

PHX Series

The Sound of Excellence

At Yamaha, prototype drums are the starting point of each drum's evolution.

These prototypes were created in the Drum Laboratory where Yamaha continually pursues the essence of musical perfection. Under a completely new concept, the PHX (pronounced "phoenix") Series is the pinnacle of excellence in this prototyping process. Handcrafted by our expert technicians, it's based on over 40 years of history, tradition, experience, and technology.

PHX Series reveal Yamaha's all-out pursuit of the ultimate in drum craftsmanship and sound.

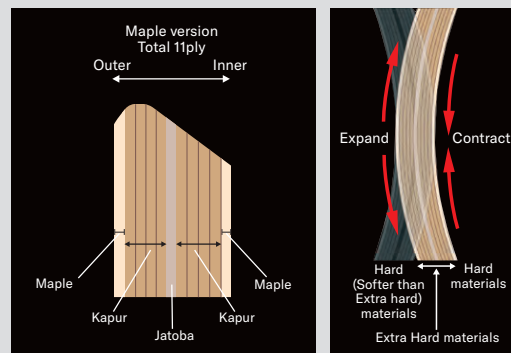


Hybrid Shell Construction (U.S.PAT. 8022281)

With the wealth of knowledge that Yamaha has amassed through the decades as the preeminent maker of musical instruments, Yamaha's wood specialists have discovered new materials that provide optimal drum performance.

Jatoba, the hardest material in the PHX hybrid shell, is positioned as the core ply and center note of the drum. It is surrounded on either side by layers of kapur. Maple, which had long been considered a classic, high-quality drum shell material because of its hardness and viscosity, is actually the softest wood in the shell construction; maple is the outer and inner plies of the shell.

This is the process used to complete the hybrid shell, in which the stiffness of the shell shifts from the center toward the outside: the woods are hardest at the center and get softer toward the outer surfaces in either direction. This results in an "excitation structure" that maximizes the shell's performance. The excitation structure increases the head's vibration to its full extent, achieving a sound unlike anything you've heard before. It produces an effect in sound waves similar to rippling waves caused by a pebble dropped in water.



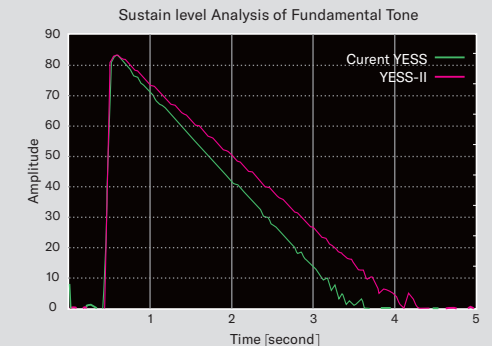
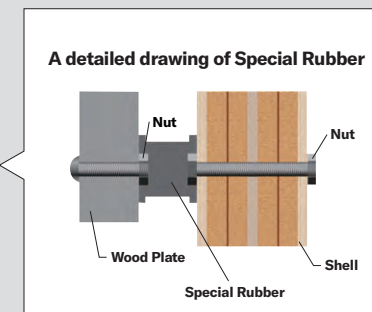
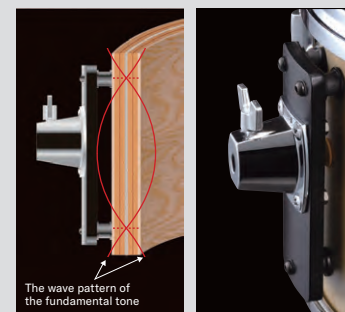
* The excitation structure increases shell vibration to its maximum through the use of relatively softer materials for the external and internal surface areas, whose curvature is greatest when the shell is vibrating, as well as by using a hard material with a high "spring" property for the core of the shell lamination.

YESSII Shell Mount System (U.S.PAT. 8168873)

YESSII shell mounting system acts as a shock mount system for the drum, allowing for optimal shell vibration.

Utilizing a unique rubber insert and a maple wood plate, the YESSII mount is primarily located at the nodal points (where no vibration occurs), causing the resonance to stay, within the shell as opposed to transferring through the hardware and being stifled.

In larger tom sizes, the rubber inserts are also positioned on the shell where overtones are present to help produce the appropriate mixture of sustain and overtone control.



Polar White

Shells

PHXB2218MR PHXF1615M
PHXT1208M PHXT1007M
RLS1470 RRS1455

Hardware

CS865 x 5 HS1200T
SS950 x 2 HXAC x 2
CL945B x 2 DFP9D

*Cymbals are not included.



Color Finishes

Gloss Finish

Matte Finish



Black Cherry Sunburst (BCS)



Polar White (PWH)

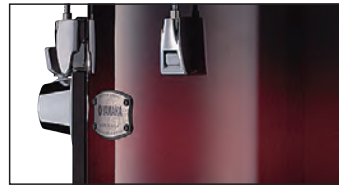


Matte Black (MBL)



Matte Natural (MNT)

3 types of surface finish



Gloss Finish



Matte Finish

A Range of Options

In addition to the qualities of tonality and functionality, Yamaha has paid special attention to the values of interior and exterior beauty.

The exterior of the PHX shell is available in classic maple or exotic burl ash finishes. Further, the Hook Lugs and aluminum die-cast hoops are available in either gold or chrome options.

Experience the ultimate combination of unparalleled beauty with brilliant color finishes, including the fresh and unique textured paint.



PHX badge with Phoenix



With Gold Parts



With Chrome Parts

Vent Holes

The number of vent holes influences both the drum's timbre and projection. PHX Series drums are designed with one to ten vent holes, depending upon the drum's dimensions. By varying the number of holes, particularly on larger shells, the drum's sustain length, amount of mid-bass tone, and playing comfort can all be fine-tuned.



Hook Lug System (U.S.PAT. 7781658)

The Hook Lug system has emerged through the progression of the Nouveau Lug, which was an innovation in drum-lug design. This new lug minimizes the rotation of the lug casing during tuning and firmly supports the tuning bolt through the wide and straight post, even at high tension.

Rather than positioning the Hook Lug at the nodal point, Yamaha placed it at the area of the shell that produces undesirable overtones, thus muting them and allowing for an unobstructed, richer fundamental tone.

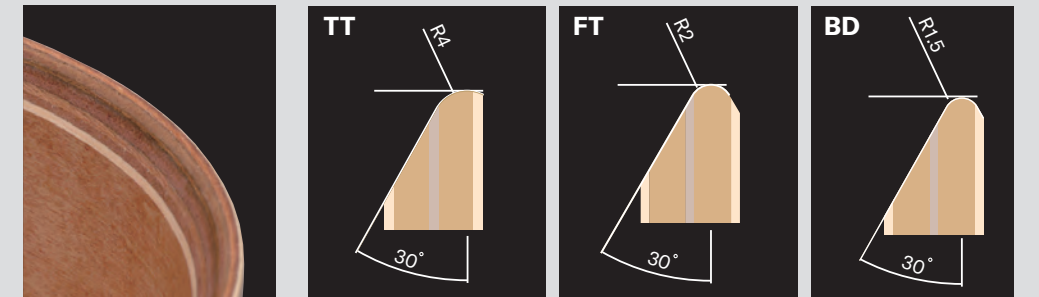
The combination of the Hook Lug system (muting the unattractive overtones) and the YESSII mount system (opening up the drum's fundamental tone) provides an unmistakably pure and naturally EQ'd sound. The organic tone of each drum is clear and perfectly defined like never before.



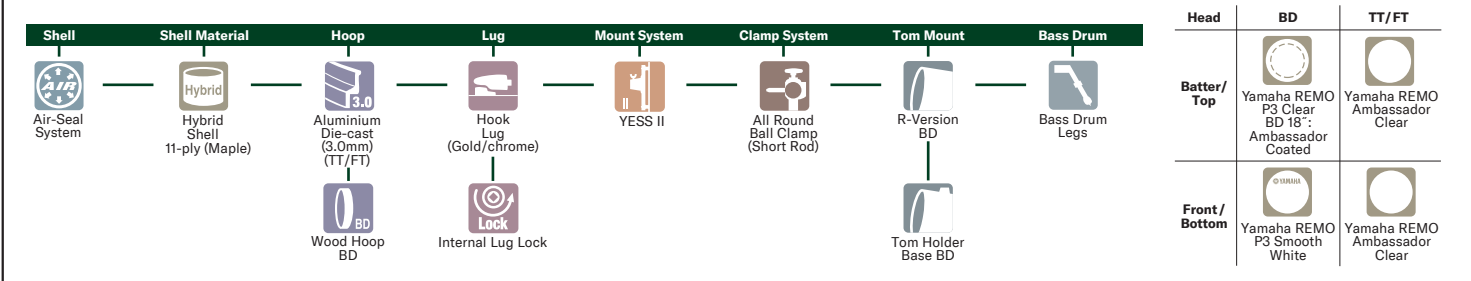
Bearing Edge Shape

To control the drum's tone and articulation, PHX floor tom, tom-tom and bass drum shells each use different types of bearing edges. All bearing edge angles are set at 30-degrees. However, the radiuses of the bearing edges differ to gain optimum acoustic performance from the shell.

The bass drum radius is designed to deliver a sharper sound while the tom tom radius produces a richer tone. Additionally, a secret treatment process is used to ensure that each edge is finished to a perfect smoothness. This guarantees a very easy and wide tuning range.



Phx Series



Components

Diameter	Bass Drum						Bass Drum (R Version-without Pipe Clamp)						
	24"	16"	18"	16"	18"	16"	18"	16"	18"	16"	18"	16"	
x Depth	18"	16"	18"	16"	18"	16"	14"	18"	16"	18"	16"	18"	16"
Model No.	PHXB2418	PHXB2416	PHXB2218	PHXB2216	PHXB2018	PHXB2016	PHXB1814	PHXB2418R	PHXB2416R	PHXB2218R	PHXB2216R	PHXB2018R	PHXB2016R
No. of Tuning Bolts	10	10	10	10	10	10	8	10	10	10	10	10	10

Diameter	Floor Tom				Tom Tom								
	18"	16"	14"	16"	14"	13"	12"	10"	8"	7"	8"	7"	
x Depth	16"	15"	13"	14"	13"	12"	11"	10"	9"	9"	8"	8"	7"
Model No.	PHXF1816	PHXF1615	PHXF1413	PHXT1614	PHXT1613	PHXT1412	PHXT1411	PHT1310	PHXT1309	PHXT1209	PHXT1208	PHXT1008	PHXT1007
No. of Tuning Bolts	8	8	8	8	8	8	8	6	6	6	6	6	5

(Unit: inch)

