



DIGITAL KEYBOARD

YPT-420



Owner's Manual



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 a 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, never mix old batteries with new ones, and never mix different types of batteries. 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

92-BP (bottom)

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 users 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 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, CA90620

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

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA.

(class B)

OBSERVERA!

Apparaten kopplas inte ur växelströmskällan (nätet) så länge som den är ansluten till vägguttaget, även om själva apparaten har stängts av.

ADVARSEL: Netspændingen til dette apparat er IKKE afbrudt, så længe netledningen sidder i en stikkontakt, som er t endt — også selvom der er slukket på apparatets afbryder.

VAROITUS: Laitteen toisiopiiriin kytketty käyttökytkin ei irroita koko laitetta verkosta.

(standby)

Entsorgung leerer Batterien (nur innerhalb Deutschlands)

Leisten Sie einen Beitrag zum Umweltschutz. Verbrauchte Batterien oder Akkumulatoren dürfen nicht in den Hausmüll. Sie können bei einer Sammelstelle für Altbatterien bzw. Sondermüll abgegeben werden. Informieren Sie sich bei Ihrer Kommune.

(battery)

COMPLIANCE INFORMATION STATEMENT (DECLARATION OF CONFORMITY PROCEDURE)

Responsible Party : Yamaha Corporation of America

Address : 6600 Orangethorpe Ave., Buena Park, Calif.
90620

Telephone : 714-522-9011

Type of Equipment : Digital Keyboard

Model Name : YPT-420

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference, and
- 2) this device must accept any interference received including interference that may cause undesired operation.

See user manual instructions if interference to radio reception is suspected.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA.

(FCC DoC)

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep this manual in a safe place for future reference.



WARNING

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

Power supply/AC power adaptor

- Do not place the power cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.
- Only use the voltage specified as correct for the instrument. The required voltage is printed on the name plate of the instrument.
- Use the specified adaptor (page 102) only. Using the wrong adaptor can result in damage to the instrument or overheating.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.

Do not open

- This instrument contains no user-serviceable parts. Do not open the instrument or attempt to disassemble or modify the internal components in any way. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.

Water warning

- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings. If any liquid such as water seeps into the instrument, turn off the power immediately and unplug the power cord from the AC outlet. Then have the instrument inspected by qualified Yamaha service personnel.
- Never insert or remove an electric plug with wet hands.

Fire warning

- Do not put burning items, such as candles, on the unit.
A burning item may fall over and cause a fire.

Battery

- Always replace all batteries at the same time. Do not use new batteries together with old ones.
- Do not mix battery types, such as alkaline batteries with manganese batteries, or batteries from different makers, or different types of batteries from the same maker, since this can cause overheating, fire, or battery fluid leakage.
- Do not tamper with or disassemble batteries.
- Do not dispose of batteries in fire.
- Do not attempt to recharge batteries that are not intended to be charged.
- Keep batteries away from children.
- If the batteries do leak, avoid contact with the leaked fluid. If the battery fluid should come in contact with your eyes, mouth, or skin, wash immediately with water and consult a doctor. Battery fluid is corrosive and may possibly cause loss of sight or chemical burns.
- Always make sure all batteries are inserted in conformity with the +/- polarity markings. Failure to do so might result in overheating, fire, or battery fluid leakage.
- When the batteries run out, or if the instrument is not to be used for a long time, remove the batteries from the instrument to prevent possible leakage of the battery fluid.

If you notice any abnormality

- When one of the following problems occur, immediately turn off the power switch and disconnect the electric plug from the outlet. (If you are using batteries, remove all batteries from the instrument.) Then have the device inspected by Yamaha service personnel.
- The power cord or plug becomes frayed or damaged.
- It emits unusual smells or smoke.
- Some object has been dropped into the instrument.
- There is a sudden loss of sound during use of the instrument.



CAUTION

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the instrument or other property. These precautions include, but are not limited to, the following:

Power supply/AC power adaptor

- Do not connect the instrument to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.
- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.
- Remove the electric plug from the outlet when the instrument is not to be used for extended periods of time, or during electrical storms.

Location

- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected cables.
- When setting up the product, make sure that the AC outlet you are using is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch and disconnect the plug from the outlet. Even when the power switch is turned off, electricity is still flowing to the product at the minimum level. When you are not using the product for a long time, make sure to unplug the power cord from the wall AC outlet.

Connections

- Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum.
- Be sure to set the volumes of all components at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.

Handling caution

- Do not insert a finger or hand in any gaps on the instrument.
- Never insert or drop paper, metallic, or other objects into the gaps on the panel or keyboard.
- Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
- Do not use the instrument/device or headphones for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

Yamaha cannot be held responsible for damage caused by improper use or modifications to the instrument, or data that is lost or destroyed.

Always turn the power off when the instrument is not in use.

When using a power adaptor, even when the [⏻] (Standby/On) switch is in the "Standby" position, electricity is still flowing to the instrument at the minimum level. When you are not using the instrument for a long time, make sure you unplug the power cord from the wall AC outlet.

Make sure to discard used batteries according to local regulations.

NOTICE

To avoid the possibility of damage to the product, data or other property, follow the notices below.

■ Handling and Maintenance

- Do not use the instrument in the vicinity of a TV, radio, stereo equipment, mobile phone, or other electric devices. Otherwise, the instrument, TV, or radio may generate noise.
- Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration or damage to the internal components.
- Do not place vinyl, plastic or rubber objects on the instrument, since this might discolor the panel or keyboard.
- When cleaning the instrument, use a soft cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

■ Saving data

- The panel settings and some other types of data is lost when you turn off the power to the instrument. Save the data to the Registration Memory (page 80). Saved data may be lost due to malfunction or incorrect operation. Save important data to external device such as a computer.
- To protect against data loss through media damage, we recommend that you save your important data onto two external media.

Information

● About this manual

- The illustrations and LCD screens as shown in this manual are for instructional purposes only, and may appear somewhat different from those on your instrument.
- Windows is a registered trademark of Microsoft® Corporation in the United States and other countries.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

The serial number of this product may be found on the bottom of the unit. You should note this serial number in the space provided below and retain this manual as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____

Serial No. _____

(bottom)

Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.



By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.



For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

[For business users in the European Union]

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.



[Information on Disposal in other Countries outside the European Union]

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

Cd

Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

(weee_battery_en)

Copyright Notice

The following is the title, credits and copyright notices for the song pre-installed in this electronic keyboard:

Composition Title : Against All Odds

Composer's Name : Collins 0007403

Copyright Owner's Name : EMI MUSIC PUBLISHING LTD AND HIT & RUN MUSIC LTD

All Rights Reserved, Unauthorized copying, public performance and broadcasting are strictly prohibited.

This product incorporates and bundles computer programs and contents in which Yamaha owns copyrights or with respect to which it has license to use others' copyrights. Such copyrighted materials include, without limitation, all computer software, style files, MIDI files, WAVE data, musical scores and sound recordings. Any unauthorized use of such programs and contents outside of personal use is not permitted under relevant laws. Any violation of copyright has legal consequences. **DON'T MAKE, DISTRIBUTE OR USE ILLEGAL COPIES.**

Copying of the commercially available musical data including but not limited to MIDI data and/or audio data is strictly prohibited except for your personal use.

Panel Logos



GM System Level 1

“GM System Level 1” is an addition to the MIDI standard which ensures that any GM-compatible music data can be accurately played by any GM-compatible tone generator, regardless of manufacturer. The GM mark is affixed to all software and hardware products that support GM System Level.



XGlite

As its name implies, “XGlite” is a simplified version of Yamaha’s high-quality XG tone generation format. Naturally, you can play back any XG song data using an XGlite tone generator. However, keep in mind that some songs may play back differently compared to the original data, due to the reduced set of control parameters and effects.



USB

USB is an abbreviation for Universal Serial Bus. It is a serial interface for connecting a computer with peripheral Devices. It allows “hot swapping” (connecting peripheral devices while the power to the computer is on).



Stereo Sampled Piano

The instrument has a special Portable Grand Piano Voice—created by state-of-the-art stereo sampling technology and using Yamaha’s sophisticated AWM (Advanced Wave memory) tone generation system.



Touch Response

The exceptionally natural Touch Response feature, with a convenient front panel on/off switch, gives you maximum expressive level control over the voices. It also works in conjunction with the Dynamic Filter, which dynamically adjusts the timbre or tone of a voice according to your playing strength—just a like a real musical instrument!



STYLE FILE

The Style File Format is Yamaha’s original style file format which uses a unique conversion system to provide high-quality automatic accompaniment based on a wide range of chord types.

*Congratulations and thank you for purchasing
the Yamaha Digital Keyboard!*

*Please read this owner's manual carefully before using the instrument
in order to take full advantage of its various features.*

*Make sure to keep this manual in a safe and handy place even after you finish reading,
and refer to it often when you need to better understand an operation or function.*

About the Manuals

This instrument has the following documents and instructional materials.

● Included Documents

- **Owner's Manual (this book)**

Provides overall explanations of this instrument.

- **Data List**

Contains various important preset content lists such as Voices, Styles and Effects.

● Online Materials (Downloadable from the web)

The following instructional materials are available for downloading from the Yamaha Manual Library. Access the Yamaha Manual Library, then enter your model name (YPT-420, for example) in the Model Name area to search the manuals.

Yamaha Manual Library <http://www.yamaha.co.jp/manual/>

- **MIDI Reference**

The MIDI Reference contains MIDI related information, such as the MIDI Data Format and MIDI Implementation chart.

- **MIDI Basics**

If you want to know more about MIDI and how to use it, refer to this introductory book.

Included Accessories

The package includes the following items. Please check that you have them all.

- Owner's Manual

- Data List

- Music rest

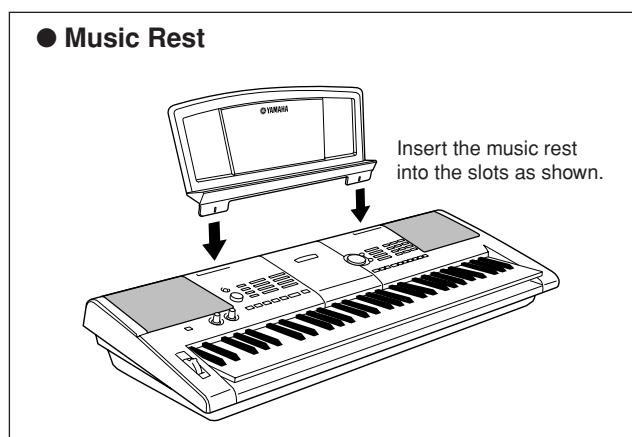
- Accessory CD-ROM

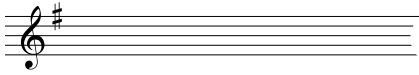
- AC Power Adaptor

* May not be included depending on your particular area. Please check with your Yamaha dealer.

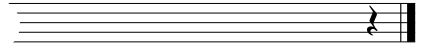
- My Yamaha Product User Registration

* The PRODUCT ID on the sheet will be needed when you fill out the User Registration form.



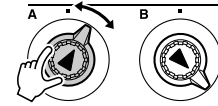


Special Features



■ Creating New Sounds ▶ Page 18

By adjusting just two knobs you can add varying degrees of distortion, “sweetness,” or other characteristics to a sound to change it subtly or drastically. Parameters that can be assigned to the knobs include effect, filter, envelope generator and more. You can create new sounds in real time!



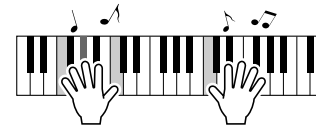
■ Arpeggio Function ▶ Page 14

Similar to the arpeggio functions provided on some synthesizers, this function automatically produces arpeggios (broken chords) when you simply play the appropriate notes on the keyboard. A variety of arpeggios can be produced by changing your fingering or the arpeggio type.



■ Performance assistant technology ▶ Page 23

Play along with a song on the instrument’s keyboard and produce a perfect performance every time ... even if you play wrong notes! All you have to do is play on the keyboard—alternately on the left- and right-hand ranges of the keyboard, for example—and you’ll sound like a pro as long as you play in time with the music.



■ Play a Variety of Instrument Voices ▶ Page 28

The instrument voice that sounds when you play the keyboard can be changed to violin, flute, harp, or any of an extensive range of voices. You can change the mood of a song written for piano, for example, by using violin to play it instead. Experience a whole new world of musical variety.



■ Play Along with Styles ▶ Page 33

Want to play with full accompaniment? Try the auto-accompaniment Styles. The accompaniment styles provide the equivalent of a full backing band covering a wide variety of styles from waltzes to 8-beat to euro-trance ... and much more. Select a style that matches the music you want to play, or experiment with new styles to expand your musical horizons.



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Setting Up

Be sure to do the following operations **BEFORE** turning on the power.

Power Requirements

Although the instrument will run either from an optional AC adaptor or batteries, Yamaha recommends use of an AC adaptor whenever possible. An AC adaptor is more environmentally friendly than batteries and does not deplete resources.

■ Using an AC Power Adaptor

- 1 Make sure that the [⏻] (Standby/On) switch of the instrument is set to Standby.

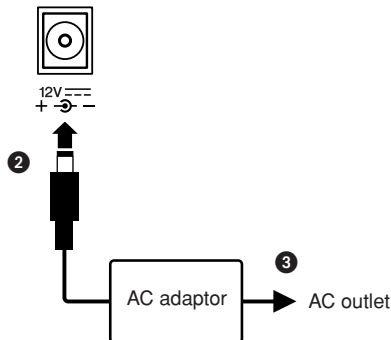
⚠ **WARNING**

- Use the specified adaptor (page 102) only. The use of other adaptors may result in irreparable damage to both the adaptor and the instrument.

- 2 Connect the AC adaptor to the power supply jack.
- 3 Plug the AC adaptor into an AC outlet.

⚠ **CAUTION**

- Unplug the AC Power Adaptor when not using the instrument, or during electrical storms.

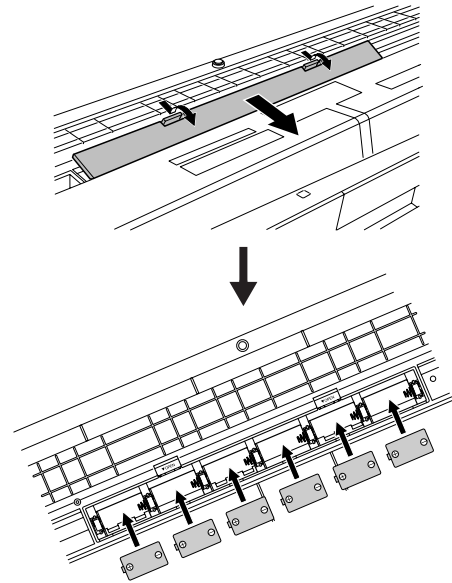


■ Using Batteries

- 1 Open the battery compartment cover located on the instrument's bottom panel.
- 2 Insert the six new batteries, being careful to follow the polarity markings on the inside of the compartment.
- 3 Replace the compartment cover, making sure that it locks firmly in place.

NOTE

- Connecting the AC power adaptor automatically supplies power from the adaptor and overrides battery power, even when batteries are installed.



For battery operation the instrument requires six 1.5V "D" size, R20P (LR20) or equivalent batteries. (Alkaline batteries are recommended.) When battery power becomes too low for proper operation, make sure to replace all batteries, following the precautions listed below.

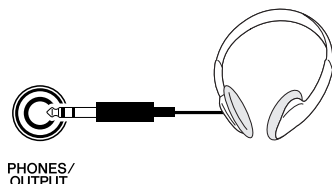
If necessary, also make sure to save all important User data (see page 56), since custom panel settings are lost when the batteries are removed.

⚠ **CAUTION**

- Use only manganese or alkaline batteries for this instrument. Other types of batteries (including rechargeable batteries) may exhibit a sudden drop in power when the batteries are low, possibly resulting in a loss of flash memory data.
- Be sure to install the batteries in the same direction, maintaining the correct polarity (as shown). Incorrect battery installation may result in heat, fire and/or leaking of corrosive chemicals.
- When the batteries run down, replace them with a complete set of six new batteries. NEVER mix old and new batteries. Do not use different kinds of batteries (e.g. alkaline and manganese) at the same time.
- If the instrument will not be used for an extended period of time, remove the batteries to prevent possible fluid leakage.
- Please use the power adaptor when transferring data to flash memory. Batteries (including rechargeable types) can be drained rapidly by this type of operation. If the batteries do become drained during a data transfer, both the data being transferred and the data currently in the transfer destination will be lost.

Make all necessary connections below **BEFORE** turning the power on.

Connecting Headphones (PHONES/OUTPUT Jack)



The internal speakers are automatically shut off when a plug is inserted into this jack.

The PHONES/OUTPUT jack also functions as an external output. You can connect the PHONES/OUTPUT jack to a keyboard amplifier, stereo system, mixer, tape recorder, or other line-level audio device to send the instrument's output signal to that device.

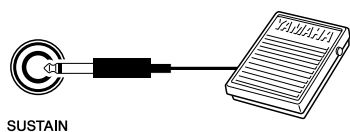
WARNING

- Avoid listening with the headphones at high volume for long periods of time; doing so may not only result in ear fatigue, it may be damaging to your hearing.

CAUTION

- To prevent damage to the speakers, set the volume of the external devices at the minimum setting before connecting them. Failure to observe these cautions may result in electric shock or equipment damage. Also, be sure to set the volumes of all devices at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.

Connecting a Footswitch (SUSTAIN Jack)

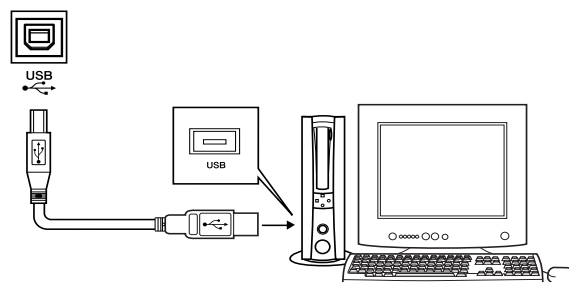


The sustain function lets you produce a natural sustain as you play by pressing a footswitch. Plug the Yamaha FC4 or FC5 footswitch into this jack and use it to switch sustain on and off.

NOTE

- Make sure that the footswitch plug is properly connected to the SUSTAIN jack before turning on the power.
- Do not press the footswitch while turning the power on. Doing this changes the recognized polarity of the footswitch, resulting in reversed footswitch operation.

Connecting to a Computer (USB Terminal)



Connect the instrument's USB terminal to the USB terminal of a computer, and you can transfer performance data and song files between the two (page 86). To use the USB data-transfer features you'll need to do the following:

- First, make sure the **POWER** switch on the instrument is set to **OFF**, then use a USB cable to connect the instrument to the computer. After making the connections, turn on the power of the instrument.
- Install the **USB MIDI driver** on your computer.

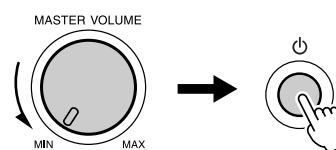
Installation of the USB MIDI driver is described on page 94.

NOTE

- Make sure to purchase a quality USB cable at a musical instrument store, computer store or electrical appliance store.

Turning the Power On

Turn down the volume by turning the [MASTER VOLUME] control to the left and press the [⏻] (Standby/On) switch to turn on the power. Press the [⏻] (Standby/On) switch again to turn the power OFF.



Backup data in the flash memory is loaded to the instrument when the power is turned on. If no backup data exists on flash memory, all instrument settings are restored to the initial factory defaults when the power is turned on.

CAUTION

- Even when the [⏻] (Standby/On) switch is in the "Standby" position, electricity is still flowing to the instrument at the minimum level. When you are not using the instrument for a long time, make sure you unplug the AC power adaptor from the wall AC outlet, and/or remove the batteries from the instrument.

CAUTION

- Never attempt to turn the power off when a "WRITING!" message is shown in the display. Doing so can damage the flash memory and result in data loss.



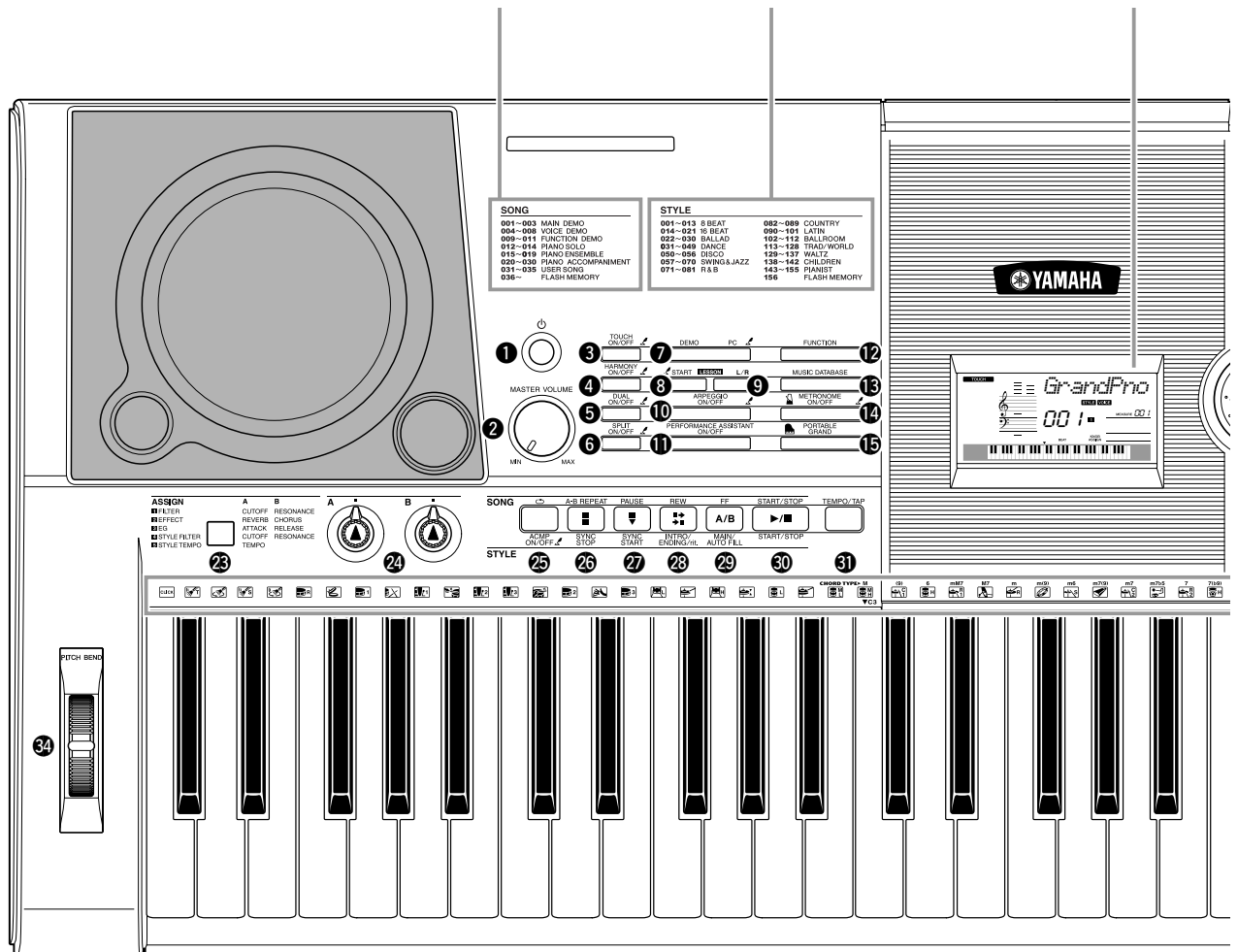
Panel Controls and Terminals

Front Panel

Song Category List
(page 41)

Style Category List
(separate Data List)

Display
(page 59)

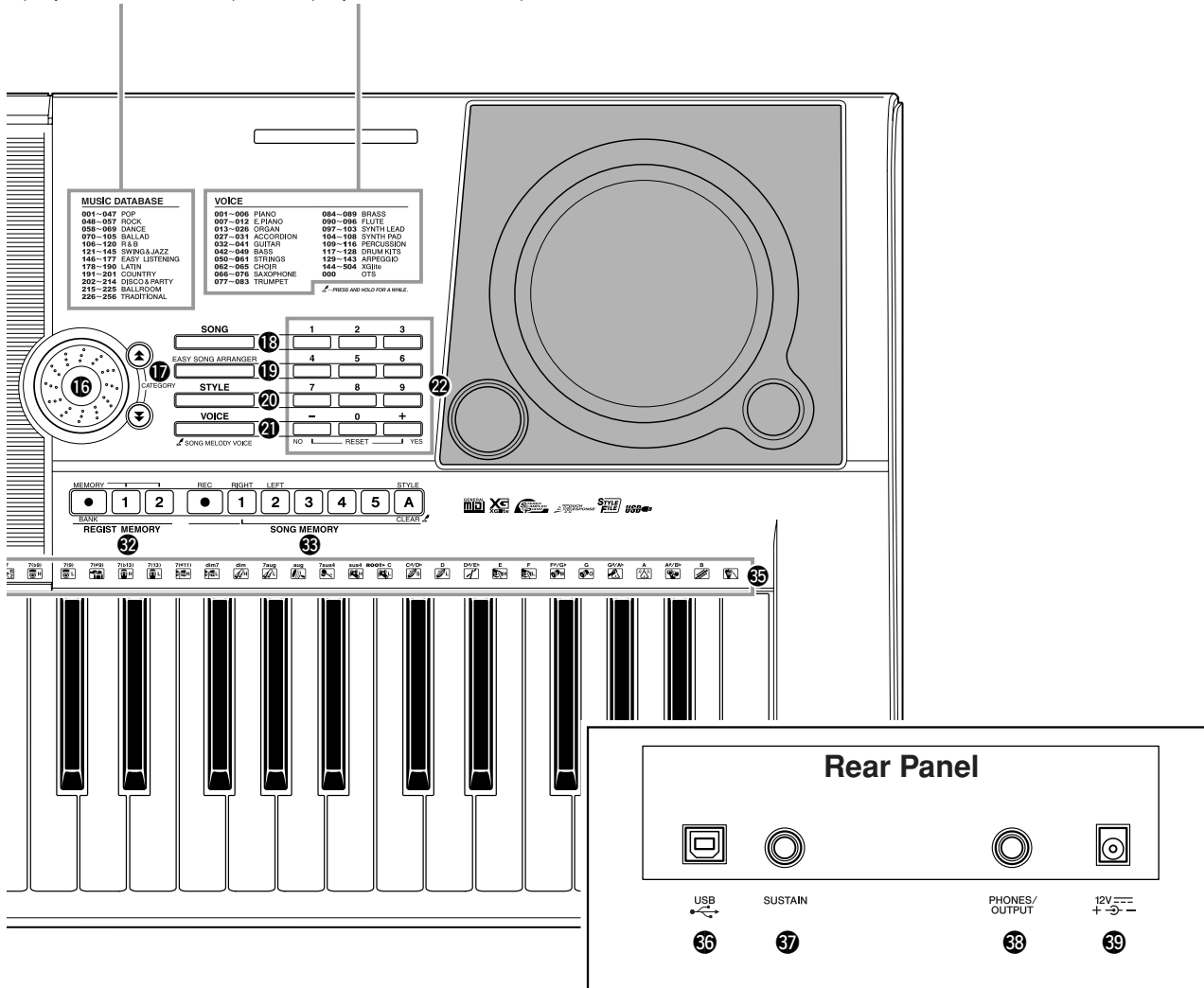


Front Panel

- 1 [⏻] (Standby/On) switch page 11
- 2 [MASTER VOLUME] control.... pages 11, 24
- 3 [TOUCH ON/OFF] button page 65
- 4 [HARMONY ON/OFF] button page 60
- 5 [DUAL ON/OFF] button page 29
- 6 [SPLIT ON/OFF] button page 30
- 7 [DEMO] button page 40
- 8 LESSON [START] button page 44
- 9 LESSON [L/R] button page 44
- 10 [ARPEGGIO ON/OFF] button page 14
- 11 [PERFORMANCE ASSISTANT ON/OFF] button page 23
- 12 [FUNCTION] button page 82
- 13 [MUSIC DATABASE] button page 49
- 14 [METRONOME ON/OFF] button page 63
- 15 [PORTABLE GRAND] button page 31
- 16 Dial pages 58, 82
- 17 CATEGORY [▲] and [▼] buttons pages 58, 82
- 18 [SONG] button page 39
- 19 [EASY SONG ARRANGER] button page 50
- 20 [STYLE] button page 33
- 21 [VOICE] button page 28
- 22 Number buttons [0]–[9], [+], and [-] buttons pages 58, 82
- 23 [ASSIGN] button page 18
- 24 [A] and [B] knobs page 21
- 25 [↺] (REPEAT & LEARN)/ [ACMP ON/OFF] button pages 48, 34

Music Database List
(separate Data List)

Voice Category List
(separate Data List)



- 26 [A-B REPEAT]/
[SYNC STOP] button pages 78, 71
- 27 [PAUSE]/
[SYNC START] button pages 40, 70
- 28 [REW]/
[INTRO/ENDING/rit.] button pages 40, 71
- 29 [FF]/
[MAIN/AUTO FILL] button pages 40, 71
- 30 [START/STOP] button pages 33, 40, 58
- 31 [TEMPO/TAP] button page 27
- 32 REGIST MEMORY
[●] (MEMORY/BANK),
[1], [2] buttons page 80
- 33 SONG MEMORY
[REC], [1]–[5], [A] buttons..... page 52
- 34 PITCH BEND wheel page 66
- 35 Drum Kit icons..... page 32

Rear Panel

- 36 USB terminalpages 11, 86
- 37 SUSTAIN jack..... page 11
- 38 PHONES/OUTPUT jack page 11
- 39 DC IN jack page 10

NOTE

• Only the following four buttons light up when selected. (Other buttons do not light up even if selected.)

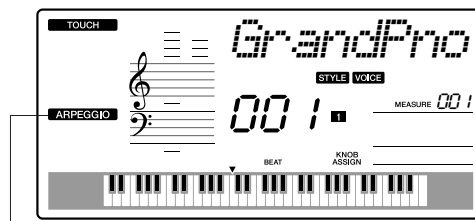
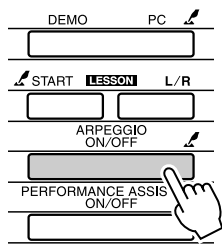
- 18 [SONG] button
- 19 [EASY SONG ARRANGER] button
- 20 [STYLE] button
- 21 [VOICE] button



Creating Arpeggios

The arpeggio function lets you create arpeggios (broken chords) by simply playing the required notes on the keyboard. For example, you could play the notes of a triad—the root, third, and fifth—and the arpeggio function will automatically create a variety of interesting arpeggio-type phrases. By changing the arpeggio type and the notes you play it is possible to create a wide range of patterns and phrases that can be used for music production as well as performance.

1 Press the [ARPEGGIO ON/OFF] button to turn the arpeggio function on.



ARPEGGIO

The ARPEGGIO icon appears when the arpeggio function is on.

● Voices and the Arpeggio Function

This instrument lets you select a variety of “voices” that you can play via the keyboard. When you select a voice number between 129 and 143 the arpeggio function will automatically be engaged so you can start playing arpeggios immediately. The arpeggio function will automatically be turned off when you select any other voice.

NOTE

• See “Try Playing a Variety of Instrument Voices” on page 28.

If you want to use voices 129–143 for normal performance without the arpeggio function, press the [ARPEGGIO ON/OFF] button to turn the arpeggio function off after selecting the voice.

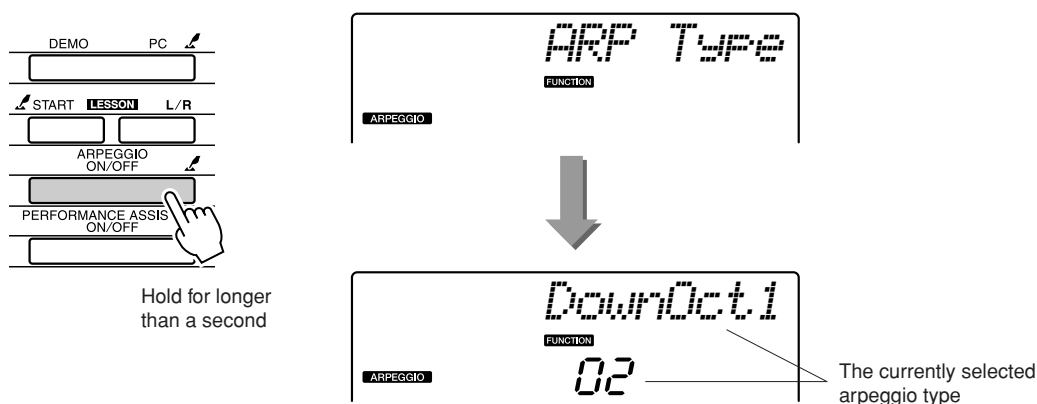
● Voices for which the arpeggio function is automatically turned on.

Voice No.	Voice Name
129	Synth Sequence
130	Sawtooth Lead Arpeggio
131	Analog Sequence
132	Chord Sequence
133	Sawtooth
134	Square Pulse
135	Trance
136	Synth Echo

Voice No.	Voice Name
137	Piano Arpeggio
138	Ballad Electric Piano
139	Guitar Chord
140	Guitar Arpeggio
141	Acid Synth
142	Arabic Loop
143	Massive Percussion

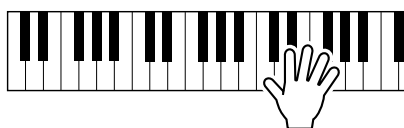
2 Select an arpeggio type.

The most suitable arpeggio type is automatically selected when you select a voice, but you can easily select any other arpeggio type.



Hold the [ARPEGGIO ON/OFF] button for longer than a second and the name of the current arpeggio type will appear in the display. Rotate the dial to select the desired arpeggio type. A list of the available arpeggio types is provided in the separate Data List.

3 Play the keyboard.



The sound of the arpeggio produced will change according to the number of notes you play and the area of the keyboard you play in. You can save the instrument's settings at this point and then recall them at any time you want to repeat your performance (page 80). You can also record your performance (page 52).

The arpeggio function applies only to the main and dual voices, and does not affect split voices. The arpeggio function cannot be used at the same time as the harmony function.

NOTE

- Make sure that you are not pressing any of the keyboard's keys while turning the arpeggio function on or off.

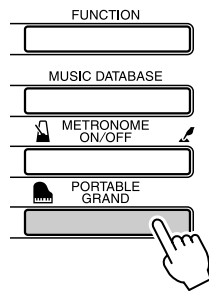
4 When you have finished playing with the arpeggio function, press the [ARPEGGIO ON/OFF] button to turn it off.

Create a Pop Tune

You can play a style and specify the style chords with your left hand while playing arpeggios with your right hand to create interesting sonic textures and backgrounds.

1 Select the keyboard voice (page 28).

For this example we'll use a grand piano voice, so press the [PORTABLE GRAND] button. This convenient voice selection method lets you instantly select a voice with a single button press.

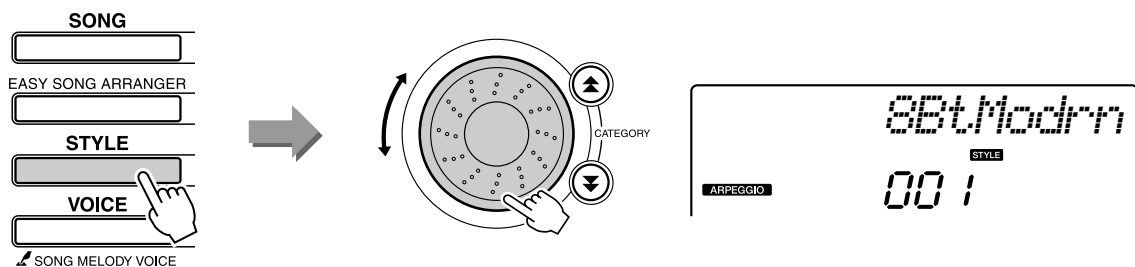


2 After turning the arpeggio function on, select an arpeggio type (steps 1 and 2 on the preceding page).

For this example select "02 DownOct1". That completes preparation to use the arpeggio function.

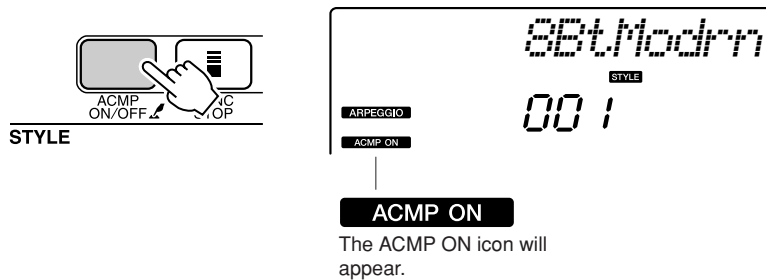
3 Select the style you want to play along with the arpeggio function.

A "style" is an automatic accompaniment pattern. Press the [STYLE] button and the name of the currently selected style will appear in the display. Rotate the dial to select the desired style. For this example we'll use the "001 8BtModrn" (8 Beat Modern) style.



NOTE
 • Refer to "Playing Styles" on page 33.

4 Press the [ACMP ON/OFF] button to turn auto accompaniment on.



When auto accompaniment is turned on, the left-hand section of the keyboard is used only for specifying accompaniment chords.

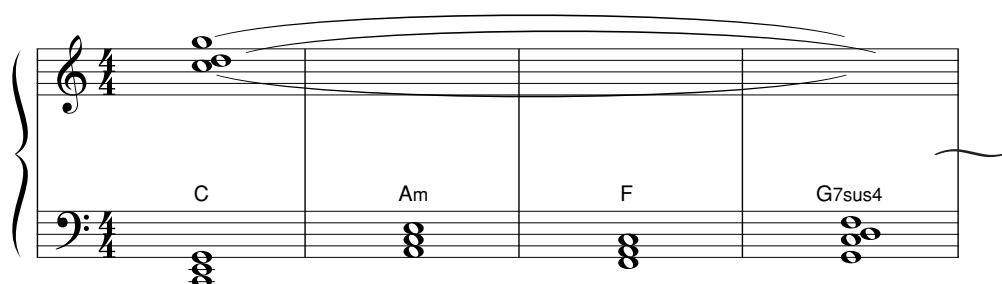
NOTE

• Refer to "When automatic accompaniment is on ..." on page 34.

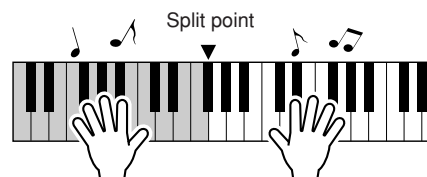
5 Press the [START/STOP] button.

The rhythm accompaniment will start.

6 Begin playing.



Listen carefully to the rhythm of the style, then play the notes shown in the score at the beginning of a measure. The style and arpeggio will begin playing together. The accompaniment will change accordingly each time you play a new left-hand chord. Of course you can also change your right-hand fingering to produce interesting changes. If you're not comfortable with right-hand playing yet, you could use the performance assistant technology feature described on page 23. When the performance assistant feature is on, playing any right-hand key will always produce musically appropriate notes!



Whenever you're playing a style as well as a right-hand part, be sure that your left hand plays only to the left of the split point and your right hand plays only to the right of the split point. (page 30)

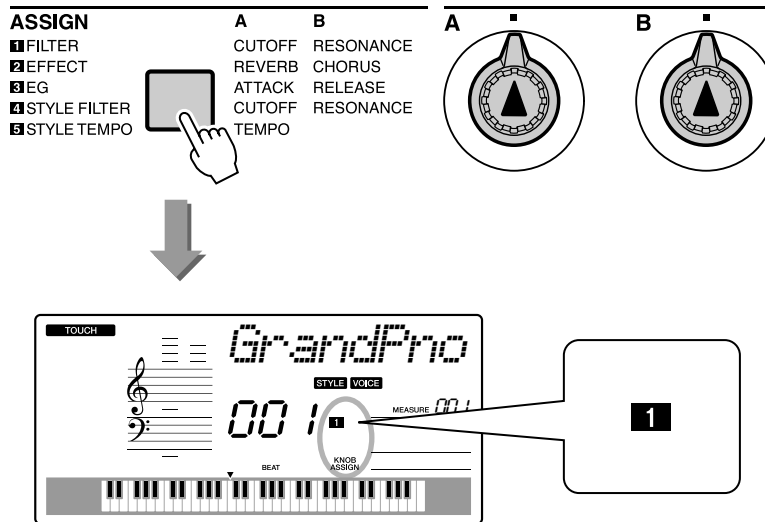


Create Original Sounds

The two knobs located in the lower left area of the panel can be used to add variations to the sound being played, transforming the sound in a variety of musical ways. Filter, envelope generator, and other effects can be assigned to the two knobs as required. In this section we'll explain how effects can be assigned to the knobs, and provide a few tips for their use.

Assigning Effects to the Knobs

Repeatedly press the [ASSIGN] button to sequentially select the five effect combinations provided: **1** → **2** → **3** → **4** → **5** → **1** → ... etc. The currently selected combination is shown in the display.



Number/Effect	Knob A	Knob B
1 Filter	Filter Cutoff	Filter Resonance
2 Effect	Reverb Send Level	Chorus Send Level
3 EG	Attack Time	Release Time
4 Style Filter	Filter Cutoff	Filter Resonance
5 Style Tempo	Tempo	-No Effect-

The assignable knob effects are pre-programmed in the pairs listed above. It is not possible to assign different effect combinations.

1–3 affect the main and dual voices only. Split voices will not be affected. Styles and songs will also not be affected.

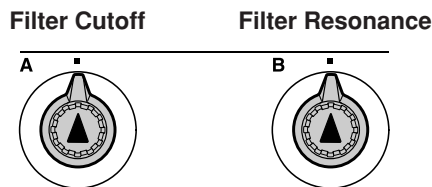
4–5 affect styles only.

1 Filter

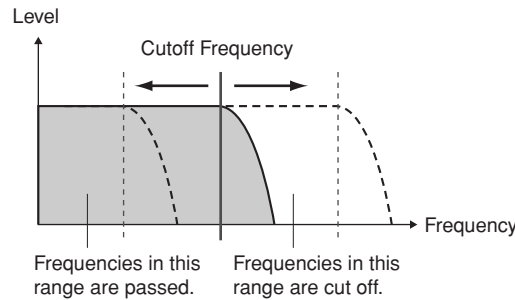
Filter effects shape sound by allowing only a specified range of frequencies to pass and/or by producing a resonance peak at the filter’s “cutoff” frequency. Filter effects can be used to create a range of synthesizer-like sounds.

* Filter effects can sometimes cause distortion in the bass frequencies.

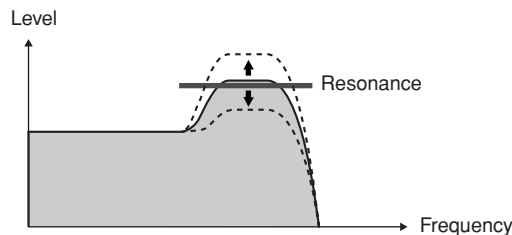
Some hints for using the filter effects are provided on page 22.



Knob A adjusts the filter’s cutoff frequency, and therefore the brightness of the sound.

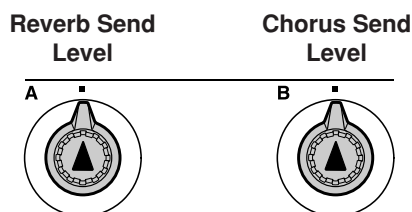


Knob B adjusts the amount of resonance applied at the filter’s cutoff frequency. Increasing the resonance emphasizes the frequencies at the cutoff frequency, and thus “strengthens” the perceived effect of the filter.



2 Effect

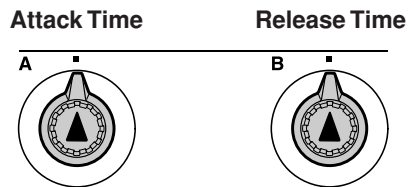
Reverb reproduces the acoustic ambience of a concert hall or club, while chorus produces a layered “multi-instrument” effect.



Knob A adjusts the depth of the reverb effect, and Knob B adjusts the depth of the chorus effect.

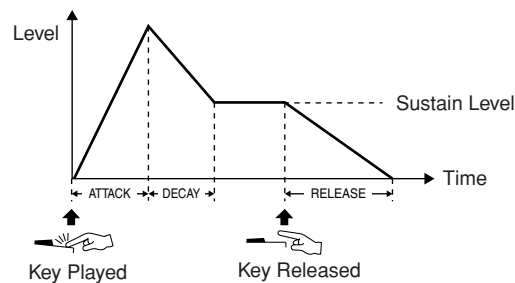
3 EG (Envelope Generator)

Envelope Generator effects determine how the level of the sound varies over time. You can make the attack faster for a more percussive sound or slower for a violin-like sound, for example. Or you can lengthen or shorten the sustain to most ideally match the music.

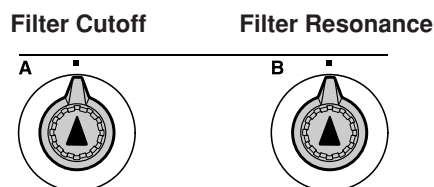


Knob A adjusts attack time (the amount of time it takes the sound to reach maximum level when a key is played).

Knob B adjusts release time (the amount of time it takes for the sound to decay to silence after a key is released).

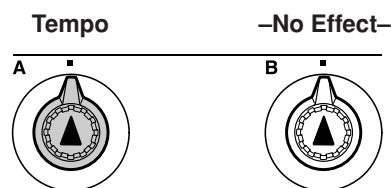


4 Style Filter



In this case the knobs apply the filter effect to the style being played. Knob A and Knob B have the same functions as for “1 Filter” described on the preceding page.

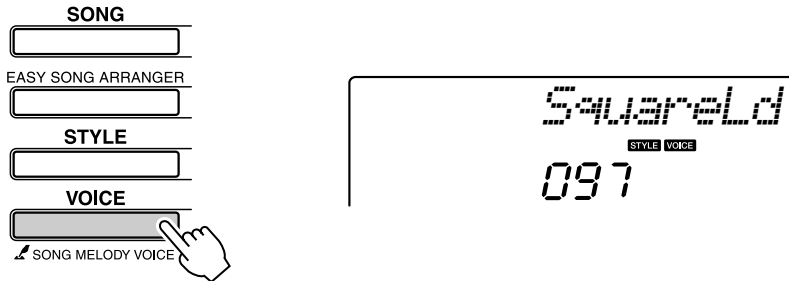
5 Style Tempo



Knob A adjusts the tempo of the style and arpeggios. Rotating the knob clockwise increases the tempo while rotating it counterclockwise decreases the tempo. The knob’s center position produces the initial default tempo.

Using the Knobs

1 Select the voice you want to play on the keyboard.



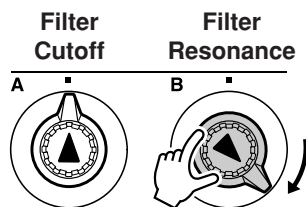
The name of the currently selected voice will appear in the display when you press the [VOICE] button. Use the dial to select the desired voice. For this example we want to use a synth-lead type voice, so select “97 SquareLd” (Square-wave Lead).

2 Press the [ASSIGN] button as many times as necessary to select “1 FILTER” (“1” will appear in the display).



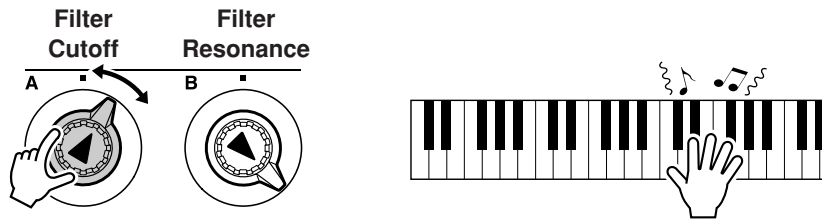
Knob A can now be used to adjust the filter cutoff frequency, and Knob B can be used to adjust the resonance.

3 Rotate Knob B to its maximum setting (all the way to the right).



Rotating the knob to the right while the volume is set to a high level can result in distortion. If this occurs, reduce the volume level.

4 Play with the right hand while operating Knob A with the left hand.



If you select a different keyboard voice the knobs will be reset and the ideal settings for the selected voice will be automatically recalled. In the same way, if the “**4** STYLE FILTER” effect is selected, the knobs will be reset if a different style is selected. If you create an original setting you like, it might be a good idea to save it in the instrument’s Registration Memory (page 80) so you can recall the same settings again at any time. You can also record performances using original sounds you’ve created (page 52).

The chart below lists some interesting ways to use the various effects that can be assigned to the knobs.

Changing the knob settings does not immediately change the sound. Newly assigned effects will only change the sound when the knobs are first operated after the new effect has been selected.

● Some Ideas for Using the Knobs

Number/Effect	Try This
1 FILTER	Select a synth-type lead or pad voice (see the separate Data List for the Voice List). Turn Knob B all the way up and operate Knob A while playing for some spacey, floating 1980’s effects.
2 EFFECT	Select a voice that sounds as though it already has reverb and chorus effects applied, and turn Knob A and Knob B all the way down to hear the “direct” sound of the voice. You can then turn the Knob A and Knob B settings up to add extra impact and richness to the voice.
3 EG	Select a piano voice, and turn Knob B all the way up and Knob A to about the 3 o’clock position. This should give you a majestic, organ-like sound. The attack time is quite long so play the keys and hold them to let the sound come in fully. Ideal for slow pieces.
4 STYLE FILTER	Select style 31, Euro Trance. Turn accompaniment on and start style playback (page 34). Set Knob B to about 3 o’clock, and Knob A to about 8 o’clock. The overall sound of the style should be a bit muffled, with the drums emphasized for solid rhythmic impact.
5 STYLE TEMPO	Play a style and/or arpeggio (page 14) and use Knob A to adjust the tempo.



The Easy Way to Play Piano

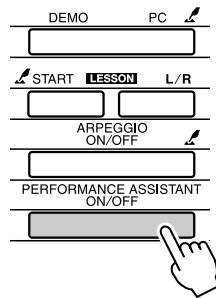
This instrument includes a performance assistant technology feature that lets you play along with a song and sound like a great pianist (even though you might be making lots of mistakes)! In fact, you can play any notes and still sound good!
So even if you can't play piano and can't read a note of music, you can have some musical fun. It's never too late to start learning!

Refer to page 25 for more information on using performance assistant technology to help you play.

Play with Both Hands

1 Press the [PERFORMANCE ASSISTANT ON/OFF] button.

This turns on the performance assistant technology feature. The P.A.T. icon will appear after "PERFORMANCE ASSISTANT".



Press the [PERFORMANCE ASSISTANT ON/OFF] button to turn the function on or off.



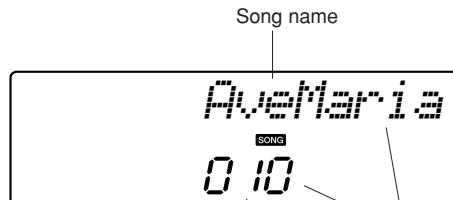
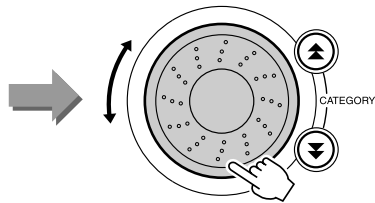
P.A.T.

Icon will appear when performance assistant technology is on.

2 Select a song.

Press the [SONG] button, and the song number and name will be displayed. You can use the dial or other selection controls to select a different song.

For this example try selecting the "010 AveMaria".



Song name

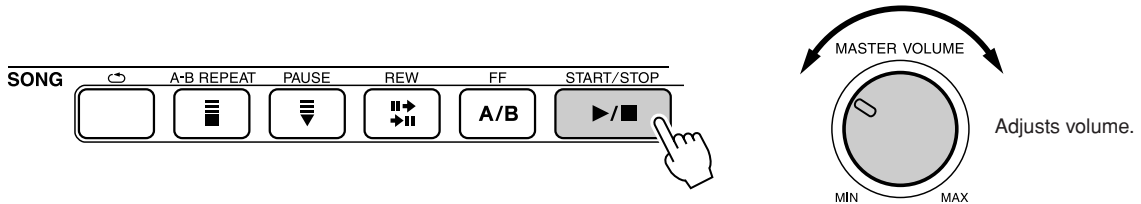
Song number

The song displayed here will be played.

● **What is a “Song”?**

Of course you know the normal meaning of the word, but for this instrument the term “song” also refers to the data that makes up a piece of music. You can listen to the songs, use them for lessons, and use them with a range of other functions (page 39).

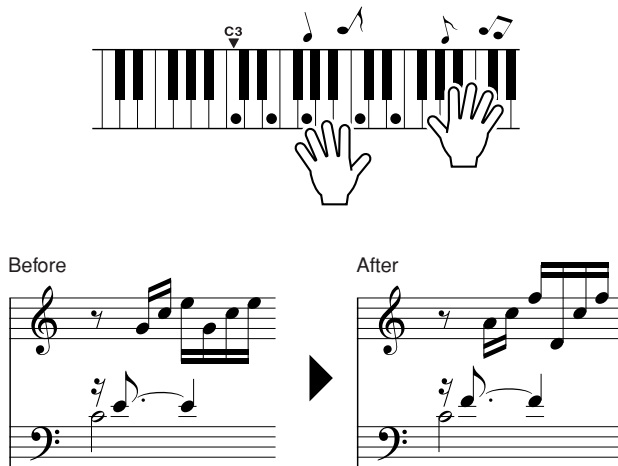
3 Press the [START/STOP] button.



Song playback will begin.

The basic pattern will repeat. Listen to four measures while memorizing the basic pattern. It's your turn to play the part from the fifth measure.

4 Play on the keyboard.



Play the score on the left along with the accompaniment using both hands. You can even play the same keys over and over: C, E, G, C, E, G, C, E. Performance assistant technology will make sure that the notes will come out as if they were played according to the score on the right. Keep playing, and performance assistant technology will continue to “correct” the notes that you play.

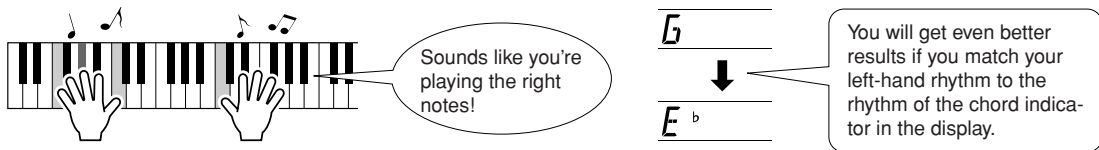
You can stop song playback at any time by pressing the [START/STOP] button.

5 Press the [PERFORMANCE ASSISTANT ON/OFF] button to turn the performance assistant technology feature off.

The complete score for Ave Maria is provided in the separate Data List.

Use the Performance Assistant to Play Like a Pro!

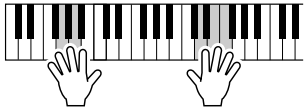
To begin, try to feel the rhythm of the song. Then, with your hands spread as shown in the illustration, simply play the keyboard alternately with your left and right hands (any notes will do).



How does it sound? You'll get acceptable results no matter where you play thanks to performance assistant technology!

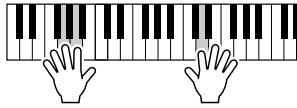
Next try the three playing methods illustrated below. Different ways of playing produce different results.

- Play with the left and right hands at the same timing—type 1.



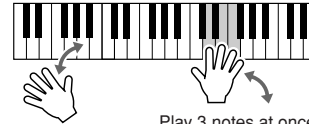
Play 3 notes at once with your right hand.

- Play with the left and right hands at the same timing—type 2.



Play 1 note at a time with your right hand (for example: index finger → middle finger → ring finger).

- Play alternately with the left and right hands—type 3.



Play 3 notes at once with your right hand.

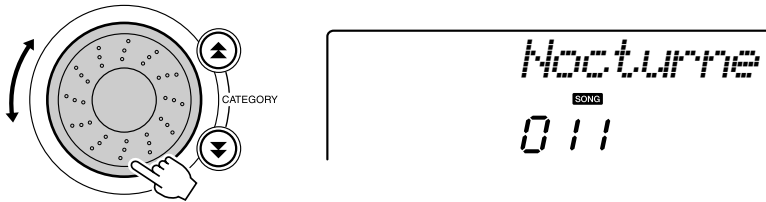
Once you get a feel for it, try playing chords with your left hand and a melody with your right ... or any other combination.

To use the performance assistant technology feature it is necessary to play a song that includes chord data, or a style with auto accompaniment on.

If a song includes the required data, the chords are shown on the right side of the display (page 59).

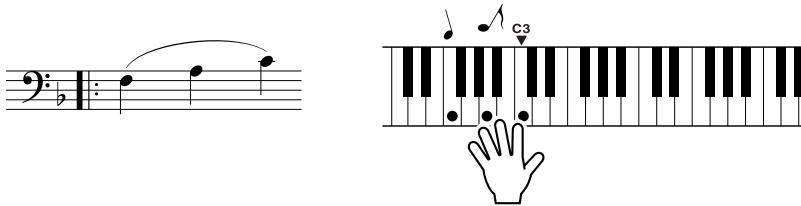
Next try playing the Chopin Nocturne.

- 1** The procedure is that same as that described for playing Ave Maria on pages 23–25. Select “011 Nocturne”.



- 2** Listen to eight measures, then begin playing from the ninth measure.

Play the keys shown in the illustration. Keep playing F, A and C with your left hand and the correct notes will sound as the song proceeds. When you get used to playing the left hand part, refer to “The Easy Way to Play Piano” on page 23 and try adding the right-hand part.

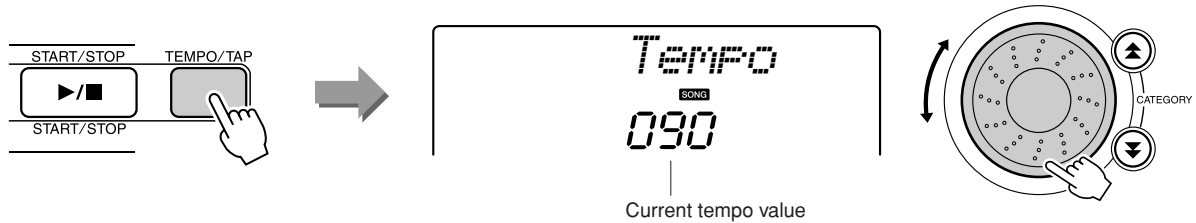


- 3** Press the [PERFORMANCE ASSISTANT ON/OFF] button to turn the performance assistant technology feature off.

The complete score for Nocturne is provided in the separate Data List.

Change the Song Tempo

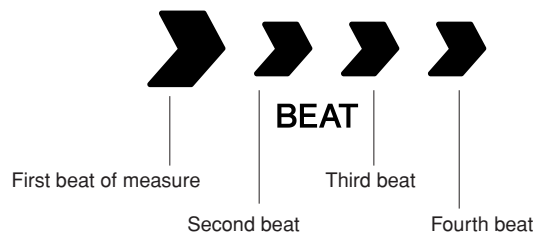
When using the performance assistant technology or in other situations in which the tempo of the song is too fast or too slow for you, you can change the tempo as required. Press the [TEMPO/TAP] button. The tempo display will appear and you can use the dial, the [+] and [-] buttons, or the [0] to [9] number buttons to set the tempo to anywhere from 011 and 280 quarter-note beats per minute.



You can return to the original tempo by simultaneously pressing the [+] and [-] buttons.

● About the Beat Display

The arrow marks in the beat display flash in time with the rhythm of the song or style.





Try Playing a Variety of Instrument Voices

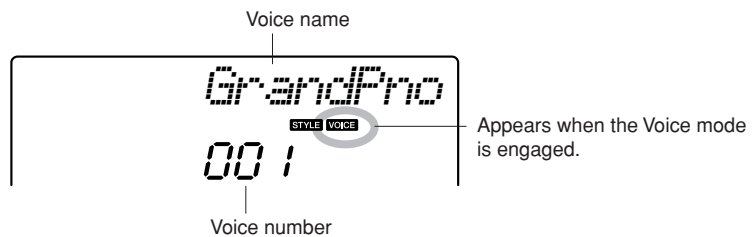
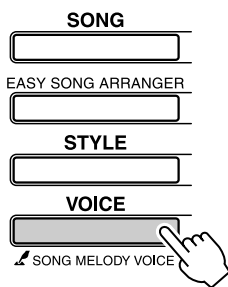
In addition to piano, organ, and other “standard” keyboard instruments, this instrument has a large range of voices that includes guitar, bass, strings, sax, trumpet, drums and percussion, sound effects ... a wide variety of musical sounds.

Select and Play a Voice—MAIN

This procedure selects the main voice you will play on the keyboard.

1 Press the [VOICE] button.

The voice number and name will be displayed.



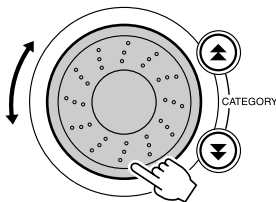
2 Select the voice you want to play.

While watching the displayed voice name rotate the dial. The available voices will be selected and displayed in sequence. The voice selected here becomes the main voice.

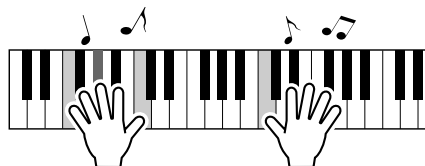
For this example select the “092 Flute” voice.

NOTE

- You can also select the voice using the CATEGORY [\blacktriangle] and [\blacktriangledown] buttons after pressing the [VOICE] button. (page 58)



3 Play the keyboard.



Try selecting and playing a variety of voices.

Play Two Voices Simultaneously—DUAL

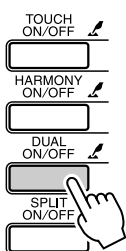
You can select a second voice which will play in addition to the main voice when you play the keyboard. The second voice is known as the “dual” voice.

1 Press the [DUAL ON/OFF] button.

The [DUAL ON/OFF] button turns the dual voice on or off. When turned on the dual voice icon will appear in the display. The currently selected dual voice will sound in addition to the main voice when you play the keyboard.

NOTE

• The dual voice feature cannot be used during a song lesson (page 43).



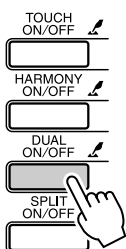
Dual voice icon

2 Press and hold the [DUAL ON/OFF] button for longer than a second.

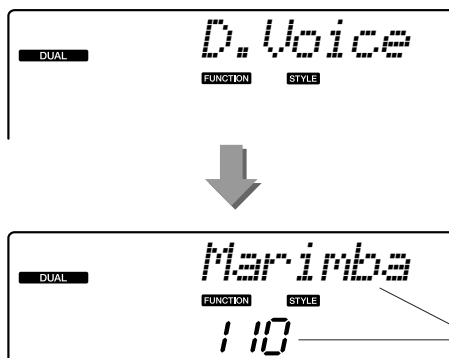
“D.VOICE” appears in the display for a few seconds, then the currently selected dual voice will be displayed.

NOTE

• You can also select the Dual Voice display by pressing the [FUNCTION] button and then using the CATEGORY [▲] and [▼] buttons to select the “D.Voice” item.



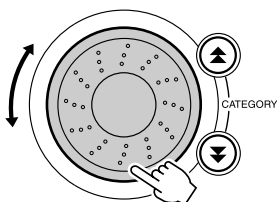
Hold for longer than a second



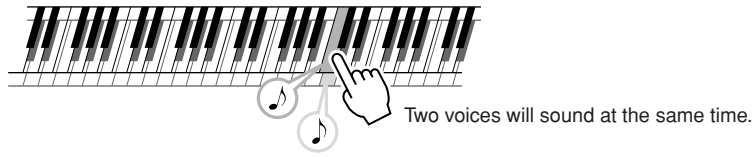
The currently selected dual voice

3 Select the desired dual voice.

Watch the displayed dual voice and rotate the dial until the voice you want to use is selected. The voice selected here becomes the dual voice. For this example try selecting the “109 Vibraphone” voice.



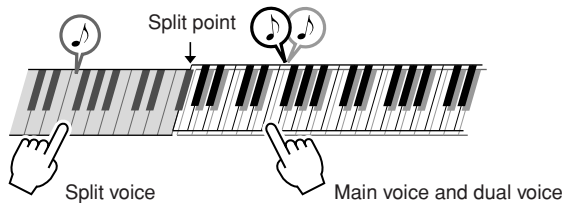
4 Play the keyboard.



Try selecting and playing a range of dual voices.

Play Different Voices with the Left and Right Hands—SPLIT

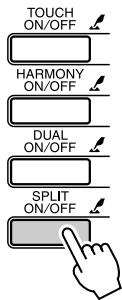
In the split mode you can play different voices to the left and right of the keyboard “split point”. The main and dual voices can be played to the right of the split point, while the voice played to the left of the split point is known as the “split voice”. The split point setting can be changed as required (page 72).



1 Press the [SPLIT ON/OFF] button.

The [SPLIT ON/OFF] button turns the split voice on or off. When turned on the split voice icon will appear in the display. The currently selected split voice will sound to the left of the keyboard split point.

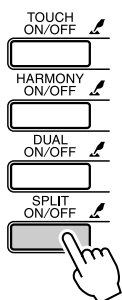
NOTE
• The split voice feature cannot be used during a song lesson (page 43).



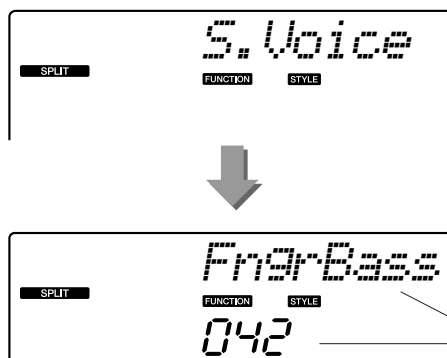
2 Press and hold the [SPLIT ON/OFF] button for longer than a second.

“S.VOICE” appears in the display for a few seconds, then the currently selected split voice will be displayed.

NOTE
• You can also select the Split Voice display by pressing the [FUNCTION] button and then using the CATEGORY [▲] and [▼] buttons to select the “S.Voice” item.



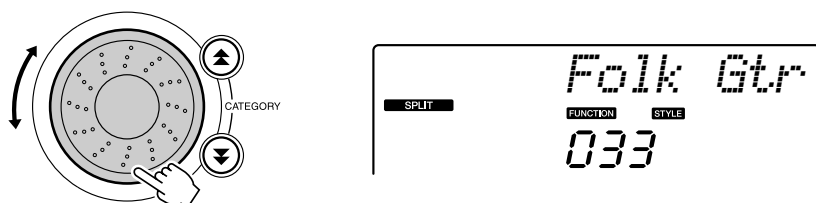
Hold for longer than a second



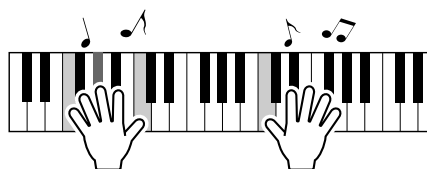
The currently selected SPLIT voice

3 Select the desired split voice.

Watch the displayed split voice and rotate the dial until the voice you want to use is selected. The voice selected here becomes the split voice which will play to the left of the keyboard split point. For this example try selecting the “033 Folk Guitar” voice.



4 Play the keyboard.



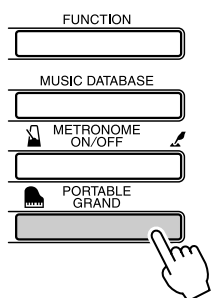
Try selecting and playing a range of split voices.

Play the Grand Piano Voice

When you just want to play piano, all you have to do is press one convenient button.

Press the [PORTABLE GRAND] button.

The “001 Grand Piano” voice will be selected.



NOTE

- When you press the [PORTABLE GRAND] button all settings other than touch sensitivity are turned off. The dual and split voices will also be turned off, so only the Grand Piano voice will play over the entire keyboard.



Drum Kits

This instrument includes a range of drum kits and unique sound effects you can use for entertainment. Laughter, babbling brooks, jet fly-bys, eerie effects, and much more. These sounds can be a great way to enhance the mood at parties.

Select and Play the Drum Kit

Drum kits are collections of drum and percussion instruments.

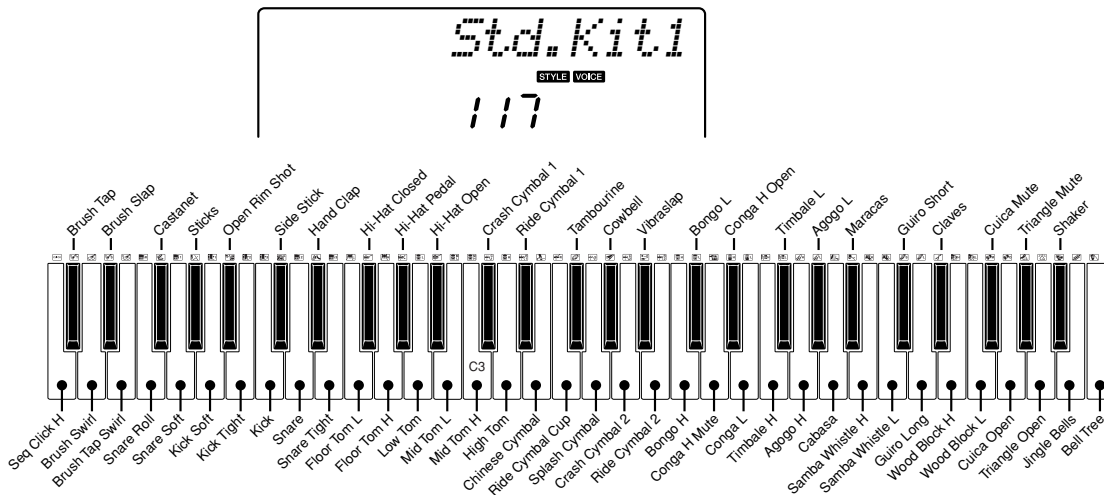
When drum kits (Voice numbers 117–128) are selected, you can play different percussion sounds directly from the keyboard.

1 Press the [VOICE] button.

2 Select the desired Drum kit.

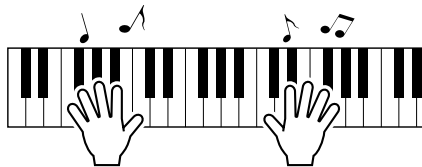
Select one of the Voice numbers from 117–128 by rotating the dial.

Example: 117 Standard Kit 1



* When Voice number 117 is selected, the icons printed above the keyboard indicates the instruments assigned to each key.

3 Try out each key.



You'll hear bongo drums, congas, maracas, and more—a comprehensive variety of drum and percussion sounds.

Details on the instruments and key assignments of each drum kit can be found in the Drum Kit List in the separate Data List.

● Drum Kit List

117	Standard Kit 1	121	Electronic Kit	125	Brush Kit
118	Standard Kit 2	122	Analog Kit	126	Symphony Kit
119	Room Kit	123	Dance Kit	127	SFX Kit 1
120	Rock Kit	124	Jazz Kit	128	SFX Kit 2



Playing Styles

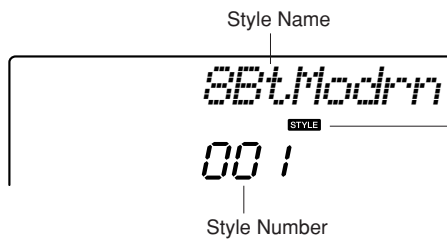
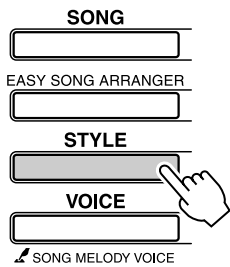
This instrument has an auto accompaniment feature that produces accompaniment (rhythm + bass + chords) in the style you choose to match chords you play with your left hand. You can select from 155 different styles covering a range of musical genres and time signatures (see the separate Data List for a complete list of the available styles). In this section we'll learn how to use the auto accompaniment features.

Select a Style Rhythm

Most styles includes a rhythm part. You can select from a wide variety of rhythmic types—rock, blues, Euro trance, and many, many more. Let's begin by listening to just the basic rhythm. The rhythm part is played using percussion instruments only.

1 Press the [STYLE] button.

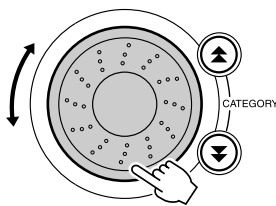
The style number and name will appear in the display.



This icon appears when a style number and name is displayed.

2 Select a style.

Use the dial to select the style you want to use. A list of all the available styles is provided in the separate Data List.

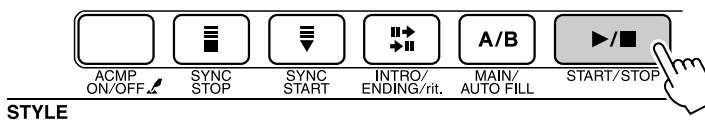


NOTE

• An external style file loaded to style number 156 can be selected and used in the same way as the internal styles. The style file must be loaded to style number 156 after transferring it to the instrument from a computer. For details, refer to the section "Loading Style Files" on page 74.

3 Press the [START/STOP] button.

The style rhythm will start playing. Press the [START/STOP] button a second time when you want to stop playback.



NOTE

• Style numbers 131, 143–155 have no rhythm part and therefore no rhythm will play if you use them for the above example. For these styles first turn auto accompaniment on as described on page 34, press the [START/STOP] button, and the accompaniment bass and chord parts will begin playing when you play a key to the left of the keyboard split point.

Play Along with a Style

You learned how to select a style rhythm on the preceding page.

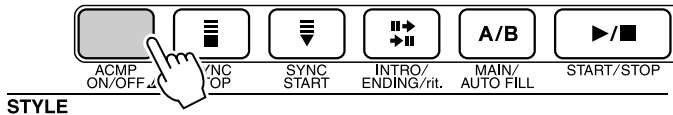
Here we'll see how to add bass and chord accompaniment to the basic rhythm to produce a full, rich accompaniment that you can play along with.

1 Press the [STYLE] button and select the desired style.

2 Turn automatic accompaniment on.

Press the [ACMP ON/OFF] button.

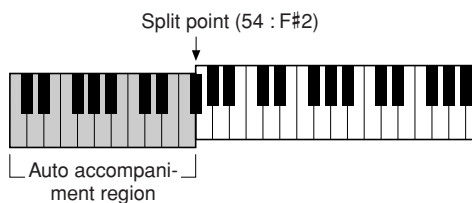
Pressing this button a second time will turn automatic accompaniment off.



This icon appears when automatic accompaniment is on.

● **When automatic accompaniment is on ...**

The area of the keyboard to the left of the split point (54 : F#2) becomes the “auto accompaniment region” and is used only for specifying the accompaniment chords.

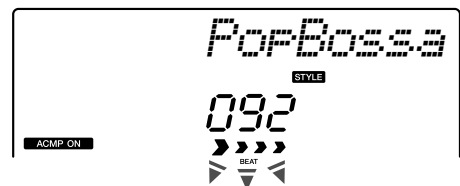
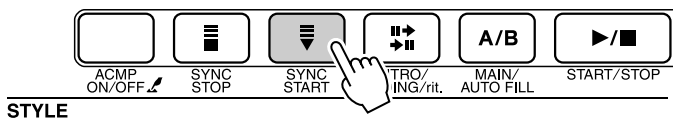


NOTE

- The keyboard split point can be changed as required: refer to page 72.

3 Turn sync start on.

Press the [SYNC START] button to turn the sync start function on.



Flashes when sync start is on.

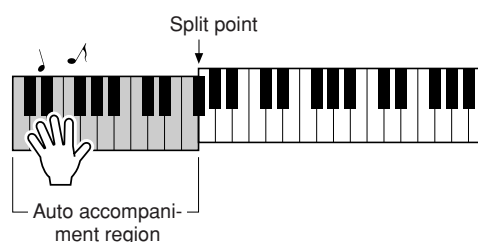
When sync start is on, the bass and chord accompaniment included in a style will start playing as soon as you play a note to left of the keyboard split point. Press the button a second time to turn the sync start function off.

4 Play a left-hand chord to start the style.

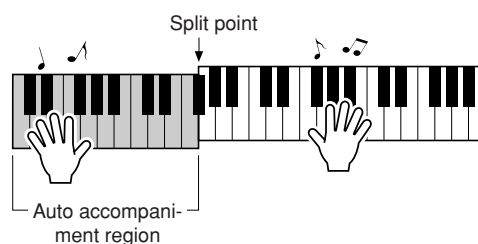
You can still “play” chords even if you don’t actually know any chords. This instrument will recognize even a single note as a chord. Try playing from one to three notes at the same time to the left of the split point. The accompaniment will change according to the left-hand notes you play.

Try this!

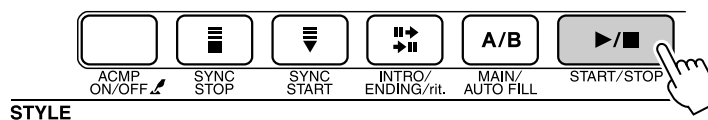
Scores for some chord progressions are provided on page 36. These examples should help you get a feel for what types of chord progressions sound good with the styles.



5 Play a variety of left-hand chords while playing a melody with your right hand.



6 Press the [START/STOP] button to stop style playback when you’re done.



You can switch style “sections” to add variety to the accompaniment. Refer to “Pattern Variation (Sections)” on page 70.

Styles Are More Fun When You Understand Chords

Chords, created by playing multiple notes at the same time, are the basis for harmonic accompaniment. In this section we'll take a look at sequences of different chords played one after another, or "chord sequences." Since each chord has its own unique "color"—even if it's different fingerings of the same chord—the chords you choose to use in your chord progressions have a huge influence on the overall feel of the music you play.

On page 34 you learned how to play colorful accompaniments using styles. Chord progressions are vital to creating interesting accompaniments, and with a little chord know-how you should be able to take your accompaniments to a new level.

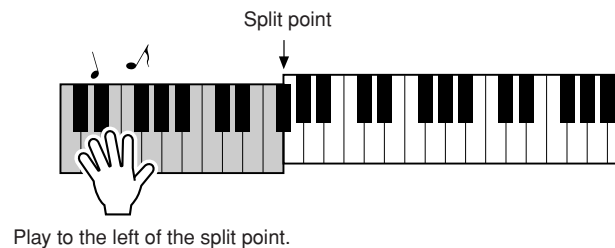
On these pages we'll introduce three easy-to-use chord progressions. Be sure to try them out with the instrument's accompaniment styles. The style will respond to the chord progression you play, effectively creating a complete song.

■ Playing the Chord Progressions

Play the scores with the left hand.

Before playing the scores follow steps 1 through 3 of "Play Along with a Style" on page 34.

* The scores provided here are not standard song scores, but rather simplified scores that indicate which notes to play to produce the chord progressions.



Recommended Style **031 Euro Trance**

—Dance music with simple chords—

Press the [INTRO/ENDING/rit.] button.

This is a simple-but-effective chord progression. When you play through to the end of the score, start again from the beginning. When you're ready to stop playing press the [INTRO/ENDING/rit.] button and the auto accompaniment function will create a perfect ending.

Recommended Style **148 Piano Boogie**

—3-chord boogie-woogie—

Press the [INTRO/ENDING/rit.] button.

Press the [INTRO/ENDING/rit.] button.

This progression provides varied harmonic backing with just three chords. When you get a feel for the progression in the score, try changing the order of the chords!

Recommended Style **091 Bossa Nova**

—Bossa nova with jazz-style chords—

Press the [INTRO/ENDING/rit.] button.

Press the [INTRO/ENDING/rit.] button.

This progression includes jazzy “two-five” (II-V) changes. Try playing it through several times. When you’re ready to stop playing press the [INTRO/ENDING/rit.] button.

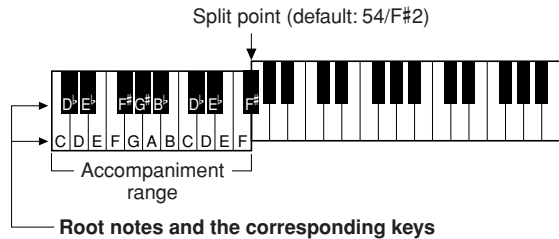
Playing Auto-accompaniment Chords

There are two ways of playing auto-accompaniment chords:

- Easy Chords
- Standard Chords

The instrument will automatically recognize the different chord types. This function is called Multi Fingering.

Press the [ACMP ON/OFF] button to turn auto-accompaniment on (page 34). The keyboard to the left of the split point (default: 54/F#2) becomes the “accompaniment range”. Play the accompaniment chords in this area of the keyboard.



■ Easy Chords

This method lets you easily play chords in the accompaniment range of the keyboard using only one, two, or three fingers.

	<p>C</p> <ul style="list-style-type: none"> • To play a major chord Press the root note of the chord.
	<p>Cm</p> <ul style="list-style-type: none"> • To play a minor chord Press the root note together with the nearest black key to the left of it.
	<p>C7</p> <ul style="list-style-type: none"> • To play a seventh chord Press the root note together with the nearest white key to the left of it.
	<p>Cm7</p> <ul style="list-style-type: none"> • To play a minor seventh chord Press the root note together with the nearest white and black keys to the left of it (three keys altogether).

■ Standard Chords

This method lets you produce accompaniment by playing chords using normal fingerings in the accompaniment range of the keyboard.

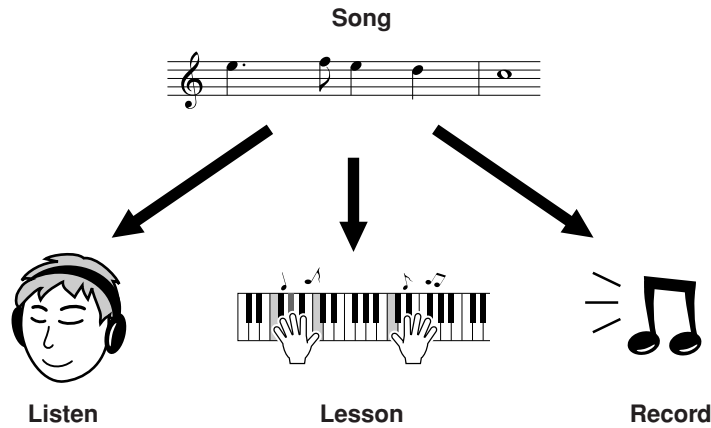
● How to play Standard Chords [Example for “C” chords]

* Notes enclosed in parentheses () are optional; the chords will be recognized without them.



Using Songs

With this instrument the term “song” refers the data that makes up a piece of music. You can simply enjoy listening to the 30 internal songs, or use them with just about any of the many functions provided—the performance assistant technology feature, lessons, and more. The songs are organized by category. In this section we’ll learn how to select and play songs, and briefly describe the 30 songs provided.



Select and Listen to a Song

1 Press the [SONG] button.

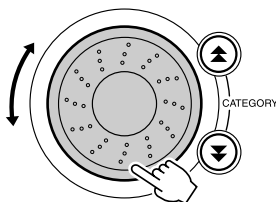
The song number and name will be displayed. You can use the dial to select a different song.



The currently selected song and number are displayed

2 Select a song.

Select a song after referring to the preset song category list on page 41. Use the dial to select the song you want to listen to.



The song displayed here can be played

NOTE

- You can also play songs you have recorded yourself (User Songs) or songs that have been transferred to the instrument from a computer in the same way that you play the internal songs.

001–030	Built in Songs (see next page)
031–035	User Songs (Songs you record yourself).
036–	Songs transferred from a computer (pages 89–91)

3 Listen to the song.

Press the [START/STOP] button to begin playback of the selected song. You can stop playback at any time by pressing the [START/STOP] button again.

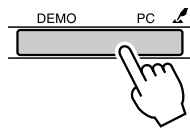


● Using the [DEMO] button

Press the [DEMO] button to play Songs 001–008 in sequence. Playback will continue repeatedly starting again from the first Song (001).

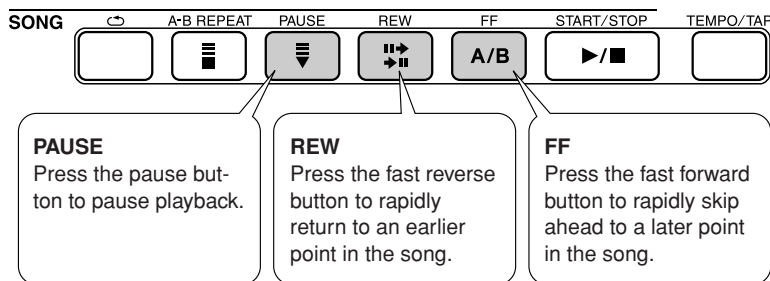
You can select a song by using the [-] and [+] buttons after pressing the [DEMO] button.

You can stop playback at any time by pressing the [DEMO] button.



Song Fast Forward, Fast Reverse, and Pause

These are just like the transport controls on a cassette deck or CD player, letting you fast forward [FF], rewind [REW] and pause [PAUSE] playback of the song.



NOTE

- When an A-B repeat range is specified the fast reverse and forward function will only work within that range.

● Song List

These 30 songs include songs that effectively demonstrate the instrument's easy song arranger feature, songs that are ideally suited for use with the performance assistant technology feature, and more. The "Suggested Uses" column provides some ideas as to how the songs can most effectively be used.

Category	No.	Name	Suggested Uses
Main Demo	1 CHORD	Groove It	The songs in this category have been created to give you an idea of the advanced capabilities of this instrument. They're great for listening, or for use with the performance assistant technology feature.
	2 CHORD	Winter Serenade	
	3 CHORD	Synth Zone	
Voice Demo	4 CHORD	Grand Piano Demo	These songs features some of the instrument's many useful voices. They make maximum use of the characteristics of each voice, and might serve as inspiration for your own compositions.
	5 CHORD	Sweet! Tenor Sax Demo	
	6 CHORD	Cool! Rotor Organ Demo	
	7 CHORD	Cool! Galaxy Electric Piano Demo	
	8 CHORD	Modern Harp & Sweet! Soprano Demo	
Function Demo	9 CHORD	Hallelujah Chorus	Use these songs to experience some of the instrument's advanced features: song number 9 for the easy song arranger, and songs 10 and 11 for the performance assistant technology feature.
	10 CHORD	Ave Maria	
	11 CHORD	Nocturne op.9-2	
Piano Solo	12	For Elise	These piano solo pieces are ideally suited for use as lesson songs.
	13	Maple Leaf Rag	
	14	The Last Rose of Summer	
Piano Ensemble	15 CHORD	Amazing Grace	A selection of piano ensemble songs that are also well suited for use as lesson songs.
	16 CHORD	Die Lorelei	
	17	Piano Concerto No.21 2nd mov.	
	18 CHORD	Scarborough Fair	
	19 CHORD	Old Folks at Home	
Piano Accompaniment	20 CHORD	Ac Ballad (Against All Odds: Collins 0007403)	When you need to practice backing (accompaniment) patterns, these are the songs to do it with. This is ability you'll need if you're invited to play with a band. These songs allow you to practice backing parts one hand at a time, which can be the easiest way to master this important skill.
	21 CHORD	Ep Ballad	
	22 CHORD	Boogie Woogie	
	23 CHORD	Rock Piano	
	24 CHORD	Salsa	
	25 CHORD	Country Piano	
	26 CHORD	Gospel R&B	
	27 CHORD	Medium Swing	
	28 CHORD	Jazz Waltz	
	29 CHORD	Medium Bossa	
	30 CHORD	SlowRock	

CHORD : Includes chord data.

The scores for the internal songs—except for songs 1–11, 30 and song 20 which is copyrighted, are provided in the Song Book on the CD-ROM. The scores for songs 9–11 are provided in the separate Data List.

Some of the classic and/or traditional songs have been edited for length or for ease in learning, and may not be exactly the same as the original.

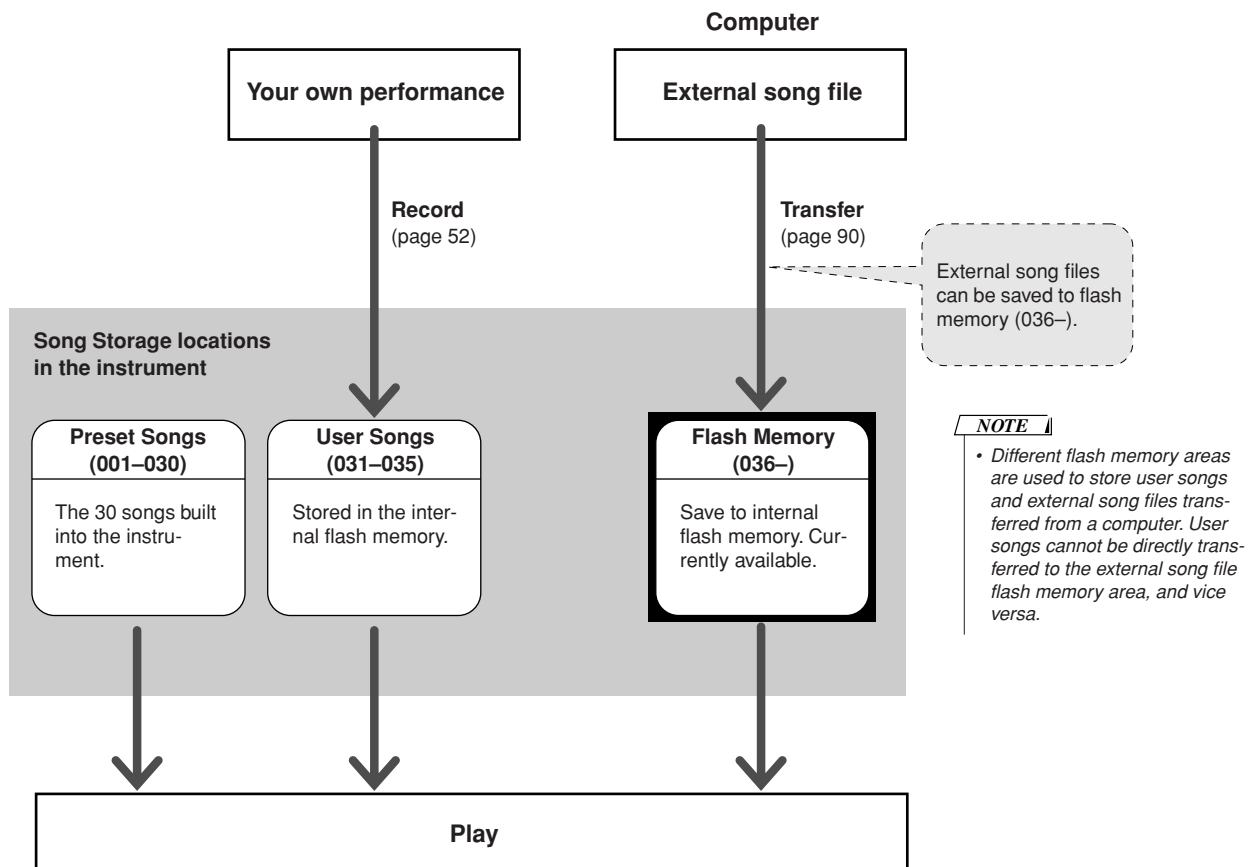
Types of Songs

The following three types of songs can be used.

- **Preset Songs (the 30 songs built into the instrument).....Song numbers 001–030.**
- **User Songs (recordings of your own performances)Song numbers 031–035.**
- **External song files (song data transferred from a computer*) ... Song numbers 036–.**

* The Accessory CD-ROM includes a selection of 70 MIDI songs. See page 90 for instructions on how to transfer the songs to the instrument.

The chart below shows the basic processes flow for using the preset songs, user songs, and external song files—from storage to playback.





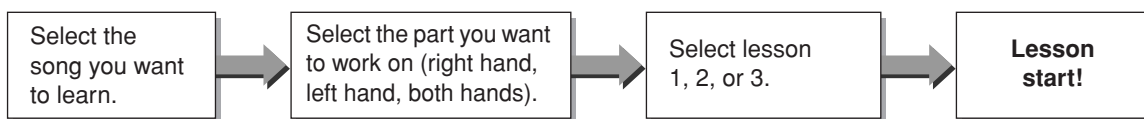
Select a Song For a Lesson

Yamaha Education Suite

You can select song you like and use it for a left-hand, right-hand, or both-hands lesson. You can also use songs (only SMF format 0) downloaded from the Internet and saved to flash memory. (pages 89–91) During the lesson you can play as slowly as you like, and you can even play wrong notes. Song playback will slow down to a speed you can handle. It's never too late to start learning!

Lesson Flow:

Select a song from the Piano Solo, Piano Ensemble category!



The practice methods:

- **Lesson 1** Learn to play the correct notes.
- **Lesson 2** Learn to play the correct notes with the correct timing.
- **Lesson 3** Learn to play the correct notes at the correct timing along with the song.

NOTE

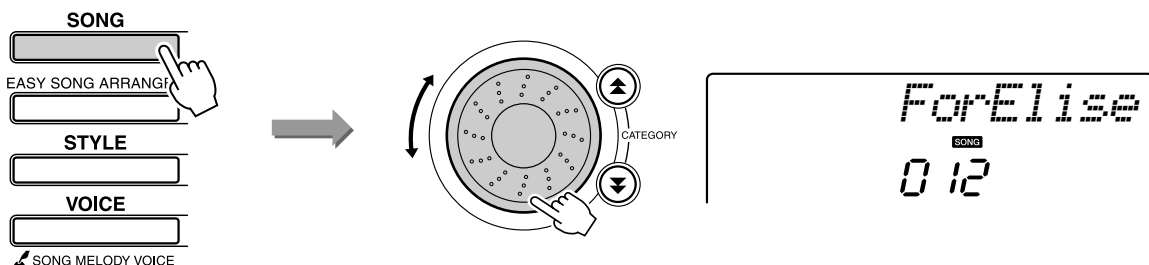
• Song numbers 10 and 11 are function demos for performance assistant. The lesson function cannot be used with them..

Lesson 1—Waiting

In this lesson, try playing the correct notes. Play the note shown in the display. The song will wait until you play the right note.

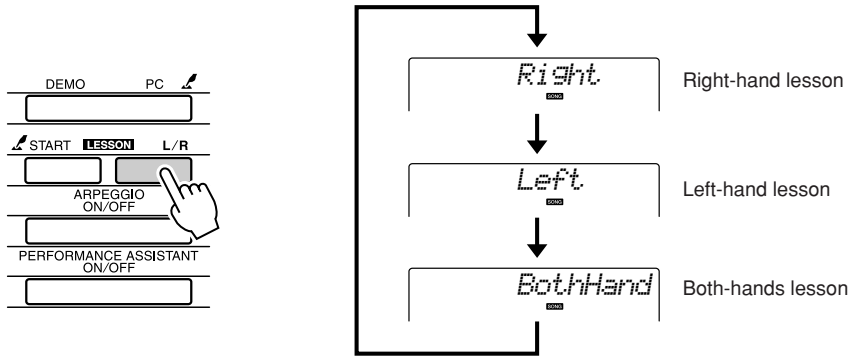
1 Select a song for your lesson.

Press the [SONG] button, and rotate the dial to select the song you want to use for your lesson. As listed on page 42 there are a variety of song types. For this example try selecting the “012 ForElise”.



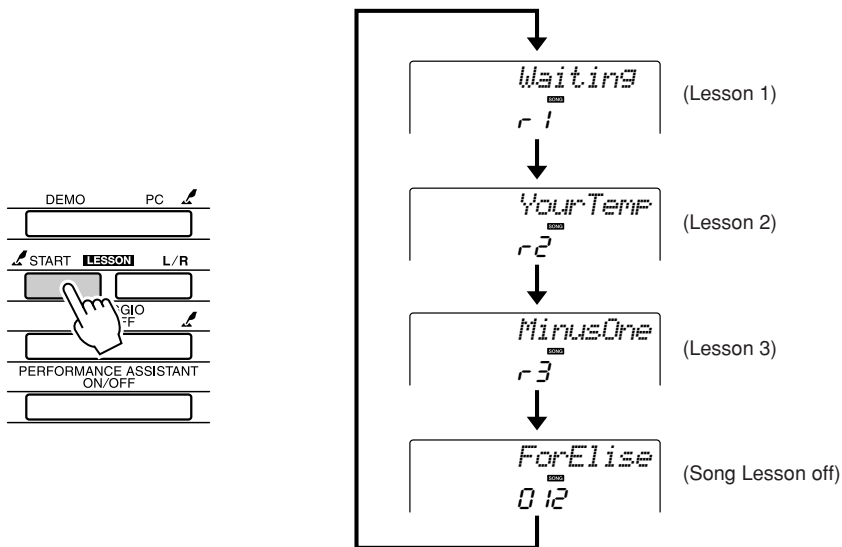
2 Select the part you want to practice.

Each time you press the LESSON [L/R] button the parts are selected in sequence: right hand → left hand → both hands → right hand The currently selected part is shown in the display.



3 Start Lesson 1.

Press the LESSON [START] button to select Lesson 1. Each time the LESSON [START] button is pressed the lesson modes are selected in sequence: Lesson 1 → Lesson 2 → Lesson 3 → Off → Lesson 1 The currently selected mode is shown in the display.

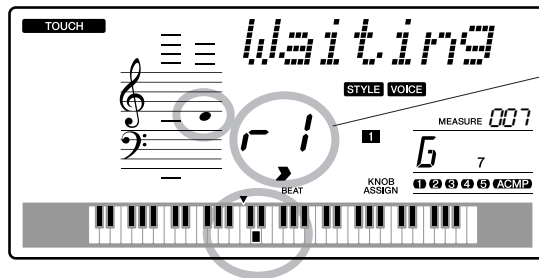


Song playback will begin automatically when you select Lesson 1.

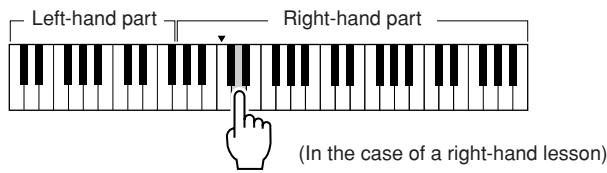


Start the lesson!

Play the note shown in the display. When you play the correct note, the next note you need play is shown. The song will wait until you play the correct note.



In this case "r 1" indicate that right-hand lesson 1 has been selected.





4 Stop the Lesson mode.

You can stop the Lesson mode at any time by pressing the [START/STOP] button.

Once you've mastered Lesson 1, move on to Lesson 2.

■ See How You've Done

- Excellent 
- Very Good 
- Good 
- OK 

When the lesson song has played all the way through your performance will be evaluated in 4 levels: OK, Good, Very Good, or Excellent. "Excellent!" is the highest evaluation.

After the evaluation display has appeared, the lesson will start again from the beginning.

NOTE

- The evaluation feature can be turned off via the FUNCTION Grade item (page 84).

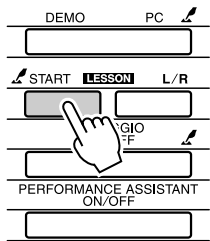
Lesson 2—Your Tempo

Learn to play the correct notes with the correct timing. Song playback tempo will vary to match the speed you are playing at. The song will slow down when you play wrong notes, so you can learn at your own pace.

1 Select the song and part you want to practice (steps 1 and 2 on pages 43, 44).

2 Start Lesson 2.

Each time the LESSON [START] button is pressed the lesson modes are selected in sequence: Lesson 1 → Lesson 2 → Lesson 3 → Off → Lesson 1 ...



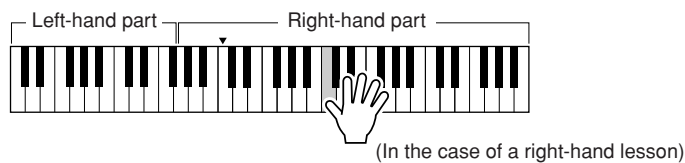
In this case "r2" indicate that right-hand lesson 2 has been selected.

Song playback will begin automatically when Lesson 2 is selected.



Start the lesson!

Play the note shown in the display. Try to play the notes at the correct timing. As you learn to play the right notes at the right timing the tempo will increase until eventually you'll be playing at the song's original tempo.



3 Stop the Lesson mode.

You can stop the Lesson mode at any time by pressing the [START/STOP] button.

Once you've mastered Lesson 2, move on to Lesson 3.

Lesson 3—Minus One

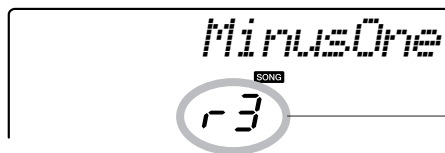
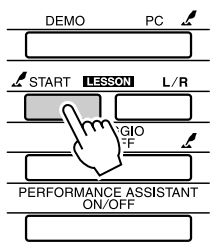
Here's where you can perfect your technique.

The song will play at the normal tempo, minus the part you have chosen to play. Play along while listening to the song.

1 Select the song and part you want to practice (steps 1 and 2 on pages 43, 44).

2 Start Lesson 3.

Each time the LESSON [START] button is pressed the lesson modes are selected in sequence: Lesson 1 → Lesson 2 → Lesson 3 → Off → Lesson 1 ...



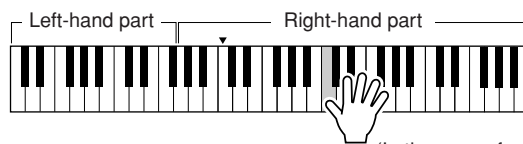
In this case "r-3" indicate that right-hand lesson 3 has been selected.

Song playback will begin automatically when Lesson 3 is selected.



Start the lesson!

Play the note shown in the display.



(In the case of a right-hand lesson)

3 Stop the Lesson mode.

You can stop the Lesson mode at any time by pressing the [START/STOP] button.

Practice Makes Perfect—Repeat and Learn

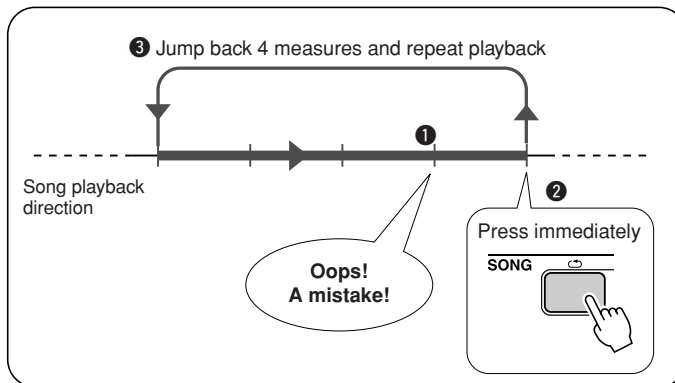
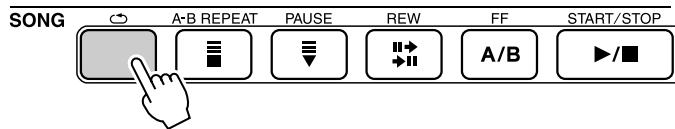
Use this feature when you want to start again just ahead of a section on which you made a mistake, or to repeatedly practice a section you find difficult.

Press the [↶] (REPEAT & LEARN) button during a lesson.

The song location will move back four measures from the point at which you pressed the button, and playback will begin after a one-measure count-in. Playback will continue up to the point at which you pressed the [↶] (REPEAT & LEARN) button, and then jump back four measures and begin again after a count-in. This process will repeat, so all you have to do is press the [↶] (REPEAT & LEARN) button when you make a mistake in order to repeat practice of that section until you get it right.

NOTE

- You can change the number of measures the Repeat and learn function jumps back by pressing a number button [1]–[9] during repeat playback.

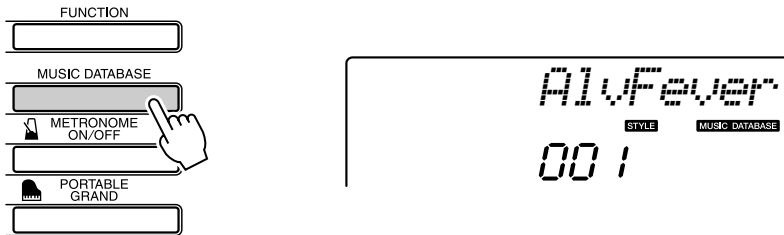




Play Using the Music Database

You want to play music in your favorite style, but you're not sure how to select the best voice and style for the type of music you want to play ... simply select the appropriate style from the Music Database. The panel settings will automatically be adjusted for the ideal combination of sounds and style!

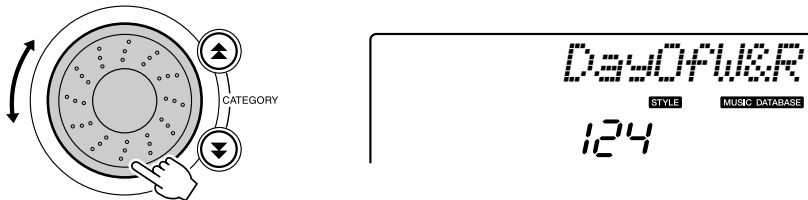
1 Press the [MUSIC DATABASE] button.



A Music Database name will appear in the display.

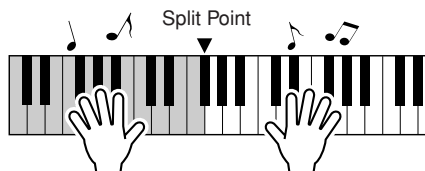
2 Select a Music Database.

Referring to the list on the panel or Music Database List in the separate Data List, use the dial to select a music database. Select one that matches the image of the song you intend to play. For this example select the “124 DayOfW&R”.



3 Play the chords with your left hand and melody with your right.

The jazz style will start playing when you play a left-hand chord to the left of the split point (page 30). Refer to page 38 for information about playing chords.



Press the [START/STOP] button to stop playback.



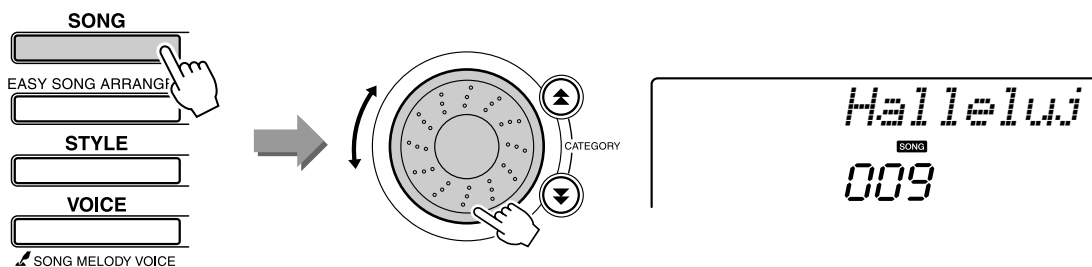
Change a Song's Style

In addition to each song's default style, you can select any other style to play the song with the Easy Song Arranger feature. This means that you can play a song that is normally a ballad, for example, as a bossa nova, as a hip-hop tune, etc. You can create totally different arrangements by changing the style with which a song is played. You can also change the song's melody voice and the keyboard voice for a complete change of image.

Listen to the DEMO Song for Easy Song Arranger

The "Hallelujah Chorus" in the preset songs lets you experience the Easy Song Arranger. Playing it.

Press the [SONG] button, then select a "009 Hallelujah Chorus" by using the dial. Press the [START/STOP] button to play it.



As the song progresses, you will see only the style changes while the song remains the same. Keep in mind that you can enjoy using Easy Song Arranger with other songs as well—any songs that include chord data.

Using the Easy Song Arranger

1 Press the [EASY SONG ARRANGER] button.

The song number and name will be displayed. You can use the dial to select a different song.

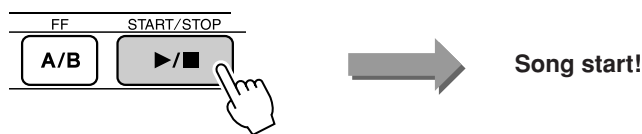


2 Select a Song.

Use the dial to select the song you want to arrange.

3 Listen to the song.

Press the [START/STOP] button to begin playback of the song. Move on to the next step while the song is playing.

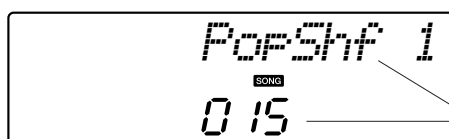
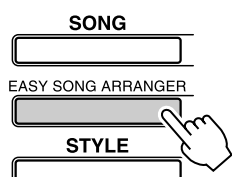


NOTE

• When playing song numbers 010, 011 and 020 to 030 while using the Easy Song Arranger, melody tracks will be automatically muted and no melody will sound. In order to hear the melody tracks you will need to press the SONG MEMORY buttons [3] to [5].

4 Press the [EASY SONG ARRANGER] button.

The style number and name will be displayed. You can use the dial to select a different style.



The currently selected style number and name are displayed here.

5 Select a style.

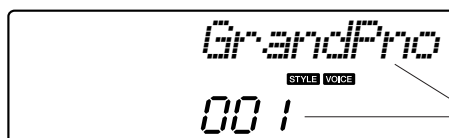
Rotate the dial and listen to how the song sounds with different styles. As you select different styles the song will remain the same while only the styles change. When you have selected a suitable style move on to the next step while the song is still playing (if you have stopped the song, start it again by pressing the [START/STOP] button).

NOTE

• Because the Easy Song Arranger uses song data you can't specify chords by playing in the accompaniment range of the keyboard. The [ACMP ON/OFF] button will not function.
• If the time signature of the song and style are different, the time signature of the song will be used.

6 Select a voice you want to play as a song melody.

Press the [VOICE] button. The currently selected voice number and name will be displayed. Use the dial to select a different voice.



The currently selected voice number and name are displayed here.

7 Change the song's melody voice.

Press and hold the [VOICE] button for longer than a second. After SONG MELODY VOICE appears on the display the voice you selected in step 6 becomes the song's melody voice.



Hold for longer than a second



Record Your Own Performance

You can record up to 5 of your own performances and save them as user songs 031 through 035. The recorded song can be played back on the instrument.

Recordable Data

You can record to a total of 6 tracks: 5 melody tracks and 1 style (chord) track. Each track can be recorded individually.

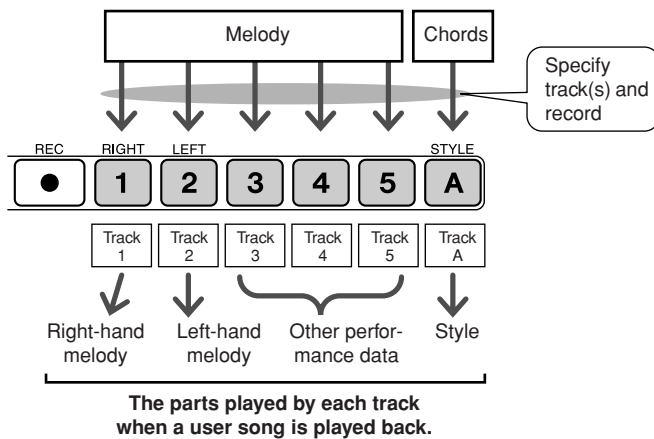
- **Melody Track [1]–[5]**..... Record the melody parts.
- **Style Track [A]** Records the chord part.

NOTE

• Up to approximately 10,000 notes can be recorded if you record only to the melody tracks. Up to approximately 5,500 chord changes can be recorded if you record only to the style track.

Track Configuration

To record your own performance, first use the SONG MEMORY [1]–[5] and [A] buttons to specify the track(s) you want to record on. The track you record on determines the part that plays back later.



- **Track [1]**—Will play back as the right-hand melody part (MELODY R)
- **Track [2]**—Will play back as the left-hand melody part (MELODY L)
- **Tracks [3]–[5]**—Will play back as “other” performance data.
- **Track [A]**—Will play back as the Style (auto-accompaniment) part.

NOTE

• **The Difference Between MELODY R and MELODY L ...** Songs are a combination of a melody and an auto-accompaniment style. Normally “melody” refers to the right-hand part, but in this instrument “melody” parts are provided for both the right and left hands. MELODY R is the melody part played by the right hand, and MELODY L is the melody part played by the left hand.

Recording Procedure

- 1 Press the [SONG] button, then use the dial to select the user song number (031–035) you want to record to.



Rotate the dial to select a song number between 031 and 035.

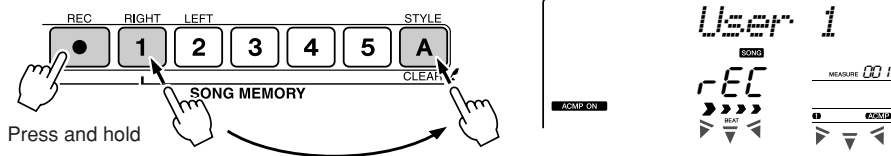
2 Select the track(s) you want to record to and confirm your selection on the display.

◆ Record a Melody Track and the Accompaniment Track Together

Press the melody track button [1]–[5] you want to record to while holding the [REC] button.

Next, press the [A] button while holding the [REC] button.

The selected tracks will flash in the display.



⚠ CAUTION

- If you record to a track that contains previously-recorded data the previous data will be overwritten and lost.

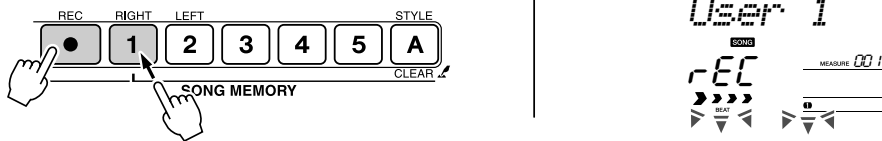
NOTE

- Style accompaniment is automatically turned on when you select the style track [A] for recording.
- Style accompaniment cannot be turned on or off while recording is in progress.
- If you use a split voice for recording, notes played to the left of the split point will not be recorded.

◆ Record a Melody track

Press the melody track button [1]–[5] you want to record to while holding the [REC] button.

The selected track will flash in the display.



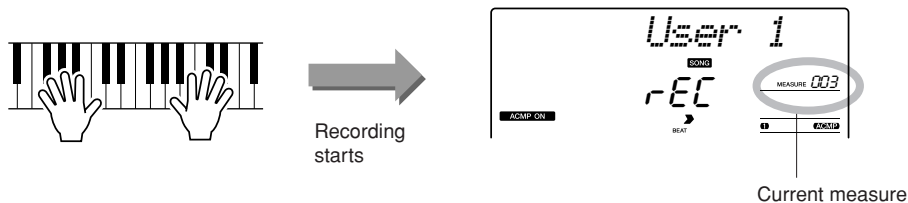
NOTE

- If style accompaniment is on and track [A] has not yet been recorded, the style track [A] will automatically be selected for recording when a melody track is selected. If you only want to record a melody track, be sure to turn the style track [A] off.

To cancel recording to a selected track, press that track button a second time. Style accompaniment cannot be turned on or off while recording is in progress.

3 Recording will start when you play on the keyboard.

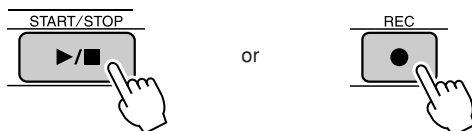
You can also start recording by pressing the [START/STOP] button. The current measure will be shown on the display during recording.



NOTE

- If the memory becomes full during recording a warning message will appear and recording will stop automatically. Use the song clear or track clear (page 55) function to delete unwanted data and make more room available for recording, then do the recording again.

4 Stop recording by pressing the [START/STOP] or [REC] button.



If you press the [INTRO/ENDING/rit.] button while recording the style track an appropriate ending pattern will play and then recording will stop. When recording stops the current measure number will return to 001 and the recorded track numbers in the display will light.

● **To Record Other Tracks**

Repeat steps 2 through 4 to record any of the remaining tracks.

By selecting an unrecorded track—SONG MEMORY buttons [1]–[5], [A]—you can record the new track while listening to previously recorded tracks (the playback tracks will appear in the display). You can also mute previously recorded tracks (the muted tracks will not appear in the display) while recording new tracks.

● **To Re-record a Track**

Simple select the track you want to re-record for recording in the normal way.

The new material will overwrite the previous data.

5 When the recording is done ...

◆ **To Play Back a User Song**

User songs are played back in the same way as regular songs (page 39).

- 1 Press the [SONG] button.
- 2 The current song number/name will be displayed—use the dial to select the user song (031–035) you want to play.
- 3 Press the [START/STOP] button to start playback.

● **Data Recording Limitations**

- The split voice cannot be recorded.
- The following data are recorded at the beginning of the track. Changes made during the song will not be recorded.
 - reverb type, chorus type, time signature, style number, style volume, tempo

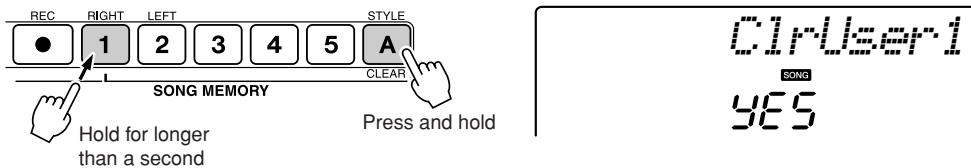
Song Clear—Deleting User Songs

This function clears an entire user song (all tracks).

NOTE

- If you only want to clear a specific track from a user song use the Track Clear function.

- 1 Press the [SONG] button, then select the user song (031–035) you want to clear.
- 2 Press and hold the SONG MEMORY [1] button for longer than a second while holding the SONG MEMORY [A] button.
A confirmation message will appear on the display.



- 3 Press the [+] button.
A confirmation message will appear on the display.
You can cancel the clear operation by pressing the [-] button.

NOTE

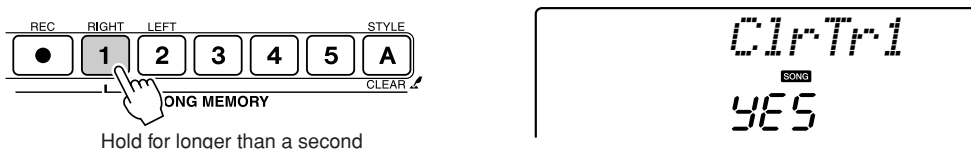
- To execute the Song Clear function press the [+] button. Press [-] to cancel the Song Clear operation.

- 4 Press the [+] button to clear the song.
The clear-in-progress message will appear briefly on the display while the song is being cleared.

Track Clear—Deleting a Specified Track from a User Song

This function lets you delete a specified track from a user song.

- 1 Press the [SONG] button, then select the user song (031–035) you want to clear.
- 2 Press and hold the SONG MEMORY track button ([1]–[5], [A]) corresponding to the track you want to clear for longer than a second.
A confirmation message will appear on the display.



- 3 Press the [+] button.
A confirmation message will appear on the display.
You can cancel the clear operation by pressing the [-] button.

NOTE

- To execute the Track Clear function press the [+] button. Press [-] to cancel the Track Clear operation.

- 4 Press the [+] button to clear the track.
The clear-in-progress message will appear briefly on the display while the track is being cleared.



Backup and Initialization

Backup

The following settings are always backed up, and are maintained even when the power is turned off. If you want to initialize the settings, use the Initialize operation as explained below.

● The Backup Parameters

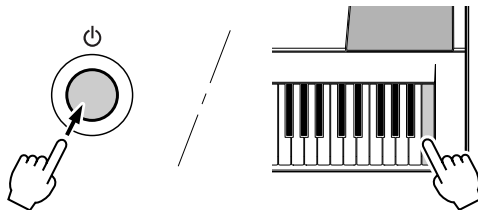
- User Songs
- Style Files
- Touch Response on/off
- Registration Memory
- FUNCTION Settings: Tuning, Split Point, Touch Sensitivity, Style Volume, Song Volume, Metronome Volume, Grade, Demo Cancel, Master EQ type, Arpeggio Velocity

Initialization

This function erases all backup data in the instrument's flash memory and restores the initial default settings. The following initialization procedures are provided.

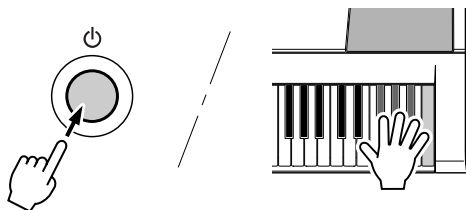
■ Backup Clear.....

To clear data backed up to the internal flash memory—panel user setting, registration memory, user songs, style file 156—turn the power on by pressing the [⏻] (Standby/On) switch while holding the highest white key on the keyboard. The backed up data will be erased and the default values restored.



■ Flash Clear.....

To clear song data and style files that have been transferred to the internal flash memory from a computer, turn the power on by pressing the [⏻] (Standby/On) switch while simultaneously holding the highest white key on the keyboard and the three highest black keys.



CAUTION

- When you execute the Flash Clear operation, song data you have purchased will also be cleared. Be sure to save data you want to keep to a computer.

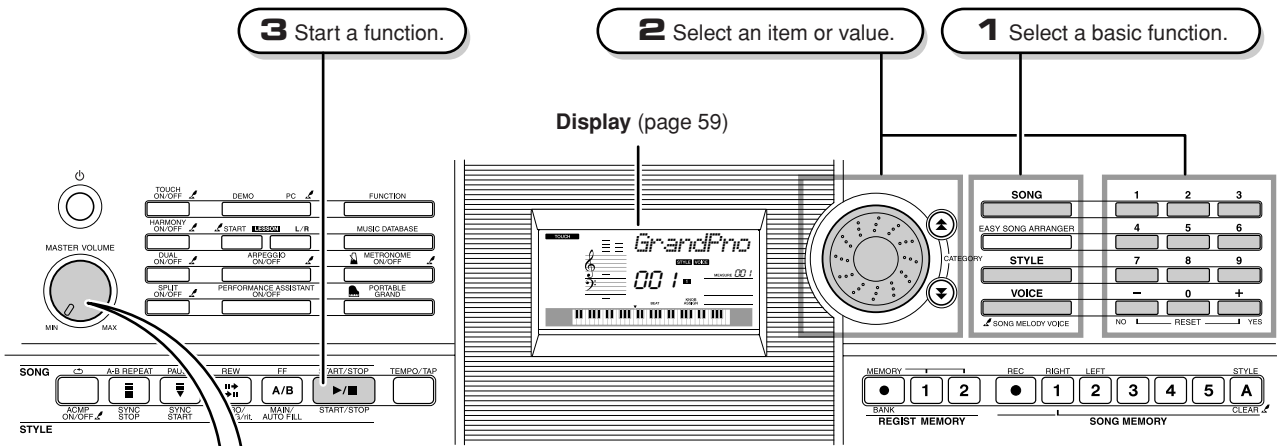


Basic Operation and Displays

Basic Operation

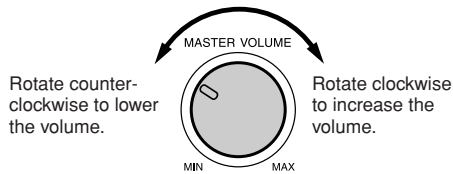
Overall control of the instrument is based on the following simple operations.

- 1 Press a button to select a basic function.
- 2 Use the dial to select an item or value.
- 3 Start a function.




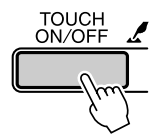
● Volume Adjustment

Adjusts the volume of the sound heard via the instrument's speakers or a pair of headphones plugged into the PHONES jack.




The "Press & Hold" Symbol

The "  " symbol that appears next to some buttons indicates that the button can be pressed and held for longer than a second to call up a related function. This provides convenient direct access to a range of functions.



1 Press a button to select a basic function.

- SONG** — Select a song you want to listen to or a song you want to use for a lesson.
- EASY SONG ARRANGER**
- STYLE** — Select an auto-accompaniment style.
- VOICE** — Select a voice you want to play on the keyboard.
-  **SONG MELODY VOICE**

2 Use the dial to select an item or value.

When you select a basic function, the item corresponding to that function will be displayed. You can then use the dial or the number buttons [0]–[9] to select the desired item.

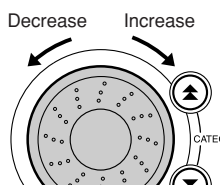


This portion of the display indicates the name and number of the currently selected song, voice and style. It also displays the name and current setting/value of other functions.

■ Changing Values.....

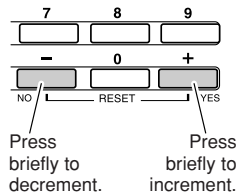
● Dial

Rotate the dial clockwise to increase the value of the selected item, or counter-clockwise to decrease its value. Rotate the dial continuously to continuously increase or decrease the value.



● [+] and [-] Buttons

Press the [+] button briefly to increment the value by 1, or press the [-] button briefly to decrement the value by 1. Press and hold either button to continuously increment or decrement the value in the corresponding direction.

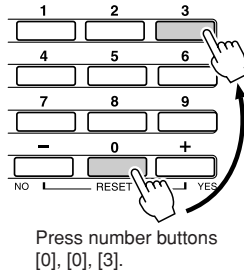


● Number Buttons [0]–[9]

The number buttons can be used to directly enter a song number or parameter value. Hundreds or tens digits that are “0” can be omitted (see below).

Example: Song number “003” can be entered in three ways.

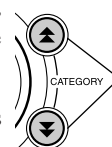
- [0] → [0] → [3]
- [0] → [3]
 (“003” will appear on the display after a brief delay)
- [3]
 (“003” will appear on the display after a brief delay)



● CATEGORY [▲] and [▼] buttons

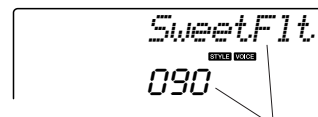
When selecting a song, style, or voice, you can use these buttons to jump to the first item in the next or previous category.

The CATEGORY [▲] and [▼] buttons are useful for selecting categorized items, as in the example below.



Jump to the first item in the next or previous category.

Example: VOICE SELECT

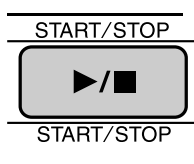


The first voice in the selected category is selected.

In a display in which a category appears, selection is easy if you first use the CATEGORY [▲] and [▼] buttons to select the category containing the desired item, then use the dial or [+] and [-] buttons to select the item. This can be particularly handy when you have to select from a large number of voices.

In most procedures described throughout this owner's manual the dial is recommended for selection simply because it is the easiest and most intuitive selection method. Please note however, that most items or values that can be selected using the dial can also be selected using the [+] and [-] buttons.

3 Start a function.



This is the [START/STOP] button.

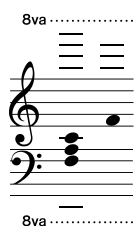
Press the [START/STOP] button after pressing the [SONG] or [STYLE] button to start playback of the selected song or style (rhythm).

Display Items

The display shows all of the current basic settings: song, style, voice. It also includes a range of indicators that show the on/off status of a range of functions.

Notation

Displays the melody and chord notes of a song when the Song Lesson function is in use, or the notes of chords you specify when the Dictionary function is in use. At other times the notes you play on the keyboard are displayed.



NOTE

- Any notes occurring below or above the staff are indicated by "8va" in the notation.
- For a few specific chords, not all notes may be shown in the notation section of the display. This is due to space limitations in the display.

BEAT number and MEASURE

Indicates the beat number in a measure during the Metronome function. Indicates the current measure during playback of a song or style, and the currently set Tempo value for the song or style. (see page 27)

MEASURE 001

Chord Display

Indicates the name of the chord currently being played back, or the name of the chord being played on the keyboard.

F

Song Track Display

Information related to the song tracks is shown here. (see page 52, 79)

1 2 3 4 5 ACMP

TOUCH

Indicates that Touch response is turned on. (see page 65)

TOUCH

HARMONY

Indicates that Harmony is turned on. (see page 60)

HARMONY

DUAL

Indicates that the Dual voice is turned on. (see page 29)

DUAL

SPLIT

Indicates that the Split voice is turned on. (see page 30)

SPLIT

ARPEGGIO

Indicates that the Arpeggio is turned on. (see page 14)

ARPEGGIO

Performance assistant technology

Indicates that performance assistant technology is turned on. (see page 23)

P. A. T.

ACMP ON

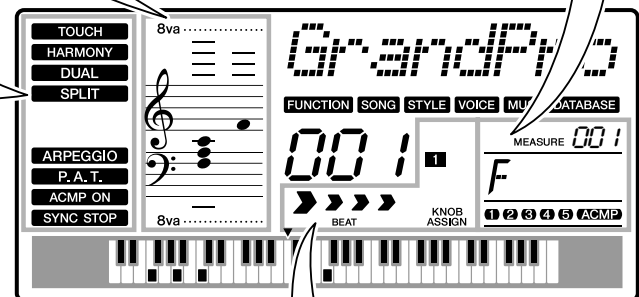
Indicates that Accompaniment is turned on. (see page 34)

ACMP ON

SYNC STOP

Indicates that SYNC STOP is turned on. (see page 71)

SYNC STOP



Beat Display

Indicates the current style or song beat with flashing arrows. (see page 27)

BEAT

Knob Assign Display

This display allows you to visually confirm parameters assigned to the knobs. (see page 18)

1

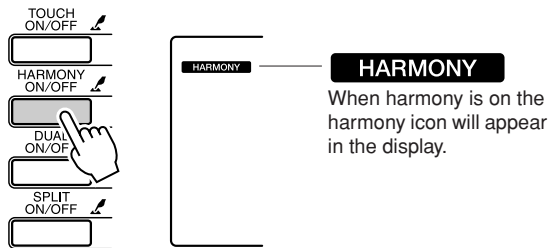
KNOB ASSIGN

Harmony

This feature adds harmony notes to the main voice.

1 Press the [HARMONY ON/OFF] button to turn Harmony feature on.

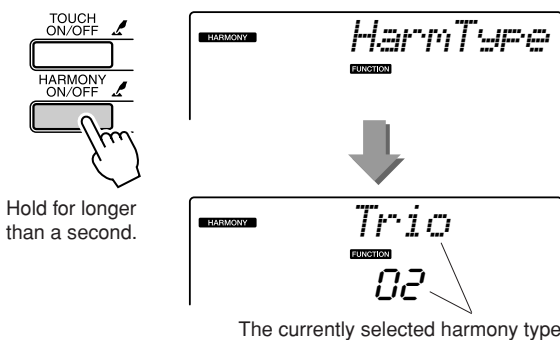
To turn Harmony off, press the [HARMONY ON/OFF] button again.



When you press the [HARMONY ON/OFF] button to turn this feature on, the appropriate harmony type for the currently selected main voice is automatically selected.

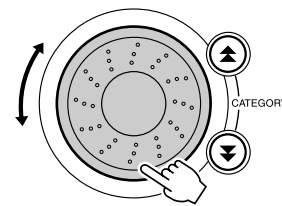
2 Press and hold the [HARMONY ON/OFF] button for longer than a second so that the Harmony Type item appears.

“HarmType” appears in the display for a few seconds, and the currently selected harmony type will be displayed. Use the dial to select a different harmony type.



3 Use the dial to select a harmony type.

Refer to the Effect Type List in the separate Data List for information about the available harmony types. Try playing the keyboard with the harmony function. The effect and operation of each Harmony Type is different—refer to the below section “How to sound each Harmony Type” as well as the Effect Type List for details.



NOTE

- The harmony notes can be added only to the Main Voice, not to Dual or Split Voices.
- The keys left of the Split Point of the keyboard produce no harmony notes when the auto accompaniment is on (ACMP ON is lit).

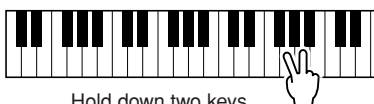
● How to sound each Harmony Type

- Harmony type 01 to 05



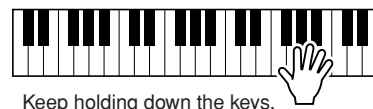
Press the right-hand keys while playing chords in the auto accompaniment range of the keyboard when the Auto Accompaniment is on (page 34).

- Harmony type 06 to 12 (Trill)



Hold down two keys.

- Harmony type 13 to 19 (Tremolo)



Keep holding down the keys.

- Harmony type 20 to 26 (Echo)



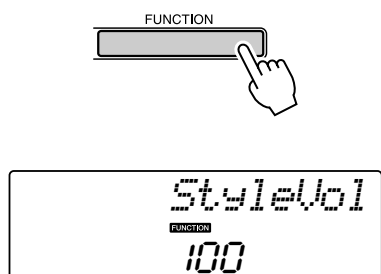
Keep holding down the keys.

You can adjust the Harmony Volume in the Function Settings (page 69).

Adding Reverb

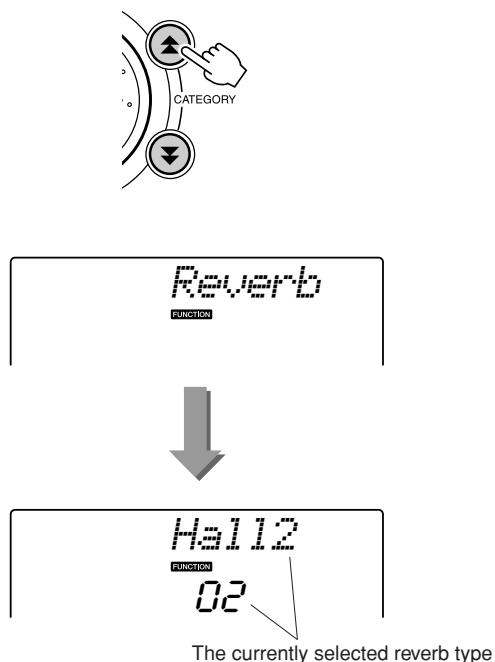
Reverb lets you play with a rich concert hall type ambience. When you select a style or song the optimum reverb type for the voice used is automatically selected. If you want to select a different reverb type, use the procedure described below.

1 Press the [FUNCTION] button.



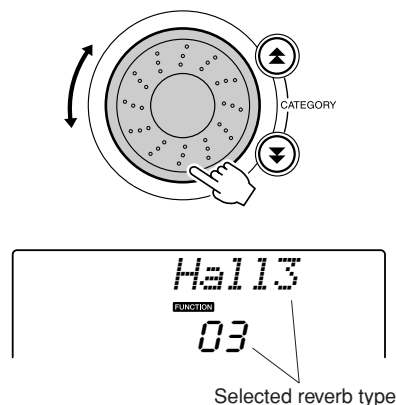
2 Use the CATEGORY [▲] and [▼] buttons to select the Reverb Type item.

“Reverb” appears in the display for a few seconds, and the currently selected reverb type will be displayed.



3 Use the dial to select a reverb type.

You can check how the selected reverb type sounds by playing on the keyboard.



Refer to the Effect Type List in the separate Data List for information about the available reverb types.

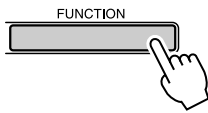
● Adjusting the Reverb Send Level

You can individually adjust the amount of reverb that is applied to the main, dual, and split voices. (See page 83.)

Adding Chorus

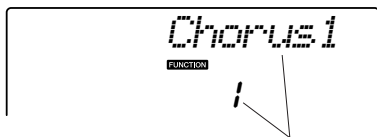
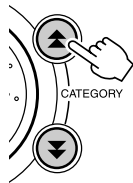
The chorus effect creates a thick sound that is similar to many of the same voices being played in unison. When you select a style or song the optimum chorus type for the voice used is automatically selected. If you want to select a different chorus type, use the procedure described below.

1 Press the [FUNCTION] button.



2 Use the CATEGORY [▲] and [▼] buttons to select the Chorus Type item.

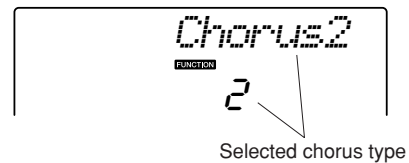
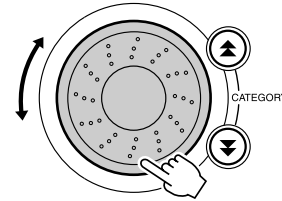
“Chorus” appears in the display for a few seconds, and the currently selected chorus type will be displayed.



The currently selected chorus type

3 Use the dial to select a chorus type.

You can check how the selected chorus type sounds by playing on the keyboard.



Refer to the Effect Type List in the separate Data List for information about the available chorus types.

● Adjusting the Chorus Send Level

You can individually adjust the amount of chorus that is applied to the main, dual, and split voices. (See page 83.)

Handy Performance Features

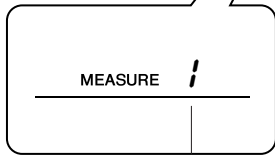
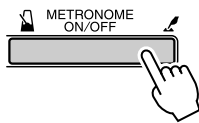
The Metronome

The instrument includes a metronome with adjustable tempo and time signature. Use it to set the tempo that is most comfortable for you.

■ Start the metronome.....

Turn the metronome on and start it by pressing the [METRONOME ON/OFF] button.

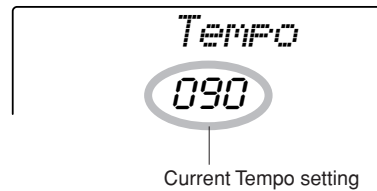
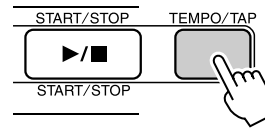
To stop the metronome, press the [METRONOME ON/OFF] button again.



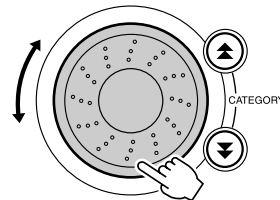
Indicates the beat number in the measure

■ Adjusting the Metronome Tempo

1 Press the [TEMPO/TAP] button to call up the tempo setting.



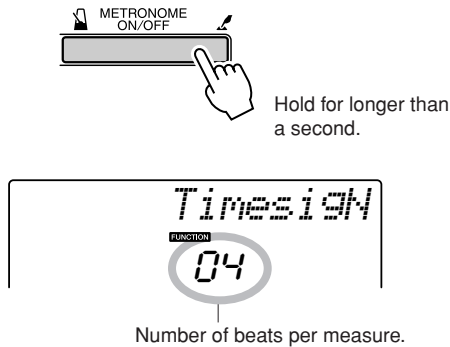
2 Use the dial to select a tempo from 11 to 280.



Setting the Number of Beats per Measure, and the Length of Each Beat

In this example we'll set up a 5/8 time signature.

- 1 Press and hold the [METRONOME ON/OFF] button for longer than a second to select the number of beats per measure function "TimesigN".



- 2 Use the dial to select the number of beats per measure.

A chime will sound on the first beat of each measure while the other beats will click. All beats will simply click with no chime at the beginning of each measure if you set this parameter to "00".

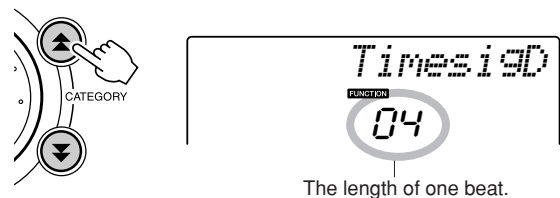
The available range is from 0 through 60. Select 5 for this example.

NOTE

The metronome time signature will synchronize to a style or song that is playing, so these parameters cannot be changed while a style or song is playing.

- 3 Press the CATEGORY [▲] and [▼] buttons as many times as necessary to select the beat length function "TimesigD".

The currently selected beat length will be displayed.

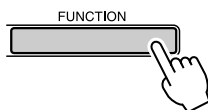


- 4 Use the dial to select the beat length.

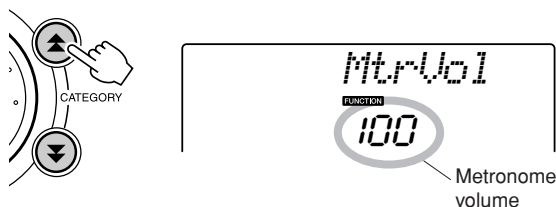
Select the required length for each beat: 2, 4, 8, or 16 (half note, quarter note, eighth note, or 16th note). Select 8 for this example.

Adjusting the Metronome Volume

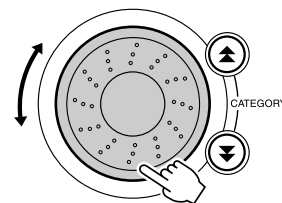
- 1 Press the [FUNCTION] button.



- 2 Use the CATEGORY [▲] and [▼] buttons to select the Metronome Volume item.

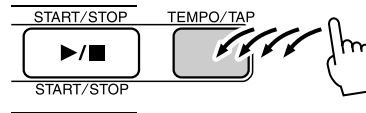


- 3 Use the dial to set the metronome volume as required.



Tap Start

You can supply a count-in at any tempo you like to start playback. Simply tap the [TEMPO/TAP] button at any tempo—4 times for time signatures in 4, and 3 times for time signatures in 3—and the selected style/song will begin playing at the tapped tempo.

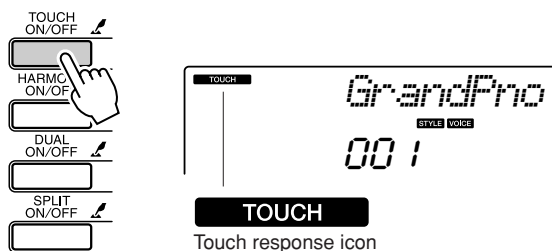


Touch Response Sensitivity

When touch response is on you can adjust the keyboard's sensitivity to dynamics in three steps.

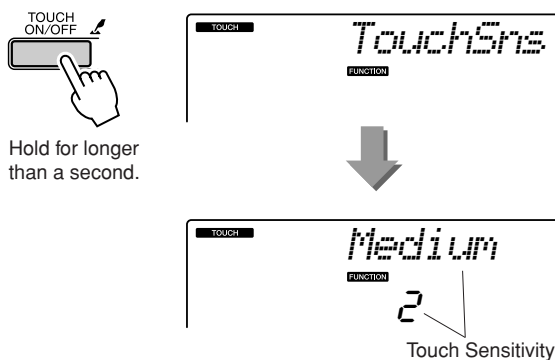
1 Press the [TOUCH ON/OFF] button to turn touch response on.

The touch response icon will appear in the display when touch response is on (page 59).



2 Press and hold the [TOUCH ON/OFF] button for longer than a second so that the Touch Sensitivity item appears.

“TouchSns” appears in the display for a few seconds, and the currently selected touch sensitivity will be displayed.



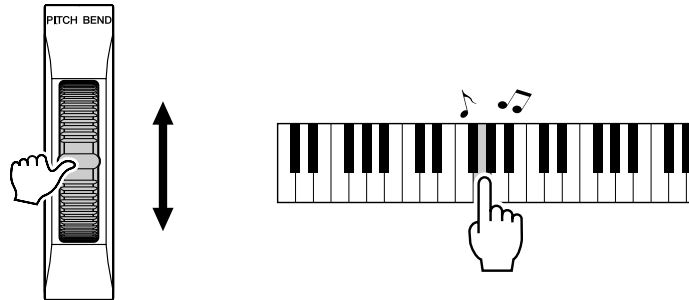
3 Use the dial in response to keyboard dynamics to select a touch sensitivity setting between 1 and 3. Higher values produce greater (easier) volume variation in response to keyboard dynamics—i.e. greater sensitivity.

NOTE

- The initial default touch sensitivity setting is “2”.

Pitch Bend

The pitch bend wheel can be used to add smooth pitch variations to notes you play on the keyboard. Roll the wheel upward to raise the pitch, or downward to lower the pitch. If you use this feature with a voice such as the “040 Overdriven” guitar voice, you can produce remarkably realistic string-bending effects.

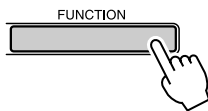


Pitch Controls

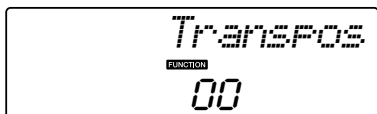
◆ Large Pitch Changes (Transpose)

The overall pitch of the instrument can be shifted up or down by a maximum of 1 octave in semitone increments.

- 1 Press the [FUNCTION] button.



- 2 Use the CATEGORY [▲] and [▼] buttons to select the Transpose item.



- 3 Use the dial to set the transpose value between -12 and +12 as required.

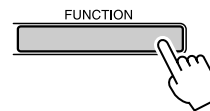
NOTE

• The pitch of Drum Kits voices cannot be changed.

◆ Small Pitch Changes (Tuning)

The overall tuning of the instrument can be shifted up or down by a maximum of 100 cents in 1-cent increments (100 cents = 1 semitone).

- 1 Press the [FUNCTION] button.



- 2 Use the CATEGORY [▲] and [▼] buttons to select the Tuning item.



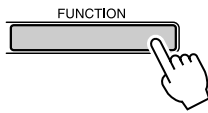
- 3 Use the dial to set the tuning value between -100 and +100 as required.

NOTE

• The pitch of Drum Kits voices cannot be changed.

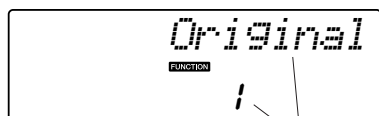
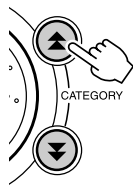
Controlling Arpeggio Volume with Keyboard Dynamics

1 Press the [FUNCTION] button.



2 Press the CATEGORY [\blacktriangle] and [\blacktriangledown] buttons as many times as necessary to select the arpeggio velocity function "ARP Velo".

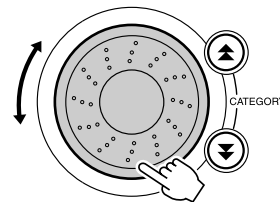
"ARP Velo" will be shown in the display for a few seconds, then the currently selected arpeggio velocity setting will appear.



The currently selected arpeggio velocity.

3 Use the dial to select "2 Thru".

When "1 Original" is selected the arpeggio volume is the same regardless of changes in keyboard velocity.



One Touch Setting

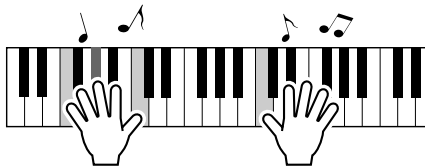
Sometimes selecting the ideal voice to play with a song or style can be confusing. The One Touch Setting feature automatically selects a well-balanced voice for you when you select a style or song. Simply select voice number “000” to activate this feature.

- 1** Select voice number “000” (steps 1 to 2 on page 28).



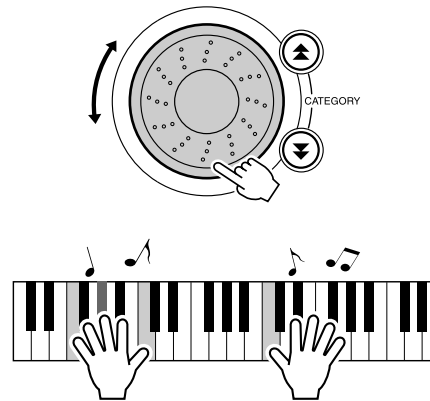
- 2** Select and play back any song (steps 1 to 3 on page 39).

- 3** Play the keyboard and remember the sound of the voice.



If you have stopped playback at some point during this procedure press the [START/STOP] button to start playback again.

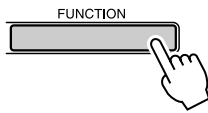
- 4** Use the dial to change songs, then play the keyboard and listen to the voice.



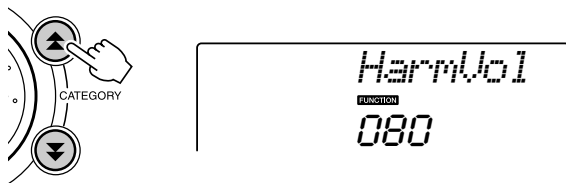
You should hear a different keyboard voice than you played in step 3. Press the [VOICE] button after changing songs to see the name of the voice being used.

Adjusting the Harmony Volume

1 Press the [FUNCTION] button.



2 Use the CATEGORY [\blacktriangle] and [\blacktriangledown] buttons to select the Harmony Volume item.



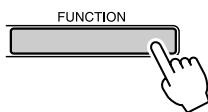
3 Use the dial to set the harmony volume between 000 and 127.

Select an EQ Setting for the Best Sound

Five different master equalizer (EQ) settings are provided to give you the best possible sound when listening through different reproduction systems—the instrument's internal speakers, headphones, or an external speaker system.

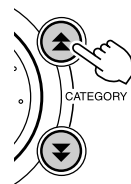
1 Press the [FUNCTION] button.

The currently selected function will appear in the display.



2 Press the CATEGORY [\blacktriangle] and [\blacktriangledown] buttons as many times as necessary to select the master EQ type function "MasterEQ".

"MasterEQ" will be shown in the display for a few seconds, then the currently selected EQ type will appear.



The currently selected master EQ type.

3 Use the dial to select the desired Master EQ setting.

Five settings are available: 1–5. Settings 1 and 2 are best for listening via the instrument's built-in speakers, setting 3 is for headphones, and settings 4 and 5 are ideal for listening via external speakers.

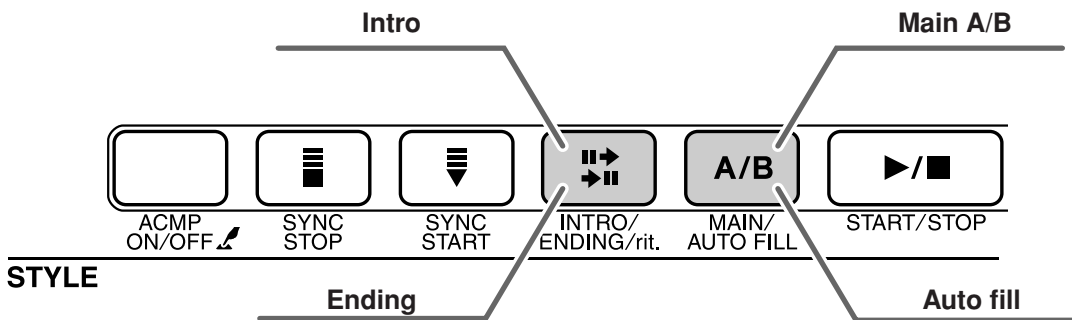
Style (Auto-accompaniment) Functions

Basic operation of the Style (auto-accompaniment) feature is described on page 33 of the Quick Guide.

Here are some other ways you can play the styles, the style volume adjustment procedure, how you can play chords using the styles, and more.

Pattern Variation (Sections)

This instrument features a wide variety of style “sections” that allow you to vary the arrangement of the accompaniment to match the song you are playing.



● INTRO section

This is used for the beginning of the Song. When the intro finishes playing, accompaniment shifts to the main section. The length of the intro (in measures) differs depending on the selected Style.

● MAIN section

This is used for playing the main part of the Song. It plays a main accompaniment pattern, and repeats indefinitely until another section’s button is pressed. There are two variations on the basic pattern (A and B), and the Style playback sound changes harmonically based on the chords you play with your left hand.

● Fill-in section

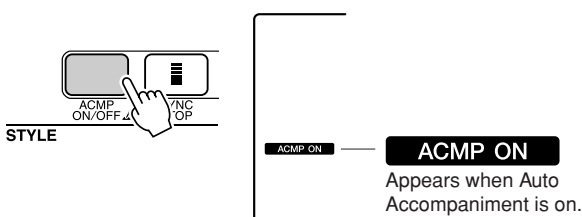
This is automatically added before changing to section A or B.

● ENDING section

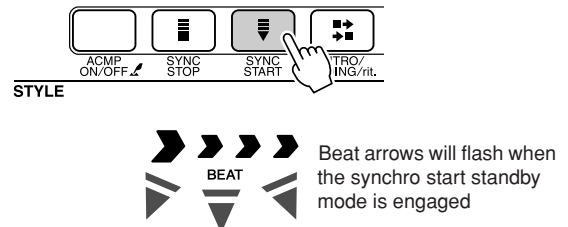
This is used for the ending of the Song. When the ending is finished, the auto accompaniment stops automatically. The length of the ending (in measures) differs depending on the selected Style.

1 Press the [STYLE] button and then select a style.

2 Press the [ACMP ON/OFF] button to turn auto accompaniment on.



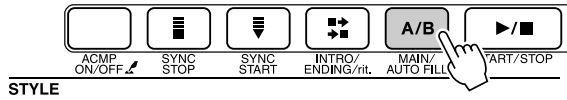
3 Press the [SYNC START] button to turn synchro start on.



● Synchro Start

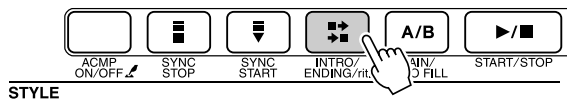
When the synchro start standby mode is engaged, style playback will begin as soon as you play a chord in the accompaniment range of the keyboard. You can disengage the synchro-start standby mode by pressing the [SYNC START] button again.

4 Press the [MAIN/AUTO FILL] button.



The name of the selected section—MAIN A or MAIN B—will be displayed.

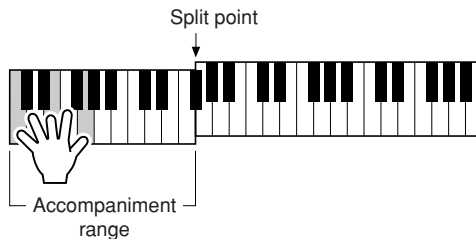
5 Press the [INTRO/ENDING/rit.] button.



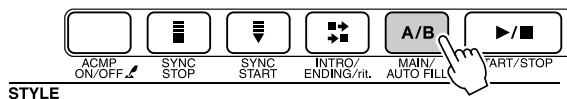
You're now ready to play the intro.

6 As soon as you play a chord with your left hand, the Intro of the selected Style starts.

For this example, play a C major chord (as shown below). For information on how to enter chords, see “Playing Auto-accompaniment Chords” on page 38.

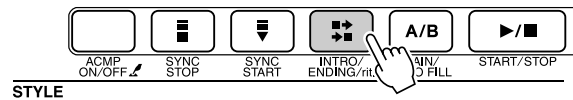


7 Press the [MAIN/AUTO FILL] button.



When the fill-in is finished, it leads smoothly into the selected main section A/B.

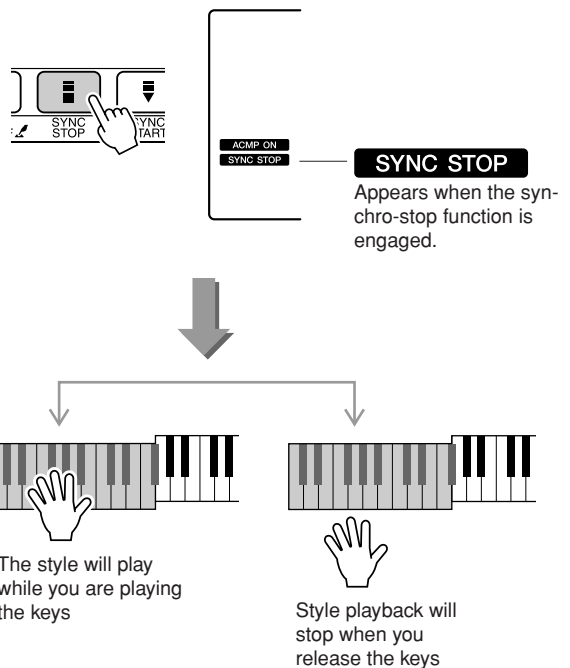
8 Press the [INTRO/ENDING/rit.] button.



This switches to the ending section. When the ending is finished, the auto accompaniment stops automatically. You can have the ending gradually slow down (ritardando) by pressing the [INTRO/ENDING/rit.] button again while the ending is playing back.

● **Synchro Stop**

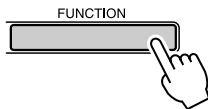
When this function is selected the accompaniment style will only play while you are playing chords in the accompaniment range of the keyboard. Style playback will stop when you release the keys. To turn the function on, press the [SYNC STOP] button.



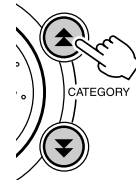
Adjusting the Style Volume

Press the [STYLE] button to engage the style function.

1 Press the [FUNCTION] button.



2 Use the CATEGORY [▲] and [▼] buttons to select the Style Volume item.



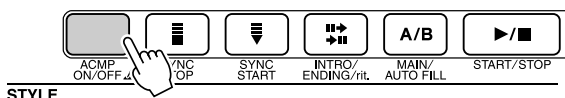
3 Use the dial to set the style volume between 000 and 127.

Setting the Split Point

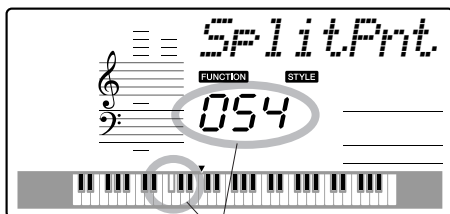
The initial default split point is key number 54 (the F#2 key), but you can change it to another key using the procedure described below.

1 Press the [STYLE] button.

2 Press and hold the [ACMP ON/OFF] for longer than a second so that the Split point item appears.

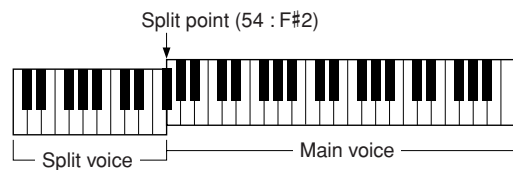


Hold for longer than a second



Split point

3 Use the dial to set the split point to any key from 000 through 127.



NOTE

- When you change the split point the auto-accompaniment split point also changes.
- The split point cannot be changed during a song lesson.

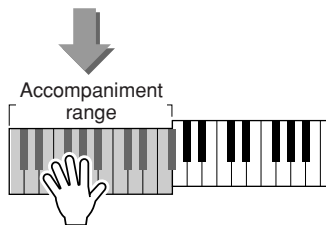
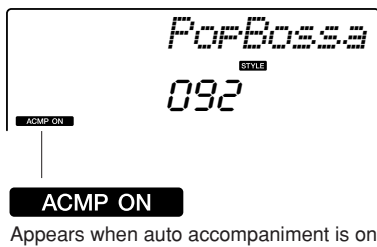
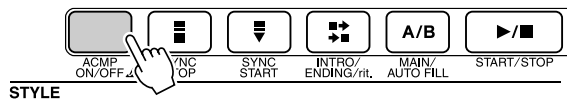
NOTE

- You can also access the Split Point item by pressing the [FUNCTION] button and using the CATEGORY [▲] and [▼] buttons to locate the item (page 82).

Play a Style with Chords but No Rhythm (Stop Accompaniment)

When auto accompaniment is on (the ACMP ON icon is showing) and Synchro Start is off, you can play chords in the left-hand accompaniment range of the keyboard while the style is stopped and still hear the accompaniment chords. This is “Stop Accompaniment”, and any of the chord fingerings recognized by the instrument can be used (page 38).

Press the [STYLE] button to engage the style function, then press the [ACMP ON/OFF] button to turn the auto accompaniment on.



Loading Style Files

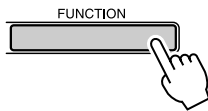
This instrument features 155 internal styles, but other styles, such as those provided on the CD-ROM and others that can be obtained from the internet (only styles with the “.sty” suffix), can be loaded into style number 156 and used in the same way as the internal styles.

In order to use the style file load function, the file must already have been transferred from the computer to the instrument. The procedure for transferring files from a computer to the instrument is described on page 89 (“Transferring Data between the Computer and Instrument”).

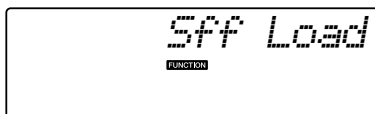
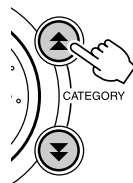
The procedure described below loads a style file that has already been transferred from a computer to the instrument into style number 156.

1 Press the [FUNCTION] button.

The currently selected function will appear in the display.



2 Press the CATEGORY [▲] and [▼] buttons as many times as necessary to select the style file load function “Sff Load”.

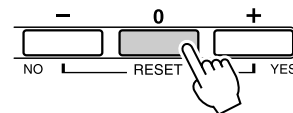


After about 2 seconds the name of a loadable style file will appear in the display.

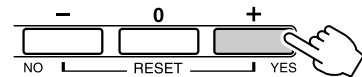
If multiple loadable style files have been transferred to the instrument, you can use the dial or the [+] and [-] buttons to select the other files in sequence.

3 Execute the load operation.

With the name of the style file you want to load shown in the display, press the number [0] button.



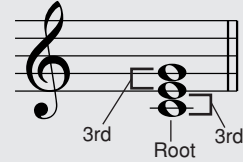
4 A confirmation message for the load operation will appear. Press the [+ / YES] button to actually load the file.



Chord Basics

Two or more notes played together constitute a “chord”.

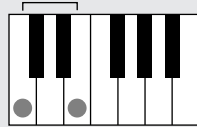
The most basic chord type is the “triad” consisting of three notes: the root, third, and fifth degrees of the corresponding scale. A C major triad, for example, is made up of the notes C (the root), E (the third note of the C major scale), and G (the fifth note of the C major scale).



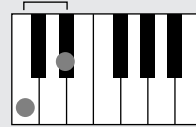
In the C major triad shown above, the lowest note is the “root” of the chord (this is the chord’s “root position” ... using other chord notes for the lowest note results in “inversions”). The root is the central sound of the chord, which supports and anchors the other chord notes.

The distance (interval) between adjacent notes of a triad in root position is either a major or minor third.

Major third—four half steps (semitones)



Minor third—three half steps (semitones)



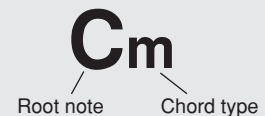
The lowest interval in our root-position triad (between the root and the third) determines whether the triad is a major or minor chord, and we can shift the highest note up or down by a semitone to produce two additional chords, as shown below.

<p>Major chord C_M</p> <p>Minor 3rd Major 3rd</p>	<p>Minor chord C_m</p> <p>Major 3rd Minor 3rd</p>	<p>Augmented chord C_{aug}</p> <p>Major 3rd Major 3rd</p>	<p>Diminished chord C_{dim}</p> <p>Minor 3rd Minor 3rd</p>
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The basic characteristics of the chord sound remain intact even if we change the order of the notes to create different inversions. Successive chords in a chord progression can be smoothly connected, for example, by choosing the appropriate inversions (or chord “voicings”).

● Reading Chord Names

Chord names tell you just about everything you need to know about a chord (other than the inversion/voicing). The chord name tells you what the root of the chord is, whether it is a major, minor, or diminished chord, whether it requires a major or flatted seventh, what alterations or tensions it uses ... all at a glance.



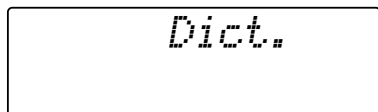
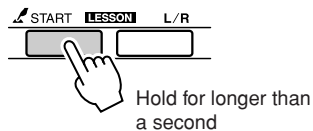
● Some Chord Types (These are just some of the “Standard” chord types recognized by this instrument.)

<p>Suspended 4 th C_{sus4}</p> <p>Perfect 5 th Perfect 4 th</p>	<p>7 th C₇</p> <p>Flatted 7 th Major chord</p>	<p>Minor 7 th C_{m7}</p> <p>Flatted 7 th Minor chord</p>	<p>Major 7 th C_{M7}</p> <p>Major 7 th Major chord</p>
<p>Minor/major 7 th C_{mM7}</p> <p>Major 7 th Minor chord</p>	<p>7 th, flatted 5 th C_{7(b5)}</p> <p>Flatted 5 th 7 th chord</p>	<p>Minor 7 th, flatted 5 th C_{m7(b5)}</p> <p>Flatted 5 th Minor 7 th chord</p>	<p>7 th, suspended 4 th C_{7sus4}</p> <p>Flatted 7 th Suspended 4 th chord</p>

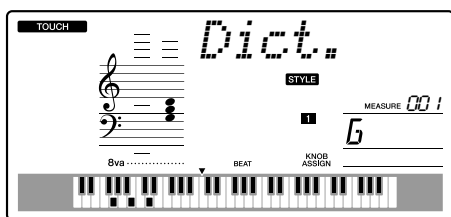
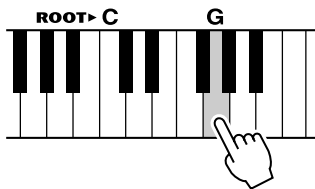
Looking Up Chords Using the Chord Dictionary

The Dictionary function is essentially a built-in “chord book” that shows you the individual notes of chords. It is ideal when you know the name of a certain chord and want to quickly learn how to play it.

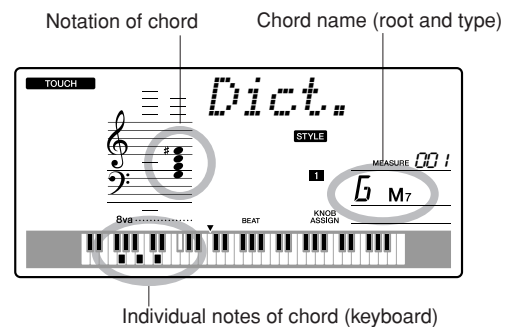
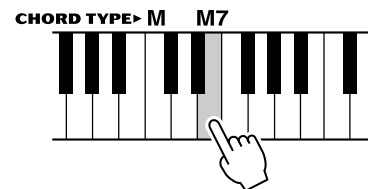
- 1 Press and hold the LESSON [START] button for longer than a second.



- 2 As an example, we'll learn how to play a GM7 (G major seventh) chord. Press the “G” key in the section of the keyboard labeled “ROOT”. (The note doesn't sound.) The root note you set is shown in the display.



- 3 Press the “M7” (major seventh) key in the section of the keyboard labeled “CHORD TYPE”. (The note doesn't sound.) The notes you should play for the specified chord (root note and chord type) are shown in the display, both as notation and in the keyboard diagram.



To call up possible inversions of the chord, press the [+]/[-] buttons.

NOTE

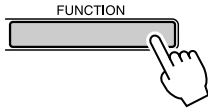
- About major chords: Simple major chords are usually indicated only by the root note. For example, “C” refers to C major. However, when specifying major chords here, make sure to select “M” (major) after pressing the root note.

- 4 Try playing a chord in the auto accompaniment section of the keyboard, checking the indications in the display. When you've played the chord properly, a bell sound signals your success and the chord name in the display flash.

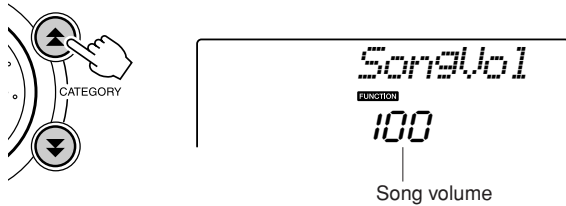
Song Settings

Song Volume

1 Press the [FUNCTION] button.



2 Use the CATEGORY [▲] and [▼] buttons to select the Song Volume item.



3 Use the dial to set the song volume between 000 and 127.

NOTE

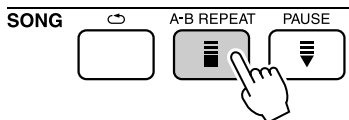
• Song volume can be adjusted while a song is selected.

A-B Repeat

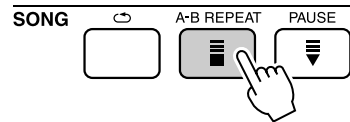
You can specify a section of a song—"A" is the start point and "B" is the end point—for repeat playback.



1 Play the song (page 39) and press the [A-B REPEAT] button at the beginning of the section you want to repeat (the "A" point).



2 Press the [A-B REPEAT] button a second time at the end of the section you want to repeat (the "B" point).



3 The specified A-B section of the song will now play repeatedly.

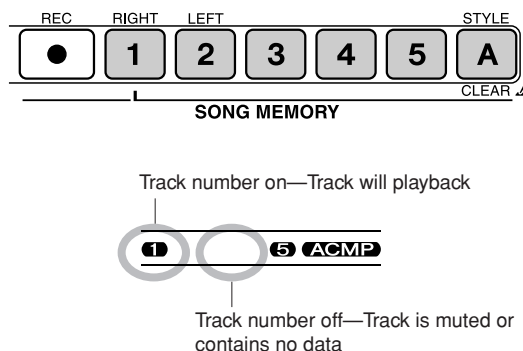
You can stop repeat playback at any time by pressing the [A-B REPEAT] button.

NOTE

- The repeat start and end points can be specified in one-measure increments.
- The current measure number is shown in the display during playback.
- If you want to set the start point "A" at the very beginning of the song press the [A-B REPEAT] button before starting playback of the song.

Muting Independent Song Parts

Each “track” of a song plays a different part of the song—melody, percussion, accompaniment, etc. You can mute individual tracks and play the muted part on the keyboard yourself, or simply mute tracks other than the ones you want to listen to. Use the SONG MEMORY [1]–[5] and [A] buttons to mute or un-mute the corresponding tracks. The track number in the display disappears when that track is muted. Refer to page 52 for information about the song track configuration.



Change the Melody Voice

You can change a song’s melody voice to any other voice you prefer.

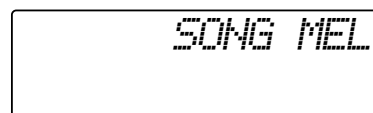
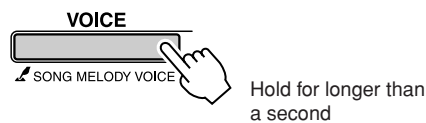
NOTE

• You cannot change the melody voice of a user song.

- 1** Select the song and play it.
- 2** Rotate the dial to select the voice you want to listen to after pressing the [VOICE] button.

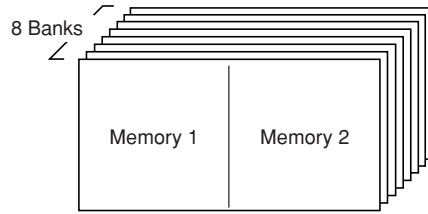


- 3** Press the [VOICE] button for longer than a second. “SONG MELODY VOICE” appears in the display for a few seconds, indicating that the voice selected in step #2 has replaced the song’s original melody voice.



Memorize Your Favorite Panel Settings

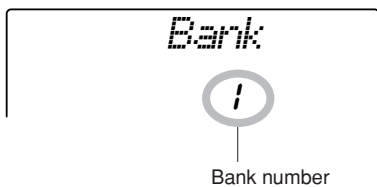
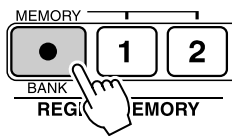
This instrument has a Registration Memory feature that lets you save your favorite settings for easy recall whenever they're needed. Up to 16 complete setups can be saved (8 banks of two setups each).



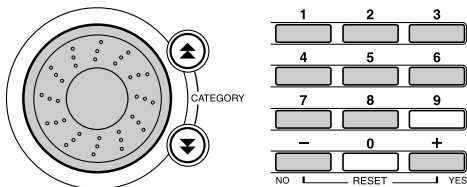
Up to 16 presets (eight banks of two each) can be memorized.

Saving to the Registration Memory

- 1 Set the panel controls as required—select a voice, accompaniment style, etc.
- 2 Press the [●] (MEMORY/BANK) button. A bank number will appear in the display when you release the button.



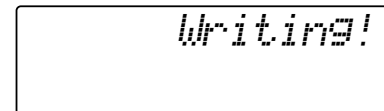
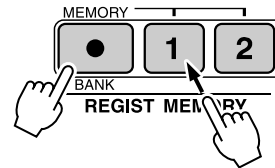
- 3 Use the dial or the [1]–[8] number buttons to select a bank number from 1 to 8.



NOTE

• Data cannot be saved to the registration memory during song playback.

- 4 Press the REGIST MEMORY [1] or [2] button while holding the [●] (MEMORY/BANK) button to store the current panel settings to the specified registration memory.



NOTE

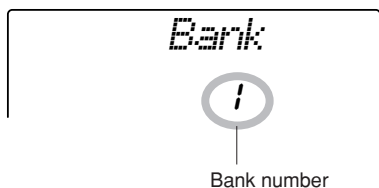
• If you select a Registration Memory number that already contains data, the previous data is deleted and overwritten by the new data.

CAUTION

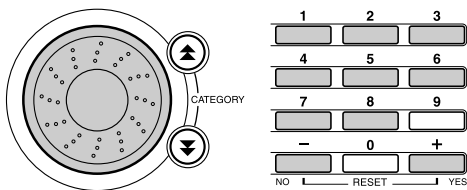
• Do not turn off the power while saving settings to the registration memory, otherwise the data may be damaged or lost.

Recalling a Registration Memory

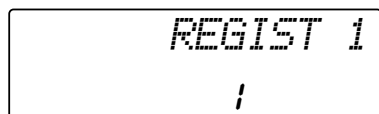
1 Press the [●] (MEMORY/BANK) button. A bank number will appear in the display when you release the button.



2 Use the dial or the [1]–[8] number buttons to select bank you want to recall.



3 Press the REGIST MEMORY button, [1] or [2], containing the settings you want to recall. The recalled REGIST MEMORY number appears in the display for a few seconds. The panel controls will be instantly set accordingly.



● Settings That Can be Saved to the Registration Memory

• Style settings*

Style number, Auto Accompaniment ON/OFF, Split Point, Style settings (Main A/B), Style Volume, Tempo

• Voice settings

Main Voice setting (Voice number, Volume, Octave, Pan, Reverb Send Level, Attack Time, Release Time, Filter Cutoff, Filter Resonance, Chorus Send Level), Dual Voice settings (Dual ON/OFF, Voice number, Volume, Octave, Pan, Reverb Send Level, Chorus Send Level, Attack Time, Release Time, Filter Cutoff, Filter Resonance), Split Voice settings (Split ON/OFF, Voice number, Volume, Octave, Pan, Reverb Send Level, Chorus Send Level)

• Effect settings

Reverb Type, Chorus Type

• Arpeggio settings

Arpeggio Type, Arpeggio ON/OFF

• Harmony settings

Harmony ON/OFF, Harmony Type, Harmony Volume

• Other settings

Transpose, Pitch Bend Range, Knob Assign

* Style settings are not available for Registration Memory when using the Song features.

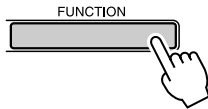
The Functions

The “Functions” provide access to a range of detailed instrument parameters for tuning, setting the split point, and adjusting the voices and effects. Take a look at the function list starting on the opposite page. There are 54 function parameters in all. When you locate a function you want to set up, simply select the function’s display name (shown to the right of the function name in the list) and adjust as required.

Selecting and Setting Functions

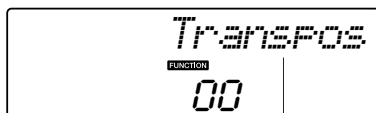
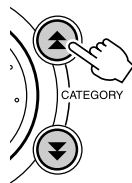
1 Find the function you want to set in the list that begins on page 83.

2 Press the [FUNCTION] button.



3 Select a function.

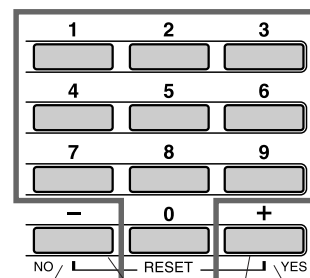
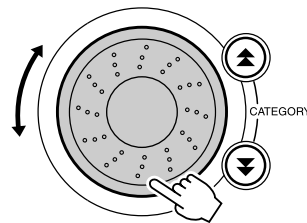
Press the CATEGORY [\blacktriangle] and [\blacktriangledown] buttons as many times as necessary until the function’s display name appears in the display.



The selected function.

4 Use the dial, the [+] and [-] buttons, or the [0]–[9] number buttons to set the selected function as required.

The [+] and [-] buttons are used to make ON/OFF type settings: [+] = ON, [-] = OFF. In some cases the [+] button will initiate execution of the selected function, and the [-] will cancel the selection.



Direct numeric entry.

- Decrement value by 1.
- OFF
- Cancel

- Increment value by 1.
- ON
- Execute

Press simultaneously to recall the default setting.

Some function settings are stored in memory as soon as they are changed. See “The Backup Parameters” on page 56 for information on the function settings that are stored on the instrument. To restore all initial factor default settings perform the “Backup Clear” procedure described in the “Initialization” section on page 56.

● Function Setting List

Setting	Item title	Range/Settings	Description
Style Volume	<i>StyleVol</i>	000–127	Determines the volume of the Style.
Song Volume	<i>SongVol</i>	000–127	Determines the volume of the Song.
Transpose	<i>Transpos</i>	-12–12	Determines the pitch of the instrument by semitone increments.
Tuning	<i>Tuning</i>	-100–100	Sets the pitch of the instrument's sound in 1-cent increments.
Pitch Bend Range	<i>PBRange</i>	01–12	Sets the pitch bend range in semitone increments.
Split Point	<i>SplitPnt</i>	000–127 (C-2–G8)	Determines the highest key for the Split voice and sets the Split “point”—in other words, the key that separates the Split (lower) and Main (upper) voices. The Split Point setting and Accompaniment Split Point setting are automatically set to the same value.
Touch Sensitivity	<i>TouchSns</i>	1(Soft), 2(Medium), 3(Hard)	When Touch Response is on, this determines the sensitivity of the feature.
Main Voice Volume	<i>M. Volume</i>	000–127	Determines the volume of the Main voice.
Main Voice Octave	<i>M. Octave</i>	-2–+2	Determines the octave range for the Main voice.
Main Voice Pan	<i>M. Pan</i>	000 (left)– 64 (center)– 127 (right)	Determines the pan position of the Main voice in the stereo image. The value “0” results in the sound being panned full left; the value “127” results in the sound being panned full right.
Main Voice Reverb Level	<i>M. Reverb</i>	000–127	Determines how much of the Main voice's signal is sent to the Reverb effect.
Main Voice Chorus Level	<i>M. Chorus</i>	000–127	Determines how much of the Main voice's signal is sent to the Chorus effect.
Main Voice Attack Time	<i>M. Attack</i>	000–127	Sets the Main voice attack time.
Main Voice Release Time	<i>M. Releas</i>	000–127	Sets the Main voice release time.
Main Voice Filter Cutoff	<i>M. Cutoff</i>	000–127	Sets the Main voice filter cutoff frequency.
Main Voice Filter Resonance	<i>M. Reso.</i>	000–127	Sets the Main voice filter resonance.
Dual Voice	<i>D. Voice</i>	001–504	Selects the Dual voice.
Dual Voice Volume	<i>D. Volume</i>	000–127	Determines the volume of the Dual voice.
Dual Voice Octave	<i>D. Octave</i>	-2–+2	Determines the octave range for the Dual voice.
Dual Voice Pan	<i>D. Pan</i>	000 (left)– 64 (center)– 127 (right)	Determines the pan position of the Dual voice in the stereo image. The value “0” results in the sound being panned full left; the value “127” results in the sound being panned full right.
Dual Voice Reverb Level	<i>D. Reverb</i>	000–127	Determines how much of the Dual voice's signal is sent to the Reverb effect.
Dual Voice Chorus Level	<i>D. Chorus</i>	000–127	Determines how much of the Dual voice's signal is sent to the Chorus effect.
Dual Voice Attack Time	<i>D. Attack</i>	000–127	Sets the Dual voice attack time.
Dual Voice Release Time	<i>D. Releas</i>	000–127	Sets the Dual voice release time.
Dual Voice Filter Cutoff	<i>D. Cutoff</i>	000–127	Sets the Dual voice filter cutoff frequency.
Dual Voice Filter Resonance	<i>D. Reso.</i>	000–127	Sets the Dual voice filter resonance.
Split Voice	<i>S. Voice</i>	001–504	Selects the Split voice.
Split Voice Volume	<i>S. Volume</i>	000–127	Determines the volume of the Split voice.
Split Voice Octave	<i>S. Octave</i>	-2–+2	Determines the octave range for the Split voice.
Split Voice Pan	<i>S. Pan</i>	000 (left)– 64 (center)– 127 (right)	Determines the pan position of the Split voice in the stereo image. The value “0” results in the sound being panned full left; the value “127” results in the sound being panned full right.
Split Voice Reverb Level	<i>S. Reverb</i>	000–127	Determines how much of the Split voice's signal is sent to the Reverb effect.
Split Voice Chorus Level	<i>S. Chorus</i>	000–127	Determines how much of the Split voice's signal is sent to the Chorus effect.

Setting	Item title	Range/Settings	Description
Reverb Type	<i>Reverb</i>	01–10	Determines the Reverb type, including off (10). (See the list in the separate Data List.)
Chorus Type	<i>Chorus</i>	01–05	Determines the Chorus type, including off (05). (See the list in the separate Data List.)
Master EQ Type	<i>MasterEQ</i>	Speaker1, Speaker2, Headphone, Line Out1, Line Out2	Sets the equalizer applied to the speaker output for optimum sound in different listening situations.
Harmony Type	<i>HarmType</i>	01–26	Determines the Harmony type. (See the list in the separate Data List.)
Harmony Volume	<i>HarmVol</i>	000–127	Determines the volume of the Harmony effect.
Arpeggio Type	<i>ARP Type</i>	01–50	Determines the Arpeggio type. (See the list on page 14)
Arpeggio Velocity	<i>ARP Velo</i>	1 (Original), 2 (Thru)	Sets the velocity mode for arpeggio playback.
Style File Load	<i>Sff Load</i>	001–nnn	Loads a Style file.
PC mode	<i>PC mode</i>	PC1/PC2/OFF	Optimizes the MIDI settings when you connect to a computer (page 88).
Local On/Off	<i>Local</i>	ON/OFF	Determines whether the instrument's keyboard controls the internal tone generator (ON) or not (OFF). (page 87)
External Clock	<i>ExtClock</i>	ON/OFF	Determines whether the instrument synchronizes to the internal clock (OFF) or an external clock (ON). (page 87)
Keyboard Out	<i>KbdOut</i>	ON/OFF	Determines whether keyboard performance data of the instrument is transmitted (ON) or not (OFF).
Style Out	<i>StyleOut</i>	ON/OFF	Determines whether Style data is transmitted (ON) via USB or not (OFF) during Style playback.
Song Out	<i>SongOut</i>	ON/OFF	Determines whether Song data is transmitted (ON) via USB or not (OFF) during Song playback.
Initial Send	<i>InitSend</i>	YES/NO	Lets you send the data of the panel settings to a computer. Press [+] to send, or press [-] to cancel.
Time Signature Numerator	<i>Timesign</i>	00–60	Determines the time signature of the Metronome.
Time Signature Denominator	<i>TimesignD</i>	Half note, Quarter note, Eighth note, Sixteenth note	Sets the length of each metronome beat.
Metronome Volume	<i>MtrVol</i>	000–127	Determines the volume of the Metronome.
Lesson Track (R)	<i>R-Part</i>	GuideTrack 1–16	Determines the guide track number for your right hand lesson. The setting is only effective for songs in SMF format 0 transferred from a computer.
Lesson Track (L)	<i>L-Part</i>	GuideTrack 1–16	Determines the guide track number for your left hand lesson. The setting is only effective for songs in SMF format 0 transferred from a computer.
Grade	<i>Grade</i>	ON/OFF	Determines whether the Grade function is on or off.
Demo Cancel	<i>D-Cancel</i>	ON/OFF	Determines whether Demo cancel is enabled or not. When this is set to ON, the Demo Song will not play, even if the [DEMO] button is pressed.

* All these settings can be conveniently reset to their initial default values by pressing the [+] and [-] buttons simultaneously. (The exception to this is Initial Send, which is an operation, not a setting.)

Connecting to a Computer

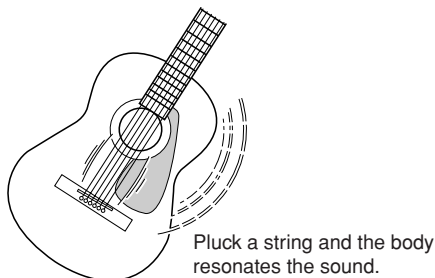
Nearly all of the electronic musical instruments made today—particularly synthesizers, sequencers and computer music related devices—use MIDI. MIDI is a worldwide standard that allows these devices to send and receive performance and setting data. Naturally, this instrument lets you save or send your keyboard performance as MIDI data, as well as the songs, styles and panel settings.

The potential MIDI holds for your live performances and music creation/production is enormous—simply by connecting this instrument to a computer and transmitting MIDI data. In this section, you'll learn the basics of MIDI and the specific MIDI functions provided by this instrument.

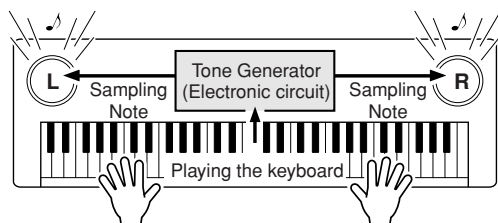
What Is MIDI?

No doubt you have heard the terms “acoustic instrument” and “digital instrument”. In the world today, these are the two main categories of instruments. Let's consider a grand piano and a classical guitar as representative acoustic instruments. They are easy to understand. With the piano, you strike a key, and a hammer inside hits some strings and plays a note. With the guitar, you directly pluck a string and the note sounds. But how does a digital instrument go about playing a note?

● Acoustic guitar note production



● Digital instrument note production



Based on playing information from the keyboard, a sampling note stored in the tone generator is played through the speakers.

As shown in the illustration above, in an electronic instrument the sampling note (previously recorded note) stored in the tone generator section (electronic circuit) is played based on information received from the keyboard. So then what is the information from the keyboard that becomes the basis for note production?

For example, let's say you play a “C” quarter note using the grand piano sound on the instrument. Unlike an acoustic instrument that puts out a resonated note, the electronic instrument puts out information from the keyboard such as “with what voice”, “with which key”, “about how strong”, “when was it pressed”, and “when was it released”. Then each piece of information is changed into a number value and sent to the tone generator. Using these numbers as a basis, the tone generator plays the stored sampling note.

Example of Keyboard Information

Voice number (with what voice)	1 (grand piano)
Note number (with which key)	60 (C3)
Note on (when was it pressed) and note off (when was it released)	Timing expressed numerically (quarter note)
Velocity (about how strong)	120 (strong)

Your keyboard performance and all panel operations of this instrument are processed as MIDI data. The songs, auto accompaniment (styles), and User songs are also made up of MIDI data. MIDI is an acronym that stands for Musical Instrument Digital Interface and it allows different musical instruments and devices to instantly communicate with each other, via digital data. The MIDI standard is used all over the world and was designed to transmit performance data between electronic musical instruments (or computers). Thanks to MIDI, you can control one instrument from another and transmit performance data between the devices-taking your creative and performance potential to even higher levels.

MIDI messages can be divided into two groups: Channel messages and System messages.

● **Channel Messages**

This instrument is capable of handling 16 MIDI channels simultaneously—meaning it can play up to sixteen different instruments at the same time. Channel messages transmit information such as Note ON/OFF, Program Change, for each of the 16 channels.

Message Name	Instrument Operation/Panel Setting
Note ON/OFF	Performance data of the keyboard (contains note number and velocity data)
Program Change	Instrument selection (including bank select MSB/LSB, if necessary)
Control Change	Instrument settings (volume, pan, etc.)

● **System Messages**

This is data that is used in common by the entire MIDI system. System messages include messages like Exclusive Messages that transmit data unique to each instrument manufacturer and Realtime Messages that control the MIDI device.

Message Name	Instrument Operation/Panel Setting
Exclusive Message	Reverb/chorus settings, etc.
Realtime Messages	Start/stop operation

Connecting a Personal Computer

The following functions become available when this instrument is connected to a computer.

- Performance data can be transferred between the instrument and the computer (page 87).
- Files can be transferred between the instrument and the computer (page 89).

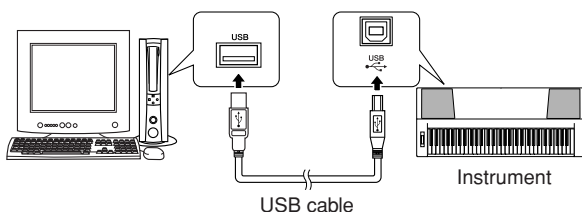
The connection procedure is as follows:

1 Install the USB-MIDI driver on your computer.

The USB-MIDI driver is included on the CD-ROM. Installation of the USB MIDI driver is described on page 92.

2 Connect the USB terminal of the computer to the USB terminal on the instrument using a standard USB cable (USB cable sold separately).

The supplied CD-ROM also includes a Musicsoft Downloader application that allows you to transfer song files from your computer to the instrument's flash memory. For instructions about how to install Musicsoft Downloader and how to transfer song files, see page 90.



■ **Precautions when using the [USB] terminal**

When connecting the computer to the [USB] terminal, make sure to observe the following points. Failing to do so risks freezing the computer and corrupting or losing the data. If the computer or the instrument freezes, restart the application software or the computer OS, or turn the power to the instrument off then on again.

CAUTION

- Use an AB type USB cable of less than about 3 meters.
- Before connecting the computer to the [USB] terminal, exit from any power-saving mode of the computer (such as suspended, sleep, standby).
- Before turning on the power to the instrument, connect the computer to the [USB] terminal.
- Execute the following before turning the power to the instrument on/off or plugging/unplugging the USB cable to/from the [USB] terminal.
 - Quit any open application software on the computer.
 - Make sure that data is not being transmitted from the instrument. (Data is transmitted whenever you play notes on the keyboard or play back a song, etc.)
- While a USB device is connected to the instrument, you should wait for six seconds or more between these operations: (1) when turning the power of the instrument off then on again, or (2) when alternately connecting/disconnecting the USB cable.

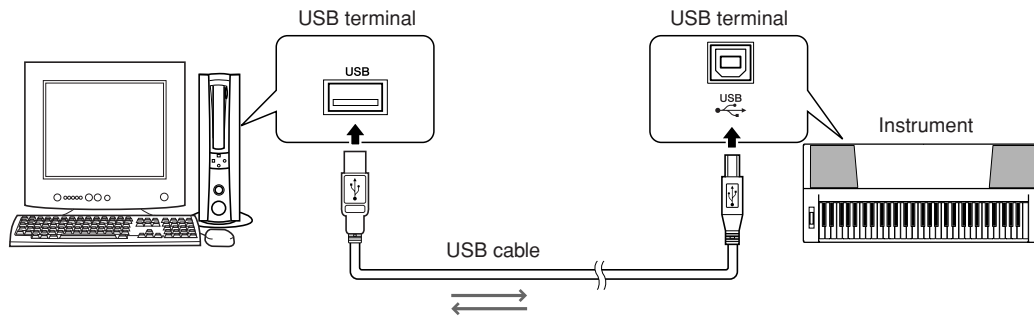
NOTE

- The Musicsoft Downloader application may not be able to access the instrument in the following cases:
 - During style playback.
 - During song playback.

Transferring Performance Data to and from a Computer

By connecting the instrument to a computer, the instrument's performance data can be used on the computer, and performance data from the computer can be played on the instrument.

- When the instrument is connected with computer, it transmits/receives performance data.



■ MIDI settings

These settings pertain to performance data transmission and reception.

Item	Range/Settings	Description
Local	ON/OFF	Local control determines whether or not notes played on the instrument are sounded by its internal tone generator system: the internal tone generator is active when local control is on, and inactive when local control is off.
External Clock	ON/OFF	These settings determine whether the instrument is synchronized to its own internal clock (OFF), or to a clock signal from an external device (ON).
Keyboard Out	ON/OFF	These settings determine whether keyboard performance data of the instrument is transmitted (ON) or not (OFF).
Style Out	ON/OFF	These settings determine whether Style data is transmitted (ON) or not (OFF) during Style playback.
Song Out	ON/OFF	These settings determine whether Song data is transmitted (ON) or not (OFF) during Song playback.

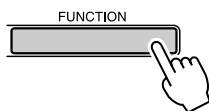
⚠ CAUTION

- If you can't get any sound out of the instrument, the most likely cause is that Local Control has been set to off.

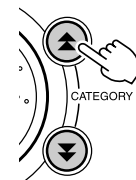
⚠ CAUTION

- If External Clock is ON and no clock signal is being received from an external device, the song, style, and metronome functions will not start.

- 1 Press the [FUNCTION] button.



- 2 Use the CATEGORY [▲] and [▼] buttons to select the item you want to change its value.



- 3 Use the dial to select ON or OFF.

■ PC Mode

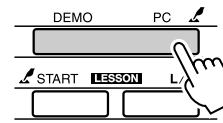
A number of MIDI settings need to be made when you want to transfer performance data between the computer and the instrument. The PC Mode item can conveniently make multiple settings for you in one operation. Three settings are available: PC1, PC2, and OFF.

This setting is not necessary when transferring song or backup files between the computer and the instrument.

* Set the PC mode to PC2 when using Digital Music Notebook.

	PC1	PC2*	OFF
Local	OFF	OFF	ON
External Clock	ON	OFF	OFF
Song Out	OFF	OFF	OFF
Style Out	OFF	OFF	OFF
Keyboard Out	OFF	ON	ON

1 Press and hold the [DEMO] button for longer than a second so that the PC Mode item appears.



2 Use the dial to select PC1, PC2, or OFF.

NOTE

- When the PC2 setting is selected the instrument's style, song, demo, song recording, and lesson features cannot be used.

NOTE

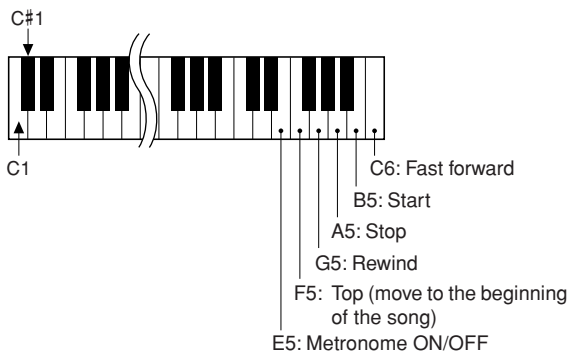
- You can also access the PC Mode item by first pressing the [FUNCTION] button and then using the CATEGORY [▲] and [▼] buttons to locate it (page 82).

Remote Control of MIDI Devices

You can also use this instrument as a remote control device for the Digital Music Notebook application on your computer (via the USB connection)—controlling playback, stop and transport functions from the panel.

■ Remote control keys

To use the remote control functions, simultaneously hold down the lowest two keys on the keyboard (C1 and C#1) and press the appropriate key (shown below).



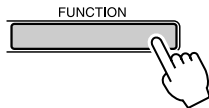
NOTE

- Remote control of MIDI devices will function independently of the PC2 mode.

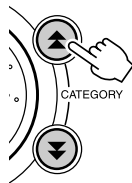
Initial Send

This function lets you send the panel setup data to a computer. Before you record performance data to a sequencer application running on your computer, it is a good idea to first send and record the panel setup data before the actual performance data.

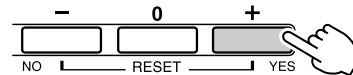
1 Press the [FUNCTION] button.



2 Use the CATEGORY [▲] and [▼] buttons to select the Initial Send item.



3 Press [+ / YES] to send, or press [- / NO] to cancel.



Transferring Data between the Computer and Instrument

MIDI songs residing on a computer, as well as the 70 MIDI songs and 5 Style files provided on the CD-ROM, can be transferred to the instrument. Backup files can also be transferred from the instrument to the computer and back. Songs and styles transferred to the instrument can be used with the instrument's lesson and other functions. In order to transfer songs between your computer and the instrument you will need to install the Musicsoft Downloader application and the USB-MIDI Driver included on the Accessory CD-ROM on your computer. Refer to the Accessory CD-ROM Installation Guide on page 92 for installation details.

● Data that can be transferred from a computer to this instrument.

- Song Capacity (max.): Flash memory 99 songs (Song 036–)
- Data Capacity: Flash memory 373 kb
- Data Format: SMF format 0, style file (extension: .sty), Backup File (06PK61.BUP)

● What is SMF (Standard MIDI File)?

The SMF (Standard MIDI File) format is one of the most common and widely compatible sequence formats used for storing sequence data. There are two variations: Format 0 and Format 1. A large number of MIDI devices are compatible with SMF Format 0, and most commercially available MIDI sequence data is provided in SMF Format 0.

■ With the Musicsoft Downloader You Can:

- Transfer MIDI songs you have downloaded from the Internet or created on your computer from the computer to the instrument's flash memory.

⇒ refer to the procedure described on page 90.

The procedure for transferring songs included on the Accessory CD-ROM from your computer to the instrument is given as an example.

- Backup files can be transferred from the instrument to a computer and back.
⇒ refer to the procedure described on page 91.

Use the Musicsoft Downloader application with Internet Explorer 5.5 or higher.

■ Use Musicsoft Downloader To Transfer Songs From the Accessory CD-ROM To the Instrument's flash memory.....

NOTE
• If a song or style is being played, stop playback before proceeding.

1 Install the Musicsoft Downloader and USB MIDI driver to your computer, then connect the computer and the instrument (page 94).

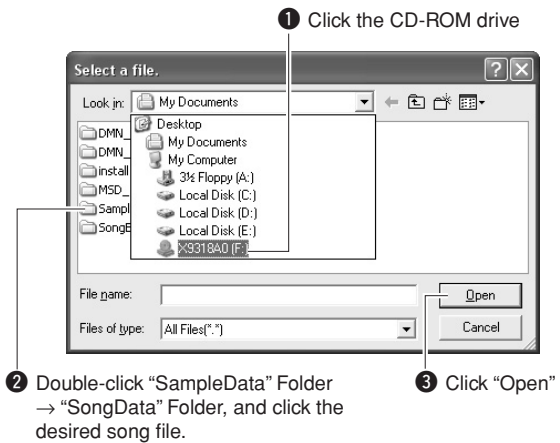
2 Insert the included CD-ROM into the CD-ROM drive.
A start window will appear automatically.

3 Double-click the Musicsoft Downloader shortcut icon that is created on the desktop.
This will launch the Musicsoft Downloader application and the main window will appear.

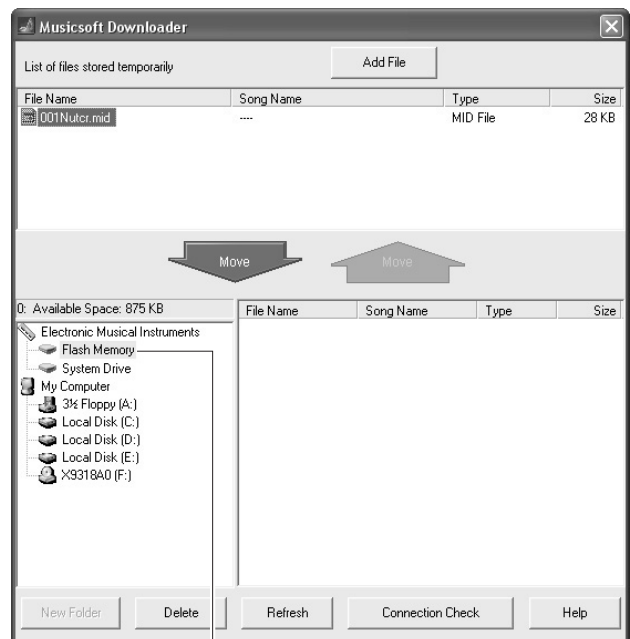
NOTE
• The instrument cannot be operated while the Musicsoft Downloader is running.

4 Click the "Add File" button and the Add File window will appear.

5 Click the button to the right of "Look in" and select the CD-ROM drive from the drop-down menu that appears. Double-click the "SampleData" Folder on the window. Select the file from the specific "SongData" folder you want to transfer to the instrument, and click "Open".



6 A copy of the selected MIDI song file will appear in the "List of files stored temporarily" at the top of the window.
The memory medium will also be displayed at the bottom of the window to specify the destination for the transfer. Click the "Electronic Musical Instruments", and then "Flash memory."



7 After selecting the file in the "List of files stored temporarily", click the downward [Move] button and a confirmation message will appear. Click [OK] and the song will be transferred from the "List of files stored temporarily" to the instrument's memory.

8 Close the window to end the Musicsoft Downloader.

NOTE

- End the Musicsoft Downloader to playback the song transferred from your computer.

9 To playback a song stored in flash memory, press the [SONG] button. Use the dial to select the song you want to play, then press the [START/STOP] button to start playback.

Style files (files with the “.STY” extension) can be transferred to Flash memory using the same procedure as described above. Style files transferred to the Flash Memory can be loaded into style number 156 and then played (page 74).

CAUTION

- Do not unplug the USB cable during a data transfer. Not only will the data not be transferred and saved, but operation of the memory media may become unstable and its contents may disappear completely when the power is turned on or off.

CAUTION

- Store data can be lost due to equipment malfunction or improper operation. For safety we recommend that you keep a copy of all important data stored on your computer.
- We recommend that you use a power adaptor rather than batteries when transferring data. The data can be corrupted if the batteries fail during the transfer.

● To Use transferred Songs For Lessons...

In order to use songs (only SMF format 0) transferred from a computer for lessons it is necessary to specify which channels are to be played back as the right-hand and left-hand parts.

- 1 Press the [SONG] button and select the song (036–) residing in flash memory for which you want to set the guide track.
- 2 Press the [FUNCTION] button.
- 3 Use the CATEGORY [▲] and [▼] buttons to select the R-Part or L-Part item.
- 4 Use the dial to select the channel you want to play back as the specified right- or left-hand part.

We recommend that you select channel 1 for the right-hand part and channel 2 for the left-hand part.

■ Transfer a backup file from the instrument to a computer...

You can use the Musicsoft Downloader to transfer “Backup Files” containing backup data (page 56), including the five User Songs stored on the instrument, to a computer. If you click “Electronic Musical Instruments” in the Musicsoft Downloader display, and then “System Drive”, a file named “06PK61.BUP” will appear in the lower right corner of the Musicsoft Downloader display. This is the backup file. For details about how to transmit backup file using the Musicsoft Downloader application, refer to the Online help in the application.

NOTE

- Preset Song data cannot be transmitted from the instrument.

CAUTION

- The backup data, including the five User Songs is transmitted/received as a single file. As a result, all backup data will be overwritten every time you transmit or receive. Keep this in mind when transferring data.

CAUTION

- Do not rename the backup file on the computer. If you do so, it will not be recognized when transferred to the instrument.



Accessory CD-ROM Installation Guide

SPECIAL NOTICES

- The software and this manual are the exclusive copyrights of Yamaha Corporation.
- Use of the software and this manual is governed by the license agreement which the purchaser fully agrees to upon breaking the seal of the software packaging. (Please read carefully the Software Licensing Agreement on page 98 before installing the application.)
- Copying of the software or reproduction of this manual in whole or in part by any means is expressly forbidden without the written consent of the manufacturer.
- Yamaha makes no representations or warranties with regard to the use of the software and documentation and cannot be held responsible for the results of the use of this manual and the software.
- This disk containing the software is not meant for use with an audio/visual system (CD player, DVD player, etc.). Do not attempt to use the disk on equipment other than a computer.
- The screen displays as illustrated in this manual are for instructional purposes, and may appear somewhat different from the screens which appear on your computer.
- Software such as the USB-MIDI driver may be revised and updated without prior notice. Make sure to check and download the latest version of the software from the following site.
<http://music.yamaha.com/download/>
- Future upgrades of application and system software and any changes in specifications and functions will be announced separately.

Important Notices about the CD-ROM

● Data Types

This CD-ROM includes application software. Please refer to page 94 for software installation instructions.

CAUTION

- *Do not attempt to play this CD-ROM on equipment other than a computer. The result high-volume noise can potentially cause hearing damage or damage your equipment.*

● Operating System (OS)

The applications in this CD-ROM are provided in versions for Windows operating systems.

CD-ROM Contents

When the included CD-ROM is inserted into the CD-ROM drive, the following start window will appear automatically. (If the start window does not appear automatically, open the “My computer” folder and double click “Start.exe” in the CD-ROM drive.)



Folder Name		Application / Data Name	Contents	
①	MSD_	Musicsoft Downloader	This application can be used to download MIDI song data from the Internet and transfer it from the computer to the instrument's memory. Refer to page 96 for installation instructions.	
②	USBdrv32_	USB-MIDI Driver (for 32-bit version Windows 2000/XP/Vista/7)	This driver software is necessary to connect MIDI devices to your computer via USB. Refer to page 94 for installation instructions.	
	USBdrv64_	USB-MIDI Driver (for 64-bit version Windows XP/Vista/7)		
③	SongBook	Song Book	Includes score data for the 30 internal songs provided on the instrument as well as 70 MIDI songs provided on the CD-ROM. The exceptions are songs 1–11, 30 and song 20 which is copyrighted. The scores for songs 9–11 are provided in the separate Data List.	
	SampleData	SongData	MIDI 70 songs	These songs, styles, or data* can be transferred to the instrument and played or used with the instrument's functions. * This instrument does not support Music Database data.
		StyleData	5 style files	
		MDB	5 Music Database data	

In order to view PDF scores, you will need to install Adobe Reader in your computer. Adobe Reader can be downloaded free at the Adobe website.

System Requirements

Data	OS	Computer	Memory	Hard Disk	Display
Musicsoft Downloader	Windows 2000/XP Home Edition/XP Professional/Vista * Only 32-bit is supported. Windows 7	233 MHz or higher; Intel Pentium/Celeron Processor family (500 MHz or higher is recommended)	64 MB or more (256 MB or more is recommended)	128 MB or more (at least 512 MB of free space is recommended)	800 x 600 HighColor (16-bit)
USB Driver for Windows	Windows XP Professional (SP2/SP3)/XP Home Edition (SP2/SP3)/2000 (SP4)	166 MHz or higher; Intel Core/Pentium/Celeron processor	32 MB or more (64 MB or more is recommended)	10 MB or more	—
	Windows XP Professional x64 Edition (SP2)	Intel 64 compatible processor	256 MB or more	10 MB or more	—
	Windows Vista (SP0/SP1/SP2)	800 MHz or higher; Intel Core/Pentium/Celeron processor or Intel 64 compatible processor	512 MB or more	10 MB or more	—
	Windows 7	1.4 GHz or higher; Intel Core/Pentium/Celeron processor or Intel 64 compatible processor	1 GB or more (32-bit)/2 GB or more (64-bit)	10 MB or more	—

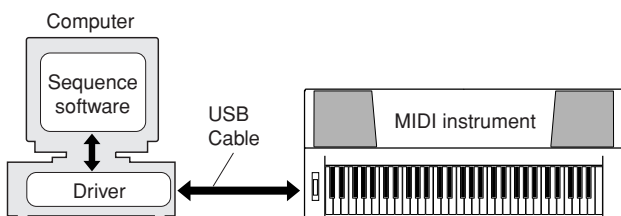
Software Installation

If you have any problems with the installation, refer to the troubleshooting section on page 96.

■ Installing / Updating the USB-MIDI Driver

In order to be able to communicate with and use MIDI instruments connected to your computer, the appropriate driver software must be properly installed on your computer.

The USB-MIDI driver allows sequence software and similar applications on your computer to transmit and receive MIDI data to and from instruments via a USB cable.



Follow the steps below to install (or update) the USB-MIDI driver.

- 1** Disconnect all USB devices from the computer except for the mouse and computer keyboard.
- 2** Start the computer and use the “Administrator” account to log on to Windows.
Close all applications and windows that are open.
- 3** Insert the Accessory CD-ROM into your computer’s CD-ROM drive.
- 4** Turn off the power of the instrument.
- 5** Connect the USB connector of the computer to the USB terminal of the MIDI instrument with a standard USB cable.

NOTE

• Do not use a USB hub for connecting multiple USB devices.

NOTE

• If you are using several MIDI instruments with USB connection at the same time, connect all the instruments to the computer and turn on the power for all of them, then perform the following installation procedure.

- 6** Turn on the power of the instrument(s).
- 7** When the “Found New Hardware Wizard” window appears, click [Cancel].

NOTE

• On some computers, it may take a few minutes before this screen appears.

NOTE

- This screen will not appear on Windows 7. When the message "Device driver software was not successfully installed." appears, continue the installation procedure.

NOTE

- This screen will not appear if you are updating the USB-MIDI driver from the previous version. Continue the installation procedure.

8 Open the following folder from the CD-ROM drive in your "My Computer" folder, and double click "setup.exe."

- For users of 32 bit version Windows 2000/XP/Vista/7: "USBdrv32_"
- For users of 64 bit version Windows XP/Vista/7: "USBdrv64_"
- * Select [Start] menu → [Control Panel] → [System] to check the system. (Windows XP: "x64 Edition" appears on the 64 bit version, and does not appear on the 32 bit version.)

9 When the "File Download" window appears, click [Run] or [Open].

The "Preparing to install" window appears. The next window will appear after finishing this preparation.

NOTE

- The messages that appear in this window may differ somewhat depending on your browser.

NOTE

- (Windows XP) If the "Security Warning" window appears, click [Run].

NOTE

- (Windows Vista/7) If the "User Account Control" window appears, click [Continue] or [Yes].

10 When the "Welcome to the InstallShield Wizard for Yamaha USB-MIDI Driver" window appears, click [Next].

If the warning message below appears during the installation, click [Yes], [Continue Anyway], or [Install].

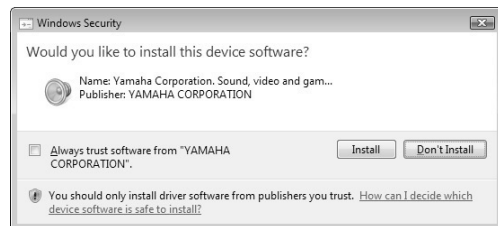
Windows 2000



Windows XP



Windows Vista/7



11 When a message appears indicating that the driver has been successfully installed, click [Finish].

NOTE

- On some computers, it may take a few minutes before this screen appears.

12 When a window appears prompting you to restart the computer, do so.

Restart the computer by following the on-screen directions.

NOTE

- This display will not appear when using Windows XP x64/Vista/7. No restart is necessary.

● Checking the version of the driver

Open the "Control Panel" and double-click the "Yamaha USB-MIDI Driver" icon.

A window appears and the driver version is indicated in the lower left of the window.

NOTE

- When using Windows XP x64/Vista/7, double-click the "Yamaha USB-MIDI Driver (WDM)" icon.

■ Installing the Musicsoft Downloader.....

IMPORTANT

- You will need to log on with administrator (root) privileges in order to install Musicsoft Downloader on a computer running Windows 2000, XP, Vista or 7.

1 Insert the Accessory CD-ROM into your computer's CD-ROM drive.

The start window will appear automatically showing software applications.

NOTE

- If the start window does not appear automatically, open the "My Computer" folder and double click "Start.exe" in the CD-ROM drive. Then, proceed to step 2 below.

2 Click [Musicsoft Downloader].

3 Click the [Install] button, and follow the on-screen instructions to install the software.

For Musicsoft Downloader operating instructions see the Help menu: launch the Musicsoft Downloader application and click "Help".

- * You can obtain the latest version of the Musicsoft Downloader at the following web site.

<http://music.yamaha.com/download/>

IMPORTANT

- Only Musicsoft Downloader can be used to transfer files between this instrument and a computer. No other file transfer application can be used.

■ Troubleshooting

The driver cannot be installed.

• Is the USB cable connected correctly?

Check the USB cable connection. Disconnect the USB cable, then connect it again.

• Is the USB function enabled on your computer?

When you connect the instrument to the computer for the first time, if the "Add (Found) New Hardware Wizard" or the "Found New Hardware" window does not appear, the USB function on the computer may be disabled. Perform the following steps.

1 Select [Control Panel]* → [System] → [Hardware] → [Device Manager] (for Windows 2000/XP), or select [Control Panel] → [Device Manager] (for Windows Vista/7).

* Classic View only in Windows XP.

2 Make sure that no "!" or "x" marks appear at "Universal serial bus controller" or "USB Root Hub". If you see an "!" or "x" mark, the USB controller is disabled.

• Is any unknown device registered?

If driver installation fails, the instrument will be marked as an "Unknown device", and you will not be able to install the driver. Delete the "Unknown device" by following the steps below.

1 Select [Control Panel]* → [System] → [Hardware] → [Device Manager] (for Windows 2000/XP), or select [Control Panel] → [Device Manager] (for Windows Vista/7).

* Classic View only in Windows XP.

2 Look for "Other devices" in the menu "View devices by type".

3 If you find "Other devices", double-click it to extend the tree to look for "Unknown device". If one appears, select it and click the [Remove] button.

4 Remove the USB cable from the instrument, and make the connection again.

5 Install the driver again. (pages 94–95)

When controlling the instrument from your computer via USB, the instrument does not operate correctly or no sound is heard.

- Did you install the driver? (page 94)
- Is the USB cable connected correctly?
- Are the volume settings of the instrument, playback device, and application program set to the appropriate levels?
- Have you selected an appropriate port in the sequence software?
- Are you using the latest USB MIDI driver? The latest driver can be downloaded from the following web site.
<http://music.yamaha.com/download/>

Playback response is delayed.

- Does your computer satisfy the system requirements?
- Is any other application or device driver running?

Cannot suspend or resume the computer correctly.

- Do not suspend the computer while the MIDI application is running.
If you are using Windows 2000, you may not be able to suspend/resume normally, depending on the particular environment (USB Host Controller, etc.). Even so, simply disconnecting and connecting the USB cable will allow you to use the instrument functions again.

How can I remove the software?

[Windows 2000/XP]

- 1** Disconnect all USB devices from the computer except for the mouse and keyboard.
- 2** Start the computer and log on to the Administrator account.
Exit from any open applications and close all open windows.
- 3** From the [Start] menu, select ([Settings] →) [Control Panel] → [Add or Remove Programs] to display the Add or Remove Programs panel.
- 4** Click “Change or Remove Programs” located in the upper left, then select “Yamaha USB-MIDI Driver” or “Yamaha Musicsoft Downloader” from the list in the right panel.
- 5** Click [Remove].
A dialog box appears. Follow the instructions to remove the software.

[Windows Vista/7]

- 1** Disconnect all USB devices from the computer except for the mouse and keyboard.
- 2** Start the computer and log on to the Administrator account.
Exit from any open applications and close all open windows.
- 3** From the [Start] menu, select the [Control Panel] → [Programs and Features] or [Uninstall a program] to display the “Uninstall or change a program” window.
- 4** Select “Yamaha USB-MIDI Driver” or “Yamaha Musicsoft Downloader” from the list.
- 5** Click [Uninstall].
If the “User Account Control” window appears, click [Allow] or [Continue].
A dialog box appears. Follow the instructions to remove the software.

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Troubleshooting

Problem	Possible Cause and Solution
When the instrument is turned on or off, a popping sound is temporarily produced.	This is normal and indicates that the instrument is receiving electrical power.
When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the instrument may produce interference. To prevent this, turn off the mobile phone or use it further away from the instrument.
There is no sound even when the keyboard is played or when a song or style is being played back.	Check that nothing is connected to the PHONES/OUTPUT jack on the rear panel. When a set of headphones is plugged into this jack, no sound is output. Check the Local Control on/off. (See page 87.)
Playing keys in the right hand area of the keyboard does not produce any sound.	When using the Dictionary function (page 77), the keys in the right hand area are used only for entering the chord root and type.
<ul style="list-style-type: none"> The volume is too soft. The sound quality is poor. The rhythm stops unexpectedly or will not play. The recorded data of the song, etc. does not play correctly. The LCD display suddenly goes dark, and all panel settings are reset. 	The batteries are low or dead. Replace all six batteries with completely new ones, or use the optional AC adaptor.
The style or song does not play back when the [START/STOP] button is pressed.	Is External Clock set to ON? Make sure External Clock is set to OFF; refer to "External Clock" on page 87.
The style does not sound properly.	Make sure that the Style Volume (page 83) is set to an appropriate level.
	Is the split point set at an appropriate key for the chords you are playing? Set the split point at an appropriate key (page 72). Is the "ACMP ON" indicator showing in the display? If it is not showing press the [ACMP ON/OFF] button so that it does show.
No rhythm accompaniment plays when the [START/STOP] button is pressed after selecting style number 131 or a style between 143 and 155 (Pianist).	This is not a malfunction. Style number 131 and style numbers 143–155 (Pianist) have no rhythm parts, so no rhythm will play. The other parts will begin playing when you play a chord in the accompaniment range of the keyboard if style playback is turned on.
Not all of the voices seem to sound, or the sound seems to be cut off.	The instrument is polyphonic up to a maximum of 32 notes. If the Dual voice or Split voice is being used and a style or song is playing back at the same time, some notes/sounds may be omitted (or "stolen") from the accompaniment or song.
Some notes don't sound when playing multiple notes simultaneously on the keyboard, or some notes don't sound when playing arpeggios.	You have exceeded 32 simultaneous notes, which is the maximum polyphony (the maximum number of notes that can be played simultaneously) of the instrument. The instrument will play normally as long as no more than 32 notes are being played at once, both on the keyboard and by any automatic playback functions.
The footswitch (for sustain) seems to produce the opposite effect. For example, pressing the footswitch cuts off the sound and releasing it sustains the sounds.	The polarity of the footswitch is reversed. Make sure that the footswitch plug is properly connected to the SUSTAIN jack before turning on the power.
The sound of the voice changes from note to note.	This is normal. The AWM tone generation method uses multiple recordings (samples) of an instrument across the range of the keyboard; thus, the actual sound of the voice may be slightly different from note to note.
The wrong notes sound when the keyboard is played.	Perhaps the performance assistant technology is turned on. Press the [PERFORMANCE ASSISTANT] button to turn it off.
The ACMP ON indicator does not appear when the [ACMP ON/OFF] button is pressed.	Is the [STYLE] button lit? Always press the [STYLE] button first when you are going to use any style-related function.
There is no harmony sound.	The harmony effects (01–26) behave differently according to their type. Types 01–05 function when style playback is on, chords are played in the accompaniment range of the keyboard, and a melody is played in the right-hand range. Types 06–26 will function whether style playback is on or off. For types 06–12 you need to play two notes at the same time.



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Specifications

Keyboards

- 61 standard-size keys (C1–C6), with Touch Response.

Display

- LCD display (backlit)

Setup

- (Standby/On)
- MASTER VOLUME: MIN–MAX

Realtime Control

- Pitch Bend Wheel
- Knobs A, B
 - A: Cutoff, Reverb, Attack, Style Cutoff, Style Tempo
 - B: Resonance, Chorus, Release, Style Resonance

Voice

- 116 panel voices + 12 drum/SFX kits + 361 XGlite voices + 15 arpeggio voices
- Polyphony: 32
- DUAL
- SPLIT

Style

- 155 Preset Styles + 1 User Style File
- Style Control: ACMP ON/OFF, SYNC STOP, SYNC START, START/STOP, INTRO/ENDING/rit., MAIN/AUTO FILL
 - Fingering: Multi Finger
 - Style Volume

Music Database

- 256

Education Feature

- Dictionary
- Lesson 1–3, Repeat & Learn

Registration Memory

- 8 banks x 2 types

Function

- VOLUME: Style Volume, Song Volume
- OVERALL: Tuning, Transpose, Split Point, Touch Sensitivity, Pitch Bend Range
- MAIN VOICE: Volume, Octave, Pan, Reverb Level, Chorus Level, Attack Time, Release Time, Filter Cutoff, Filter Resonance
- DUAL VOICE: Voice, Volume, Octave, Pan, Reverb Level, Chorus Level, Attack Time, Release Time, Filter Cutoff, Filter Resonance
- SPLIT VOICE: Voice, Volume, Octave, Pan, Reverb Level, Chorus Level, Attack Time, Release Time, Filter Cutoff, Filter Resonance
- EFFECT: Reverb Type, Chorus Type, Master EQ Type
- HARMONY: Harmony Type, Harmony Volume
- ARPEGGIO: Arpeggio Type, Arpeggio Velocity
- SFF Load: Style File Load
- PC: PC Mode
- MIDI: Local On/Off, External Clock, Initial Send, Keyboard Out, Style Out, Song Out
- METRONOME: Time Signature Numerator, Time Signature Denominator, Metronome Volume
- LESSON: Lesson Track (R), Lesson Track (L)
- UTILITY: Grade, Demo Cancel

Effects

- Reverb: 9 types
- Chorus: 4 types
- Harmony: 26 types
- Arpeggio: 50 types

Song

- 30 Preset Songs + 5 User Songs + Accessory CD-ROM Songs (70)
- Song Clear, Track Clear
- Song Volume
- Song Control: , A-B REPEAT, PAUSE, REW, FF, START/STOP

Performance assistant technology

Recording

- Song
 - User Song: 5 Songs
 - Recording Tracks: 1, 2, 3, 4, 5, STYLE

MIDI

- Local On/Off
- Initial Send
- External Clock
- Keyboard Out
- Style Out
- Song Out

Auxiliary jacks

- PHONES/OUTPUT, DC IN, USB, SUSTAIN

Amplifier

- 2.5W + 2.5W

Speakers

- 12cm x 2 + 3cm x 2

Power Consumption

- 7W (PA-130)
- 10W (PA-3C)

Power Supply

- Adaptor: Yamaha PA-130, PA-3C, or an equivalent
- Batteries: Six "D" size, R20P (LR20) or equivalent batteries

Dimensions (W x D x H)

- 952 x 388 x 146 mm (37-1/2" x 15-1/4" x 5-3/4")

Weight

- 7.0kg (15 lbs. 7 oz.) (not including batteries)

Included Accessories

- AC Power Adaptor (PA-130, PA-3C or an equivalent)
 - * May not be included depending on your particular area. Please check with your Yamaha dealer.
- Music Rest
- Accessory CD-ROM
- Owner's Manual
- Data List
- My Yamaha Product User Registration

Optional Accessories

- AC Power Adaptor: PA-130, PA-3C or an equivalent
- Footswitch: FC4/FC5
- Keyboard Stand: L-2C/L-2L
- Headphones: HPE-150/HPE-30

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<p>Aviso importante: informações sobre as garantias para clientes da AEE* e da Suíça Para obter uma informação pormenorizada sobre este produto da Yamaha e sobre o serviço de garantia na AEE* e na Suíça, visite o site a seguir (o arquivo para impressão está disponível no nosso site) ou entre em contato com o escritório de representação da Yamaha no seu país (consulte o verso). * AEE: Área Económica Europeia</p>	<p>Português</p>
<p>Σημαντική σημείωση: Πληροφορίες εγγύησης για τους πελάτες στον ΕΟΧ* και Ελλάδα Για λεπτομερείς πληροφορίες εγγύησης σχετικά με το προϊόν προϊόν της Yamaha και την κάλυψη εγγύησης σε όλες τις χώρες του ΕΟΧ και την Ελλάδα, επισκεφτείτε την παρακάτω ιστοσελίδα (Εκτυρίσιμη μορφή είναι διαθέσιμη στην ιστοσελίδα μας) ή απευθυνθείτε στην αντιπροσωπεία της Yamaha στη χώρα σας (βλ. πίσω μέρος σελίδας). * ΕΟΧ: Ευρωπαϊκός Οικονομικός Χώρος</p>	<p>Ελληνικά</p>
<p>Viktigt: Garantiinformation för kunder i EES-området* och Schweiz För detaljerad information om denna Yamaha-produkt samt garantitjänsten i hela EES-området* och Schweiz kan du antingen besöka nedanstående webbadress (en utskriftsvänlig fil finns på webbplatsen) eller kontakta Yamahas officiella representant i ditt land (se baksidan). * EES: Europeiska Ekonomiska Samarbetsområdet</p>	<p>Svenska</p>
<p>Viktig merknad: Garantiinformasjon for kunder i EØS* og Sveits Detaljert garantiinformasjon om dette Yamaha-produktet og garantitjenesten for hele EØS-området* og Sveits kan fås enten ved å besøke nettadressen nedenfor (utskriftsversjon finnes på våre nettsider) eller kontakte Yamahas kontoret i landet der du bor (se neste side). *EØS: Det europeiske økonomiske samarbeidsområdet</p>	<p>Norsk</p>
<p>Viktig oplysning: Garantioplysninger til kunder i EØO* og Schweiz De kan finde detaljerede garantioplysninger om dette Yamaha-produkt og den fælles garantitjenesteforordning for EØO* (og Schweiz) ved at besøge det websted, der er angivet nedenfor (der findes en fil, som kan udskrives, på vores websted), eller ved at kontakte Yamahas nationale repræsentationskontor i det land, hvor De bor (se næste side). * EØO: Det Europæiske Økonomiske Område</p>	<p>Dansk</p>

<p>Tärkeä ilmoitus: Takuutiedot Euroopan talousalueen (ETA)* ja Sveitsin asiakkaille Tämän Yamaha-tuotteen sekä ETA-alueen ja Sveitsin takuuta koskevat yksityiskohtaiset tiedot saatte alla olevasta nettisivustamme. (Tulostettava tiedosto saatavissa sivustollamme.) Voitte myös ottaa yhteyttä paikalliseen Yamahatiedustajaan (lisätietoja käännösolella). *ETA: Euroopan talousalue</p>	<p>Suomi</p>
<p>Ważne: Warunki gwarancyjne obowiązujące w EOG* i Szwajcarii Aby dowiedzieć się więcej na temat warunków gwarancyjnych tego produktu i my Yamaha i serwisu gwarancyjnego w całym EOG* i Szwajcarii, należy odwiedzić wskazaną poniżej stronę internetową (plik gotowy do wydruku znajduje się na naszej stronie internetowej) lub skontaktować się z przedstawicielstwem fi my Yamaha w swoim kraju (informacje na ten temat znajdują się na odwrocie strony). * EOG — Europejski Obszar Gospodarczy</p>	<p>Polski</p>
<p>Důležité oznámení: Záruční informace pro zákazníky v EHS* a ve Švýcarsku Podrobné záruční informace o tomto produktu Yamaha a záručním servisu v celém EHS* a ve Švýcarsku naleznete na níže uvedené webové adrese (soubor k tisku je dostupný na našich webových stránkách) nebo se můžete obrátit na zástupce firmy Yamaha ve své zemi (viz druhá strana). * EHS: Evropský hospodářský prostor</p>	<p>Česky</p>
<p>Fontos figyelmeztetés: Garancia-információk az EGT* területén és Svájcban élő vásárlók számára A jelen Yamaha termékre vonatkozó részletes garancia-információk, valamint az EGT*-re és Svájcra kiterjedő garanciális szolgáltatás technikai részleteiben keressze fel webhelyünket az alábbi címen (a webhelyen nyomtatható fájl is talál), vagy pedig lépjen kapcsolatba az országában működő Yamaha képviselői hálójával (lásd a következő oldalon). * EGT: Európai Gazdasági Térség</p>	<p>Magyar</p>
<p>Oluline märkus: Garantiitave Euroopa Majanduspiirkonna (EMP)* ja Šveitsi klientidele Tapsema teabe saamiseks selle Yamaha toote garantii ning kogu Euroopa Majanduspiirkonna ja Šveitsi garantiitteeninduse kohta, külastage palun veebisaiti alljärgneval aadressil (meie saidil on saadaval printitav fail) või pöörduge Teie regiooni Yamaha esinduse poole (vt järgmisele leheküljele). * EMP: Euroopa Majanduspiirkond</p>	<p>Eesti keel</p>
<p>Svarīgs paziņojums: garantijas informācija klientiem EEZ* un Šveicē Lai saņemtu detalizētāku garantijas informāciju par šo Yamaha produktu, kā arī garantijas apakpošanu EEZ* un Šveicē, lūdzam apmeklēt zemāk norādīto tīmekļa vietnes adresi (mūsu tīmekļa vietnē ir pieejams drukājams fails) vai sazināties ar jūsu valsti apkalpojošo Yamaha pārstāvniecību (skatiet nākamno lapu). * EEZ: Eiropas Ekonomikas zona</p>	<p>Latviešu</p>
<p>Dėmesio: informacija dėl garantijos pirkėjams EEE* ir Šveicarijoje Jei reikia išsamios informacijos apie šį „Yamaha“ produktą ir jo techninę priežiūrą visoje EEE* ir Šveicarijoje, apsilankykite mūsų svetainėje toliau nurodytu adresu (svetainėje yra spausdinamas failas) arba kreipkitės į „Yamaha“ atstovybę savo šalyje (žr. kitoje pusėje). *EEE — Europos ekonominė erdvė</p>	<p>Lietuvių kalba</p>
<p>Dôležité upozornenie: Informácie o záruke pre zákazníkov v EHP* a Švajčiarsku Podrobné informácie o záruke týkajúce sa tohto produktu od spoločnosti Yamaha a garancijnom servise v EHP* a Švajčiarsku nájdete na webovej stránke uvedenej nižšie (na našej webovej stránke je k dispozícii súbor na tlač) alebo sa obráťte na zástupcu spoločnosti Yamaha vo svojej krajine (pozrite nasledujúcu stranu). * EHP: Európsky hospodársky priestor</p>	<p>Slovenčina</p>
<p>Pomembno obvestilo: Informacije o garanciji za kupce v EGP* in Švici Za podrobnejše informacije o tem Yamahinem izdelku ter garancijskem servisu v celotnem EGP in Švici, obiščite spletno mesto, ki je navedeno spodaj (natiskljiva datoteka je na voljo na našem spletnem mestu), ali se obrnite na Yamahinega predstavnika v svoji državi (glejte drugo stran lista). * EGP: Evropski gospodarski prostor</p>	<p>Slovensčina</p>
<p>Важно съобщение: Информация за гаранцията за клиенти в ЕИП* и Швейцария За подробна информация за гаранцията за този продукт на Yamaha и гаранционното обслужване в паневропейската зона на ЕИП* и Швейцария или посетете посочения по-долу уеб сайт (на нашия уеб сайт има файл за печат), или се свържете с представителния офис на Yamaha във вашата страна (вж. на гърба). * ЕИП: Европейско икономическо пространство</p>	<p>Български език</p>
<p>Notificare importanță: Informații despre garanție pentru clienții din SEE* și Elveția Pentru informații detaliate privind acest produs Yamaha și serviciul de garanție Pan-SEE*, și Elveția, vizitați site-ul la adresa de mai jos (fișierul imprimabil este disponibil pe site-ul nostru) sau contactați biroul reprezentanței Yamaha din țara dumneavoastră (a se vedea pe verso). * SEE: Spațiul Economic European</p>	<p>Limba română</p>

<http://europe.yamaha.com/warranty/>

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