for the rhythm part, a bass line for the bass part, or a chord backing for the guitar part. Phrases are the smallest unit that makes up the accompaniment of a song.
- "Patterns" are created by joining two or more Phrases horizontally, or by joining up to 16 parts vertically to create an accompaniment with drums, bass, and chord backing. While phrases contain musical data for a single instrument, patterns combine two or more phrases to create a single backing pattern. Patterns are the basic unit with which the accompaniment of a song is created.
- In order to create the accompaniment for an entire song, you will need to create different patterns for the various parts of the song, such as the intro, theme, fill-ins, breaks, and ending.
- Song mode provides a Pattern track in which patterns can be arranged, and a Chord track in which chords can be arranged. When you place patterns and chords in these tracks as appropriate for the changes in your song, the accompaniment patterns will automatically be converted for playback with the chords you specify.

3. Phrases

Instrument category   Beat   Number   Phrase name

```
<PHRASE> Da16001:DA BreakBt 1
Drum-a              16 Beat
```

- "Phrases" are musical accompaniment phrases for a single instrument, such as a rhythm pattern for the rhythm part, a bass line for the bass part, or a chord backing for the guitar part. Phrases are the smallest unit that makes up the accompaniment of a song.
- The QY700 provides 3,876 Preset Phrases, and 99 User Phrases for each Style.
- Preset phrases and user phrases are categorized by three parameters: "instrument category," "beat" and "number." This lets you efficiently find desired phrases without having to be familiar with each individual phrase.

Instrument category

- Instrument category refers to the type of instrument or playing technique. There are the following 15 instrument categories. "US" indicates a "User Phrase," and all others are preset phrases.

Display		Category
Da	Drum-a	Drum phrases
Db	Drum-b(General)	Drum phrases
Fa	Drum Fill-a(Pop & Rock)	Drum fill-in phrases
Fb	Drum Fill-b(Specific)	Drum fill-in phrases
Fc	Drum Fill-c(General)	Drum fill-in phrases
DP	Durm Parts	Drum phrases separated by instrument
PC	Percussion	Percussion phrases
PF	Percussion Fill	Percussion fill-in phrases
Ba	Bass-a	Bass phrases
Bb	Bass-b(General)	Bass phrases
GC	Guitar Chord	Guitar chord backing phrases
GA	Guitar Arpeggio	Guitar arpeggio phrases
GR	Guitar Riff	Guitar riff phrases
KC	Keyboard Chord	Keyboard chord backing phrases
KA	Kbd Arpeggio	Keyboard arpeggio phrases
KR	Keyboard Riff	Keyboard riff phrases
PD	Pad	Pad-type phrases
BR	Brass	Brass phrases
SE	Sound Effect	Sound effect phrases
US	User	User phrases

Beat

- Beat categorizes phrases by their basic rhythm, into the following three types.

Display	Type
16	16 beat : 16-beat phrases
08	8 beat : 8-beat phrases
34	3/4 beat : 3/4 time or 6/8 time phrases

Number

- Number specifies phrases within Instrument Category and Beat by a number 001 – 256. (User phrases are numbered 001 – 099.)

4. How chord conversion works

Chord conversion table

- The QY700's "chord conversion table" allows phrases to be developed and played according to the Chord Root and Chord Type that you specify.
- The chord conversion table provides pitch data corresponding to 12 chord roots and 28 chord types. The data played back by a phrase passes through the chord conversion table and is converted to the pitches that correspond to the chord root and chord type. In this way, the phrase is developed into the specified chord.

Chord root

CM7

Chord type

- The Source Chord indicates the chord with which the phrase was originally recorded. The source chord plays an important role in the chord conversion of phrases. This is because the original chords must be known in order for the chords of a phrase to be converted into the specified chords.
- In other words, chord conversion is performed by reading relative pitch differences between the source chord and the specified chord from the chord conversion table.
- You can specify the Phrase Type of each phrase so that chord conversion will be performed in a manner appropriate for the instrument. There are seven phrase types: melody 1 and 2, chord 1 and 2, bass, bypass, and parallel. The chord conversion table is switched according to the phrase type.
- The Phrase Type and Source Chord can be set for each phrase in the phrase table (→ p.209).

Phrase type

Source chord

Original phrase

Chord root
Chord type → Chord conversion table

Converted phrase

On Bass

Original Bass

On Bass and Original Bass

- In addition to Chord Root and Chord Type, chord settings also allow you to specify On Bass and Original Bass.
- On Bass and Original Bass are effective only for phrases whose Phrase Type is set to Bass.
- On Bass lets you specify a root note for the bass that is separate from the chord, so that when the pattern or phrase is played back, phrases with a phrase type of Bass will be fixed at the root note. For example if On Bass G is specified for a CM7 chord, the display will be "CM7onG", and phrases whose phrase type is set to Bass will all be played as "G".
- Original Bass lets you specify a chord for the bass that is separate from the chord, so that when the pattern or phrase is played back, phrases with a phrase type of Bass will be played with a separate bass chord. For example if a CM7 chord is set to an Original Bass of G7, the display will be "CM7/G7" and phrases whose phrase type is Bass will be played back just as though the chord had been set to G7.
- For details on inputting chords, refer to "7. Chord input methods" (→ p.42).

5. Patterns

- "Patterns" are created by joining two or more Phrases horizontally, or by joining up to 16 parts vertically to create an accompaniment with drums, bass, and chord backing. While phrases contain musical data for a single instrument, patterns combine two or more phrases to create a single backing pattern. Patterns are the basic unit with which the accompaniment of a song is created.
- Patterns are created in the Patch display of Pattern mode. (→ p.200)
- The QY700 manages patterns by Style and by Block.
- "Styles" are groups of patterns for each song. The QY700 provides 64 styles.
- "Blocks" are groups of patterns within a song that provide changing accompaniment such as for intros, themes, fill-ins, breaks, and endings. For each style, the QY700 provides eight blocks A – H.
- The QY700 provides $64 \times 8 = 512$ patterns.
- When you specify a chord for a pattern, each of the various phrases that make up that pattern will be processed by chord conversion, meaning that in effect, chord conversion is performed for the entire pattern.

User Styles x 64

Track structure within each pattern

- Patterns are organized as a matrix of tracks and measures, as shown in the diagram below.
- A phrase or a rest can be specified for each measure in each track of the pattern.

	M1	M2	M3	• • •
TR 1	Phrase number		Phrase number	• • •
TR 2	Phrase number			• • •
TR 3	Phrase number			• • •
⋮	⋮	⋮	⋮	⋮
TR 16	Phrase number			• • •

Playback channel of each track

- When a pattern is played back, the musical data of each track in the pattern is transmitted to the tone generator block and the MIDI OUT connectors according to the Out Channel settings of Song mode. (→ p.103)
- The data is transmitted to the tone generator block as specified by the "TO TG" setting, and to the MIDI OUT connectors as specified by the "MIDI OUT-A" / "MIDI OUT-B" settings.

Sequencer block (Pattern)

	M001	M002	• • •
TR 1	Phrase		
TR 2	Phrase		
TR 3	Phrase		
⋮			
TR 16	Phrase		

TO TG

MIDI OUT-A

MIDI OUT-B

MIDI OUT-A

MIDI OUT-B

Part 1
⋮
Part 16
Part 17
⋮
Part 32

Tone generator block

6. Songs

- "Songs" are songs that have been created by recording musical data to tracks in the QY700's Song mode.
- The QY700's song memory can hold 20 songs.
- Each song consists of a total of 35 tracks: 32 sequence tracks, the pattern track, the chord track, and the tempo track.
- In addition to creating songs in the same way as on a conventional sequencer by recording only sequence tracks, you can also create a song by using the auto-accompaniment function to create the backing portion of a song, and then adding melody and other parts to complete the song.

Track structure of a song

- Each song consists of 32 sequence tracks (TR1 – TR32), a pattern track (PATTERN), a chord track (CHORD), and a tempo track (TEMPO).
- The sequence tracks are used to record musical data. Data can be recorded from the controller block etc. using realtime recording or step recording etc. The QY700 has 32 sequence tracks, and each track can record musical data for one Part.
- To use the auto-accompaniment function, you will arrange patterns in the pattern track. This track also allows you to input the time signature for each measure. Pattern track input is performed in Song Recording.
- The chord track contains the chords that are used to playback the pattern track. In addition to chords, this track also allows you to input the On Bass, Original Bass, and Syncopation etc. Chord track input is performed in Song Recording.
- The tempo track contains tempo changes that are applied when the song is played back. This lets you create changes in song tempo, such as accelerando and ritardando. Tempo track input is performed in Song Recording.

Sequence tracks	TR 1	musical data
	TR 2	musical data
	TR 3	musical data
	⋮	⋮
	TR 31	musical data
	TR 32	musical data
Pattern track	PATTERN	Patterns, time signatures
Chord track	CHORD	Chord Root, Chord Name, On Bass, Original Bass, Syncopation
Tempo track	TEMPO	Tempo changes

Sequencer block
Sequence tracks

Sequence tracks	
TR 1	musical data
TR 2	musical data
⋮	⋮
TR 16	musical data
TR 17	musical data
⋮	⋮
TR 32	musical data

Pattern

	M001	M002	• • •
TR 1	Phrase		
TR 2	Phrase		
TR 3	Phrase		
⋮			
TR 16	Phrase		

Sequence track   Tempo track

Pattern track   Chord track

TO TG

Part 1
⋮
Part 16
Part 17
⋮
Part 32

Tone generator block

MIDI OUT-A   MIDI OUT-B

MIDI OUT-A   MIDI OUT-B

Sequence track playback channels

- When a song is played back, the musical data of each sequence track and the musical data of each pattern specified by the pattern track is transmitted to the tone generator block and the MIDI OUT connectors according to the Out Channel settings of Song mode. (→ p.103)
- The data is transmitted to the tone generator block as specified by the Out Channel "TO TG" setting, and to the MIDI OUT connectors on the channels specified by the "MIDI OUT-A" / "MIDI OUT-B" settings.
- Since the tone generator block has only 32 parts, it is not able to simultaneously produce the sounds for the sequence tracks of the sequencer block (32 tracks) as well as all of the pattern tracks (16 tracks). However if you use an external tone generator, you can make Out Channel settings so that any 16 of the tracks are played back by the external MIDI tone generator so that all tracks will playback simultaneously.

Out Channel (Sequencer tracks)

Out Channel (Pattern track)

7. Chord input methods

- This block explains how to input the chords in Song mode or Pattern mode so that you can use the auto-accompaniment function.

Using Chord Root and Chord Type to input chords

- You can use the symbols printed on the microkeyboard to enter the Chord Root and Chord Type.
- For the Chord Root, use the E2 – D♯3 keys to specify the root of the chord.
- For the Chord Type, use the E3 – F4 keyboard buttons to select from the 28 chord types printed on the buttons.
- By combining the Chord Root and Chord Type you can specify 336 different chords. You can also specify On Bass chords or Original Bass chords, for even more variation.

Chord Root input   Chord Type input

Using the Fingered Chord function to input chords

- Fingered Chord is one of the functions included in auto-accompaniment, that automatically detects the chord from the combination of notes that you press on the keyboard, so that the pattern or phrase is converted into that chord at the time of playback.
- When the QY700's fingered chord function is used, chords that you play in the Fingered Chord Zone will be automatically analyzed as a chord, and specified.
- It is also possible to use the microkeyboard below the Fingered Chord Zone to specify the On Bass or the Original Bass at the same time that you play the chord. A single note that you play below the Fingered Chord Zone will be detected and set as the On Bass, and a chord will be detected as the Original Bass.
- The fingered chord function can be used not only from the QY700's microkeyboard, but also from a MIDI keyboard connected to the MIDI IN connector.

Turning the Fingered Chord Zone on/off

- In order to use the fingered chord function to input chords, you must first make Fingered Chord Zone settings in Utility mode to specify the range of the keyboard in which this function will operate. (→ p.299)
- A Fingered Chord function on/off setting is provided in the Patch displays of Song Play and Pattern modes, and in the Utility mode Fingered Chord Zone setting display. The settings in these three displays are linked.
- When Fingered Chord is on (FINGRD), the keys below the Zone High key of the fingered chord zone will no longer be usable as conventional keys for performance or recording.
- When Fingered Chord is off (OFF), the fingered chord function will not operate, and you can input the Chord Root and Chord Type using the symbols printed on the keyboard buttons.

5. The tone generator block

About the tone generator block

- The tone generator block is what actually produces sound in response to the MIDI messages received from the sequencer block, the controller block, and from the MIDI IN connectors.
- The tone generator block always functions as a 32 part multi-timbral tone generator.
- The tone generator block of the QY700 is GM and XG compatible. It is able to playback any song data bearing the GM logo or XG logo, including extension voices and effect settings.

all elements sound   specific element sounds

Normal Voice   Drum Voice

Voice Category, Program Number, and Bank Number

- The QY700 contains 480 normal voices and 11 drum voices. This is more voices than can be selected by a program number of 1 – 128. Thus, voices are selected on the QY700 using a combination of the Voice Category, Program Number, and Bank Number.

Voice Category

- The Voice Category is a broad classification of the type of voice. The QY700 uses four voice categories: normal voices ▦, SFX voices 🐢, SFX kits 🐢 and drum voices ▦. In addition to these four voice categories, you can select drum setup 1 ▦ and drum setup 2 ▦ in Voice mode, and drum setup 3 ▦ in Pattern mode. These three categories are used to select drum setups, and are used in a different way than the first four categories.
- Normal voice ▦ is the voice category that specifies normal voices.
- SFX voice 🐢 is a voice category that specifies sound effects. The sound effects in this category have the same element structure as normal voices, and their pitch will change as different notes of the keyboard are played.
- SFX kit 🐢 is a voice category that specifies sound effect. The sound effects in this category have the same element structure as drum voices, and will produce different types of sound effect as different notes of the keyboard are played.

Voices

- "Voices" are the individual sound programs that you can edit, which are used by the tone generator to produce sound.
- There are two types of voices: normal voices which change their pitch as you play different notes on the keyboard, and drum voices which produce a different rhythm instrument sound for each note of the keyboard.
- Normal voices consist of 1 or 2 "elements." By using two elements you can produce a richer sound, or create a voice that produces different sounds depending on the pitch or velocity.
- Drum voices are special voices in which different sounds are assigned to each note. You can make detailed modifications to the sound of each note.
- Elements are the building blocks that each voice is made of, and are made from sampled waveforms. You can make detailed modifications to the pitch, tone and volume.

- Drum voice 🎛 is the voice category that specifies drum voices. In this category, drum voices can be freely assigned, and you can select a different drum voice for each part. However it will not be possible to edit the drum voice.
- If you wish to edit a drum voice, you can use the three voice categories drum setup 1 🎛 – drum setup 3 🎛. These categories "overlay" a drum voice with a drum setup that can be edited. This means that by editing the drum setup for a part that is set to this category, you can indirectly edit a drum voice. However if you specify the same drum setup for two or more parts, editing one of the parts will automatically edit the drum voice for the other part.

Program number

- The program number specifies the voice number to select the voice. The voices selected by the program number will depend on the voice category setting.
- If the voice category is set to a Normal 🎹 voice, program numbers 1 – 128 will allow you to select the 128 voices of the XG basic bank (= GM System Level 1).
- If the voice category is other than Normal 🎹 voice, it will not necessarily be the case that each program number selects a different voice. Also, if SFX voice 🚀 is selected as the category, some program numbers will produce no sound.
- For lists of voices, refer to the List Book.

Bank number

- Bank number is effective only for parts whose voice category is set to Normal voice 🎹.
- The Bank number specifies the XG expansion banks to select variation voices relative to the 128 voices of the XG basic bank (= GM System Level 1).
- For example with program number 17 "DrawOrgn", variation voices can be selected by changing the bank number to 64 to select "Organ Ba", 65 to select "70sDrOr2", 66 to select "CheezOrg," or 67 to select "DrawOrg3."

Selecting voices via MIDI

- Voice Category, Program Number, and Bank Number respectively correspond to the MIDI messages Bank Select MSB, Program Change, and Bank Select LSB. When using MIDI to select a voice, transmit these three MIDI messages in the order of Bank Select MSB, Bank Select LSB, and Program Change.
- The voice categories Drum Setup 1 🎛 – Drum Setup 3 🎛 are selected using MIDI System Exclusive messages.
- Each voice is placed in a three-dimensional space with the three axes being the Bank Select MSB, LSB, and Program Change (see diagram below).
- The Bank Select MSB and LSB are used to manage 105 voice banks.

MSB=000 : LSB=000	(Normal voices: XG basic bank = GM System Level 1)
MSB=000 : LSB-001 – 101	(Normal voices: XG extension banks)
MSB=064 : LSB=000	(SFX voices)
MSB=126 : LSB=000	(SFX kits)
MSB=127 : LSB=000	(Drum voices)

- The voices within the bank specified by the Bank Select messages are selected by Program Change messages.

Program Change=000 – 127

Voice Category
MSB=000–127

LSB=000–127
Bank Number

Program Change=000–127

Maximum polyphony

- The tone generator block has a maximum polyphony of 32 notes, in element units. I.e., 32 notes can be played simultaneously if you are using normal voices that consist of one element or drum voices, and 16 notes can be played simultaneously with normal voices that consist of two elements.
- The number of elements used by each voice is given in the voice lists of the separate "*QY700 Reference Listings*".
- If MIDI messages are received which request more than the available maximum polyphony, currently-sounding notes will be turned off, and the later arrivals will be played. This type of note assignment is called "last-note priority."
- The note priority of each part of the tone generator is fixed as follows, and when the maximum polyphony is exceeded, notes will be turned off starting with the lower-priority parts. You should use high-priority parts for musically important parts such as the melody or bass, so that these important lines will not be interrupted even if the maximum polyphony is exceeded.

Note priority order	1	2	⋯	10	11	⋯	16	17	18	⋯	26	27	⋯	32
Part number	10	1	⋯	9	11	⋯	16	26	17	⋯	25	27	⋯	32

- It is possible to use MIDI System Exclusive messages to specify Element Reserve settings for each part. If you specify an Element Reserve setting, the specified number of notes will be reserved for that part, so that no further notes will be "stolen" from that part when the maximum polyphony is exceeded. It is a good idea to make Element Reserve settings for musically important parts such as the melody or bass, whose notes must not be interrupted.

Connections between the sequencer block and the tone generator block

- The sequencer block is internally connected to the tone generator block via MIDI.
- The connections between each track of the sequencer block and each part of the tone generator block can be specified by the Song mode Out Channel (→ p.103) setting "TO TG."
- The MIDI channels of the 32 parts of the tone generator block can be set to any desired setting via MIDI System Exclusive messages. With the default settings, these are set to the same MIDI channel number as the part number, as shown in the following table.

Tone generator number	1	2	⋯	16	17	18	⋯	32
MIDI channel	1(A01)	2(A02)	⋯	16(A16)	17(B01)	18(B02)	⋯	32(B16)

- When setting the Song mode Out Channel "TO TG" parameter, you must first check the MIDI channel of the tone generator block.
- Unless you have something special in mind such as layering multiple parts, it is best to use the System Exclusive XG System On message to restore the MIDI channel of each tone generator part to the default value before making "TO TG" settings.

Sequencer block
Sequence tracks

Sequence tracks	
TR 1	musical data
TR 2	musical data
⋮	⋮
TR 16	musical data
TR 17	musical data
⋮	⋮
TR 32	musical data

Pattern

	M001	M002	● ● ●
TR 1	Phrase		
TR 2	Phrase		
TR 3	Phrase		
⋮			
TR 16	Phrase		

TO TG

MIDI OUT-A

MIDI OUT-B

MIDI OUT-A

MIDI OUT-B

Part 1
⋮
Part 16
Part 17
⋮
Part 32

Tone generator block

6. Controller block

About the controller block

- The controller block lets you use the microkeyboard, pitch wheel, assignable wheel, foot switch etc. to play music and control the tone generator block via the sequencer block, or to directly control the tone generator block or effect block.

- In addition to transmitting note data to the tone generator block and to the sequencer block, the microkeyboard are also used to specify chord roots or chord types, and to input fingered chords.
- Utility mode System settings allow you to specify the control numbers that the pitch wheel and the assignable wheel will output.

Relationship to other blocks

- In Song mode and Pattern mode, the controller block is connected to the various parts of the tone generator and to the MIDI OUT connectors via the keyboard track (recording track) of the sequencer block.
- Data from the controller block passes from the keyboard track to the parts of the tone generator block and to external MIDI devices in accordance with the Out Channel settings "TO TG," "MIDI OUT-A" and "MIDI OUT-B."
- From the controller block, you can record sequence tracks or user phrases, or play the tone generator block or external MIDI devices.

- When Fingered Chord is ON (FINGRD), musical data will not be output from the keyboard range below the specified Fingered Zone (→ p.299) area.
- The "keyboard track" is the track which is highlighted in the Song Play and Pattern Play pages.
- The "recording track" is the track selected by the cursor in the Recording Standby page. If the cursor is in a location other than the track display, the track number will be highlighted.

7. Effect block

About the effect block

- This block processes the audio signals from the tone generator block, adding reverberation or ambiance etc.
- The QY700 has three types of effect: the reverb effect, the chorus effect, and the variation effect.
- Effect settings for Song mode can be made in Effect mode and in Voice mode.
  In Effect mode, you can store the effect type and other detailed settings of the three effects for each song, allowing you to create the ideal acoustical ambiance for the song.
  In Voice mode, you can store the effect send level settings of the three effects for each part of the song.
- Effect settings for Pattern mode can be made in Pattern Effect and Pattern Voice.
  In Pattern Effect, you can store the effect type and other detailed settings of the three effects for each pattern, allowing you to create the ideal acoustical ambiance for the pattern.
  In Pattern Voice, you can store the effect send level settings of the three effects for each part of the pattern.

Pattern setup

- When a song that uses patterns is played back in Song mode, you must choose in Pattern Setup the group of settings which will be used: Effect mode or Pattern Effect.
- Pattern Setup settings are made in the Song Play page (→ p.73).

- When Pattern Setup = OFF, the Effect mode settings will be used, and the Pattern Effect settings will be ignored. This means that the pattern playback may sound different than when in Pattern mode.
  However, you can make Voice mode settings so that the effects specified in Effect mode are applied to a pattern.
- When Pattern Setup = ON, the Pattern Effect settings will be used, and the Effect mode settings will be ignored. Also, the effect settings will change each time the pattern is switched.
  In this case, the Pattern Effect settings will be transmitted as MIDI data to the effect block and to the MIDI OUT connectors each time the pattern is switched. When using effects on a sequence track, you will need to check the Pattern Effect settings of the pattern that you are using, and set the Effect Send levels of Voice mode.

Reverb effect

- The reverb effect is dedicated to reverb. It adds reverberation to the sound.
- In Effect mode, you can select one of 11 Effect Types, and modify parameter values to adjust the character of the reverb. Effect mode settings are remembered independently for each song.
- In Pattern mode, you can use Pattern Effect settings to select one of 11 Effect Types for each pattern, and modify parameter values to adjust the character of the reverb.

Chorus effect

- The chorus effect is dedicated to chorus. It adds spaciousness and depth to the sound.
- In Effect mode, you can select one of 11 Effect Types, and modify parameter values to adjust the character of the chorus. Effect mode settings are remembered independently for each song.
- In Pattern mode, you can use Pattern Effect settings to select one of 11 Effect Types for each pattern, and modify parameter values to adjust the character of the chorus.

Variation effect

- The variation effect provides 43 types of effect including reverb and chorus, and also distortion and overdrive etc.
- In Effect mode, you can select one of 43 Effect Types, and modify parameter values to adjust the character of the effect. Effect mode settings are remembered independently for each song.
- In Pattern mode, you can use Pattern Effect settings to select one of 43 Effect Types for each pattern, and modify parameter values to adjust the character of the effect.

System Effects and Insertion Effects

- The effects of the effect block are divided into two types of effect which function in completely different ways: system effects and insertion effects.
- On the QY700, the reverb effect and the chorus effect are system effects, and the variation effect can be set either as a system effect or an insertion effect.
- In the case of a system effect, effect processing is performed by using the mixer Send and Return controls to send signals from each tone generator Part to the effect and then return the processed signal to the mixer.
- In the case of an insertion effect, the effect is connected in series between the instrument and the mixer, and adjusted using the Dry/Wet Balance. On the QY700, an insertion effect can be used on any one specified Part.
- System effects and insertion effects are defined within "XG." This means that if you use a tone generator bearing the XG logo, you can use effects not only in a "minimal" way by simply applying chorus and reverb, but also in a more aggressive way to create the fundamental character of the sounds.

Insertion effect

System effects

How the effects work

Variation mode = Insertion

- When Variation mode is set to Insertion, the three effects will be connected as shown in the diagram below.
- Of the 32 parts of the tone generator block, the signals of the part specified by the Voice mode Variation Switch ① will be input to the variation effect, and the variation effect will be applied here.
- The signals of all tone generator parts including the above-mentioned part will be sent to the reverb effect and the chorus effect according to the Voice mode settings Reverb Send Level ② and Chorus Send Level ③. Here you can adjust the depth of the effect for each part.
- To adjust the overall depth of each effect, use the Effect mode settings Reverb Return Level ④ and Chorus Return Level ⑤. Here you can adjust the amount of the signal returned from each effect, determining the overall depth of each effect.
- The stereo location of the effect output is determined by the Effect mode settings Reverb Pan ⑥ and Chorus Pan ⑦.
- A bus line called Send Chorus To Reverb ⑧ connects the chorus effect to the reverb effect. By using this bus line you can connect the chorus effect and reverb effect in series.

1

Effect blocks diagram in Song mode (Variation mode= INS)

Reverb effect

Chorus effect

Variation effect

1
2
⋮
16
17
⋮
32

Voice mode (mixer)

VOICE -- MIXER --   PART=01
CAT. 082 BANK 000 Saw.Lead
Reverb Send   = 061
PART 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
VELO METER
VOICE CAT.
PROGRAM
BANK
REVERB
CHORUS
VARIATION
PAN
VOLUME
EXPRESN
Mixer Tune VoicEdit   PT17~32

SONG -- EFFECT CONNECTION --
Variation Mode   = Insertion
VARIATION
DELAY LCR
VARIATION MODE
Insertion
REVERB   Pan
HALL 1
return
rev
CHORUS   pan send to rev
CHORUS 1
cho
Connect Reverb Chorus Vari.

Effect mode (Effect Connection)

Variation mode = System

• When Variation mode is set to System, the three effects will be connected as shown in the diagram below.
• The signals from all tone generator parts will be sent to the reverb effect, chorus effect, and variation effect according to the Voice mode settings Reverb Send Level ①, Chorus Send Level ②, and Variation Send Level ③. Here you can adjust the effect depth for each part.
• The overall depth of each effect can be adjusted by the Effect mode settings Reverb Return Level ④, Chorus Return Level ⑤, and Variation Return Level ⑥. Here you can set the amount of the signal that is returned from each effect, to adjust the overall depth of the effect.
• The stereo location of the effect output is determined by the Effect mode settings Reverb Pan ⑦, Chorus Pan ⑧, and Variation Pan ⑨.
• If Variation Mode = System, three bus lines will be connected.
  Send Chorus To Reverb ⑩ is a bus line that connects the Chorus Effect to the Reverb Effect.
  Send Variation To Chorus ⑪ is a bus line that connects the Variation Effect to the Chorus Effect.
  Send Variation To Reverb ⑫ is a bus line that connects the Variation Effect to the Reverb Effect.

By using these three bus lines, you can use the effects in a variety of ways, such as connecting the three effects in series, or dividing them.

Effect blocks diagram in Song mode (Variation mode = SYS)

Reverb effect

Chorus effect

Variation effect

1
2
⋮
16
17
⋮
32

Voice mode (Mixer)

Effect mode (Effect Connection)

1

8. Basic operation

1. Moving the cursor

- You will notice a black, highlighted location in the display. This is referred to as the cursor, and the location of the cursor will be the currently-selected command or data.
- Use the cursor keys to move the cursor.

- The direction(s) in which the cursor will move is fixed for each screen, and the cursor will not move to locations other than this.
- If the cursor does not move as you expect, try moving it in a different direction.
- The cursor will not move to commands or data which cannot be set.

2. Moving to modes, submodes, and pages

Selecting modes

- This refers to switching between Song mode, Pattern mode, Utility mode, Voice mode, Effect mode, and Disk mode.
- To switch modes, use the following 6 keys.

SONG	Move to Song mode.
PATTERN	Move to Pattern mode.
UTILITY	Move to Utility mode.
VOICE	Move to Voice mode.
EFFECT	Move to Effect mode.
DISK	Move to Disk mode.

- When you press a mode key, the mode indicator above that key will light.
- It is not possible to switch modes during recording.

Selecting sub-modes

- This refers to moving within a mode to a sub-mode.
- To select sub-modes, use the following keys.

F1 – F6

- These keys will select the sub-modes which are displayed in the key line of each mode. For details refer to the Function Tree (→ p.34).

EDIT

- In Song mode this key selects Song Edit. In Pattern mode this key selects Phrase Edit.

JOB

- In Song mode this key selects Song Jobs. In Pattern mode this key selects Pattern Jobs.

●

- In Song mode this key selects Song Recording. In Pattern mode this key selects Phrase Recording.

Selecting pages

- This refers to changing pages within the sub-mode.
- To select pages, use the function keys that correspond to the tab menu.

- This example is of selecting pages within Song (mode) Play Effect (sub-mode).
- In this display, F1 – F3 are assigned to pages, F4 is assigned to a sub-page, and F6 is assigned to a special page. The sub-pages and special pages will differ depending on the page.
- The page will change when you press the function key that corresponds to the desired page.

  F1   Move to the Groove page.

  F2   Move to the Clock Shift / Gate Time / Velocity page.

  F3   Move to the Transpose page.

  F4   Move to the Groove View sub-page.

  F6   Switch the displayed tracks to tracks 17 – 32.

Selecting parameters

- To select parameters, move the cursor in the page.
- The parameter name and setting value of the selected parameter will be shown in the top line of the display.

3. Menu selections

- In the Song Job and Pattern Job screens, a menu of the available jobs will appear.

- This example is of selecting a job from the Song Job list.
- Jobs can be selected in the following four ways.

▲ / ▼ → ↵
- Use the cursor keys to move the cursor up or down to select the desired job, and press ↵ .

Data dial → ↵
- Rotate the data dial to move the cursor to the desired job, and press ↵ .
- Rotating the data dial clockwise will move the cursor in the order of 00 → 01 → 02 etc. Rotating it counterclockwise will move in the opposite order.

-1/NO / +1/YES → ↵
- Use -1/NO / +1/YES to move the cursor to the desired job, and press ↵ .
- Pressing +1/YES will move the cursor in the order of 00 → 01 → 02 etc. Pressing -1/NO will move in the opposite order.

Numeric keypad → ↵
- Use the numeric keypad to directly enter the number of the desired job, and press ↵ .
- When you use the numeric keypad to enter a number, the number will be shown in the upper right of the display.
- This method is convenient when you already know the desired job number.
- For example in order to enter the "01 Quantize" page, press numeric key [1] and then ↵ .

- Pressing EXIT will return to the Job menu, and pressing EXIT once again will return to the previous mode.

4. Inputting numbers

- Here's how to enter a number for an item you wish to specify.
- A number can be specified in the following three ways.

Data dial
- You can input a number by rotating the data dial.
- Rotating the data dial clockwise will increase the number, and rotating it counterclockwise will decrease the number.

NO / YES
- You can input a number by pressing NO / YES.
- Pressing YES will increase the number in steps of 1, and pressing NO will decrease the number in steps of 1.

Numeric keypad → ↵
- You can input a number by using the numeric keypad and then pressing ↵.
- Use the numeric keypad to input a number, and while the number you input is blinking, press ↵ to finalize the number.

5. On/off selections

- Some items have an on/off setting.
- On/off settings can be made in the following two ways.

Data dial
- You can make an on/off setting by rotating the data dial.
- Rotating the data dial clockwise will turn the setting on, and rotating it counterclockwise will turn the setting off.

NO / YES
- You can make an on/off setting by using NO / YES.
- Press YES to turn the setting on, or press NO to turn it off.

6. Inputting characters

- Some items such as song name, voice name, track name, style name, pattern name, and file name require you to enter characters.
- Characters are always entered using the same procedure.

- When you press a microkeyboard, the character printed at the left side of the microkeyboard will be input as a lowercase character.
- If you hold down the left [OCT DOWN] (CAPS) key as you press the microkeyboard, the character will be input as an uppercase character.
- If you hold down the left [OCT UP] (SHIFT) key as you press the microkeyboard, the symbol printed at the left of the microkeyboard will be input.
- You can use the numeric keypad to enter numerals.
- The right [OCT DOWN] (SPACE) key will enter a blank space.
- The right [OCT UP] (DEL) key will delete the character at the cursor location, and the characters to the right of the deleted character will be shifted to the left to close up the gap.
- Use the cursor keys to move the cursor.

- The number of characters in the character input area will depend on the situation.
- When entering a filename in Disk mode Save, there are restrictions on the types of characters which can be entered. Also, entering all spaces in the character input area will cause an error. You must use characters other than spaces.

7. Used Memory display

- Here's how to check the amount of currently used memory, so that you can see about how much more recording can be done.

- Simultaneously press the right [OCT DOWN] and [OCT UP].
- The Used Memory display will appear as long as you continue holding these keys.

8. Drum Map display

- Here's how to view the drum instruments that are assigned to the microkeyboard.
- The keyboard will be displayed vertically, and the instrument names will be shown to the right and left of the notes. The bottom of the display is the lowest note, and the top of the display is the highest note.
- The note names will be shown inside the C notes. This lets you see the octave relationships.
- By using the ◁ [OCT DOWN] and ▷ [OCT UP] keys to change the octave of the microkeyboard, you can shift the range of the keyboard that is displayed.

- Simultaneously press the left ◁ [OCT DOWN] and ▷ [OCT UP] keys.
- The drum map will be displayed as long as you continue pressing the keys.

9. Undo/Redo

- Undo is a function that cancels the last-executed recording, edit, or job operation, and restores the data to its previous condition.
- Redo is a function that cancels the Undo operation, and re-executes the operation.
- These jobs are very convenient when important data has been damaged because of recording, editing, or a job.
- These jobs can be used for recording, editing, and job (except Name) operations in Song and Pattern mode, and for Patch operations in Pattern mode.

- Hold down SHIFT and press JOB .
- After a recording, editing, or job operation has been performed, it will always be possible to execute Undo. Likewise, it will always be possible to execute Redo after Undo has been executed, and Undo and Redo will alternate.

- This procedure does the same thing as the Undo/Redo job in Song Job (→ p.141) and Pattern Job (→ p.259).

10. Initialization

- If you wish to reset the QY700's settings to the factory condition, you can perform the Initialization operation.

- While holding down the left ◁ [OCT DOWN] and ▷ [OCT UP] keys and the [F♯/G♭] key located at their right, turn on the power switch.

- When initialization has been performed and "QY700" appears in the display, release the keys. If you continue holding the three buttons, the drum map display accessed by ◁ [OCT DOWN] + ▷ [OCT UP] will appear.
- When the QY700 was shipped, the contents of the included demonstration disk were loaded into memory, but these contents will disappear when initialization is performed. If you want the contents of the demonstration disk to be in memory, re-load it from the disk.

- When initialization is performed, all the data you created will be erased. If you wish to keep any of your data, you must save it to floppy disk before initializing.

11. Other key operations

Here are some convenient key operations that you should know.

Auto Repeat function

• The cursor keys, 🔲 / 🔲 , and ◄◄ / ►► will Auto Repeat.
• If you continue holding them, the value or item being controlled by the key will change continuously.

◄◄ / ►►

• In Song mode or Pattern mode, these keys will rewind/fast-forward measures regardless of the cursor location.

SHIFT

• SHIFT + data dial or SHIFT + 🔲 / 🔲 will increase/decrease common parameters in the display by the same value.
• SHIFT + numeric keypad → ↵ will specify the same value for common parameters in the display.

9. Song creation procedure

- This section will take you through the steps of actually creating a song, providing a practical demonstration of the relation between phrases, patterns and songs, the procedure for using Auto-Accompaniment to create a song, and recording procedure in Song mode.
- Before you create the song, use the procedure given in "8. Basic operation" (→ p.51) to initialize the data.
- In this example, we will use the following procedure to create a song.
  Create patterns → Edit patterns → Input the pattern track → Input the chord track → Specify voices → Realtime recording of track 2 → Step recording of track 1 → Edit tracks 1 and 2 → Edit voices → Save to disk

Create patterns

Patterns to be created

Style 01, Section A
"intro"

Style 01, Section B
"normal1"

Style 01, Section C
"normal2"

Style 01, Section D
"fill1"

Style 01, Section E
"fill2"

Style 01, Section F
"ending"

Pattern creation procedure

- The procedure for creating a pattern will be explained as we create the Style 01 Section A "intro" pattern.

1. Enter Pattern mode.
- Press ⸢PATTERN⸥ to enter Pattern mode.

2. Select a pattern.
(1) Move the cursor to the Style number or Section (→ p.202).

(2) Use the data dial, [No] / [Yes] or the numeric keypad → ↵ to select Style 01 and Section A.

3. Specify the number of measures in the pattern.
(1) Press ⸢_____⸥ [D1] twice to move the cursor to the number of measures.
(2) Use the data dial, [No] / [Yes] , or numeric keypad → ↵ to set the number of measures to 02.

4. Set the Section Connection (→ p.202).
(1) Move the cursor to Section Connection.
(2) Use the jog dial or [No] / [Yes] to set the Section Connection to C.

5. Move the cursor to the location where the phrase or rest will be entered.
- Refer to the diagram for the pattern you are creating, to check the location where the phrase will be placed.
- First, move the cursor to M002 of track 1.

6. Enter the phrase.
(1) Use the data dial or ⬛ / ⬛ to display the phrase.
(2) Move the cursor to the phrase Instrument Category, Beat, and Number (→ p.38), and use the data dial, ⬛ / ⬛ , or numeric keypad → ⏎ to select the phrase.
(3) For track 1 M002, specify Instrument Category Fa, Beat 16, and Number 004.

```
Fa16004
```

Instrument category   Beat   Number

7. Enter a rest.
(1) Move the cursor to track 1 M001.
(2) Press [F5] (Rest) and a rest will be entered.

■ Refer to "Patterns to be created" (→ p.57), and enter all phrases and rests for Style 01 Sections A – F.

8. Specify the style name and pattern names
(1) Press [JOB] to enter the Pattern Jobs.
(2) Use the data dial, ⬛ / ⬛ or the numeric keypad to move the cursor to "29 Pattern Name."
(3) Press ⏎ to access the Pattern Name display.

```
PATT  -- JOB 29 Pattern Name --



Style        ■▭▭▭▭▭        Style name

Section=A    ▭▭▭▭▭        Pattern name
             ▨▨▨▨▨▨▨▨▨▨▨▨▨


  00    01    02    03    04    05
```
Section ← (label pointing to Section=A)

(4) Move the cursor to the Style Name, and enter "FunkDeGo".
• Use the microkeyboard to enter characters. For details refer to "8. Basic operation" (→ p.53).
(5) Move the cursor between the Section and Pattern Name, and enter the pattern names for each section A – F. Refer to "Patterns to be created," and input the appropriate pattern names "intro" – "ending."
(6) Press [EXIT] twice to return to the Patch display.

• To erase a phrase or rest that you have input by mistake, use the following procedure.
(1) Move the cursor to the phrase or rest that you wish to delete.
(2) Press [F6] (Clear) to erase the phrase or rest.
• If you wish to modify the phrase, there is no need to erase it.

Now let's playback.
• Press the sequencer key ▶ to playback the pattern.
• To create an original pattern, you can layer phrases while playing back.

Editing a pattern

Pattern voice mixer settings

- The pattern voice mixer lets you adjust effect send levels, pan, and volume etc. for each track.

TRACK	1	2	3	4	5	6	7	8
•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•
REVERB	*	0	*	0	*	*	*	*
•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•
PAN	*	*	88	*	50	78	*	50
VOLUME	115	*	*	*	90	90	*	115

Values marked with an "*" must be left unmodified from the default values.

1. Select the pattern voice mixer.
(1) In Pattern mode Patch, press ⎡ F2 ⎤ (Voice) to enter Pattern Voice.
(2) In Pattern Voice, press ⎡ F1 ⎤ (Mixer) to access the mixer display.

Data display

2. Move the cursor.
- Move the cursor to the parameter that you wish to set.
- As an example, let's move the cursor to the track 1 volume setting.

3. Use the numeric keypad to enter the value, and press ⏎ .
- For track 1 volume, enter 115 from the numeric keypad, and press ⏎ .
- The value that you input will appear in the data display field.

■ Enter all the parameters from the above table.

4. After you have finished entering all the values, press ⎡EXIT⎤ to return to the Patch display.

Play Effect Groove Quantize settings

- Groove Quantize is a function that allows you to apply certain rules to the timing, velocity, and gate time of the note data, producing subtle feelings of rhythmic nuance or "groove" in the playback data.

1. Access the Play Effect Groove Quantize display.
(1) In Pattern mode Patch, press ⎡ F1 ⎤ (PlayFx) to access Play Effect.
(2) In Play Effect, press ⎡ F1 ⎤ (Groove) to access the Groove Quantize display.

Data display

Template

Strength

2. Move the cursor.
- Move the cursor to the parameter that you wish to set.
- As an example, let's move the cursor to the track 1 template setting.

3. Use the numeric keypad to enter the value, and press ⏎ .
- Here we will set Template = 4 and Strength = 65 for all tracks.
- To specify the same value for all tracks, hold down ⎡SHIFT⎤ , and use the numeric keypad to enter the value and then press ⏎ .

4. After you have finished entering the values, press ⎡EXIT⎤ to return to the Patch display.

Now let's playback.

- Press sequencer key ▶ and the pattern will playback.
- To create an original pattern, you can modify the Pattern Voice or Play Effect settings while playing back.

Pattern track recording

Recording the Song mode Pattern track

- You will record styles and sections on the Pattern track of Song mode.
- If Styles and Sections have been entered into the Pattern track, patterns will change automatically when the song is played back.
- Here we will use Step Recording to record Styles and Sections on the Pattern track.

1. Enter Song mode.
- Press SONG to enter Song mode.

Song number

Pattern track

	Style	Section
001	01 FuncDeGo	[A] intro
:	:	:
010		[E] fill2
:	:	:
022		[D] fill1
:	:	:
031		[F] ending

2. Select the song number.
- Move the cursor to the song number, and use the data dial, NO / YES or numeric keypad → ↵ to enter 01.

3. Press TRACK DOWN / TRACK UP to move the cursor to the Pattern track.

4. Press • to enter Recording Standby condition.

5. Press F6 (STEP) to select Step Recording as the recording mode.

6. Press ► to start step recording on the Pattern track.

7. Move the cursor.
- Move the cursor to the locations for entering Style and Section.
- First move the cursor to the Section for measure 001.

8. Enter the styles and sections.
- Use the data dial or NO / YES to enter the styles and sections.
- Styles can also be enter using numeric keypad → ↵ .
- Sections can also be enter using the E2 – E3 microkeyboard.
- For locations which are blank, the pattern that was specified for the previous measure will be repeated.
- For the measure 001 Section, specify [A]intro.

■ Repeat steps 7 – 8 to input all the items from the above table.

9. When all record has been completed, press ■ to stop recording.

Chord track recording

Recording the Song mode Chord track

1. Press `TRACK DOWN` / `TRACK UP` to move the cursor to the Chord track.

2. Press ● to enter Recording Standby condition.

3. Press `F6` (STEP) to select Step Recording as the recording mode.

4. Press ► to start step recording on the Chord track.

Measure 001 ——

First beat

5. Move the cursor.
- Move the cursor to the location where you wish to enter the chord.
- In this example, move the cursor to the first beat of measure 001.

6. Enter the chord.
- Use the microkeyboard E2 – D♯3 to enter the Chord Root.
- Use the microkeyboard E3 – F4 to enter the Chord Type.

enter Chord Root   enter Chord Type

- As an example, select a Chord Root of D and a Chord Type of m7(9) to specify a Dm7(9) chord. Select the m7(9) Chord Type by pressing the C4 microkeyboard twice in succession.

- For beats which are left blank, the previously-specified pattern will be repeated.

■ Repeat steps 5 – 6 to enter all of the items in the following table of chords.

7. When all enter has been completed, press ■ to stop recording.

001	Dm7(9)			
002				
003	Em7(9)		A7(♭13)	
004	Dm7(9)		G7(13)	
005	Em7(9)		A7(♭13)	
006	Dm7(9)		G7(13)	
007	Em7(9)		A7(♭13)	
008	Dm7(9)		G7(13)	
009	Em7(9)		A7(♭13)	
010	Dm7(9)		G7(13)	
011	Dm7(9)			
012	G7(13)			
013	Dm7(9)			
014	G7(13)			
015	Em7(9)			
016	A7(♭13)			
017	Em7(9)			
018	A7(♭13)			
019	Dm7(9)			
020	G7(13)			
021	Dm7(9)			
022	A7(♯15)			
023	Em7(9)		A7(♭13)	
024	Dm7(9)		G7(13)	
025	Em7(9)		A7(♭13)	
026	Dm7(9)		G7(13)	
027	Em7(9)		A7(♭13)	
028	Dm7(9)		G7(13)	
029	Em7(9)		A7(♭13)	
030	Dm7(9)		G7(13)	
031	A7(♯15)			
032	Dm7(9)			

Now let's playback.

- Press the sequencer key ► and the song will playback.
- After you have finished entering the Pattern track and Chord track, return to Song Play and playback.

Voice settings

- In Voice mode you will specify the voices that tracks 1 and 2 will use.

1. Press VOICE to enter Voice mode.

2. Press   F1   (Mixer) to select the mixer.

Program number
Bank number

3. Move the cursor.
- Move the cursor to the program number and bank number of parts 1 and 2.

4. Select voices.
- Uses the data dial, NO / YES or the numeric keypad → ↵ to specify the program number and bank number.
- For part 1, specify
  Program number = 81
  Bank number = 18
  "Hollow"

- For part 2, specify
  Program number = 18
  Bank number = 33
  "LiteOrg"

Realtime record of track 2

- Here we will record the track 2 organ part in realtime from the musical score on page 56.
- Before you begin record , press SONG to return to Song Play.

1. Press SONG to enter Song mode.

2. Press TRACK DOWN / TRACK UP to move the cursor to track 2.

3. Press • to enter Recording Standby condition.

Tempo
Click mode
Click beat
Tempo count

4. Press   F3   (REPLACE) or   F4   (OVERDUB) to select either Replace or Overdub realtime recording.
- For the difference between Replace and Overdub recording, refer to "Chapter 2. SONG MODE" (→ p.109).
- In this example, press   F3   (REPLACE) to select Replace recording, so that you will be able to re-do the recording repeatedly as desired.

5. Press ▸ to start realtime recording of track 2.
- The play indicator will blink in time to the tempo, and after a count of several measures, recording will begin. With the default settings, there will be one measure of quarter-note clicks.
- While listening to the previously-record patterns, record your performance.
- Before you start recording, press ◂ to set the measure to 001:1.

6. Press ▪ to end recording.
- Press ▸ to playback.

Changing the tempo

- Here's how to change the tempo so that it will be comfortable for you to play.
(1) Press [D3] to move the cursor to Tempo.
(2) Use the data dial, [NO] / [YES] or numeric keypad → ↵ to set the desired tempo.

Changing the Click Beat, Click Mode, and Count

- Here's how to change the click or count.

(1) Press [D4] several times to move the cursor to Click Beat, Click Mode, or Count.
(2) Use the data dial, [NO] / [YES] or numeric keypad → ↵ to set the desired values.

Now let's playback.

- Press the sequencer key ▶ to playback the song.
- Listen to the performance of track 2.

Step recording of track 1

- Here we will use step recording to record the melody part for track 1 from the musical score printed on page 56.

1. Press TRACK DOWN / TRACK UP to move the cursor to track 1.

2. Press ● to enter Recording Standby.

3. Press F6 (STEP) to select Step Recording.

4. Press ▶ to start step recording on track 1.

Song position pointer

Measure:
Beat :Clock

Note value (Step Time)

Playing strength (Velocity)

Note length (Gate Time)

Location of the lowest "C" of the micro-keyboard

5. Move the song position pointer to the location where you wish to enter a note.
- Use the data dial or [NO] / [YES] to move the song position pointer.
- If the cursor is located elsewhere than the song position pointer ▼, you must first press ◄ to move the cursor to the song position pointer.
- You can move in steps of 1 measure by pressing ◄◄ / ►► .
- Since the first note of track 2 is in the first beat of measure 3, press ►► twice.

6. Select the note length.
(1) Press [D2] to move the cursor to the note value.
(2) Use the numeric keypad to select the type of note that you wish to enter.
- Since the first note in track 2 is a dotted 8th note, press numeric keypad [4] and then [0].

quarter note triplet (64 clocks)	8th note triplet (32 clocks)	16th note triplet (16 clocks)
8th note (48 clocks)	16th note (24 clocks)	32nd note (12 clocks)
whole note (384 clocks)	half note (192 clocks)	quarter note (96 clocks)

dot

7. Check the octave setting of the microkeyboard.
- Use ◁ [OCT DOWN]/ ▷ [OCT UP] to change the octave.
- The middle "C" of the keyboard graphic shown in the left edge of the display is the lowest "C" of the microkeyboard.
- In this case since the first-entered note is D3, use ◁ [OCT DOWN]/ ▷ [OCT UP] to set middle "C" to C3.

the same "C" note

8. Enter notes.
- Press microkeyboard to enter notes.
- A line of a length corresponding to the length of the specified note will appear, and the song position pointer will move to the right.
- In this example, press the middle "D" microkeyboard (D3).

Song position pointer

Note that was entered

9. Enter a tie.
- The note to be entered next is connected to the following note by a tie.
(1) Set the note value to a 16th note, and enter an "E" (E3).
(2) Set the note value to an 8th note, and press `SOLO` (TIE). The note length will be extended by an 8th note, and the song position pointer will move.

■ Repeat steps 6 through 9, and enter all the notes of track 1.

10. Press `■` **to stop recording.**
- Press `▶` to playback.

Deleting a mistakenly-entered note
- To delete the note that was entered immediately before, press `F5` (BkDelete). The note that was entered will disappear, and the song position pointer will move back, allowing you to re-enter the note.
- To delete any undesired note, move the cursor to the note that you wish to delete, and press `F6` (Delete). All notes located at the same timing will be deleted.

Using Jobs
- In track 1, measures 3 – 10 are identical to measures 23 – 30. In such cases, you can use the Song job Copy Event for more efficient data entry.
(1) Press `■` to stop Step Recording.
(2) Press `JOB` to access the Job menu.
(3) Use the data dial, `NO` / `YES`, the cursor keys, or the numeric keypad to select "11 Copy Event" and press `↵` to access the Copy Event job.
(4) Set the upper line to Song 01, TR=01, M003:1 – 010:4, the lower line to Song 01, TR=01, M 023 × 1, and press `↵`.

Now let's playback.
- Press the sequencer key `▶` to playback the song.
- Make sure that the performance of track 1 is correct.

Editing tracks 1 and 2

Quantize

- Quantize is a job that corrects the timing of notes. Let's quantize to track 2, which was recorded using realtime recording.

1. Press JOB to access the Job menu.

2. Select the Quantize job.
(1) Use the data dial, NO / YES , or the cursor keys to move the cursor to "01 Quantize."
(2) Press ↵ to access the Quantize job.

3. Specify the track which will be Quantized, and the note value that will be the basis for quantization.

Note value
that will be the basis
for quantization

Track to be quantized

(1) Move the cursor.
(2) Use the data dial, NO / YES , or the numeric keypad to set the values. If you wish to set other values, move the cursor without pressing ↵ . If you press ↵ the job will be executed.
(3) When you have made all settings, press ↵ to execute the job.
- For track 2, set TR=02 and Quantize= ♪

Play Effect Groove Quantize settings

- The same type of Groove Quantization that you used on the pattern can also be applied to song tracks 1 and 2.

1. Access the Play Effect Groove Quantize display.
(1) From Song Play, press F1 (PlayFx) to access Play Effect.
(2) In Play Effect, press F1 (Groove) to access the Groove Quantize display.

2. Move the cursor.
- Move the cursor to set.
- For this example, set Template and Strength.

3. Use the numeric keypad to enter the values, and press ↵ .
- Set both tracks 1 and 2 to a Template of 4.
- Set Strength to 50 for track 1, and 18 for track 2.

4. When you finish entering the values, press EXIT to return to Song Play.

Now let's playback.

- Press the sequencer key ▶ to playback the song.
- Listen to the changes in the performance that are produced by Quantization and Play Effect.

Modifying the voice of track 1

- Let's modify the voice that is being used by the track 1 melody.

1. Press VOICE to enter Voice mode.

2. Press F3 (VoicEdit) to enter Voice Edit.

Portamento

Mono/Poly

Cutoff

Data display

Resonance EG attack

3. Press TRACK DOWN to set Part to 1.

4. Move the cursor.
- Move the cursor to the parameter that you wish to modify.

5. Modify the value.
- Use the data dial, NO / YES , or the numeric keypad → ↵ to modify the value.
- Use the following table as a guideline for modifying the values.

	PORTAMENT		FILTER		EG
MONO/POLY	SW	TIME	CUTOFF	RESNANCE	ATTACK
MONO	ON	07	+16	+43	-64

Now let's playback.

- Press the sequencer key ▶ to playback the song.
- Playback the song while you modify the voice, and notice how the voice changes.

Save to floppy disk

- Let's save the patterns and song that you created to a floppy disk.

1. Prepare a new disk.
- The QY700 can use 3.5 inch floppy disks of either 2HD or 2DD types.
- For details on types of disk, refer to "Chapter 7. DISK MODE" (→ p.302).

2. Insert the floppy disk into the floppy disk drive.
- For details on inserting floppy disks, refer to "Chapter 7. DISK MODE" (→ p.302).

3. Format the floppy disk.
- Press DISK to enter Disk mode.
- For the formatting procedure, refer to "Chapter 7. DISK MODE" (→ p.306).

4. Save the data.
(1) Press F1 (Save), and then press [D1] (All Data) to access the Save All Data page.

```
DISK  -- SAVE ALL DATA --

                        ▤ > ▭ ALL DATA
▤ ALL DATA       ▥▪ ─────────────── Filename

           ▮➡     │ Save │

              ▤ DISK INFORMATION
              FILE │ TOTAL │ FREE
                0  │ 0000K │1423K
              ▭ ALL DATA
              FILE │   TOTAL
                0  │   0000K

                                  DeflName
```

(2) Use the microkeyboard to input the filename.
- Pressing F6 will enter "ALL-DATA" as the filename.
(3) Press ↵ .
▼ The display will indicate "Executing..." and the data will be saved.

- With this procedure, all data of the song that you created has been saved to floppy disk.

- The song data will remain in memory even if the power is turned off, but even if it is erased when you create a different song etc., you will always be able to recall it by loading the file "ALL-DATA" from the floppy disk.

Memo

Chapter 2. SONG MODE

You use SONG mode to play, edit, and record your songs. This chapter explains all SONG-mode operations.

SONG MODE Overview

- You use SONG mode to record, edit, and play songs.
- A *song* is a set of playable performance data that you create by recording onto the QY700 tracks under SONG mode.
- The QY700's *song memory* has room for 20 songs.
- Each song can comprise as many as 32 sequence tracks, together with a PATTERN track, a CHORD track, and a TEMPO track.
- If you wish to record songs in the same way as on a conventional sequencer, you can do so by working with the sequence tracks only. But in many cases you will want to use the *auto-accompaniment* feature to set up a backing. You can then play the backing while creating the melody and other parts.

Track Configuration

- As mentioned above, each song comprises up to 32 sequence tracks, together with a PATTERN track, a CHORD track, and a TEMPO track.
- The sequence tracks store your performance data, with each track storing a single part. Each part consists of a full set of performance data (note data, controller data, and so on). You can create each part using either realtime or step recording.

- The PATTERN track stores the pattern list for the auto-accompaniment feature. The track can also include meter (time signature) settings. You set up the patterns by entering appropriate styles and sections, again using either realtime or step recording.
- The CHORD track stores the chords used for replaying the patterns. When entering a chord, you can also set an "on-bass" or original bass setting, and a syncopation.
- The TEMPO track sets the tempo (and tempo changes) for the song. You set these values using realtime or step recording. The TEMPO track controls accelerando, ritardando, and other such tempo changes.

Sequence tracks	TR 1	Performance data
	TR 2	Performance data
	TR 3	Performance data
	⋮	⋮
	TR 31	Performance data
	TR 32	Performance data
PATTERN track	PATTERN	Patterns, meters
CHORD track	CHORD	Chord roots, types, on-bass, original bass, syncopation
TEMPO track	TEMPO	Tempo changes

Sequence tracks   TEMPO track

PATTERN track   CHORD track

2

Track Output Channels

- During song replay, the QY700 transmits sequence data (from the sequence tracks) and pattern data (from the 16 pattern tracks) to both the tone generator block and the MIDI OUT connectors. You can set up the track/channel correspondence using the SONG mode's Output Channel function (→ p.103).

- The tone generator block supports a maximum of 32 parts, and cannot reproduce data from all 32 sequence and 16 pattern tracks at the same time. But you can reproduce all 48 tracks at once by assigning any 16 of the tracks to an external MIDI tone generator.

Sequencer block
(Sequence tracks)

Sequence tracks	
TR 1	Performance data
TR 2	Performance data
⋮	⋮
TR 16	Performance data
TR 17	Performance data
⋮	⋮
TR 32	Performance data

Tone generator block

Part 1
⋮
Part 16
Part 17
⋮
Part 32

TO TG

MIDI OUT-A

MIDI OUT-B

Sequencer block (patterns)

	M001	M002	• • •
TR 1	Phrase		
TR 2	Phrase		
TR 3	Phrase		
⋮			
TR 16	Phrase		

MIDI OUT-A

MIDI OUT-B

1. SONG PLAY

3. Track numbers; keyboard-track setting (highlighted)

4. Track status

1. Song number and name

2. Pattern setup

Track name

9. Measure and beat

10. Loop switch; locations 1, 2

11. Tempo and meter

12. Click mode, click beat, and count

13. Transposition

SONG SONG PLAY
- F1 Play Effects
- F2 Track View
- F3 Output Channels
- F5 Save
- F6 Load
- ● Song Recording
- EDIT Song Edit
- JOB Song Jobs

6. Chord root and type   8. Keyboard image   7. Fingered-chord switch

5. Style number, style name, section, pattern name

Parameter	Values	Function	See page
1 Song no.	01,..., 20	Selects song for recording or replay.	P.73
Song name	View only	Name of selected song.	
2 Pattern setup	OFF, ON	Selects whether the pattern's effect is used during song replay.	P.73
3 Track numbers	View only	Shows track numbers.	P.74
Keyboard-track setting	[Seq] 1,...,32, [Pat] 1,...,16	The keyboard track is indicated in reverse video.	
4 Track status (data, MUTE, SOLO)	[ ] : no data [_] : data exists	Indicates whether track contains data.	P.74
	M : MUTE S : SOLO	Also indicates/selects SOLO or MUTE operation.	
5 Style no.	00 (=off),...,65	Sets initial style for backing.	P.75
Style name	View only	Name of selected style.	
Section	A,...,H	Selects one of the style's 8 sections.	
Pattern name	View only	Name of selected section.	
6 Chord root	C, C♯, D, E♭, E, F, F♯, G, A♭, A, B♭, B	Sets the chord root for pattern play.	P.75
Chord type	M, M7, 6, 7, m, m7, m6, mM7, m7(♭5), dim, aug, sus4, add9, M7(9), 6(9), 7(9), madd9, m7(9), m7(11), 7(♭5), 7(♯5), 7(♭9), 7(♯9), 7(13), 7(♭13), 7sus4, 7(♯11) --- (=THRU)	Sets the chord type.	
7 Fingered-chord switch	OFF, FINGRD	Selects use or nonuse of fingered-chord input.	P.76
8 Keyboard image	View only	Wheel/keyboard image monitors the data played from the keyboard track.	P.77
9 Measure	001,...,999	Sets location (measure) for start of song playback, and monitors	P.77
Beat	1,...,16	current playback location.	
10 Loop switch	OFF, LOOP	Selects use or nonuse of looped play.	P.78
Locations 1, 2	001,...,999	a) Sets jump points within song, by measure number. (To jump, press LOC 1 or LOC 2 .)	
		b) For looped play: sets start and end points for loop.	
11 Tempo	25.0,...,300.0	Sets tempo for song play.	P.78
Meter	View only	Shows meter of selected song.	
12 Click mode	Off, Rec, Ply, All	Selects use of acoustic click.	P.78
Click beat	♪, ♪, ♩, ♩.	Selects the click interval.	
Count	Off, 1,...,8Ms	Sets number of lead-in measures to recording start.	
13 Transposition	-24,...,+00,...,+24	Sets transposition for song playback, in semitones.	P.78

- • You use SONG PLAY mode to select songs for replay, to start and stop the replay, and to set the various replay parameters.
- • You can switch into VOICE mode and make adjustments in track voices and track balances while playback is in progress.
- • By selecting playback of an empty song (a song without data), you can use the auto-accompaniment feature as background for normal keyboard play. (→ p.106)
- • SONG PLAY includes eight submodes. You can switch from SONG PLAY into any of these submodes by pressing the appropriate key, as follows.
    - F1 (PlayFx) Move to Play Effects submode. (→ p.80)
    - F2 (TrView) Move to Track View submode. (→ p.100)
    - F3 (OutCh.) Move to Output Channel submode. (→ p.103)
    - F5 (Save) Move to Save Song submode. (→ p.307)
    - SHIFT + F5 (Save) Move to Save Song submode (SMF save). (→ p.307)
    - F6 (Load) Move to Load Song submode. (→ p.310)
    - SHIFT + F6 (Load) Move to Load Song submode. (→ p.310)
    - • Move to Record submode. (→ p.109)
    - EDIT Move to Song Edit submode. (→ p.129)
    - JOB Move to Song Job submode. (→ p.138)

1. Press SONG .
▼ The indicator above the key comes on, and the QY700 enters SONG mode (SONG PLAY).

2. Move the cursor onto the song number on the screen, and select the song using the data dial, NO / YES , or the numeric keypad.

3. Press ▶ to start playback.
▼ The PLAY indicator comes on, and playback begins.

4. To stop the playback, press ■ .

- • If you start song replay from a point other than the beginning, you may find that some of the song's PATTERN-track and CHORD-track data drops out. You can solve the problem by moving the start point to a measure at which a full pattern change occurs.

1. Song number and name

- • You use the song number to select a song for playback or recording.
- • The screen displays the song name (if any) directly to the right of the song number.
- • To set or change the song name, you use the SONG NAME job (→ p.165).

Song no.:   01,...,20

1. Move the cursor onto the song number on the screen.

2. Select a song number using the data dial, NO / YES , or the numeric keypad.

2. Pattern setup

- • This parameter determines whether the QY700 uses the pattern effects (the effects set up within each pattern) during song replay.
- • If you set this to OFF, the QY700 will not use the pattern effects. Instead, it uses the effects that you have selected under the EFFECT mode.
- • If you set this to ON, the QY700 uses the effects set up within the current pattern. In this case, the pattern's effect settings overwrite the EFFECT-mode settings. The EFFECT-mode settings therefore changes each time the pattern changes.

[icon] OFF, ON

[icon] 1. Move the cursor to the PATT SETUP area on the screen.

2. Select the setting using either the data dial or [−/NO] / [+/YES] .

3. Track numbers; keyboard-track setting

[icon] • Each sequence track and pattern track is identified by a track number.
• The highlighted track number identifies the current keyboard track. Note that the highlight is not related to cursor action.
• The keyboard track (unlike all other tracks) is connected internally to the keyboard. This means that you can add keyboard play to the track while song replay is in progress. Your keyboard play will be transmitted (along with the track's other data) to the tone generator block and MIDI OUT destinations selected by the track's Output Channel settings. (→ p.105)

[icon] 1,...,32 [sequence tracks], 1,...,16 [pattern tracks]

[icon] Press [TRACK UP] or [TRACK DOWN] as necessary to select the keyboard track.
▼ The keyboard track is indicated by highlight.

4. Track status (data, MUTE, SOLO)

Track contains data.
Track is empty.
Track is set to SOLO.
Track is muted.

[icon] • This area shows you the current status of each track. An underscore indicates that the track contains data.
• The [M] symbol appears to indicate that a track is muted. You can use the [MUTE] key to mute one or more tracks.
• The [S] symbol appears to indicate that the track is selected for solo play. When you select a track for solo play (by pressing the [SOLO] key), all other tracks are switched off. The underscore under other tracks changes appearance (to a dashed line) to indicate that these tracks are switched off.
• SOLO and MUTE options can be used with all tracks: the 32 sequence tracks and the 16 pattern tracks.
• You can select and store SOLO and MUTE settings separately for each song.

[icon] 1. First select a track using the [TRACK UP] or [TRACK DOWN] key, so that the track number is highlighted. (Note that this also becomes the keyboard track.)

2. *To mute the track* : Press the [MUTE] key once, so that the [M] appears.
To release a mute : Press [MUTE] once again.

3. *To select a track for SOLO play* : Press [SOLO] , so that the [S] appears.
To deselect : Press [SOLO] once again.
• You can easily use this feature to listen to your tracks one by one. Begin by playing one of the tracks solo, then press [TRACK UP] or [TRACK DOWN] to select the next track, then press [SOLO] again. Note that each time you press [SOLO] , any previous SOLO selection is automatically canceled.

4. You can also use the solo feature to select multiple "solo" tracks, so that only the selected tracks are produced (with all other tracks silent). Begin by setting one of the tracks to SOLO as described above. Then use TRACK UP / TRACK DOWN to select another track, and then press SHIFT + SOLO .

- *To cancel all of these solo selections at once* : Use TRACK UP or TRACK DOWN to move to any one of the solo tracks, and then press SOLO .

  To switch off only one of the solo selections : Move to the corresponding track, and then press SHIFT + SOLO .

5. Style number, style name, section, and pattern name

- This area sets the style and section for the initial (default) backing pattern.
- If your song's PATTERN track includes data (style and section settings), these settings will automatically become effective as playback proceeds. The content of this display area will change to indicate the effective settings.
- For general information about styles and sections, refer to Chapter 1. ($\rightarrow$ p.39)

Style no.:　　00,...,65　(where 00=off; 65=end)
Section:　　A,...,H

1. Move the cursor onto the style number on the screen. Select the desired style using the data dial, NO / YES , or the numeric keypad.

2. Move the cursor onto the section indicator. Select a new section using the data dial, NO / YES , or a microkeyboard key between E2 and E3.

- If you are working with sequence tracks only (TR1 to TR32), you should set the style number to 00 (off).

6. Chord root and type

- This area sets the chord root and type for the initial backing.
- If your song's CHORD track includes its own chord settings, these will automatically become effective as playback proceeds. The content of this display area will change to indicate the effective settings.
- For each chord, you can select from among 12 roots and 28 types.
- For each chord, you can also select a separate on-bass or original bass setting. ($\rightarrow$ p.115)

  On-bass:　　Sets fixed tone for bass phrases. Bass phrases will produce the on-bass tone only.

  Original bass:　Sets alternative chord (root and type) for bass phrases. Bass phrases will reproduce this alternative chord only.

- For a full chord listing, refer to the *QY700 Reference Listings*.

Chord root:
　C, C♯, D, E♭, E, F, F♯, G, A♭, A, B♭, B
Chord type:
　M, M7, 6, 7, m, m7, m6, mM7, m7 (♭5), dim, aug, sus4, add9, m7 (9), 6 (9), 7 (9), madd9, m7 (9), m7 (11), 7 (♭5), 7 (♯5), 7 (♭9), 7 (♯9), 7 (13), 7 (♭13), 7sus4, 7 (♯11), --- (=THRU)

■ *If you do not want to use fingered chording:*

1. Set the fingered-chord switch to OFF. (See Section 7., below.)

2. Move the cursor to the chord root/type area on the screen.

3. Select the root by pressing a microkeyboard key from E2 to D♯3.

4. Select the type by pressing a key from E3 to F4.

5. *To set an on-bass* : Hold down the left-side ◁ [OCT DOWN] key and press a key from E2 to D♯3.

   To set an original bass : Hold down the left-side ▷ [OCT UP] key and press a key from E3 to F4.

6. Press ⏎ to register your entry.

Enter the chord root here.   Enter the chord type here.

■ *If you want to use fingered chording:*

1. Go to UTILITY mode and set up the fingered-chord zone. (→ p.299)

2. Return to the SONG PLAY screen. Move the cursor to the fingered-chord switch area, and set the value to FINGRD (see Section 7 below).
   Leave the cursor in this area as you proceed.

3. Press down the keys for the appropriate chord, using either the QY700 microkeyboard or a remote MIDI keyboard. Be sure that all the keys you press are within the fingered-chord zone. The QY700 will automatically detect and register the root and type values.
   • To select the on-bass or original bass value: Continue to hold down the chord notes within the fingered-chord zone, while pressing one note (for the on-bass setting) or multiple notes (for the original-bass setting) in the keyboard area to the left of the zone.

• For information about how to enter chords, refer to Chapter 1. (→ p.42)

7. Fingered-chord switch

• This setting enables or disables the fingered-chord feature.
• If you enable this feature (by setting the value to FINGRD), you will be able to enter chord values directly by playing the appropriate chord either at the microkeyboard or at a remote MIDI keyboard. Specifically, you can enter the root and type by playing the keys within the keyboard's fingered-chord zone (→ p.299), and you can enter the on-bass or original-bass value by playing the appropriate key(s) in the area to the left of the zone. See the procedure given in Section 6., directly above.
• For general information about the fingered chord feature, refer to Chapter 1. (→ p.42)

OFF, FINGRD

1. Move the cursor to the fingered-chord switch area.

2. Use the data dial or ⌐NO⌐ / ⌐YES⌐ to select the setting.

• You can use the fingered-chord feature to set up an auto-accompaniment for live-action keyboard play. First set the fingered-chord switch to FINGRD, and then select an empty song. You can then play the chord notes (for the accompaniment) in the fingered-zone area (→ p.299), while using the area to the right of the zone for normal play. The QY700 will produce your performance in the keyboard track's current voice. (But note that the area to the left of the zone is not available.)

8. Keyboard image

- • This area presents an animated display of the playback of the keyboard track's recorded data.
- • Black markings appear on the keyboard graphic to indicate notes as they are replayed.
- • Note that the entire keyboard image does not fit on the screen. But you can shift the displayed area of the image up or down an octave by pressing ▷ [OCT UP] or ◁ [OCT DOWN].
- • The pitch wheel image moves in accordance with the track's pitch events.
- • The control-wheel image moves in accordance with control change events recorded on the track.

- • The ▷ [OCT UP] and ◁ [OCT DOWN] keys apply both to the keyboard image and to the QY700's microkeyboard. This means that you can use the image as a reference to check the microkeyboard's current octave range, the third C on the keyboard image (counting from the left) corresponds to the first C key on the microkeyboard.

Same pitch

9. Measure and beat

- • The measure value sets the start point for song playback.
- • The measure and beat values increment during playback, indicating the current song location.

Measure: 001,...,999
Beat: View only

1. Press [____] [D1] to move the cursor to the measure setting area.

2. Set the measure value using the data dial, [-1/NO] / [+1/YES] , or the numeric keypad.

- • You can change the measure value while song playback is in progress. Playback will immediately jump to the new location.
- • There are three ways to change the measure during playback, as follows.
  - • Press [____] [D1] to move the cursor to the measure display area, and then change the value as described above.
  - • Rotate the shuttle dial, or press ◄◄ or ►► .
  - • Press ◄ to return to the top of the song (measure 1, beat 1).
- • When you select a new song, the measure value automatically switches to 001.

10. Loop switch; locations 1 and 2

📖 • Set the loop feature ON when you want to repeatedly play a specific area of the selected song.
• When loop play is in effect, locations 1 and 2 set the start and end points of the loop (by measure number). Even when loop play is not in effect, you can jump to location 1 or 2 at any time by pressing LOC 1 or LOC 2 , respectively.

Loop on	LOOP
Loop off	OFF
Locations 1/2	001,...,999

1. Press [D2] as necessary to move the cursor to the loop-switch area or either of the location values.

2. Switch the value using the data dial or 🔲 / 🔲 .

• To set location 1 or 2 equal to the value of the current measure, hold down SHIFT and press LOC 1 or LOC 2 .

11. Tempo and meter

📖 • The tempo value sets the tempo for recording or playback of the song.
• Each song stores its own tempo value.
• The meter setting area shows the meter for the current measure.

Tempo	25.0,...,300.0 (=♩)
Meter	View only

1. Press [D3] to move the cursor to the tempo area.

2. Set the appropriate value using the data dial, 🔲 / 🔲 , or the numeric keypad.

• The meter values are set in Song Recording. (→ p.111)

12. Click mode, click beat, and count

📖 • These parameters set up the sequencer's click sound.
• The *beat* value sets the click interval.
• The *mode* setting determines when the click feature is used.
• The *count* value sets the number of preliminary measures used at start of realtime recording.

Click mode:
Off   Disables the click feature.
Rec   Use click for realtime and punch recording only.
Ply   Use click for realtime recording, punch recording, and playback.
All   Always use click.
Click beat:
♪, ♪., ♩, ♩., 𝅗𝅥
Count:
Off, 1,...,8Ms

1. Press [D4] as necessary to move the cursor to the appropriate click parameter.

2. Set the value using the data dial or 🔲 / 🔲 .

- If the QY700 fails to produce a click sound even when the mode setting is All, you may need to change the click setting within UTILITY mode. See page 297 for details.

13. Transposition

- You use this feature to transpose the song being played. The transposition is set in semitone increments.
- The setting operates on pattern tracks as well as sequence tracks.
- Transposition has no effect on drum voices and SFX kits.
- Transposition does not operate on bypassed pattern phrases (that is, on phrases whose type is set to Bypas).

– 24,...,+00,...,+24

1. Press ⬜ [D5] to move the cursor to the transposition area.

2. Set the value using the data dial, 🔲 / 🔲 , or the numeric keypad.

2. Play Effects

- The Play Effects submode allows you to adjust various song-play parameters, including quantizing, gate timing, and velocity. This makes it possible to control and adjust timing and articulation while playback is in progress. Note that these adjustments do not cause changes in your recorded data.
- Song playback remains available while you are in the Play Effects submode. In particular, the ▶, ■, ◄, ◄◄, and ►► keys continue to function normally.
- If you want to modify the actual recorded data to reflect your Play Effects adjustments, you can do so using the Normalize Play Effects song job. (→ p.163.)
- Each song stores its own Play Effect settings. When you change to a different song, the new song's settings automatically become effective.
- The Play Effects submode comprises three main pages together with two supplementary pages. You access the main pages by pressing the appropriate function keys (F1 , F2 , F3). You can access the supplementary page (where available) by pressing F4 .
- F1 (Groove) displays the "Groove Quantize" page. You use this page to set up the rhythm quantizing for each track.
- F2 (Shf|GT|Vel) selects the "Clock Shift, Gate Time, and Velocity" page. You use this page to set the corresponding values. Again, values are set separately for each track.
- F3 (Transpose) selects the "Transpose" page. You use this page to set transposition values for each track. You also use it to access the "Drum Table Edit" page; see below.
- F6 {(TR1~16) or (TR17~32)} switches the tracks displayed on the current page.
- F4 (GrovView), accessible only from the "Groove Quantize" page, switches the display to the "Groove View" page. You use the "Groove View" page to view the groove templates, and to view or adjust your user templates.
- F4 (DrTabEdit), accessible only from the "Transpose" page, switches you to the "Drum Table Edit" page. You can then use this page to adjust drum table settings.

1. At the SONG PLAY screen, press F1 (PlayFx).
▼ The QY700 enters the Play Effects submode.

2. If necessary, change the page by pressing the appropriate function key: F1 (Groove), F2 (Shf|GT|Vel), or F3 (Transpose).
- Note that the screen only has room to display 16 tracks (tracks 1 to 16, or tracks 17 to 32). You can toggle between these two groupings by pressing F6 .

3. After making the necessary settings, press EXIT to return to the main SONG PLAY screen.

- Editing Shortcut 1: You can simultaneously adjust values for all 32 tracks by an equal amount by holding down the SHIFT key while rotating the data dial or pressing -1 NO or +1 YES .
- Editing Shortcut 2: You can set all values for all 32 tracks to the same value by holding down SHIFT , then entering the value at the numeric keypad.

2

Groove Quantizing

Data display   3.Voice program

```
SONG  -- PLAY EFFECT --  TR=01:track 1
▓ □ ▶   P.FX Thru        = OFF  ▽ ◫│:│▶
▦ TRACK  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
VOICE     ▥ ▐ ▐ ▧ ▧ ▧ ▥ ▥ ▥ ▨    ▥ ▧ ▲◉ ▐ ▐
P.FX THRU ▣ ▣ □ □ □ □ □ □ □ □ □ □ □ □ □ □
TEMPLATE  23 │ │ -- -- -- -- -- -- -- -- -- -- --
QNT VALUE ♪ ♪ ♪ -- -- -- -- -- -- -- -- -- -- --
STRENGTH  ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●
GROOVE
TIMING
GROOVE
GATETIME  ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●
GROOVE
VELOCITY
Groove Shf│GT│Vel Transpose GrovView  TR17~32
```

2.Measure and beat

1. Track numbers
   Track name
   Keyboard-track setting
4.Play-effects THRU setting
5.Groove template
6.Quantizing value
7.Strength
8.Groove timing
9.Groove gate time
10.Groove velocity

[SHIFT] [F1] [F2] [F3] [F4] [F5] [F6] [SHIFT] [EXIT]

SONG SONG PLAY
  └ F1 Play Effects
      └ F1 Groove Quantize
          └ F4 Groove View

11.Grid   12.Clock shift   13.Gate-time multiplier

```
SONG  -- PLAY EFFECT --  TR=01:track 1
▓ □ ▶   P.FX Thru        = OFF  ▽ ◫│:│▶
▦ TRACK  1 □□□□□□□□□□□□□□□
VOICE     ▥
P.FX THRU ▣
TEMPLATE  23 1:1:000   +000 clocks ◫104% ♩+05
QNT VALUE ♪   ▽
            ●-●-●-●-●-●-●-●-●-●-●-●-●-●-●-●
STRENGTH  ● 1 1      1 2      1 3      1 4
            ←→←→←→←→←→←→←→←→←→←→←→←→←→←→←→←→
GROOVE
TIMING      ◆ ◇ ◆ ◇ ◆ ◆ ◇ ◆ ◇ ◆ ◆ ◇
GROOVE
GATETIME  ● ■■■■■■■■■■■■■■■■■■
          +99-
GROOVE    0-  ▬▬▬ ▬ ▬ ▬▬▬ ▬ ▬
VELOCITY  -99-
              GrovView CopyTmp TR17~32
```

14.Velocity offset

[SHIFT] [F1] [F2] [F3] [F4] [F5] [F6] [SHIFT] [EXIT]

	Parameter	Values	Function	See page
1	Track number	View only	Shows track number.	P.84
	Track name	View only	Shows name of selected track.	
	Keyboard track	1,...,32	Selects track for editing.	
2	Measure	001,...,999	Sets location (measure) for beginning of song playback, and indicates current playback location.	P.85
3	Voice program	View only	Identifies the voice program, as selected under VOICE mode.	P.85
4	THRU setting	☐, T	Sets the play effects ON or OFF for each track.	P.85
5	Groove template	-- (=off),1,...,100,US	Sets the groove template, for each track.	P.86
6	Quantizing value	-- (=off),♪,♪₃,♪,♪₃,♩,♩₃,♩ ♪₃,♪₃	Timing interval used as basis for quantization. (Selectable in Groove View screen only if template type = US.)	P.86
7	Quantize strength	000%,...,100%	Sets degree by which notes are pulled toward nearest quantizing line.	P.86
8	Groove timing	000%,...,200%	Sets degree by which performance data's original timing is affected by the groove template.	P.87
9	Groove gate time	000%,...,200%	Sets degree by which performance data's gate timing is affected by the groove template.	P.87
10	Groove velocity	000%,...,200%	Sets degree by which performance data's velocity values are affected by the groove template.	P.88
11	Grid	View only	Sets the dimensional unit for the groove template's parameter settings. The grid changes to match the selected quantization value.	P.88
12	Clock shift	Setting range varies according to quantization value.	Sets/shows final time shift applied after quantizing by template is completed. (Value is in clock cycles.)	P.88
13	Gate-time multiplier	000%,...,200%	Sets gate-time adjustment at each interval, by percent.	P.89
14	Velocity offset	-99,...,+00,...,+99	Sets velocity offset at each interval.	P.89

• You use the groove quantize (rhythm quantization) feature to impart a swing, or "groove," to the song data as it is played back. The feature operates by making specified adjustments in note-event timing, velocities, and gate times. Effective use of this feature makes it possible to convert mechanical-sounding song data into driving, meaningful music.

• The QY700 comes equipped with 100 preset groove templates, each corresponding to a different musical genre: swing, beat rock, acid jazz, and so on. The QY700 also allows you to create your own, customized templates (called *user templates*).

• Each template contains data for quantizing one measure of recorded data. Quantizing is executed by reapplying the template values to each measure of the recorded track.

• Because you can select a different template for each track, you can combine a wide variety of different rhythms within a single song. You can also select how strongly each track's template will act on the track's data — so that it is possible to get a wide range of different "grooves" even when using the same template.

• You use the Groove View page to view the preset templates, and to view or create your own user templates. The page displays the template settings in an easy-to-follow graphical form.

- Each groove template is divided into equal quantizing intervals: eighth-note intervals, eighth-note triplet intervals, sixteenth-note intervals, or some other such value. On the Groove View page, these intervals are represented by a grid pattern.
- The quantizing template sets separate adjustment values for each interval, allowing for subtle but swinging nuances. For example, the template might increase the gate times and velocities in the first half of the first beat, while delaying the timing of notes that occur in the second half of the second beat.
- You can create your own user templates by copying any of the preset templates, then adjusting the various values to create your own customized variations.

■ Setting the Groove Quantize Parameters

1. From the SONG PLAY screen, press `F1` (PlayFx).
▼ The QY700 enters the Play Effects submode.

2. Press `F1` (Groove).
▼ The Groove Quantize page appears.

3. Press `TRACK UP` or `TRACK DOWN` as necessary to select the track you want to work on.
- Note that a single screen can only display 16 tracks (tracks 1 to 16, or tracks 17 to 32). You can toggle between these two groupings by pressing `F6`.

4. Move the cursor to the TEMPLATE line.

5. Select the template using the data dial, `NO` / `YES`, or the numeric keypad.

6. Move the cursor to each of the parameters you want to change, and set the new value using the data dial, `NO` / `YES`, or the numeric keypad.

7. When you have finished making changes, press `EXIT` to return to the SONG PLAY screen.

■ Viewing or Creating a Groove Template

1. From the Groove Quantize page, press `F4` (GrovView).
▼ The QY700 displays the Groove View page.

2. Press `TRACK UP` or `TRACK DOWN` as necessary to select the appropriate track.
- Each screen displays 16 tracks (tracks 1 to 16, or tracks 17 to 32). You can toggle between these two groupings by pressing `F6`.

3. Move the cursor to the TEMPLATE setting. Select the template using the data dial, `NO` / `YES`, or the numeric keypad.

4. If you have selected the user template (US), you can now set the desired quantizing interval. To do so, move the cursor to the QNT VALUE line, then set the interval using the data dial, or `NO` / `YES`.
- Note that it is not possible to change the Quantize Value on the preset templates (templates 1 to 100).

5. Now move the cursor to any parameter line or (if US template) to any of the parameters in the grid area, and adjust as necessary using the data dial, `NO` / `YES`, or the numeric keypad.

6. When you have finished making changes, press `EXIT` to return to the Groove Quantize page.

7. Press `EXIT` again to return to the SONG PLAY screen.

- You can change the template and the template parameter values even while song playback is in progress.

1. Track numbers, track name, and keyboard-track setting

- Each sequence track is identified by a track number.
- The highlighted track number selects the track for quantization editing. It also selects the keyboard track — the track that connects internally to the QY700's keyboard/controller section.
- The upper right of the screen indicates the selected track, both by its number and by its name. You can set up your own track names from within SONG EDIT mode. (→ p.132)

1,...,32

- • Press **TRACK UP** or **TRACK DOWN** until the track number for the desired track is highlighted.
- • Note that the screen only shows tracks 1 to 16 or tracks 17 to 32. You can toggle between these two groupings by pressing **F6** .
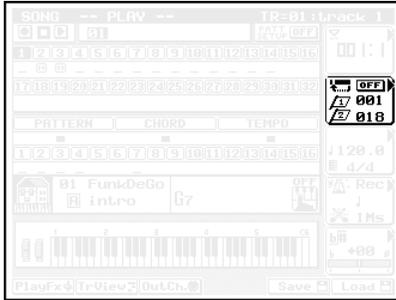
2. Measure and beat

- • The measure value sets the start point for song playback.
- • The measure and beat values increase during playback, indicating the current song location.

Measure: 001,...,999

1. Press ⬜ [D1] to move the cursor to the measure display area.

2. Set the measure value using the data dial, 🔳 / 🔳 , or the numeric keypad → ↵ .

- • You can change the measure value while song playback is in progress. Playback will immediately jump to the new location.
- • There are three ways to change the measure during playback, as follows.
  - • Press ⬜ [D1] to move the cursor to the measure display area, and then change the value as described above.
  - • Rotate the shuttle dial, or press ◀◀ or ▶▶ .
  - • Press ◀ to return to the top of the song (measure 001, beat 1).
- • When you select a new song, the measure value automatically switches to 001.

3. Voice program

- • The icons indicate the voice program assigned to each track.
- • You select the voices using VOICE mode. (→ p.168)

4. Play-effects THRU setting

- • You use this setting to determine whether or not to apply the play effects to the corresponding track. If you set the value to **T**, the QY700 will play the track without using the play effects.
- • The QY700 memorizes the THRU settings separately for each song

⬜ Apply play effects to the track.
T Do not apply play effects to the track.

1. Move the cursor to the P.FX.THRU line for the track you want to set.

2. Change the setting using the data dial or the 🔳 or 🔳 key.

5. Groove template

📖 • You use groove templates to set up the basic rhythm quantization settings for each track. Use of these templates allows you to impart a swing, or "groove," to the song data as it is replayed.
• Each template contains quantizing parameters for one measure of the recorded data. Quantizing is executed by reapplying the values to each successive measure of the recorded track.
• Note that each template actually contains parameter values sufficient to cover eight beats. If the song's time signature calls for less than eight beats per measure, the excess template values are not used. If the time signature is 4/4, for example, the template values for beats 5 to 8 are meaningless.
• The QY700 comes equipped with 100 preset templates, each corresponding to a different musical genre, such as swing, beat rock, and acid jazz. For a full template listing, refer to the *QY700 Reference Listings* (separately bound).
• The QY700 also allows you to create your own, customized templates (called *user templates*). (→ p.84)
• You can use the Groove View page to view the preset templates, and to view or create our own user templates. (→ p.84)

0101 1101	--	No template
	1,...,100	Preset template
	US	User template

🔘 1. Move the cursor to the TEMPLATE line for the track you want to set.

2. Select the template icon using the data dial, [NO] / [YES], or the numeric keypad.

6. Quantizing value (Accessible only on user templates)

📖 • The quantizing value sets the interval between the quantizing lines. (If you select an eighth-note as the value, for example, then a quantizing line will exist at every eighth-note interval, with the first line at the very beginning of the measure).
• Quantization is carried out by shifting note timing toward the nearest quantizing line. The STRENGTH parameter determines how strongly note-event timing is adjusted in this manner; again, see below.
• The quantizing interval sets the scale of the groove-template grid (as viewable on the Groove View page). Each template provides separate adjustment values (such as gate-time and velocity adjustment values) for each interval. Refer also to page 88.
• You can use the "Groove View" page to edit the quantizing value for the user template. Note that it is not possible to change the values for the 100 preset templates.

0101 1101	--	off	𝅘𝅥𝅯	32nd
	𝅘𝅥𝅯³	16th-triplet	𝅘𝅥𝅮	16th
	𝅘𝅥𝅮³	8th-triplet	𝅘𝅥	8th
	𝅘𝅥³	Quarter-triplet	𝅘	Quarter note
	𝅘𝅥𝅯+³	16th and 16th triplet		
	𝅘𝅥𝅮+³	8th and 8th-triplet		

7. Strength

📖 • This value sets the degree by which performance events (note events) are pulled toward the nearest quantizing line. (For more information about quantizing lines, refer to page 88, and also to page 142.)

- A setting of 100% produces the strongest quantizing, so that all notes are pulled directly onto the nearest line. A setting of 0% effectively switches off all quantizing.

Original (recorded) data

1:1   1:2   1:3   1:4   2:1

(Assuming that the quantizing value is set to ♩ , and meter is 4/4)

If STRENGTH = 100%:

1:1   1:2   1:3   1:4   2:1

If STRENGTH = 50%:

1:1   1:2   1:3   1:4   2:1

000%,...,100%

1. Move the cursor to the STRENGTH line for the track you want to set.

2. Set the value using the data dial, 🔽 / 🔼 , or the numeric keypad.

▨ 8. Groove timing

- This value sets the effectiveness of the groove template's CLOCK SHIFT settings.
- The formula for the timing adjustment at each interval is as follows:

Adjusted timing = original timing + (CLOCK SHIFT × GROOVE TIMING).

- A GROOVE TIMING value of 100% will therefore apply the template's clock shift value without change. A value of 200% will double the clock shift, while a setting of 0% will cancel it completely.

000%,...,100%,...,200%

1. Move the cursor to the GROOVE TIMING line for the track you want to set.

2. Set the value using the data dial, 🔽 / 🔼 , or the numeric keypad.

▨ 9. Groove gate time

- This value determines how strongly the groove template's "gate-time multiplier" (see Section 13 below) affects the note gate timing.
- The formula for the applied gate-time adjustment at each interval is as follows:

Adjusted gate time = original gate time × (100 + (gatetime multiplier -100) × GROOVE GATETIME).

- If GROOVE GATETIME is 100%, the QY700 will adjust the note gate times for each interval exactly in accordance with the template's multiplier value for that interval. If GROOVE GATETIME is 0%, the original gate times will be reproduced without change. If GROOVE GATETIME is 200%, the original gate times will be adjusted by double the template's multiplier.
- If the adjusted gate time is less than 1, the QY700 automatically uses a value of 1.

000%,...,100%,...,200%

1. Move the cursor to the GROOVE GATETIME line for the track you want to set.

2. Set the value using the data dial, 🔽 / 🔼 , or the numeric keypad.

10. Groove velocity

📖 • This value determines how strongly the groove template's interval-specific offset values (see section 14 below) affect the recorded note velocities.
  • The formula for the applied adjustment is as follows:

Adjusted velocity = original velocity + (template's velocity offset × GROOVE VELOCITY).

  • A GROOVE VELOCITY value of 100% will therefore apply the template's offset values without change. A value of 200% will applies twice the offset, while a setting of 0% leaves the original velocity unchanged.
  • If the adjusted velocity is less than 1, the QY700 automatically uses a velocity of 1.
  • If the adjusted velocity is greater than 127, the QY700 uses 127.

🔢 000%,...,100%,...,200%

🎛 1. Move the cursor to the GROOVE VELOCITY line for the track you want to set.

2. Set the value using the data dial, ⬚ / ⬚ , or the numeric keypad.

11. Grid

📖 • The grid display shows the quantization timing scheme. The graphic area (with the diamonds and the lines) shows the quantization intervals, while the numerical values show the currently selected grid position (by measure, beat, and clock cycle).

• The diamond-shaped figures along the top of the grid indicate the position of the quantizing lines. If the quantizing value is "eighth-note," then there will be 16 quantizing lines across the screen, each spaced one eighth-note apart. The first line will be at Measure 1, Beat 1; the second line (not drawn) will be halfway between Beat 1 and Beat 2; the third line will be directly on Beat 2; and so on.
• All templates contain parameter values sufficient to cover eight beats (1:1 to 1:8). If the song's time signature selects less than eight beats per measure, the excess template values are not used. If the signature is 4/4, for example, the template values for beats 5 to 8 are meaningless.
• The template parameters determine the adjustments carried out at each quantizing interval. The template may call for increased velocities and strong timing adjustments in the first interval, with decreased velocities and weaker adjustment in the second interval, and so on. You can use the grid to view the template's parameter values at each interval, so that you can see what the template is actually doing.
• Note that it is not possible to edit the interval-specific parameters of the preset templates. But it is possible to set or edit these values on the user templates.

🔢 Interval-line positions: 1:1:000,...,1:8:420

12. Clock shift

📖 • The clock-shift value sets the number of cycles that notes are shifted after initial quantization is completed. In other words, the QY700 will first quantize the notes (pulling them toward the nearest quantizing line) in accordance with the STRENGTH setting. It will then shift the notes by the specified number of clock cycles, in accordance with the clock-shift setting. Note that the clock-shift value may be different for each quantizing interval.
• If you are using a preset template, you will not be able to change these values (although you can view them). If you are using a user template, you can edit the values as described below.

🔢 The maximum clock shift displacement is equal to half the quantize interval in either direction. The range can be given as follows:
  -1/2 × (interval time),...,000,...+1/2 × (interval time)

where "interval time" refers to the number of clock cycles between interval lines. Note that positive values shift notes toward the end of the song, while negative values shift them toward the beginning.

1. Move the cursor to the clock-shift setting (in the grid area) for the appropriate interval.

2. Adjust the value using the data dial, 🔽NO / 🔼YES , or the numeric keypad.

13. Gate-time multiplier

• This value adjusts the gate times for each interval.
• If you are using a preset template, you can not change these values. If you are using a user template, you can edit the values as described below.
• The multiplier is only one of the factors determining the final gate-time adjustment. Specifically, the gate time is adjusted by the combined action of the multiplier and the GROOVE GATETIME setting (see Section 9 above).

000%,...,100%,...,200%

1. Move the cursor to the gate-time multiplier setting (in the grid area) for the appropriate interval.

2. Set the value using the data dial, 🔽NO / 🔼YES , or the numeric keypad.

14. Velocity offset

• This value applies offsets to the velocity values. Again, offsets can be different for each interval.
• If you are using a preset template, you can not change these values. If you are using a user template, you can edit the values as described below.
• This offset is only one of the factors determining the final velocity adjustment. Specifically, the velocity is adjusted by the combined action of the offset and the GROOVE VE-LOCITY setting (see Section 10 above).

–99%,...,00%,...,+99%

1. Move the cursor to the velocity-offset setting (in the grid area) for the appropriate interval.

2. Set the value using the data dial, 🔽NO / 🔼YES , or the numeric keypad.

F5 (CopyTmp) *Copy template*

• This function copies the currently selected groove template into the user template for a designated song or style.
• You can set up one user template for each song, and one for each style.
• The values in the window select the destination.

Destination: Song 01,...,20; Patt 01,...,64

1. At the "Groove View" page, select F5 (CopyTmp).
▼ The screen displays the Copy to User Template window.

2. Select the destination values (Song or Patt in the left box, and the appropriate number in the right box) using the data dial, 🔽NO / 🔼YES , and numeric keypad.

Clock Shift, Gate Time, and Velocity

1.Keyboard track   Data display   1.Track number and name

SONG PLAY

F1 Play Effects

F2 Clock Shift, Gate Time, and Velocity

```
SONG    -- PLAY EFFECT --   TR=01:track 1
■▢▶  P.FX Thru            = OFF  ▽▢▢1:1
▦ TRACK   1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
VOICE
P.FX THRU
CLOCK
SHIFT
GATETIME
VELOCITY
RATE
VELOCITY
OFFSET
Groove  Shf Gt Vel Transpose              TR17~32
```

- 2. Measure and beat
- 1.Track number
- 3.Voice program
- 4.Play-effects THRU setting
- 15.Clock shift modifie
- 16.Gate-time modifier
- 17.Velocity rate
- 18.Velocity offset

SHIFT   F1   F2   F3   F4   F5   F6   SHIFT   EXIT

Parameter	Values	Function	See page
1 Track number	View only	Shows track number.	P.84
Track name	View only	Shows name of selected track.	
Keyboard track	1,...,32	Selects track for editing.	
2 Measure; beat	001,...,999	Sets location (measure) for start of song playback, and monitors current playback location.	P.85
3 Voice program	View only	Identifies the voice program, as selected under VOICE mode.	P.85
4 THRU setting	☐, T	Sets the play effects ON or OFF for each track.	P.85
15 Clock shift	-999,...,+999	Shifts playback timing, in clock-cycle increments .	P.91
16 Gate-time modifier	000%,...,200%	Gate-time modifier, used to adjust the original gate times.	P.91
17 Velocity rate	000%,...,200%	Velocity modifier, used to adjust the original velocity values.	P.92
18 Velocity offset	-99,...,+99	Offset value, applied to the original velocities.	P.93

📖 • You use this page to set the following play-effect parameters: clock shift, gate-time modifier, velocity rate, and velocity offset.
  • Settings are different for each track. Use of this feature therefore allows you to adjust note-event timing, gate times, and velocities separately for each track.

🎛 1. At the SONG PLAY screen, press ⎡F1⎤ (PlayFx).
▼ The QY700 enters the Play Effects submode.

2. Press ⎡F2⎤ (Shf|GT|Vel).
▼ The "Clock Shift, Gate Time, and Velocity" page appears.

3. Press ⎡TRACK UP⎤ or ⎡TRACK DOWN⎤ as necessary to select the track whose values you want to set.
  • Note that the screen only has room to display 16 tracks (tracks 1 to 16, or tracks 17 to 32). You can toggle between these two groupings by pressing ⎡F6⎤.

4. Move the cursor to the line corresponding to the parameter that you want to set.

5. Change the value using the data dial, ⎡-1/NO⎤ / ⎡+1/YES⎤, or the numeric keypad.

6. When you have finished making changes, press ⎡EXIT⎤ to return to the SONG PLAY screen.

📝 • You can change these parameter values even while song playback is in progress.

The first four parameters listed in the table above are identical to those on the "Groove Quantize" page, and are explained on pages 84 and 85. The remaining parameters are described below.

▓ 15. Clock shift

📖 • You use this parameter to shift the playback timing by a specified number of clock cycles.

  • On the QY700, one clock cycle is equivalent to 1/480 quarter note.
  • A negative value shifts the timing backward (toward the beginning of the song), while a positive value shifts the timing forward. A setting of +480, for example, will effectively delay the playback timing by one beat.
  • For more information about clock usage, refer to page 131.

Original data

CLOCK SHIFT = +240

CLOCK SHIFT = -240

🔢 –999,...,000,...,+999

🎛 1. Move the cursor to the CLOCK SHIFT line of the track you want to set.

2. Set the value using the data dial, ⎡-1/NO⎤ / ⎡+1/YES⎤, or the numeric keypad.

📝 • It is not possible to shift the playback timing backwards past the song's original start point. If you set the value to –300, for instance, all song data in the first 300 clock cycles of the recording will be shifted back exactly to the start point.

▓ 16. Gate-time modifier

📖 • This value adjusts the gate times of the notes on the track. Adjustment is made by multiplying the original gate time by the modifier value (percentage).

- The gate time denotes the length of time that a note is held. For non-percussive voices, the gate time is equal to the actual playback time span.
- If you set this value to 100%, the original gate times will be used. Setting the value below 100% will lower the gate times, while higher values will increase them.
- If an adjusted gate-time value is less than 1, the QY700 will use a value of 1.

Original data

Gate time modifier = 50%

Gate-time modifier = 150%

000%,...,100%,...,200%

1. Move the cursor to the GATETIME setting of the track you want to adjust.

2. Set the value using the data dial, NO / YES , or the numeric keypad.

17. Velocity rate

- You use this parameter to apply a proportional change to the track's original velocity values.
- If you set this value to 100%, playback will be at the original velocities. If you set this value below 100%, velocities will be adjusted downward at playback. If you set the value above 100%, velocities will be adjusted upward.

Original data

Velocity rate = 50%

Velocity rate = 150%

000%,...,100%,...,200%

1. Move the cursor to the VELOCITY RATE setting of the track you want to adjust.

2. Set the value using the data dial, NO / YES , or the numeric keypad.

- In electronic music applications, velocity indicates how forcefully a note is struck. (The term "velocity" is used because, in keyboard instruments, the force is determined by measuring the speed at which the key is depressed). Changing the velocity may affect both the loudness and the timbre, although the relationship varies according to the voice.
- The VELOCITY RATE (described here) and the VELOCITY OFFSET (described below) work together to determine the actual adjustment applied to the track's velocities. The relation is as follows:

Playback velocity = (original velocity × VELOCITY RATE) + VELOCITY OFFSET.

- If an adjusted velocity is less than 1, the QY700 automatically uses a velocity of 1.
- If an adjusted velocity is greater than 127, the QY700 uses 127.

2. Play Effects

■ 18. Velocity offset

📖 • You use this parameter to apply an offset to the track's rate-adjusted velocity values. Note that the offset is applied *after* the VELOCITY RATE adjustment described above.

• Positive values increase the playback velocity, while negative values decrease it.

Original data

| | 96 | 64 | 32 | 127 | 96 |

VELOCITY OFFSET = -20

| | 76 | 44 | 12 | 107 | 76 |

VELOCITY OFFSET = +20

| | 116 | 84 | 52 | 127 | 116 |

▦ –99,...,+00,...,+99

⟳ 1. Move the cursor to the VELOCITY OFFSET line of the track you want to set.

2. Set the value using the data dial, the [−1/NO] / [+1/YES] key, or the numeric keypad.

✏ • The VELOCITY OFFSET (described here) and the VELOCITY RATE (described above) work together to determine the actual adjustment applied to the track's velocities. The relation is:

Playback velocity = (original velocity × VELOCITY RATE)
    + VELOCITY OFFSET.

• If an adjusted velocity is less than 1, the QY700 automatically uses a velocity of 1.
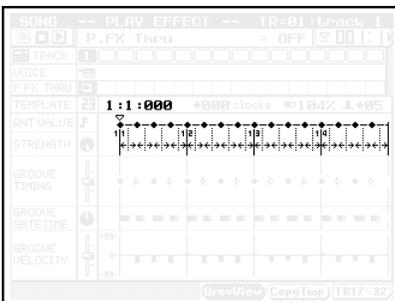• If an adjusted velocity is greater than 127, the QY700 uses 127.

2

Chapter 2. SONG MODE   **93**

Transposition

1.Keyboard track Data display 1.Track number and name

2.Measure and beat
1.Track number
3.Voice program
4.Play-effects THRU setting
19.Drum table
20.Transposition

SONG SONG PLAY
F1 Play Effects
F3 Transpose
F4 Drum-Table Edit

Parameter	Values	Function	See page
1 Track number	View only	Shows track number.	P.84
Track name	View only	Shows name of selected track.	
Keyboard track	1,...,32	Selects track for editing.	
2 Measure; beat	001,...,999	Sets location (measure) for start of song playback, and monitors current playback location.	P.85
3 Voice program	View only	Identifies the voice program, as selected under VOICE mode.	P.85
4 THRU setting	□, T	Sets the play effects ON or OFF for each track.	P.85
19 Drum table	-- (=none),1,...,8	Selects the drum table.	P.95
20 Transposition	-99,...,+99	Sets track transposition, in semitone increments.	P.95

- You use this page to select the drum table and transposition used for track playback.
- You can access and edit the drum-table data by pressing [F4] (DrTabEdit).

1. At the SONG PLAY screen, press [F4] (PlayFx).
▼ The QY700 enters the Play Effects submode.

2. Press [F3] (Transpose).
▼ The Transpose page appears.

3. Press [TRACK UP] or [TRACK DOWN] as necessary to select the track you want to work on.
- The screen can only display 16 tracks at one time (tracks 1 to 16, or tracks 17 to 32). You can toggle between these two groupings by pressing [F6].

4. Move the cursor to the appropriate parameter setting for the track you want to adjust.

5. Change the value using the data dial, [NO] / [YES], or the numeric keypad.

6. If you wish to view or edit the drum-table values, press [F4] (DrTabEdit).

7. When you have finished making changes, press [EXIT] to return to the SONG PLAY screen.

- You can change these parameter values even while song playback is in progress.

The first four parameters listed in the table above are identical to those on the "Groove Quantize" page, and are explained on pages 84 and 85. The remaining parameters are described below.

19. Drum table

- *Drum tables* are required to handle sequence data produced by drum machines that are not XG or GM compatible. As these machines may use different numbering arrangements to identify the various rhythm instruments, it becomes necessary to make appropriate substitutions when playing back the recorded data. Failure to make these substitutions will cause the "wrong" instruments to be produced.
- Each drum table therefore contains a list of rhythm-instrument substitutions. You can select the table separately for each track.
- The QY700 provides eight different tables. To view or edit the contents of a drum table you must press [F4] (DrTabEdit) to move into the Drum-Table Edit page (→ p.98).

-- (=none),1,...,8

1. Move the cursor to the DR TABLE setting for the appropriate track.

2. Set the value using the data dial, [NO] / [YES], or the numeric keypad.

20. Transposition

- You can use this feature to change the key (alter the pitch) of any track. You can set transposition separately for each track.
- Transposition is in semitone increments. Setting the value to +12, therefore, will raise the pitch of all notes on the track by exactly one octave. A setting of -12 would drop the pitch by exactly one octave.

–99,...,+99

1. Move the cursor to the TRANSPOSE setting for the track you want to transpose.

2. Set the value using the data dial, 🔲 / 🔲 , or the numeric keypad.

Drum Table Edit

1.Keyboard track   Data display   1.Track number and name

```
SONG  -- PLAY EFFECT --  TR=10:track 10
 ▨ ■▶  DR Table         = 1     ▽▥▥|:▶     2.Measure and beat
▦ TRACK 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16   1.Track number
VOICE  ▰▰▰▰▰▰▰▰▨▰▰▰▰▰▰▰                3.Voice program
P.FX THRU □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □         4. Play-effects THRU setting
DR TABLE  |  -- -- -- -- -- -- ▮  -- -- -- -- --  19.Drum table
                                      Velocity
From                 To                  Rate
All  Brush Snare   →E 1    Snare H2      ⏱
G 0  Snare L2      →E 1    Snare H2      ⏱
All  Kick          →C 1    Bass Drum H2  ⏱
B♭0  OpenRimShot2  →E 1    Snare H2      ⏱      22.Velocity rate
C#1  Side Stick    →E 1    Snare H2      ⏱
D 1  Snare M2      →E 1    Snare H2      ⏱
---- ----          → ---- ----          ⏱
---- ----          → ---- ----          ⏱
(Clear!)(Default)░░░░░░░░░░░░░░░TR17~32⟩
```

21.Replacement list

SHIFT   F1   F2   F3   F4   F5   F6   SHIFT   EXIT

SONG SONG PLAY
 └ F1 Play Effects
     └ F3 Transpose
         └ F4 Drum-Table Edit

2

Parameter	Values	Function	See page
1 Track number	View only	Shows track number.	P.84
Track name	View only	Shows name of selected track.	
Keyboard track	1,...,32	Selects track for editing.	
2 Measure	001,...,999	Sets location (measure) for start of song playback, and monitors	P.85
Beat	View only	current playback location.	
3 Voice program	View only	Identifies the voice program, as selected under VOICE mode.	P.85
4 THRU setting	□, T	Sets the play effects ON or OFF for each track.	P.85
19 Drum table	-- (=none),1,...,8	Selects the drum table.	P.95
21 Replacement list		List of drum-voice replacements.	P.98
22 Velocity rate	000%,...,100%,...,200%	Adjusts the velocity of the replacement voice. This parameter allows you to correct for volume imbalance that may be caused by the replacement.	P.98

• You use this page to edit the selected drum table. This feature is useful when you need to set the QY700 to replay rhythm-instrument data generated by a machine that was not compatible with the XG or GM protocol.

• You can use the Velocity Rate parameter to adjust the loudness balance.

1. At the SONG PLAY screen, press F1 (PlayFx).
▼ The QY700 enters the Play Effects submode.

2. Press F3 (Transpose).
▼ The Transpose page appears.

3. Press F4 (DrTabEdit).
▼ The Drum-Table Edit page appears.

4. Press TRACK UP or TRACK DOWN as necessary to select the appropriate track.
• The screen can only display 16 tracks at one time (tracks 1 to 16, or tracks 17 to 32). You can toggle between these two groupings by pressing F6 .

5. With the cursor on the DR TABLE line, select the desired drum table.

6. Move the cursor to the list entry or Velocity Rate value that you want to set.

7. Set the value using the data dial, NO / YES , or the numeric keypad.

8. When you have finished making changes, press EXIT to return to the Transpose screen.

• You can change these parameter values even while song playback is in progress.

The first five parameters listed in the table above (numbered 1, 2, 3, 4, and 19) are identical to those on the "Transpose" page; see page 94. The remaining parameters are described below.

21. Replacement List

• This list sets up the rhythm-instrument replacements.

• If this drum table is selected for a track during replay, the QY700 will replace any rhythm instrument designated in the From column (when encountered in the performance data for that track) with the instrument named in the corresponding To line.

• A "No" entry in the From column actually means "All but". A "No Snares" entry, for example, instructs the QY700 to substitute the to instrument for all voices other than snare voices.

• An "All" specification in the From column (for example, "All Shakers") tells the QY700 to replace all instruments of the specified type with the item named in the To entry.

• If different lines contain contradictory specifications, the lower line is effective.

[From]
No Shakers, No Congas&Bongos, No Crash Sym., No Ride Sym., No Hi-Hat, No Tom, No Brush Snare, No Kick, No Snare, All Shakers, Congas&Bongos, All Crash Sym., All Ride Sym., All Hi-Hat, All Tom, All Brush Snare, All kick, All Snare, All drum Kit, All Perc., C5 Bell Tree ~ C$\sharp$1 Surdo Mute

[To]
C5 Bell Tree,..., C$\sharp$1 Surdo Mute

1. Move the cursor to the parameter you want to set (From entry, To entry, or Velocity Rate).

2. Set the value using the data dial, the NO or YES key, or the numeric keypad.

3. When you have finished making changes, press EXIT to return to the Transpose screen.

22. Velocity rate

• This Velocity Rate parameter adjusts the velocity of the replacement rhythm instrument (the instrument named in the To column).

• To calculate the adjusted velocity, the QY700 multiplies the original velocity value by the Velocity Rate value. A Velocity Rate of 100% produces no adjustment, while larger values increase the velocity and lower values reduce it.

• This parameter allows you to adjust for loudness imbalances that may occur when you replace one instrument with another.

Original data

Velocity rate = 50%

Velocity rate = 150%

000%,...,100%,...,200%

1. Move the cursor to the Velocity Rate icon for the list entry you want to adjust.

2. Set the value using the data dial, the [−1/NO] or [+1/YES] key, or the numeric keypad.

[F1] **(Clear)**

- Press [F1] (Clear) to delete the entry on the selected line of the table.
- If you press [F1] while the cursor is in the From column, the QY700 will delete both the From and the To entries for that line.
- If you press [F1] while the cursor is in the To column, only the To item will be deleted. (If the To entry is left blank, the "From" instrument will be muted.)

1. Move the cursor to the appropriate entry.

2. Press [F1] (Clear).

[F2] **(Default)**

- Press [F2] (Default) to reset the drum table to its default values. All of the From, To, and Velocity Rate settings will return to their defaults.

Press [F2] (Default).
▼ The table resets to its defaults.

3. Track View

1.Track numbers; keyboard track   1.Track number and name

```
SONG  -- TRACKS VIEW --  TR=01:track 1
```

4.Measure
5.Tempo
4.Measure
6.Meter

More than 4 events
in this measure

Between 1 and 4
events in this measure

3.Voice program

2.Track status (data, MUTE, SOLO)

SONG SONG PLAY

F2   Track View

	Parameter	Values	Function	See page
1	Track number	View only	Shows track number.	P.101
	Track name	View only	Shows name of selected track.	
	Keyboard track	1,...,32	Selects the track that can be played by the keyboard.	
2	Track status	[ ] : no data [|] : data exists	Indicates whether track contains data.	P.101
	(data, SOLO, MUTE)	M : MUTE S : SOLO	Also indicates/selects SOLO or MUTE operation.	
3	Voice program	View only	Shows the voice program, as selected under VOICE mode.	P.102
4	Measure	001,...,999	Sets playback start position, and indicates current playback location.	P.102
5	Tempo	25.0,...,300.0	Sets tempo for song play.	P.102
6	Meter	View only	Shows meter for each measure.	P.102

- The Track View feature lets you see which measures of which tracks contain recorded data. This makes it easy to check the general sound structure of each track, or of the entire song.
- A gray rectangle indicates that the measure contains between 1 and 4 recorded events. A black rectangle means that the measure contains more than 4 events.
- If you press EDIT , the QY700 will display a list of the events in the currently selected track and measure.

1. At the SONG PLAY screen, press F2 (TrView).
▼ The QY700 displays the Track view screen.

2. Press ▶ to begin song playback.
▼ The PLAY indicator begins flashing, and the QY700 starts playback.

3. If you like, you can press ■ to stop playback and freeze the screen. You can then press ▶ to resume playback.

4. When you are finished viewing the tracks, press EXIT to return to the SONG PLAY screen.

1. Track numbers, track name, and keyboard track

- The numbers running down the left of the screen identify the different sequence tracks (tracks 1 to 32). Each track is identified by its track number. (You can scroll the display using the up/down cursor keys.)
- The highlighted track number identifies the keyboard track.
- The keyboard track is internally connected to the QY700 controller section.

1,...,32

- You can set the keyboard track using the ▲ / ▼ cursor key, or the TRACK UP or TRACK DOWN key.
- The keyboard track is indicated by highlight.

2. Track status (data, SOLO, MUTE)

- The space to the immediate right of the track number shows you the track's status. If there is no entry, then the track is empty. A [ǀ] mark indicates that the track contains data. An M means that the track is muted, while an S means that it is set to SOLO.
- You can use the MUTE key to mute one or more tracks. (See the procedure below.)
- You can use the SOLO key to select a track for solo play, so that playback from all other tracks is switched off. An S symbol appears to indicate that the track is selected for solo play, and all [ǀ] markers change appearance to indicate that these other tracks are temporarily switched off.

1. First select a track using the up or down cursor key or the TRACK UP or TRACK DOWN key.

2. To mute the track: Press the MUTE key once, so that the M appears.
To release a mute: Press MUTE once again.

3. *To select the track for SOLO play* : Press SOLO , so that the S appears.
To deselect SOLO play, press SOLO once again.
- You can easily use this feature to listen to your tracks one by one. Begin by playing one of the tracks solo, then move the cursor to another track and press SOLO again. Note that each time you press SOLO , any previous SOLO selection is automatically canceled.

4. You can also use the solo feature to select multiple "solo" tracks, so that only the selected tracks are produced (with all other tracks silent). Begin by setting one of the tracks to SOLO as described above. Then move the cursor to another track and press `SHIFT` + `SOLO`

- *To cancel all of these solo selections at once* : Move the cursor to any one of these tracks and press `SOLO` .
  To switch off only one of the solo selections : Move to the corresponding track, and then press `SHIFT` + `SOLO` .

3. Voice program

- Each icon indicates the voice program assigned to the corresponding track. (→ p.172)
- You can make the voice settings from VOICE mode. (→ p.167)

4. Measure

- The measure value selects the start point for song playback.
- The measure and beat values increment during playback to indicate the current song location.

001,...,999

1. Press ⬚ [D1] to move the cursor to the measure setting area.

2. Set the measure value using the data dial, 🔽 / 🔼 , or the numeric keypad → ↵ .

- You can change the measure value while song playback is in progress. Playback will immediately jump to the new location.
- There are three ways to change the measure during playback, as follows.
  - Press ⬚ [D1] to move the cursor to the measure display area, and then change the value as described above.
  - Rotate the shuttle dial, or press ⏴⏴ or ⏵⏵ .
  - Press ⏴ to return to the top of the song.

5. Tempo

- The tempo value sets the tempo for recording or playback of the song.
- The tempo setting applies to all tracks of the song.

25.0,...,300.0 (=♩)

1. Press ⬚ [D1] to move the cursor to the tempo area.

2. Set the appropriate value using the data dial, 🔽 / 🔼 , or the numeric keypad.

6. Meter

- This value shows the time signature set for each measure.

- You can set these values from the Recording Standby page (→ p.108) or during step recording of the PATTERN track (→ p.125).

4. Output Channels

1.Keyboard track   Data display   1.Track number and name

```
SONG  -- SEQ.OUT CH. --  TR=01:track 1
```

TO TG   = CH01   2.Measure and beat
TRACK 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16   1.Track number
TO TG   1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16   3.TO TG channel setup
MIDI OUT-A 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16   4.MIDI OUT-A channel setup
MIDI OUT-B Off Off Off Off Off Off Off Off Off Off Off Off Off Off Off Off   4.MIDI OUT-B channel setup
TRACK 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32   1.Track number
TO TG   17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32   3.TO TG channel setup
MIDI OUT-A Off Off Off Off Off Off Off Off Off Off Off Off Off Off Off Off   4.MIDI OUT-A channel setup
MIDI OUT-B 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16   4.MIDI OUT-B channel setup

Patt.TR

SHIFT F1 F2 F3 F4 F5 F6 SHIFT EXIT

SONG SONG PLAY
    F3 Output Channels

2

1.Keyboard track   Data display

```
SONG  -- PATTERN OUT CH. --  TR=PT01
```

TO TG   = CH17   2.Measure and beat
TRACK 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16   1.Track number
TO TG   17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32   3.TO TG channel setup
MIDI OUT-A Off Off Off Off Off Off Off Off Off Off Off Off Off Off Off Off   4.MIDI OUT-A channel setup
MIDI OUT-B 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16   4.MIDI OUT-B channel setup

Seq.TR

SHIFT F1 F2 F3 F4 F5 F6 SHIFT EXIT

Parameter	Values	Function	See page
1 Track number	View only	Shows track number.	P.104
Track name	View only	Shows name of selected track.	
Keyboard track	[Seq] 1,...,32, [Pat] 1,...,16	Selects track for channel-assignment editing.	
2. Measure	001,...,999	Sets location (measure) for start of song playback, and monitors	P.104
Beat	View only	current playback location.	
3 TO TG Channel setup	Off,1,...,32	Sets up channel transmission to the tone generator block.	P.105
4 MIDI OUT-A Channel setup	Off,1,...,16	Sets up channel transmission to the MIDI OUT-A connector.	P.105
MIDI OUT-B Channel setup	Off,1,...,16	Sets up channel transmission to the MIDI OUT-B connector.	

- You use these two pages to select the output locations for each track. The SEQ OUT CH. page sets up channel output for the sequence tracks. The PATTERN OUT CH. page sets up the output for the pattern tracks.
- You use the TO TG setting to set the track's output channel to the tone generator block.
- You use the MIDI OUT-A and MIDI OUT-B settings to assign each track to a MIDI OUT channel.
- The QY700 stores separate channel arrangements for each song. The assignments automatically change each time you switch to a different song.

1. At the SONG PLAY screen, press ⬚ F3 ⬚ (OutCh).
▼ The Output Channel setup screen appears.

2. Press ⬚ TRACK UP ⬚ or ⬚ TRACK DOWN ⬚ as necessary to select the track you want to work on.
- Note that the sequence-track settings and pattern-track settings are shown on different pages. You can toggle between the pages by pressing ⬚ F6 ⬚ .

3. Move the cursor to the appropriate channel-setting entry.

4. Change the value using the data dial, ⬚ ⬚ / ⬚ ⬚ , or the numeric keypad.

5. When you have finished making changes, press ⬚ EXIT ⬚ to return to the SONG PLAY screen.

1. Track numbers, track name, and keyboard track

- Each track is identified by a track number.
- The highlighted track number identifies the keyboard track. The keyboard track is internally connected to the QY700 controller section.

Sequence track: 1,...,32
Pattern track: 1,...,16

Press ⬚ TRACK UP ⬚ or ⬚ TRACK DOWN ⬚ until the track number for the desired track is highlighted.
- Use ⬚ F6 ⬚ as necessary to switch between the sequence-track page and the pattern-track page.
- The keyboard track is indicated by highlight.

2. Measure and beat

- The measure value sets the start point for song playback.
- The measure and beat values increment during playback to indicate the current song location

Measure: 001,...,999

1. Press ⬚ ⬚ [D1] to move the cursor to the measure setting area.

2. Set the measure value using the data dial, ⬚ ⬚ / ⬚ ⬚ , or the numeric keypad.

- You can change the measure value while song playback is in progress. Playback will immediately jump to the new location.
- There are three ways to change the measure during playback, as follows.
  - Press ⬚ ⬚ [D1] to move the cursor to the measure display area, and then change the value as described above.
  - Rotate the shuttle dial, or press ⬚◄◄⬚ or ⬚►►⬚ .
  - Press ⬚◄⬚ to return to the top of the song.

3. TO TG channel setup

- You use this parameter to set the channel over which each track transmits to the tone-generator block.
- The figure below shows the relationship between the sequencer block (sequence and pattern tracks) and the tone-generator block.
- It is permissible to assign multiple tracks to the same TG part (the same channel number).
- If you want to direct a track's data to an external MIDI device only (and not to the tone generator block), set this value to Off.
- All output-channel settings are stored separately for each song.

Sequencer block / Tone generator (TG) block

	Track	TO TG		Part
Sequence tracks	1	1	→	1
	2	2	→	2
	⋮	⋮		⋮
	16	16	→	16
	17	off		17
	18	off		18
	⋮	⋮		⋮
	32	off		32
Pattern tracks	1	17		
	2	18		
	⋮	⋮		
	16	32		

Off   Track data not sent to TG block.
1,...,32   Track data sent to corresponding TG part.

1. Move the cursor to the TO TG area for the track you want to set.

2. Set the value using the data dial, [NO] / [YES], or the numeric keypad.

4. MIDI OUT-A and MIDI OUT-B channel setup

2

- You use these settings to assign tracks to MIDI channels.
- During playback, the QY700 adds corresponding MIDI OUT channel identification data to each track's performance data, and sends the result to the corresponding MIDI OUT connector (A or B). Refer to the illustration below.
- If you do not want to transmit the track data to the MIDI OUT connectors, set both MIDI-OUT values (MIDI OUT-A and MIDI OUT-B) to Off. Note that you can still produce the track data through the tone generator block, by setting an appropriate value on the TO TG line.
- All output-channel settings are stored separately for each song.

Sequencer block

	Track			MIDI OUT-A			MIDI OUT-A
Sequence tracks	1	Off	→	1		→	
	2	Off	→	2			
	⋮			⋮			
	16	Off	→	16			
	17		→	MIDI OUT-B			MIDI OUT-B
	18		→	1		→	
	⋮			2			
	32			⋮			
Pattern tracks	1		→	16			
	2						
	⋮						
	16						

Off   QY700 does not send data to MIDI OUT.
1,...,16   QY700 sends data out over corresponding MIDI channel, via corresponding MIDI OUT connector (A or B)

1. Move the cursor to the MIDI OUT-A or MIDI OUT-B area for the track you want to set.

2. Set the value using the data dial, [NO] / [YES], or the numeric keypad → [↵].

5. Song Recording

Recording Songs on the QY700

The QY700 offers two general methods for recording songs: *realtime* recording and *step recording*.

- With realtime recording, the QY700 operates as a multitrack recorder, recording the performance data as it is played. This allows you to catch all the nuances of an actual performance.
- With step recording, you input your music one note at a time, almost as if you were writing the notes down on a music sheet. This allows you to create complex phrases without having to play them in real time at the keyboard.

The general procedure that you use to make the recording will vary according to whether or not you are using the QY700's auto-accompaniment feature.

- If you are using auto-accompaniment, you begin by entering the required accompaniment settings. You can then listen to the accompaniment while recording the other parts onto the sequence tracks.
- If you are not using auto-accompaniment, you can skip the accompaniment setup steps, so that the procedure is shorter.

Both of these procedures are outlined below.

If using auto-accompaniment:

1. At the SONG PLAY screen, select the destination song for the recording. ($\rightarrow$ p.73)

2. Press ● to enter Recording Standby. Select the appropriate recording values. ($\rightarrow$ p.109)

3. Record the styles and sections for the PATTERN track. Use either the realtime method ($\rightarrow$ p.112) or the step method ($\rightarrow$ p.120).

4. Record the chords into the CHORD track, using either the realtime method ($\rightarrow$ p.112) or the step method ($\rightarrow$ p.120).

5. Enter VOICE mode and make provisional mixer settings for all of the parts that will be used to reproduce your recorded tracks. ($\rightarrow$ p.170)

6. Record on track 1, again using either the realtime ($\rightarrow$ p.112) or step ($\rightarrow$ p.120) approach. If you are using the realtime method, you can listen to auto-accompaniment while making the recording.

7. Now record track 2. (If using the realtime method, you can listen to track 1 together with auto-accompaniment as you record.) Then proceed to record the subsequent tracks in the same way.

8. Go to SONG mode's Play Effects submode, and adjust the play-effect settings to get the right rhythms and nuances. You can listen to the recording as you make the adjustments. ($\rightarrow$ p.80)

9. Go to SONG EDIT mode, and edit the sequence tracks as necessary. ($\rightarrow$ p.129)

10. If necessary, use appropriate song jobs to make other types of editing changes. ($\rightarrow$ p.138)

11. Return to VOICE mode, and adjust the tone-generator settings as necessary. Listen to the recording as you make these adjustments.

12. When you are satisfied with the results, save the song to disk.

If not using auto-accompaniment:

1. At the SONG PLAY screen, select the destination song for the recording. (→ p.73)

2. Enter VOICE mode and make provisional mixer settings for all of the parts that will be used to reproduce your recorded tracks. (→ p.170)

3. Press ⊙ to enter Recording Standby. Set the appropriate recording values. (→ p.109)

4. Record on track 1, using either the realtime (→ p.112) or step (→ p.120) approach.

5. Now record track 2. (If using the realtime method, you can listen to track 1 as you record.) Then proceed to record the subsequent tracks in the same way.

6. Go to SONG mode's Play Effects submode, and adjust the play-effect settings to get the right rhythms and nuances. You can listen to the recording as you make the adjustments. (→ p.80)

7. Go to SONG EDIT mode, and edit the sequence tracks as necessary. (→ p.129)

8. If necessary, use appropriate song jobs to make other types of editing changes. (→ p.138)

9. Return to VOICE mode, and adjust the tone-generator settings as necessary. Listen to the recording as you make these adjustments.

10. When you are satisfied with the results, save the song to disk.

2

Recording Standby

5.Recording track   3.Song number and name   4.Pattern setup

SONG   -- REC REPLACE --   TR=01:track 1

10.Measure and beat

6.Track status
(data, MUTE, SOLO)

9.Fingered-chord switch

11.Tempo and meter

12.Click mode, click
beat, and count

13.Transposition

1.Recording mode

2.Multitrack switch   8.Chord root and type

7.Style number, style name,
section, pattern name

SONG SONG PLAY

□ Recording Standby

F3 Replace

F4 Overdub

F5 Punch

F6 Step Recording

Parameter	Values	Function	See page
1 Recording mode	F3 (REPLACE), F4 (OVERDUB), F5 (PUNCH), F6 (STEP)	Selects the recording method.	P.109
2 Multitrack switch	F1 (MULTI)	Allows you to record onto all sequence tracks (1 to 16) at the same time.	P.110
3 Song number	01,..., 20	Selects song for recording.	P.109
Song name	View only	Shows name of selected song.	
4 Pattern setup	OFF, ON	Selects whether the pattern's effect is used during song replay.	P.109
5 Recording track	1,...,32, PATTERN, CHORD, TEMPO	Selects the track to be recorded.	P.109
6 Track status	[ ] : no data [_] : data exists	Indicates whether track contains data.	P.109
(data, SOLO, MUTE)	M : MUTE S : SOLO	Also indicates/selects SOLO or MUTE operation.	
7 Style no.	00,...,65 (where 00=off; 65=end)	Sets initial style for backing.	P.109
Style name	View only	Shows name of selected style.	
Section	A,...,H	Selects one of the style's 8 sections.	
8 Chord root	C, C♯, D, E♭, E, F, F♯, G, A♭, A, B♭, B	Sets the chord root for pattern play.	P.109
Chord type	M, M7, 6, 7, m, m7, m6, mM7, m7(♭5), dim, aug, sus4, add9, M7(9), 6(9), 7(9), madd9, m7(9), m7(11), 7(♭5), 7(♯5), 7(♭9), 7(♯9), 7(13), 7(♭13), 7sus4, 7(♯11), --- (=THRU)	Sets the chord type.	
9 Fingered-chord switch	OFF, FINGRD	Selects use or nonuse of fingered-chord input.	P.109
10 Measure	001,...,999	Sets location for start of recording, and indicates current	P.109
Beat	1,...,16	recording/playback location.	
11 Tempo	25.0,...,300.0	Sets tempo for recording.	P.111
Meter	1/16,...,16/16; 1/8,...,16/8; 1/4,...,8/4	Sets meter for selected song.	
12 Click mode	Off, Rec, Ply, All	Selects use of acoustic click.	P.109
Click beat	♪, ♩, ♩, ♩, 𝅝	Sets the click interval.	
Count	Off, 1,...,8Ms	Sets number of lead-in measures to recording start.	
13 Transposition	24,...,+00,...,+24	Sets transposition for song playback, in semitones.	P.109

- You use SONG RECORDING mode to record your songs.
- You start a recording session from the SONG PLAY screen by pressing the ● key. This puts you into Recording Standby. You can then select the recording method and set the relevant parameters, before beginning the actual recording.
- If you are using realtime recording, you can use the MULTITRACK feature to simultaneously record all incoming MIDI channels (1 to 16) onto the corresponding sequence tracks. This is useful when you want to record a multipart recording from a computer or another sequencer in real time. (→ p.110)

1. At the SONG PLAY screen, select the destination song (by song number). Also set up the voice and the effects.

2. Again at the SONG PLAY screen, press ● to enter Recording Standby.

3. Set the recording mode, and the relevant recording parameters. Parameters include: track, meter, starting point (by measure), tempo, click beat, click mode, count, and transposition.

4. Press ▶ to start recording.
▼ The PLAY indicator comes on (either solid or blinking).
- You can now record on any track. Tracks that are already recorded can be played back while you record on some other track.
- If you want to use patterns, you should begin by recording the PATTERN and CHORD tracks.

5. When you are ready, press ■ to terminate recording and return to the SONG PLAY screen.

6. You can now edit or manipulate your recorded data using SONG EDIT mode (→ p.129) and any of the song jobs (→ p.138).

7. When you are satisfied with the results, save your recorded song to disk. (→ p.307)

- If you press ● while in Recording Standby, the QY700 returns to SONG PLAY screen.

Most of the parameters listed in the table above are described in the explanations for the SONG PLAY screen (→ p.72). Below are described only those parameters that have not yet been explained: the recording mode, the multitrack switch, the recording track, and the meter.

1. Recording mode

- The QY700 offers four different recording modes. The first three modes (REPLACE, OVERDUB, and PUNCH) are realtime modes, while the STEP mode is used for step recording.
- With realtime recording, the QY700 operates as a multitrack recorder, recording the performance data as it is played. With step recording, you input the music one note at a time (→ p.120).
- You use REPLACE mode when you want to overwrite an already recorded track with new data. The first recording is lost, and the new one takes its place. You use this mode, for example, when you are unsatisfied with the results of the first recording and want to redo it.
- You use OVERDUB when you want to add more data to a track that already contains data. This feature lets you build up a complex phrase out of a series of realtime recordings.
- You use PUNCH mode when you want to record (in real time) over a specific area of the track only. In this case, you must set the start and end points before you begin the recording. This feature allows you to redo segments that you don't like, while retaining the segments that you do like. Note that PUNCH mode always replaces (destroys) the original data over the specified area. (→ p.118)

2

[0101 1101]   **F3** (REPLACE)   Record in real time, overwriting already recorded data.

        F4 (OVERDUB)   Record in real time, retaining already recorded data.

        F5 (PUNCH)   Record in real time over specified segment of the track, overwriting any data already recorded in that area.

        F6 (STEP)   Step recording

[○] • Press the corresponding function key: **F3** (REPLACE), **F4** (OVERDUB), **F5** (PUNCH), or **F6** (STEP).

[✎] • The multitrack recording feature is available with all realtime recording modes. If you are using step recording, the MULTI option will not appear on the screen. (→ p.110)

2. Multitrack switch

[📖] • This feature is available with all realtime recording modes (REPLACE, OVERDUB, and PUNCH). It is not available with STEP recording.
• If you select this feature, the QY700 will simultaneously record data received over MIDI channels 1 to 16 onto the corresponding sequence tracks (tracks 1 to 16). This is useful when you want to record (copy) a multipart recording from a computer or another sequencer in real time, or when you want to record from a MIDI instrument (such as a MIDI guitar) that outputs over multiple channels.

[0101 1101]   **MULTI** (outline)   The Multitrack function is OFF. The QY700 records to one selected track only.

       MULTI (filled)   The Multitrack function is ON.

[○] 1. At the Recording Standby page, select one of the realtime recording modes (REPLACE, OVERDUB, or PUNCH).

2. Press **F1** (MULTI) to set the Multitrack feature ON. The **F1** indicator appears highlighted (**MULTI**) to indicate that multitrack recording is selected.

3. You can switch the function off by pressing **F1** (MULTI) once again.

[✎] • Before starting a realtime recording from an external sequencer or computer, be sure that MIDI SYNC, MIDI CONTROL, and other relevant MIDI parameters are set correctly. (→ p.291)

5. Recording Track

[📖] • This parameter selects the track to be recorded.
• The track number of the selected track is highlighted on the screen.

[0101 1101] TR1,...,TR32   Sequence track 1 to 32
PATTERN   Pattern track
CHORD   Chord track
TEMPO   Tempo track

[○] • Press **TRACK UP** or **TRACK DOWN** until the track number of the desired track is highlighted.

[✎] • For TEMPO recording, you can use only realtime (REPLACE or PUNCH) recording modes. But you can use the SONG EDIT mode to apply step changes to the track.
• To record pattern data into the 16 pattern tracks, use PATTERN mode. (→ p.197)

11. Meter

- This parameter sets the meter for each measure of the song. The selected meter applies to all tracks.
- Although you will generally set these values before starting to record, you are also free to set or change them after recording is completed. If your song will include time changes, you can record the whole song in a standard meter such 4/4 and then make the required adjustments later.
- You can use step recording of the PATTERN track ($\rightarrow$ p.125) to adjust each measure's meter value.

1/16,...,16/16, 1/8,...,16/8, 1/4,...,8/4

1. Press [ ] [D3] to move the cursor to the meter setting area.

2. Set the value using the data dial or the [−1 NO] or [+1 YES] key.

- To change the meter at some internal point within the song: First select the measure at which you want to make the change, and then set the meter value.

Realtime Recording: Sequence Tracks (TR1,...,TR32)

Recording track

Recording mode

SONG SONG PLAY
Song recording
F3 Replace
F4 Overdub
TR1~TR32
PATTERN
CHORD
TEMPO

• You use this function to record a performance in real time. You can input the performance using the QY700 microkeyboard, a remote MIDI keyboard, or some other type of remote MIDI device

• This section describes the F3 (REPLACE) and F4 (OVERDUB) realtime recording methods. The F5 (PUNCH) method, which is also realtime, is described on a later page.

• You use the F3 (REPLACE) method when you want to overwrite any data already existing on the track – for example, when you want to redo a phrase that you are not satisfied with.

• You use F4 (OVERDUB) when you want to add your new performance data to the data already contained in the track. This allows you to build up a complex phrase by recording it as a combination of several parts.

1. At the SONG PLAY screen, press •.
▼ The QY700 displays the Recording Standby page. The RECORDING indicator comes on.

2. Press F3 (REPLACE) or F4 (OVERDUB) to select the recording method.

3. Press TRACK UP or TRACK DOWN as necessary to select the track you want to record.

4. Press ▶.
▼ The PLAY indicator begins flashing. The QY700 counts out the specified number of lead-in measures (as set by the COUNT parameter; see page 78), and then begins the recording.

5. Input the performance data from the microkeyboard or your remote MIDI instrument.

6. When you are ready to stop recording, press ▪.
▼ The QY700 returns to the SONG PLAY screen.

• You can use song job 00 (UNDO/REDO) to cancel a recording that you have just made. This allows you to recover data that you have inadvertently over-recorded. (→ p.141)

• Remember to set the appropriate parameters (such as measure, tempo, meter, click beat, click mode, count, and transposition) before beginning the recording. (→ p.109)

• If you have selected a style number and section, the QY700 will start pattern replay at the same time that it starts to record. If you don't want to hear a pattern, set the style number to 00.

• If you have selected a pattern whose section connection is set to End, the QY700 will automatically stop recording when the pattern playback reaches its end. If you do not want this to happen, select a different pattern or else change the section connection setting. (→ p.202)

• You can use the F1 (MULTI) function to make a simultaneous recording of multiple MIDI channels. (→ p.110)

• Sequence tracks can record system-exclusive data, subject to memory constraints. (You can use your QY700 as a MIDI data filer.)

• If you input your recording using the QY700 keyboard keys, the velocity for each note is set to 88(ƒ). If you want true recording of velocity values, use a remote MIDI keyboard for the input.

• Before recording onto the QY700 from a remote keyboard, go to UTILITY mode and set the MIDI "echoback" setting to "RecMonitor". (→ p.292)

Realtime Recording: PATTERN Track

- • You use this function to select patterns (styles and sections) in real time.
- • This section describes the [F3] (REPLACE) realtime method. When you record with this method, you overwrite any data already existing on the track. This is useful when you want to redo an arrangement that you are not satisfied with.
- • Note that it is not possible to select the [F4] (OVERDUB) method for PATTERN-track recording.
- • The "section connection" setting may cause automatic section switching or automatic termination of the song. (→ p.202)

- • Style number: 00 (=off), 01,...,64, 65 (=end)
- • Section: A,...,H

1. At the SONG PLAY screen, press [•].
▼ The QY700 displays the Recording Standby page. The RECORDING indicator comes on.

2. Press [F3] (REPLACE).

3. Press [TRACK UP] or [TRACK DOWN] as necessary to set the recording track to PATTERN.

4. Move the cursor to the style number entry on the screen. Use [NO], [YES], or the numeric keypad to select the style number for the first measure. Then set the section by pressing a key from E2(A) to E3(H) on the microkeyboard.

5. Press [▶].
▼ The PLAY indicator begins flashing. The QY700 counts out the specified number of lead-in measures (as set by the COUNT parameter; see page 78), and then begins the recording.

6. Leave the cursor positioned at the style-number area as the recording proceeds. To switch the style number, use [NO], [YES], or the numeric keypad. To switch the section, press a key from E2(A) to E3(H).
- • The changes that you make become effective starting from the next measure. (The QY700 does not change patterns in the middle of a measure.) In other words, the screen always indicates the style and section to be recorded into the upcoming measure.

7. When you are ready to stop recording, press [•].
▼ The QY700 returns to the SONG PLAY screen.

- You can use song job 00 (UNDO/REDO) to cancel a recording that you have just made. This allows you to recover data that you have inadvertently over-recorded. (→ p.141)
- Remember to set the appropriate parameters (such as measure, tempo, meter, click beat, click mode, count, and transposition) before beginning the recording. (→ p.109)
- It is a good idea to select a slow tempo. This will make it easier to enter the style and section values at the right time.
- Set the style number at the end of the song to 65 (=end). If you set a different value, the song will not end. (→ p.113)
- You can use step recording of the PATTERN track to review or modify the recorded style and section values. (→ p.125)

Realtime Recording: CHORD Track

Recording track

Chord root
Chord type

Fingered-chord switch

Recording mode

SONG SONG PLAY
● Song recording
F3 Replace
F4 Overdub
TR1~TR32
PATTERN
CHORD

2

- You use this function to record chord values (root, type, on-bass, and original bass) onto the CHORD track in real time.
- This section describes the F3 (REPLACE) realtime recording method. When you record with this method, you overwrite any data already existing on the track. This is useful when you want to redo a phrase that you are not satisfied with.
- Note that it is not possible to select the F4 (OVERDUB) method for CHORD-track recording.

Chord root:
C, C#, D, Eb, E, F, F#, G, Ab, A, Bb, B

Chord type:
M, M7, 6, 7, m, m7, m6, mM7, m7 (b5), dim, aug, sus4, add9, m7 (9), 6 (9), 7 (9), madd9, m7 (9), m7 (11), 7 (b5), 7 (#5), 7 (b9), 7 (#9), 7 (13), 7 (b13), 7sus4, 7 (#11), --- (=THRU)

Note that you can set an "on-bass" or "original bass" value for each chord.

1. Starting from the SONG PLAY screen, press ● .
▼ The QY700 displays the Recording Standby page. The RECORDING indicator comes on.

2. Press F3 (REPLACE).

3. Press TRACK UP or TRACK DOWN as necessary to set the recording track to CHORD.

4. If necessary, move the cursor to the fingered-chord switch area, and use the data dial or [-1 NO] / [+1 YES] to select whether to use the fingered chording.

5. Press ▶ .
▼ The PLAY indicator begins flashing. The QY700 counts out the specified number of lead-in measures (as set by the COUNT parameter; see page 78), and then begins the recording.

6. Record the chords.

- **If you are not using fingered chords, enter chords as follows.**

To select the chord root:
Press a microkeyboard between E2 and D#3.

To select the chord type:
Press a microkeyboard between E3 and F4.

To set the "on-bass":
Hold down the left-side ◁ [OCT DOWN] and press a microkeyboard key between E2 and D#3.

To set the "original bass":
Hold down the left-side ▷ [OCT UP] and press a microkeyboard key between E2 and D#3, followed by a key between E3 to F4.

Press ↵ at the precise time that you want to record the chord onto the track. (The chord is recorded at the instant that this is pressed.)

Enter the chord root here.   Enter the chord type here.

- **If you are using fingered chords, enter as follows.**
1) Be sure that the cursor is at the fingered-chord ON/OFF area, and that the setting is FNGRD. Leave the cursor in this area.
2) Play the desired chord within the "fingered-chord zone" on your external MIDI keyboard (→ p.299). The QY700 will automatically set the chord root and type.
3) While continuing to hold down the chord in the keyboard zone, press a single note to the left of the zone to set the "on-bass," or play a chord to the left of the zone to set the "original bass."
4) Release the notes to record the chord. (The chord is recorded at the instant that the notes are released.)

Fingered-chord zone

On-bass   Chord root   Melody
Original bass   Chord type

7. When you are ready to stop recording, press ▣ .
▼ The QY700 returns to the SONG PLAY screen.

- **Entering the syncopation**
  Although chords generally cover a single full beat, it is possible to time the recording so that you get an eighth- or sixteenth-note syncopated lead-in. To get an eighth-note lead in, enter the chord at least one eighth-note ahead of the beat. To get the 16th-note syncopation, enter the chord one 16th-note ahead of the beat.

Syncopation (eighth)   Syncopation (sixteenth)

- You can use song job 00 (UNDO/REDO) to cancel a recording that you have just made. This allows you to recover data that you have inadvertently over-recorded. (→ p.141)
- Remember to set the appropriate parameters (such as measure, tempo, meter, click beat, click mode, count, and transposition) before beginning the recording. (→ p.109)
- It is a good idea to select a slow tempo. This will make it easier to enter the chord values at the right time.
- You can use step recording of the PATTERN track to review or modify the recorded chords. (→ p.127)

Realtime Recording: TEMPO Track

```
SONG   -- REC REPLACE --        TR=Tempo
[●][■][▶] 01   new song      PATT OFF
                             SETUP
[1][2][3][4][5][6][7][8][9][10][11][12][13][14][15][16]

[17][18][19][20][21][22][23][24][25][26][27][28][29][30][31][32]

[PATTERN]   [CHORD]        [TEMPO]

[1][2][3][4][5][6][7][8][9][10][11][12][13][14][15][16]

01 FunkDeGo              OFF
A intro    CM7

1    2    3    4    5    C6

[MULTI]          [REPLACE][OVERDUB][PUNCH]  [STEP]
```

```
001:1
♩120.0
4/4
Rec
♩
1Ms
+00
```

```
[SONG] SONG PLAY
  └ [●] Song Recording
      ├ [F3] Replace
      └ [F4] Overdub
         ├ TR1~TR32
         ├ PATTERN
         ├ CHORD
         └ TEMPO
```

Recording track

Recording mode

[SHIFT] [F1] [F2] [F3] [F4] [F5] [F6] [SHIFT] [EXIT]

2

- You use this function to record tempo changes for the song.
- This section describes the [F3] (REPLACE) realtime recording method. When you record with this method, you overwrite any data already existing on the track.
- Note that it is not possible to select the [F4] (OVERDUB) method for TEMPO-track recording.

Tempo: ♩= 25.0,...,300.0

1. Starting from the SONG PLAY page, press [●] .
▼ The QY700 displays the Recording Standby page. The RE-CORDING indicator comes on.

2. Press [F3] (REPLACE).

3. Press [TRACK UP] or [TRACK DOWN] as necessary to set the recording track to TEMPO.

4. Press [▶] .
▼ The PLAY indicator begins flashing. The QY700 counts out the specified number of lead-in measures (as set by the COUNT parameter; see page 78), and then begins the recording. The cursor automatically moves to the tempo entry area.

5. Make the required tempo changes using the data dial, [-1 NO] / [+1 YES] , or the numeric keypad.
▼ The tempo changes are recorded as you make them.

6. When you are finished recording the tempo changes, press [●] .
▼ The QY700 returns to the SONG PLAY screen.

Punch Recording

Recording track

Song measure

Punch-in point

Punch-out point

Recording mode

SONG SONG PLAY
└─ ● Song Recording
   └─ F5 PUNCH
      ├─ TR1~TR32
      ├─ PATTERN
      ├─ CHORD
      └─ TEMPO

• With punch recording, you record over (replace) a specific area in an already recorded track. You begin by setting up the start and end points (the *punch-in* and *punch-out* points) for the area you want to replace. You then record over the area in real time.

• You set the punch-in and punch-out points by specifying the measure and beat.

• With the exception of the punch-in and punch-out settings, this method is identical to the REPLACE method for realtime recording. For additional information, see page 112.

1. Starting from the SONG PLAY screen, press ● .
▼ The QY700 displays the Recording Standby page. The RECORDING indicator comes on.

2. Press F5 (PUNCH).

3. Press TRACK UP or TRACK DOWN as necessary to select the track you want to record. You can select any of the sequence tracks (TR1,...,TR32) or the PATTERN, CHORD, or TEMPO track.

4. Press [D2] to position the cursor in the punch-point entry area. Set the punch-in and punch-out values (both measure and beat) using the data dial, ⌐NO / +1YES , or the numeric keypad.

5. Press [D1] to move the cursor to the song-measure entry area. Set the measure at which you want playback to begin.
• You will generally want to start playback several measures before the punch-in point.

6. Press ▶ .
▼ The PLAY indicator begins flashing, and song playback begins from the measure you specified at Step 5 above. The QY700 then automatically switches into recording operation when the song reaches the punch-in point. It then resumes playback upon reaching the punch-out point.

7. Input the data you wish to record, in real time. When you are finished, press ■ to return to the SONG PLAY screen.

Punch-In Point

• This is the point within the song at which the QY700 begins realtime recording operation. You set this point by specifying its measure and beat.

Punch-Out Point

• This is the point within the song at which recording stops, and the QY700 resumes song playback. You set this point by measure and beat.

📖 • The figure below illustrates the process. The QY700 switches from PLAY to RECORD at the punch-in point, then returns to PLAY at the punch-out point.

If settings are:
→ 013: 1
← 016: 1
Then:

Play	Record	Play

Punch-in point   Punch-out point

Operation switches from playback to recording at Measure 13, Beat 1 of the song.   Recording stops and playback resumes at Measure 16, Beat 1.

2

Step Recording: Sequence Tracks (TR1,...,TR32)

Beat graph   Location pointer

Location
Step time
Velocity
Gate time
Piano roll
Back delete

SONG SONG PLAY
└ ● Song Recording
  └ F6 Step Recording
     ├ TR1~TR32
     ├ PATTERN
     └ CHORD

📖 • You use this method to create a recording one note at a time, setting appropriate values for each note's length, velocity, and so on.

🎛 1. Starting from the SONG PLAY screen, press ● .
▼ The QY700 displays the Recording Standby page. The RECORDING indicator comes on.

2. Press F6 (STEP) to select step recording.

3. Press TRACK UP or TRACK DOWN as necessary to select the sequence track you want to record on (TR1,...,TR32).

4. Press ▶ .
▼ The PLAY indicator comes on. The QY700 displays the step recording page for sequence-track recording.

5. Move the location pointer to the point where you want to enter a note, using 🔽NO / 🔼YES , the data dial, or the shuttle dial.
• To jump to a distant measure: Press ⬜ [D1] to move the cursor to the location-setting area, then enter the measure number with the numeric keypad.

6. Set the step time, velocity, and gate time. To set each value, press the corresponding key (⬜ [D2] for step time, ⬜ [D3] for velocity, ⬜ [D4] for gate time) to move the cursor to the entry area, then enter the value using the data dial, 🔽NO / 🔼YES , or numeric keypad.

7. Now enter the note itself. You can select the note using either the microkeyboard or an external MIDI keyboard. If you want to enter a rest, press the MUTE key. If you want to enter a tie, press the SOLO key.

8. If you make an incorrect entry, you can delete it as follows.
• To delete the last note you entered, press F5 (BkDelete). The location pointer moves back to position it had just before you entered the note.
• To delete some other note: Move the location pointer to the note's location and press F6 (Delete). All notes that start at that position will be deleted.

9. When you have finished making your entries, press ■ to terminate the recording and return to the SONG PLAY screen.

📝 • Under step recording, note registration occurs when you release the key(s), rather than when you press them. This makes it easy to enter a block chord: you can pick out the notes one by one and then release them all at the same time.
• You may want to enter rough velocity values at this point (using only *f*, *p*, and *mp*, for example). You can then use one of the song jobs (such as Crescendo or Modify Velocity) to adjust the values later. (→ p.138)
• Step recording supports entry of note data only. You can add other types of data using the SONG EDIT mode's Insert function (→ p.133).

The remainder of this section describes the step recording parameters (the parameters displayed on the screen) and the use of the MUTE and SOLO keys,.

Beat Graph

📖 • The beat graph is a useful guide for setting up the timing for your recording.

• Each dash (–) on the graph represents a 32nd-note interval. Eight consecutive dashes correspond to a quarter note, while 32 consecutive dashes correspond to a whole note.
• A ● mark appears in the beat graph to indicate that at least one note begins at that point.
• As an example, assume that you are recording in 4/4 time and your first measure contains the following note pattern: ♩ | ♩ | ♪ ♪♪|♪ ♪. In this case, the beat graph will appear as shown below.

• The beat graph cannot accurately indicate notes shorter than a 32nd. You can check the status of these notes using SONG EDIT mode (→ p.130).

Location Pointer

📖 • The location pointer is the small triangular mark that appears just above the beat graph. The pointer points down at the current input location.
• If you move the location pointer so that it comes above one of the note markings on the beat graph, the QY700 will play out the corresponding note(s).
• When selected by the cursor, the pointer appears highlighted on the screen. When the pointer is in this condition, you can move it using the ◄ or ► key, the data dial, or the ⬚ or ⬚ key.
• Regardless of the cursor position, you can always move the pointer using the shuttle dial or the ⏪ or ⏩ keys.
• When you enter a note, a rest, or a tie, the pointer automatically advances by one step.

Piano Roll

📖 • This graphical representation shows the pitch, timing, and length (gate time) of each recorded note. The horizontal gridlines represent pitch, the vertical gridlines correspond to time, and the horizontal bars indicate individual notes.
• You can scroll the piano roll up or down an octave by pressing the ▷ [OCT UP] or ◁ [OCT DOWN] key.
• The piano roll automatically scrolls in the horizontal direction as you move the location pointer.

Location

- The location area indicates the current position of the location pointer. The first number gives the measure, the second gives the beat, and the third gives the number of clock cycles following the beat (the *clock count*).
- Note that each beat is divided into 480 clock cycles (000 to 479). A clock count of 000 indicates that the pointer is at the start of the beat; a value of 240 indicates that it is at the center of the beat.
- You can use the location setting to jump the location pointer to a different measure, as described in the following procedure.

1. Press [D1] to move the cursor into the location area.

2. Select the new location using the data dial, [−1/NO] / [+1/YES], or the numeric keypad.

Step Time

- This parameter sets the step time for the next note to be input, clock cycles.

- You can use the upper setting area to set the step time by note type. The easiest way to make this setting is by pressing the appropriate numeric key, as shown below. Note that after entering a note type (by pressing a key between [1] and [9]), you can change it into the corresponding dotted note by pressing [0] once. Or you can change it to a double-dotted note by pressing [0] twice. When you select the note type, the clock-cycle value (in the lower setting area) sets accordingly.

Quarter-note triplet (320 cycles)	Eighth-note triplet (160 cycles)	16th-note triplet (80 cycles)
Eighth note (240 cycles)	16th note (120 cycles)	32nd note (60 cycles)
Whole note (1920 cycles)	Half note (960 cycles)	Quarter note (480 cycles)
Dotted note		

- The lower part of the step-time entry area sets the step time by clock cycles. You can set to any value from 0001 to 9999. If the input value matches the cycle length of any of the notes indicated above (or the corresponding dotted note), the note image will appear in the upper part of the entry area.

1. Press [D2] to move the cursor to the upper part of the step time entry area.

2. To set the step time by note type, select the desired note image. You can make your selection using the data dial or [−1/NO] / [+1/YES], or by pressing the appropriate note-image key on the numeric keypad.

3. If you want to set the step by number of cycles, press [D2] again to move the cursor to the lower part of the area.

4. Set the cycle value, using the data dial, [−1/NO] / [+1/YES], or the numeric keypad.

Velocity

📖 • This velocity entry area sets the velocity (force) for the next note to be input.

• The upper part of the entry area sets the velocity by its musical notation. Again, the easiest way to make the setting is by pressing one of the numeric keys. When you select the notation, the corresponding velocity value (see illustration below) automatically appears in the lower setting area.

7 𝆑	8 𝆑𝆑	9 𝆑𝆑𝆑
f : (088)	*ff* : (104)	*fff* : (120)
4 𝆐𝆏	5	6 𝆐𝆑
mp : (056)	(064)	*mf*: (072)
1 𝆏𝆏𝆏	2 𝆏𝆏	3 𝆏
ppp : (008)	*pp* : (024)	*p* : (040)
0		

EXT (Keyboard velocity)

• You can use the lower entry area to set an actual MIDI velocity value (from 001 to 127). When you enter a value, a corresponding notation will appear in the upper entry area. (If you set the value to 0 (EXT), the QY700 sets the velocities according to the keyboard input.)

🎛 1. Press ⬜ [D3] to move the cursor to the upper part of the velocity entry area.

2. To set the value by notation, select the notation (such as *ff* or *mp*) using the data dial or 🔲/🔲, or by pressing the appropriate numeric key.

3. If you want to set a numerical velocity value, press ⬜ [D3] again to move the cursor to the lower part of the area.

4. Set the value using the data dial, 🔲/🔲, or the numeric keypad.

Gate Time

📖 • This value sets the note length (time that the note is actually sounded), as a percentage of the step time. For example, you can set the note to play staccato, so that its sound switches off well before its step time is over. Or you can hold it right up to the start of the next step (so that it slurs into the next note).

• You can use the upper part of the entry area to set the gate time by type. (When you make your selection, the corresponding percentage value will appear in the lower part of the entry area.) Three types are available, as follows.

Stac (staccato)   The gate time is 50% of the step time.
Norm (normal)   The gate time is 90% of the step time.
Slur   The gate time is 99% of the step time.

Step time	480 clock cycles
Gate time	
Stac	240=480×50%
Norm	432=480×90%
Slur	475=480×99%

• You can use the lower part of the setting area to set the gate time as an explicit percentage (from 001% to 120%) of the gate time.

🎛 1. Press ⬜ [D4] to move the cursor to the upper part of the gate-time entry area.

2. To set the step time by type, select the appropriate type value (Step, Norm, or Slur) using the data dial or the 🔲 or 🔲 key.

2

3. If you want to set an explicit percentage, press ☐ [D4] again to move the cursor to the lower part of the area.

4. Set the percentage value, using the data dial, ⊟ / ⊞ , or the numeric keypad.

MUTE /REST

- You use this key to enter a rest. First set the step value to the rest time that you want to use, and then press MUTE . The rest is entered, and the location pointer advances accordingly.
- *Example* To enter a quarter-note rest: Set the step time to quarter note, then press MUTE .

SOLO /TIE

- You use this key to enter a musical tie. This extends the length of the note you just entered, by adding an additional step time.
- To use this feature, you begin by setting the step time for the first note in the tie, and entering the note. You then set the step time for extension note. You then press SOLO .

Tie

- *Example* Assume that you want to set up the tie illustrated below.
    1. Set the step time to quarter note.
    2. Enter the C.
    3. Set the step time to eighth note.
    4. Press SOLO (TIE).
▼ The original quarter note is extended by an eighth-note interval. (The note bar on the piano roll indicates the extended length.)

F5 (BkDelete) *Back delete*

- You use this function to delete the last note or rest that you entered. This provides a simple way to remove your incorrect entries.
- When you press F5 (BkDelete), the QY700 deletes the last note entry and moves the location pointer back by one step. You can then enter the correct value.

Removes the last entered note,
and moves location pointer one step back.

F6 (Delete)

- This function deletes all notes that begin directly under the location pointer.

Step Recording: PATTERN track

Measure no.　Meter　　　　Style no.　　　　　　Section

Location

📖 • You use this method to write settings into the PATTERN track one item at a time. For each measure you can set the meter, the style, and the section.

🎧 1. Starting from the SONG PLAY screen, press ●.
▼ The QY700 displays the Recording Standby page. The RECORDING indicator comes on.

2. Press ⎡F6⎤ (STEP) to select step recording.

3. Press ⎡TRACK UP⎤ or ⎡TRACK DOWN⎤ as necessary to set the recording track to PATTERN.

4. Press ▶.
▼ The PLAY indicator comes on. The QY700 displays the step recording page for PATTERN-track recording.

5. Select the measure you want to work on, using either of the following methods.
   • Press ⎡　⎤ [D1] to move to the location parameter. Select the measure using the data dial, ⎡NO⎤ / ⎡YES⎤, or the numeric keypad.
   • With the cursor in the Meter, Section, or Style column, press ▲ or ▼ to scroll up or down.

6. Press ▶ or ◀ to move the cursor to the appropriate Meter, Section, or Style entry area, and enter the desired value. You can enter any of these values using the data dial or ⎡NO⎤ / ⎡YES⎤. In addition:
   • You can enter the style number using the numeric keypad.
   • You can enter the section letter by pressing a microkeyboard key from E2(A) to E3(H).

---

7. You can delete any incorrect entries by moving the cursor back to the entry area and pressing ⎡F6⎤ (Clear).

8. When you have finished, press ■ to terminate the session and return to the SONG PLAY screen.

✏️ • Set the style number at the end of the song to 65 (=end). If you set a different value, the song will not end. (→ p.113)

The remainder of this section describes the various screen settings, and the use of the ⎡F6⎤ (Clear) function.

Location

📖 • The location area indicates the measure at which the cursor is located.
   • You can jump the cursor to a different measure by entering the corresponding measure number into this area.

🎧 1. Press ⎡　⎤ [D1] to move the cursor into the location-setting area.

2. Select the new location using the data dial, ⎡NO⎤ / ⎡YES⎤, or the numeric keypad.

Meter

- The Meter column sets the meter for the corresponding measure.
- You can use this feature to adjust meter values for sequence tracks that have already been recorded.
- Each meter setting applies to all tracks
- You can set the value to any of the following: 1/16,...,16/16, 1/8,...,16/8, 1/4,...,4/4.

Style and Section

- These columns select the style and section for each measure.
- If you want to continue the style or section from the previous measure, leave the entry space blank.
- If you leave the Style or Section column completely empty, the Q700 will use the style or section selected at the SONG PLAY screen.

Style   00 (=off), 01,...,64, 65 (=end)
Section   A,...,H

`F6` **(Clear)**

- This function clears the Style or Section entry selected by the cursor.

Step Recording: CHORD track

Location
Measure
Meter
On-bass
Original bass
Syncopation
Chord root and type

SONG SONG PLAY
Song Recording
F6 Step Recording
TR1~TR32
PATTERN
CHORD

2

• You use this method to write chord data into the CHORD track. There are five data types: chord type, chord root, on-bass, original bass, and syncopation.

Chord root:
C, C♯, D, E♭, E, F, F♯, G, A♭, A, B♭, B
Chord type:
M, M7, 6, 7, m, m7, m6, mM7, m7 (♭5), dim, aug, sus4, add9, m7 (9), 6 (9), 7 (9), madd9, m7 (9), m7 (11), 7 (♭5), 7 (♯5), 7 (♭9), 7 (♯9), 7 (13), 7 (♭13), 7sus4, 7 (♯11), --- (=THRU)
Syncopation:
♪, ♪♪, ♪, ♪♪

1. Starting from the SONG PLAY screen, press ●.
▼ The QY700 displays the Recording Standby page. The RECORDING indicator comes on.

2. Press F6 (STEP) to select step recording.

3. Press TRACK UP or TRACK DOWN as necessary to set the recording track to CHORD.

4. Press ►.
▼ The PLAY indicator comes on. The QY700 displays the step recording page for CHORD-track recording.

5. Select the measure you want to work on, using either of the following methods.
• Press [D1] to move the cursor to the location entry area. Select the measure using the data dial, -1/NO / +1/YES, or the numeric keypad.
• With the cursor in the chord entry area, press ▲ or ▼ to move to the next measure.

6. Press ◄ or ► to move the cursor to the beat at which you want to enter the chord.

7. Enter the chord.

■ If you are not using fingered chords, enter chords as follows.
To select the chord root: Press a microkeyboard key between E2 and D♯3.
To select the chord type: Press a key between E3 and F4.
To set an "on-bass": Hold down the left-side ◁ [OCT DOWN] key and press a microkeyboard key between E2 and D♯3.
To set an "original bass": Hold down the left ▷ [OCT UP] key and press a key between E2 and D♯3, followed by a key between E3 to F4.

Enter the chord root here.   Enter the chord type here.

■ If you are using fingered chords, enter as follows.

1) The fingered-chord switch must be set on in the SONG PLAY page. If necessary, return to that page and set the switch on (and leave the cursor in the switch area).

2) Play the desired chord within the "fingered-chord zone" on your external MIDI keyboard (→ p.299). The QY700 will automatically set the chord root and type.

3) While continuing to hold down the chord in the keyboard zone, press a single note to the left of the zone to set the "on-bass," or play a chord to the left of the zone to set the "original bass."

Fingered-chord zone

On-bass   Chord root   Melody
Original bass   Chord type

8. Set the syncopation.

Move the cursor the chord for which you want to add syncopation.

- Press the right ▷ [OCT UP] key once or twice to select eighth-note or eighth-note-triplet syncopation. The first press selects eighth-note, the second press selects the triplet, and the third press switches syncopation back off. (♪ → ♪₃ → *off*)

- Press the right ◁ [OCT DOWN] key once or twice to select 16th-note or 16th-note-triplet syncopation. (♬ → ♬₃ → *off*)

Syncopation (eighth)   Syncopation (sixteenth)

The remainder of this section describes the various screen settings and the use of the ⌐F6⌐ (Clear) function.

Chord Root and Chord Type

- You can set a different chord (root and type) for each beat. (→ p.127)
- If you want to continue the chord from the preceding beat, you can leave the entry space blank.
- You can use the fingered-chord feature to simplify chord input.

On-Bass

- The "on-bass" value sets a fixed pitch for bass-type phrases. Bass-type phrases will produce this single tone only. (→ p.39)
- You can set this value separately for each chord entry. (→ p.115)

Original Bass

- The "original bass" value sets an alternative chord (root and type) for bass-type phrases. Bass-type phrases will produce this alternative chord only. (→ p.39)
- You can set this value separately for each chord entry. (→ p.115)

Syncopation

You use this feature when you want the chord to change slightly ahead of the beat, for a syncopated feel. Settings are as follows.

- ♪   Chord-change occurs one eighth-note ahead of the beat.
- ♪₃   Chord-change occurs one eighth-note-triplet ahead of the beat.
- ♬   Chord-change occurs one 16th-note ahead of the beat.
- ♬₃   Chord-change occurs one 16th-note-triplet ahead of the beat.

Syncopation (eighth)   Syncopation (sixteenth)

Note that you must enter the chord before you can set its syncopation.

⌐F6⌐ (Clear)

- This function deletes the chord at the cursor position. All of the chord's values (root, type, on-bass or original bass, and syncopation) are deleted.

6. Song Editing

3.Measure: Beat: Clock count
6.XG Viewer mark
7.MUTE and SOLO marks   1.Track number and name

```
SONG   -- EDIT --          TR=02:track 2
[icons] XG M                    [icons]
              Bank      PC#
002:1:060 ▦PC   000-043-029 [Gt.Pinch]
002:1:065 ◣Vol  [007]  103  [||||||||||||....]
002:1:070 ◣Pan  [010]  -64  [||||||||||......]
002:1:075 ◣Exp  [011]  127  [||||||||||||||||]
002:1:080 ◣Rev  [091]  025
002:1:085 ◣Cho  [093]  020
002:1:090 ◣Var  [094]  025
002:1:095 ◣Bright[074] -15
002:1:100 ◣Harmo [071] +06
002:3:060 ▨PBSens[ 000- 000]  009
002:3:070 ▨Null  [ 127- 127]
008:3:170 ▥A♭2   01:300 [♩]  104 [ ff]
008:3:175 ▥C#3   01:300 [♩]  104 [ ff]
Graphic XGView Tr Name ViwFiltr Delete Insert
```

2.Location
5.View Filter mark
4.Event name, parameter values

SHIFT   F1   F2   F3   F4   F5   F6   SHIFT   EXIT

SONG SONG PLAY
  EDIT Song Edit
    F1 Graphic
    F1 Event list
      F2 XG View
      F3 Track name
      F4 View Filter
      F5 Delete
      F6 Insert

2

	Parameter	Values	Function	See page
1	Track number	01,...,32, PATTERN, CHORD, TEMPO	Indicates the currently selected track.	P.130
	Track name	*character string*	Shows the name of the track.	
2	Location	001,...,999	Shows/sets cursor location (measure and beat)	P.130
3	Measure	001,..., 999	Shows/changes time of indicated event.	P.131
	Beat	1,...,8		
	Clock count	000,...,239		
4	Event name	Note, Bend, PC, CC, ChAT, KeyAT, Excl, Tmp	Shows/sets MIDI event.	P.131
	Parameter values	Varies by event type	Event-related arguments.	
5	View Filter mark	[mark]	Mark appears if View Filter is ON.	P.132
6	XG Viewer mark	XG	Mark appears if XG Viewer is ON.	P.132
7	MUTE and SOLO marks	M, S	Mark appears if mute or solo is ON.	P.132

- You use the SONG EDIT submode to edit the contents of a song. You can adjust or delete any of the MIDI events that constitute the song, and you can add new events.
- The QY700 offers two different sequence-track editing screens: an event list and a graphic display. You can toggle between these screens by pressing [F1].
- The event list presents a listing of the track's MIDI events, in order of their occurrence. Each entry shows an event's location in time, its name, and its numerical arguments. You are free to adjust the location or any of the argument values. You can delete any of the events, or insert new ones. The event-list screen is described in detail directly below.
- The graphic display consists of a piano-roll section and a point-graph section. You can edit the event values on this screen, but you cannot insert or delete events. Description of the graphic display begins on page 135.
- You can also use SONG EDIT submode for measure-by-measure editing of the PATTERN and CHORD tracks. The edit page presents a list-type display that you can use to make changes, additions, and deletions.

1. At the SONG PLAY screen, press [TRACK UP] or [TRACK DOWN] to select the track you want to edit.
- On the SONG PLAY screen, the selected track (the "keyboard track") is indicated by highlight.

2. Press [EDIT] to enter SONG EDIT submode (Event List screen).

3. Move the cursor to the event that you want to edit. You can use various methods, as follows.
   - Press [ ] [D1] to move the location entry area. Select the measure using the data dial, [NO] / [YES], or the numeric keypad.
   - Regardless of the cursor position, you can always move the cursor rapidly across the screen using the shuttle dial or the [◄◄] or [►►] keys. If you move the cursor more slowly with the shuttle dial, the QY700 will play out note events as the cursor passes.
   - You can move up or down one event at a time by pressing [▲] or [▼]. Again, the QY700 will reproduce note events when the cursor lands on them.

4. When you reach an event that you want to edit, use [◄] or [►] to move the cursor along the line to each value you want to change (the measure, the beat, the clock count, or any of the arguments). Change the values using the data dial, [NO] / [YES], or the numeric keypad. Regardless of the entry method, you must press [↵] to register the value.
- The new settings will blink on the screen until you press [↵] to register them. If you move the graph cursor before pressing [↵], the original values will remain in effect.

5. If you wish to insert a new event, press [F6] (Insert) and proceed as described on page 133. If you wish to delete an entire event, move the cursor to the corresponding line and press [F5] (Delete).

6. When you have finished editing, press [EXIT] to return to the SONG PLAY screen.

- If you make an error during editing, you can cancel all changes made during the current SONG EDIT session by executing the UNDO song job (job 00). (→ p.141)

1. Track number and name

- This area identifies the track that you are editing. The first value gives the track's number, and the second value gives its name.
- You can you use [F3] (TrName) to set or change the track's name. (→ p.132)
- You can change to a different track by pressing [TRACK UP] or [TRACK DOWN].

2. Location

- The location area indicates the measure and beat at which the cursor is located.
- You can jump the cursor to a different measure by entering the corresponding measure number into this area. You can select any measure between song start (001:1) and song end.

1. Press ⬜ [D1] to move the cursor into the location area.

2. Select the target measure using the data dial, ⬚ / ⬚ , or the numeric keypad.
- When you change the measure, the beat automatically sets to 1.

3. Measure, Beat, and Clock count

- These values give the precise location of the MIDI event within the song.
- By changing the measure, beat, or clock count, you change the time at which the event occurs.

Measure: Indicates the measure at which the event occurs.

Beat: Indicates the beat (within the measure) at which the event occurs.

Clock count: Indicates the place within the beat at which the event occurs. Each beat is divided into 480 clock cycles (000 to 479). A clock count of 000 indicates that the event occurs at the exact start of the beat. A value of 240 indicates that the event occurs at the middle of the beat.

Measure   001,...,999
Beat   01,...,08 (but varies according to meter)
Clock count   000,...,479 (but varies according to meter)

1. Move the cursor to the measure, beat, or clock-count entry for the event whose time you want to change.

2. Enter the new value using the data dial, ⬚ / ⬚ , or the numeric keypad.
▼ The event line flashes on the screen. The value is not registered until you press ↵ .

3. Press ↵ to register the change.
▼ The line stops flashing, and the new timing values are shown.
- If you move the cursor while the line is still flashing, the change is canceled.

4. Event name and parameter values

- When you record a performance onto a sequence track, you are recording it as a series of MIDI events. Each event corresponds to a specific MIDI action. The striking of a note is a "note event", the switching of a voice is a "program change event", and so on.
- Most event specifications must include information indicating how the event is to be carried out. A note-event specification, for example, must identify the note (the *note name*), the note's time span (the *gate time*), and the note's force (the *velocity*). Each of these information requirements is referred to as a *parameter*. (The actual value that a parameter takes is referred to as a *parameter value* or *argument*.)
- The first item on the event list is Top, while the last item is End. These items are for marking purposes only; they do not represent events, and they cannot be edited.

Events:
- Note, PB (Pitch Bend), PC (Program Change), CC (Control Change), CAT (Channel Aftertouch), PAT (Polyphonic Aftertouch), RPN (Registered Parameter Number), NRPN (Non-Registered Parameter Number), Exc (System Exclusive), XG Parameter, Tempo Change

Parameters
- Vary according to event type.

1. Move the cursor to the parameter value you want to change.

2. Enter the new value using the data dial, ⬚ / ⬚ , or the numeric keypad.
▼ The event line flashes on the screen. The value is not registered until you press ↵ .

3. Press ↵ to register the change.

▼ The line stops flashing, and the new timing is indicated.

• If you move the cursor while the line is still flashing, the change is canceled.

▉ 5. View Filter mark
6. XG Viewer mark
7. MUTE and SOLO marks

📖 • The QY700 includes a "View Filter" that can limit the event types that appear on the event list, so that you can "filter out" the types that are not of interest. The "View Filter mark" appears at the top of the event-list display to indicate that you have set the filter to block out certain types. The mark warns you that you may not be looking at a complete list of all events.

• You can access the View Filter by pressing 〔 F4 〕 (ViwFiltr). See page 133 for details.

• The XG Viewer mark comes on to indicate that you are currently using the QY700's XG viewer. When you use this viewer, XG-defined events (such as RPN events, NRPN events, and XG system exclusives) are listed by their XG parameter names. This is useful when you are generating XG-compatible song data. You can toggle the viewer ON and OFF by pressing 〔 F2 〕 (XGView).

• The MUTE mark indicates that you have switched on the mute for the track that you are editing. You can set or release the mute by pressing the 〔MUTE〕 key.

• The SOLO mark indicates that you have switched the track you are editing to SOLO play. You can set and release SOLO operation by pressing the 〔SOLO〕 key.

〔 F2 〕 (XGView) *XG Viewer ON/OFF*

📖 • The XG Viewer lists XG-defined events (such as RPN, NRPN, and XG system exclusives) by their XG parameter names. This feature is useful when you are working with XG-compatible song data.

• Note that there are some XG system exclusives that the viewer does not display by XG name.

• The XG Viewer mark comes on to indicate that the XG viewer is currently ON.

◉ • Toggle the XG Viewer ON or OFF by pressing 〔 F2 〕 (XGView).

〔 F3 〕 (TrName) *Track Name*

📖 • You can use this function to enter a name (up to eight characters) for the currently selected track.

• The QY700 displays the track name on the SONG PLAY and TRACK VIEW screens. You may therefore find it helpful to use a descriptive name, such as a name that identifies the track's voice or part.

◉ 1. Press 〔 F3 〕 (TrName).

▼ The TrName indicator (above the 〔 F3 〕 key) becomes highlighted, and a cursor appears in the track-name area at the upper right of the screen.

2. Use the microkeyboard to enter the track name.

• For information about how to input the characters, refer to Chapter 1. (→ p.53)

3. When you have finished entering the name, press 〔 F3 〕 (TrName) again to return to normal editing.

F4 (ViwFiltr) *View Filter*

```
SONG  -- EDIT --        TR=01:track 1
⊛□▷XG                   ⊙⊙ ⊻ⅡⅡ]:Ⅰ▷

   View Filter

  ☑ ▥ Note
  ☑ ♩ Pitch Bend
  ☑ ♯ Program Change
  ☑ ◣ Control Change
  ☑ ▯ Channel After Touch
  ☐ ▯ Polyphonic After Touch
  ☑ ▯ RPN
  ☑ ▯ NRPN
  ☑ ▩ Exclusive

                        ClearAll Set All
```

• The QY700's "View Filter" lets you select the event types that appear on the editing screens (both the event list and the graphic screen). To select an event for display, place a checkmark in the box next to the event name. To filter out an event type (so that it does not appear on the list), remove the checkmark so that the box is empty.

• Under the default setup all event types are shown, and the View Filter mark does not appear. If you choose to filter out one or more event types, the View Filter mark appears at the top of the editing screens to remind you that the filter is on.

• As an example, assume that you want to work on note events only. In this case, you will probably want to filter out all other event types from the event list — since this will make the list easier to follow, and will protect against accidental changes to other events. To set the filter to block out all non-note events, remove checkmarks from all boxes other than the Note box.

• You can remove all checkmarks at once by pressing F5 (ClearAll). To set checkmarks into all boxes, press F6 (Set All).

1. At the Event List screen, press F4 (ViwFiltr).

2. Move the cursor to the appropriate event types, and use the data dial or NO / YES to set the filter on or off for each type.

• Remember that you can use F5 (ClearAll) or F6 (Set All) to clear or restore all checkmarks at one time.

3. When you are finished, press EXIT to return to the Edit List page.

F5 (Delete)

• You use this function to delete an unwanted event.

1. Move the cursor to the event that you want to delete.

2. Press F5 (Delete).

F6 (Insert)

```
SONG  -- EDIT INSERT -- TR=02:track 2
⊛□▷XGM                  ⊙⊙ ⊻ⅡⅡ]:Ⅰ▷
   Location   Note  DateTime   Velocity
  Note
  001:1:000 ▥C 3   00:086 [♪]  086 [  f]

  002:1:070 ◣Pan   [010]  -64  [▮▮▮▮▮▮    ]
  002:1:075 ◣Exp   [011]  127  [▮▮▮▮▮▮▮▮▮▮]
  002:1:080 ◣Rev   [091]  025
  002:1:085 ◣Cho   [093]  020
  002:1:090 ◣Var   [094]  025
  002:1:095 ◣Bright[074]  -15
  002:1:100 ◣Harmo [071]  +06
  002:3:060 ▯PBSens[ 000- 000]  009
  002:3:070 ▯Null  [ 127- 127]
```

• You use this function to insert a new event into the event list.

• When inserting an event, you need to set the event name, the event time (measure, beat, and clock count), and the parameter values. Each of these are described below.

Event name

• As explained above, all MIDI performances are recorded as a series of events. Each event is defined by its name and its accompanying parameters. The event name describes the type of action to be performed. A "Note" event, for example, indicates that a note is to be played; a "Program Change" event indicates that the voice must be changed.

• You can use the F6 (Insert) function to insert any of the following 10 event types onto the track: Note, Pitch Bend, Program Change, Control Change, Channel Aftertouch, Polyphonic Aftertouch, RPN, NRPN, Exclusive, and XG Parameter.

Measure, Beat, and Clock Count

• These values define the time at which the event is inserted.
  Measure: Sets the measure at which the event will occur.
  Beat: Sets the beat (within the measure) at which the event will occur.
  Clock count: Sets the precise point within the beat at which the event will occur. Each beat is divided into 480 clock cycles (000 to 479). A clock count of 000 places the event at the exact start of the beat. A value of 240 places the event at the dead center of the beat.

- On the QY700, you can set the measure to any value between 001 and 999. The allowable beat and time values vary according to the selected time meter. The maximum range for the beat is 01 to 16. The maximum range for the clock count is 000 to 479.

Parameter values

- As described above (→ p.131), each event is defined by its type and by its accompanying parameter values. When entering an event type, you must include parameter values indicating how it is to be carried out. If entering a note event, for example, you must include values for velocity (note force) and gate time (note playback time).
- Required parameters are different for each event type.

1. At the Event List screen, press ⌷F6⌷ (Insert).
▼ The QY700 displays the "INSERT" window.

2. Move the cursor to the item that you want to set (event name, measure, beat, clock count, or parameter).

3. Set the value using the data dial, ⌷NO⌷ / ⌷YES⌷ , or the numeric keypad.
- If you are using the numeric keypad, do not press ↵ until you have finished entering all values and have checked them for correctness. Let the values remain flashing on the screen until you have completed all of the settings.

4. When you have finished entering all values for the event, press ↵ to record the event onto the track.
- As a shortcut, you can press ↵ as many times as you like to insert multiple copies of the same event. You can then go back to the event-list page and edit these entries as necessary.
- If you wish to set up and insert another event, return to Step 2 above.

5. When you have finished, press ⌷EXIT⌷ to return to the EVENT LIST page. Check the listing to make sure that the events were correctly inserted.

Entering a System Exclusive at the INSERT window.
- Use the following procedure to insert a system exclusive when working at the INSERT window.

1. Select Exc as the event name. Set the measure, beat, and clock count at which you want the exclusive to occur.

2. Move the cursor to the parameter area. Enter the hexadecimal values, moving the cursor from value to value as necessary.
- You can enter the hexadecimal numbers using ⌷NO⌷ / ⌷YES⌷ or the data dial. You can also enter them with the numeric keypad: use the pad keys to enter digits from 0 to 9, and microkeyboard keys [F#2], [G#2], [A#2], [C#3], [D#3], [F#3] to input digits A to F, respectively. (But don't press ↵ until you have completed entry of all values.)
- Be sure to enter value F7 ("End of Exclusive") as the final data item.

3. When you have entered all values for the system exclusive, press ↵ to record it onto the track.
- As a shortcut, you can press ↵ to insert multiple copies of the same system exclusive. You can then go back to the event-list page and edit the values as necessary.
- If you wish to insert another, different system exclusive, return to Step 2 above.

4. When you have finished, press ⌷EXIT⌷ to return to the EVENT LIST page. Check the listing to make sure that the new system exclusives are correct.

F1 （Graphic） *Graphic screen*

1.Beat graph   2.Piano roll   3.Point graph
5.Velocity
6.Pitchbend
7.Control change / Control number
4.Event line

SONG PLAY
EDIT Song Edit
F1 Graphic
F1 Event list
F2 XG View
F3 Track name
F4 View Filter
F5 Delete
F6 Insert

2

• The graphic editing page shows the following data in graphical form: note events, velocity values, pitchbend events, and control changes. The page is divided into three different graphs: a *beat graph*, a *piano roll*, and a *point graph*. In addition, an event line along the bottom of the screen indicates the values for the currently selected event.

• The screen presents two cursors. The *graph cursor*, in the graphical part of the screen, selects the event to be edited. The *edit cursor*, along the bottom line, selects the value to be edited.

• Note that a location pointer along the top of the screen always points to the current location of the graph cursor.

• You adjust the various values (such as gate times and pitchbend levels) by entering changes directly on the event line along the bottom of the page, using the same procedures that you use when working at the Event List screen ($\rightarrow$ p.131). The changes that you make produce corresponding changes in the graphical part of the screen.

• It is not possible to insert or delete events at this screen. If you wish to make an insertion or deletion, you must return to the Event List screen.

• You can return to the Event List screen by pressing F1 (EvntList). You can change the track being edited at any time by pressing TRACK UP or TRACK DOWN .

1. At the SONG PLAY screen, press TRACK UP or TRACK DOWN to select the track you want to edit.

• On the SONG PLAY screen, the selected track (the "keyboard track") is indicated by highlight.

2. Press EDIT to enter SONG EDIT submode (Event List screen).

3. Press F1 (Graphic) to move to the graphical edit screen.

4. Move the graph cursor to the event that you want to edit. You can use various methods, as follows. Notice that the location pointer along the top of the screen always points to the current position of the graph cursor.

• Press ☐ [D1] to move the location entry area. Select the measure using the data dial, NO, YES, or the numeric keypad.

• You can always move the graph cursor rapidly across the screen using the shuttle dial or the ◄◄ or ►► key. If you move the cursor more slowly with the shuttle dial, the QY700 will play out note events as the cursor passes.

• You can move the graph cursor one event at a time by pressing ▲ or ▼. Again, the QY700 will reproduce note events when the cursor lands on them.

5. When you reach an event that you want to edit, use ◄ or ► to move the edit cursor (on the bottom line) to the value you want to change: the measure, the beat, the clock count, or any of the arguments. Then change the selected value using the data dial, NO / YES, or the numeric keypad. Regardless of the entry method, you must press ↵ to register the value.

• The new settings will blink on the screen until you press ↵ to register them. If you move the graph cursor before pressing ↵, the original values will remain in effect.

6. When you are finished, press F1 (EvntList) to return to the Event List screen, or press EXIT to return to the SONG PLAY screen.

1. Beat Graph

📖
- The beat graph indicates the start point for each note event.
- Each dash (–) on the graph represents a 32nd-note interval. Eight consecutive dashes therefore correspond to a quarter note, while 32 consecutive dashes correspond to a whole note.
- A ● mark appears in the beat graph to indicate that at least one note begins at that point.
- As an example, assume that you are recording in 4/4 time and your first measure contains the following note pattern: ♩ |♩ |♪ ♫|♪ ♪. In this case, the beat graph for this measure will appear as shown below.

2. Piano Roll

📖
- This graphical representation shows the pitch, timing, and length (gate time) of each recorded note. The vertical scale represents pitch, the horizontal scale represents time (measures and beats), and the horizontal bars indicate individual notes.
- When you select a note (for editing), the graph cursor appears (as a square highlight) at the left edge of the note bar.
- The left edge of the note bar corresponds to the point at which the note is "struck," the right end indicates its point of release, and the vertical position indicates its pitch.

- You can scroll the piano roll up or down an octave by pressing ▷ [OCT UP] or ◁ [OCT DOWN].

3. Point Graph

📖
- This area illustrates the numerical values for note velocities and for pitchbend and control-change events. For velocity and controller events, the scale runs from 0 or 1 (bottom) to 127 (top). For pitchbend events, the scale runs from -8192 to +8191, with the center of the graph (the dashed line) corresponding to 0.
- Note that the graph will only show values for one type of control-change event. You can select the type by entering the appropriate control-change number into the CONTRL box, as described below.
- On the graph, velocity values are indicated by ▼, pitchbend values by ■, and control-change values by ■. Note that you can filter out any of these indications by removing the checkmark from the corresponding area along the right of the screen; see below.
- You can select a pitchbend or controller event for editing by moving the graph cursor to the event point on the graph.

4. Event Line

📖
- This line indicates the position (measure, beat, and clock count), the name, and the parameter values for the currently selected event. The content is identical to the corresponding entry in the Event List screen.
- You use this line to edit the values that you want to change. The editing procedure is the same as that for the Event List screen. (→ p.131)

5. Velocity
6. Pitch Bend
7. Control Change

2

- The VELCTY box lets you select whether or not to display velocity values on the point graph. If you choose to display these values, they are indicated by a ⊤ symbol that appears directly under the start point of each note. The scale runs vertically from 1 (at the bottom) to 127 (at the top).
- The P.BEND box lets you select whether to display pitchbend values on the point graph. If you choose to display these values, they are indicated by a ■ symbol. The scale runs from -8192 (bottom) to +8191 (top), with the center of the graph (the dashed line) corresponding to 0.
- The point graph will only display one type of control-change event. You use the CONTRL box to select the type, as well as to enable or disable the display. You enable/disable the display by setting or removing the checkmark. You select the event type by entering the control-change number: for example, 001 to show modulation-wheel events, or 011 to display expression events. Occurrences of the selected control change event are indicated on the graph by the ◣ symbol. The scale (for the control change argument) runs from 0 (bottom) to 127 (top).

To display on point graph: ☑
To suppress from graph: ☐
Control change number : #001,...,#031,#033,...,#119

1. Press ⬜ [D2], ⬜ [D3], or ⬜ [D4] to move the cursor into the checkmark area of the VELCTY, P.BEND, or CONTRL box.

2. Use 🔽 / 🔼 or the data dial to set or remove the checkmark.

3. To change the control-change number: Press ⬜ [D4] once or twice to move the cursor to the number-setting area. Set the number using 🔽 / 🔼 or the data dial.

7. Song Jobs

```
SONG  -- JOB LIST --        00
00 Undo/Redo                        Event  ▶
01 Quantize
02 Modify Velocity
03 Modify Gate Time                Measure ▶
04 Crescendo
05 Transpose
06 Shift Note                       Track  ▶
07 Shift Clock
08 Chord Sort
09 Chord Separate                   Song   ▶
10 Shift Event
11 Copy Event
12 Erase Event
13 Extract Event
14 Thin Out
15 Time Stretch
16 Create Measure
17 Delete Measure
18 Copy Track
19 Mix Track
20 Clear Track
21 Expand Backing
22 Normalize Play Effect
23 Copy Song
24 Clear Song
25 Song Name
┌──────┬──────┬──────┬──────┬──────┬──────┐
│  00  │  01  │  02  │  03  │  04  │  05  │
└──────┴──────┴──────┴──────┴──────┴──────┘
```

```
[SONG] SONG PLAY
  └─[JOB] Song Job
        ├─ 00 Undo/Redo
        │    ⋮
        └─ 25 Song Name
```

Song Job	Purpose	See page
00 Undo/Redo	If UNDO: Cancel the last operation. If REDO: Cancel the last UNDO.	P.141
01 Quantize	Quantize the note events within the selected range.	P.142
02 Modify Velocity	Change velocities in selected range.	P.145
03 Modify Gate Time	Change gate times in selected range.	P.147
04 Crescendo	Gradually increase or decrease velocity over selected range.	P.148
05 Transpose	Transpose all notes over selected range.	P.149
06 Shift Note	Replace all instances of selected note (pitch) with specified replacement, over designated range.	P.150
07 Shift Clock	Shift all data over selected range, by specified number of clock cycles.	P.150
08 Chord Sort	Sort chordal note events, by pitch, over specified range of selected track.	P.151
09 Chord Separate	Play chord notes one at a time, introducing specified delay between consecutive notes.	P.152
10 Shift Event	Change one event type into another, over specified range of specified track.	P.153
11 Copy Event	Copy all events over selected range into specified target.	P.154
12 Erase Event	Erase all events over selected range, and replace with rests.	P.155
13 Extract Event	Move events of specified type from selected range of one track into same range on another.	P.155
14 Thin Out	Reduce data quantity utilized by specified event type in specified track.	P.157
15 Time Stretch	Expand or compress all timing over specified range, in accordance with specified time ratio.	P.158
16 Create Measure	Insert empty measures into all tracks.	P.158
17 Delete Measure	Delete specified measures from all tracks.	P.159
18 Copy Track	Copy track data into another track. (Target track can be in a different song.)	P.160
19 Mix Track	Mix one track into another. (Target track can be in a different song.)	P.161
20 Clear Track	Clear all data from selected track.	P.162
21 Expand Backing	Expand PATTERN- and CHORD-track data into performance data, and write results into sequence tracks 17 to 32.	P.162
22 Normalize Play Effect	Rewrite sequence track(s) so that play-effect settings are internalized.	P.163
23 Copy Song	Copy all content of another song.	P.164
24 Clear Song	Delete all of a song's data.	P.164
25 Song Name	Assign a name to the song.	P.165

2

- You use the QY700 *song jobs* to perform various operations on the songs that you have recorded.
- You select the job from the job menu using ▲ , ▼ , or the data dial. As an alternative, you can select a job by entering the job number at the numeric keypad. You can also make your selection using the function keys, as described below.
- Note that the job menu is too large to fit entirely on the screen. But you can scroll through the list using ▲ , ▼ , or the data dial.
- The menu is divided into four groupings, in accordance with job type: event-related, measure-related, track-related, and song-related. You can jump the cursor to the first job in any of these grouping by pressing the corresponding key on the side of the screen.

  ☐ [D1](Event) .... jumps to 01 Quantize.
  ☐ [D2](Measure) .... jumps to 16 Create Measure.
  ☐ [D3](Track) .... jumps to 18 Copy Track.
  ☐ [D4](Song) .... jumps to 23 Copy Song.

- As the factory default, function keys F1 to F6 on the menu page automatically switch you into the job execution screens for jobs 00 to 05, respectively. But you can reassign each function key so that it accesses a job of your choice: just move the cursor to the job you want to assign, then hold down SHIFT and press the function key. Note that the function key assignments are displayed along the bottom line of the screen.

1. Go to the SONG PLAY screen and select the song and track that you want to work on.

2. Press JOB .
▼ The screen displays the job menu.

```
SONG  -- JOB LIST --              00
00 Undo/Redo               ┌─────────┐
01 Quantize                │ Event  ▶│
02 Modify Velocity         └─────────┘
03 Modify Gate Time        ┌─────────┐
04 Crescendo               │ Measure▶│
05 Transpose               └─────────┘
06 Shift Note              ┌─────────┐
07 Shift Clock             │ Track  ▶│
08 Chord Sort              └─────────┘
09 Chord Separate          ┌─────────┐
10 Shift Event             │ Song   ▶│
11 Copy Event              └─────────┘
12 Erase Event
13 Extract Event
├──00──┼──01──┼──02──┼──03──┼──04──┼──05──┤
```

3. Move the cursor to the job you want to execute, or else enter the job number using the numeric keypad. Then press ↵ to open the job-execution screen.

```
SONG  -- JOB 03 MODIFY GATE TIME --

  TR= 01   M 001:1 ~ 999:4
            ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓
     Note= C -2 ~ G 8
              ▼
     Set all    = Off  (0=off)
     Rate       = 100 %
     Offset     = +0000



├──00──┼──01──┼──02──┼──03──┼──04──┼──05──┤
```

4. Move the cursor to the various entry spaces on the job execution screen, and enter the required values using the data dial, NO / YES , or the numeric keypad.

❗ Do not press the ↵ key until you are ready to execute the job. Even when entering values with the numeric keypad, you do not need to press ↵ .

5. When you have entered all the values and are ready to execute the job, press ↵ .
▼ The QY700 executes the job. The screen displays "Executing...", and then "Completed".

6. Press EXIT twice to return to the SONG PLAY screen.

- Most jobs operate on a specified segment of the track, which you designate by selecting the start and end points (by measure and beat). If you make an invalid specification, the screen may return the message "No Data". If you see this message, press EXIT to clear it.
- You can use job 00 (Undo/Redo) to undo the results of a job that you have just executed (see next page). This allows you to recover from an incorrect job operation. Once you have "undone" a job, you can then "redo" it. In some cases you may find it useful to do successively "undo" and "redo" a job so that you can compare the pre-job and post-job versions of your data.
- If you select a job that requires you to enter a segment designation, the screen will display boxes in which you can set the start point and end point (with a ~ character between the boxes). If you want the operation to begin at Measure 5 Beat 1 and terminate at Measure 8 Beat 4, for example, your specification would look like this: 005:1 ~ 008:4.
- The number of beats per measure depends on the meter. If the meter is 4/4, for example, you can use a beat value of 1 to 4 when specifying the segment. If the meter is 8/4, then (since there are eight beats per measure) you can set the beat to any value between 1 and 8.
- Note that the beat setting is linked to the measure setting. If you continuously increment (or decrement) the beat setting, the measure setting will change accordingly.

❗ Do not switch off the power while a job is executing (while the "Executing..." message is on the screen), as this may cause destruction of your song data.

JOB 00   UNDO/REDO

- The UNDO job cancels the changes you made in your most recent recording session, editing session, or job, restoring the data to its previous state. This allows you to recover from accidental data loss.
- The REDO job, which becomes available only after you execute an UNDO, cancels the UNDO and restores the changes.
- The UNDO/REDO job is effective on recording sessions, editing sessions, and jobs (with the exception of the SONG NAME and PATTERN NAME jobs) carried out under SONG, PATTERN, and PHRASE modes. It is also effective on PATTERN-mode patch operations.
- The UNDO job is effective only on the most recent data changes. If you run a recording session and then an editing session, for example, the UNDO will be available only for the editing session. (But note that if you move to a recording, editing, or job screen and then quit without making any changes, this does not count as a session.)
- As soon as you execute an UNDO, the job name changes to REDO. The REDO will remain available until you change data again.
- You can undo and then redo the same change as many times as you like (provided that you don't make any other changes in between). This can be useful when you want to compare two versions of your data.

- Check the JOB 00 UNDO/REDO execution screen to make sure that the details are correct, and then press ⏎ .

- As a shortcut, it is often possible to execute an UNDO/REDO job immediately – without moving into the corresponding job screens – by pressing `SHIFT` + `JOB` . This feature is available, for example, from the SONG PLAY screen.

1. Undo/Redo indication

- The screen displays the word Undo or Redo to indicate the job that is currently available.

2. UNDO/REDO target

- The two entries at the right of the screen identify the data-change currently available for UNDOing or REDOing. This will be the most recently executed editing, recording, or job-related data change. (In the example above, the most recent change was made by running the THIN OUT job under SONG mode.)

JOB 01   QUANTIZE

```
SONG  -- JOB 01 QUANTIZE --


    TR= 01   M 001:1 ~ 999:4

    Note= C -2 ~ G 8
              ▼
    Quantize   = ♪
    Strength   = 100 %
    Sensitivity = +100 %

    Swing Rate = 50 %
    Gate Time  = 100 %
    Velocity   = 100 %


   00    01    02    03    04    05
```

• This job quantizes note events over a specified segment of a specified track. *Quantizing* is the process of adjusting the timing of note events by pulling them closer to the nearest interval boundary (*or quantizing line*). You can use this feature, for example, to improve the timing of a performance you recorded in real time.

• Before running the job, you must set the musical interval (or quantizing value) that you want to use. This value sets the distance between adjacent quantizing lines. The figure below illustrates the concept for quarter-note and eighth-note quantizing values.

Original note data   Quarter-note length

Result when quantizing value is ♩ (at 100% strength)

Result when quantizing value is ♪ (at 100% strength)

• The quantizing strength determines how closely notes are pulled toward the nearest quantizing line, while the sensitivity selects which notes are targeted (based on distance from the nearest line). You can combine these settings, for example, to direct the QY700 to slightly adjust only those notes that are far away from the nearest line, while leaving the closer notes untouched.

• The swing rate can be used to slightly delay the note events in every even-numbered interval, thereby adding a "swing" to the music. If you are using an eighth-note quantizing value, for example, the delay applies to all notes starting within the second, fourth, sixth, or eighth interval of the measures, as illustrated.

Original timing   Quarter-note length

Quantizing value = ♪, Swing rate = 50% (no delay)

Quantizing value = ♪, Swing rate = 60% (delay applied)

• Finally, you can further improve the swing by adjusting the velocities and gate times of the notes in every other interval.

1. Track setting: TR

• Sets the track to which quantizing is applied.

01,...,32, All
• 01,...,32   Apply quantizing to the corresponding track.
• All   Apply quantizing to all 32 sequence tracks.

2. Segment and notes (M and Note=)

• The two boxes at the top of the screen (to the right of the M) select the area of the track to be quantized. The first box sets the measure and beat for the start point; the second box sets the end point. The Note boxes select the range of notes (pitches) to which quantizing is applied; notes outside of this range are not adjusted.

Measure: beat   001:1,...,999:8
Note range   C-2,...,G8

3. Quantizing value

- The Quantize setting selects the quantizing interval. You can set the value using 🔽 / 🔼 or the data dial, or by pressing the appropriate note key on the numeric keypad.
- Notice that the ⊞ settings create both "normal" and "triplet" intervals over the same space. The ♪₃, for example, sets quantizing lines at every eighth-note spacing *and* at every eighth-note-triplet spacing.

♪	32nd-note intervals		
♪₃	16th-triplet intervals	♪	16th-note intervals
♪₃	8th-triplet intervals	♪	8th-note intervals
♩₃	Quarter-note-triplet intervals	♩	Quarter-note intervals
♪₃	16th-note and 16th-triplet intervals		
♪₃	8th-note and 8th-triplet intervals		

4. Strength

- The Strength value sets the degree by which note events are pulled toward the nearest quantizing line.
- A setting of 100% pulls each note event all the way to the nearest quantizing line. A setting of 50% pulls each note only halfway to the nearest quantizing line.

Original data (assuming 4/4 meter)

Quantizing strength = 100% (where quantize value = ♩)

Quantizing strength = 50% (where quantize value = ♩)

000%,...,100%

5. Sensitivity

- You can use the Sensitivity setting to limit quantization to only those notes that are at a certain distance from the quantizing line. You can choose, for example, to quantize only those notes that are close to the nearest quantizing line, or only those notes that are far away.
- The full quantizing range extends from 1/2 interval to the left through 1/2 interval to the right of the quantizing line. (See figure below.) If you were to apply quantizing at 100% sensitivity and 100% strength, for example, then all notes over this range would be pulled exactly onto the quantizing line.
- If you set Sensitivity to 100% (or -100%), then all notes within the range are pulled toward the quantizing line. If you set the value to 50%, then quantizing applies only to the notes in the half-interval span surrounding the line (starting 1/4-interval to the left of the line, and extending to 1/4-interval to the right). If you use 50% sensitivity with a "quarter-note" quantizing value, for example, then all notes within

a 16th-note to either side of the line are shifted, while notes that are farther away are left untouched.

- You use the negative values when you want to shift only notes that are farthest away from the line. A sensitivity of -50%, for example, applies quantizing to the notes in the far 1/4-interval to the left and the far 1/4-interval to the right. Assuming a "quarter-note" quantizing value, this would quantize all notes that are more than a 16th-note away from the quantizing line, while leaving closer notes unaffected.

2

Quantizing line

Sensitivity = +100%
Sensitivity = +50%
Sensitivity = +30%
Sensitivity = -30%
Sensitivity = -50%
Sensitivity = -100%

Time length of Quantize value

-100%,...,+000%,...,+100%

- Use of the feature allows you to correct notes that are markedly off time while retaining the more subtle discrepancies characteristic of an authentic performance. To achieve this kind of result, you would generally want to set the sensitivity between approximately -30% and -50%.

6. Swing rate

- This setting lets you apply a delay to the notes in every even-numbered quantizing interval (but see below) to produce a more swinging rhythm. This adjustment is carried out after quantizing is completed: first the notes are quantized, and then the swing delay (if any) is applied.
- If you are using a 32nd, 16th, 8th, or quarter-note quantizing value, the QY700 applies the delay to every even-numbered interval. If you are using an 8th-note, for example, then the notes in the first 8th-note interval are normal, the notes in the second 8th-note interval are delayed, the notes in third interval are normal, and so on.
- If you are using one of the triplet quantizing values, then the QY700 applies the delay to the notes in every third interval. If you are using the ♪₊₃ or ♬₊₃ quantizing value, the QY700 applies the delay to the non-triplet part of the rhythm only (to the ♪ or ♬ rhythm only).
- The "swing rate" is given as a scale value indicating the position for the shifted "beat." For non-triplet rhythms, a value of 50% leaves the position unchanged, while higher values apply a delay. (In this case, 100% represents double the length of the quantizing interval.) The available settings depend on the rhythm type, as described below.

Where quantizing value is ♩ , ♪, ♬ or ♭ :

Setting range

- For the quantizing values indicated above, a 50% setting produces no adjustment, so that the even-numbered interval remains exactly centered. Higher values shift the interval to the right, to produce an added swing. The maximum setting is 75%, which shifts the interval by an amount equal to one-half the quantizing value.

Where quantizing value is ♩³, ♪³ or ♬³ :

Setting range

- With the triplet quantizing values (see above), the QY700 applies the shift to the third interval only. In this case, a 66% setting produces no adjustment (so that the third interval remains at its original position). Higher values shift the interval to the right. The maximum setting is 83%, which shifts the interval by an amount equal to one-half the quantizing value. (Notice that in this case, the 100% scale represents three times the quantizing length.)

Where quantizing value is ♪₊₃ , ♬₊₃ :

Setting range

- In the case of normal-plus-triplet quantizing values, the QY700 applies the shift only to the non-triplet part of the rhythm, as illustrated above. In this case, a setting of 50% produces no shift, while higher values shift the even interval to the right. Note that the maximum setting is 66%, which moves the interval all the way up to the position of the third note in the triplet rhythm. (The 100% scale represents double the ♪ or ♬ quantizing length.)

- If quantizing value is ♩, ♪, ♬, ♭:   50%,...,75%
- If quantizing value is ♩³, ♪³ or ♬³: 66%,...,83%
- If quantizing value is ♪₊₃ or ♬₊₃: 50%,...,66%

- If you set STRENGTH below 100%, notes may lie at arbitrary locations within the interval prior to the "swing-rate" shift. In this case, the QY700 will slide all of the notes within the interval by an equal amount.
- Where STRENGTH is less than 100%, therefore, it is possible that the swing adjustment may push some notes into the next interval. If the QY700 must push a note beyond one or more notes lying in the next interval, it will shift these other notes to the same location as well.

7. Swing Gate Time

- This value applies a proportional adjustment to the gate timing of the notes within the swing-adjusted intervals.
- The *gate time* is the length of time that a note is held. You can use this setting, therefore, to lengthen or shorten the notes in the swing-adjusted intervals.
- A setting of 100% leaves the original gate time unchanged. Higher settings increase the gate time, while lower settings shorten it.
- If an adjusted gate-time value is less than 1, the QY700 sets the value to 1.

000%,...,100%,...,200%

8. Swing velocity

- This value applies a proportional adjustment to the note velocities within the swing-adjusted intervals.
- Remember that *velocity* is a measure of the note's force. You can use this setting, therefore, to increase or reduce the force of the notes within the swing-adjusted intervals.
- A setting of 100% leaves the original velocities unchanged. Higher settings increase the velocity, while lower settings decrease it.
- If an adjusted value is less than 1 or higher than 127, the QY700 sets the velocity to 1 or 127, respectively.

000%,...,100%,...,200%

JOB 02 MODIFY VELOCITY

```
SONG   -- JOB 02 MODIFY VELOCITY --

   TR= 01   M 001:1 ~ 999:4

   Note= C -2 ~ G 8
               ▼
   Set all   = Off (0=off)
   Rate      = 100 %
   Offset    = +00

   00    01    02    03    04    05
```

- This job alters the velocity values of the specified range of notes (pitches) in the specified segment of the designated track. Remember that *velocity* refers to the force with which a note is struck. The precise effect of a velocity change varies according to the voice: in most cases a higher velocity produces a louder sound.
- Using this job, you can choose to set all targeted notes to an identical velocity value, or you can apply a relative (linear) adjustment to the original velocity values.
- If making a relative adjustment, you use two parameters: the Rate and the Offset. The Rate value applies a proportional change to the velocity value, while the Offset value (which is applied after the Rate adjustment) adds a fixed value. The relation is as follows:

Adjusted velocity = (original velocity X Rate) + Offset.

- If the adjustment result is less than 1, the QY700 sets the value to 1. If the result is higher than 127, the QY700 sets the value to 127.

1. Track setting: TR

- This parameter selects the sequence track to which adjustment is applied.

01,...,32

2. Segment and notes (M and Note=)

- The two boxes at the top of the screen (to the right of the M) select the track segment over which adjustment is carried out. The first box sets the measure and beat for the start point; the second box sets the end point. The Note boxes select the range of notes (pitches) to be targeted by the adjustment: notes with pitches outside this range are not affected.

Measure: beat	001:1,...,999:8
Note range	C-2,...,G8

3. Set all

- Use this parameter if you want to set the velocities of all targeted notes to the same fixed value (1 to 127). If you do not want to use this feature (if you want to make the linear adjustment instead), set the value to Off.
- Note that if the setting is other than Off, the Rate and Offset values are ignored.

Off (0), 001,...,127

4. Rate

- The Rate parameter applies a proportional change to the velocities of all targeted notes. A setting of 100% produces no change; a setting of 50% cuts the velocities in half; a setting of 200% causes the velocities to double.

Original velocities

96 64 32 127 96

Rate = 50%

48 32 16 63 48

Rate = 150%

127 96 48 127 127

000%,...,100%,...,200%

5. Offset

- This parameter adds a fixed value to each of the Rate-adjusted velocity values. A setting of 0 produces no change. Positive values increase the velocity, while negative values decrease it.

Original velocities

96 64 32 127 96

Offset = -20

76 44 12 107 76

Offset = +20

116 84 52 127 116

-99,...,+00,...,+99

JOB 03   MODIFY GATE TIME

```
SONG  -- JOB 03 MODIFY GATE TIME --


  TR= 01    M 001:1 ~ 999:4
              ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨
      Note= C -2 ~ G 8
             ▼
      Set all   = Off  (0=off)
      Rate      = 100 %
      Offset    = +0000




  00      01      02      03      04      05
```

• This job alters the gate times of the specified range of notes (pitches) in the specified segment of the designated track. The gate time refers to the length of time that a note is held. For non-percussive voices, the gate time is equal to the actual playback time span.

• Using this job, you can choose to change all targeted notes to some fixed gate time, or you can apply a relative (linear) adjustment to the original gate times.

• If making a relative adjustment, you use two parameters: the Rate and the Offset. The Rate value applies a proportional change to the gate time, while the Offset value (which is applied after the Rate adjustment) adds a fixed value. The relation is as follows:

Adjusted gate time = (original gate time X Rate) + Offset.

• If the adjustment result is less than 1, the QY700 sets the value to 1.

1. Track setting: TR

• This parameter selects the sequence track to which adjustment is applied.

01,...,32

2. Segment and notes (M and Note=)

• The two boxes at the top of the screen (to the right of the M) select the track segment over which adjustment is carried out. The first box sets the measure and beat for the start point; the second box sets the end point. The Note boxes select the range of notes (pitches) to be targeted by the adjustment: notes with pitches outside this range are not affected.

Measure: beat   001:1,...,999:8
Note range   C-2,...,G8

3. Set all

• Use this parameter if you want to set all targeted notes to some identical gate time (1 to 9999). If you do not want to use this feature (if you want to make the linear adjustment instead), set the value to Off.

• Note that if the setting is other than Off, the Rate and Offset values are ignored.

Off (0), 0001,...,9999

4. Rate

• The Rate parameter applies a proportional change to the gate timing of all targeted notes. A setting of 100% produces no change; a setting of 50% cuts the gate time in half; a setting of 200% causes the gate time to double.

Original gate timing

(Gate)   32   32   32   48   48

Rate = 50%

(Gate)   16   16   16   24   24

Rate = 150%

(Gate)   48   48   48   72   72

000%,...,100%,...,200%

5. Offset

- This parameter adds a fixed value to each of the Rate-adjusted gate times. A setting of 0 produces no change. Positive values increase the gate time, while negative values decrease it.

Original gate timing

(Gate)
32 32 32 48 48

Offset = -20

(Gate)
12 12 12 28 28

Offset = +20

(Gate)
52 52 52 68 68

-9999,...,+0000,...,+9999

JOB 04   CRESCENDO

```
SONG  -- JOB 04 CRESCENDO --



TR= 01   M 001:1 ~ 999:4

Note= C -2 ~ G 8
                ▼

Range        = -99



  00    01    02    03    04    05
```

- You use this job to apply a crescendo or decrescendo to the specified range of notes (pitches) in the specified segment of the designated track. The QY700 produces the effect by applying a slight velocity adjustment (offset) at the beginning of the segment, with the offset increasing gradually up until the end of the segment.

1. Track setting: TR

- This parameter selects the sequence track to which adjustment is applied.

01,...,32

2. Segment and notes (M and Note=)

- The two boxes at the top of the screen (to the right of the M) select the track segment over which the crescendo or diminuendo is created. The first box sets the measure and beat for the start point; the second box sets the end point. The Note boxes select the range of notes (pitches) to be targeted by the adjustment: notes with pitches outside this range are not affected.

Measure: beat   001:1,...,999:8
Note range   C-2,...,G8

3. Range

- You use the Range parameter to set the intensity of the crescendo.
- The Range setting selects the value added to the velocities of notes at the final meter and beat of the segment. The QY700 gradually increases the amount added to (or subtracted from) the velocities within the segment, beginning with a "0" amount at the beginning of the segment, and ending with the full Range amount at the end of the segment.
- Velocity cannot be less than 1 or higher than 127. Adjusted valves below 1 are raised to 1, adjusted values above 127 are set to 127.

Original velocities

(Vel)

| 64 | 64 | 64 | 64 | 64 | 64 |

Range = +50 (M: 001:1 ~ 003:1)

(Vel)

| 64 | 74 | 84 | 94 | 104 | 114 |

Range = –50 (M: 001:1 ~ 003:1)

(Vel)

| 64 | 54 | 44 | 34 | 21 | 14 |

-99,...,+00,...,+99

2

JOB 05   TRANSPOSE


```
SONG  -- JOB 05 TRANSPOSE --


TR= 01    M 001:1 ~ 999:4

        Note= C -2 ~ G 8
                ▼

        Transpose   = +00




    00    01    02    03    04    05
```

• You use this job to tranpose a specified range of notes
(pitches) in a specified segment of the designated track. You
set the transposition level in semitone increments.

1. Track setting: TR

• This parameter selects the track.

01,...,32,Chd
• 01,...,32   Apply transposition to the corresponding se-
quence track.
• Chd   Apply transposition to the CHORD track.

2. Segment and notes (M and Note=)

• The two boxes to the right of the M select the track segment
containing the notes to be transposed. The first box sets the
measure and beat for the start point; the second box sets the
end point. The Note boxes select the range of notes (pitches)

to be targeted: notes with pitches outside this range are not
affected.

Measure: beat   001:1,...,999:8
Note range   C-2,...,G8

3. Transposition amount

• The Transpose value sets the number of transposition inter-
vals (semitones). A value of +12 would transpose all tar-
geted notes up by exactly one octave, while a value of -12
would transpose down by an octave.

-99,...,+00,...,+99

JOB 06   SHIFT NOTE

```
SONG  -- JOB 06 SHIFT NOTE --



   TR= 01   M 001:1 ~ 999:4
                ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨
                      ▼

         Note=  C 3  ➡ G 8




     00    01    02    03    04    05
```

- This job replaces all occurrences of a specified pitch (within the selected segment of the selected sequence track) with some other pitch.

1. Track setting: TR

- This parameter selects the track.

01,...,32

2. Segment and notes (M)

- The two boxes to the right of the M select the track segment over which notes are to be changed. The first box sets the measure and beat for the start point; the second box sets the end point.

Measure: beat   001:1,...,999:8

3. Source pitch

- The first box to the right of "Note =" indicates the note (pitch) to be changed. Each of these notes will be converted to an equivalent note of the destination pitch.

C-2,...,G8

4. Destination pitch

- The second box to the right of "Note=" selects the new pitch for the transposed notes.

C-2,...,G8

JOB 07   SHIFT CLOCK

```
SONG  -- JOB 07 SHIFT CLOCK --



   TR= 01   M 001:1 ~ 999:4
                ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨
                      ▼

         Clock  = +0000




     00    01    02    03    04    05
```

- This job executes a time shift of all data events on the selected segment of the selected track. The shift is executed in clock-cycle increments.

- If you wish to move events by one or more full beats or measures, you may find it easier to use the COPY EVENT job. (→ p.154)

• Note that this job will never move an event past the designated segment's start or end points; any event that would otherwise move past this point is instead deposited at the segment's border.

1. Track setting: TR

• This parameter selects the track.

01,...,32, Tmp
- 01,...,32   Apply the shift to the corresponding sequence track.
- Tmp   Apply the shift to the TEMPO track.

2. Segment

• The two boxes to the right of the M select the track segment for the shift. The first box sets the measure and beat for the start point; the second box sets the end point.

Measure: beat   001:1,...,999:8

3. Clock cycles

• The Clock value sets the number of clock cycles for the data shift. Positive values shift events toward the right (toward the end of the song), while negative events shift them back.
• Note that there are 480 cycles per beat.

-9999,...,+0000,...,+9999

JOB 08   CHORD SORT


```
SONG  -- JOB 08 CHORD SORT --


TR= 01    M 001:1 ~ 999:4


              ▼

Type    = Normal



  00    01    02    03    04    05
```

• This job "sorts" chord events (simultaneous note events) by order of pitch. The sort is reflected in the EDIT page listing, and determines the separation sequence used by the CHORD SEPARATE job (see next page).
• Sorting is by pitch. If notes E3, C3, and G3 all begin at the same time, the job adjusts the sequence to C3, E3, G3 (if the setting is Normal) to G3, E3, C3 (if Reverse).

1. Track setting: TR

• This parameter selects track containing the data to be sorted.

01,...,32

2. Segment

• The two boxes to the right of the M select the track segment over which the chord sort is executed. The first box sets the measure and beat for the start point; the second box sets the end point.

Measure: beat   001:1,...,999:8

3. Type

Normal   Sort from low pitch to high.
Reverse   Sort from high pitch to low.

JOB 09   CHORD SEPARATE

```
SONG  -- JOB 09 CHORD SEPARATE --



    TR= 01   M 001:1 ~ 999:4



              ▼

         Clock = 000




  00    01    02    03    04    05
```

- • This job plays opens each chord formation (within the specified segment of the specified track) into its individual notes, inserting a specified delay between each note.
- • If the Clock value is set to 30, a block chord consisting of elements C3, E3, G3 will be played as a C3 (at the chord's original timing) followed 30 cycles later by the E3, and then another 30 cycles later by the G3. This feature is useful, for example, when you want to open up guitar strokes.
- • Note that it is not possible to break chords over the next measure boundary or into the next chord.

1. Track setting: TR

- • This parameter selects the target track.

01,...,32

2. Segment

- • The two boxes to the right of the M select the track segment over which chord separations are executed. The first box sets the measure and beat for the start point; the second box sets the end point.

Measure: beat   001:1,...,999:8

3. Clock cycles

- • The Clock value sets the number of clock cycles inserted between adjacent chord notes.
- • Note that there are 480 clock cycles per beat.

000,...,999

JOB 10   SHIFT EVENT

```
SONG  -- JOB 10 SHIFT EVENT --



    TR= 01   M 001:1 ~ 999:4

                  ▼
              ↘CC     001:Modulation
               ↓
              ↘CC     001:Modulation




      00    01    02    03    04    05
```

2

- This job replaces all occurrences of a specified event type (within the selected segment of the selected sequence track) with some other designated event type. Although the event type itself is replaced, the accompanying argument (parameter value) is retained and applied to the new event type.
- As an example, you can use this function to change breath-controller events into channel-aftertouch events, while leaving the magnitude of the event unchanged.

1. Track setting: TR

- This parameter selects the target track.

01,...,32

2. Segment

- The two boxes to the right of the M select the target track segment.

Measure: beat   001:1,...,999:8

3. Source event

- The two boxes at the center select the event type to be replaced.

CC	001,...,031,033,...,127	Control-change event
CAT		Channel aftertouch
PB MSB		Pitch bend MSB
Note		Note event (where the note-number argument is retained.)
	Note (Velo=64)	
Note		Note event (where the velocity argument is retained.)
	Velo# (Note=C3)	

4. Destination event

- The two boxes at the bottom select the event type that replaces the "source" event.

CC	001,...,031,033,...,127	Control-change event
CAT		Channel aftertouch
PB MSB		Pitch bend (With the LSB argument set to 00)
Note		Note event (where original argument gives the new note number; velocity is set to 64; and gate time is set to 108.)
	Note (Velo=64)	
Note		Note event (where original argument gives the new velocity; the note is set to C3; and gate time is set to 108.)
	Velo# (Note=C3)	

JOB 11   COPY EVENT

```
SONG  -- JOB 11 COPY EVENT --



Song 01 TR= 01   M 001:1 ~ 999:4


     ↓


Song 01 TR= 01   M 001:1  × 01




    00    01    02    03    04    05
```

- This job copies all data from a specified source area (song, track, and segment) to a specified destination, overwriting any data already existing at the destination.
- This job is useful when you want to copy data from one song to another, or when you want to copy or move data from one area of a track to another.
- Note that this job does not operate on voice settings and play-effect settings.
- You can choose to copy more than one iteration of the source data. If you select three iterations, for example, the source data will be repeated three times on the destination side.

1. Source song

- The upper Song value selects the song from which the data are to be copied.

01,...,20

2. Source track

- The upper TR value selects the track from which the data are copied.

01,...,32, Pat, Chd, Tmp, All
- 01,...,32   Sequence track
- Pat   PATTERN track
- Chd   CHORD track
- Tmp   TEMPO track
- All   All tracks

NOTE: The source and destination tracks must be the same type. If you set the above value to Pat, Chd, Tmp, or All, the destination track setting will automatically take the same value. If you copy from a sequence track, the destination must also be a sequence track.

3. Source segment

- The two boxes to the right of the M (on the upper line of the screen) select the track segment from which data are copied.

Measure: beat   001:1,...,999:8

4. Destination song

- The lower Song value selects the destination song.

01,...,20

5. Destination track

- The lower TR value selects the destination track.

01,...,32, Pat, Chd, Tmp, All
- 01,...,32   Sequence track
- Pat   PATTERN track
- Chd   CHORD track
- Tmp   TEMPO track
- All   All tracks

NOTE: The source and destination tracks must be the same type. If you set the above value to Pat, Chd, Tmp, or All, the source track setting will automatically take the same value. If you set the above to a sequence track, the source must also be a sequence track.

6. Start point of destination segment

- The first box to the right of the M (on the lower line of the screen) selects the start point for the copy on the destination track.

Measure: beat   001:1,...,999:8

7. Copy iterations

- The final entry on the job page sets the number of times the copy is executed.

01,...,99

2

JOB 12 ERASE EVENT

• This job clears all data from the specified segment of the designated song, so that the segment becomes silent.

1. Track setting

• This TR value selects the track from which data are to be cleared.

01,...,32, Pat, Chd, Tmp
  • 01,...,32   Sequence track
  • Pat   PATTERN track
  • Chd   CHORD track
  • Tmp   TEMPO track

2. Segment

• The two boxes to the right of the M select the track segment to be cleared.

Measure: beat   001:1,...,999:8

JOB 13   EXTRACT EVENT

• This job moves all instances of specified event data from a selected segment of a sequence track to the same segment on a different sequence track. Following the operation, the targeted events no longer exist in the source segment.
• You can use the Spot Clock setting to target only those events that occur within a certain interval of each of the segment's measures. For example, you can choose to extract only events that fall between the second and third beats of each of the targeted measures.
• If data already exist at the destination side, the extracted data and existing data are mixed.
• You can also use this job to delete the specified event data rather than moving it. (You can do this by setting the second TR value to "Off".)

1. Source track

📖 • The first TR setting selects the track from which events are to be extracted.

🔢 01,...,32

2. Source segment

📖 • The two boxes to the right of the M select the track segment for the extraction.

🔢 Measure: beat   001:1,...,999:8

3. Spot clock

📖 • The Spot Clock parameter selects the interval of each measure from which data are to be extracted.
   • The interval is set by clock cycles, where each measure starts at cycle 0000. There are 480 cycles per quarter note.
     • For example, assume that timing is set to 4/4. In this case, if you want to extract data only from the first half of each measure, you would set the range to 0000 – 0959. If you wanted to copy only those events that fall exactly on the fourth beat, you would set the range to 1440 – 1440.

```
     0000        0480        0960        1440        1919
4/4  [_____|_____|_____|_____]


     0000   0240   0480   0720   0960   1200   1439
6/8  [_____|_____|_____|_____|_____|_____]
```

🔢 0000,...,3840

4. Destination track

📖 • The lower TR setting selects the destination track.

🔢 01,...,32, Off
   • 01,...,32   Sequence track
   • Off   No destination. (Extract and delete)

5. Event

📖 • The third pair of boxes (at the center of the screen) select the event type to be extracted.

🔢 Note, PC, PB, CC (000,...,127, All), CAT, PAT, EXC
   • Note   Note events (C2,...,G8, All)
   • PC   Program change
   • PB   Pitch bend
   • CC(000,...,127,All) Control change (Any single control-change message type 000 to 127, or all control-change messages)
   • CAT   Channel aftertouch
   • PAT   Polyphonic aftertouch
   • EXC   System exclusive

6. Argument range

📖 • The lowest two boxes on the screen select the argument range. The QY700 will extract only those note events whose arguments fall within the specified range.
   • If you are extracting note events, for example, you can use this setting to limit extraction to all note events within a certain pitch range (for example, C3 to C4). If extracting program-change events, you can limit extraction to events with a certain range of program numbers only.
   • Note that the EXC event type does not accept an argument-range value.
   • The values listed below show the maximum ranges. In all cases you can set a smaller range. Note that the first value of the range must be less than or equal to the second value.

🔢 C-2,...,G8   Maximum range for note events
   -8192,...,+8191 Maximum range for pitchbend events
   000,..,127   Maximum range for all event types other than note and pitchbend.

JOB 14   THIN OUT

```
SONG  -- JOB 14 THIN OUT --


      TR= 01   M 001:1 ~ 999:4
                ▨▨▨▨▨▨▨▨▨▨▨▨▨▨
                     ▼

                 ░PB    Pitch Bend


   00    01    02    03    04    05
```

2

- • You use this job to remove some occurrences of a specified non-note event within the designated segment of a selected track. The purpose is to reduce the data volume and free up additional memory.
- • Specifically, the job will remove every other occurrence of the event in areas where the event recurs within 60 clock cycles. The job will not remove an event that is separated from the previous occurrence by at least 60 clock cycles.

1. Track setting

- • The TR value selects the target track.

  01,...,32, Tmp
    - • 01,...,32   Sequence track
    - • Tmp   TEMPO track

2. Segment

- • The two boxes to the right of the M select the track segment to be thinned.

  Measure: beat   001:1,...,999:8

3. Event

- • The bottom pair of boxes select the targeted event type.
- • Note that these settings are available only when you are working on a sequence track. If you have selected the TEMPO track, the QY700 will automatically target tempo-change events.

  PB, CC (000,...,127), CAT, PAT
    - • PB   Pitch bend
    - • CC(000,...,127) Control change (Any single control-change message type, 000 to 127)
    - • CAT   Channel aftertouch
    - • PAT   Polyphonic aftertouch

JOB 15   TIME STRETCH

```
SONG  -- JOB 15 TIME STRETCH --


      TR= 01   M 001:1 ~ 999:4
               ▨▨████████▨▨▨▨▨▨▨▨▨▨
                      ▼
               Time = 050 %




         00    01    02    03    04    05
```

- This job expands or compresses the timing over the selected segment on the selected track.
- The operation affects all event timing, note step times, and note gate times.

1. Track setting

- The TR value selects the target track.

01,...,32, All
- 01,...,32   Corresponding sequence track
- All   All sequence tracks

2. Segment

- The two boxes to the right of the M select the target segment of the track.

Measure: beat   001:1,...,999:8

3. Time

- The Time parameter sets the time multiplier.

050%,...,200%

JOB 16   CREATE MEASURE

```
SONG  -- JOB 16 CREATE MEASURE --




        M 001    4/ 4   01 Measure
        ▨▨▨▨▨▨   ▨▨▨▨▨▨▨▨▨▨▨▨▨▨
              ︿
            ▭▭▭




         00    01    02    03    04    05
```

- This job inserts one or more empty measures into the same location on all tracks (all 32 sequence tracks, as well as the PATTERN, CHORD, and TEMPO tracks).

1. Insertion point

- The M value sets the position for the insertion. Specifically, the value sets the measure number (within the song) for the first inserted measure. A value of 001, for example, inserts the measures at the very beginning (so that the first inserted measure becomes Measure 1).

001,...,999

• If you set the insertion point past the end of the song, the QY700 will append the empty measure(s) to the end of Track 1 only.

2. Meter

• The middle box on the screen sets the meter for the new measure.
• You can select any meter that you like. You may find it convenient to use this job when you need to create a song that incorporates meter changes.

1/16,...,16/16; 1/8,...,16/8; 1/4,...,8/4

3. Number of measures to insert

• The final box on the screen sets the number of measures to be inserted.

01,...,99

JOB 17   DELETE MEASURE


```
SONG   -- JOB 17 DELETE MEASURE --



          M 001 ~ 999

                  Delete
                    ↓



      00     01     02     03     04     05
```

• This job removes a segment consisting of one or more measures. The segment is removed from all tracks (all 32 sequence tracks, as well as the PATTERN, CHORD, and TEMPO tracks).
• The area that trails the deleted segment shifts forward (toward the start of the song) to fill in the gap.

1. Range

• The M values set the segment to be removed. The first value gives the number of the first measure of the segment; the second value gives the number of the final measure.

001,...,999

JOB 18   COPY TRACK


```
SONG  -- JOB 18 COPY TRACK --

Song= 01  TR= 01  ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨
                        ↓
Song= 01  TR= 01  ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨
              ☑ Event
              ☑ Play Effect
              ☑ Voice

  00    01    02    03    04    05
```

- This job copies all data (or a selected type of data; see below) from one track onto another. The source and destination tracks may be in the same song, or in different songs.
- Note that the source track's transmission-channel and meter settings are not copied.
- This operation overwrites any data already existing on the destination track.

1. Source song

- The first Song setting selects the song containing the source track.

01,...,20

2. Source track

- The first TR setting selects the track containing the data to be copied.

01,...,32, Pat, Chd, Tmp
- 01,...,32   Sequence track
- Pat   PATTERN track
- Chd   CHORD track
- Tmp   TEMPO track

NOTE: The source and destination tracks must be the same type. If you set the above value to Pat, Chd, or Tmp, the destination track setting will automatically take the same value. If you copy from a sequence track, the destination must also be a sequence track.

3. Destination song

- The second Song setting selects the song containing the destination track.

01,...,20

4. Destination track

- The second TR setting selects the destination track.

01,...,32, Pat, Chd, Tmp
- 01,...,32   Sequence track
- Pat   PATTERN track
- Chd   CHORD track
- Tmp   TEMPO track

NOTE: The source and destination tracks must be the same type. If you set the destination to Pat, Chd, or Tmp, the source track setting will automatically take the same value. If you copy from a sequence track, the destination must also be a sequence track.

5. Data type

- The last three items on the screen allow you to select the type of data to be targeted. You can select one or more of these types by placing checkmarks into the corresponding boxes.
  - If you select Event, the job copies all event data from the source track to the destination track.
  - If you select Play Effect, the job copies all of the source track's SONG-mode play effect settings.
  - If you select Voice, the job copies all of the source track's associated VOICE-mode settings.
- The checkmark settings have no meaning if the track is set to Pat, Chd, or Tmp.

☑ Copy the corresponding data type.
☐ Do not copy this data type.

JOB 19   MIX TRACKS

```
SONG  -- JOB 19 MIX TRACK --



Song= 01  TR= 01  a ▨▨▨▨▨▨▨▨▨▨▨▨▨
                             +
Song= 01  TR= 01  b ▨▨▨▨▨▨▨▨▨▨▨▨▨
                             ↓
Song= 01  TR= 01  c ▨▨▨▨▨▨▨▨▨▨▨▨▨

 Play Effect=   b
 Voice     =    b



   00     01     02     03     04     05
```

2

- This job mixes all data from a selected sequence track onto another sequence track. The two tracks do not have to be in the same song.
- When the operation is completed, the source track remains unchanged, while the destination track contains both its original data and a copy of the source track's data.

1. Source song

- The first Song value selects the song containing the source track.

01,...,20

2. Source track (Track "a")

- The first TR value selects the source track. This is the track containing the data to be mixed into the destination track. Following the mix, the source track's content will remain unchanged.

01,...,32

3. Destination song

- The second Song value selects the song containing the destination track (track "b").

01,...,20

4. Destination track (Track "b")

- The second TR value selects the destination track. The original content of this track becomes mixed with the content from Track "a."

01,...,32

5. Play Effect and Voice source

- The final two items let you select which play-effect and voice settings to apply to the destination track (track "b"). For both Play Effect and Voice, you can choose to apply the values from track "a" or to retain the values already in effect at track "b".

a, b
- a   Use the settings from track "a".
- b   Use the settings from track "b".

JOB 20   CLEAR TRACK

```
SONG  -- JOB 20 CLEAR TRACK --



   TR= 01    ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨

                   ↓ Clear
              ┌─────────────────────┐
              └─────────────────────┘

           ☑ Event
           ☑ Play Effect
           ☑ Voice




   ┃ 00 ┃ 01 ┃ 02 ┃ 03 ┃ 04 ┃ 05 ┃
```

📖 • This job deletes all data (of the selected type) from the se-
     lected track.
   • To select a data type for deletion, place a checkmark in the
     corresponding box.
   • If you select Event, the job will delete all event data from
     the track.
   • If you select Play Effect, the job will initialize all play-ef-
     fect settings for that track.
   • If you select Voice, the job will initialize the track's VOICE-
     mode settings.

▓ 1. Track

📖 • The TR setting selects the track to be cleared.

🔢 01,...,32, Pat, Chd, Tmp, All
   • 01,...,32   Sequence track
   • Pat   PATTERN track
   • Chd   CHORD track
   • Tmp   TEMPO track
   • All   All tracks

▓ 2. Data type

📖 • Check the box containing the data type(s) that you want to
     delete.

🔢 ☑   Delete the corresponding data type.
   ☐   Do not delete this data type.

JOB 21   EXPAND BACKING

```
SONG  -- JOB 21 EXPAND BACKING --




       Backing            TR=17~32
       ┌─────┐   Expand   ┌──────┐
       │ Pat │    ━━▶     │ ♪▯▭▭ │
       │ Chd │            └──────┘
       └─────┘




   ┃ 00 ┃ 01 ┃ 02 ┃ 03 ┃ 04 ┃ 05 ┃
```

📖 • This job expands pattern-track and chord-track data into
     pattern performance data (event data), and places the re-
     sults into sequence tracks 17 to 32.

Pattern	TR1	2	3	4	5	6	⋯	15	16
	↓	↓	↓	↓	↓	↓	↓	↓	↓
Song	TR17	18	19	20	21	22	⋯	31	32

- Note that the job will cause loss of any data already existing in tracks 17 to 32.
- Expanded pattern data includes program change messages. There is no need to make explicit VOICE mode settings.
- The PATTERN mode's play effects are incorporated into the expanded data.

JOB 22   NORMALIZE PLAY EFFECTS

2

```
SONG  -- JOB 22 NORMALIZE P.EFFECT --



               Play Effect



         TR= 01


  00   01   02   03   04   05
```

- This job rewrites the data in the selected sequence track so that the new data incorporates the current play-effect settings ($\rightarrow$ p.80). In other words, the external play-effect values are internalized into the track's MIDI event data.
- After rewriting the track's sequence data, the job reinitializes the track's play-effect parameters.

1. Track

- The TR value selects the track to be normalized.

01,...,32, All
- 01,...,32   Normalize the corresponding sequence track.
- All   Normalize all sequence tracks.

JOB 23   COPY SONG

```
SONG  -- JOB 23 COPY SONG --



   Song= 01  ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨

              ↓ COPY
   Song= 01  ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨




  00     01     02     03     04     05
```

📖 • This job copies the selected song (including play effects and VOICE-mode settings) into another song location. Following the copy, the selected song will exist at two song locations.

• The copy operation causes loss of any data already existing in the destination song.

▨ 1. Source song

📖 • The first Song value selects the song to be copied.

[0101 1101] 01,...,20

▨ 2. Destination song

📖 • The second Song value selects the destination.

[0101 1101] 01,...,20

JOB 24   CLEAR SONG

```
SONG  -- JOB 24 CLEAR SONG --



   Song= 01  ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨

              ↓ Clear
            [                    ]




  00     01     02     03     04     05
```

📖 • This job deletes all data from the selected song, and reinitializes the song's play effects and VOICE-mode settings.

▨ 1. Song

📖 • The Song value selects the song to be deleted.

[0101 1101] 1,...,20

JOB 25   SONG NAME

- • You use this job to set or change the name for the currently
  selected song.

1. Song name

Supported characters:
   0,...,9, a,...,z, A,...,Z " ' ^ ( ) < = > @ | \ _ ! ? # $ % &
   * + - / , . : ; *space*

1. Use the numeric keypad and the microkeyboard to in-
   put each character. You can use the ◄ and ► keys
   to move the cursor left and right as necessary.
   • For information about how to input characters, refer to Chap-
     ter 1.(→ p.53)

2. When you have finished entering the name, press
   ⌜EXIT⌝ twice to return to the SONG PLAY screen.
   Check that the name appears correctly on the second
   line of the display.
   • Note that you do not need to press ↵ to enter the name.

Memo

Chapter 3. VOICE MODE

3

This chapter explains mixer, tune, and voice edit settings.
Voice mode is where you will select the voices used by a song, and edit voices.

About voice mode

- Voice mode is the mode in which you can select and edit the voices that are used in a song.
- Voice mode does not have a single fixed "top" display which will always appear when you press the MODE key. (The last-selected display will appear.)
- In the QY700, the tracks of the sequencer block and the parts of the tone generator block are connected according to the Song mode Out Channel TO TG settings, as shown in the following diagram. Before you make voice settings, check the Song mode Out Channel TO TG settings, and understand the relation between tracks and parts. (→ p.105)
- The settings of the part which is connected to the pattern track by the Out Channel TO TG setting will automatically be overwritten whenever the pattern is switched by the Pattern Voice settings (→ p.225).

- If the Recording Mode (→ p.106) is set either to Realtime Recording or to Punch Recording, you will also be able to record from this mode.
- Voice mode has five sub-mode pages, and these are selected using function keys ⬚F1⬚ – ⬚F5⬚ .
  Pressing ⬚F1⬚ (Mixer) accesses the Mixer page. Here you can set voice, pan and volume etc. for each part. (→ p.170)
  Pressing ⬚F2⬚ (Tune) accesses the Tune page. Here you can make transposition and tuning settings for each part. (→ p.174)
  Pressing ⬚F3⬚ (VoicEdit) accesses the Voice Edit page. Here you can make settings to modify the voice. (→ p.176)
  Pressing ⬚F4⬚ (DrS1Edit) accesses the Drum Setup 1 Edit page. Here you can make settings to modify a drum set voice. (→ p.182) This sub-mode can be selected only if Drum Setup 1 is selected as the voice category for the part where the cursor is located.
  Pressing ⬚F5⬚ (DrS2Edit) accesses the Drum Setup 2 Edit page. Here you can make settings to modify a drum set voice. (→ p.182) This submode can be selected only if Drum Setup 2 is selected as the voice category for the part where the cursor is located.

	Sequencer block		Tone generator block
	Track	TO TG	Part
Sequencer tracks	1	1	1
	2	2	2
	⋮	⋮	⋮
	16	16	16
	17	off	17
	18	off	18
	⋮	⋮	⋮
	32	off	32
Pattern tracks	1	17	
	2	18	
	⋮	⋮	
	16	32	

- If the song contains "GM Mode On", "XG System On", or control change or exclusive messages which set program changes, the settings of Voice mode will be ignored.
- If you want your Voice mode settings to be reflected in the data, highlight the XG Header item in the Save page of Disk mode when saving the song to a Standard MIDI File etc. (→ p.307)

1. Mixer

Data display

2. Location
3. Part number
4. Velocity meter
5. Voice category
6. Program number
7. Bank number
8. Reverb send
9. Chorus send
10. Variation switch/
    Variation send
11. Pan
12. Volume
13. Expression

VOICE Voice Mode

— F1 Mixer
— F2 Tune
— F3 Voice Edit
— F4 Drum Setup 1 Edit
— F5 Drum Setup 2 Edit

Parameter	Values	Function	See page
1 Data display	display only	Displays the data selected by the cursor.	P.171
2 Location	001 – 999	Indicates the playback location of the song in measures and beats.	P.171
3 Part number	1 – 32	The part number for which settings are being made is highlighted.	P.171
4 Velocity meter	[ ], [_], [M], [S]	Graphically indicates the velocity value of the note data sent from the song.	P.171
5 Voice category	[▥], [☰], [☰], [☰], [☰], [☰], Off	Specify the general category of the voice for each part. This indicates the Bank Select MSB value.	P.172
6 Program number	001 – 128	Select the voice for each part.	P.172
7 Bank number	000 – 101	Specify the voice bank for each part. This indicates the Bank Select LSB value.	P.173
8 Reverb send	000 – 127	Adjust the level sent to the Reverb effect from each part.	P.173
9 Chorus send	000 – 127	Adjust the level sent to the Chorus effect from each part.	P.173
10 Variation switch	on, off	Specify the part that will use the Variation effect.	P.173
Variation send	000 – 127	Adjust the level sent to the Variation effect from each part.	
11 Pan	Random, Left63 – Center – Right63	Specify the position of the sound when stereo playback is used.	P.173
12 Volume	000 – 127	Adjust the volume setting of each part.	P.173
13 Expression	000 – 127	Adjust the expression setting of each part.	P.173

- Here you can make settings such as voice, effect, pan and volume for each part, that will apply when playing back or recording a song.
- It is also possible to make settings while playing back a song, and you can also solo or mute tracks just as in Song mode.

1. Press [VOICE].

▼ The indicator above [VOICE] will light, and you will enter Voice mode.

2. Press [F1] (Mixer) to access the mixer.

3. Use [TRACK DOWN] / [TRACK UP] or [◄] / [►] to select a part. You can switch between the screens for parts 1–16 and parts 17–32 by pressing [F6].

4. Move the cursor to the parameter that you wish to set.

5. Use [NO] / [YES], the data dial, or the numeric keypad → [↵] to set the value.

- In Voice mode, keys such as [►], [●], [■], [◄] and [◄◄] / [►►] will function in the same way as in Song Play mode. You can use these keys to listen to the playback while you modify the settings in realtime. If the Recording Mode for song recording (→ p.106) is set either to Realtime Recording Replace or Overdub, or to Punch Recording, song recording can also be performed in Voice mode.
- [SHIFT] + data dial or [SHIFT] + [NO] / [YES] will increase or decrease the setting of all parts by the same value.
- [SHIFT] + numeric keypad → [↵] will set all parts to the same value.

1. Data display

- The upper line shows the Voice Category / Program Number / Bank Number / Voice Name for the part where the cursor is located.
- The lower line shows the name and value of the parameter where the cursor is located.

2. Location

- Location indicates the playback location of the song in measures and beats.
- To change the playback location of the song, press [D1] to move the cursor to Location, and use [NO] / [YES], the data dial, or numeric keypad → [↵] to specify the desired measure.

3. Part number

- This indicates the part number of the QY700's tone generator block.
- On the QY700, the Track of the sequencer block and the Part of the tone generator block are connected according to the Song mode Out Channel setting TO TG. Before making voice settings, check the Song mode Out Channel TO TG setting, and be sure that you understand the relation between tracks and parts. (→ p.105)
- The settings of the part which is connected to the pattern track by the Out Channel TO TG setting will automatically be overwritten whenever the pattern is switched by the Pattern Voice settings (→ p.225).
- Highlight the part number (1–32) for which you wish to make settings.

1 – 32

4. Velocity meter

- When you start playback, the velocity meter will appear. The velocity meter graphically indicates the velocity values of the musical notes that are transmitted from the song.
- Mute or solo settings can be made independently for each track. Mute temporarily silences a track. Solo mutes the other tracks, allowing you to hear only the playback of a certain track.

1. Use TRACK DOWN / TRACK UP or the cursor keys to move the cursor to the desired track.

2. Press MUTE , and the display will indicate Ⓜ and the track will be muted.
   If you press MUTE once again for a muted track, it will be un-muted.

3. Press SOLO , and the display will indicate 🅂 and all other tracks will be displayed as dashed lines, and only the sound of the track located at the cursor will be heard.
   When a track is being soloed, moving the cursor to another track and pressing SOLO will switch the soloed track. In this way, you can successively audition the playback of each track.
   When a track is being soloed, moving the cursor to another track and pressing SHIFT + SOLO will add the selected track to the playback, allowing you to solo two or more tracks.

4. When you press SOLO on a soloed track, all solo settings will be canceled simultaneously.
   When you press SHIFT + SOLO on a soloed track, solo will be canceled only for that track.

5. Voice category

- Voice Category allows you to change the Bank Select MSB value to specify the general category of the voice.
- Normal Voice is the voice category that specifies normal voices (instrumental sounds). Specify a Bank Select MSB of 000.
- SFX Voice is a voice category that specifies sound effects. Sounds effects in this category change their pitch when played from different notes of the keyboard. Specify a Bank Select MSB of 064.

- SFX Kit is a voice category that specifies sound effects. Sounds effects in this category produce a different type of sound effect for each note of the keyboard, similarly to a drum voice. Specify a Bank Select MSB of 126.
- Drum Voice is the voice category that specifies drum voices. In this category, you can specify Drum Voice for two or more parts, and select a different drum set voice for each part. However it is not possible to modify the drum sounds. Specify a Bank Select MSB of 127.
- Drum S1 and Drum S2 are voice categories that specify Drum Setups. The drum voices in this category can be modified using Drum Setup Edit. However if Drum S1 is specified for two or more parts, selecting a drum set voice or modifying the sound for one of the parts will automatically change the settings for the other parts as well.

(icon)	Normal Voice
(icon)	SFX Voice
(icon)	SFX Kit
(icon)	Drum Voice
(icon)	Drum Setup 1
(icon)	Drum Setup 2
Off	Part off

6. Program number

- Program Number specifies the voice number that will be used by each part.
- Voices are selected by three values: Voice Category, Bank Number (see following item) and Program Number.
- A voice icon will be displayed at the cursor location. The data display location will show the specified program number and the name of the selected voice.
- The available program numbers will depend on the Voice Category.
- During playback, this setting will change according to the Program Change data that was recorded into each track of the sequencer block.

001–128

- For details on voice selection, refer to "Chapter 1. BASIC CONCEPTS". (→ p.43)
- For voice names and numbers, refer to the separate "*QY700 Reference Listings*".

7. Bank number

- Bank Number specifies the Bank Select LSB of the voice that will be used by each part.
- Voices are selected by three values: Voice Category, Bank Number and Program Number.
- If the Voice Category is other than ▦ (Normal Voice), the Bank Number will be fixed at 000.

000–101 (discontinuous)

- For details on bank selection, refer to "Chapter 1. BASIC CONCEPTS". (→ p.43)
- For bank numbers, refer to the separate "*QY700 Reference Listings*".

8. Reverb send

- This specifies the amount that will be sent from each part to the Reverb effect, adjusting the reverb depth.
- When making this setting, take into consideration the Effect mode Reverb Return setting (→ p.191).

000–127

9. Chorus send

- This specifies the amount that will be sent from each part to the Chorus effect, adjusting the chorus depth.
- When making this setting, take into consideration the Effect mode Chorus Return setting (→ p.192).

000–127

10. Variation switch / Variation send

- If the Effect mode Variation Mode (→ p.190) is set to Insertion, this setting functions as the Variation Switch, specifying the part which will use the Variation effect.
  Only one selected part can be turned on.
- If the Effect mode Variation Mode (→ p.190) is set to System, this setting functions as the Variation Send Level, setting the amount that will be sent from each part to the Variation effect, and thus adjusting the depth of the effect.
- When making this setting, take into consideration the Effect mode Variation Return setting.

- Variation Switch
  Off, On (Insertion)
- Variation Send Level
  000–127 (System)

11. Pan

- This sets the pan position (stereo location) for stereo playback.
- During playback, this value will follow the Pan data contained in the track.
- If a Drum Voice is selected, the pan setting specified here will function as an offset relative to the pan setting specified for each drum instrument.
- Settings of Left63–Center–Right63 will place the sound toward the left, in the center, or toward the right.
- A setting of Random will produce a special effect in which the sound be move between left and right randomly for each note.

Random (0), Left63(1)–Center(64)–Right63(127)

12. Volume

- This sets the volume for each part.
- The slider located at the left edge of the display is the master volume.
- During playback, this value will follow the Volume data contained in the track.

000–127

13. Expression

- This sets the expression level for each part.
- During playback, this value will follow the Expression data contained in the track.

000–127

3

2. Tune

Parameter	Values	Function	See page
1 Data display	display only	Displays the data selected by the cursor.	P.175
2 Location	001 – 999	Indicates the playback location of the song in measures and beats.	P.175
3 Part number	1 – 32	The part number for which settings are being made is highlighted.	P.175
4 Velocity meter	[ ], [_], [M], [S]	Graphically indicates the velocity value of the note data sent from the song.	P.175
5 Voice category	[▦], [▧], [▨], [▩], [▪], [▫], Off	Specify the general category of the voice for each part. This indicates the Bank Select MSB value.	P.175
6 Program number	001 – 128	Select the voice for each part.	P.175
7 Bank number	000 – 101	Specify the voice bank for each part. This indicates the Bank Select LSB value.	P.175
8 Detune	-12.8 – +00.0 – +12.7	Detune the tuning relative to standard pitch (440 Hz).	P.175
9 Note shift	-24 – +00 – +24	Modify the pitch of each part in semitone steps.	P.175
10 Transpose	-24 – +00 – +24	Modify the pitch of all parts in semitone steps.	P.175

• Here you can make detune and note shift settings for each part that will apply during song playback or recording.

• These settings can be made while the song is playing back, and tracks can also be muted or soloed, just as in Song mode.

1. Press VOICE .

▼ The indicator above VOICE will light, and you will enter Voice mode.
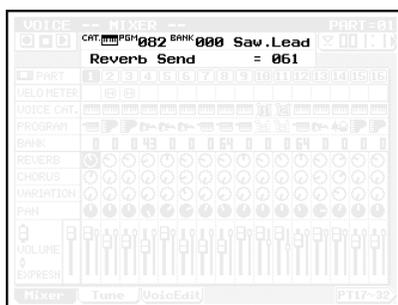
2. Press F2 (Tune) to access the Tune page.

3. Use TRACK DOWN / TRACK UP or ◄ / ► to select a part. You can switch between the screens for parts 1–16 and parts 17–32 by pressing F6 .

4. Move the cursor to the parameter that you wish to set.

5. Use ↓NO / ↑YES , the data dial, or the numeric keypad → ↵ to set the value.

• In Voice mode, keys such as ►, ■, ◄ and ◄◄ / ►► will function in the same way as in Song Play mode. You can use these keys to listen to the playback while you modify the settings in realtime.

• SHIFT + data dial or SHIFT + ↓NO / ↑YES will increase or decrease the setting of all parts by the same value.

• SHIFT + numeric keypad → ↵ will set all parts to the same value.

Operations for "1. Data display" – "7. Bank number" are the same as in the Mixer page. For details on these parameters, refer to the explanations for the Mixer page (→ p.170).

8. Detune

• This detunes the tuning relative to the standard pitch (440 Hz).

• This lets you make fine changes in the pitch of each part.

• Setting the melody part slightly sharp will make the melody stand out, and setting the bass part slightly flat will give it additional weight.

-12.8–+00.0–+12.7

9. Note shift

• This adjusts the pitch of each part in semitone steps.

-24–+00–+24

10. Transpose

• This adjusts the pitch of all parts in semitone steps.

-24–+00–+24

3. Voice edit

6.Velocity sensitivity depth /
Velocity sensitivity offset

7.Portamento switch /
Portamento time

8.MW LFO depth pitch modulation /
MW LFO filter modulation /
MW LFO amplitude modulation

4.Mono/Poly   5.Element reserve   1.Data display

2.Location

3.Part number

12.Pitch bend control

13.Dry level

VOICE Voice Mode

F1 Mixer
F2 Tune
F3 Voice Edit
F4 Drum Setup 1 Edit
F5 Drum Setup 2 Edit

SHIFT F1 F2 F3 F4 F5 F6 SHIFT EXIT

9.Filter cutoff /
Filter cutoff resonance

10.EG attack /
EG decay /
EG release

11.Vibrato rate /
Vibrato depth /
Vibrato delay

Parameter	Values	Function	See page
1 Data display	display only	Displays the data selected by the cursor.	P.177
2 Location	001 – 999	Indicates the playback location of the song in measures and beats.	P.177
3 Part number	1 – 32	The part number for which settings are being made is highlighted.	P.177
4 Mono/Poly	MONO/POLY	Select the Play mode for each part.	P.177
5 Element reserve	00 – 32	Specify the number of elements that must be reserved for each part so that the sound does not disappear when the maximum polyphony is exceeded.	P.177
6 Velocity sensitivity depth	000 – 127	Specify how velocity will affect the volume.	P.178
Velocity sensitivity offset	000 – 127	Increase or decrease the overall effect of velocity on the volume.	
7 Portamento switch	OFF/ON	Specify whether or not portamento will be applied to each part.	P.179
Portamento time	000 – 127	Specify how portamento will be applied to each part.	
8 MW LFO depth pitch modulation	000 – 127	Specify for each part how deeply the LFO effect controlled by the modulation wheel will affect pitch, filter, and amplitude.	P.179
MW LFO filter modulation	000 – 127		
MW LFO amplitude modulation	000 – 127		
9 Filter cutoff	-64 – +00 – +63	Adjust the frequency at which the filter will take effect, to modify the tone of each part.	P.179
Filter cutoff resonance	-64 – +00 – +63	Adjust the filter resonance to modify the tone of each part.	
10 EG attack	-64 – +00 – +63	Adjust the time from when a note is played until the maximum volume is reached.	P.180
EG decay	-64 – +00 – +63	Adjust the time over which the volume falls from the maximum level to the sustain level.	
EG release	-64 – +00 – +63	Adjust the time over which the volume diminishes to silence after the note is released.	
11 Vibrato rate	-64 – +00 – +63	Adjust the speed at which vibrato will modulate the pitch.	P.180
Vibrato depth	-64 – +00 – +63	Adjust the depth with which vibrato will modulate the pitch.	
Vibrato delay	-64 – +00 – +63	Adjust the time from when a note is played to when vibrato begins to take effect.	
12 Pitch bend control	-24 – +00 – +24	Specify the range of the pitch change controlled by the PITCH wheel in semitone units, for each part.	P.181
13 Dry level (Only when the Effect parameter Variation Mode=System.)	000 – 127	Specify for each part the amount that is sent to the Dry line of the effect.	P.181

- The Voice Edit page lets you freely modify the voice of each part.
- Voice Edit parameters are made for the Part, not for individual voices. When a different voice is selected, the voice edit settings will still apply to the newly selected voice.
- Of the voice edit parameters, the filter, EG, and vibrato parameters are adjustments relative to the parameters of the voice. Voice edit parameters other than these modify the voice by overwriting the parameters of the voice.

1. Press VOICE .
▼ The indicator above VOICE will light, and you will enter Voice mode.

2. Press F3 (VoicEdit) to access the Voice Edit page.

3. Use TRACK DOWN / TRACK UP or ◄ / ► to select a part.
   You can switch between the screens for parts 1–16 and parts 17–32 by pressing F6 .

4. Move the cursor to the parameter that you wish to set.

5. Use NO / YES , the data dial, or the numeric keypad → ↵ to set the value.

- In Voice mode, keys such as ► , ● , ■ , ◄ and ◄◄ / ►► will function in the same way as in Song Play mode. You can use these keys to listen to the playback while you modify the settings in realtime. If the Recording Mode for song recording (→ p.106) is set either to Realtime Recording Replace or Overdub, or to Punch Recording, song recording can also be performed in Voice mode.

Operation of "1. Data display" – "3. Part number" is the same as in the Mixer page. For details on these parameters, refer to the explanation for the Mixer page. (→ p.170)

4. Mono/Poly

- This selects either Mono mode or Poly mode for each part.
- In Mono mode, only one note can be sounded at a time, and chords cannot be played. In Poly mode, chords may be played.
- This setting is ignored for parts for which a Drum Set voice is selected.

MONO, POLY

5. Element reserve

- On the QY700, when the total number of voice elements sounding for each part would exceed the maximum polyphony of 32 notes, currently-sounding notes will be turned off, starting with the first-played voice (i.e., last-note priority).
- Element Reserve allows you to specify a minimum number of elements that will be reserved for each part, so that even if the maximum polyphony is exceeded, the sound of that part will not disappear.
- For example if Element Reserve is set to 10 for a part, no notes will be turned off for that part as long as it uses 10 or fewer elements, even if a total of more than 32 notes are being requested by all parts.

00 – 32

6. Velocity sensitivity depth, Velocity sensitivity offset

- By adjusting the sensitivity of the voice to note velocity (keyboard playing strength), this setting modifies the way in which note velocity affects the tone generator.
- Velocity Sensitivity Depth controls the depth (slope) of the change that occurs in the tone generator relative to the actual velocity value that is received.

  Higher settings of Depth will cause the tone generator to respond more greatly to changes in the received velocity values. Lowering the Depth setting will cause the tone generator to respond less to changes in the received velocity values. With a Depth setting of 0, the tone generator will not respond at all to differences in the received velocity values.

How Depth affects the velocity curve
(when Offset is fixed at 64)

- Velocity Sensitivity Offset creates a fixed increase or decrease in the velocity that is applied by the tone generator. With an Offset value of 64, the received velocity value will be applied by the tone generator without change. An Offset value greater than 64 will produce an overall increase in the velocity values applied by the tone generator, meaning that even if the received velocity value is low, a high velocity value will be applied by the tone generator. Playing the keyboard with more than a given force will produce velocity values that are fixed at the maximum (127).

An Offset value less than 64 will produce an overall decrease in the velocity values applied by the tone generator, meaning that until the received velocity exceeds a certain level, the minimum velocity value (1) will be applied by the tone generator, and that even if the received velocity value is high, a low velocity value will be applied by the tone generator.

How Depth affects the velocity curve
(when Depth is fixed at 64)

Velocity Sensitivity Depth   000 – 127
Velocity Sensitivity Offset   000 – 127

- Some settings of these parameters can cause the volume to be lowered. If this occurs, set both Velocity Sensitivity Depth and Velocity Sensitivity Offset to 64. This will, of course, restore the normal velocity response.
- Velocity Sensitivity Depth and Velocity Sensitivity Offset settings allow you widely vary the way in which the tone generator responds to keyboard playing dynamics.
- Here are several examples of possible settings which you can refer to as you make your own settings.

- Velocity Sensitivity Depth = 64
- Velocity Sensitivity Offset = 64
- This is the standard keyboard setting.

- Velocity Sensitivity Depth = 127
- Velocity Sensitivity Offset = 32
- This setting allows small variations in playing strength to produce large variations in the sound.

- Velocity Sensitivity Depth = 0
- Velocity Sensitivity Offset = 112
- This setting causes the tone generator to apply a fixed velocity, regardless of the keyboard playing strength.
- This setting is convenient for organ-type voices.
- By raising or lowering the Velocity Sensitivity Offset, you can vary the velocity that is applied by the tone generator. A setting of 64 produces a velocity of 1. A setting of 127 produces the maximum velocity.

- Velocity Sensitivity Depth = 32
- Velocity Sensitivity Offset = 96
- This setting is suitable when you want velocity to change in response to keyboard playing dynamics, but you don't want the velocity value to drop too low.
- This setting is useful for brass riffs or for solo instruments.

7. Portamento switch, Portamento time

- Portamento is a function that smoothly changes the pitch between two notes of different pitch.
- Portamento Switch specifies whether or not portamento will be applied to each part.
- Portamento Time specifies the way in which portamento is applied to each part. Higher values will cause the pitch to change more slowly. Lower values will produce a faster change.
- Portamento will not apply to drum voices or SFX kit voices.

Portamento Switch   Off, On
Portamento Time   000–127

8. Modulation Wheel LFO depth pitch modulation, Modulation Wheel LFO depth filter modulation, Modulation Wheel LFO depth amplitude modulation

- For each part, these parameters specify the depth of the LFO effect on pitch, filter, and amplitude that is controlled by the modulation wheel.
- Pitch modulation is vibrato, filter modulation is wah, amplitude modulation is tremolo.
- Higher values will produce a deeper effect.

000 – 127

9. Filter cutoff, Filter cutoff resonance

- For each part, these parameters adjust the cutoff frequency of the filter, modifying the tone.
- Since the filters of the QY700 are low pass filters, the portion of the sound above the cutoff frequency will be cut.
- A low cutoff frequency will remove many of the overtones, causing the sound to be darker and mellower.
- A high cutoff frequency will cut few or none of the overtones, allowing the original bright sound of the waveform to be output.

- The filter resonance can be specified for each part to modify the sound.
- Resonance boosts the volume in the area of the cutoff frequency, emphasizing the overtones in that area. By appropriate settings of Resonance, you can simulate the body resonance of stringed instruments etc., or produce sounds typical of analog synthesizers.

| Filter Cutoff | -64–+00–+63 |
| Filter Resonance | -64–+00–+63 |

10. EG attack time, EG decay time, EG release time

- These parameters adjust the time-based changes that occur between the moment that a note is played to when the sound disappears.
- Attack Time adjusts the time over which the volume rises from zero (when the note is played) to reach the maximum level.
  Smaller values will produce a faster attack.
- Decay Time adjusts the time over which the volume falls from the maximum to reach the sustain level.
  Smaller values will produce a more sharply defined sound.

- Release Time adjusts the time over which the volume falls from the sustain level (when the note is released) to reach a level of 0.
  Smaller values will cause the sound to reach silence more quickly.

EG Attack Time	-64–+00–+63
EG Decay Time	-64–+00–+63
EG Release Time	-64–+00–+63

11. Vibrato rate, Vibrato depth, Vibrato delay

- These parameters are the vibrato settings.
- Rate adjusts the speed at which pitch is modulated, Depth adjust the depth of modulation, and Delay adjusts the time from when the note is played until vibrato begins to occur.

Rate	-64–+00–+63
Depth	-64–+00–+63
Delay	-64–+00–+63

12. Pitch bend control

- For each part, this sets the width of the pitch change that can be controlled by pitch bend.
- With a setting of +12, the pitch will change one octave when pitch bend is fully raised or lowered.
- With negative settings, the direction of pitch change will be inverted.

-24–+00–+24

13. Dry level

- This parameter can be set only if the Effect mode Variation Mode is set to System. If Variation Mode is set to Insertion, this parameter will not be displayed.
- For each part, this sets the amount that will be sent to the dry line of the effect.
- Increasing the Dry Level will decrease the effect.
- Decreasing the Dry Level will cause the stereo position of sounds which pass through that effect to gather in one location.

000 – 127

4. Drum Setup Edit

10.Pitch fine   1.Data display   2.Location

3.Note name
4.Drum kit
5.Reverb send
6.Chorus send
7.Variation send
8.Pan
9.Level

12.Alternate group
14.Receive note off
13.Key assign

VOICE Voice Mode
- F1 Mixer
- F2 Tune
- F3 Voice Edit
- F4 Drum Setup 1 Edit
- F5 Drum Setup 2 Edit

SHIFT F1 F2 F3 F4 F5 F6 SHIFT EXIT

11.Pitch coarse   15.Filter cutoff / Filter resonance   16.EG attack / EG decay 1 / EG decay 2

Parameter	Values	Function	See page
1 Data display	display only	Displays the data specified for the currently selected part.	P.183
2 Location	001 – 999	Displays the playback location of the song in measures and beats.	P.183
3 Note name	C# - 1 – C5	Specify the note to select the instrument that you wish to edit.	P.184
4 Drum kit	001 StandKit, 002 Stnd2Kit, 009 Room Kit, 017 Rock Kit, 025 ElectKit, 026 AnalgKit, 033 Jazz Kit, 041 BrushKit, 049 ClascKit, 001 SFX1 Kit, 002 SFX2 Kit	Select the drum kit that will be the basis for setup editing.	P.184
5 Reverb send	000 – 127	Specify the amount sent from each instrument to the Reverb effect.	P.184
6 Chorus send	000 – 127	Specify the amount sent from each instrument to the Chorus effect.	P.184
7 Variation send	000 – 127	Specify the amount sent from each instrument to the Variation effect.	P.184
8 Pan	Random, Left63 – Center – Right63	Specify the stereo location of each instrument.	P.184
9 Level	000 – 127	Specify the volume of each instrument.	P.184
10 Pitch fine	-64 – +00 – +63	Make fine adjustments to the pitch of each instrument.	P.184
11 Pitch coarse	-64 – +00 – +63	Adjust the pitch of each instrument in semitone steps.	P.185
12 Alternate group	000 – 127	Prevent instruments which should not sound simultaneously from sounding simultaneously.	P.185
13 Key assign	SINGLE, MULTI	Specify how multiple MIDI Note On messages of the same note which are received while a note is sounding will be handled by each instrument.	P.185
14 Receive note off	OFF, ON	Specify whether or not MIDI Note Off messages will be received by each instrument.	P.185
15 Filter cutoff	-64 – +00 – +63	Adjust the filter cutoff frequency for each instrument to modify the tone.	P.185
Filter resonance	-64 – +00 – +63	Adjust the filter resonance for each instrument to modify the tone.	
16 EG attack	-64 – +00 – +63	Adjust the time from when the note is played until the maximum volume is reached.	P.185
EG decay 1	-64 – +00 – +63	Adjust the time from when the maximum volume is reached to when the volume reaches the decay level.	
EG decay 2	-64 – +00 – +63	Adjust the time from when the decay level is reached to when the volume reaches zero.	

- By editing a drum setup, you can indirectly modify the drum voice.
- The Drum Setup Edit menu will appear in the `F4` and `F5` positions in the bottom line, only if Drum Setup (Drum S1, Drum S2) is selected as the Voice Category.
- If the same drum setup is selected for two or more parts, editing one drum setup will cause the other to be modified simultaneously.
- Unlike normal voices, drum voices have a special structure in which different waves are assigned to each note C#-1–C5. Also, each note to which a wave form is assigned is referred to as an instrument, and various parameters can be set for each instrument.
- The types of instrument which are assigned to each note will depend on the drum kit. For the arrangements of each drum kit, refer to the separate "*QY700 Reference Listings*".
- When you change drum kits, all instrument settings will be initialized. When editing a drum setup, you must first select the drum kit, and then select an instrument and set its parameters.
- Of these parameters, the filter and EG parameters are relative adjustments to the voice which function by adding the specified value to the original value of the voice. Parameters other than these modify the voice by overwriting the original values of the voice.

1. Press `VOICE`.
▼ The indicator located above `VOICE` will light, and you will enter Voice mode.

2. In the Mixer page, select either Drum Setup 1 or Drum Setup 2 as the Voice Category.
▼ Either (DrsS1Edit) or (DrsS2Edit) will be displayed above `F4` or `F5`.

3. Press either `F4` (DrsS1Edit) or `F5` (DrsS2Edit) to access the Drum Setup Edit page.

4. Move the cursor to Drum Kit and select the drum kit that will be the basis for your editing.

5. Use the microkeyboard to select the drum instrument that you wish to edit.

6. Move the cursor to the parameter that you wish to modify.

7. Use [NO] / [YES], the data dial, or numeric keypad → ↵ to specify the value.

- In Voice mode, keys such as ►, ●, ■, ◄ and ◄◄ / ►► will function in the same way as in Song Play mode. You can use these keys to listen to the playback while you modify the settings in realtime. If the Recording Mode for song recording (→ p.109) is set either to Realtime Recording Replace or Overdub, or to Punch Recording, song recording can also be performed in Voice mode.

1. Data display

- The upper line shows the drum setup and the currently selected instrument.
- The lower line shows the program number of the currently selected drum voice.

2. Location

- This indicates the playback location of the song in measures and beats.
- To change the playback location of the song, press [D1] to move the cursor to Location, and use [NO] / [YES], the data dial, or numeric keypad → ↵ to specify the measure.

3. Note name

📖
- Specify the note to select the instrument that you wish to edit.
- The types of instrument which are assigned to each note will depend on the drum kit. For the arrangements of each drum kit, refer to the separate "*QY700 Reference Listings*".

🔢 C#-1 – C5

4. Drum kit

📖
- Select the drum kit that will be the basis of your setup editing. When you change drum kits, the instruments which are assigned to each note will also change.
- When you change drum kits, all Drum Setup Edit parameters will be initialized. Select a drum kit first, and then modify the parameters.

🔢
001 StandKit, 002 Stnd2Kit, 009 Room Kit,
017 Rock Kit, 025 ElectKit, 026 AnalgKit,
033 Jazz Kit, 041 BrushKit, 049 ClascKit,
001 SFX1 Kit, 002 SFX2 Kit

5. Reverb send

📖
- Specify the amount that will be sent to the Reverb effect from each instrument.
- The actual depth of the reverb will also be affected by the mixer setting Reverb Send (→ p.170) and by the Effect mode setting Reverb Return (→ p.191). As you adjust this parameter, keep in mind the relationship to these other parameters.

🔢 000 – 127

6. Chorus send

📖
- Specify the amount that will be sent to the Chorus effect from each instrument.
- The actual depth of the chorus will also be affected by the mixer setting Chorus Send (→ p.170) and by the Effect mode setting Chorus Return (→ p.192). As you adjust this parameter, keep in mind the relationship to these other parameters.

🔢 000 – 127

7. Variation send

📖
- When the Effect mode parameter Variation Mode (→ p.191) is set to System, this parameter functions as the Variation Send Level.
  This specifies the amount that will be sent to the Variation effect from each instrument, adjusting the depth of the effect.
  As you adjust this parameter, you should also keep in mind the setting of the Effect mode parameter Variation Return.
- When the Effect mode parameter Variation Mode (→ p.191) is set to Insertion, setting this parameter to 000 will turn Variation=Off, and setting it to 1–127 will turn Variation=On.

🔢
Variation Send Level
000 – 127

8. Pan

📖
- This specifies the stereo location of each instrument.
- Arranging the instruments in the same stereo locations as a real drum set will produce the most natural result.

🔢 Random, Left63–Center–Right63
- Random produces a special effect in which the stereo location of the sound varies randomly for each note.
- Left63 (far left)–Center (center)–Right63 (far right)

9. Level

📖
- Set the volume of each instrument.

🔢 000 – 127

10. Pitch fine

📖
- Make fine adjustments to the pitch of each instrument.
- This setting is made in steps of 1 cent (1 cent is 1/100th of a semitone).

🔢 -64–+00–+63

11. Pitch coarse

- Adjust the pitch of each instrument in semitone steps.
- With a value of +00, the instrument will sound at the same pitch at which it was sampled.
- By modifying the pitch, you can make an instrument sound heavier, or create melodic toms, etc.
- For fine tuning, use 10. Pitch fine.

-64–+00–+63

12. Alternate group

- This setting lets you prevent instruments which should not sound simultaneously from sounding simultaneously.
- Instruments which are set to the same Alternate Group number will not sound simultaneously.
- Instruments which would never sound simultaneously in real life (such as closed and open hi-hat sounds) should be set to the same number.
- Instruments for which an Alternate Group is specified will always have a Key Assign Mode setting of Single.

Off, 001 – 127

13. Key assign

- Specify how multiple MIDI Note On messages of the same note which are received while a note is sounding will be handled by each instrument.
- With a Key Assign setting of Single, the currently-sounding note will be damped (will stop sounding) before the note is re-triggered.
- With a Key Assign setting of Multi, the currently-sounding note will continue sounding, and the next note will be played together with the currently-sounding note.
- This effect is particularly noticeable for sounds with a slow decay, such as cymbals. In general, a Key Assign setting of Multi will sound more natural.

Single, Multi

14. Receive note off

- Specify whether or not MIDI Note Off messages will be received by each instrument.
- If this is on, MIDI Note Off messages will be received to damp (turn off) the currently-sounding note.
- If this is off, MIDI Note Off messages will be ignored, and the note will continue sounding until it ends naturally. Normally you will use a setting of "off."
- Use a setting of "on" if you wish to damp cymbals while they are still sounding, etc.

Off, On

15. Filter cutoff, Filter resonance

- Cutoff adjusts the filter cutoff frequency of each instrument.
- By modifying the cutoff, you can brighten or darken the tone.
- Resonance adjusts the filter resonance for each instrument.
- By modifying the resonance, you can adjust the emphasis of the overtones in the region of the cutoff frequency, creating a more distinctive tone.

Filter Cutoff   -64–+00–+63
Filter Resonance   -64–+00–+63

16. EG attack, EG decay 1, EG decay 2

- These parameters adjust the way in which the volume of each instrument changes over time.

- Attack
  Adjust the time over which the volume rises from 0 (when the note is played) until it reaches the maximum volume. Excessively high settings may mean that the wave will finish playing before the maximum volume is reached, producing an unnatural effect.
- Decay 1
  Adjust the time from when the maximum volume is reached until it falls to the decay level.
- Decay 2
  Adjust the time from when the decay level is reached until the volume falls to zero.
- Increasing the value will result in slower change, and decreasing the value will result in faster change.
- Level is fixed for each instrument, and cannot be adjusted.
- For some voices, these settings may have no effect.
- SFX-type voices will not be affected by any of these parameters.

EG Attack	-64–+00–+63
EG Decay 1	-64–+00–+63
EG Decay 2	-64–+00–+63

Chapter 4. EFFECT MODE

This chapter explains connections, reverb, chorus, and variation.
In Effect mode, you can select the effects used in a song and modify
effect settings.

4

About effect mode

```
SONG  -- EFFECT CONNECTION --
        Variation Mode   = Insertion

◀️ VARIATION              VARIATION MODE
DELAY LCR                Insertion

                    ((‖)) REVERB      Pan
              return  HALL 1          🕐

              🕐rev
                    ‖‖‖ CHORUS    Pan send to
              🕐     CHORUS 1      🕐 🔄
              cho

Connect Reverb Chorus Vari.
```

```
EFFECT  Effect mode

— F1              Connection
— F2   Reverb edit
— F3   Chorus edit
— F4   Variation edit
```

📖 • In Effect mode, you can select the effects used in a song and modify effect settings.

• Effect mode does not have a "top" page which always appears first when you press the MODE key. (The previously-selected page will appear.)

• Effect mode has four sub-mode pages, and these are selected by the ⌑F1⌑ – ⌑F4⌑ function keys.

Pressing ⌑F1⌑ (Connect) accesses the Connection page. Here you can specify the connection mode, the Effect Type for each effect, and the return levels etc. ($\rightarrow$ p.190)

Pressing ⌑F2⌑ (Reverb) accesses the Reverb Edit page. Here you can select the Reverb Type, and make reverb parameter settings. ($\rightarrow$ p.193)

Pressing ⌑F3⌑ (Chorus) accesses the Chorus Edit page. Here you can select the Chorus Type, and make chorus parameter settings. ($\rightarrow$ p.193)

Pressing ⌑F4⌑ (Vari.) accesses the Variation Edit page. Here you can select the Variation Type, and make variation parameter settings. ($\rightarrow$ p.193)

✏️ • The structure of the QY700's effects is greatly dependent on the Variation Mode setting of the Connection page.

• If exclusive messages such as "GM Mode On" or "XG System On" that make effect settings are included in a song, settings made in Effect mode or by control changes will be ignored.

• If you want the settings of Effect mode to be reflected in the data, highlight XG Header in the Save page of Disk mode when saving the song to a Standard MIDI File etc. ($\rightarrow$ p.307)

• For details on Variation mode and effect structure, refer to "Chapter 1. BASIC CONCEPTS" ($\rightarrow$ p.47).

When Variation Mode = Insertion

Although some freedom is sacrificed, this structure is easier to understand.

When Variation Mode = System

Although this structure gives you more freedom, it is slightly more complex.

1. Connection

Parameter	Values	Function	See page
1 Data display	display only	This indicates the parameter setting at the cursor location.	P.191
2 Variation mode	Insertion, System	Specify whether the Variation effect will be used as an Insertion effect or as a System effect.	P.191
3 Reverb type	11 types	Select the reverb type.	P.191
4 Reverb return	000 – 127	Specify the amount of return from the reverb effect.	P.191
5 Reverb pan	Left63 – Center – Right63	Set the stereo location of the sound processed by reverb.	P.191
6 Chorus type	11 types	Select the chorus type.	P.191
7 Chorus return	000 – 127	Specify the amount of return from the chorus effect.	P.192
8 Chorus pan	Left63 – Center – Right63	Set the stereo location of the sound processed by chorus.	P.192
9 Send chorus to reverb	000 – 127	Specify the amount sent from chorus to reverb.	P.192
10 Variation type	43 types	Select the variation type.	P.192
11 Variation return	000 – 127	Specify the amount of return from the variation effect.	P.192
12 Variation pan	Left63 – Center – Right63	Set the stereo location of the sound processed by variation.	P.192
13 Send variation to chorus	000 – 127	Specify the amount sent from variation to chorus.	P.192
14 Send variation to reverb	000 – 127	Specify the amount sent from variation to reverb.	P.192

*11-14 are available only when Variation Mode = "System"

- In the Connection page you can make settings such as the Variation Mode, the effect type for each effect, and return levels.
- For details on how the effects work, refer to "Chapter 1. BASIC CONCEPTS" (→ p.47).

1. Press EFFECT .
▼ The indicator located above EFFECT will light, and one of the four sub-modes of Effect mode (the last-selected sub-mode) will appear.

2. Press F1 (Connect) to access the Connection page.

3. Move the cursor to the parameter that you wish to set.

4. Use ↓NO / ↑YES , the data dial, or numeric keypad → ↵ to specify the value.

- In Effect mode, keys such as ▶ , ■ , ◀ , and ◀◀ / ▶▶ will function in the same way as in Song Play. Using these keys, you can modify settings in realtime while you listen to the playback.

1. Data display

- This displays the settings of the parameter where the cursor is located.

2. Variation mode

- This parameter lets you specify whether the Variation effect will function as an Insertion effect or as a System effect. (→ p.48)
- If the Variation effect is used as an insertion effect, it can be used only by one specific part. In this case, a modulation wheel or foot controller can be used to control specified parameters.
- If the Variation effect is used as a system effect, it can be used by all parts in the same way as the Reverb and Chorus effects, with adjustable Send Level and Return Level. In this case, it will not be possible to use controllers to control specific parameters.

Insertion, System
- Insertion   The Variation effect will function as an insertion effect.
- System   The Variation effect will function as a system effect.

3. Reverb type

- This sets the effect type of the reverb.

NO EFFECT, HALL 1, HALL 2, ROOM 1, ROOM 2, ROOM 3, STAGE 1, STAGE 2, PLATE, WHITE ROOM, TUNNEL, BASEMENT

4. Reverb return

- This sets the amount that is returned from the reverb, adjusting the overall reverb effect for all parts.

000 – 127

5. Reverb pan

- This sets the stereo location of the signal from the reverb effect (the processed sound).

Left63 – Center – Right63
- Left settings move the sound toward the left of the stereo image, and Right settings toward the right. A setting of Center places the sound in the center.

6. Chorus type

- This sets the effect type of the chorus.

NO EFFECT, CHORUS 1, CHORUS 2, CHORUS 3, CHORUS 4, CELESTE 1, CELESTE 2, CELESTE 3, CELESTE 4, FLANGER 1, FLANGER 2, FLANGER 3

7. Chorus return

- This sets the amount that is returned from the chorus, adjusting the overall chorus effect for all parts.

000 – 127

8. Chorus pan

- This sets the stereo location of the signal from the chorus effect (the processed sound).

Left63 – Center – Right63
- Left settings move the sound toward the left of the stereo image, and Right settings toward the right. A setting of Center places the sound in the center.

9. Send chorus to reverb

- This sets the amount that is sent on the bus line connecting the chorus effect to the reverb effect.

000 – 127

10. Variation type

- This selects the Variation effect type.

NO EFFECT, HALL 1, HALL 2, ROOM 1, ROOM 2, ROOM 3, STAGE 1, STAGE 2, PLATE, DELAY LCR, DELAY L,R, ECHO, CROSSDELAY, ER1, ER2, GATE REV, REVRS GATE, KARAOKE 1, KARAOKE 2, KARAOKE 3, THRU, CHORUS 1, CHORUS 2, CHORUS 3, CHORUS 4, CELESTE 1, CELESTE 2, CELESTE 3, CELESTE 4, FLANGER 1, FLANGER 2, FLANGER 3, SYMPHONIC, ROTARY SP, TREMOLO, AUTO PAN, PHASER 1, PHASER 2, DISTORTION, OVERDRIVE, AMP SIM, 3-BAND EQ, 2-BAND EQ, AUTO WAH

11. Variation return
(Available only if variation mode = System)

- This sets the amount that is returned from the variation, adjusting the overall variation effect for all parts.

000 – 127

12. Variation pan
(Available only if variation mode = System)

- This sets the stereo location of the signal from the variation effect (the processed sound).

Left63 – Center – Right63
- Left settings move the sound toward the left of the stereo image, and Right settings toward the right. A setting of Center places the sound in the center.

13. Send variation to chorus
(Available only if variation mode = System)

- This sets the amount that is sent on the bus line connecting the variation effect to the chorus effect.

000 – 127

14. Send variation to reverb
(Available only if variation mode = System)

- This sets the amount that is sent on the bus line connecting the variation effect to the reverb effect.

000 – 127

2. Reverb edit, Chorus edit, Variation edit

Parameter	Values	Function	See page
1 Effect type		Specify the effect type for each effect	P.194
2 Effect parameters		Make detailed settings for each effect.	P.195
3 Dry/Wet (only for Variation edit)	D63>W – D=W – D<W63	When the Variation Type is set to Insertion, set the balance between the sound processed by the Variation effect (the "Wet" sound), and the unprocessed sound (the "Dry" sound).	P.195
4 Control (only for Variation edit)	display only	A control symbol will be displayed to indicate a parameter that can be controlled by Control Change messages.	P.195
5 AC1 control (only for Variation edit)	-64 – +0 – +63	Specify the depth with which AC1 can be used to control the parameter indicated by the control symbol.	P.195

- Here you can make effect parameter settings for reverb, chorus, and variation.
- By setting effect parameters, you can make detailed adjustments to the sound of each effect.

1. Press ⌨EFFECT .
▼ The indicator located above ⌨EFFECT will light, and you will enter Effect mode.

2. Press ⌨F2 (Reverb) – ⌨F4 (Vari) to access the edit page for the desired effect.

3. Move the cursor to the parameter that you wish to set.

4. Use 🔘 / 🔘 , the data dial, or numeric keypad → ↵ to specify the value.

- In Effect mode, keys such as ▶ , ■ , ◀ , and ◀◀ / ▶▶ will function in the same way as in Song Play. Using these keys, you can modify settings in realtime while you listen to the playback.

Reverb
   NO EFFECT, HALL 1, HALL 2, ROOM 1, ROOM 2, ROOM 3, STAGE 1, STAGE 2, PLATE, WHITE ROOM, TUNNEL, BASEMENT
Chorus
   NO EFFECT, CHORUS 1, CHORUS 2, CHORUS 3, CHORUS 4, CELESTE 1, CELESTE 2, CELESTE 3, CELESTE 4, FLANGER 1, FLANGER 2, FLANGER 3
Variation
   NO EFFECT, HALL 1, HALL 2, ROOM 1, ROOM 2, ROOM 3, STAGE 1, STAGE 2, PLATE, DELAY LCR, DELAY L,R, ECHO, CROSSDELAY, ER1, ER2, GATE REV, REVRS GATE, KARAOKE 1, KARAOKE 2, KARAOKE 3, THRU, CHORUS 1, CHORUS 2, CHORUS 3, CHORUS 4, CELESTE 1, CELESTE 2, CELESTE 3, CELESTE 4, FLANGER 1, FLANGER 2, FLANGER 3, SYMPHONIC, ROTARY SP, TREMOLO, AUTO PAN, PHASER 1, PHASER 2, DISTORTION, OVERDRIVE, AMP SIM, 3-BAND EQ, 2-BAND EQ, AUTO WAH

1. Effect type

- This sets the effect type for the reverb, chorus, and variation effects.
- The settings here are linked to the effect type settings in the Connection page. (→ p.190)

• If Variation Mode is set to Insertion, setting the Effect Type of the Variation effect to "No Effect" will mean that the part whose Variation Switch is ON will not sound.

2. Effect parameters

• Here you can make detailed settings for each effect.
• Each effect type has different parameters.

3. Dry/Wet (only for Variation edit)

• This sets the balance between the sound processed by the Variation effect (the "Wet" sound), and the unprocessed sound (the "Dry" sound).
• This can be set only if Variation Type = Insertion. If Variation Mode = System, this will be fixed at D32>W.

D63>W – D=W – D<W63

4. Control (only for Variation edit)

• A ▤ symbol will be displayed to indicate a parameter that can be controlled using control change messages.
• When Variation Type is set to Insertion, this can be used for parts whose Variation switch is ON.

5. AC1 control (only for Variation edit)

• This specifies the depth with which AC1 (assignable controller) can be used to control the parameter indicated by the control symbol.
• With a setting of 0, control will not be possible. As this setting is increased, a greater amount of control will be possible. With negative settings, raising the controller will lower the parameter value.
• Assignable controllers are controllers whose control number can be set freely. The QY700 provides two assignable controllers: AC1 and AC2. Assignable controller settings are made using Exclusive messages.
• This can be set only when Variation Type = Insertion. This parameter will not be displayed when Variation Mode = System.

-64 – +0 – +63

Memo

Chapter 5. PATTERN MODE

You use PATTERN mode to record and edit user phrases, to assemble preset and user phrases into patterns, and to set up the pattern playback characteristics.

This chapter describes all PATTERN-mode operations: pattern arrangement (style and sections), pattern play effects, voice and effects settings, phrase recording and editing, and pattern jobs.

5

PATTERN MODE Overview

📖 • You use PATTERN mode to record and edit user phrases, to assemble phrases into patterns, and to set up the playback characteristics for your patterns.

• The *phrase* is the basic unit of song-accompaniment patterns. A single phrase, for example, might provide a bass line for a bass part, a rhythm line for a rhythm part, or a chord backing for a guitar part.

• The QY700 includes 3,876 built-in phrases (*preset phrases*) that you can use to build your patterns. In addition, you can record and edit your own, original *user phrases*: up to 99 user phrases for each of the 64 available pattern styles. For general information about phrases, see Chapter 1. (→ p.37)

• During replay, the QY700 can modulate (transpose) phrases to match a specified chord type and root. To do this, the QY700 uses an internal *chord conversion table* to convert the phrase's original chord/pitch relationships in accordance with the target chord type (28 types) and root (12 roots). For general information about the chord conversion setup, see Chapter 1. (→ p.38)

• A *pattern* is a multitrack arrangement of phrases. The pattern can consist of up to 16 tracks (or parts), with each part producing its own phrase sequence. Although each phrase reproduces a single instrument (voice), the pattern combines these phrases to produce a multivoice accompaniment — which may include, for example, multiple drum phrases, a bass phrase, chord comps, and so on.

• The pattern is the basic unit of song accompaniment. At any given instant the QY700 can play a single pattern only (consisting of up to 16 tracks of independent phrase sequences). During replay, the QY700 switches from pattern to pattern in accordance with the pattern sequence you have specified.

• The QY700 organizes patterns within *styles* and *sections*. More precisely, each pattern exists as a section within a style.

• A *style* is a general accompaniment type, such as "TECHNO 1" or "Hip Hop." Each style consists of eight sections (A through H), which give different segments of the accompaniment: intro section, first melody section, fill-in, ending, and so on. Each section is equivalent to one pattern. (Thus, "Style 1 Section A," "Style 1 Section B," and "Style 9 Section D" all identify distinct patterns.)

- The QY700 provides 64 styles. Since you can set up 8 sections for each style, you can create, store, and access up to 512 patterns.
- You can transpose (modulate) an entire pattern by changing its source-chord value. The QY700 executes the modulation by transposing all of the phrase's patterns accordingly (using the chord conversion table).
- For more information about patterns, refer to Chapter 1. (→ p.39)

	M1	M2	M3	• • •
TR 1	Phrase no.		Phrase no.	• • •
TR 2	Phrase no.			• • •
TR 3	Phrase no.			• • •
⋮	⋮	⋮	⋮	⋮
TR 16	Phrase no.		▬	• • •

F4	(PhrSolo)	Select "phrase solo" operation: The QY700 begins repeated playback of the cursor-selected phrase.
F5	(Rest)	Enter a rest at the cursor-selected phrase position.
F6	(Clear)	Delete the cursor-selected phrase or rest.
●		Move to Phrase Recording submode.
EDIT		Move to Phrase Editing submode.
JOB		Move to Pattern Job submode.

Track Output Channels

- During pattern replay, the QY700 transmits pattern-track data to both the tone generator block and the MIDI OUT connectors. You can set up the track/channel correspondence using the SONG mode's Output Channel function. (→ p.103)

Sequencer block
(Sequence tracks)

Tone generator (TG) block

Sequence tracks	
TR 1	Performance data
TR 2	Performance data
⋮	⋮
TR 16	Performance data
TR 17	Performance data
⋮	⋮
TR 32	Performance data

TO TG

Part 1
⋮
Part 16
Part 17
⋮
Part 32

MIDI OUT-A

MIDI OUT-B

MIDI OUT-A

MIDI OUT-B

Sequencer block (pattern tracks)

	M001	M002	• • •
TR 1	Phrase		
TR 2	Phrase		
TR 3	Phrase		
⋮			
TR 16	Phrase		

5

- PATTERN mode consists of a main screen (PATCH screen), and six submodes. You can access the submodes from the PATCH screen by pressing F1 , F2 , F3 , ● , EDIT , or JOB .
- Key operation from the PATCH screen is as follows.
  - F1 (PlayFx) Move to Play Effects submode. (→ p.212)
  - F2 (Voice) Move to Pattern Voice submode. (→ p.225)
  - F3 (Effect) Move to Pattern Effects submode. (→ p.239)

1. PATCH

1. Style number and name
2. Section, and pattern name
4. Chord root and type
3. Section connection
5. Fingered-chord switch

6. Current measure; pattern length
7. Tempo and meter
8. Click beat, click mode, and count
9. Data display
10. Track number
11. Measure
15. Phrase number, Phrase name
13. Scale time
14. Beat shift
12. Track status

PATTERN PATCH
- F1 Play Effects
- F2 Pattern Voice Setup
- F3 Pattern Effects
- F4 Phrase Solo
  - F6 Phrase Table
- • Phrase Recording
- EDIT Phrase Edit
- JOB Pattern Job

Parameter	Values	Function	See page
1 Style number	01,...,64	Selects the style.	P.202
Style name	View only	Name of selected style.	
2 Section	A,...,H	Selects the section (pattern).	P.202
Pattern name	View only	Name of pattern.	
3 Section connection	A,...,H	Selects next section.	P.202
4 Chord root	C, C♯, D, E♭, E, F, F♯, G, A♭, A, B♭, B	Selects initial (default) chord root and type for pattern replay.	P.203
Chord type	M, M7, 6, 7, m, m7, m6, mM7, m7(♭5), dim, aug, sus4, add9, M7(9), 6(9), 7(9), madd9, M9, m7(9), m7(11), 7(♭5), 7(♯5), 7(♭9), 7(♯9), 7(13), 7(♭13), 7sus4, 7(♯11), --- (THRU)		
5 Fingered-chord switch	OFF, FINGRD	Selects use or nonuse of fingered-chord input.	P.204
6 Current measure	001,...,*pattern length*	Sets playback start location; or shows current playback location.	P.204
Measure length	Pattern length (in measures)	Shows total length of pattern.	
7 Tempo	25.0,...,300.0	Sets tempo for pattern playback.	P.204
Meter (time signature)	1/16,...,16/16; 1/8,..., 16/8; 1/4,...,8/4	Sets the pattern's time signature.	
8 Click mode	Off, Rec, Ply, All	Selects use of acoustic click.	P.205
Click beat	♪, ♩, ♩, ♩.	Selects the click interval.	
Count	Off, 1,...,8Ms	Sets number of lead-in measures to recording start.	
9 Data display	View only	Shows scale time, beat shift, or phrase name.	P.205
10 Track number	1,...,16	Pattern track.	P.205
11 Measure	M001,...,*pattern length*	Determines phrase location within pattern (by measure).	P.205
12 Track status	M : MUTE S : SOLO	Indicates/selects track SOLO or track MUTE.	P.206
13 Scale time	050%, 066%, 075%, 100%, 133%, 150%, 200%	Proportionally adjusts playback length of phrases on track.	P.206
14 Beat shift	-32,...,+00,...,+32 (*♪)	Shifts playback timing of phrases on track, in 16th-note increments.	P.207
15 Phrase number		Identifies/selects phrase.	P.207
Instrument category	Da,Db,Fa,Fb,Fc,DP,PC,PF,Ba,Bb,GC,GA, GR,KC,KA,KR,PD,BR,SE,US		
Beat	16,08,34		
Sequential no.	001,...,256 (preset); 001,...,099 (user)		

- When you enter PATTERN mode, the QY700 displays the PATCH screen. You can use this screen to create a pattern (by arranging phrases onto the 16 pattern tracks), or to select and replay an existing pattern.
- During pattern playback, you can change the chord setting so that the pattern modulates. If you enable the fingered-chord switch, you can make the changes by playing appropriate chords at the microkeyboard or at an external MIDI keyboard.
- The lower half of the PATCH screen shows the pattern's phrase arrangement, by measure and by track. You can change the phrase settings directly at this screen. By selecting different voices for each track, you can easily build and try out a wide number of multipart variations (drum plus guitar plus bass, and so on).

To select and play a pattern

1. Press ⌈PATTERN⌉ .
▼ The QY700 enters PATTERN mode. The PATTERN indicator lamp comes on.

2. Select the pattern. (→ p.202)
- Move the cursor to the style-number and section-letter areas on the screen, and make your selection using the data dial, ⌈NO⌉ / ⌈YES⌉ , or the numeric keypad.

3. Press ▶ to start playback.
- The PLAY indicator lamp comes on, and the QY700 begins playback of the selected pattern. The QY700 repeats the pattern until you change the selection or switch playback off.

4. Press ■ to stop the playback.

To create a pattern

1. Press ⌈PATTERN⌉ .
▼ The QY700 enters PATTERN mode. The PATTERN indicator lamp comes on.

2. Select the pattern that you want to work on.
- Move the cursor to the style-number and section-letter areas on the screen, and make your selection using the data dial, ⌈NO⌉ / ⌈YES⌉ , or the numeric keypad.

3. Set the pattern length and time signature. (→ p.204.)
- Press ⌊   ⌋ [D1] or ⌊   ⌋ [D2] to move the cursor into the appropriate setting area. Set the values using the data dial, ⌈NO⌉ / ⌈YES⌉ , or the numeric keypad.

4. Move the cursor to the appropriate phrase-entry location.
- Move the cursor to the appropriate track and measure location (lower half of the screen).

5. Make an initial selection using the data dial or ⌈NO⌉ / ⌈YES⌉ .
▼ The QY700 displays the phrase name and number.

6. Complete the selection. (→ p.207)
- The phrase number consists of three sections: the instrument category, the beat value, and a sequential number. Move the cursor to each of these sections as necessary, and make your selection using the data dial, ⌈NO⌉ / ⌈YES⌉ , or the numeric keypad.
- To enter a rest rather than a phrase: Press ⌈F5⌉ (Rest).
- To delete a phrase or rest setting: Move the cursor to the setting, and press ⌈F6⌉ (Clear).

7. Set the beat shift and scale time (→ p.206, 207)
- Move the cursor to the beat-shift and scale-time entry areas, and set the values using the data dial, ⌈NO⌉ / ⌈YES⌉ , or the numeric keypad.
- Note that the following controls continue to be effective while you are working at the PATCH screen: ⏮ , ⏪ / ⏩ , ■ , ▶ , and the shuttle dial.
- If you want to hear one of the phrases playing alone, select the phrase with the cursor and then press ⌈F4⌉ (PhrSolo). The QY700 will begin repeated solo play of the selected phrase.

5

1. Style number and name
2. Section, and pattern name

📖 • Each pattern exists as a *section* within a *style*. You select the pattern by selecting the style (by number: 01 to 64) and section (by letter: A to H). The QY700 displays the corresponding style and section names next to your entries. If you select an empty style or section, the QY700 displays a blank string (********) in the name area.

• You can use the Pattern Name job to set or edit the style and section names. Explanation of pattern jobs begins on page 256.

• For general information about styles and sections, refer to page 39.

🔢 Style number   01,...,64
Section   A,...,H

🎛 1. Move the cursor to the style-number or section-letter entry area.

2. Enter the appropriate value using the data dial, 🔽 / 🔼 , or the numeric keypad → ↵ .

✏ • For the section letter, you can also make your selection by pressing one of the first eight keys on the microkeyboard (section keys "A" to "H": the section letter appears under the key).

• If you change the style or section setting while playback is in progress, the QY700 will change the sound at the beginning of the next measure.

3. Section connection

📖 • This setting sets up automatic section switching. If the QY700 encounters this section during SONG replay, it plays the section once and then automatically switches into the section indicated at the right of the arrow (unless explicitly instructed otherwise by a PATTERN-track entry).

• Note that the setting operates only during playback under SONG mode. Automatic pattern switching does not occur while you are working in PATTERN mode.

• If the setting is A → B, for example, then if the QY700 encounters section A during song playback, it plays the section once and then proceeds to Section B (of the same style). If the setting is A → A, then the QY700 continues to repeat section A until instructed otherwise.

• A connection value of ▤ corresponds to "end of playback." If the setting is A → ▤, then upon encountering section A the QY700 will play it once and then terminate the song play.

🔢 A,...,H, ▤ (= end)

🎛 1. Move the cursor to the section-connection setting (the entry to the right of the arrow).

2. Enter the appropriate value using the data dial, 🔽 / 🔼 , or the microkeyboard.

▨ 4. Chord root and type

📖 • This area sets the chord root and type for the initial (default) playback of the pattern.
   • For each chord, you can select from among 12 roots and 28 types.
   • For each chord, you can also select a separate *on-bass* or *original bass* setting.
   On-bass: Converts all bass-type phrases into repetitions of the selected on-bass pitch. (All bass-phrase notes automatically transpose into the selected pitch.)
   Original bass: Causes all bass-type phrases to transpose to the selected "original bass" chord (root and type). All notes within the bass phrase transpose to constituent notes of the "original bass" chord.

📖 • For a full chord listing, refer to the *QY700 Reference Listings* (separately bound).

▦ Chord root
   C, C♯, D, E♭, E, F, F♯, G, A♭, A, B♭, B
   Chord type
   M, M7, 6, 7, m, m7, m6, mM7, m7(♭5), dim, aug, sus4, add9, M7(9), 6(9), 7(9), madd9, m7(9), m7(11), 7(♭5), 7(♯5), 7(♭9), 7(♯9), 7(13), 7(♭13), 7sus4, 7(♯11),--- (THRU)

If you do not want to use fingered chording
   1. Set the fingered-chord switch to OFF. (See next page.)
   2. Move the cursor to the chord root/type area on the screen.
   3. Select the root by pressing a microkeyboard key from E2 to D♯3.

   4. Select the type by pressing a key from E3 to F4.
   5. To set an on-bass pitch: Hold down the left-side ◁ [OCT DOWN] key and press a key from E2 to D♯3.
      -or-
      To set an original bass: Hold down the left-side ▷ [OCT UP] key and press a key from E3 to F4.
   6. Press ↵ to register your entries.

Hold down to enter on-bass or original bass

Enter the chord root here.   Enter chord type here.

If you want to use fingered chording
   1. Go to UTILITY mode and set up the fingered-chord zone. (→ p.299)
   2. Move the cursor to the fingered-chord switch area, and set the value to FINGRD (see next page). Leave the cursor in this area as you proceed.
   3. Press down the keys for the appropriate chord, using either the microkeyboard or a remote MIDI keyboard. *Be sure that all the keys you press are within the fingered-chord zone.* The QY700 will automatically detect and register the root and type values.
   • To select an on-bass or original-bass value: Continue to hold down the chord notes within the fingered-chord zone, while pressing one note (to set an on-bass) or multiple notes (to set an original bass) in the keyboard area to the left of the zone.

Fingered-chord zone

Enter on-bass or original bass here.   Enter the chord here.

✎ • For more information about how to enter chords, refer to Chapter 1. (→ p.42)

5

5. Fingered-chord switch

📖
- This setting enables or disables the fingered-chord feature.
- If you enable this feature (by setting the value to FINGRD), you will be able to enter chord values directly by playing the appropriate chord either at the microkeyboard or at a remote MIDI keyboard. Specifically, you can enter the root and type by playing the keys within the keyboard's fingered-chord zone ($\rightarrow$ p.299), and you can enter an on-bass or original-bass value by playing the appropriate key(s) in the area to the left of the zone. See the procedure given on the previous page.
- For general information about the fingered chord feature, refer to Chapter 1. ($\rightarrow$ p.42)

OFF, FINGRD

1. Move the cursor to the fingered-chord switch area.

2. Use the data dial or 🔽 / 🔼 to select the setting.

- If you have selected fingered chording, you can use the area to the right of the zone for normal play while using the rest of the keyboard for your chord input. But remember that all keyboard area from the chord downward is reserved for chord input only.

6. Current measure; pattern length

📖
- The top value sets the measure from which playback begins. The value then increments as playback proceeds.
- The lower value indicates the pattern's length, in measures.
- There are three ways to jump to a different measure while playback is in progress, as follows.
  1. Press ☐ [D1] to move the cursor into this measure area, and then change the current-measure value.
  2. Rotate the shuttle dial, or press ◀◀ or ▶▶ .
  3. Press ◀ to return to the top of the song.

Current length 001,...,*pattern length (in measures)*

1. Press ☐ [D1] once to move the cursor to the current-measure area, or twice to move it to the pattern-length area.

2. Set the value using the data dial, 🔽 / 🔼 , or the numeric keypad.

7. Tempo and meter

📖
- The values set the tempo and meter (time signature) for pattern playback.
- The meter setting applies to all sections within in the style.
- Each style retains its own tempo and meter settings within memory.

Tempo   25.0,...,300.0 (=♩)

Meter   1/16,...,16/16; 1/8,...,16/8; 1/4,...,8/4

1. Press ⬜ [D2] as necessary to move the cursor to the tempo or meter setting.

2. Set the value using the data dial, 🔽 / 🔼 , or the numeric keypad.

▨ 8. Click beat, click mode, and count

- These parameters set up the sequencer's click sound.
- The *beat* value sets the click interval.
- The *mode* setting determines when the click feature is used.
- The *count* value sets the number of preliminary measures used as a lead-in for realtime recording.

Click mode:

Off   Disables the click feature.

Rec   Use click for realtime and punch recording only.

Ply   Use click for realtime recording, punch recording, and playback.

All   Always use click.

Click beat

    ♪, ♩, ♩, ♩, 𝅝

Count

    Off, 1,...,8Ms

1. Press ⬜ [D4] as necessary to move the cursor to the appropriate click parameter.

2. Set the value using the data dial or 🔽 / 🔼 . (For the click beat, you can also set the value by pressing the appropriate note key on the numeric keypad.)

▨ 9. Data display

- This area shows the name of the currently selected phrase, or the value of the currently selected scale-time or beat-shift setting.

▨ 10. Track number
11. Measure

- The lower half of the PATCH screen presents a matrix showing the pattern's phrase arrangement, with the track numbers running down the left side and the measure numbers running across the top.
- The track numbers run from 1 to 16. The measure numbers run from M001 (measure 1) to the final measure in the pattern. The entire arrangement cannot fit on the screen, but you can scroll in any direction as required.
- You can edit the pattern by entering any phrase, or a rest value, at any location on the matrix.

Track   1,...,16

Measure   M001,...,*pattern length*

             (where *pattern length* is set by the second value in the [D1] entry area; see page 204.)

- Move to the appropriate matrix position using ⎢TRACK UP⎥ / ⎢TRACK DOWN⎥ , and/or the cursor keys.

5

12. Track status

- You can choose to mute out one or more tracks, or to set one or more tracks to SOLO play. An ⊟ mark appears to indicate that a track is muted; an ⧉ mark indicates that it is set to SOLO.
- If you set one or more tracks to SOLO, the QY700 automatically switches off playback from all other tracks. (The track-number borders change appearance to indicate the tracks that are temporarily switched off.)
- During playback, the track-status area operates as a velocity meter that monitors the playback level of each track in real time.

1. Select a non-empty track by pressing `TRACK UP` / `TRACK DOWN` or the up or down cursor key.

2. *To mute the track*: Press `MUTE` once, so that the ⊟ appears.
   To release a mute: Press `MUTE` once again.

3. *To set the track to SOLO*: Press `SOLO`, so that the ⧉ appears.
   To deselect SOLO: Press `SOLO` once again.
- You can easily use this feature to listen to your tracks one by one. Begin by playing one of the tracks solo, then move the cursor to select the next track, then press `SOLO` again. Note that each time you press `SOLO`, any previous SOLO selection is automatically canceled.

4. You can also use the solo feature to select multiple tracks "solo", so that only the selected tracks are produced (with all other tracks silent). Begin by setting one of the tracks to SOLO as described above. Then move to each of the other tracks and press `SHIFT` + `SOLO`.
- *To cancel all of these solo selections at once* : Move the cursor to any one of the tracks, and press `SOLO`.
   To switch off only one of the solo selections : Move to the corresponding track, and press `SHIFT` + `SOLO`.

13. Scale time

- You use this value to speed up or slow down the playing speed of the phrases on the corresponding track. The scale-time value acts as a multiplier.
- If the meter is set to 4/4, for example, then setting the scale time to 50% compresses the meter to 2/4, while setting it to 75% compresses the meter to 3/4. A 150% scale time expands the meter to 6/4; a 200% time expands it to 8/4.
- Note timing also changes accordingly. At 50% scale, a quarter note in the original phrase converts into into an eighth note; at 66%, into a quarter-note triplet; at 75%, into a dotted eighth; at 133%, into a quarter plus eighth-triplet; at 150%, into a dotted quarter; at 200%, into a half note.
- This scaling feature makes it easy to set up complex rhythms within your patterns.

050%, 066%, 075%, 100%, 133%, 150%, 200%

14. Beat shift

📖 • You use this feature to shift the entire pattern backwards or forwards in time, by 16th-note increments.

• A setting of +01*♪, for example, shifts the phrase forward (toward the end of the pattern) by one 16th note, while a setting of -01*♪ shifts the phrase backwards by that amount.

• This feature lets you produce a wide range of variations from a single phrase. This, in turn, increases the range of patterns that you can build.

🔢 -32*♪,...,+00*♪,..., +32*♪

15. Phrase number and name

Phrase number

Instrument category

Phrase name

Beat

📖 • As mentioned above, you can freely enter or change phrases within the matrix area of the PATCH screen. You select each phrase by its phrase number, as described below.

• If a selected phrase is longer than one measure, the box surrounding the phrase number will extend horizontally across the measure boundary.

• A phrase starts playing at the measure at which it is entered, and continues until the last measure of the pattern or until a subsequent entry is encountered on the same line (track).

• You select a phrase by moving the cursor to the matrix position, then setting the phrase number as described immediately below. Note that the data area (above the matrix) shows the phrase number, phrase name, and instrument category for the cursor-selected phrase.

• The QY700 provides two types of phrases: *preset phrases* and *user phrases*.

• The phrase number for a preset phrase consists of three fields: the instrument category, the beat value, and a sequential number. You select the phrase by choosing values for each of these fields. You can select from a total of 3,876 preset phrases.

• The phrase number for a user phrase consists of two fields. It starts with the characters US (in the instrument-category field), which are followed by a sequential number. (The beat field is left blank.)

🔢 Instrument category

	Instrument category	Numeric-keypad entry
Da	Drum-a	1
Db	Drum-b(General)	2
Fa	Drum Fill-a(Pop&Rock)	3
Fb	Drum Fill-b (Specific)	4
Fc	Drum Fill-c(General)	5
DP	Drum Parts	6
PC	Percussion	7
PF	Percussion Fill	8
Ba	Bass-a	9
Bb	Bass-b(General)	10
GC	Guitar Chord	11
GA	Guitar Arpeggio	12
GR	Guitar Riff	13
KC	Keyboard Chord	14
KA	Kbd Arpeggio	15
KR	Keyboard Riff	16
PD	Pad	17
BR	Brass	18
SE	Sound Effect	19
US	User	20

Beat value

	Beat category	Numeric-keypad entry
16	16 beats	5
08	8 beats	4
34	3/4 beat	3

Sequential number
  Preset phrase: 001,...,256
  User phrase: 001,...,099

5

1. Move the cursor to an appropriate space in the matrix area.

2. Press ⌊⅟ɴ⌋ / ⌊⅟ʏᴇꜱ⌋ or rotate the data dial to cause a phrase number to appear.

3. Move the cursor to each of the fields of the phrase number (instrument category, beat value, and sequential number) in turn. For each field, select the appropriate value using the data dial, ⌊⅟ɴ⌋ / ⌊⅟ʏᴇꜱ⌋, or the numeric keypad.

- Phrase numbers for user phrases do not include a beat value.
- You can record new user phrases using the Phrase Recording submode. (→ p.247)

F5 **(Rest)**

- You use this function to enter a rest into the cursor-selected space on the matrix.
- The rest causes any phrase that is already playing on that track to stop, so that the track becomes silent. The track remains silent until the next phrase entry appears.

F6 **(Clear)**

- Use this function to delete any entry (phrase or rest) from the matrix. Simply move the cursor to the entry, and then press F6 (Clear).

F4 **(PhrSolo)**

- The "phrase-solo" feature lets you play a single phrase repeatedly. Just move the cursor to the phrase you want to hear, and then press F4 (PhrSolo). All other phrases immediately stop playing, and the selected phrase plays repeatedly.
- While this feature remains selected, you can switch play from one phrase to another by moving the cursor. Phrase-solo operation continues in effect until you press F4 (PhrSolo) once again to switch it off.
- Once you have moved into phrase-solo operation, you can press F6 (PhrTable) (→ p.209) to access the *phrase table* for the selected phrase. This table shows the various internal settings for the phrase, as described immediately below.

Phrase Table

5. Low and high limits

1. Phrase number and name

2. Length

4. Retrigger

3. Phrase type

6. High key

8. Source chord

7. Voice category, program number, and bank number

	Parameter	Values	Function	See page
1	Phrase number, name	View only	Identifies the currently selected phrase.	P.210
2	Length	View only	Shows the length of the phrase, in measures.	P.210
3	Phrase type	Mldy1, Mldy2, Chrd1, Chrd2, Bass, Bypas, Para	Shows/selects phrase type, for purposes of chord conversion.	P.210
4	Retrigger	OFF, ON	Shows/selects how in-play phrase responds to chord change. If OFF, the phrase stops; if ON, it transposes and continues.	P.210
5	Low and high limits	Low: C-2,...,G8 High: C-1,...,G8	Pitch range for modulated phrase playback. (Notes outside this range are shifted by octave as necessary.)	P.210
6	High key	C,...,B	Highest key for upward transposition of root.(Applies to Mldy1, Chrd1, and Bass phrase types only.)	P.211
7	Voice category Program number Bank number	001,...,128 000,...,127	Shows/selects the voice used for playing the phrase.	P.211
8	Source chord	*Chord root and type*	Phrase's original key (chord).	P.211

5

- You use the phrase table to access the parameters for the currently selected phrase.
- Note that it is not possible to edit the parameter values for preset phrases. But you are free to edit the values on your user phrases.
- If you wish to change the values for a preset phrase, you can copy it into a user phrase, and then edit the copy.

1. Select the phrase at the PATCH screen. (→ p.208)

2. Press ⬚F4⬚ (PhrSolo) once, to set the PATCH screen into "phrase solo" mode.

3. Press ⬚F6⬚ (PhrTable) to move to the Phrase Table screen.

4. If you have selected a user phrase: Move the cursor to each of the settings you want to change, and enter the appropriate value using ⬚NO⬚ / ⬚YES⬚ or the data dial.

5. When you have finished, press ⬚EXIT⬚ to return to the "phrase solo" screen.

6. When you are ready, press ⬚EXIT⬚ again to release "phrase solo" and resume normal PATCH-screen operation.

1. Phrase number and name

- These values identify the currently selected phrase.
- You can use the Phrase Name job to set or change the names for your user phrases. (→ p.279)

2. Phrase length

- This value shows the phrase's length, in measures.
- It is not possible to change this value for existing phrases. Before recording a new user phrase, however, you can set the length value from the Recording Standby screen. (→ p.249)

3. Phrase type

- The TYPE value selects the kind of chord conversion used when modulating (transposing) the phrase. Different TYPE settings result in different conversion results, as follows.
- The "Melody" types (Mdly1, Mldy2) generate relatively slight, subtle changes in the playback sound.
- The "Chord" types (Chrd1, Chrd2) generate relatively large changes in the playback sound.
- For Mldy1 and Chrd1 transpositions, the QY700 first converts the original phrase line according to the chord type, and then transposes according to the chord root. For Mldy2 and Chrd2 transpositions, the QY700 attempts to remain closer to the original sound, so that the chord change is somewhat smoother.

- The Bass type is used for bass phrases. For these phrases, the QY700 always produces the root note at the start of any chord change. In addition, transposition is always according to the target chord's on-bass or original-bass setting (if any).
- The Bypas (Bypass) setting disables all phrase transposition – the phrase always bypasses the conversion process and plays out in its original sound. (Note that drum and percussion voices are always Bypas type.)
- The Para (parallel) type transposes by root only; the chord type is ignored. This is useful for phrases that contain implicit internal chord changes, since chord type conversion in this case may produce unpredictable or clashing results.

Mldy1, Mldy2, Chrd1, Chrd2, Bass, Bypas, Para

4. Retrigger

- This setting determines how the phrase responds to chord changes that occur while the phrase is already playing. If the setting is OFF, the phrase switches off when the chord change occurs. If ON, the QY700 transposes the phrase (in accordance with the chord-conversion parameters) and continues the playback.

OFF, ON

5. Low and high limits

- These values select the highest and lowest notes that can be used for replay of the transposed phrase. If transposition produces a note that is outside the limit, the QY700 shifts the note (by octave) to bring it into range.

Low limit   C-2,...,G8
High limit   C-1,...,G8

6. High key

- This setting determines the highest key that the chord root can take following transposition. The setting applies only to phrases of the following types: Mldy1, Chrd1, and Bass.
- To transpose any of these phrase types, the QY700 normally shifts the root upwards by the number of semitones separating the source chord's root and the new chord's root. Because too large a shift upward can cause the phrase to lose its original character, however, the QY700 will automatically shift downward, by one octave, any transposition that would move to a root higher than the value set here.

C,...,B

7. Voice category, program number, bank number, and voice name

- The first three values (voice category, program number, and bank number) select the voice used to play the phrase. The screen also displays the selected voice's name.
- The voice category selects the general voice class, as given by the Bank Select MSB (the most significant byte of the Bank Select value).
- The program number selects the voice within the category.
- The bank number (or Bank Select LSB) can be used to select one of the alternative voices assigned to the program number. This value is effective only with respect to voices in the "normal" category; the value is fixed at 000 for all other categories.

Voice category

Normal voice (Bank Select MSB = 000).

SFX voice (Bank Select MSB = 064). This type of SFX voice (sound-effects voice) has the same character over the full range of the keyboard, but different keys produce the sound in different pitches (as with a normal voice).

SFX kit (Bank Select MSB = 126). This type of voice exists as a collection of different sounds, so that each key produces a different kind of sound effect.

Drum voice (Bank Select MSB = 127). As with the SFX kit, each key produces a different type of drum sound. Note that these sounds cannot be changed directly by editing.

Program number
001,...,128
Bank number
000,...,127

- For more information above voice and bank settings, refer to Chapter 1. (→ p.43)
- For a listing of voice names, voice numbers, and bank settings, refer to the *QY700 Reference Listings*.

8. Source chord

- This value shows the phrase's original key (the key and chord value under which the phrase was originally played). The QY700 uses this value as the basis for executing chord conversions on the phrase.
- You can set this value only when recording a new user phrase. Be sure to set the value correctly, as an incorrect setting may lead to improper transpositions.

Chord root
C, C♯, D, E♭, E, F, F♯, G, A♭, A, B♭, B
(Where C♯ is equivalent to D♭, etc.)
Chord type
M, M7, 6, 7, m, m7, m6, mM7, m7(♭5), dim, aug, sus4, add9, M7(9), 6(9), 7(9), madd9, m7(9), m7(11), 7(♭5), 7(♯5), 7(♭9), 7(♯9), 7(13), 7(♭13), 7sus4, 7(♯11),--- (THRU)

- For information about setting up chords, refer to Chapter 1. (→ p.61)

2. Play Effects

- The Play Effects submode allows you to adjust various pattern-playback parameters, including note timing, gate timing, and velocities. The submode gives you a high level of control over playback timing and articulation. Note that these adjustments are fully reversible and do not cause changes in your recorded data.
- Each style stores its own play-effect settings. When you change to a different style, the new style's settings automatically become effective. Note that the play-effect settings apply to all eight sections within the style.
- You can use the "Expand Backing" job (song job 21; → p.162) to convert your pattern data (as adjusted by the Play Effects settings) into MIDI sequence data. The job stores the results onto sequence tracks 17 to 32.
- You can continue to replay the selected pattern while working in the Play Effects submode. The playback keys (▶ , ■ , ◄◄ , ◄◄ / ▶▶) continue to operate. This means that you can monitor the results of your changes as you make them.
- The Play Effects submode comprises three main pages together with two supplementary pages. You access the main pages by pressing the appropriate function keys (F1 , F2 , F3). You can access the supplementary page (where available) by pressing F4 . You can also switch to a different submode by pressing F5 or F6 .
- F1 (Groove) displays the "Groove Quantize" page. You use this page to set up the rhythm quantizing for each track.
- F2 (Shf|GT|Vel) selects the "Clock Shift, Gate Time, and Velocity" page. You use this page to set the corresponding values. Again, values are set separately for each track.
- F3 (Transpose) selects the "Transpose" page. You use this page to set transposition values for each track. You also use it to access the "Drum Table Edit" page; see below.
- F5 (→ Voice) switches you into Pattern Voice submode, where you can set up the voicing for each style. (→ p.225)
- F6 (→ Effect) switches you into Pattern Effects submode, where you can set up the effects for each style. (→ p.239.)
- F4 (GrovView), accessible only from the "Groove Quantize" page, switches the display to the "Groove View" screen. You can use this screen to view the groove templates, and to view or adjust your user templates.
- F4 (DrTabEdit), accessible only from the "Transpose" page, switches you to the "Drum Table Edit" page. You can use this page to adjust the drum table settings.

1. At the PATCH screen in Pattern mode, press F1 (PlayFx).
▼ The QY700 enters the Play Effects submode.

2. If necessary, change the page by pressing the appropriate function key: F1 (Groove), F2 (Shf|GT|Vel), or F3 (Transpose). Listen to the playback while making the various adjustments.

3. When you have finished, press EXIT to return to the PATCH screen.

- *Adjustment shortcut 1*: To adjust the cursor-selected parameter by an equal amount on all tracks, hold down SHIFT while rotating the data dial or pressing ⌊⁻¹ₙₒ⌋ or ⌈⁺¹ᵧₑₛ⌉ .
- *Adjustment Shortcut 2*: To set the cursor-selected parameter to the same value on all tracks, hold down SHIFT and enter the value at the numeric keypad.

5

Groove Quantizing

1. Track number

1. Track numbers
4. Play-effects THRU setting
6. Quantizing value
2. Measure
3. Voice program
5. Groove template
7. Strength
8. Groove timing
9. Groove gate time
10. Groove velocity

PATTERN PATCH
F1 Play Effects
F1 Groove Quantize
F4 Groove View

13. Gate-time multiplier
11. Grid position
12. Clock shift
14. Velocity offset

11. Grid
12. Clock shift
13. Gate-time multiplier
14. Velocity offset

Parameter	Values	Function	See page
1 Track number	01,...,16	Shows track numbers. (Track number at top right, and highlighted track-number box, show track selected for editing.)	P.216
2 Measure	001,...,256	Sets location (measure) for beginning of pattern playback, and indicates current playback location.	P.85
3 Voice program	View only	Identifies the voice program, as selected under VOICE mode.	P.85
4 THRU setting	□ (=off), T (=on)	Sets the play effects ON or OFF for each track.	P.85
5 Groove template	-- (=off),1,...,100,US	Sets the groove template, for each track.	P.86
6 Quantizing value	(Selectable only if template type = US.)	Timing interval used as basis for quantization.	P.86

7 Strength	000%,...,100%	Sets degree by which notes are pulled toward nearest quantizing line.	P.86
8 Groove timing	000%,...,200%	Sets degree by which note data's original timing is adjusted by the groove template.	P.87
9 Groove gate time	000%,...,200%	Sets degree by which note data's gate time is adjusted by the groove template.	P.87
10 Groove velocity	000%,...,200%	Sets degree by which note data's velocity values are adjusted by the groove template.	P.88
11 Grid, and grid position	View only	The grid illustrates the interval arrangement for quantization. The numerical position value shows the location of the cursor-selected quantizing line.	P.88
12 Clock shift	Setting range varies according to quantization value.	Sets/shows final time shift applied after quantizing by template is completed. (Value is in clock cycles.)	P.88
13 Gate-time multiplier	000%,...,200%	Gate time adjustment applied at each interval, by percent.	P.89
14 Velocity offset	-99,...,+00,...,+99	Velocity offset applied at each interval.	P.89

- You use the groove quantize (rhythm quantization) feature to impart a swing, or "groove," to the note data as it is played back. The feature operates by making specified adjustments in note-event timing, velocities, and gate times. Effective use of this feature makes it possible to convert mechanical-sounding note data into driving, meaningful music.
- The QY700 comes equipped with 100 preset groove templates, each corresponding to a different musical genre. You can therefore get good quantization results simply by selecting the appropriate template. But the QY700 also lets you create your own, customized templates (*user templates*).
- Each template contains data for quantizing one measure of recorded data. Quantizing is executed by reapplying the template values to each measure of the track.
- Because you can select a different template for each track, you can combine a wide variety of different rhythms within a single pattern. You can also select how strongly each track's template will act on the track's data – so that you can get a wide range of variations even when working with the same template.
- You use the Groove View page to view the preset templates, and to view or create your own user templates. The page displays the template settings in an easy-to-follow graphical form.

- Each groove template is divided into equal quantizing intervals: eighth-note intervals, eighth-note triplet intervals, sixteenth-note intervals, or some other such value. On the Groove View page, these intervals are represented by a grid pattern.
- The groove template sets separate adjustment values for each interval, allowing for subtle but swinging nuances. For example, the template might increase the gate times and velocities in the first half of the first beat, while delaying the timing of notes that occur in the second half of the second beat.

1. At the Play Effects screen, press ⬚F1⬚ (Groove).
▼ The Groove Quantize page appears.

2. Move the cursor to each of the parameters you want to change, and set the new value using the data dial, 🔲 / 🔲 , or the numeric keypad.

3. When you have finished making changes, press ⬚EXIT⬚ to return to the PATCH screen.

- The playback keys (▷ , ▢ , ◁ , ◁◁ / ▷▷) continue to function while you are adjusting the groove settings, so that you can monitor the results of your changes as you make them.
- *Adjustment shortcut 1*: To adjust the cursor-selected parameter by an equal amount on all tracks, hold down ⬚SHIFT⬚ while rotating the data dial or pressing 🔲 or 🔲 .
- *Adjustment Shortcut 2*: To set the cursor-selected parameter to the same value on all tracks, hold down ⬚SHIFT⬚ and enter the value at the numeric keypad.

5

1. Track number

📖 • The numbers running horizontally across the screen identify the different tracks. The highlighted number (and the number value at the top right of the screen) indicates the track currently selected for editing.

Selected track: 1,...,16

2. Measure
3. Voice program
4. Play-effects THRU setting
5. Groove template
6. Quantizing value
7. Strength
8. Groove timing
9. Groove gate time
10. Groove velocity
11. Grid
12. Clock shift
13. Gate-time multiplier
14. Velocity offset
F5 **(CopyTmp)** [appears on Groove View only]

📖 • The parameters listed above, as well as the F5 (CopyTmp) switch, are functionally equivalent to the identically named items in the SONG mode's Play Effects submode. For information, refer to explanations on page 85 - 89.

Clock Shift, Gate Time, and Velocity

1. Track number

1. Track numbers

2. Measure

4. Play-effects THRU setting

15. Clock shift

16. Gate-time modifier

17. Velocity rate

18. Velocity offset

PATTERN PATCH
  F1 Play Effects
      F2 Clock Shift, Gate Time, and Velocity

5

Parameter	Values	Function	See page
1 Track number	1,...,16	Shows track numbers. (The track number at top right, and the high-lighted track-number box, indicate the track selected for editing.)	P.216
2 Measure	001,...,256	Sets location (measure) for beginning of pattern playback, and indicates current playback location	P.216
4 THRU setting	□ (=off), T (=on)	Sets the play effects ON or OFF for each track.	P.216
15 Clock shift	-999,...,+999	Shifts playback timing of all notes on track, in clock-cycle increments.	P.218
16 Gate-time modifier	000%,...,200%	Mutiplier, applied to all gate times on track.	P.218
17 Velocity rate	000%,...,200%	Multiplier, applied to all velocities on track.	P.218
18 Velocity offset	-99,...,+99	Offset, applied to all velocities on track.	P.218

• You use this page to set the following play-effect parameters: clock shift, gate-time modifier, velocity rate, and velocity offset.

1. At the Play Effects screen, press ⬜F2⬜ (Shf|GT|Vel).
   ▼ The "Clock Shift, Gate Time, and Velocity" page appears.

2. Move the cursor to each of the parameters you want to change, and set the new value using the data dial, 🔲 / 🔲 , or the numeric keypad.

3. When you have finished making changes, press ⬜EXIT⬜ to return to the PATCH screen.

• The playback keys (▶ , ■ , ◄ , ◄◄ / ►►) continue to function while you are adjusting the settings, so that you can monitor the results of your changes as you make them.
• *Adjustment shortcut 1*: To adjust the cursor-selected parameter by an equal amount on all tracks, hold down ⬜SHIFT⬜ while rotating the data dial or pressing 🔲 or 🔲 .
• *Adjustment Shortcut 2*: To set the cursor-selected parameter to the same value on all tracks, hold down ⬜SHIFT⬜ and enter the value at the numeric keypad.

15. Clock shift
16. Gate-time modifier
17. Velocity rate
18. Velocity offset

• The parameters listed above are functionally equivalent to the identically named parameters in the SONG mode's Play Effects submode. Refer to Chapter 2, page 90 for details.
• For additional information about the clock shift parameter, see directly below.

• If you apply a negative clock shift value that would move a note past the beginning of the pattern, the note will sound at the precise start of the pattern when the pattern begins its replay. If you set the value to -200, for instance, all notes within the first 200 cycles of the track will sound together when the pattern starts up.
• For second and subsequent rounds of the pattern, however, all clock-shifts are applied correctly.

Transposition

1. Track number
2. Measure
4. Play-effects THRU setting
19. Drum table
20. Transposition
21. Inversion transposition
22. Open harmony

1. Track numbers

PATTERN PATCH
— F1 — Play Effects
— F3 — Transpose
— F4 — Drum-Table Edit

SHIFT F1 F2 F3 F4 F5 F6 SHIFT EXIT

Parameter	Values	Function	See page
1 Track number	1,...,16	Shows track numbers. (The track number at top right, and the highlighted track-number box, indicate the track selected for editing.)	P.220
2 Measure	001,...,256	Sets location (measure) for beginning of pattern playback, and indicates current playback location	P.220
4 THRU setting	□ (=off), T (=on)	Sets the play effects ON or OFF for each track.	P.220
19 Drum table	-- (=none),1,...,8	Selects the drum table.	P.220
20 Transposition	-99,...,+99	Transposes all notes on track.	P.220
21 Inversion transposition	-64,...,+00,...,+63	Applies chord-based transposition.	P.220
22 Open harmony	-15,...,+00,...,+15	Opens or closes chord voicings produced by track.	P.221

5

- You use this page to adjust note pitches and chord development on each track. These settings allow you to obtain a wide range of variations in the pattern's sound.
- You can access and edit the drum-table data by pressing ⌐F4⌐ (DrTabEdit).

1. At the Play Effects screen, press ⌐F3⌐ (Transpose).
▼ The Transpose page appears.

2. Move the cursor to each of the parameters you want to change, and set the new value using the data dial, 🔽/🔼 , or the numeric keypad.

3. When you have finished making changes, press ⌐EXIT⌐ to return to the PATCH screen.

- The playback keys (▶ , ■ , ◄ , ◄◄ / ▶▶) continue to function while you are adjusting the settings, so that you can monitor the results of your changes as you make them.
- *Adjustment shortcut 1*: To adjust the cursor-selected parameter by an equal amount on all tracks, hold down ⌐SHIFT⌐ while rotating the data dial or pressing 🔽 or 🔼 .
- *Adjustment Shortcut 2*: To set the cursor-selected parameter to the same value on all tracks, hold down ⌐SHIFT⌐ and enter the value at the numeric keypad.

The first three parameters listed in the table above ("track number," "measure," and "THRU") are identical to those on the Groove Quantize page; refer to page 214. The remaining parameters are described below.

19. Drum table

- *Drum tables* are required to handle rhythm data produced by drum machines that are not XG or GM compatible. As these machines may use different numbering arrangements to identify the various rhythm instruments, it becomes necessary to make appropriate substitutions when playing back the recorded data. Failure to make these substitutions will cause the "wrong" instruments to be produced.
- Each drum table therefore contains a list of rhythm-instrument substitutions. You can select the table separately for each track.
- You can also use the drum table to experiment with your own customized substitutions. This can be an easy way to try out different instrument combinations.
- The QY700 stores eight different drum tables. To view or edit the contents of a drum table you must press ⌐F4⌐ (DrTabEdit) to move into the Drum-Table Edit page. (→ p.222)

-- (=none),1,...,8

1. Move the cursor to the DR TABLE setting for the appropriate track.

2. Set the value using the data dial, 🔽/🔼 , or the numeric keypad.

20. Transposition

- You use this setting to transpose all notes on the track.
- Transposition is in semitone increments. Setting the value to +12, therefore, raises the pitch of all notes on the track by exactly one octave. A setting of -12 drops the pitch by exactly one octave.

-99,...,+99

1. Move the cursor to the TRANSPOSE setting for the track you want to transpose.

2. Set the value using the data dial, 🔽/🔼 , or the numeric keypad.

21. Inversion transposition

- This parameter implements chord-based transposition on each track.
- This feature allows you to adjust chord pitch while retaining the original sense of the chord. The adjustment is distinct from the TRANSPOSE adjustment, which can cause a noticeable change in the chord's feeling.

-64,...,+00,...,+63

1. Move the cursor to the INVERSION TRANSPOSE setting for the track you want to adjust.

2. Set the value using the data dial, 🔽/🔼 , or the numeric keypad.

- For Mldy1, Chrd1, and Bass-type phrases, each increment of the INVERSION TRANSPOSE value produces a whole-tone increment in the phrase table's low and high limit values. An inversion transposition value of +1, for example, would raise the both limit values by one whole tone (two semitones) each.
- For Mldy2 and Chrd2 phrases, each increment of the INVERSION TRANSPOSE value produces a whole-tone increment in the original phrase's pitch values, and in the root of the phrase-table source chord.

22. Open harmony

- This adjustment opens or closes the chord voicings on the track.
- This feature lets you adjust chord resonance characteristics without changing the essential character of the chords.

-15,...,+00,...,+15

1. Move the cursor to the OPEN HARMONY setting for the track you want to adjust.

2. Set the value using the data dial, 🔽 / 🔼 , or the numeric keypad.

5

Drum Table Edit

1. Track number

PATT -- PLAY EFFECT -- TR=01

2. Measure
1. Track numbers
4. Play-effects THRU setting
19. Drum table

23. Replacement list

24. Velocity rate

From		To		Velocity Rate
All	Brush Snare	→E 1	Snare H2	⏱
G 0	Snare L2	→E 1	Snare H2	⏱
All	Kick	→C 1	Bass Drum H2	⏱
B♭0	OpenRimShot2	→E 1	Snare H2	⏱
C♯1	Side Stick	→E 1	Snare H2	⏱
D 1	Snare M2	→E 1	Snare H2	⏱
---- ----		→ ---- ----		⏱
---- ----		→ ---- ----		⏱

(Clear!)(Default)

SHIFT   F1   F2   F3   F4   F5   F6   SHIFT   EXIT

PATTERN PATCH
├ F1 Play Effects
  └ F3 Transpose
     └ F4 Drum-Table Edit

Parameter	Values	Function	See page
1 Track number	1,...,16	Shows track numbers. (The track number at top right, and the highlighted track-number box, show track selected for editing.)	P.223
2 Measure	001,...,*pattern length*	Sets location (measure) for start of pattern playback, and monitors current playback location.	P.223
3 Voice program	View only	Identifies the track's voice program, as selected under VOICE mode.	P.223
4 Play-effects THRU setting	☐ (=off), T (=on)	Sets the play effects ON or OFF for each track.	P.223
19 Drum table	-- (=none),1,...,8	Selects the drum table.	P.223
23 Replacement list		List of drum-voice replacements.	P.223
24 Velocity rate	000%,...,100%,...,200%	Adjusts the velocity of the replacement voice. This parameter allows you to correct for volume imbalance that may be caused by the replacement.	P.223

- You use this page to edit the selected drum table.
- *Drum tables* are required to handle rhythm data produced by drum machines that are not XG or GM compatible. As these machines may use different numbering arrangements to identify the various rhythm instruments, it becomes necessary to make appropriate substitutions when playing back the recorded data. Failure to make these substitutions will cause the "wrong" instruments to be produced.
- Each drum table therefore provides a list of rhythm-instrument substitutions. The QY700 stores eight different tables. You can select the table separately for each track. You can also edit the contents of each table as required.
- The table also allows you to adjust velocities for each of your substitutions, so that you can maintain appropriate volume balance.
- You may also want to use these table to experiment with your own customized substitutions. This can be any easy way to try out different instrument combinations.

1. At the PATCH screen, press ⌷F1⌷ (PlayFx).
   ▼ The QY700 enters the Play Effects submode.

2. Press ⌷F3⌷ (Transpose).
   ▼ The Transpose page appears.

3. Press ⌷F4⌷ (DrTabEdit).
   ▼ The Drum-Table Edit page appears.

4. Press ⌷TRACK UP⌷ or ⌷TRACK DOWN⌷ as necessary to select the appropriate track.

5. With the cursor on the DR TABLE line, select the desired drum table. (→ p.220)

6. Move the cursor to the list entry or Velocity Rate value that you want to set.

7. Set the value using the data dial, ⌷NO⌷ / ⌷YES⌷ , or the numeric keypad.

8. When you have finished making changes, press ⌷EXIT⌷ to return to the PATCH screen.

- The playback keys (⌷▶⌷ , ⌷■⌷ , ⌷◀⌷ , ⌷◀◀⌷ / ⌷▶▶⌷) continue to function while you are adjusting the settings, so that you can monitor the results of your changes as you make them.
- Adjustment shortcut: To select the same drum table for all tracks, hold down ⌷SHIFT⌷ and select the value (at any one of the tracks) with the numeric keypad. To change all drum-table settings by an equal amount, hold down ⌷SHIFT⌷ and use the data dial or ⌷NO⌷ / ⌷YES⌷ .

The first five parameters listed in the table above (numbered 1, 2, 3, 4, and 19) are identical to those on the "Transpose" page; see page 219. The remaining parameters are described below.

23. Replacement List

- This list sets up the rhythm-instrument replacements.
- If this drum table is selected for a track during replay, the QY700 will replace any rhythm instrument designated in the From column (when encountered in the performance data for that track) with the instrument named in the corresponding To line.
- A "No" entry in the From column actually means "All but." A "No Snares" entry, for example, instructs the QY700 to substitute the To instrument for all voices other than snare voices.
- An "All" specification in the From column (for example, "All Shakers") tells the QY700 to replace all instruments of the specified type with the item named in the To entry.

[From]
No Shakers, No Congas&Bongos, No Crash Sym., No Ride Sym., No Hi-Hat, No Tom, No Brush Snare, No Kick, No Snare, All Shakers, Congas&Bongos, All Crash Sym., All Ride Sym., All Hi-Hat, All Tom, All Brush Snare, All kick, All snare, All drum Kit, All Perc., C5 Bell Tree ~ C#-1 Surdo Mute
[To]
C5 Bell Tree,..., C#-1 Surdo Mute

1. Move the cursor to the parameter you want to set (From entry, To entry, or Velocity Rate).

2. Set the value using the data dial, ⌷NO⌷ / ⌷YES⌷ , or the numeric keypad.

3. When you have finished making changes, press ⌷EXIT⌷ to return to the Transpose screen.

5

24. Velocity rate

- This Velocity Rate parameter adjusts the velocity of the re-placement rhythm instrument (the instrument named in the To column).
- To calculate the adjusted velocity, the QY700 multiplies the original velocity value by the Velocity Rate value. A Veloc-ity Rate of 100% produces no adjustment, while larger val-ues increase the velocity and lower values reduce it.
- This parameter allows you to adjust for loudness imbalances that may occur when you replace one instrument with an-other. You may also want to use it to experiment with your own customized velocity adjustments.

Original velocities

(Vel)

| 96 | 64 | 32 | 96 | 96 |

Velocity Rate = 50%

(Vel)

| 48 | 32 | 16 | 48 | 48 |

Velocity Rate = 150%

(Vel)

| 115 | 76 | 38 | 115 | 115 |

000%,...,100%,...,200%

1. Move the cursor to the Velocity Rate icon for the list entry you want to adjust.

2. Set the value using the data dial, ⌐NO / ⌐YES , or the nu-meric keypad.

F1 (Clear)

- Press F1 (Clear) to delete the entry on the selected line of the table.
- If you press F1 while the cursor is in the From column, the QY700 deletes both the From and the To entries for that line.
- If you press F1 while the cursor is in the To column, only the To item will be deleted. (If the To entry is left blank, the "From" instrument will be muted.)

1. Move the cursor to the appropriate entry.

2. Press F1 (Clear).

F2 (Default)

- Press F2 (Default) to reset the drum table to its default values. All of the From, To, and Velocity Rate settings re-turn to their defaults.

1. Press F2 (Default).
▼ The table resets to its defaults.

3. Pattern Voice submode


```
PATT   -- PATTERN VOICE SETUP --   TR=01
        CAT.  PGM    BANK
        Voice Select = Phrase
TRACK   1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
VELO METER
VOICE SEL. Phr Phr Phr Phr Phr Phr Phr Phr Phr Phr Phr Phr Phr Phr Phr Phr
VOICE CAT. -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
PROGRAM   -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
BANK      -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
REVERB
CHORUS
VARIATION
PAN
VOLUME
 Mixer  VoicEdit              ➜PlayFx ➜Effect
```



```
PATTERN PATCH
  └─ F2   Voice
        ├─ F1   Mixer
        ├─ F2   Voice Edit
        └─ F3   Drum Setup-3 Edit
```

• You use the Pattern Voice submode to assign voices to your patterns, and to edit the various voice settings.

• You can set pattern-voice values separately for each style. The values apply to all sections (Sections A to H) of the style.

• These settings are effective during all PATTERN-mode operation. You can choose whether or not to apply them during SONG-mode operation by setting the PATTERN SETUP switch (on the SONG PLAY screen). See Chapter 1, page 47 for more information.

• The illustration at right shows how sequencer-block tracks correspond to "parts" in the tone generator block. You can set up the TO TG assignments using the SONG mode's Output Channels function. Before making your pattern-voice settings, it is a good idea to go to SONG mode to review (or revise) these settings. (→ p.103)

• When you change the pattern or the voice settings for a track, the new voice settings overwrite the voice parameters for the corresponding tone generator part. (You can see the new settings reflected in the VOICE-mode screens; see Chapter 3.)

Sequencer block   Tone generator (TG) block

	Track	TO TG		Part
Sequence tracks	1	1	→	1
	2	2	→	2
	⋮	⋮		⋮
	16	16	→	16
	17	off		17
	18	off		18
	⋮	⋮		⋮
	32	off		32
Pattern tracks	1	17		
	2	18		
	⋮	⋮		
	16	32		

• The Pattern Voice submode consists of three pages. You access these pages using function keys F1 , F2 , and F3 .

• F1 (Mixer) selects the Mixer page. You use this page to set voice, pan, volume, and other such parameters for each track. (→ p.227)

• F2 (VoicEdit) selects the Voice Edit page. You can use this page to edit (redesign) the sound of the selected voice. (→ p.232)

• F3 (DrS3Edit) selects the "Drum Setup-3 Edit" page. You can use this page to edit the drum-set voices. (→ p.235) Note that this submode is available only for tracks whose voice category is set to "Drum Setup-3".

5

1. At the PATCH screen, press [F2] (Voice).
▼ The Pattern Voice Setup page appears.

2. Press [F1] (Mixer), [F2] (VoicEdit), or [F3] (DrS3Edit) to move to the page you want to work on.

3. Move the cursor to any parameter you need to change, and set the value using the data dial, [NO] / [YES] , or the numeric keypad.

4. When you have finished working at these pages, press [EXIT] to return to the PATCH screen.

Mixer

Parameter	Values	Function	See page
1 Data display	View only	Shows data values for selected track.	P.228
2 Location	001,...,256	Shows current playback position, by measure.	P.228
3 Track numbers	1,...,16	Highlighted track number indicates track currently selected for editing.	P.228
4 Track status	M : MUTE S : SOLO	Indicates/selects track SOLO or track MUTE.	P.228
5 Voice select	Phr, Pat	Selects which voice to use: either the phrase setting voice, or else the voice selected at this screen.	P.229
6 Voice category	[icons]	Selects the voice category	P.229
7 Program number	001,...,128	Selects the voice (voice number).	P.230
8 Bank number	001,...,101	Selects the voice bank.	P.230
9 Reverb send level	000,...,127	Sets signal level to reverb-effect block.	P.230
10 Chorus send level	000,...,127	Sets signal level to chorus-effect block.	P.230
11 Variation switch (if mode=insertion)	On, Off	Selects use/nonuse of variation effect.	P.230
Variation send level (if mode=system)	000,...,127	Sets signal level to variation-effect block.	
12 Pan	Random, Left=63,...,Center,...,Right=63	Sets sound positioning for stereo playback.	P.230
13 Volume	000,...,127	Sets sound volume.	P.231

📖 • You use the Mixer page to set various parameters (such as voice, effects, pan, and volume) for each of the pattern tracks.

🎛 1. At the PATCH screen, press ⬚F2⬚ (Voice).
▼ The Pattern Voice Setup page appears.

2. If necessary, press ⬚F1⬚ (Mixer) to select the Mixer page.

3. Press ⬚TRACK UP⬚ / ⬚TRACK DOWN⬚ or cursor keys as necessary to select the track (part) that you want to work on.

4. Move the cursor to the appropriate parameters, and set the values using the data dial, ⬚⁻¹ NO⬚ / ⬚⁺¹ YES⬚, or the numeric keypad.

5. When you have finished, press ⬚EXIT⬚ to return to the PATCH screen.

📝 • The playback keys (▶ , ■ , ◄ , ◄◄ / ►►) continue to function while you are adjusting the settings, so that you can monitor the results of your changes as you make them.
• *Adjustment shortcut 1*: To adjust the cursor-selected parameter by an equal amount for all parts, hold down ⬚SHIFT⬚ while rotating the data dial or pressing ⬚⁻¹ NO⬚ or ⬚⁺¹ YES⬚.
• *Adjustment Shortcut 2*: To set the cursor-selected parameter to the same value on all parts, hold down ⬚SHIFT⬚ and enter the value at the numeric keypad.

1. Data display

📖 • The upper line of this area identifies the voice for the currently selected track (by voice category, program number, bank number, and voice name).
• The second line of the area shows the current numerical value of the cursor-selected parameter.

2. Location

📖 • The location area shows the pattern's current playback location.
• You can jump to a different location during playback by changing this value: Press ⬚⬚ [D1] to move the cursor into this area, then select the new location using the data dial, ⬚⁻¹ NO⬚ / ⬚⁺¹ YES⬚, or the numeric keypad.

3. Track number

📖 • The highlighted track number, and the track number at the top right of the screen, indicate the pattern track currently selected for editing.

⬚0101 1101⬚ 1,...,16

4. Track status

📖 • You can choose to mute out one or more tracks, or to set one or more tracks for SOLO play. An M mark appears to indicate that a track is muted; an S mark indicates that it is set to SOLO.
• If you set one or more tracks to SOLO, the QY700 automatically switches off playback from all other tracks. (The track-number borders change appearance to indicate the tracks that are temporarily switched off.)
• During playback, the track-status area operates as a velocity meter, indicating the playback level of each track in real time.

1. Select a non-empty track using `TRACK UP` / `TRACK DOWN` or the left or right cursor key.

2. *To mute the track* : Press `MUTE` key once, so that an M̄ appears.
To release a mute : Press `MUTE` once again.

3. *To set the track to SOLO* : Press `SOLO`, so that an S̄ appears.
To deselect SOLO : Press `SOLO` once again.
• You can easily use this feature to listen to your tracks one by one. Begin by playing one of the tracks solo, then move the cursor to select the next track, then press `SOLO` again. Note that each time you press `SOLO`, any previous SOLO selection is automatically canceled.

4. You can also use the solo feature to select multiple tracks for "solo" play, so that only the selected tracks are produced (with all other tracks silent). Begin by setting one of the tracks to SOLO as described above. Then move the cursor to another track and then `SHIFT` + `SOLO`.
• *To cancel all of these solo selections at once* : Move the cursor to any one of the tracks, and press `SOLO`.
To switch off only one of the solo selections : Move to the corresponding track, and press `SHIFT` + `SOLO`.

5. Voice select

• This parameter determines whether each phrase on the track uses its own voice, or whether all phrases on the track use the voice selected at this Mixer page.
• If you set the value to Phr (Phrase), then each phrase is produced in its own voice, and the mixer's voice settings (voice category, program-number, and bank-number settings) are disabled – and are blanked out on the screen.
• If you set the value to Pat (Pattern), then all phrases on the track are produced using voice selected by the mixer's voice-category, program-number, and bank-number settings (see below).

Phr, Pat

6. Voice category

• This value selects the general voice category, as given by the bank-select MSB (the most significant byte of the two-byte bank value). Available choices are as follows.
• The ▥ icon selects the "normal voice" category (MSB 000).
• The 🐾 icon selects the "SFX voice" category (MSB 064). (Note that SFX is an acronym for "sound effects".) Each voice in this category produces a single effect-type sound over the full range of the keyboard, with different keys producing the sound in different pitches (as with a normal voice).
• The 🐾 icon selects the "SFX kit" category (MSB 126). Each voice in this category provides a full range of effect-type sounds, with a different sound assigned to each key of the keyboard (as with a drum voice).
• The 📊 icon selects the "drum voice" category. Each voice in this category consists of a "drum kit" of percussion sounds. This gives you access to multiple drum kits — so that you can assign a different kit to each of your drum tracks.
• The 📊 icon selects the special "drum setup-3" category. This is a special category that allows you to implement note-by-note editing for any one of your drum kits. (You edit the sound using the Drum-Setup Edit screen; see page 235.) The category consists of a single voice only (as selected and edited by you); all tracks set to this category will therefore produce the same voice.

▥	Normal Voice
🐾	SFX Voice
🐾	SFX Kit
📊	Drum Voice
📊	Drum setup-3
Off	(No selection)

5

7. Program number

- This number selects the voice within the category. (Note that the voice selection is determined by all three values: category, program number, and bank number.)
- To change this value, you must move the cursor to the PROGRAM line. Notice that the PROGRAM line displays the selections in icon form; you must look up at the data display line (at the top of the screen) to view the actual program number and voice name.
- Available selections vary according to the voice category.
- During playback, the program setting changes in accordance with program change messages recorded on the track.

001,...,128

- For general information about voice selection, refer to Chapter 1. (→ p.43)
- For a full listing of voice names and numbers, refer to the *QY700 Reference Listings*.

8. Bank Number

- This is the third and last parameter used in selecting the voice. This parameter gives the bank LSB for the voice (the least significant byte of the bank-select argument).
- Remember that the voice selection is determined by the combination of the three values: the category (bank MSB), the program number, and the bank number (bank LSB).
- The bank number is meaningful only with voices in the normal category (🎹). For all other categories, the number is fixed at 0.

000,...,101 (but many values unavailable)

- For general information about bank selection, refer to Chapter 1. (→ p.44)
- For a full bank listing, refer to the *QY700 Reference Listings*.

9. Reverb send level

- This value sets the level of the signal sent to the reverb block.
- Use this value in conjunction with the PATTERN EFFECTS "reverb return" setting. (→ p.241, 242)

000,...,127

10. Chorus send level

- This value sets the level of the signal sent to the chorus block.
- Use this value in conjunction with the PATTERN EFFECTS "chorus return" setting (→ p.241, 242).

000,...,127

11. Variation switch/variation send level

- The type of setting you can make here depends on whether the variation mode is set to "insertion" or "system."
- If the mode is "insertion," then this setting is an ON/OFF switch. The switch determines which one (if any) of the parts receives the variation effect. Note that you can set the switch ON for one part (track) only. (When you set the value to ON, any other ON setting automatically changes to OFF.
- If the mode is "system," then this setting sets the signal level to the variation. In this case, you can set the level separately for each track (part).
- Use this value in conjunction with the PATTERN EFFECTS "variation return" setting. (→ p.241, 243)

Variation switch (if variation mode = "insertion")
    Off, On
Variation send level (if variation mode = "system")
    000,...,127

12. Pan

- This value sets the sound positioning for stereo playback.
- The pan value changes during replay in accordance with the track's MIDI pan data.
- If the track is set for a drum voice, the pan setting that you make here is applied as an offset to the pan value set internally for each of the voice's instrument sounds.
- Left=63 sets the position all the way to the left; Right=63 sets it all the way to the right.
- If you set the pan to Random, the position changes at random each time a new note is sounded.

Random [0], Left=63 [1],...,Center [64],...,Right=63 [127]

13. Volume

- This parameter sets the volume for the part.
- During replay, the volume changes in accordance with the track's MIDI volume data.

000,...,127

Voice Edit

1. Data display
2. Location
3. Track number
4. Filter cutoff, filter resonance
5. EG attack, EG decay, EG release

PATTERN PATCH
└ F2 Voice
— F1 Mixer
— F2 Voice Edit
— F3 Drum Setup-3 Edit

	Parameter	Values	Function	See page
1	Data display	View only	Shows data values for selected track.	P.228
2	Location	001,...,256	Shows current playback position, by measure.	P.228
3	Track number	1,...,16	Indicates track currently selected for editing.	P.228
4	Filter			P.233
	Cutoff	-64,...,+00,...,+63	Sets part's filter cutoff frequency.	
	Resonance	-64,...,+00,...,+63	Sets part's filter resonance.	
5	EG			P.234
	Attack	-64,...,+00,...,+63	Sets time from note strike to peak volume.	
	Decay	-64,...,+00,...,+63	Sets level-drop time: from peak volume to sustain level.	
	Release	-64,...,+00,...,+63	Sets time that sound continues after note is released.	

📖 • You use this page to edit the sound characteristics of the voice(s) played on the selected track. You can make separate edit settings for each track.

• Settings do not apply to the voices themselves, but only to the track. If the track's voice changes, the settings operate on the new voice. If you use the same voice on different tracks with different edit settings, the sound characteristics may be quite different.

• These settings are applied as offsets to the voice's original, internal settings.

🎧 1. At the PATCH screen, press [F2] (Voice).
▼ The Pattern Voice Setup page appears.

2. If necessary, press [F2] (VoicEdit) to select the Voice Edit page.

3. Press [TRACK UP] or [TRACK DOWN] as necessary to select the track.

4. Move the cursor to the parameter values you want to change, and set the values using the data dial, 🔽 / 🔼 , or the numeric keypad.

5. When you have finished editing, press [EXIT] to return to the PATCH screen.

🖊 • The playback keys (▶ , ■ , ◄ , ◄◄ / ►►) continue to function while you are adjusting the settings, so that you can monitor the results of your changes as you make them.

The first three parameters listed in the table above ("data display," "location," and "track number") are the same as on the Mixer page; refer to page 228. The remaining parameters are described below.

4. Filter cutoff, and filter resonance

Filter cutoff   Filter resonance

📖 • The CUTOFF value sets the cutoff frequency for the QY700's low-pass filter. Adjusting this value changes the voice's timbre. Settings are stored separately for each track.

• Note that the filter is a low-pass type: it filters out the frequencies above (higher than) the cutoff point.

• Setting the cutoff to a high value will allow the high-frequency harmonics (overtones) to pass, producing a relatively bright sound that is true to the voice's waveform.

• Setting the cutoff to a low value will block out the higher harmonics, producing a darker and smoother sound.

• The RESONANCE value sets the resonance for the low-pass filter. As with the CUTOFF value, the RESONANCE setting affects the voice's timbre. Again, you can set the value separately for each track.

• The term *resonance* here refers to the amplification (boost) applied to the frequencies in the vicinity of the cutoff point. A boost to the overtones within this range can have a significant impact on the sound. With careful adjustment, you can get very effective resonance characteristics – such as the body resonance of a string instrument, or the distinctive slur of an analog synthesizer.

Filter cutoff   -64,...,+00,...,+63
Resonance   -64,...,+00,...,+63

5. EG attack, decay, and release times

EG attack   Decay   Release times

- These values control how volume changes over time, starting with the initial note strike and ending at the point where the sound dies out. (Note that "EG" stand for *envelope generator*.)
- The *attack time* sets the time it takes for the sound to climb to its peak volume, starting from its initial level of 0 (at the moment when the "key" is first "struck"). Low values produce a rapid volume rise, while higher values produce a more gradual climb.
- The *decay time* sets the time it takes for the volume to drop from its peak level to its "sustain" level. Lower values produce crisper, clearer sounds.
- The *release time* sets the time it takes for the volume to fall to 0 following the "physical" release of the note. The lower the value, the faster the sound will go off.

Release time

Attack time   Decay time

EG attack time   -64,...,+00,...,+63
EG decay time   -64,...,+00,...,+63
EG release time   -64,...,+00,...,+63

Drum-Setup Edit

Parameter	Values	Function	See page
1 Data display	View only	Shows data values for selected track.	P.236
2 Location	001,...,*pattern length*	Shows current playback position, by measure.	P.236
3 Note	C#-1,...,C5	Selects note (instrument) for editing.	P.236
4 Drum kit	001 StandKit, 002 Stnd2Kit, 009 Room Kit, 017 Rock Kit, 025 ElectKit, 026 AnalgKit, 033 Jazz Kit, 041 BrushKit, 049 ClascKit, 001 SFX1 Kit, 002 SFX2 Kit	Selects voice (drum kit) for editing.	P.237
5 Reverb send level	000,...,127	Sets signal level to reverb block.	P.237
6 Chorus send level	000,...,127	Sets signal level to chorus block.	P.237
7 Variation send level	000,...,127	Sets signal level to variation-effect block.	P.237
8 Pan	Random, Left=63,...,Center,...,Right=63	Sets instrument positioning for stereo playback.	P.237
9 Level	000,...,127	Sets sound volume for instrument.	P.237
10 Pitch fine-tuning	-64,...,+00,...,+63	Fine-tunes instrument's pitch.	P.237
11 Pitch coarse-tuning	-64,...,+00,...,+63	Coarse-tunes instrument's pitch.	P.237
12 Filter			P.238
Cutoff	-64,...,+00,...,+63	Sets filter cutoff frequency for instrument.	
Resonance	-64,...,+00,...,+63	Sets filter resonance for instrument.	
13 EG			P.238
Attack	-64,...,+00,...,+63	Sets time from note strike to peak volume.	
Decay-1	-64,...,+00,...,+63	Sets drop time from peak level to decay level.	
Decay-2	-64,...,+00,...,+63	Sets drop time from decay level to 0 level.	

- This Drum-Setup Edit feature lets you select one drum voice for note-by-note (instrument by instrument) editing. You can edit the sound characteristic of each instrument by adjusting its filter values, EG values, pitch, and so on.
- This Drum Setup Edit page is available only for tracks whose voice category has been set to "drum setup-3." (On the Voice and Mixer pages, the F3 (DrS3Edit) switch appears only while the cursor is at a track that is set to this category.)
- The "drum setup-3" category consists of one voice only – the voice you create at this Drum Setup Edit page. If two or more tracks are set to this category, all of these tracks will play the same voice. If you change the edit values at the Drum Setup Edit page, the changes will apply to all of these tracks.
- A drum voice (or "drum kit") consists of a collection of different "instruments," with each instrument assigned to a different key on the keyboard, starting at key C♯-1 and extending to C5. (This is in contrast with a "normal voice," where a single instrument applies across the entire keyboard.) For a listing of the various drum voices and their instrument arrangements, refer to the *QY700 Reference Listings*.
- When you work at the Drum Setup Edit page, you work on a single drum-voice only. If you change the drum-voice selection while you are editing, all of the edit settings return to their defaults. *Be sure that you have selected the correct drum kit before you begin your editing*.
- Note that the filter and EG settings made at this page are applied as offsets to the voice's internal filter/EG settings. The other settings that you make at this page (PITCH, CHORUS, and so on) are used as replacements for the voice's original settings.

1. At the PATCH screen, press F2 (Voice). Then press F1 (Mixer) to display the Mixer page.

2. Move the cursor to a track whose voice category is set to "drum setup-3." (If necessary, move the cursor to the VOICE CAT. line and set the category to this value.)
▼ The F3 (DrS3Edit) switch appears (on the bottom line of the screen).

3. Press F3 (DrS3Edit) to move to the Drum Setup Edit page.

4. Move the cursor to the drum-kit setting and select the drum voice you want to use.

5. Now edit each of the instruments in the kit by repeating the following steps.
   a) Press the appropriate key on the microkeyboard to select the instrument (note) that you want to edit.
   b) Move the cursor to each of the parameter values that you want to change.
   c) Enter your change using the data dial, ↓/NO / ↑/YES , or the numeric keypad.

6. When you have finished, press EXIT to return to the PATCH screen, or press one of the function buttons to move to a different screen.

- The playback keys (▶ , ■ , ◀ , ◀◀ / ▶▶) continue to function while you are adjusting the settings, so that you can monitor the results of your changes as you make them.

1. Data display

- The top line of the data-display area shows the name of the instrument currently selected for editing. This value changes each time you press a different key on the microkeyboard.
- The lower line shows the program number of the selected drum voice.

2. Location

- This location area shows the pattern's current playback location (measure).
- You can jump to a different location during playback by changing this value: Press [   ] [D1] to move the cursor into this area, then select the new location using the data dial, ↓/NO / ↑/YES , or the numeric keypad.

001,...,*pattern length*

3. Note

- This area shows the currently selected note. (You select the note by pressing the appropriate key on the microkeyboard.) Each note corresponds to a different instrument in the kit.
- The note/instrument correspondence is different for each drum voice. For complete listings of the instrument arrangements within each voice, refer to the *QY700 Reference Listings*.

C♯-1,...,C5

4. Drum kit

- This area selects the drum voice (drum kit) to be edited. Each voice consists of a kit of instruments, with each instrument assigned to a different note on the keyboard.
- As explained above, you can apply editing to one drum kit only. If you change the kit setting (either purposely or by accident), all editing parameters on this page immediately return to their defaults. Be sure to select the correct kit before making your editing changes; do not change the kit unless you wish to restart the entire editing process.

001 StandKit, 002 Stnd2Kit, 009 Room Kit,
017 Rock Kit, 025 ElectKit, 026 AnalgKit,
033 Jazz Kit, 041 BrushKit, 049 ClascKit,
001 SFX1 Kit, 002 SFX2 Kit

5. Reverb send level

- This value sets the signal level to the reverb block. Raising this value increases the amount of reverb applied to the instrument.
- Keep in mind that total reverb application depends also on the mixer's reverb send level (→ p.230) and the PATTERN EFFECTS reverb return level. (→ p.241, 242)

000,...,127

6. Chorus send level

- This value sets the signal level to the chorus block. Raising this value increases the amount of chorus effect applied to the instrument.
- Note that total chorus-effect application depends also on the mixer's chorus send level (→ p.230) and the PATTERN EFFECTS chorus return level. (→ p.241, 242)

000,...,127

7.Variation send level

- This value sets the signal level to the variation-effect block. The numerical setting is effective only if the variation mode (→ p.242) is set to "system" (see below). Provided that the mode is "system", you can use this feature to set a different variation-effect level for each instrument in the kit.
- Note that the actual effect application depends also on the EFFECT mode's variation-return setting.
- If the variation mode is "system," then the level to the variation-effect block varies according to the numerical value you set here. If the mode is "insertion," however, then a setting of 000 switches the variation-effect off, while any other value (from 001 to 127) switches the effect on. (See page 242 for information about the variation-mode setting.)

000,...,127

8. Pan

- This value sets the instrument position for stereo playback. (The position is determined relative to the left and right speakers.)
- You can get the most natural effect by setting instrument positions to match the arrangement of a true drum set.

Random, Left=63,...,Center,...,Right=63
(where Random causes the instrument's position to change at random each time it is played.)

9. Level

- This value sets the instrument's volume.

000,...,127

10. Pitch fine-tuning

- This setting fine-tunes the instrument's pitch, in 1-cent increments (where 1 cent corresponds to 1/100 semitone).

-64,...,+00,...,+63

11. Pitch coarse-tuning

- This setting coarse-tunes the instrument's pitch, in semitone increments.
- A value of 00 retains the instrument's original pitch (the pitch recorded when the instrument was sampled).
- You can use this adjustment to set up melodic toms or other kinds of pitched drum play. Note that changes to the pitch may cause changes in the instrument's sound characteristics.
- After setting the coarse pitch, you can apply fine tuning by adjusting the "pitch fine-tuning" value described above.
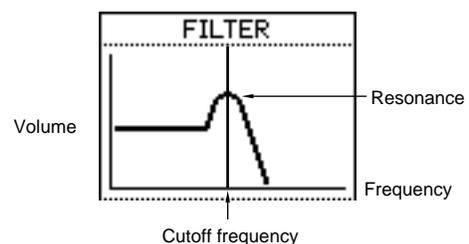
-64,...,+00,...,+63

5

12. Filter cutoff, and filter resonance

- The CUTOFF value sets the cutoff frequency for the QY700's low-pass filter. Adjustments to this value general cause the sound to become brighter or darker.
- The RESONANCE value sets the filter's resonance. You can use this adjustment to accentuate (or suppress) the overtones in the vicinity of the cutoff point. The value is particularly effective on the attack part of the sound.

Filter cutoff	-64,...,+00,...,+63
Filter resonance	-64,...,+00,...,+63

13. EG attack, EG decay-1, and EG decay-2

- These values determines how the instrument's loudness changes over time. Loudness development is controlled by the envelope generator (EG). The following graph shows the development sequence.

- ATTACK
  This value sets the time it takes for the sound to rise to its peak volume, starting from its initial level of 0 (at the moment when the "drum" is first "struck"). Note that excessively high values can produce an unnatural sound, since the peak may be delayed until after the waveform has reached its end.
- DECAY-1
  This value sets the time it takes for the sound to fall from its peak level to the internally set "decay level." (The decay level itself cannot be edited.)
- DECAY-2
  This value sets the time it takes for the sound to fall from the decay level to the 0 level. Higher values cause the sound to linger for a longer time.
- Note that some of these settings are ineffective on certain instruments.
- Although it is possible to select an SFX-kit voice for editing, the edit settings are not effective on these voices.

EG attack	-64,...,+00,...,+63
EG decay-1	-64,...,+00,...,+63
EG decay-2	-64,...,+00,...,+63

4. Pattern Effects

```
PATT  -- EFFECT CONNECTION SETUP --
        Variation Mode    = Insertion

 VARIATION                VARIATION MODE
 DELAY LCR                Insertion
 ▯▯▯▯▯▯
                    ┌ REVERB     Pan
              return│ HALL 1     ◉
                    │ CHORUS     Pan send to
              rev   │ CHORUS 1   ◉ ◉
              cho

Connect Reverb Chorus Vari. ➡PlayFx ➡Voice
```

```
PATTERN PATCH
    │
    └ F3 Pattern Effects
         ├ F1  Effect Connection Setup
         ├ F2  Reverb Edit
         ├ F3  Chorus Edit
         └ F4  Variation Edit
```

- You use the Pattern Effects submode to select and set up the effects applied to the pattern.
- The Pattern Effects submode comprises four pages. You access these pages by pressing the corresponding function keys (F1 , F2 , F3 , F4). Note that you can exit to a different submode by pressing F5 or F6 .
- F1 (Connect) displays the "Effect Connection Setup" page. You use this page to set up the effect connection configuration: the variation mode, the effect type, the return level, and so on. (→ p.241)
- F2 (Reverb) calls the "Reverb Edit" page. This page selects the reverb type and sets the various reverb parameters. (→ p.244)
- F3 (Chorus) calls the "Chorus Edit" page. This page selects the chorus-effect type and sets the various chorus parameters. (→ p.244)
- F4 (Vari.) calls the "Variation Edit" page. This page selects and sets up the variation effect. (→ p.244)
- F5 (→ PlayFx) switches you into Play Effects submode, where you can set up the playback effects applied to each style. (→ p.212)
- F6 (→ Voice) switches you into Pattern Voice submode, where you can set up the voicing for each style. (→ p.225)

- The *variation mode* setting (accessible from the Effect Connection Setup screen) determines how the QY700 handles effects processing. The illustration on the next page shows the two possibilities. For more information, refer to Chapter 1. (→ p.48)
- The playback keys (▶ , ■ , ◄◄ , ◄◄ / ▶▶) continue to function while you are adjusting the settings, so that you can monitor the results of your changes as you make them.

5

Where variation mode = Insertion:

Bold line indicates stereo transmission.

Variation is effective on one part only

variation part

Variation is effective on one part only

part 1
variation on/off
VAR
volume
expression
PAN
dry
rev send
cho send

part 2
variation on/off
VAR
volume
expression
PAN
dry
rev send
cho send

part 3
variation on/off
VAR
volume
expression
PAN
dry
rev send
cho send

part 32
variation on/off
VAR
volume
expression
PAN
dry
rev send
cho send

REVERB
reverb pan
PAN
reverb return

send chorus to reverb

CHORUS
PAN
chorus pan
chorus return

OUTPUT

DRY LINE

Easy to set up, but less flexible than *system* type.

Where variation mode = System:

Bold line indicates stereo transmission.

part 1
volume
expression
PAN
dry level
rev send
cho send
var send

part 2
volume
expression
PAN
dry level
rev send
cho send
var send

part 3
volume
expression
PAN
dry level
rev send
cho send
var send

part 32
volume
expression
PAN
dry level
rev send
cho send
var send

REVERB
PAN
reverb pan
reverb return

send chorus to reverb

CHORUS
PAN
chorus pan
chorus return

send variation to chorus

send variation to reverb

VARIATION
PAN
variation pan
variation return

OUTPUT

DRY LINE

Offers much greater control, but more difficult to set up.

Connection

4. Reverb return

1. Display data

10. Variation type

3. Reverb type

5. Reverb pan

7. Chorus return | 6. Chorus type | 9. Chorus-to-reverb level

8. Chorus pan

PATTERN PATCH
F3 Pattern Effects
F1 Effect Connection Setup
F2 Reverb Edit
F3 Chorus Edit
F4 Variation Edit

14. Variation-to-reverb level

11. Variation return | 13. Variation-to-chorus level

12. Variation pan

Parameter	Values	Function	See page
1 Data display	View only	Shows name and value of cursor-selected parameter.	P.242
2 Variation mode	Insertion, System	Selects handling of variation effect.	P.242
3 Reverb type	Any of 11 types.	Selects the reverb-effect type.	P.242
4 Reverb return	000,...,127	Sets return level from reverb block.	P.242
5 Reverb pan	Left=63,...,Center,...,Right=63	Sets stereo positioning of signal from reverb block.	P.242
6 Chorus type	Any of 11 types.	Selects the chorus-effect type.	P.242
7 Chorus return	000,...,127	Sets return level from chorus block.	P.242
8 Chorus pan	Left=63,...,Center,...,Right=63	Sets stereo positioning of signal from chorus block.	P.242
9 Chorus-to-reverb	000,...,127	Sets level on bus from chorus block to reverb block.	P.243
10 Variation type	Any of 43 types.	Selects the variation effect type.	P.243
11 Variation return	000,...,127	Sets return level from variation-effect block.	P.243
12 Variation pan	Left=63,...,Center,...,Right=63	Sets stereo positioning of signal from variation-effect block.	P.243
13 Variation-to-chorus	000,...,127	Sets level on bus from variation-effect block to chorus block.	P.243
14 Variation-to-reverb	000,...,127	Sets level on bus from variation-effect block to reverb block.	P.243

• The Effect Connection Setup page selects the variation mode, and the pan and transmission levels for each of the three effects (variation, chorus, and reverb). You can also use it to set the effect types themselves, although these settings are also accessible from the corresponding edit pages (→ p.244).

1. At the PATCH screen, press ⎡ F3 ⎤ (Effect).
▼ The QY700 enters the Pattern Effects submode.

2. If necessary, press ⎡ F1 ⎤ (Connect) to move to the Effect Connection Setup screen.

3. Move the cursor to the parameters that you need to set, and change the values using the data dial, 🔾 / 🔾, or the numeric keypad.

4. When you are ready to return to the PATCH screen, press ⎡ EXIT ⎤ .

• The playback keys (▶ , ■ , ◀ , ◀◀ / ▶▶) continue to function while you are adjusting the settings, so that you can monitor the results of your changes as you make them.

1. Data display

• The data-display area shows the name and value of the currently selected parameter.

2. Variation mode

• This setting determines whether the variation effect is handled as an *insertion* effect or as a *system* effect. (See the illustrations on page 240.)
• If you set this value to Insertion, then you can apply the variation effect to no more than a single part. In this case, you can also use an assignable controller to control one of the parameters for the effect in real time.
• If you set the value to System, then the variation effect operates in the same way as the chorus and reverb effects — so that you can apply it to all parts, and set values for the send and return levels. But in this case you can not use a controller to control the effect.

Insertion, System
• Insertion: Variation effect is handled as an insertion effect.
• System: Variation effect is handled as a system effect.

3. Reverb type

• This parameter selects the reverb effect type.

NO EFFECT, HALL 1, HALL 2, ROOM 1, ROOM 2, ROOM 3, STAGE 1, STAGE 2, PLATE, WHITE ROOM, TUNNEL, BASEMENT

4. Reverb return

• This parameter sets the signal level returned from the reverb block. You use this setting to adjust the reverb level for all parts at the same time.

000,...,127

5. Reverb pan

• This parameter sets the stereo positioning of the signal from the reverb block.

Left=63,...,Center,...,Right=63

6. Chorus Type

• This parameter selects the chorus effect type.

NO EFFECT, CHORUS 1, CHORUS 2, CHORUS 3, CHORUS 4, CELESTE 1, CELESTE 2, CELESTE 3, CELESTE 4, FLANGER 1, FLANGER 2, FLANGER 3

7. Chorus return

• This parameter sets the signal level returned from the chorus block. You use this setting to adjust the chorus level for all parts at the same time.

000,...,127

8. Chorus pan

• This parameter sets the stereo positioning of the signal from the chorus block.

Left=63,...,Center,...,Right=63

9. Chorus-to-reverb

- The Send Chorus to Reverb parameter sets the signal level on the bus from the chorus block to the reverb block.

001,...,127

10. Variation Type

- This parameter selects the variation effect type.

NO EFFECT, HALL 1, HALL 2, ROOM 1, ROOM 2, ROOM3, STAGE 1, STAGE 2, PLATE, DELAY LCR, DELAY L, R, ECHO, CROSSDELAY, ER1, ER2, GATE REV, REVRS GATE, KARAOKE 1, KARAOKE 2, KARAOKE 3, THRU, CHORUS 1, CHORUS 2, CHORUS 3, CHORUS 4, CE-LESTE 1, CELESTE 2, CELESTE 3, CELESTE 4, FLANGER 1, FLANGER 2, FLANGER 3, SYMPHONIC, ROTARY SP, TREMOLO, AUTO PAN, PHASER 1, PHASER 2, DISTOR-TION, OVERDRIVE, AMP SIM, 3-BAND EQ, 2-BAND EQ, AUTO WAH

11. Variation return
(Available only if variation mode = System)

- This parameter sets the signal level returned from the vari-ation-effect block. You use this setting to adjust the varia-tion-effect level for all parts at the same time.

000,...,127

12. Variation pan
(Available only if variation mode = System)

- This parameter sets the stereo positioning the signal from the variation-effect block.

Left=63,...,Center,...,Right=63

13. Variation-to-chorus
(Available only if variation mode = System)

- The Send Variation to Chorus parameter sets the signal level on the bus from the variation-effect block to the chorus block.

000,...,127

14. Variation-to-reverb
(Available only if variation mode = System)

- The Send Variation to Reverb parameter sets the signal level on the bus from the variation-effect block to the reverb.

000,...,127

5

Reverb Edit, Chorus Edit, and Variation Edit

1. Data display
2. Effect type
3. Effect parameters

```
PATT  -- EFFECT REVERB EDIT SETUP --
            Reverb Type    = HALL 1
《i》REVERB TYPE   REVERBTIME DIFFUSION INITDELAY
HALL 1              2.1s      10       08
                  HPF CUTOFF LPF CUTOFF
HALL               90Hz     5.6kHz
Connect Reverb Chorus  Vari.  ⇥PlayFx ⇥Voice
```

PATTERN PATCH
— F3 Pattern Effects
— F1 Effect Connection Setup
— F2 Reverb Edit
— F3 Chorus Edit
— F4 Variation Edit

1. Data display
2. Effect type
3. Effect parameters

```
PATT  -- EFFECT CHORUS EDIT SETUP --
            Chorus Type    = CHORUS 1
ĨĨĨ CHORUS TYPE  LFO FREQ LFO PM DPT
CHORUS 1           0.25Hz   054
                  FB LEVEL DELAY OFST
CHORUS             +13      106
Connect Reverb Chorus  Vari.  ⇥PlayFx ⇥Voice
```

1. Data display
2. Effect type
3. Effect parameters
6. AC1 control depth
4. Dry/wet balance
5. Controllable-parameter indicator

```
PATT  -- EFFECT VARIATION EDIT SETUP --
            Variation Type = DELAY LCR
《i》VARIATION TYPE  LCH DELAY RCH DELAY CCH DELAY
DELAY LCR          333.3ms 166.7ms 500.0ms
                   FB DELAY FB LEVEL
                   500.0ms  +10
DELAY LCR          DRY/WET AC1CONTROL
                   D32>W    +00
Connect Reverb Chorus  Vari.  ⇥PlayFx ⇥Voice
```

Parameter	Values	Function	See page
1 Data display	View only	Shows name and value of cursor-selected parameter.	P.245
2 Effect type		Selects the effect type.	P.245
3 Effect parameters		Various parameter values for the selected effect.	P.245
4 Dry/wet balance (On Variation Edit page, if mode = Insertion)	D63>W,...,D=W,...,D<W63	Sets balance between wet sound (sound passed through varia-tion effect) and dry (non-effected) sound. Setting appears only if variation mode is set to Insertion.	P.245
5 Controllable parameter (On Variation Edit page, if mode = Insertion)	View only	Appears beside parameter that can be controlled with AC1 (As-signable Controller 1).	P.245
6 AC1 control depth (On Variation Edit page, if mode = Insertion)	-64,...,+0,...,+63	Sets AC1 control depth for the controllable parameter.	P.246

- These three pages set the various parameters for the reverb effect, chorus effect, and variation effect.

1. At the PATCH screen, press F3 (Effect).
▼ The QY700 enters the Pattern Effects submode.

2. Press F2 (Reverb), F3 (Chorus), or F4 (Vari.) to move to the editing page for the effect that you need to edit.

3. Move the cursor to the parameters you need to set, and enter the values using the data dial, NO / YES , or the numeric keypad.

4. When you are ready to return to the main PATCH screen, press EXIT .

- The playback keys (▶ , ■ , ◄◄ , ◄◄ / ►►) continue to function while you are adjusting the settings, so that you can monitor the results of your changes as you make them.
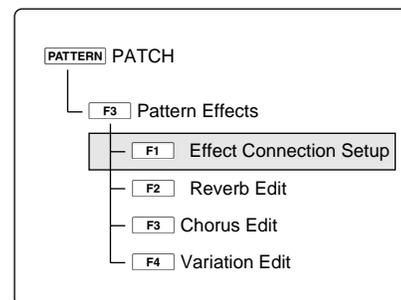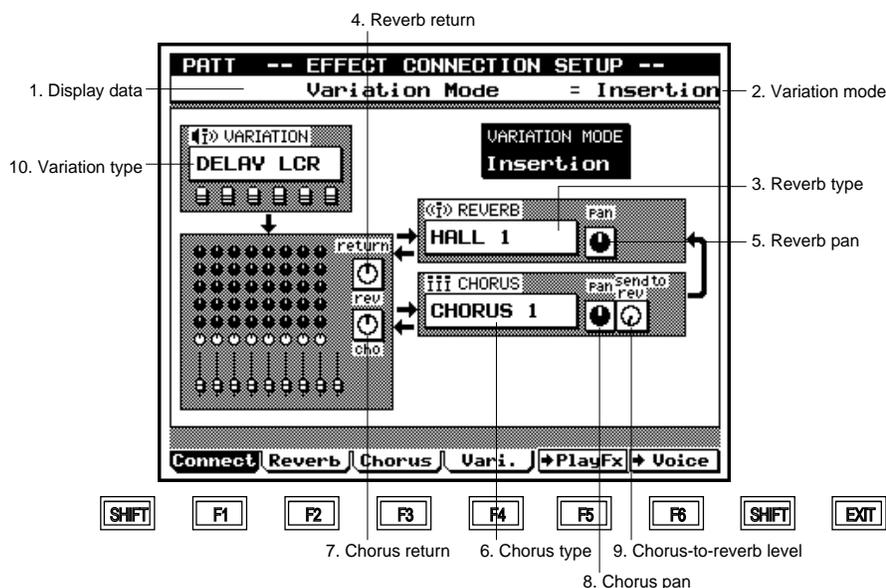
1. Data display

- The data-display area shows the name and current value of the parameter selected by the cursor.

2. Effect type

- This parameter selects the effect type. Note that you can also view or change these values at the Effect Connection Setup screen. (→ p.241)

- If the variation mode is Insertion and the variation effect type is NO EFFECT, the QY700 will not produce any sound at all for the part whose variation switch is turned ON.

3. Effect parameters

- These values adjust the operation of the selected effect type. Available parameters vary according to the type.

4. Dry/wet balance
(Only on Variation Edit page; only if mode is Insertion)

- This parameter sets the balance between the wet sound (the sound that receives the variation effect) and the dry sound (the sound that does not).
- This parameter appears only if the variation mode is set to Insertion. The dry/wet balance for System-mode operation is fixed at D32>W.

D63>W,...,D=W,...,D<W63

5. Controllable parameter
(Only on Variation Edit page; only if mode is Insertion)

- The 🔳 mark identifies the parameter that can be controlled in real time with AC1 (Assignable Controller 1).
- This type of control is available only if the variation mode is set to Insertion, and applies only to the part whose varia-tion switch is set on.

5

6. AC1 control depth
(Only on Variation Edit page; only if mode is Insertion)

- This parameter determines how strongly AC1 (Assignable Controller 1) affects the value of the controllable parameter.
- If you set the depth to 0, then AC1 has no effect. Higher magnitudes increase the sensitivity of the AC1 control. The sign of the setting determines the AC1 directionality: a positive sign means that upward displacement of AC1 raises the value of the controllable parameter, while a negative sign means that upward displacement reduces the value.
- Note that an *assignable controller* is a controller (such as a control wheel) whose function can be set by the user. The QY700 provides two assignable controllers, AC1 and AC2. (You select the function by assigning the appropriate "control number" to the controller. You make these assignments by issuing System Exclusive messages.)
- Note that this setting appears only if the variation mode is set to Insertion.

-64,...,+0,...,+63

5. Phrase Recording

```
PATT   -- REC REPLACE --        TR=01
[○][□][▷] US--001:init phrase  LENGTH  ▽ □□ ▷
User Phrase                     004 M  of 004
TYPE   RETRIGGER LOW LIMIT HIGH LIMIT HIGH KEY  ♩120.0
Chrd1   ON     C -2    G 8    G        ᴇ 4/4
CAT      PGM 001 BANK 000  SOURCE              Rec
   GrandPno               CHORD    CM7            1Ms
TR        M001      M002     M003     M004
[1]    US--001
[2]
[3]
[4]
[5]
[6]
[7]
[8]
                       REPLACE OVERDUB  STEP
```

PATTERN PATCH
— • Recording Standby
  — F4 Replace
  — F5 Overdub
  — F6 Step Recording

- Although the QY700 comes equipped with many preset phrases, it also allows you to record your own user phrases. You use the Phrase Recording submode to make these recordings.
- The QY700 offers two general recording methods: *realtime recording* and *step recording*.
- With realtime recording, the QY700 operates as a tape recorder, recording the performance data as it is played. This allows you to catch all the nuances of an actual performance.
- With step recording, you input the phrase one note at a time, almost as if you were writing the notes down on a music sheet. This allows you to create complex phrases without having to play them in real time at the keyboard.

1. Go to the PATCH screen (→ p.200) and select the phrase number for the user phrase that you want to record. (The "phrase number" consists of the prefix US followed by a sequential number).

2. Go to the Recording Standby screen, and set the necessary recording parameters. (→ p.248)

3. Record the phrase, using either realtime recording (→ p.252) or step recording. (→ p.253)

4. Edit or otherwise modify the results using Phrase Edit (→ p.254) and pattern jobs. (→ p.256)

5. When you are satisfied with the results, save the recorded phrase to disk. (→ p.307)

5

Recording Standby

5. Low and high limits

1. Phrase number;
phrase name

2. Phrase length

4. Retrigger

3. Phrase type

6. High key

8. Source chord

1. Phrase number

7. Voice category, program number,
bank number, and voice name

PATTERN PATCH

- Recording Standby
  - F4 Replace
  - F5 Overdub
  - F6 Step Recording

9. Recording mode

	Parameter	Values	Function	See page
1	Phrase number, name	View only	Identifies the currently selected phrase.	P.249
2	Length	001,...,256	Sets phrase length, in measures. (Phrase length cannot exceed the pattern length.)	P.249
3	Phrase type	Mldy1, Mldy2, Chrd1, Chrd2, Bass, Bypas, Para	Selects phrase type. (The type setting determines how chord conversions are handled.)	P.249
4	Retrigger	OFF, ON	Selects whether phrase will modulate and continue if chord change occurs while phrase is playing.	P.249
5	Low and high limits	Low: C-2,...,G8 High: C-1,...,G8	Pitch range for chord-converted phrase playback. (Notes outside this range are shifted by octave as necessary.)	P.250
6	High key	C,...,B	Highest key for upward transposition of root.(Applies to Mldy1, Chrd1, and Bass phrase types only.)	P.250
7	Voice category Program number Bank number Voice name	[▥], [▤], [▤], [▥], [▥], [▥] 001,...,128 000,...,127	Selects the voice to be used for playing the phrase. Shows name of selected voice.	P.250
8	Source chord	Chord root and type	Phrase's original key (chord).	P.250
9	Recording mode	F4 (REPLACE), F5 (OVERDUB), F6 (STEP)	Selects the recording method.	P.251

- Before starting actual recording, you must set the relevant recording parameters at the Recording Standby screen.

1. Go to the PATCH screen (→ p.200) and select the phrase number for the user phrase that you want to record. (The "phrase number" consists of the prefix US followed by a sequential number.)

2. Press ⬤ to move to the Recording Standby screen.

3. Set the recording parameters (phrase length, retrigger, and so on) and select the recording mode (F4 (RE-PLACE), F5 (OVERDUB), or F6 (STEP)).

4. Press ▶ to begin recording.
▼ The PLAY indicator comes on (either solid or blinking).

5. When you are finished, press ⬛ to stop recording and return to the PATCH screen.

6. Edit or otherwise manipulate the recording results using Phrase Edit (→ p.254) and pattern jobs (→ p.256).

7. When you are satisfied with the results, store the recorded phrase to disk. (→ p.307)

- If you press ⬤ while in Recording Standby, the QY700 returns to the PATCH screen.

1. Phrase number; phrase name

- The phrase is identified by its phrase number. You select the number at the PATCH screen. (→ p.200)
- You can use the Phrase Name pattern job to assign the phrase an arbitrary phrase name. (→ p.279)

2. Length

- This parameter sets the length (in measures) for the phrase.
- The maximum phrase length is equivalent to the length of the currently selected pattern (the "of" value appearing in the upper right box area on the display.)

001,...,*pattern length*
(where maximum pattern length = 256)

3. Phrase type

- The TYPE value selects the kind of chord conversion used when modulating (transposing) the phrase. Different type settings result in different conversion results, as follows.
- The "Melody" types (Mdly1, Mldy2) generate relatively slight, subtle changes in the playback sound.
- The "Chord" types (Chrd1, Chrd2) generate relatively large changes in the playback sound.
- For Mldy1 and Chrd1 transpositions, the QY700 first converts the original phrase line according to the chord type, and then transposes according to the chord root. For Mldy2 and Chrd2 transpositions, the QY700 remains closer to the original sound, so that chord changes are somewhat smoother.
- The Bass type is designed for bass phrases. For these phrases, the QY700 always produces the root note at the start of any chord change. In addition, transposition is always according to the target chord's on-bass or original-bass setting (if any).
- Use the Bypas (Bypass) setting if you do not want the phrase to be converted at all. In this case, the phrase bypasses the conversion process and plays out in its original sound.
- The Para (parallel) type transposes by root only; the chord type is ignored. This is useful for phrases that contain implicit internal chord changes, since type conversion in this case may produce unpredictable or clashing results.

Mldy1, Mldy2, Chrd1, Chrd2, Bass, Bypas, Para

5

4. Retrigger

- This setting determines how the phrase responds to chord changes that occur while the phrase is already playing. If the setting is OFF, the phrase switches off when the chord change occurs. If ON, the QY700 transposes the phrase (in accordance with the chord-conversion parameters) and continues the playback.

OFF, ON

5. Low and high limits

- These values select the highest and lowest pitches that can be used for replay of a transposed phrase. If transposition produces a note that is outside the limit, the QY700 shifts the note (by octave) to bring it into range.

Low limit   C-2,...,G8
High limit   C-1,...,G8

6. High key

- This setting determines the highest key that the chord root can take following transposition. The setting applies only to phrases of the following types: Mldy1, Chrd1, and Bass.
- To transpose any of these phrase types, the QY700 normally shifts the root upwards by the number of semitones separating the source chord's root and the new chord's root. Because too large a shift upward can cause the phrase to lose its original character, however, the QY700 will automatically shift downward, by one octave, any transposition that would move to a root higher than the value set here.

C,...,B

7. Voice category, program number, bank number, and voice name

- The first three values (voice category, program number, and bank number) select the voice used to play the phrase. The screen also displays the selected voice's name.
- The voice category selects the general voice class, as given by the Bank Select MSB (the most significant byte of the Bank Select value).
- The *program number* selects the voice within the category.
- The bank number(or Bank Select LSB) can be used to select one of the alternative voices assigned to the program number. This value is effective only with respect to voices in the "normal" category; the value is fixed at 000 for all other categories.

Voice category
- Normal voice (Bank Select MSB = 000).
- SFX voice (Bank Select MSB = 064). This type of SFX voice (sound-effects voice) has the same character over the full range of the keyboard, but different keys produce the sound in different pitches (as with a normal voice).
- SFX kit (Bank Select MSB = 126). This type of voice exists as a collection of different sounds, so that each key produces a different kind of sound effect.
- Drum voice (Bank Select MSB = 127). As with the SFX kit, each key produces a different type of drum sound. Note that these sounds cannot be changed directly by editing.

Program number
     001,...,128

Bank number
     000,...,127

- For more information above voice and bank settings, refer to Chapter 1. (→ p.43)
- For a listing of voice names, voice numbers, and bank settings, refer to the *QY700 Reference Listings*.

8. Source chord

- This value sets the phrase's original key (the key and chord value under which the phrase was originally played). The QY700 takes this value into account when executing chord conversions on the phrase.
- You can set this value only when recording a new user phrase. Be sure to set the value correctly; an incorrect setting may make it impossible for the QY700 to transpose the phrase.

Chord root
     C, C♯, D, E♭, E, F, F♯, G, A♭, A, B♭, B
     (Where C♯ is equivalent to D♭, etc.)
Chord type
     M, M7, 6, 7, m, m7, m6, mM7, m7(♭5), dim, aug, sus4, add9, M7(9), 6(9), 7(9), madd9, m7(9), m7(11), 7(♭5), 7(♯5), 7(♭9), 7(♯9), 7(13), 7(♭13), 7sus4, 7(♯11), --- (THRU)

- For information about setting up chords, refer to Chapter 1. (→ p.61)

9. Recording mode

- • The QY700 offers three different phrase recording modes: two *realtime* modes and one *step* mode.
- • The F4 (REPLACE) mode records performance data in real time, overwriting any data already present in the destination user phrase. The new data replaces the previous data. This is the mode to use when you wish to redo a phrase that you are not satisfied with or that you no longer need. (See next page.)
- • The F5 (OVERDUB) mode – the second realtime mode – records onto the selected phrase while leaving its previous data in place. The phrase continues to loop while recording is in progress, so that you can add a new layer of performance data with each round, while listening to the results as they accumulate. This is the method to use when you need to create a complex, multilayer phrase. (See next page.)
- • The F6 (STEP) mode lets you compose your performance by "writing" it down one event at a time. This is a non-realtime, step recording method – similar to the process of writing musical notations onto music paper. ($\rightarrow$ p.253) This method supports "overdubbing," since events are not removed unless you explicitly erase them.

F4 (REPLACE)
F5 (OVERDUB)
F6 (STEP)

- • Press F4 (REPLACE), F5 (OVERDUB), or F6 (STEP) to select the recording mode.

Realtime Recording

```
PATT  -- REC REPLACE --           TR=01
◐⬛▶ US--001:init phrase   LENGTH  ▽▢▢│ ▶
User Phrase                 004M  of 004
 TYPE  RETRIGGER LOW LIMIT HIGH LIMIT HIGH KEY  ♩120.0▶
Chrd1    ON      C -2      G 8      G   ♭ 4/4
CAT▤ PGM001 BANK000  SOURCE            ▨♩Rec▶
    GrandPno          CHORD  CM7       ✕ 1Ms
TR │⬤│▢║  M001     M002     M003     M004
❶  ◷ ◷  US--001
❷  ◷ ◷
❸  ◷ ◷
❹  ◷ ◷
❺  ◷ ◷
❻  ◷ ◷
❼  ◷ ◷
❽  ◷ ◷
                    REPLACE OVERDUB  STEP
```

```
PATTERN PATCH
  │
  └─ ⬛  Recording Standby
        │
        └─ F4   Replace
        │
        └─ F5   Overdub
```

📖 • You use this recording method when you want to input your phrase in real time. You can input the phrase directly either at the microkeybaord, or else through a remote MIDI keyboard or other such MIDI device. Or you can record (copy) a phrase from a computer or from another sequencer.

• The QY700 offers two realtime phrase recording methods: F4 (REPLACE) and F5 (OVERDUB).

• You use the F4 (REPLACE) method when you want to create a entirely new phrase or overwrite an existing phrase. This method erases any data already existing in the selected phrase.

• You use F5 (OVERDUB) when you want to overdub new data onto the phrase's existing data. This allows you to build up a complex, multilayered phrases.

🔘 1. Starting from the PATCH screen, press ⬛ .

• The QY700 displays the Recording Standby page. The RECORDING indicator comes on.

2. Press F4 (REPLACE) or F5 (OVERDUB) to select the recording method.

3. Press ▶ to begin recording.

▼ The PLAY indicator begins flashing. The QY700 counts out the specified number of lead-in measures (as set by the COUNT parameter; see page 78), and then starts recording.

• The QY700 loops over the recording area until you press ⬛ to stop, so that you can record multiple layers in a single session. The QY700 starts recording at measure 1, continues to the final measure of the phrase, then jumps back to measure 1 and begins another round.

If you input an incorrect note, you can remove it on a subsequent round by holding down SHIFT together with the same note key – hold both of these keys down as the recording passes the point where the original (bad) note was entered.

4. When you have finished recording, press ⬛ to return to the PATCH screen.

📝 • You can use pattern job 00 (UNDO/REDO) to cancel a recording that you have just made. This allows you to recover data that you have inadvertently over-recorded. (→ p.259)

• Remember to set other appropriate parameters (such as tempo, click beat, click mode, and count; see page 78) before beginning the recording.

• If you input your recording using the microkeyboard, the velocity for each note is set to 88(*f*). If you want true recording of velocity values, enter the data from a remote MIDI keyboard.

Step Recording

1. Beat graph   3. Location

2. Location pointer

4. Step time
5. Velocity
6. Gate time
7. Piano roll
8. Back delete   9. Delete

PATTERN PATCH
└ ● Recording Standby
  └ F6 Step Recording

• You use this recording mode to create a recording one note at a time, setting appropriate values for each note's length, velocity, and so on.

1. Starting from the PATCH screen, press ● .
• The QY700 displays the Recording Standby page. The RECORDING indicator comes on.

2. Press F6 (STEP) to select step recording.

3. Press ▶ .
▼ The PLAY indicator comes on. The screen displays the step recording page.

4. Move the location pointer to the location where you want to enter a note, using ⬆NO / ⬇YES , the data dial, or the shuttle dial. (To jump to a distant measure: Press ⬜ [D1] to move the cursor to the location-setting area, then enter the measure number with the numeric keypad.)

5. Set the step time, velocity, and gate time. To set each value, press the corresponding key (⬜ [D2] for step time, ⬜ [D3] for velocity, ⬜ [D4] for gate time) to move the cursor to the entry area, then enter the value using the data dial, ⬆NO / ⬇YES , or numeric keypad.

6. Now enter the note itself. You can select the note using either the microkeyboard or an external MIDI keyboard. If you want to enter a rest, press the MUTE (REST) key. If you want to enter a tie, press the SOLO (TIE) key.

7. If you make an incorrect entry, you can delete it as follows.
• *To delete the last note you entered*, press F5 (BkDelete). The location pointer moves back to position it had just before you entered that note.
• *To delete some other note*: Move the location pointer to the note's location and press F6 (Delete). The QY700 deletes all notes that start at that position.

8. When you have finished making your entries, press ● to terminate the session and return to the PATCH screen.

• Under step recording, note registration occurs when you release the key(s), rather than when you press them. This makes it easy to enter a block chord: you can pick out the notes one by one and then release them all at the same time.
• You may want to enter rough velocity values only (using only the *f*, *p*, and *mp* selections from the numeric keypad, for example). You can then use one of the pattern jobs (such as Crescendo or Modify Velocity) to adjust the values later. (See explanations starting on page 256.)
• Step recording supports entry of note data only. You can add other types of data using the Phrase Edit Insert function.

Step recording of phrases (PATTERN mode) is essentially the same as step recording of songs (SONG mode). In particular, the recording procedures and screen parameters are the same. For more detailed operational information, refer to the explanation of song recording that begins on page 106.

6. Phrase Editing

3. Measure: Beat: Clock count

1. View Filter mark

```
PATT  -- EDIT --        TR=Pattern01
● □ ▷ XG M              ━━ ▽ ▯▯ ▏        ── 2. Location
            Note   GateTime      Velocity
001:1:000 ▥B 0   00:005 [♪]   100 [ ff]
001:1:380 ▥B 0   00:005 [♪]   100 [ ff]
001:2:140 ▥C 1   00:005 [♪]   120 [fff]
001:3:240 ▥C 1   00:005 [♪]   120 [fff]
001:3:380 ▥B 0   00:005 [♪]   100 [ ff]
001:4:240 ▥B 0   00:005 [♪]   100 [ ff]
002:1:000 ▥B 0   00:005 [♪]   100 [ ff]
002:1:380 ▥B 0   00:005 [♪]   100 [ ff]
002:3:240 ▥C 1   00:005 [♪]   120 [fff]
002:3:380 ▥B 0   00:005 [♪]   100 [ ff]
002:4:140 ▥B 0   00:005 [♪]   100 [ ff]
--------- End ---------------------
Graphic XGView        ViwFiltr Delete Insert
```

4. Event name

5. Event parameters

SHIFT F1 F2 F3 F4 F5 F6 SHIFT EXIT

PATTERN PATCH

EDIT Phrase Edit
  F1 Graphic
  F1 Event list
    F2 XG View
    F4 View Filter
    F5 Delete
    F6 Insert

Parameter	Values	Function	See page
1 View Filter mark	View only	Mark appears if View Filter is ON.	P.132
2 Location	001,...,999	Shows/sets cursor location (by measure).	P.130
3 Measure	001,..., 999	Shows/changes time of indicated note event.	P.131
Beat	1,...,8		
Clock count	000,...,239		
4 Event name	Note, Bend, PC, CC, ChAT, KeyAT, Excl, Tmp	Shows/sets MIDI event.	P.131
5 Event parameters	Varies by event type	Event parameter values.	P.131

- You use the PHRASE EDIT submode to edit the contents of a user phrase. You can adjust or delete any of the MIDI events that constitute the phrase, and you can add new events.
- The QY700 offers two different editing screens: an *event list* and a *graphic display*. You can toggle between these screens by pressing F1 .
- The event list presents a listing of the track's MIDI events, in order of their occurrence. Each entry shows an event's location in time, its name, and its numerical arguments. You are free to adjust the location or any of the argument values. You can delete any of the events, or insert new ones.
- The graphic display consists of a piano-roll section and a point-graph section. You can edit the event values on this screen, but you cannot insert or delete events. ($\rightarrow$ p.135)

1. Go to the PATCH screen and select the user phrase that you want to edit.

2. Press EDIT to enter PHRASE EDIT submode (Event List screen).

3. Move the cursor to the event that you want to edit. You can use various methods, as follows.
- Press ⬚ [D1] to move the location entry area. Select the measure using the data dial, 🔘 / 🔘 , or the numeric keypad.
- Regardless of the cursor position, you can always move the cursor rapidly across the screen using the shuttle dial or the ◄◄ / ►► keys. If you move the cursor more slowly with the shuttle dial, the QY700 will play out note events as the cursor passes.
- You can move up or down one event at a time by pressing ▲ / ▼ . Again, the QY700 will reproduce note events when the cursor lands on them.

4. When you reach an event that you want to edit, use ◄ / ► to move the cursor along the event line to each value you want to change. Enter your changes using the data dial, 🔘 / 🔘 , or the numeric keypad. Regardless of the entry method, you must press ↵ to register the value.
▼ The new settings will blink on the screen until you press ↵ to register them. If you move the cursor before you press ↵ , the original values will remain in effect.

5. When you have finished editing, press EXIT to return to the PATCH screen.

- If you make an error during editing, you can undo all editing changes by executing the UNDO pattern job (job #00). ($\rightarrow$ p.259)
- For detailed explanation of the editing procedures, refer to the discussion of the SONG EDIT function, starting on page 129. Phrase editing is essentially identical to song editing, with the following restrictions: (*a*) the phrase is recorded onto one track only, (*b*) the phrase cannot be longer than the pattern, and (*c*) phrase editing does not offer tempo-change settings.

5

7. Pattern Jobs

```
┌─────────────────────────────────┐
│PATT  -- JOB LIST --          13 │
├─────────────────────────┬───────┤
│00 Undo/Redo             │ Event ▶│
│01 Quantize              │        │
│02 Modify Velocity       │        │
│03 Modify Gate Time      │Phrase ▶│
│04 Crescendo             │        │
│05 Transpose             │        │
│06 Shift Note            │ Track ▶│
│07 Shift Clock           │        │
│08 Chord Sort            │        │
│09 Chord Separate        │Pattern▶│
│10 Shift Event           │        │
│11 Copy Event            │        │
│12 Erase Event           │        │
│13 Extract Event         │        │
│14 Thin Out              │        │
│15 Time Stretch          │        │
│16 Copy Phrase           │        │
│17 Mix Phrase            │        │
│18 Append Phrase         │        │
│19 Split Phrase          │        │
│20 Get Phrase            │        │
│21 Put Phrase            │        │
│22 Clear Phrase          │        │
│23 Phrase Name           │        │
│24 Clear Track           │        │
│25 Copy Pattern          │        │
│26 Append Pattern        │        │
│27 Split Pattern         │        │
│28 Clear Pattern         │        │
│29 Pattern Name          │        │
│30 Style Icon            │        │
├──┬──┬──┬──┬──┬──────────┴───────┤
│00│01│02│03│04│05               │
└──┴──┴──┴──┴──┴──────────────────┘
```

```
┌──────────────────────────────┐
│ [PATTERN] PATCH              │
│   │                          │
│   └─ [JOB]  PATTERN JOB      │
│         │                    │
│         ├─00 Undo/Redo       │
│         ⋮                    │
│         └─30 Style Icon      │
└──────────────────────────────┘
```

Pattern Job	Purpose	See page
00 Undo/Redo	If UNDO: Cancel the last operation. If REDO: Cancel the last UNDO	P.259
01 Quantize	Quantize note events within selected segment of selected user phrase.	P.260
02 Modify Velocity	Change velocities in selected segment of selected user phrase.	P.261
03 Modify Gate Time	Change gate times in selected segment of selected user phrase.	P.262
04 Crescendo	Gradually increase/decrease velocity over selected segment.	P.263
05 Transpose	Transpose all notes over selected segment.	P.263
06 Shift Note	Replace all instances of specified note with specified replacement note, over designated segment.	P.264
07 Shift Clock	Shift all data (within specified segment) by specified number of clock cycles.	P.265
08 Chord Sort	Sort each chordal note event (within specified segment) by pitch.	P.265
09 Chord Separate	Break each chordal note event (within specified segment) into individual notes, separated by designated delay time.	P.266
10 Shift Event	Replace all occurrences of selected event type (within specified segment) with some other type.	P.267
11 Copy Event	Copy all events in specified segment to designated destination.	P.268
12 Erase Event	Erase all events over selected segment (and replaces with rests).	P.269
13 Extract Event	Move events of specified type from specified segment of one phrase to same segment in another.	P.269
14 Thin Out	Reduce repetitions of specified event type (within specified segment).	P.271
15 Time Stretch	Expand or compress timing over specified segment.	P.272
16 Copy Phrase	Copy phrase into specified destination.	P.272
17 Mix Phrase	Mix one phrase into another.	P.274
18 Append Phrase	Append one phrase to another.	P.275
19 Split Phrase	Split phrase into two phrases.	P.276
20 Get Phrase	Create user phrase from selected song data.	P.277
21 Put Phrase	Copy user phrase into song.	P.278
22 Clear Phrase	Delete all data from user phrase.	P.279
23 Phrase Name	Assign name to user phrase.	P.279
24 Clear Track	Delete all data from selected track, cancel voice setting, and reinitialize play effects.	P.280
25 Copy Pattern	Copy data from selected pattern track into destination pattern track.	P.281
26 Append Pattern	Append one pattern to another.	P.282
27 Split Pattern	Split pattern into two patterns.	P.283
28 Clear Pattern	Delete all data from selected pattern.	P.284
29 Pattern Name	Assign style and section names.	P.284
30 Style Icon	Assign icon to currently selected style.	P.285

5

- You use the QY700's *pattern jobs* to perform various operations on phrases and patterns.
- You select the job from the job menu using ▲ , ▼ , or the data dial. As an alternative, you can select a job by entering the job number at the numeric keypad. You can also make your selection using the function keys, as described below.
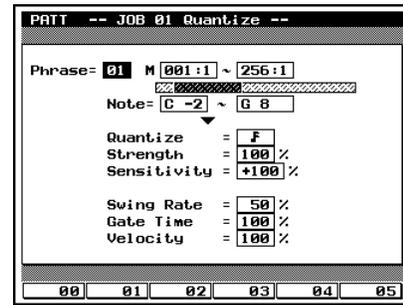- Note that the job menu is too large to fit entirely on the screen. But you can scroll through the list using ▲ , ▼ , or the data dial.
- The menu is divided into four groupings, in accordance with job type: event-related, phrase-related, track-related, and pattern-related. You can jump the cursor to the first job in any of these grouping by pressing the corresponding key on the side of the screen.
  - ⬜ [D1](Event) .... jumps to 01 Quantize.
  - ⬜ [D2](Phrase) .... jumps to 16 Copy Phrase.
  - ⬜ [D3](Track) .... jumps to 24 Clear Track.
  - ⬜ [D4](Pattern) .... jumps to 25 Copy Pattern.
- As the factory default, function keys ⬚F1⬚ to ⬚F6⬚ on the menu page automatically switch you into the job execution screens for jobs 00 to 05, respectively. But you can reassign each function key so that it accesses a job of your choice: just move the cursor to the job you want to assign, then hold down ⬚SHIFT⬚ and press the function key. Note that the function key assignments are displayed along the bottom line of the screen.

1. Go to the PATCH screen and select the pattern or phrase you want to work on.

2. Press ⬚JOB⬚ .
▼ The screen displays the job menu.

```
PATT  -- JOB LIST --          13
00 Undo/Redo              ┌─────────┐
01 Quantize               │ Event ▶ │
02 Modify Velocity        └─────────┘
03 Modify Gate Time
04 Crescendo              ┌─────────┐
05 Transpose              │ Phrase ▶│
06 Shift Note             └─────────┘
07 Shift Clock
08 Chord Sort             ┌─────────┐
09 Chord Separate         │ Track ▶ │
10 Shift Event            └─────────┘
11 Copy Event
12 Erase Event            ┌─────────┐
13 Extract Event          │Pattern ▶│
                          └─────────┘
┌──┐┌──┐┌──┐┌──┐┌──┐┌──┐
│00││01││02││03││04││05│
└──┘└──┘└──┘└──┘└──┘└──┘
```

3. Move the cursor to the job you want to execute, or else enter the job number using the numeric keypad. Then press ⏎ to open the job-execution screen.
- Note that you can use keys ⬜ [D1] to ⬜ [D4] to jump the cursor to different areas on the menu.

```
PATT  -- JOB 01 Quantize --

Phrase= 01  M 001:1 ~ 256:1
           ░░▨▨▨▨▨▨░░░░░░░░░░
         Note= C -2 ~ G 8
                  ▼
         Quantize    =  ♪
         Strength    = 100 %
         Sensitivity = +100 %

         Swing Rate  =  50 %
         Gate Time   = 100 %
         Velocity    = 100 %

┌──┐┌──┐┌──┐┌──┐┌──┐┌──┐
│00││01││02││03││04││05│
└──┘└──┘└──┘└──┘└──┘└──┘
```

4. Move the cursor to the various entry spaces on the job execution screen, and enter the required values using the data dial, 🔲NO / 🔲YES , or the numeric keypad.

- Do not press the ⏎ key until you are ready to execute the job. Be especially careful when using the numeric keypad: do not press ⏎ until you have finished inputting *all* values.

5. When you have entered all the values and are ready to execute the job, press ⏎ .
▼ The QY700 executes the job. The screen displays "Executing...," and then "Completed."

6. Press ⬚EXIT⬚ twice to return to the PATCH screen.

- If you attempt to execute a job on an empty phrase or segment, the screen returns the "No Data" error message. If you see this message, press ⬚EXIT⬚ to clear it.
- You can use job 00 (Undo/Redo) to undo the results of a job that you have just executed (see next page). This allows you to recover from an incorrect job operation. Once you have "undone" a job, you can then "redo" it. In some cases you may find it useful to successively "undo" and "redo" a job so that you can compare the pre-job and post-job versions of your data. (→ p.259.)
- If you select a job that requires you to enter a segment designation, the screen will display boxes in which you can set the start point and end point (with a ~ character between the boxes). If you want the operation to begin at Measure 5 Beat 1 and terminate at Measure 8 Beat 4, for example, your specification would look like this: 005:1 ~ 008:4.
- The number of beats per measure depends on the meter. If the meter is 4/4, for example, you can use a beat value of 1 to 4 when specifying the segment. If the meter is 8/4, then (since there are eight beats per measure) you can set the beat to any value between 1 and 8.
- Note that the beat setting is linked to the measure setting. If you continuously increment (or decrement) the beat setting, the measure setting changes accordingly.

- Do not switch off the power while a job is executing (while the "Executing..." message is on the screen), as this may cause destruction of your recorded data.

Job 00   Undo/Redo

```
┌──────────────────────────────────────┐
│ PATT   -- JOB 00 Undo/Redo --        │
│                                        │
│                                        │
│                         ┌────┐         │
│                         │PATT│         │
│    ┌────┐ Undo ┌────┐   └────┘         │
│    │♪♫♪♪│  ▄▟  │♪♫♪♪│    Edit          │
│    └────┘      └────┘                   │
│                                        │
│                                        │
│                                        │
│                                        │
│ ┌──┐ ┌──┐ ┌──┐ ┌──┐ ┌──┐ ┌──┐         │
│  00    01    02    03    04    05      │
└──────────────────────────────────────┘
```

• The UNDO job cancels the changes you made in your most recent patch session, recording session, editing session, or job, restoring the data to its previous state. This allows you to recover from accidental data loss.

• The REDO job, which becomes available only after you execute an UNDO, cancels the UNDO and restores the changes.

• The UNDO/REDO job is effective on PATTERN-mode patch sessions, and on PATTERN-mode and SONG-mode recording sessions, editing sessions, and jobs (with the exception of the SONG NAME and PHRASE NAME jobs).

• The UNDO job is effective only on the most recent data changes. If you run a recording session and then an editing session, for example, the UNDO will be available only for the editing session. (But note that if you move to a recording, editing, or job screen and then quit without making any changes, this does not count as a session.)

• As soon as you execute an UNDO, the job name changes to REDO. The REDO will remain available until you change data again.

• You can undo and then redo the same change as many times as you like (provided that you don't make any other changes in between). This can be useful when you want to compare two versions of your data.

• Check the JOB 00 Undo/Redo execution screen to make sure that the details are correct, and then press ↵ .

• As a shortcut, it is possible to execute an UNDO/REDO job immediately — without moving into the corresponding job screens — by pressing SHIFT + JOB . This feature is available, for example, from the PATCH screen.

1. Undo/Redo indication

• The screen displays the word Undo or Redo to indicate the job that is currently available.

2. UNDO/REDO target

• The two entries at the right of the screen identify the data-change currently available for UNDOing or REDOing. This will be the most recently executed patch, editing, recording, or job-related data change. (In the example above, the most recent change was a PATTERN-mode editing change.)

5

Job 01   Quantize

```
PATT  -- JOB 01 Quantize --


Phrase= 01  M 001:1 ~ 256:1

Note= C -2 ~ G 8
        ▼
Quantize    = ♪
Strength    = 100 %
Sensitivity = +100 %

Swing Rate  = 50 %
Gate Time   = 100 %
Velocity    = 100 %


  00    01    02    03    04    05
```

• This job quantizes note events over a specified segment of the specified user phrase. *Quantizing* is the process of adjusting the timing of note events by pulling them closer to the nearest interval boundary (or *quantizing line*). You can use this feature, for example, to improve the timing of a phrase you recorded in real time.

• For full information about this job's parameters and operation, refer to the explanation for the SONG-mode version of the job, on page 142. Note the following differences, however: the PATTERN-mode job applies to a user phrase rather than a sequence track, and the maximum segment length is 256 measures.

1. Phrase

• The Phrase value selects the user phrase to be quantized.

01,...,99

2. Segment and notes

Measure: beat   001:1,...,256:8
Note range   C-2,...,G8

3. Quantizing value

♪	32nd-note intervals
♪3	16th-triplet intervals
♪	16th-note intervals
♪3	8th-triplet intervals
♪	8th-note intervals
♩3	Quarter-note-triplet intervals
♩	Quarter-note intervals
♪+3	16th-note *and* 16th-triplet intervals
♪+3	8th-note *and* 8th-triplet intervals

4. Strength

000%,...,100%

5. Sensitivity

-100%,...,+000%,...,+100%

6. Swing rate

• If quantizing value is ♩, ♪, ♪, or ♪ : 50%,...,75%
• If quantizing value is ♩3, ♪3, or ♪3 : 66%,...,83%
• If quantizing value is ♪+3, or ♪+3 : 50%,...,66%

7. Swing gate time

000%,...,100%,...,200%

8. Swing velocity

000%,...,100%,...,200%

Job 02   Modify Velocity

```
PATT  -- JOB 02 Modify Velocity --



Phrase= 01  M 001:1 ~ 256:1

Note= C -2 ~ G 8
         ▼
Set all   = Off (0=off)
Rate      = 100 %
Offset    = +00




  00     01     02     03     04     05
```

📖 • This job alters the velocity values of the specified range of notes (pitches) in the specified segment of the designated user phrase. Remember that velocity refers to the force with which a note is struck. The precise effect of a velocity change varies according to the voice: in most cases a higher velocity produces a louder sound.

• Using this job, you can choose to set all targeted notes to an identical velocity value, or you can apply a relative (linear) adjustment to the original velocity values.

• If making a relative adjustment, you use two parameters: the Rate and the Offset. The Rate value applies a proportional change to the velocity value, while the Offset value (which is applied after the Rate adjustment) adds a fixed value. The relation is as follows:

Adjusted velocity = (original velocity X Rate) + Offset.

• If the adjustment result is less than 1, the QY700 sets the value to 1. If the result is higher than 127, the QY700 sets the value to 127.

• For full information about this job's parameters and operation, refer to the explanation for the SONG-mode version of the job, on page 145. But note that the PATTERN-mode job applies to a user phrase rather than a sequence track, and that maximum segment length for a phrase is 256 measures.

1. Phrase

📖 • The Phrase value selects the user phrase to be adjusted.

`0101 1101` 01,...,99

2. Segment and notes

`0101 1101` Measure: beat   001:1,...,256:8
Note range   C-2,...,G8

3. Set all

`0101 1101` Off (0), 001,...,127

4. Rate

`0101 1101` 000%,...,100%,...,200%

5. Offset

`0101 1101` -99,...,+00,...,+99

5

Job 03   Modify Gate Time

```
PATT  -- JOB 03 Modify Gate Time --



Phrase= 01  M 001:1 ~ 256:1
                  ▨▨▨▨▨▨▨▨▨▨▨▨▨▨
            Note= C -2 ~ G 8
                    ▼
            Set all    = Off  (0=off)
            Rate       = 100 %
            Offset     = +0000




  00    01    02    03    04    05
```

• This job alters the gate times of the designated range of notes (pitches) in the specified segment of the selected user phrase. The *gate time* refers to the length of time that a note is held. For non-percussive voices, the gate time is equal to the actual playback time span.

• Using this job, you can choose to change all targeted notes to some fixed gate time, or you can apply a relative (linear) adjustment to the original gate times.

• If making a relative adjustment, you use two parameters: the Rate and the Offset. The Rate value applies a proportional change to the gate time, while the Offset value (which is applied after the Rate adjustment) adds a fixed value. The relation is as follows:

Adjusted gate time = (original gate time X Rate) + Offset.

• If the adjustment result is less than 1, the QY700 sets the value to 1.

• For full information about this job's parameters and operation, refer to the explanation for the SONG-mode version of the job, on page 147. But note that the PATTERN-mode job applies to a user phrase rather than a sequence track, and that maximum segment length for a phrase is 256 measures.

1. Phrase

• The Phrase value selects the user phrase to be adjusted.

01,...,99

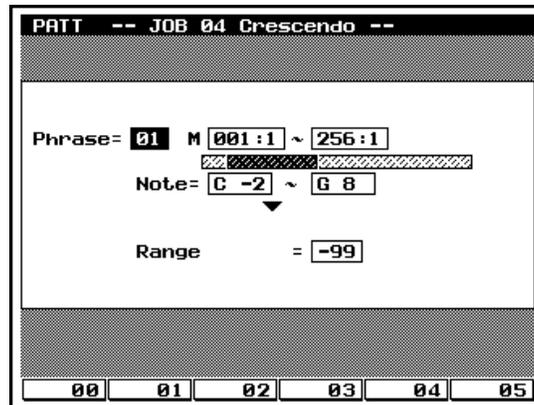### 2. Segment and notes (M and Note=)

Measure: beat   001:1,...,256:8
Note range   C-2,...,G8

3. Set all

Off (0), 0001,...,9999

4. Rate

000%,...,100%,...,200%

5. Offset

-9999,...,+0000,...,+9999

Job 04   Crescendo

```
PATT  -- JOB 04 Crescendo --



Phrase= 01  M 001:1 ~ 256:1
              ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨
         Note= C -2 ~ G 8
                   ▼

         Range      = -99




          00    01    02    03    04    05
```

- You use this job to apply a crescendo or decrescendo to the specified range of notes (pitches) in the specified user phrase. The QY700 produces the effect by applying a slight velocity adjustment (offset) at the beginning of the segment, with the offset increasing gradually up until the end of the segment.

- For full information about this job's parameters and operation, refer to the explanation for the SONG-mode version of the job, on page 148. But note that the PATTERN-mode job applies to a user phrase rather than a sequencer track, and that maximum segment length for a phrase is 256 measures.

1. Phrase

- The Phrase value selects the user phrase to be adjusted.
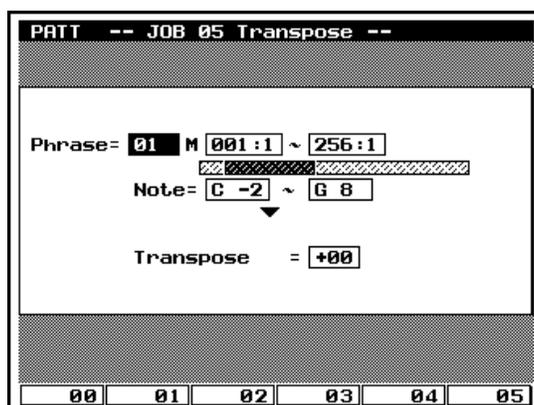
01,...,99

2. Segment and notes

Measure: beat   001:1,...,256:8
Note range   C-2,...,G8

3. Range

-99,...,+00,...,+99

5

Job 05   Transpose

```
PATT  -- JOB 05 Transpose --



Phrase= 01  M 001:1 ~ 256:1
              ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨
         Note= C -2 ~ G 8
                   ▼

         Transpose   = +00




          00    01    02    03    04    05
```

- You use this job to transpose a specified range of notes (pitches) within a specified segment of a designated user phrase. You set the transposition level in semitone increments.

1. Phrase

- This Phrase value selects the user phrase.

01,...,99

2. Segment and notes (M and Note=)

📖 • The two boxes to the right of the M select the phrase segment to be transposed. The first box sets the measure and beat for the start point; the second box sets the end point. The Note boxes select the range of notes (pitches) to be targeted: notes with pitches outside this range are not affected.

🔲 Measure: beat   001:1,...,256:8
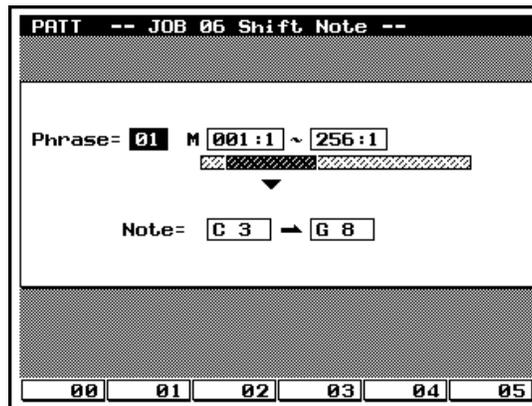Note range   C-2,...,G8

3. Transposition amount

📖 • The Transpose value sets the number of transposition intervals (semitones). A value of +12 would transpose all targeted notes up by exactly one octave, while a value of -12 would transpose down by an octave.

🔲 -99,...,+00,...,+99

Job 06 Shift Note

📖 • This job replaces all occurrences of a specified pitch (within the selected segment of the selected user phrase) with some other selected pitch.

1. Phrase

📖 • The Phrase value selects the user phrase.

🔲 01,...,99

2. Segment and notes (M)

📖 • The two boxes to the right of the M select the phrase segment over which notes are to be changed. The first box sets the measure and beat for the start point; the second box sets the end point.

🔲 Measure: beat   001:1,...,256:8

3. Source pitch

📖 • The first box to the right of "Note =" indicates the note (pitch) to be changed. Each occurrence of this note will be converted to an equivalent note of the destination pitch.
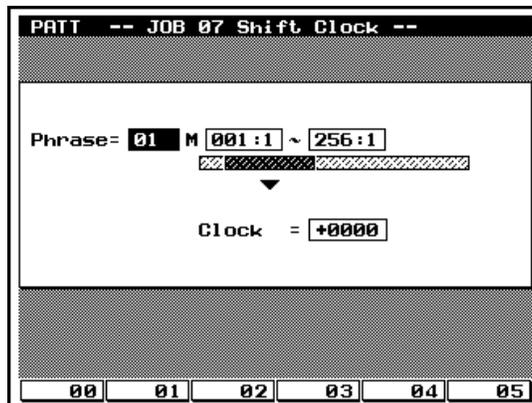
🔲 C-2,...,G8

4. Destination pitch

📖 • The second box to the right of "Note=" selects the new pitch for the transposed notes.

🔲 C-2,...,G8

Job 07   Shift Clock

```
PATT   -- JOB 07 Shift Clock --



Phrase= 01  M 001:1 ~ 256:1
                ▼

          Clock  = +0000




    00    01    02    03    04    05
```

- This job executes a time shift of all data events within the selected segment of the selected phrase. The shift is executed in clock-cycle increments.
- If you wish to move by one or more full beats or measures, you may find it easier to use the COPY EVENT job. (→ p.268)
- Note that this job will never move an event past the designated segment's start or end points; any event that would otherwise move past this point is instead deposited at the segment's border.

1. Phrase

- The Phrase value selects the user phrase.

01,...,99

2. Segment

- The two boxes to the right of the M select the phrase segment. The first box sets the measure and beat for the start point; the second box sets the end point.

Measure: beat   001:1,...,256:8
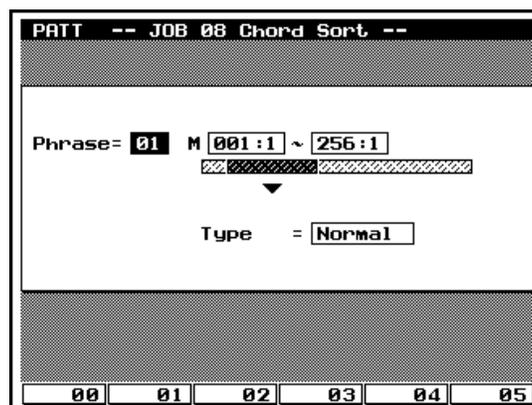
3. Clock cycles

- The Clock value sets the number of clock cycles for the data shift. Positive values shift events toward toward the end of the phrase, while negative events shift them back.
- Note that there are 480 clock cycles per beat.

-9999,...,+0000,...,+9999

Job 08   Chord Sort

```
PATT   -- JOB 08 Chord Sort --



Phrase= 01   M 001:1 ~ 256:1
                 ▼

           Type  = Normal




    00    01    02    03    04    05
```

- This job "sorts" chord events (simultaneous note events) by order of pitch. The sort is reflected in the EDIT page listing, and determines the separation sequence used by the CHORD SEPARATE job (see next page).

- Sorting is by pitch. If notes E3, C3, and G3 all begin at the same time, the job adjusts the sequence to C3, E3, G3 (if the setting is Normal) to G3, E3, C3 (if Reverse).

1. Phrase

- The Phrase value selects the user phrase.
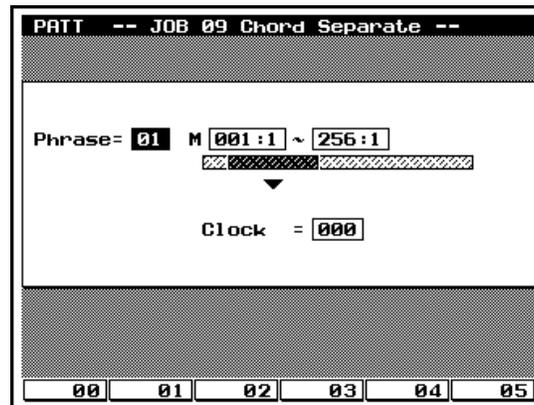
01,...,99

2. Segment

- The two boxes to the right of the M select the phrase segment over which chord sorts are executed. The first box sets the measure and beat for the start point; the second box sets the end point.

Measure: beat   001:1,...,256:8

3. Type

Normal   Sort from low pitch to high.
Reverse   Sort from high pitch to low.

Job 09   Chord Separate

- This job opens each chord formation (within the specified segment of the specified phrase) into its individual notes, inserting a specified delay between adjacent notes.
- If the Clock value is set to 30, for example, then a block chord consisting of elements C3, E3, G3 will be played as a C3 (at the chord's original timing) followed 30 cycles later by the E3, and then another 30 cycles later by the G3. This feature is useful, for example, when you want to open up guitar chords stroking.
- Note that the QY700 will shorten chord breaks as necessary to avoid playing over the next measure boundary or into the next chord.

1. Phrase

- The Phrase value selects the user phrase.

01,...,99

2. Segment

- The two boxes to the right of the M select the phrase segment over which chord separations are executed. The first box sets the measure and beat for the start point; the second box sets the end point.
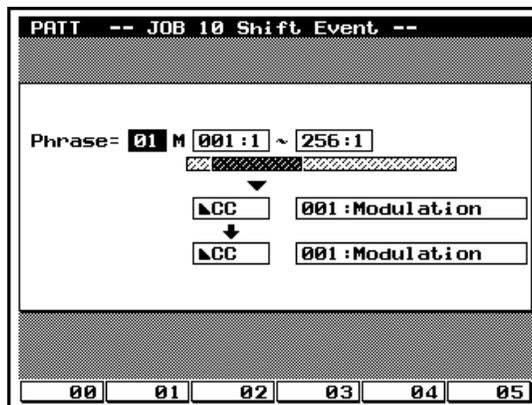
Measure: beat   001:1,...,256:8

3. Clock cycles

- The Clock value sets the number of clock cycles inserted between adjacent chord notes.
- Note that there are 480 clock cycles per beat.

000,...,999

Job 10   Shift Event

```
PATT   -- JOB 10 Shift Event --


Phrase= 01 M 001:1 ~ 256:1

            ▼
        ◣CC    001:Modulation
         ↓
        ◣CC    001:Modulation



    00    01    02    03    04    05
```

- This job replaces all occurrences of a specified event type (within the selected segment of the selected phrase) with some other designated event type. Although the event type itself is replaced, its accompanying argument (parameter value) is retained and applied to the new event type.
- As an example, you can use this function to change every breath-controller event into a channel-aftertouch event, while leaving the magnitude of the event unchanged.

1. Phrase

- The Phrase value selects the user phrase.

01,...,99

2. Segment

- The two boxes to the right of the M select the phrase segment over which the substitutions are executed.

Measure:beat   001:1,...,256:8

3. Source event

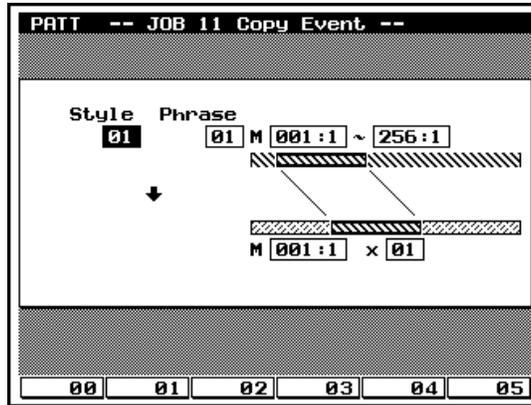- The two boxes at the center select the event type to be replaced.

CC   001,...,031,033,...,127   Control-change event
CAT   Channel aftertouch
PB MSB   Pitch bend MSB
Note   Note event (where the note-number argument is retained.)
  Note (Velo=64)
Note   Note event (where the velocity argument is retained.)
  Velo# (Note=C3)

4. Destination event

- The two boxes at the bottom select the event type that replaces the "source" event.

CC   001,...,031,033,...,127   Control-change event
CAT   Channel aftertouch
PB MSB   Pitch bend (With the LSB argument set to 00.)
Note   Note event (where original argument gives the new note number; velocity is set to 64; and gate time is set to 108.)
  Note (Velo=64)
Note   Note event (where original argument gives the new velocity; the new note becomes C3; and gate time is set to 108.)
  Velo# (Note=C3)

5

Job 11   Copy Event

```
PATT  -- JOB 11 Copy Event --



   Style  Phrase
     01       01  M 001:1 ~ 256:1



        ↓



                M 001:1  × 01





    00     01     02     03     04     05
```

- This job copies a specified segment of a selected user phrase into a different area of the same phrase.
- You can choose to copy more than one iteration of the segment. If you select three iterations, for example, the segment will be copied three times, with the copies placed one after the other.

1. Style

- The Style value selects the style containing the desired phrase.

01,...,64

2. Phrase

- The Phrase value selects the user phrase.

01,...,99

3. Source segment

- The upper "M" values select the phrase area that you want to copy.

Measure: beat   001:1,...,256:8

4. Start point of destination

- The lower "M" value selects the start point of the copy destination.

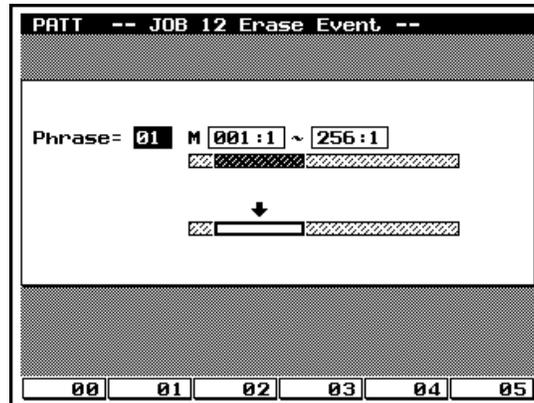Measure: beat   001:1,...,256:8

5. Copy iterations

- The final entry on the page sets the number of times the segment is copied.

01,...,99

Job 12 Erase Event

```
PATT  -- JOB 12 Erase Event --



Phrase= 01  M 001:1  ~ 256:1
             ▨▨▨▨▨▨▨▨▨▨  ▨▨▨▨▨▨▨▨▨▨▨▨
                    ↓
             ▨▨ ▭▭▭▭▭▭ ▨▨▨▨▨▨▨▨▨▨▨▨



    00    01    02    03    04    05
```

• This job clears all data from the specified segment of the designated user phrase, and replaces the data with "rests" (so that the segment becomes silent).

1. Phrase

• The Phrase value selects the user phrase.

01,...,99

2. Segment

• The two boxes to the right of the M select the phrase segment to be erased.

Measure: beat   001:1,...,256:8

Job 13   Extract Event

5

```
PATT  -- JOB 13 Extract Event --



Phrase= 01 M 001:1   256:1
             ▨▨▨▨▨▨▨▨▨▨  ▨▨▨▨▨▨▨▨▨▨▨▨
Spot Clock = 0000  ~ 3840

             ⊞Note    Note
Phrase= 01   C -2  ~  G 8
                    ↓
             ▭ ▨▨▨▨▨▨▨▨ ▭▭▭▭▭▭



    00    01    02    03    04    05
```

• This job moves all instances of specified event data from a selected segment of a user phrase to the same segment on a different user phrase. Following the operation, the targeted events no longer exist in the source segment.
• You can use the Spot Clock setting to target only those events that occur within a certain interval of each of the segment's measures. For example, you can choose to extract only events that fall between the second and third beats of each of the targeted measures.
• If data already exist at the destination side, the extracted data and existing data are mixed.

• You can also use this job to delete the specified event data from the source segment, without transferring it to any destination. (You can do this by setting the second Phrase value to "Off.")

1. Source phrase

• The first Phrase value selects the source phrase (user phrase).
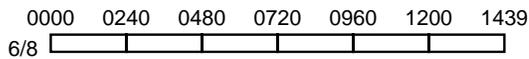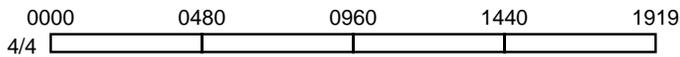
01,...,99

2. Source segment

- The two boxes to the right of the M select the source segment.

Measure: beat   001:1,...,256:16

3. Spot clock

- The Spot Clock value selects the interval of each measure from which data are to be extracted.
- The interval is set by clock cycles, where each measure starts at cycle 0000. There are 480 cycles per quarter note.
- For example, assume that the meter is set to 4/4. In this case, if you want to extract data only from the first half of each measure, you would set the range to 0000~0959. If you wanted to copy only those events that fall exactly on the fourth beat, you would set the range to 1440~1440.

```
       0000        0480        0960        1440        1919
4/4  [           |           |           |           ]
```

```
       0000   0240   0480   0720   0960   1200   1439
6/8  [      |      |      |      |      |      ]
```

0000,...,3840

4. Destination phrase

- The second Phrase value selects the destination phrase (user phrase).

Off, 01,...,99
     Off   No destination. (Erase only.)
     01,...,99   Selects destination phrase.

5. Event

- The third pair of boxes (at the center of the screen) selects the event type to be extracted.

Note, PC, PB, CC (000,...,127, All), CAT, PAT, EXC
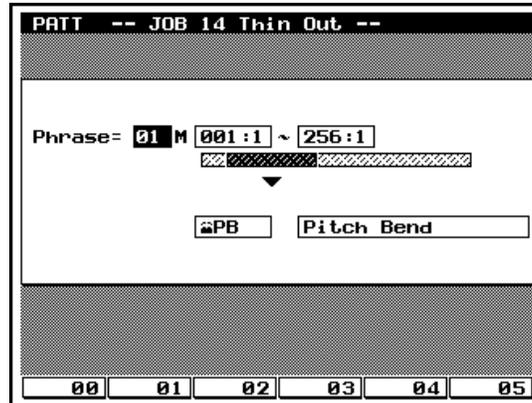   Note   Note events (C-2,...,G8, All)
     PC   Program change
     PB   Pitch bend
     CC(000,...,127,All)   Control change (Any single control-change message type 000 to 127, or all control-change messages)
     CAT   Channel aftertouch
     PAT   Polyphonic aftertouch
     EXC   System exclusive

6. Argument range

- The lowest two boxes on the screen select the argument range. The QY700 will extract only those events whose argument falls within the specified range.
- If you are extracting note events, for example, you can use this setting to limit extraction to all note events within a certain pitch range (for example, C3 to C4). If extracting program-change events, you can limit extraction to events with a certain range of program numbers.
- Note that the EXC event type does not accept an argument-range value.
- The values listed below show the maximum ranges. In all cases you can set a smaller range. Note that the first value of the range must be less than or equal to the second value.

C-2,...,G8   Maximum range for note events.
-8192,...,+8191   Maximum range for pitchbend events.
000,...,127   Maximum range for all event types other than note and pitchbend.

Job 14   Thin Out

```
PATT  -- JOB 14 Thin Out --



Phrase= 01 M 001:1 ~ 256:1



                ▼


              PB      Pitch Bend




   00    01    02    03    04    05
```

- You use this job to remove repeated occurrences of a speci-fied non-note event within the designated segment of a se-lected user phrase. The purpose is to reduce the data vol-ume and free up additional memory.
- Specifically, the job will remove every other occurrence of the event in areas where the event recurs within 60 clock cycles. The job will not remove an event that is separated from the previous occurrence by at least 60 clock cycles.

1. Phrase

- The Phrase value selects the target phrase.

01,...,99

2. Segment

- The two boxes to the right of the M select the phrase area to be thinned.

Measure: beat   001:1,...,256:16

3. Event

- The lower pair of boxes selects the targeted event type.

PB, CC (000,...,127, All), CAT, PAT
PB	Pitch bend
CC(000,...,127,All)	Control change (Any single control-change message type 000 to 127, or all control-change messages)
CAT	Channel aftertouch
PAT	Polyphonic aftertouch

5

Job 15   Time Stretch

```
PATT  -- JOB 15 Time Stretch --



Phrase= 01  M 001:1 ~ 256:1


            ▼

        Time = 050 %




 00    01    02    03    04    05
```

- This job expands or compresses the timing over the selected segment of the selected user phrase.
- The operation affects all event timing, note step times, and note gate times.

1. Phrase

- The Phrase value selects the target phrase.

01,...,99

2. Segment

- The two boxes to the right of the M select the target segment of the phrase.

Measure: beat   001:1,...,256:8

3. Time

- The Time value sets the magnification/compression ratio.

050%,...,200%

Job 16   Copy Phrase

```
PATT  -- JOB 16 Copy Phrase --


 Style 01  Phrase Da16001:DA BreakBt 1


 Style 01  Phrase 01        ↓


        ☑ Event
        ☑ Phrase Table



 00    01    02    03    04    05
```

- This job copies a selected phrase (either user phrase or preset phrase) to the designated user phrase.
- The source-side Style parameter is meaningful only if you are copying from a user phrase.
- If the destination phrase does not yet exist, this job will create it. If it does exist, the job will delete its original data.

1. Source style

• The first Style value selects the style containing the user phrase to be copied. The value is meaningful only if you are copying a user phrase; the QY700 ignores the setting if you are copying a preset phrase.

01,...,64

2. Source phrase

• The first Phrase value selects the phrase to be copied.

Any preset phrase, or user phrase 01 to 99

3. Destination style

• The second Style value selects the style that will contain the destination phrase.

01,...,64

4. Destination phrase

• The second Phrase value selects the destination phrase (user phrase).

01,...,99

5. Data type

• The final two items on the screen let you select the type of data to be targeted. You can select one or both types by placing a checkmark into the corresponding box(es).
• If you select Event, the job copies all event data from the source to the destination.
• If you select Phrase Table, the job copies the content of the source side's phrase table into the destination's phrase table.

☑ Copy the corresponding data type.
☐ Do not copy this data type.

5

Job 17   Mix Phrase

• This job mixes all data from two selected user phrases into the second of these phrases.

1. Source style

• The first Style value selects the style containing the source phrase (phrase "a").

01,...,64

2. Source phrase (Phrase "a")

• The first Phrase value selects the source phrase. This is the phrase containing the data to be mixed into the destination phrase. Following the mix, the content of the source phrase remains unchanged.

01,...,99

3. Destination style

• The second Style value selects the style containing the destination phrase (phrase "b").

01,...,64

4. Destination phrase (Phrase "b")

• The second Phrase value selects the destination phrase. The original content of this phrase becomes mixed with the content from phrase "a".
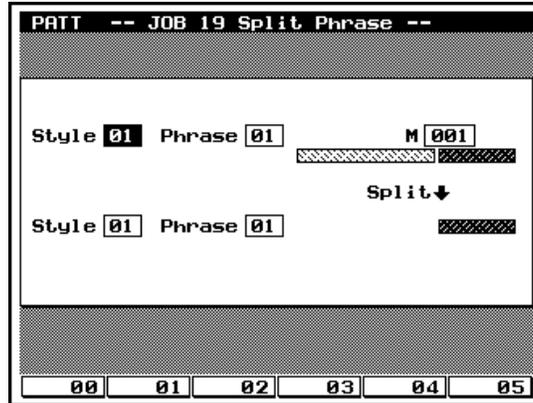
01,...,99

5. Phrase Table source

• The final item on the screen lets you select which phrase table to use for the destination phrase. If you select "a", the QY700 copies the phrase-table data from the source phrase to the destination. If you choose "b", the phrase table at the destination side remains unchanged.

a, b
   a   Use table data from phrase "a".
   b   Use table data from phrase "b".

Job 18   Append Phrase


```
PATT   -- JOB 18 Append Phrase --



Style 01  Phrase 01                    a
                                    ▨▨▨▨▨▨▨

                              b     Append ↓ a
Style 01  Phrase 01         ▨▨▨▨▨▨▨▨▨▨▨ ▨▨▨▨▨▨▨
     Phrase Table = b




00      01      02      03      04      05
```

📖 • This job attaches the content of a selected user phrase (phrase "a") onto the end of another user phrase (phrase "b"). After completion of the job, phrase "a" remains unchanged.
   • If you attempt to append data such that phrase "b" would become longer than 256 measures (the maximum phrase length), the QY700 returns the "Illegal Input" message and the job does not execute.

1. Source style

📖 • The first Style value selects the style containing the source user phrase (phrase "a").

▦ 01,...,64

2. Source phrase (Phrase "a")

📖 • The first Phrase value selects the source phrase (user phrase). Following job execution, the content of the source phrase remains unchanged.

▦ 01,...,99

3. Destination style

📖 • The second Style value selects the style containing the destination phrase (phrase "b").

▦ 01,...,64

4. Destination phrase (Phrase "b")

📖 • The second Phrase value selects the phrase to which the source phrase is attached.

▦ 01,...,99

5. Phrase Table source

📖 • The final item on the screen lets you select which phrase table to use for the destination phrase. If you select "a", the QY700 copies the phrase-table data from the source phrase to the destination phrase. If you choose "b", the phrase table at the destination side remains unchanged.

▦ a, b
   a   Use table data from phrase "a".
   b   Use table data from phrase "b".

5

Job 19   Split Phrase


```
PATT   -- JOB 19 Split Phrase --



Style 01  Phrase 01          M 001
                        ▨▨▨▨▨▨▨▨▨▨ ▨▨▨▨▨▨
                            Split↓
Style 01  Phrase 01               ▨▨▨▨▨▨



    00     01     02     03     04     05
```

- This job splits a selected user phrase into two user phrases.
- The job splits the phrase at the first beat of the specified measure. The initial portion of the phrase (up to the split) remains in its original location, while the remainder of the phrase moves into the specified destination.
- The job overwrites any data already existing in the destination phrase.
- The phrase table from the original phrase is copied to the destination phase.

1. Source style

- The first Style value selects the style containing the user phrase to be split.

01,...,64

2. Source phrase

- The first Phrase value selects the user phrase to be split.

01,...,99

3. Split point

- The M value selects the measure at which the phrase is split. This becomes the start point of the destination phrase.

001,...,*source-phrase length*

4. Destination style

- The second Style value selects the destination style.

01,...,64

5. Destination phrase

- The second Phrase value selects the split destination.

01,...,99

Job 20 Get Phrase

• This job creates a user phrase from a specified segment of song data. Specifically, it copies a segment of sequence-track data from a song into the designated destination phrase.

• The QY700 sets the time signature (meter) for the new phrase equal to the meter recorded in the initial measure of the source segment. (Note that meter value applies to the entire phrase. Any meter changes that occur within subsequent measures of the source segment are ignored.)

• Maximum phrase length is 256 measures. If you attempt to copy a segment that is longer than 256 measures, the screen returns the "Illegal Input" message and the job does not execute.

• The job overwrites any data already existing in the destination phrase.

• The job does not copy voice and tempo settings.

1. Source song

• The Song value selects the song containing the source data.

01,...,20

2. Source track

• The Track value selects the sequence track containing the source data.

01,...,32

3. Segment

• The M values select the source segment, by its location (in measures) on the source track. The first value gives the initial measure; the second value gives the final measure.

Initial measure: 001,...,999
Final measure: 001,...,999
(where final measure – initial measure $\leq$ 256,
and final measure $\geq$ initial measure)

4. Destination style

• The Style value selects the style that will contain the new user phrase.

01,...,64

5. Destination phrase

• The Phrase value sets the phrase number for the destination user phrase.

01,...,99

5

Job 21   Put Phrase

```
PATT   -- JOB 21 Put Phrase --



   Style    Phrase
     01       01      ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨

                         Put↓
   Song     Track
     01       01      M 001
                        ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨

    00      01      02      03      04      05
```

• This job copies a selected user phrase into a specified area of a selected song. Any data previously existing in the destination area is erased.

• You select the source phrase by its style and phrase numbers. You select the destination by song number, track number (sequence track), and measure number (location on track).

• The job does not copy meter, voice, or tempo settings. The phrase's meter (time signature) has no effect on the copy.

1. Source style

• The Style value selects the style containing the source phrase.

01,...,64

2. Source phrase

• The Phrase value selects the user phrase to be copied.

01,...,99

3. Destination song

• The Song value selects the destination song.

01,..,20

4. Destination track

• The Track value selects the sequence track onto which the phrase is to be copied.

01,...,32

5. Track location

• The M value selects the starting measure, on the sequence track, for the copy.

001,...,999

Job 22   Clear Phrase

```
PATT  -- JOB 22 Clear Phrase --


     Phrase = 01      ░░░░░░░░░░░░░░░░░░░░

                      ↓ Clear
                     ┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
                     └ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘



   00    01    02    03    04    05
```

• This job deletes all data from the selected user phrase, and reinitializes the phrase table.

1. Phrase

• The Phrase value selects the user phrase to be deleted.

01,...,99

Job 23   Phrase Name

```
PATT  -- JOB 23 Phrase Name --


     Phrase = 01    ┌ ************* ┐
                    └ ─ ─ ─ ─ ─ ─ ─ ─ ┘
                   ░░░░░░░░░░░░░░░░░░░░░░░



   00    01    02    03    04    05
```

• You use this job to set or change the name for a (non-empty) user phrase. The name can be up to 12 characters long.

1. Phrase

• The Phrase value selects the user phrase to be named.
• You cannot assign a name to an empty phrase. If you select an empty phrase, a string of asterisks (*************) appears in the name entry area.

01,...,99

2. Phrase name

• Enter the phrase name into the entry space to the right of the number.

Supported characters:
0,...,9, a,...,z, A,...,Z " ' ^ ( ) < = > @ | \ _ ! ? # $ % & * + - / , . : ; *space*

1. Move the cursor into the entry area.

2. Use the numeric keypad and the microkeyboard to input each character. Use the ◄ and ► keys to move the cursor left and right as necessary.

• For information about how to input characters, refer to Chapter 1. (→ p.53)

3. When you have finished entering the name, press ⌜EXIT⌝ twice to return to the PATCH screen. Move the cursor onto the phrase entry in the matrix, and check that the name appears correctly in the data-display area.

• Note that you do not need to press ↵ to enter the name.

Job 24   Clear Track

```
PATT  -- JOB 24 CLEAR TRACK  --


   TR= 01  ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨

              ↓ Clear

              [                    ]

         ☑ Patch
         ☑ Play Effect
         ☑ Voice



  00    01    02    03    04    05
```

• This job deletes all data (of the selected type) from the selected pattern track, or from all pattern tracks.

1. Track

• The TR setting selects the track to be cleared.

01,...,16, All

2. Data type

Check the box containing the data type(s) that you want to delete.
• If you select Patch, the job deletes all data stored in the track.
• If you select Play Effect, the job deletes all play-effect settings for that track.
• If you select Voice, the job deletes the track's pattern-voice setting.

☑   Delete the corresponding data type.
☐   Do not delete this data type.

Job 25   Copy Pattern

```
PATT  -- JOB 25 Copy Pattern --


Style  = 01
Section= All        ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨
Track  = All

                            ↓
Style  = 01
Section= All        ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨
Track  = All

            ☑ Patch
            ☑ User Phrase
            ☑ Play Effect
            ☑ Pattern Voice

  00    01    02    03    04    05
```

📖 • This job copies all data (of a selected type) from selected source track(s) to selected pattern track(s). You can copy track data from a single section of a selected style, or from all sections of the style.
• The copy operation overwrites any data previously existing on the destination track(s).

1. Source style, section, and track

📖 • The first three settings select the source track(s).
• If you set Section or Track to "All", the QY700 automatically sets the corresponding destination value to "All". (If you change an "All" setting to a number or letter, the QY700 automatically deselects the "All" setting at the destination side.)

```
Style       01,...,64
Section     A,...,H, All
Track       1,...,16, All
```

2. Destination style, section, and track

📖 • The second group of settings selects the destination track(s).
• Again, if you set Section or Track to "All", the QY700 automatically sets the corresponding source value to "All". (And if you change an "All" setting to a number or letter, the QY700 automatically deselects the "All" setting at the source side.)

```
Style       01,...,64
Section     A,...,H, All
Track       1,...,16, All
```

3. Data type

📖 Check the box(es) containing the data type(s) that you want to copy.
• Select Patch to copy the phrase settings from the selected track(s).
• Select User Phrase to copy user phrases from the selected track(s).
• Select Play Effect to copy the track play-effect settings.
• Select Voice to copy the pattern-voice setting(s).

☑ Copy the corresponding data type.
☐ Do not copy this data type.

5

Job 26   Append Pattern

```
PATT  -- JOB 26 Append Pattern --


Style 01  Section A                      a
                                      ▨▨▨▨▨▨▨

                                   b   Append ↓ a
Style 01  Section A          ▨▨▨▨▨▨▨▨▨▨ ▨▨▨▨▨▨▨

  Play Effect   = b
  Pattern Voice = b



  00    01    02    03    04    05
```

📖 • This job attaches a copy of the selected user pattern (pattern "a") onto the end of another user pattern (pattern "b"). After completion of the job, the original pattern "a" remains unchanged.
  • If you attempt to append data such that pattern "b" would become longer than 256 measures, the QY700 returns the "Illegal Input" message and the job does not execute.

1. Source pattern (pattern "a")

📖 • The first Style and Section settings select the source pattern.

🔢 Style   01,...,64
  Section   A,...,H

2. Destination pattern (pattern "b")

📖 • The second Style and Section settings select the pattern to which the source pattern is attached.

🔢 Style   01,...,64
  Section   A,...,H

3. Play Effect selection

📖 • The Play Effect entry lets you select which play-effect settings to apply to the destination pattern. If you select "a", the QY700 copies the play effects from the source phrase to the destination phrase. If you choose "b", the destination side's original play-effect settings remain in effect.

🔢 a, b
    a   Use play effects from pattern "a".
    b   Retain play effects from original pattern "b".

4. Pattern Voice selection

📖 • The Pattern Voice entry lets you select which pattern voices to apply to the destination pattern.

🔢 a, b
    a   Use pattern voices from pattern "a".
    b   Retain pattern voices from original pattern "b".

Job 27   Split Pattern

```
PATT   -- JOB 27 Split Pattern --



Style 01  Section A              M 001

Split↓


Style 01   Section A

    ☑ Play Effect
    ☑ Pattern Voice




  00     01     02     03     04     05
```

- This job splits a selected pattern into two patterns.
- The job splits the pattern at the first beat of the specified measure. The initial portion of the pattern (up to the split point) remains in its original location, while the portion starting after the split point is moved and becomes the destination pattern. (If no phrases start after the split point, the destination pattern becomes empty.)
- The job overwrites any data already existing in the destination pattern.

1. Source pattern

- The first Style and Section settings select the pattern to be split.

Style	01,...,64
Section	A,...,H

2. Split point

- The M value selects the measure at which the pattern is split. This becomes the start point of the destination phrase.

001,...,*source-pattern length*

3. Destination pattern

- The second Style and Section select the new location for the portion of the pattern that begins at the split point.

Style	01,...,64
Section	A,...,H

4. Play Effect and Pattern Voice copy

- The last two entries on the screen let you select whether or not to copy the source's play-effect and pattern-voice settings to the destination side when making the split.

☑   Include the corresponding data.
☐   Do not include this data.

5

Job 28   Clear Pattern

```
PATT  -- JOB 28 Clear Pattern --




   Style   = 01
   Section=  A       ▨▨▨▨▨▨▨▨▨▨▨▨▨▨

                     ↓ Clear

                     ┌──────────────┐
                     └──────────────┘




   00    01    02    03    04    05
```

📖 • This job deletes all data from the selected pattern(s).
• If you set Style to "All", the job executes a *total deletion* – removing *all* sections of *all* styles. In this case, the job also reinitializes all play-effect and pattern-voice settings for all styles.
• *Note that it is not possible to UNDO a total deletion.* Be sure that you really want to delete all patterns before executing a Style=All deletion.
• If you set Style to a numerical value and set Section to "All", the job deletes all sections (all patterns) within the selected style. It also reinitializes all play-effect and pattern-voice settings for that style. (If you make an error with this type of deletion, however, you can recover by running an UNDO.)

▨ **1. Style and section**

📖 • The style and section values select the pattern(s) to be deleted.
• If you set Style to "All", then Section is also forced to "All".

🔢 Style   01,...,64, All
Section   A,...,H, All

Job 29   Pattern Name

```
PATT  -- JOB 29 Pattern Name --



   Style          ▨********


   Section= A     ********

                  ▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨▨




   00    01    02    03    04    05
```

📖 • You use this job to set or change the style name and section names for the currently selected style.
• Maximum length for these names is 8 characters.

1. Style name

- When the screen first appears, the Style entry shows the name of the currently selected style. You can overwrite as necessary to create the new name.

Supported characters:
0,...,9, a,...,z, A,...,Z " ' ^ ( ) < = > @ | \ _ ! ? # $ % & * + - / , . : ; *space*

2. Section

- You can use the Section setting (in the square box) to select the section that you want to name.

A,...,H

3. Pattern name

- After selecting the section, move the cursor into the rectangular area to the right, and enter or change the pattern name as necessary .

Supported characters:
0,...,9, a,...,z, A,...,Z " ' ^ ( ) < = > @ | \ _ ! ? # $ % & * + - / , . : ; *space*

1. Move the cursor into the name-entry area for the name you want to set.

2. Use the numeric keypad and the microkeyboard to enter each character. You can use the ◄ and ► keys to move the cursor left or right as necessary.
- For information about how to enter characters, refer to Chapter 1. ($\rightarrow$ p.53)

3. When you have finished entering the names, press EXIT twice to return to the PATCH screen. You can then check whether the names appear correctly.
- Note that you do not need to press ↵ to enter the name.

Job 30   Style Icon

- You use this job to change the icon for the currently selected style. You can choose from 160 icons.

Move the cursor to the desired icon, then press EXIT .

Memo

Chapter 6. UTILITY MODE

This chapter explains Utility mode.
Utility mode is where you can make system settings and MIDI-related settings.

6

About Utility mode

```
UTILITY -- SYSTEM --
Master Fine Tune        = +000.0

  MASTER TUNE  BACKLITE SAVER  FOOTSWITCH

     (◉)          (◯)            (◯)

    +000.0      4 Hours       Start/Stop
              WHEEL
  PITCH BEND      ASSIGNABLE
     P. B.        Ctrl# 001

  Pitch Bend   Modulation

System   MIDI   MIDI Fltr Seqencr  Click  FngZone
```

```
UTILITY

    F1    System
    F2    MIDI
    F3    MIDI filter
    F4    Sequencer
    F5    Click
    F6    Fingered chord zone
```

- Utility mode is where you can make system settings and MIDI settings.
- Utility mode does not have a "top" page which will always appear when the MODE key is pressed. (The last-selected page will appear.)
- Utility mode has six sub-modes, and these are accessed by pressing the F1 – F6 function keys.
  Pressing F1 (System) will access the System page. (→ p.289)
  Pressing F2 (MIDI) will access the MIDI page. (→ p.291)
  Pressing F3 (MIDI Fltr) will access the MIDI filter page. (→ p.293)
  Pressing F4 (Seqencr) will access the sequencer page. (→ p.295)
  Pressing F5 (Click) will access the click page. (→ p.297)
  Pressing F6 (FngZone) will access the fingered chord zone page. (→ p.299)
- The settings made in Utility mode are backed up by the internal battery, and will not disappear when the power is turned off.

1. System

UTILITY -- SYSTEM --
Master Fine Tune   = +000.0

MASTER TUNE   BACKLITE SAVER   FOOTSWITCH

+000.0   4 Hours   Start/Stop

WHEEL
PITCH BEND   ASSIGNABLE

P. B.   Ctrl# 001

Pitch Bend   Modulation

System   MIDI   MIDI Fltr Seqencr   Click   FngZone

F1   F2   F3   F4   F5   F6

UTILITY

— F1   System
— F2   MIDI
— F3   MIDI filter
— F4   Sequencer
— F5   Click
— F6   Fingered chord zone

• Here you can make settings for system-related parameters, such as Master Tune and controller settings.

1. Press UTILITY .
▼ The indicator located above UTILITY will light, and you will enter Utility mode.

2. Press F1 (System) to access the system page.

3. Move the cursor to the parameter that you wish to set.

4. Use NO / YES , the data dial, or numeric keypad → ↵ to set the value.

1. Master tune

• This sets the overall tuning of the entire QY700 in 0.1 cent steps.
• The pitch of drum voices cannot be adjusted here. (→ p.182)
• One cent is 1/100th of a semitone.

-102.4 – +000.0 – +102.3

2. Backlite saver

• This function automatically turns off the display backlight when the power has been left on for a certain time without any operations being performed.
• Like any fluorescent light, the backlight of the QY700 has a finite lifespan. Turning the unit off when it will not be used for an extended time will extend its life as long as possible. However there may be times when the unit will be left on and unused for an extended time. In such cases, you can set Backlite Saver so that the backlight will automatically turn off when the specified time elapses, to conserve the lifespan of the backlight.

Off, 1 Hours, 2 Hours, 3 Hours, 4 Hours, 5 Hours, 6 Hours, 7 Hours, 8 Hours

6

3. Footswitch

- This sets the function of the footswitch connected to the rear panel FOOT SW connector.

Start/Stop, Section, Sustain, Sostenuto

Start/Stop   Each time the footswitch is pressed, the song or pattern will alternately start or stop.

Section   Each time the footswitch is pressed, the Section of the pattern will be switched in the order of A – H.

Sustain   All notes played while the footswitch is held will be sustained until the footswitch is released.

Sostenuto   All notes which were being held on the keyboard when the footswitch was pressed will be sustained until the footswitch is released.

4. Pitch bend wheel, Assignable wheel

- These settings specify the MIDI messages that are output when the PITCH wheel and ASSIGNABLE wheel located on the QY700's top panel are operated.
- Since the PITCH wheel will automatically return to the center position when it is released, it is suitable for controlling Pitch Bend.
- The ASSIGNABLE wheel is detented in the center position.

OFF, P.B., Ctrl#001 – 119, CAT, VEL, TMP

OFF

The wheel will have no function.

P.B. (Pitch Bend)

Pitch Bend messages.

Ctrl#001 (Modulation) – 119 (ContrlChng)

Control Change messages. You can choose the control number. However, Ctrl#032 cannot be selected.

CAT (Ch After)

Channel aftertouch messages

VEL (Velocity)

Velocity

TMP (Tempo)

Tempo

2. MIDI

```
UTILITY -- MIDI --
MIDI Sync            =  Internal

       MIDI SYNC           MIDI CONTROL
                       IN  ___      OUT  ___
         (◑)             (↻)          (↻)

        Internal        In-A,B       Out-A,B
      XG PARAMTR OUT          ECHO BACK
                       IN-A  ___    IN-B  ___
         (○)             (○)          (○)

          Off             Off          Off
       MTC START OFFSET
          00:00:00:00

 System    MIDI   MIDI Fltr Seqencr  Click  FngZone
   F1       F2       F3      F4       F5      F6
```

```
 UTILITY

   ─ F1   System
   ─ F2   MIDI
   ─ F3   MIDI filter
   ─ F4   Sequencer
   ─ F5   Click
   ─ F6   Fingered chord zone
```

- The MIDI page lets you make MIDI settings for the QY700.

1. Press UTILITY .
▼ The indicator located above UTILITY will light, and you will enter Utility mode.

2. Press F2 (MIDI) to access the MIDI page.

3. Move the cursor to the parameter that you wish to set.

4. Use NO / YES , the data dial, or numeric keypad → ↵ to set the value.

1. MIDI sync

- This selects whether the QY700 will use its own internal clock or whether it will use MIDI Clock or MTC messages received from the MIDI IN connector.
- You will need to make these settings when synchronizing the QY700 with external MIDI devices.
- With a setting of Internal, the QY700 will use its own internal clock. Select this setting if you are using the QY700 by itself or as the master device in a system that is synchronized by MIDI Clock messages.
- With a setting of MIDI-A or MIDI-B, the QY700 will be controlled by MIDI Clock messages received from MIDI IN-A or MIDI IN-B. Select this setting if you are using the QY700 as a slave device for synchronized play.
  This is the setting to use when synchronizing the QY700 to an external MIDI device.

- With a setting of MTC:MIDI-A or MTC:MIDI-B, the QY700 will synchronize to MTC messages received from MIDI IN-A or MIDI IN-B, and will transmit MMC messages from the corresponding MIDI OUT connector (MIDI OUT-A for MTC:MIDI-A, or MIDI OUT-B for MTC:MIDI-B).
- MTC is an acronym for MIDI Time Code, and is a type of timecode that can be exchanged between MIDI device via a MIDI cable. MTC consists of "hour:minute:second:frame" units.
  The QY700 does not output MTC. If you wish to synchronize using MTC, you will need a device that is able to output MTC such as the Yamaha MD4.
- MMC is an acronym for MIDI Machine Control, and is a specification for controlling devices such as multi-track recorders from MIDI sequencers etc. When operations such as start/stop or rewind/fast-forward are performed on the sequencer, the corresponding operation will automatically be performed on the MMC-compatible multi-track recorder, so that playback on the recorder will always occur from the same location of the song as on the sequencer.
- Select this setting if you are using the QY700 as a slave device for MTC synchronization, or if you are using the QY700 together with an external device such as an MMC-compatible multi-track recorder.

Internal, MIDI-A, MIDI-B, MTC:MIDI-A, MTC:MIDI-B

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2. MIDI control in/out

- • These settings determine whether the MIDI messages Start, Stop, Continue Start, Song Position/Pointer, and MIDI Clock will be transmitted or received. (MIDI Clock is only transmitted.)
- • MIDI Control In is the reception setting, and MIDI Control Out is the transmission setting.

MIDI Control In

Off, In-A, In-B, In-A,B

Off

Messages will not be received.

In-A, In-B

Messages arriving at the MIDI IN-A connector or at the MIDI IN-B connector will be received.

In-A,B

Message arriving at either the MIDI IN-A or the MIDI IN-B connector will be received.

MIDI Control Out

Off, Out-A, Out-B, Out-A,B

Off

Messages will not be transmitted.

Out-A, Out-B

Messages will be transmitted from either the MIDI OUT-A connector or from the MIDI OUT-B connector.

Out-A,B

Messages will be transmitted from both the MIDI OUT-A and B connectors.

3. XG parameter out

- • When parameter values are modified in Voice mode or Effect mode, this setting specifies whether the operation will be transmitted in realtime from the MIDI OUT connectors as MIDI data.
- • When using the QY700 together with another XG tone generator, this setting allows the external XG tone generator's voice and effect parameters to be controlled from the QY700.

Off, Out-A, Out-B, Out-A,B

Off	MIDI will not be output.
Out-A, Out-B	MIDI will be output from the MIDI OUT-A connector or from the MIDI OUT-B connector.
Out-A,B	MIDI will be output from both the MIDI OUT-A and B connectors.

4. MIDI echo back In-A/In-B

- • Echo Back is a function by which data received at a MIDI IN connector is re-transmitted from a MIDI OUT connector. These parameters are the echo back settings.
- • MIDI Echo Back In A sets echo back for data received at the MIDI IN-A connector, and MIDI Echo Back In B for data received at the MIDI IN-B connector.
- • If you wish to use the QY700's MIDI OUT connectors as MIDI THRU connectors, select Thru A, Thru B, or Thru A,B.
- • When using an external MIDI keyboard and external MIDI tone generator to record on QY700 tracks, select RecMonitor.
- • When connecting the QY700's MIDI IN and MIDI OUT connectors to an external MIDI device, select Off.

Off, Thru A, Thru B, Thru A,B, RecMonitor

Off

Echo back will not be performed.

Thru A, Thru B, Thru A, B

Echo back will be performed respectively from the MIDI OUT-A connector or the OUT-B connector, or from both OUT-A and OUT-B connectors.

RecMonitor

Echo back will be performed according to the Out Channel MIDI OUT-A and MIDI OUT-B settings of the Keyboard Track or the Recording Track.

- • System exclusive messages of 128 bytes or longer will not be echoed back.

5. MTC start offset

- • Specify the delay from when MIDI Time Code is received until when the sequencer is started, in hours:minutes:seconds:frames.
- • When synchronizing with an MTC-compatible MTR etc., use this setting to make the song begin simultaneously.

hours:minutes:seconds:frames

Hours	00 – 23
Minutes	00 – 59
Seconds	00 – 59
Frames	00 – 29

3. MIDI filter

```
UTILITY -- MIDI FILTER --
Note IN-A                = Pass


     IN   OUT
     A B  A B
     ☑ ☑  ☑ ☑  Note
     ☑ ☑  ☑ ☑  Pitch Bend
     ☑ ☑  ☑ ☑  Control Change
     ☑ ☑  ☑ ☑  Program Change
     ☑ ☑  ☑ ☑  Polyphonic After Touch
     ☑ ☑  ☑ ☑  Channel After Touch
     ☑ ☑  ☑ ☑  System Exclusive


 System   MIDI  MIDIFltr Seqencr  Click  FngZone
```

| F1 | F2 | F3 | F4 | F5 | F6 |

UTILITY
— F1 System
— F2 MIDI
— F3 MIDI filter
— F4 Sequencer
— F5 Click
— F6 Fingered chord zone

- • MIDI Filter settings allow you to strip out specified types of MIDI events from the stream of MIDI data that passes through the MIDI IN connectors or MIDI OUT connectors.
  - • MIDI Filter settings apply to recording and playback of the sequencer block. They have no effect on the tone generator block.
  - • The display indicates whether the corresponding type of MIDI event will be passed or cut.
    ☐ (Cut) The specified MIDI event will not be passed.
    ☑ (Pass) The specified MIDI event will be passed.

- 1. Press UTILITY .
  ▼ The indicator located above UTILITY will light, and you will enter Utility mode.

  2. Press F3 (MIDIFltr) to access the MIDI Filter page.

  3. Move the cursor to the parameter that you wish to set.

  4. Use NO / YES or the data dial to make the setting.

1. Note

- • Specify whether or not MIDI Note On and Note Off messages will be passed.
  - • MIDI Note On messages are produced when a note of the keyboard is pressed, and Note Off messages when a note is released. If these MIDI messages are cut, there will be no sound.

2. Pitch Bend

- • Specify whether or not MIDI Pitch Bend messages will be passed.
  - • MIDI Pitch Bend messages are produced when the PITCH wheel is operated. They are used to smoothly change the pitch.

3. Control Change

- • Specify whether or not MIDI Control Change messages will be passed.
  - • MIDI Control Change messages convey many types of information, such as Modulation Wheel, Pan, and Volume.

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4. Program Change

- Specify whether or not MIDI Program Change messages and the control change messages Bank Select MSB and LSB will be passed.
- Program Change, and Bank Select MSB and LSB are MIDI messages used to select voices.

5. Polyphonic After Touch

- Specify whether or not MIDI Polyphonic After Touch messages will be passed.

6. Channel Aftertouch

- Specify whether or not MIDI Channel Aftertouch messages will be passed.

7. System Exclusive

- Specify whether or not MIDI System Exclusive messages will be passed.
- MIDI System Exclusive messages are used to reset the tone generator and to operate internal parameters.

4. Sequencer

```
UTILITY -- SEQUENCER --
Mute Tracks Level        = Off

┌─────────────┬─────────────┬─────────────┐
│ MUTE TRACKS │ EVENT CHASE │ INTERVAL TIME│
│    LEVEL    │             │             │
│     ●       │     ○       │     ◔       │
│    Off      │    Off      │   1*100     │
└─────────────┴─────────────┴─────────────┘

System   MIDI  MIDI Fltr Seqencr  Click  FngZone
```

F1   F2   F3   F4   F5   F6

UTILITY

- F1   System
- F2   MIDI
- F3   MIDI filter
- F4   Sequencer
- F5   Click
- F6   Fingered chord zone

- Here are the setup parameters for the sequencer block.

1. Press UTILITY .
▼ The indicator located above UTILITY will light, and you will enter Utility mode.

2. Press F4 (Seqencr) to access the Sequencer page.

3. Move the cursor to the parameter that you wish to set.

4. Use ⌊no⌋ / ⌊yes⌋ , the data dial, or numeric keypad → ⏎ to set the value.

1. Mute tracks level

- This setting specifies how much the volume (velocity) will be reduced when a track is muted.
- This setting will also affect the other tracks that are muted when a track is soloed.

Off, 01% – 99%
Off   There will be no sound.
01% – 99%   The velocity values will be reduced by the specified percentage.
                The muted volume will be (original velocity) x (mute track setting).

2. Event chase

- Event Chase is a function that rapidly plays back the specified types of event when a song, pattern, or phrase is played back from the middle or when it is rewound or fast-forwarded. This ensures that voice selections and pitch changes etc. will be correct for the location when playback begins.
- If a song or phrase which uses program changes or pitch bend changes is played back from the middle or is rewound or fast-forwarded, the playback may use unexpected voices or the wrong pitch. Such problems can occur if the section of the song or phrase that was skipped over contains events such as program changes or pitch bends.
- If the Event Chase function is used, the specified type(s) of event will be played back at high speed from the beginning whenever a song or phrase is played back from the middle. This will mean that a certain length of time may elapse from the moment the Start command is given until playback actually begins, or that the rewind/fast-forward speed will be slower.
- If Event Chase is set to ALL, large amounts of MIDI data will be transmitted from the MIDI OUT connector, which can cause MIDI errors to occur on the external MIDI device that is receiving this data.

Off, PC, PC,PB,Ctrl, ALL
Off   Event Chase will not be performed.
PC   Program Change messages
PC,PB,Ctrl   Program Change, Pitch Bend, and Control Change messages
ALL   All events other than notes

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3. Interval time

- When system exclusive data (bulk data) recorded in a sequence track is played back, an interval of the duration specified by this setting will be inserted between each 1 KB (kilobyte) of data.
- When bulk data that was recorded is re-transmitted to an external MIDI device, limitations of the receiving device's bulk data processing power may result in MIDI errors. By setting an appropriate Interval Time, you can transmit bulk data at a rate that the receiving device is able to process.
- In sequence tracks, each unit of system exclusive data is recorded in a single location of time. However when this data is played back, the Interval Time function will insert a delay between each 1 KB of data. The delay is specified in units of 100 ms (1/10 second).
- If MIDI errors occur on the receiving device, increase the Interval Time setting and try transmitting the data again.

0 – 9 * 100 (msec)

- Interval Time settings may cause playback to be delayed.

5. Click

```
UTILITY -- CLICK --
TG Channel            = CH10


         CHANNEL      ACCENT        NORMAL
                    NOTE  LEVEL   NOTE  LEVEL

      TG  ◯  10    C 0  ● 127   B -1  ◯ 080

      MIDI ◯ Off   C 0  ● 127   B -1  ◯ 080
      A

      MIDI ◯ Off   C 0  ● 127   B -1  ◯ 080
      B


System   MIDI  MIDI Fltr Seqencr  Click  FngZone
```

```
F1    F2    F3    F4    F5    F6
```

```
UTILITY

    F1   System
    F2   MIDI
    F3   MIDI filter
    F4   Sequencer
    F5   Click
    F6   Fingered chord zone
```

• Here you can make settings for the Click sound that uses the QY700's tone generator block or an external MIDI tone generator.

• Since the QY700 does not have a dedicated tone generator for the click, simply outputting a click signal does not necessarily mean that a click will sound. Also, the click sound will change depending on the Voice mode settings.

• Find a part for which a drum voice is selected, and then set the channel here so that that part will sound. Then specify the note(s) of the drum voice with which the click will be sounded.

1. Press **UTILITY** .

▼ The indicator located above **UTILITY** will light, and you will enter Utility mode.

2. Press **F5** (Click) to access the Click page.

3. Move the cursor to the parameter that you wish to set.

4. Use 🔾 / 🔾 , the data dial, or numeric keypad → ↵ to set the value.

• The initial settings are as shown in the screen above.

1. Channel

• Specify the part and the tone generator on which the click will be played.

• Find a part for which a drum voice is selected, and set this channel setting so that that part will be played.

• So that you can check whether or not the click will sound, set the song play Click Mode to "All" so that the click will always be played. (→ p.72)

• To avoid problems, set the Channel to "Off" for TG or MIDI OUT if they are not being used for the click.

TG: Off, 01 – 32　Sound the click using the QY700's tone generator block.

MIDI A: Off, 01 – 16　Sound the click on an external MIDI tone generator connected to the MIDI OUT-A connector.

MIDI B: Off, 01 – 16　Sound the click on an external MIDI tone generator connected to the MIDI OUT-B connector.

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2. Accent note/level
3. Normal note/level

- Accent specifies the click note and level for the first beat, and Normal specifies the click note and level for the second and later beats.
- If you are using a drum voice to sound the click, you can use the Note setting to select instruments within the drum voice.
- For the correspondence between notes and instrument, refer to the separate "*QY700 Reference Listings*".
- Level sets the volume by specifying the velocity.

Note	C-2 – G8
Level	000 – 127

6. Fingered chord zone

- The chord detection function of the QY700's Auto-Accompaniment is referred to as Fingered Chord, and the range in which chord detection is performed is called the Fingered Chord Zone.
- Here you can make on/off settings for Fingered Chord, and specify the Fingered Chord Zone etc.

1. Press UTILITY .
▼ The indicator located above UTILITY will light, and you will enter Utility mode.

2. Press F6 (FngZone) to access the Fingered Chord Zone page.

3. Move the cursor to the parameter that you wish to set.

4. Use [↓/NO] / [↑/YES] , the data dial, or numeric keypad → ↵ to set the value.

1. Fingered chord

- Specify whether or not Fingered Chord will be active.
- This setting is linked with the "Fingered Chord" settings displayed in Song mode Song Play and in Pattern mode Patch.

OFF (Off), FINGRD (On)

2. Zone low/high

- The Fingered Chord Zone is specified by the lowest (Low) and highest (High) note.
- Fingered Chord will operate in the keyboard area between the Low and High Zone settings.
- Notes below the Zone Low are used to specify On Bass or Original Bass.
- Zone settings can be made using [↓/NO] / [↑/YES] or the data dial, and also using the microkeyboard of the QY700.

Zone Low   C-2 – G8
Zone High   C-2 – G8
(Zone Low ≦ Zone High)

- When Fingered Chord is selected (FINGRD), the keyboard below Zone High will be dedicated to the Fingered Chord function, and cannot be played normally.
- These settings are not affected by the Keyboard Transpose setting.
- For details on Fingered Chord, refer to "Chapter 1. BASIC CONCEPTS". (→ p.42)

6

3. MIDI port/channel

- When using an external MIDI keyboard for Fingered Chord input, specify the MIDI IN connector(s) to which the keyboard is connected.

MIDI Port   In-A, In-B, In-A,B
MIDI Channel   ALL, 01 – 16

Chapter 7. DISK MODE

This chapter explains Disk mode.
Disk mode is where data can be transferred to and from floppy disk.

7

About floppy disks

On the QY700, floppy disks are used to save data that you create, or to exchange data with other devices. This section explains the types of floppy disks that the QY700 can use, and things you should know about floppy disk handling.

Types of floppy disk

- The QY700 can use two types of floppy disk: 3.5 inch 2HD and 3.5 inch 2DD.
- Before data files can be stored on a floppy disk, the disk must be formatted (initialized). (→ p.316)
- The QY700 formats 2HD disks to 1.44 MB (megabytes) and 2DD disks to 720 KB (kilobytes) MS-DOS format. (MS-DOS is a registered trademark of Microsoft Corporation.)
  Since this format is common to computers as well as to Yamaha products and the products of other manufacturers, it allows disk compatibility.

3.5 inch 2HD
1.44 MB

3.5 inch 2DD
720 KB

Inserting a floppy disk

- With the label side of the floppy disk facing upward, insert it into the floppy disk drive starting with the end with the shutter.
- Push the disk gently in until it clicks into place.

Push disk gently in until it clicks into place

Removing a floppy disk

- After making sure that the floppy disk drive is not in use, firmly press the eject button, make sure that the floppy disk has been completely ejected, and remove it from the drive.

Press the eject button firmly and accurately,
and make sure that the disk is ejected

- If the disk catches inside and does not slide out smoothly, firmly press the eject button once again, or re-insert the floppy disk and then press the eject button once again.
- While the disk-in-use indicator is lit, data is being transferred between the floppy disk and the QY700. While the disk-in-use indicator is lit, never turn off the power or attempt to remove the floppy disk.
  Doing so could damage not only the floppy disk but also the floppy disk drive.

Regular cleaning of the disk drive heads

- Floppy disk drives contain a high-precision magnetic head. When a floppy disk drive is used for an extended period, the heads will become soiled by magnetic particles from the floppy disk. This will increase the chance of errors occurring when data is read or written.
- In order to keep the floppy disk drive in good condition, we recommend that you clean the heads regularly (once a month).

Floppy disk handling and storage

- Floppy disks should not be placed in locations of direct sunlight or temperature extremes, or in excessively damp or dusty locations.
- Do not allow floppy disks to come near objects that have a strong magnetic field, such as televisions or speakers.
- Before turning off the power, remove the floppy disk from the disk drive. Leaving a floppy disk in the drive for a long period with the power turned off can cause the disk to become dirty, producing read/write errors.

Preventing accidental erasure

- Floppy disks have a write-protect slide which can be used to prevent accidental erasure of data. On floppy disks which contain important data, move the write-protect slide to the write-protect position (the window open) so that data cannot be written to the disk.

write permit

write prohibit

write-protect slide

Data backup

- The data on a floppy disk can be damaged by unforeseen accidents. If you have especially important data that you wish to keep, we suggest that you take the time to make a backup copy.

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About Disk mode

- In Disk mode, data can be transferred between a floppy disk and the QY700.
- Disk mode contains the following five groups of operations, which are accessed by the function keys `F1` (save) – `F6` (Format).

  `F1` (Save) lets you save data to floppy disk. (→ p.307)
  `F2` (Load) lets you load files from floppy disk. (→ p.310)
  `F4` (Rename) lets you modify a filename. (→ p.312)
  `F5` (Delete) lets you delete a file from floppy disk. (→ p.314)
  `F6` (Format) lets you format (initialize) a floppy disk. (→ p.316)

- The various operations in `F1` – `F6` handle 3 – 5 different types of data. Use the direct cursor keys `___` [D1] (All Data) – `___` [D5] (Song SMF) to select from the applicable types of data.

  `___` [D1] (All Data) handles all data of the QY700's internal memory as a single file.
  `___` [D2] (Style) handles data such as the 8 patterns within a style or 99 phrases as a single file.
  `___` [D3] (Song) handles the musical data for one song together with voice and effect settings etc. as a single file. However in the `F2` (Load), `F4` (Rename), and `F5` (Delete) pages, ESEQ and SMF song files are also handled.
  `___` [D4] (Song ESEQ) handles only the musical data for one song as an ESEQ file.
  `___` [D5] (Song SMF) handles only the musical data for one song as an SMF format file.

Types of file used by the QY700

1. All Data

- These files handle all data of the QY700's internal memory as a single file.
- All Data includes the following data.
  Songs   20
  Styles   64
  System Setup   1
- Song data includes the musical data for songs 01 – 20 of Song mode, the Voice mode and Effect mode settings for each song, and the Song mode Play Effect and Out Channel settings.
- Style data includes data for the eight Patterns of each Style ($64 \times 8 = 512$), and 99 User Phrases for each Style ($64 \times 99 = 6336$).
  The data for each Pattern includes Play Effect, Pattern Voice, and Pattern Effect settings in addition to the musical data.
- System Setup contains the settings of Utility mode.
- Song data that was created by using the automatic accompaniment functions to join patterns with the song must be saved and loaded as All Data.

2. Style

• Style files contain all the data included in a style of Pattern mode.
• Style files contain the following data.
  Patterns   8 (sections)
  User Phrases   99 (user phrases)
• Pattern data also contains the Play Effect, Pattern Voice, and Pattern Effect settings in addition to the musical data.

3. Song

• Song files handle all data included in one song of Song mode as a single file.
• Song files include the following data.
  Musical data recorded in the song
  Pattern track, Chord track, and Tempo track data
  Play Effect, Out Channel settings
  Voice mode settings
  Effect mode settings

4. Song ESEQ

• ESEQ is a sequencer format developed by Yamaha that is used on many Yamaha products including digital musical instruments such as the QY300 and QS300, Clavinovas and piano players. ESEQ-compatible models can exchange sequence data via floppy disk. (If you plan to exchange data with another Yamaha product, we suggest that you use 2DD disks to ensure disk drive compatibility.)
• Song ESEQ handles as a single file only the musical data of TR1 – TR16 and the tempo track from one song in Song mode.
• Play Effect, Out Channel, Voice mode and Effect mode settings are not included in an ESEQ file.
• Disks which are commercially available for use on the Clavinova or piano players are protected for reasons of copyright, and cannot be loaded into the QY700.

5. Song SMF

• SMF (Standard MIDI File) is defined as a suggested format for MIDI musical data, and is a sequencer data format used by many musical instrument manufacturers and computer software companies. Devices that are Standard MIDI File compatible can exchange sequence data via floppy disk, etc.
• Song SMF handles one Song mode file as a single file.
• Play Effect, Out Channel, Voice mode and Effect mode settings are not included in an SMF file.
• The QY700 can use the following two types of Standard MIDI Files.

Format 0

This format combines data of two or more MIDI channels into a single track. This format can handle the musical data of QY700 Tr1 – Tr16 and the tempo track.
If a song in which music is recorded on Tr1 – Tr32 is saved as format 0, all of the data in Tr17 – Tr32 will be mixed to Tr1 – Tr16 when it is saved. If your song uses tracks 17 and later, use the following format 1 to save it.

Format 1

This format allows an unlimited number of tracks, and each track can contain data of multiple MIDI channels. This format can handle the musical data of all QY700 sequence tracks (Tr1 – Tr32) plus the tempo track.
Format 1 was defined as an extension of format 0. This means that some SMF-compatible devices are able to handle only format 0, and cannot handle format 1. If compatibility is a concern, songs created with 16 or fewer tracks should be saved in format 0.

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XG header

- When saving a song in Song ESEQ and Song SMF formats, you can press ⎡ F4 ⎤ (XG HEADR) to highlight it, so that 1 or 2 setup measures will be added to the beginning of the musical data when it is saved. The QY700's Voice mode and Effect mode data that is required to set up the tone generator will be inserted in the form of MIDI System Exclusive data into these setup measures.
- This function lets you create setup measure easily, without requiring an advanced knowledge of MIDI.
- Since MIDI data that sets up the tone generator is contained at the beginning of song data that was saved with an XG header, the song can be played back using another sequencer and XG-compatible tone generator to produce the same musical result.
- When a file saved with an XG header is loaded and then saved once again with the XG Header setting highlighted, tone generator setup data will again be inserted at the beginning of the song, resulting in duplicate data. For this reason, before saving the data for the second time, you should use the Song job Delete Measure to delete the previous setup measures that were added.
- When a file saved with an XG header is loaded and played back, the tempo may lag slightly during measures 1 – 2. This is because the setup measures that were added contain bulk data. However this will have no effect on the playback of the original portion of the song data.
- When a file saved with an XG header is loaded and played back, all settings of Voice mode and Effect mode will be ignored. If you wish to keep the Voice mode and Effect mode settings, use the Song job Delete Measure to delete the setup measures that were added.

Data filename extensions

- When the above-mentioned five types of data are saved by the QY700, a filename extension (three characters indicating the type of file) will be automatically added to the name of the file as follows.
  1. All Data Q7A
  2. Style Q7P
  3. Song Q7S
  4. Song ESEQ .... .ESQ
  5. Song SMF .... .MID

1. Save

Type of data	Screen display	Setting items
[D1] All Data Save all data from QY700 memory to floppy disk.		1. Specify the filename
[D2] Style Save all data included in one Style of Pattern mode to floppy disk.		1. Select the Style to be saved 2. Specify the filename
[D3] Song Save all data included in one song of Song mode to floppy disk.		1. Select the Song to be saved 2. Specify the filename
[D4] Song ESEQ Save only the musical data of TR1 – TR16 and the tempo track of one song of Song mode to floppy disk in ESEQ format.		1. Select the Song to be saved 2. Turn XG Header on/off 3. Specify the filename
[D5] Song SMF Save only the musical data of one song of Song mode to floppy disk in SMF format.		1. Select the Song to be saved 2. Turn XG Header on/off 3. Format 0/1 4. Specify the filename

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• The Save operation saves data from internal memory to floppy disk.

• Select one of five types of data to be saved. For details on the different file types, refer to "Types of file used by the QY700." (→ p.304)

• The "DISK INFORMATION" area located in the lower right of the screen shows the total number of files on the floppy disk, the total size of all files, and the free area on the disk. The area below this shows the number of files of the selected type that are on the floppy disk, and the total size. Refer to this information when saving your data.

• Before a floppy disk can be used to save data, it must first be formatted. (→ p.316)

• If the size of the data to be saved is greater than the free area of the floppy disk, a message of "Disk Full" will appear. If this occurs, delete unwanted files from the disk, and try the Save operation once again.
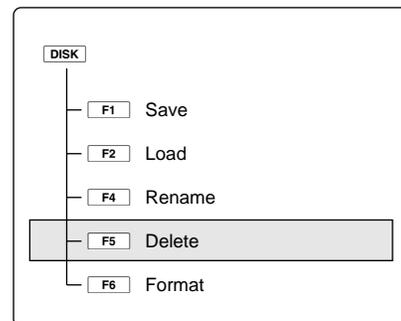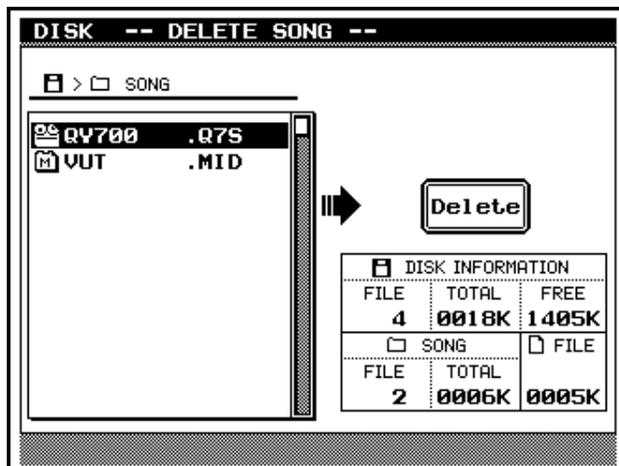
• Be careful that you do not accidentally delete important data from the disk.

1. Press ⌷F1⌷ (Save).
▼ The top line of the display will indicate "DISK -- SAVE --".

2. Press ⌷___⌷ [D1] (All Data) – ⌷___⌷ [D5] (Song SMF) to select the type of data that will be saved.
▼ The corresponding Save page will appear.

3. If Song ESEQ or Song SMF was selected as the data type, use ⌷F4⌷ (XG HEADR) to specify whether or not an XG header will be added.
If you press ⌷F4⌷ (XG HEADR) to highlight the display, 1 – 2 measures of setup data will be added to the beginning of the playback data when it is saved. For details on the XG header, refer to "XG header" (→ p.306).

4. If Song SMF was selected as the data type, use ⌷F1⌷ (FORMAT0) or ⌷F2⌷ (FORMAT1) to select the format of the Standard MIDI File.
For details on Standard MIDI File formats, refer to "Types of file used by the QY700". (→ p.304)

5. In the left side of the display, select the style or song number that you wish to save.

• If you are saving All Data, there will not be a number selection at this point.

```
DISK  -- SAVE SONG --
▦▸▢ SONG     03        ▤▸▢ SONG
▯ 01  SONG            ▥
▯ 02  Song2
▮ 03  Song3            ┌─────────┐
▯ 04  ********         │  Save   │
▯ 05  ********         └─────────┘
▯ 06  ********
▯ 07  ********         ▤ DISK INFORMATION
▯ 08  ********       FILE   TOTAL   FREE
▯ 09  ********        4    0018K  1405K
▯ 10  ********          ▢ SONG
▯ 11  ********       FILE      TOTAL
                      1       0005K
                              (DeflName)
```

6. Press the ▸ key to move the cursor to the right, and specify a filename.

• The filename is what distinguishes between files on the same floppy disk. It is not possible to specify the same filename for two or more different files on the same disk.

• For character input, refer to "Chapter 1. BASIC CONCEPTS". (→ p.53)

• If you press ⌷F6⌷ (DeflName), the name previously specified for the selected of song or style will be copied to the filename.

• When you access the Save page, the filename display will show the name of the file that was saved last. This means that if you press ↵ without modifying the filename, the previous file will be overwritten.

```
DISK  -- SAVE SONG --
▦▸▢ SONG     03        ▤▸▢ SONG
▯ 01  SONG            ▥SONGFILE▣
▯ 02  Song2
▮ 03  Song3            ┌─────────┐
▯ 04  ********         │  Save   │
▯ 05  ********         └─────────┘
▯ 06  ********
▯ 07  ********         ▤ DISK INFORMATION
▯ 08  ********       FILE   TOTAL   FREE
▯ 09  ********        4    0018K  1405K
▯ 10  ********          ▢ SONG
▯ 11  ********       FILE      TOTAL
                      1       0005K
                              (DeflName)
```

7. Make sure that the settings are correct, and press ↵ .
▼ The display will indicate "Executing...", and the data will be saved.

• If the data will be overwritten, a confirmation message will appear. To execute saving, press ⊞YES⊞ . To cancel saving, press ⊟NO⊟ .

8. Press ⌐EXIT¬ to close the Save page.

• When saving a style or song, memory numbers for which there is no data will be displayed as "********" If you attempt to save such styles or songs, a message of "No Data" will appear, and it will not be possible to execute the Save operation.

• It is not possible to use "*" or "?" characters in a filename.

• If a filename includes characters such as spaces or periods which are not permitted by MS-DOS, computers or other devices may not be able to read that file. (MS-DOS is a registered trademark of Microsoft Corporation.)

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2. Load

Type of data	Screen display	Setting items
[D1] All Data A file that was saved as QY700 All Data format will be loaded from floppy disk into internal memory.		1. Select the file to be loaded
[D2] Style A file that was saved as QY700 Style format will be loaded from floppy disk into internal memory.		1. Select the file to be loaded 2. Select the loading destination style
[D3] Song A file that was saved in QY700 Song format or as ESEQ format or SMF format will be loaded from floppy disk into internal memory.		1. Select the file to be loaded 2. Select the loading destination song

- The Load operation loads data from floppy disk into the QY700.
- You can select one of three types of file to be loaded. For details on the types of file, refer to "Types of file used by the QY700." ($\rightarrow$ p.304)
- The "DISK INFORMATION" area located in the lower right of the screen shows the total number of files on the floppy disk, the total size of all files, and the free area on the disk. The area below this shows the number of files of the selected type that are on the floppy disk, and the total size. Refer to this information when loading data.

- When an All Data file is loaded, all data in memory such as Songs, Patterns, Phrases, and System setup data will be overwritten. If internal memory contains data that you wish to save, save it to disk before loading other data.

1. Press ⬜ F2 (Load).
▼ The top line of the display will indicate "DISK -- LOAD --".

2. Press ⬜ [D1] (All Data) – ⬜ [D3] (Song) to select the type of data that you wish to load.
▼ The load execute page will appear.

3. In the left side of the display, select the file that you wish to load.

```
DISK  -- LOAD SONG --
 ▯ > ▢ SONG        ▦ > ▢ SONG
 QY700    .Q7S      ▯ 02 Song2
 VUT      .MID
                     ▮▶  [ Load ]

                     ▯ DISK INFORMATION
                     FILE  TOTAL  FREE
                      4    0018K 1405K
                      ▢ SONG   ▯ FILE
                     FILE  TOTAL
                      2    0006K 0005K
```

Preplay function

- If you have selected Song as the data type, and if a Standard MIDI File format 0 song file is selected, you can press ⬜ F6 (Preplay) to playback the file before you execute loading.
- This is a convenient way to check the contents of the file.

4. Press ► to move the cursor to the memory number area in the right side of the display, and use 🔽/🔼, the data dial or the numeric keypad → ⏎ to specify a memory number as the loading destination.
- If you are loading All Data, this setting will not appear.
- Vacant memory numbers will be displayed with a name of "********".

5. Check the settings, and press ⏎ .
▼ The display will indicate "Executing...", and the data will be loaded.
- If the data will overwrite existing data, a confirmation message will appear. To load the data, press 🔼 . To cancel, press 🔽 .

6. Press EXIT to close the Load execute page.

- If the data to be loaded is larger than the remaining free memory, a message of "Memory Full" will appear. If this occurs, delete unneeded data and repeat the Load operation.

3. Rename

```
DISK  -- RENAME SONG --

 🖫 > 🗀 SONG            🖫 > 🗀 SONG

 📇 QY700    .Q7S        🗋 ▊Y700    .Q7S
 🎵 VUT      .MID
                        ┌─────────┐
 ▮▶                     │ Rename  │
                        └─────────┘

                        ┌ 🖫 DISK INFORMATION ┐
                        │ FILE │ TOTAL │ FREE  │
                        │  4   │ 0018K │ 1405K │
                        │  🗀 SONG    │ 🗋 FILE │
                        │ FILE │ TOTAL │        │
                        │  2   │ 0006K │ 0005K  │
```

```
┌ DISK ┐
│
├─ [F1]  Save
│
├─ [F2]  Load
│
├─ [F4]  Rename
│
├─ [F5]  Delete
│
└─ [F6]  Format
```

Types of data	Function
[D1] All Data	Modify the filename of a file that was saved as QY700 All Data
[D2] Style	Modify the filename of a file that was saved as QY700 Style data
[D3] Song	Modify the filename of any file including files that were saved in QY700 Song format, ESEQ format, or SMF format

📖 • Rename modifies the filename of a file that was saved on floppy disk.
• You can select from three types of file to rename. For details on each type of file, refer to "Types of file used by the QY700." (→ p.304)
• If you select "Song" as the file type, you will be able to modify the filenames of files that were saved by devices other than the QY700.
• The "DISK INFORMATION" area located in the lower right of the screen shows the total number of files on the floppy disk, the total size of all files, and the free area on the disk.
• The area below this shows the number of files of the selected type that are on the floppy disk, the total size, and the size of the selected file.

🎛 1. Press [F4] (Rename).
▼ The top line of the screen will indicate "DISK -- RENAME --".

2. Press ⬚ [D1] (All Data) – ⬚ [D3] (Song) to select the type of data that you wish to rename.
▼ The Rename execute page will appear.

3. In the left side of the display, select the file that you wish to rename.

4. Press ▶ to move the cursor to the right, and modify the filename.
- For details on inputting characters, refer to "Chapter 1. BASIC CONCEPTS". (→ p.53)

5. Check the settings, and press ↵ .
▼ The display will indicate "Executing..." and the filename will be changed.
- If you press ↵ without modifying the filename, the display will indicate "Can't Change File Name," and the Rename operation cannot be executed.

6. Press EXIT to close the Rename execute page.

- If the filename extension of an ESEQ/SMF file is renamed, it may become impossible to load the file.

4. Delete

```
DISK  -- DELETE SONG --

  🖪 > 🗀 SONG
  ┌──────────────────────┐
  │ 📇 QY700   .Q7S   ▓  │
  │ 🎵 VUT     .MID   ░  │       ▮▶   ┌─────────┐
  │                  ░  │            │ Delete  │
  │                  ░  │            └─────────┘
  │                  ░  │
  │                  ░  │       ┌──────────────────┐
  │                  ░  │       │ 🖪 DISK INFORMATION│
  │                  ░  │       ├─────┬──────┬──────┤
  │                  ░  │       │FILE │TOTAL │ FREE │
  │                  ░  │       │  4  │0018K │1405K │
  │                  ░  │       ├─────┴──────┼──────┤
  │                  ░  │       │  🗀 SONG    │🗋 FILE│
  └──────────────────────┘       ├─────┬──────┼──────┤
                                 │FILE │TOTAL │      │
                                 │  2  │0006K │0005K │
                                 └─────┴──────┴──────┘
```

```
┌─────────────────────────────┐
│ DISK                        │
│                             │
│  ─ F1   Save                │
│                             │
│  ─ F2   Load                │
│                             │
│  ─ F4   Rename              │
│                             │
│  ─ F5   Delete              │
│                             │
│  ─ F6   Format              │
│                             │
└─────────────────────────────┘
```

Type of data	Function
[D1] All Data	Delete a file that was saved as QY700 All Data
[D2] Style	Delete a file that was saved as QY700 Style data
[D3] Song	Delete any file including files that were saved in QY700 Song format, ESEQ format, or SMF format

- Delete allows you to delete files from floppy disk.
- You can select from three types of file to delete. For details on each type of file, refer to "Types of file used by the QY700." (→ p.304)
- If you select "Song" as the file type, you will be able to delete files that were saved by devices other than the QY700.
- The "DISK INFORMATION" area located in the lower right of the screen shows the total number of files on the floppy disk, the total size of all files, and the free area on the disk. The area below this shows the number of files of the selected type that are on the floppy disk, the total size, and the size of the selected file. You can refer to this area when deciding which files to delete.

- If Delete is executed, the specified file will be lost forever and cannot be recovered. Before executing this operation, be sure that you really want to delete the file.

1. Press F5 (Delete).
   ▼ The top line of the screen will indicate "DISK -- DELETE --".

2. Press ⬚ [D1] (All Data) – ⬚ [D3] (Song) to select the type of data that you wish to delete.
   ▼ The Delete execute page will appear.

3. Use ▲ / ▼ to select the file that you wish to delete.

4. Check the display, and press ↵ .
▼ A message will ask for confirmation.

5. Press 🔲 .
▼ The display will indicate "Executing..." and the file will be
   deleted.
• To cancel without deleting, press 🔲 .

6. Press EXIT to close the Delete execute page.

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5. Format

- The Format operation formats (initializes) a floppy disk.
- Before a new floppy disk can be used, it must be formatted.

1. Press ⌐F6⌐ (Format).
▼ The Format page will appear.

2. Insert a floppy disk into the floppy disk drive slot.

3. Press ⏎ .
▼ A message will ask for confirmation.

4. Press ⌐YES⌐ .
▼ The display will indicate "Executing..." and formatting will begin. After the disk has been formatted, you will return to the Format page.
- To cancel without formatting, press ⌐NO⌐ .

- The QY700 can use two types of floppy disk: 3.5 inch 2HD and 3.5 inch 2DD.
- The QY700 will format 2HD disks to 18 sectors (1.44 megabyte MS-DOS format) and 2DD disks to 9 sectors (720 kilobyte MS-DOS format). (MS-DOS is a registered trademark of Microsoft Corporation.)

- When the Format operation is executed, the entire contents of the floppy disk will be lost. Be careful not to format an important floppy disk by mistake.

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1. Specifications

Sequencer block

Data capacity	approximately 110,000 notes
Note resolution	480 clocks per quarter note
Polyphony	64 notes
Tempo	25.0 – 300.0
Record modes	Realtime Recording, Punch Recording, Step Recording
Tracks	Song: 35 tracks (TR1 – TR32, Pattern, Chord, Tempo)
	Pattern: 16 tracks (TR1 – TR16)
Songs	20 songs
Patterns	64 user styles x 8 sections (512 user styles)
Phrases	3,876 preset phrases
	up to 99 user phrases for each style
Chord Presets	12×28 types (including Thru)
Edit	Voice edit
	Drum Setup edit
	Song edit
	Phrase edit
Jobs	Song jobs: 25
	Pattern jobs: 30
Play effects	Groove Quantize, Clock Shift / Gate Time / Velocity, Transpose
Fingered Chord functions	Chord Root, Chord Type, On Bass, Original Bass
Sequence file formats	QY700 native sequence format, ESEQ, SMF formats 0/1

Tone generator block

Type	AWM2 tone generator
Maximum polyphony	32 notes
Multi-timbral capability	32 timbres (with DVA)
Preset voices	Normal voices 480
	Drum voices 11
Effects	3 systems (Reverb effect, Chorus effect, Variation effect)
	Reverb 11 types
	Chorus 11 types
	Variation 43 types

Controls

Power switch (POWER ON/OFF)
Volume control (VOLUME)
Pitch wheel
Assignable wheel
Shuttle dial
Data dial
Mode keys (SONG , PATTERN , UTILITY , VOICE , EFFECT , DISK)
Sub-mode keys (EDIT , JOB)
Function keys (F1 – F6)
Direct keys (☐ D1 – ☐ D5)
SHIFT $\times$ 2, EXIT $\times$ 1
CONTRAST control

Sequencer keys (⏺ , ⏹ , ▶ , ⏮ , ⏪ , ⏩)
Locate keys (LOC 1 , LOC 2)
Track keys (TRACK DOWN , TRACK UP , MUTE , SOLO)
Data entry keys (-1/NO , +1/YES)
Cursor keys (▲ , ▼ , ◀ , ▶)
Numeric keypad (0 – 9, -), Enter key (↵)
Octave keys (◁ OCT DOWN × 2, ▷ OCT UP × 2)
Microkeyboard (E2 – F4)
Floppy disk drive

Display (LCD)   320 × 240 dot graphic LCD (with CFL backlight, adjustable contrast)

LED indicators   MODE × 6 (green)
REC × 1 (red)
PLAY × 1 (green)
MIDI IN-A (red), MIDI IN-B × 1 (red), MIDI OUT-A × 1 (green), MIDI OUT-B x 1 (green)

Connectors   PHONES (stereo phone jack)
        Nominal output: +7.0 ± 2 dBm (output impedance 33 ohms)
OUTPUT (phone jack) × 2 (L/MONO, R)
        Nominal output: +6.5 ± 2 dBm (output impedance 1 k-ohm)
FOOT SWITCH
DC IN
MIDI × 4 (IN-A, IN-B, OUT-A, OUT-B)

Floppy disk drive   3.5 inch 2HD (MF2HD) and 2DD (MF2DD) types

Power supply   AC adaptor (PA-5B)

Dimensions   353 (W) × 305 (D) × 90 (H) (mm)

Weight   3.5 kg

Included items   STYLE & DEMONSTRATION (floppy disk)
Power adaptor (PA-5B)
Owner's manual set: Reference + *QY700 Reference Listings*

* Specifications and appearance are subject to change without notice for improvement of the
  product.

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2. Troubleshooting

If you experience problems such as "no sound," "incorrect sound," or "sequencer does not operate," please check the following points before deciding that the unit is malfunctioning. In many cases, checking these points will help you solve the problem.
If this does not solve the problem, contact your nearest Yamaha dealer or the authorized distributor for your country.

Problem	Possible causes	Refer to page
No sound	Is the volume raised sufficiently?	(→ p.13)
	Is the volume of each track raised?	(→ p.170)
	Are the effect settings wrong?	(→ p.190)
	Is Fingered Chord turned on?	(→ p.76)
	Are tracks muted?	(→ p.74)
	Is the TO TG channel turned off?	(→ p.103)
	Have the speakers been disconnected?	(→ p.19)
	Does the playback data contain inappropriate Volume or Expression data?	(→ p.129)
Sound is distorted	Have unneeded effects been set?	(→ p.190)
Volume is low	Has MIDI Volume or Expression been lowered?	(→ p.170)
Pitch is different than the keyboard note that was played	Is the Note Shift setting other than 0?	(→ p.175)
	Is the Detune setting other than 0?	(→ p.174)
	Is the Transpose setting other than 0?	(→ p.175)
Notes are intermittently broken (notes sputter or stutter)	Does the number of currently sounding notes exceed the maximum polyphony?	(→ p.44)
Playback does not start when you press ▶	Does the selected song, pattern, or phrase contain data?	(→ p.72, 200, 247)
	Is the MIDI Sync setting other than "Internal"?	(→ p.291)
Can't change the length of a phrase	Are you attempting to change the length of an already-recorded phrase?	(→ p.249)
When a song is played back, it stops in the middle	Does the Pattern track contain style 65 "end"?	(→ p.126)
	Does the Pattern track contain a Section Connection ▦ pattern?	(→ p.202)
Volume does not diminish significantly when a track is muted	Is the Utility mode Sequencer setting Mute Track Level set to 0?	(→ p.295)
No sound when chords are changed in the middle of a measure	Is Retrigger turned Off for that phrase?	(→ p.210)
Rhythm or note timing are played back differently than when recorded	Are Play Effect settings being used?	(→ p.82, 214)

Cannot use the Fingered Chord function

Is Fingered Chord turned off?

Are you pressing keys within the Fingered Chord Zone?

Can't load a disk created by the QY300

Are you using an MF2DD type disk?

Can't load phrases or patterns created on the QY300 or QS300 into the QY700

The patterns and phrases of the QY700 are structured differently than the patterns and phrases of the QY300 and QS300, and are not compatible.

Can't hear the click sound

Is the Song Play setting Click turned off?

In the Utility mode Click page, is the TG Channel turned off?

In the Voice mode Mixer page, has the part that is sounding the click been set to a volume of 0?

When the song starts, the voice or effect settings that you have made disappear

Does the beginning of the song contain data which resets the tone generator?

Has data which was saved with "XG Header" highlighted been loaded and then saved again?
(Voice mode and Effect mode settings will be affected by the Control Change or Exclusive data within a song.)

Are the voice settings for a part to which a Pattern track is assigned?
(For a part to which a Pattern track is assigned, the voice settings will change each time the pattern changes.)

Is the Song mode Pattern Setup turned on?
(If Pattern Setup is on, voice and effect settings will change each time the pattern changes.)

The memory is full even though there are still unused songs

Are there songs or phrases containing large amounts of data?
(The memory capacity of the QY700 (approximately 110,000 notes) is for the total data of all songs and phrases. This means that if there are songs or phrases which contain large amounts of data, the memory may be full even though there are still unused songs or patterns.)

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3. Error messages

Monitor

Illegal Input

This will appear in response to inappropriate operation or input. Check your input method.

Preset Phrase

This will appear when you attempt to edit a Preset Phrase. If you wish to edit a preset phrase, you must first copy it to a User Phrase.

No Data

When a job is executed, this will appear if the selected track or area contains no data, making the job invalid. Re-select the area.

Time Sig. Mismatch

In Pattern mode, this will appear when you attempt to input a phrase whose time signature is different than the time signature of the pattern. Change the time signature of the pattern, and try the operation again.

Exceed Pat Meas

In Pattern mode, this will appear when you attempt to input a phrase that is longer than the number of measures in the pattern. Specify the number of measures in the pattern, and try the operation again.

MIDI

XG Data Error

This indicates that MIDI data sent to the QY700 contained an error. Check MIDI settings and MIDI cables etc., and transmit the data once again.

MIDI Buffer Full

This indicates that the MIDI reception buffer of the QY700 has filled up, and processing was not possible. Transmit the data once again.

XG Adrs Error
XG Data Error
XG Size Error
XG Checksum Error

These will appear when the received XG data contains an error. Transmit the data once again.

Disk

No Data

When saving data to floppy disk, this will appear if the selected song or style contains no data, and the save operation is invalid. Select a different song or style.

No Disk

This indicates that the floppy disk is not correctly inserted into the QY700. Insert the floppy disk correctly.

Illegal Format

This will appear if the floppy disk is of a format which the QY700 is not able to handle. Check the contents of the disk.

Unformat

This will appear if the floppy disk is not formatted. Format the disk.

Bad Disk

The floppy disk is faulty. Use a different floppy disk.

Bad File

This will appear when you attempt to load a defective file.

File Not Found

When loading, this will appear if the specified file does not exist in the floppy disk. Insert the disk once again, and try the operation again.

Write Protected

This will appear if the write-protect slider of the floppy disk is in the write prohibit position. Remove the floppy disk, close the write-protect slider, and try the operation once again.

Disk Full

This will appear if the floppy disk is full and has no room to save the file. Either use a new floppy disk, or delete unneeded files before trying the operation once again.

Disk Changed

This will appear if you have exchanged disks when you should not have.
Try the operation once again from the beginning.

Illegal File

When loading, this will appear if the specified file cannot be handled by
the QY700. Check the contents of the file.

Can't Change File Name

When renaming, this will appear if the floppy disk already contains a file
with a name identical to the specified filename. Specify a different
filename.

System

Memory Full

This will appear when internal memory is full and it is not possible to
record, edit, execute a job, receive MIDI, or load from floppy disk. De-
lete unneeded songs, patterns, or user phrases, and try the operation once
again.

Battery Low

This will appear when the internal backup battery of the QY700 has run
down. Contact nearest Yamaha dealer or the authorized distributer for
your country to have the battery replaced.

Messages other than error messages

Can't Undo. Ok? (Y/N)

If executing a job would fill up the internal memory so that Undo will not
be available, this message will appear. If you are sure that you will not
need to Undo this job, press ⊞ . To cancel without executing the job,
press ⊟ , and delete unneeded songs, patterns, or user phrases before
trying the operation once again.

Executing...

When loading, saving, or formatting, this message will appear while the
job is being executed. Please wait.

Completed

This will appear when the current process has been completed. Press any
key and the message will disappear.

Are you sure? (Y/N)

Before an operation is executed, this message will ask you for confirma-
tion. Use ⊟ / ⊞ to either cancel or execute.

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4. Glossary

A

Aftertouch: MIDI messages which are transmitted when additional pressure is applied to the keyboard after notes are played.

Attack time: The time over which the volume rises from 0 when a note is played until the maximum volume is reached.

AWM2 tone generation: A method of generating sound developed by Yamaha which is based on digitally recorded waveforms. Since it generates the complex waveform of actual acoustic instruments, it provides extremely realistic sounds. Digital filtering is also built-in, allowing precise control over the tone. AWM2 is an acronym for Advanced Wave Memory 2.

B

Bank number: A number which selects a variation voice from an XG extension bank, relative to the voice selected by the Program Number from the 128 voices of the XG basic bank (GM system level 1)

Beat: When playing back or recording a song, one "beat" (a rhythmic subdivision of a measure).

Beat graph: When using step recording on the QY700 to input notes, a graphic display that indicates the input location.

Brilliance: A control or parameter that regulates the brightness of the tone. The cutoff frequency of the QY700's filters can be controlled to adjust the brilliance.

Bulk data: A type of System Exclusive message which contains a collection of data for the internal settings of a device.

Bus line: A route (line) that carries audio signals from each part or block. The bus lines of the QY700 include "SendVar → Cho," "SendVar → Rev" and "SendCho → Rev," and the stereo bus line that collects the stereo output of each block.

Bypass: An alternative to the usual route. When the QY700's effects are used with a setting of Variation Mode = System, "bypass" refers to the bus line that allows the outputs of the chorus and variation effects to be re-input into a different effect.

C

Channel: The means by which the receiver receives only those MIDI messages that are sent from the specified transmitter.

Chord conversion table: The section which contains data that specifies how the 12 types of Chord Root × 28 types of Chord Type will modify the notes in the scale.

Chord root: An alphabetical letter which indicates the root of a chord. The QY700 lets you specify 12 different chord roots.

Chord track: A track that lets you record and playback Chord Roots and Chord Types.

Chord type: A symbolic or numerical indication of how a chord is composed. The QY700 allows you to select from 28 chord types.

Chorus: A type of effect that adds richness and depth to the sound, similar to what happens when multiple sound sources are heard simultaneously.

Click: A metronome that is sounded when playing back or recording on a sequencer.

Clock: A unit of timing resolution. On the QY700, one clock is a length of 1/480th of a quarter note.

Control change: A group of MIDI messages that are output when a controller (modulation wheel, foot controller etc.) is operated. Each controller has its own control number.

Cutoff frequency: Filters work by allowing the portion of the signal lower than a given frequency to pass, and cutting the portion of the signal above that frequency. This frequency is referred to as the cutoff frequency.

D

Decay time: The time from when the maximum volume of a note is reached until it falls to the sustain level.

Delay: An effect (or device) that delays an audio signal. The QY700's Variation effect allows a delay to be applied.

Depth: The amount or degree of a setting or effect.

Dry sound: The audio signal that is not processed by an effect. Normally when using an effect, not all of the audio signal is passed through the effect. Rather, the degree of the effect is adjusted by mixing the sound that passes through the effect (the wet sound) with the sound that bypasses the effect (the dry sound).

Dump out: The process of transmitting bulk data as MIDI System Exclusive messages.

E

Echo back: The action or process in which data received at the MIDI IN connector is re-transmitted from the MIDI OUT connector.

Edit: The action of modifying or editing data.

Effect: A block (device) that processes the sound to add various effects. The QY700 provides two system effects (reverb and chorus), and one effect (variation) which can be used either as a system effect or as insertion effect.

Element: A block within the AWM2 tone generator that generates a sound. The voices of the QY700 consist of 1 to 2 elements.

Envelope Generator (EG): A block that modifies the level of the tone generator from the moment that a note is played until the sound decays to silence. The AEG controls the volume, the PEG controls the pitch, and the FEG controls the filter.

ESEQ: A sequence data file format developed by Yamaha. ESEQ-compatible products can exchange sequence data via floppy disk. (Disks commercially available for Clavinovas and piano players are exceptions.)

Event: A single piece (such as Note On/Off or Program Change messages) of the data which makes up a sequence.

Exclusive: See the entry for System Exclusive.

Expression: A MIDI control change message used to control the volume of a part.

F

Filter: A block which modifies the tone by cutting the output of a specific frequency portion of the sound. The QY700 has low pass filters for each element of a voice, allowing the tone to be made more mellow by cutting the higher overtones, or brighter by allowing them to pass.

Fingered chord: A function that automatically detects chords based on the combination of notes that are played on the keyboard, and converts the playback of patterns or phrases to the chords that are detected.

Floppy disk: A type of data storage media, available in varieties such as 2DD and 2HD. In order for a device to be able to write and read data to/from a floppy disk, the disk must be formatted appropriately for that device.

Foot controller: A control device that can be used to control tone, volume or effects etc. during a performance.

Formatting: The action of initializing a floppy disk so that it can be used by a specific device.

G

Gate time: The length of time that a note actually sounds.

GM: A specification approved by the MIDI Standards Committee, standardizing the basic functionality of a tone generator, and defining the number of voices and sounds, etc.

H

Hexadecimal: A system of numbering based on 16, in which the digits increment in units of n-th powers of 16. The alphabetical characters A – F are used to express the numbers 10 – 15.

I

IBM-PC/AT series: This is a type of personal computer manufactured and sold by the International Business Machine Corporation. Compatible computers are manufactured and sold by many companies.

Insertion (effect): An effect used in Voice mode as a major factor in the character of a sound. In Song mode, an insertion effect will apply only to the specified part (unlike a system effect), meaning that you can use the insertion effect "aggressively."

Instrument: One of the individual instruments such as snare or bass drum that makes up a drum voice. In a drum voice, a different instrument is assigned to each note of the keyboard.

Instrument category: A classification of voice by type of instrument or playing technique.

Interval time: A delay time that is inserted at regular intervals when transmitting bulk data that was recorded in a sequence track.

L

Length: On the QY700 this indicates the number of measures in the selected phrase.

LFO: An acronym for Low Frequency Oscillator, a block that produces a signal at a low frequency. The signal from the LFO can be used to modulate pitch, volume or tone to produce effects such as vibrato, tremolo and wah.

Load: The process of reading data from floppy disk into internal memory.

Location: The place within a song at which notes will be input or playback will be started, indicated as measure, beat, and clock.

Low pass filter: A type of filter which cuts the high frequencies. The sound can be brightened by raising the cutoff frequency of the filter, or darkened by lowering it.

LSB: An acronym for Least Significant Byte, referring to the lower byte of data when MIDI control change data is divided into two bytes for transmission.

M

Master tune: A parameter that adjust the overall tuning of the entire device.

Maximum polyphony: The maximum number of notes that can be played at once. The QY700 can produce 32 simultaneous notes (counted in 1-element units). If MIDI messages are received requesting more notes than the maximum polyphony allows, currently sounding notes will be turned off, and the later-received notes will be played.

MDF2: The product name of a MIDI data filter. This device receives data for the internal settings of a MIDI device in the form of System Exclusive messages, and stores them to floppy disk.

Measure: A unit of musical duration consisting of several beats.

MIDI: An acronym for Musical Instruments Digital Interface, a standard for transferring data between musical instruments. Most electronic musical instruments today implement the MIDI specification and provide MIDI connectors. Such instruments can be connected together to create remote performance or automatic performance systems.

MIDI data filer: A MIDI device that receives data for the internal settings of a MIDI device in the form of System Exclusive messages, and stores them to floppy disk. An example is the Yamaha MDF2 MIDI data filer.

Mixer: On the QY700, the display page in which you can make settings such as voice, pan, effect and volume etc. for the voice of each part, when recording or playing back.

Modulation wheel: A controller that can be used to smoothly modify the volume, tone or pitch while you perform.

MSB: An acronym for Most Significant Byte, referring to the upper byte of data when MIDI control change data is divided into two bytes for transmission.

Multi-timbral tone generator: A tone generator that can simultaneously produce more than one type of sound.

Mute: A function that temporarily silences a track or reduces its volume.

N

Note name: The name which specifies the pitch of a note, expressed as a character, a sharp or flat symbol, and a number indicating the octave.

NRPN: An acronym for Non Registered Parameter Number. These are a type of MIDI control change message, and are used to edit sounds via MIDI, allowing you to edit filter or EG settings, or adjust the pitch or level for each instrument of a drum voice.

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O

Offset (Relative) editing: A type of editing in which data is added without changing the actual setting; the added data is referred to as the "offset value."

On bass: A function that lets you specify a root note for the bass independently of the chord, so that the playback of a phrase whose Phrase Type is Bass will be fixed on that root note.

Original bass: A function that lets you specify the Chord Root and Chord Type for the bass, so that only a phrase whose Phrase Type is Bass will playback using the bass chord.

Oscillator: A block or device that produces the waveform on which the sound is based, or a frequency that modulates the sound.

Overdub: A method of realtime recording in which new material is recorded without erasing previously recorded tracks.

P

Pan: The parameter that sets the stereo location of a sound when it is played back in stereo. ("Pan" or "panpot" are abbreviations of "panoramic potentiometer.") The pan parameters found in Voice Edit, song play Multi, and Effect Edit are linked.

Parameter: A setting or data item which you can modify in the various mode and sub-mode displays.

Patch: A screen page in Pattern mode that allows you to select and playback patterns, and to create patterns by assigning phrases to each track of the pattern.

Pattern: An accompaniment pattern consisting of drums, bass and chord backing, created by connecting phrases end-to-end or by vertically stacking up to16 parts.

Pattern track: The track which records and plays back pattern data.

Phrase: A unit of musical accompaniment played by a accompaniment part; e.g., a rhythm pattern for the rhythm part, a bass line for the bass part, or chord backing for the guitar part. Phrases are the smallest unit from which the accompaniment of a song is created.

Piano roll: When using step recording to input notes, a graphic display that indicates the pitch and gate time of the notes, with pitch represented by the vertical axis, and measures and beats as the horizontal axis.

Pitch bend: A type of MIDI message that smoothly modifies the pitch.

Pitch wheel: A controller that smoothly changes the pitch. The PITCH wheel of the QY700 can be assigned to control aspects of the sound other than pitch, such as volume or tone.

Portamento: An effect that smoothly changes the pitch from one note to another note. Higher settings of Portamento Time will produce a slower change, and there will be no effect with a setting of 0.

Preset: A type of memory that is built into a device. The QY700 has preset memories for voices, phrases, and patterns.

Program change: A MIDI message that selects a voice.

Program number: On the QY700, a number specifying one of the GM-defined sounds.

Punch recording: A method of realtime recording in which the uses specifies the punch-in and punch-out points, so that recording takes place only in that area.

Q

Quantization: A function which "tightens up" the inexact timing of notes or other events that were entered in realtime.

R

Rate: A type of parameter that controls EG or scaling. For example in the case of an EG on the QY700, two rates can be adjusted.

Realtime recording: A method of recording in which your performance is recorded just as you play, similar to a conventional multi-track recorder. Since the performance is recorded as you play, the musical expression and nuances of your performance will be accurately recorded.

Release time: The time over which the volume falls from the sustain level (beginning at the moment a note is released) until it reaches silence.

Replace: A method of realtime recording or punch recording in which previously recorded data is erased (replaced) as new material is recorded.

Resonance: A parameter that boosts the level of the signal in the area of the cutoff frequency. By emphasizing the overtones in this area, this can produce a distinctive "peaky" tone, making the sound brighter and harder.

Reverb: An effect that simulates the acoustical reverberance of a room or space. The sound that reaches our ear usually includes not only the direct sound, but also sound that was reflected off the walls or ceiling. Reverb creates these indirect reflections artificially. Although some reflections can be perceived individually as distinct echoes, the term "reverb" usually refers only to the indistinct "wash" of reflected sound.

RPN: An acronym for Registered Parameter Number. These MIDI messages are used to set Part settings such as Pitch Bend Sensitivity or Tuning.

S

Save: The process of saving data or songs from internal memory to floppy disk.

Section: A term referring to each of the eight types of patterns that comprise a style. Patterns are selected by specifying the style and the section.

Send level: The amount of signal that is sent to a specified bus line for processing by an effect. The amount of signal that is returned from the effect is the "return level."

Sensitivity: The degree to which an aspect of the sound (e.g., volume) responds to a control (e.g., note velocity).

Sequencer: A block (or device) that records, edits, modifies, and plays back a musical performance in the form of MIDI messages.

Sequence tracks: Tracks which record and playback normal MIDI sequence data.

SMF: See the entry for Standard MIDI File.

Song: A musical composition created by recording performance data on one or more tracks.

Standard MIDI File (SMF): SMF is an acronym for Standard MIDI File; a format that allows easy exchange of song data between different sequencers. Most of today's software and hardware manufacturers provide software/hardware that can read and write Standard MIDI Files.

Step recording: The method of recording in which music is input by entering notes once by one, specifying the note length, velocity, and pitch etc. of each note.

Stereo location: The location within the stereo field from which a sound is heard. This can be modified by the Pan setting.

Store: In Voice mode, the process in which a voice created in the edit buffer is saved to internal memory.

Style: The collective name for a set of eight sections (intro, fill-in, ending, etc.). Sections are put together to create a backing pattern.

Synchronization: The function or process of matching the playback or recording tempo of a device with a separate, external device such as another sequencer or a rhythm machine.

Sync: See Synchronization.

System (effect): An effect which can be applied to all parts by adjusting the Send Levels and Return Level. System effects allow reverb or chorus etc. to be applied to the overall music. The QY700 provides Reverb and Chorus as system effects. The Variation effect can also be used as a system effect.

System exclusive message: A type of MIDI message used to exchange data unique to a specific model or type of device.

T

Tempo track: The track containing data that determines the playback tempo of the song.

Track: A location where musical performance data is recorded.

Transpose: Shifting the pitch in semitone steps.

Tremolo: An effect produced by cyclically modulating the volume.

Tuning: The process of matching the pitch of two or more instruments when playing in an ensemble. Normally, A3 is tuned to 440 Hz.

U

Utility mode: A mode on the QY700 in which system or MIDI settings can be made.

V

Variation effect: One of the QY700's effects. In Voice mode, this effect can be used aggressively as a major component of a sound. The Variation effect can function either as an insertion effect or as a system effect, and provides a wide variety of effect programs such as delay, rotary speaker, auto pan, amp simulation and auto wah in addition to reverb and chorus.

Velocity: A numerical value indicating the speed (force) with which a note was played.

Vibrato: A performance effect produced by cyclically modifying the pitch.

Voice: A sound that is built into the tone generator that can be selected and played.

Voice category: On the QY700, a broad classification of voices that groups them as Normal voices, Drum voices, SFX voices etc.

Volume: A parameter or control that adjusts the volume. Track Volume adjusts the volume of each track, and Master Volume adjusts the overall volume.

W

Wah effect: An effect that cyclically modulates the tone. The QY700 produces this effect by using an LFO signal to modulate the cutoff frequency of the filter.

Waves: Digitally recorded waveforms of various instruments, which are the basis for AWM2 tone generation.

Wet sound: The audio signal that is processed by an effect. Normally when using an effect, not all of the audio signal is passed through the effect. Rather, the degree of the effect is adjusted by mixing the sound that passes through the effect (the wet sound) with the sound that bypasses the effect (the dry sound).

X

XG: A tone generator format developed by Yamaha which expands the GM specification to provide the richer expressiveness and upward data compatibility that is demanded by today's more sophisticated computer peripheral environment.

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YAMAHA