

High Performance Subwoofer Features Advanced YST II and New “Half Pipe” Port with Slim Design to Match Plasma Displays and Flat TVs.



Black finish available in some areas

- Slim Design Is Only 157mm (6-3/16”) Deep to Match Plasma Displays and Flat TVs
- Advanced YST II (Yamaha Active Servo Technology) for Deep, Powerful Bass
- New “Half Pipe” Port for Minimizing Extraneous Noise
- Powerful 16cm (6.5”) Multi-Range Driver with Magnetic Shielding
- 130 W Dynamic Power

Main Specifications

Dynamic Power	130 W
Output Power (5 ohms, 100Hz, 10% THD)	75 W
Frequency Response	30–200 Hz
Driver	16cm (6.5”) multi-range
Magnetic Shielding	Yes
Dimensions (W x H x D)	400 x 375 x 157 mm 15 ³ / ₄ ” x 14 ³ / ₄ ” x 6 ³ / ₁₆ ”
Weight	8.1 kg; 17.9 lbs.



Slim Design

The YST-FSW100 has a slim, elegant design that will perfectly match thin-line home theater components and plasma monitors or flat-screen TVs.

Advanced YST II for Awesome Deep Bass



Yamaha's newly developed Advanced YST II (Yamaha

Active Servo Technology II) combines negative-impedance and constant-current principles to drive the speaker cone with even tighter control than previously. Using Advanced Negative Impedance Converter (ANIC) circuits, this system dynamically optimizes effective speaker impedance to maintain excellent linearity. This means more stable and accurate low range response, not to mention higher sound pressure levels, for more natural and

energetic bass reproduction.

New "Half Pipe" Port

The subwoofer also employs a new design feature called the Half Pipe Port, which further smoothes bass response and minimizes extraneous noise.

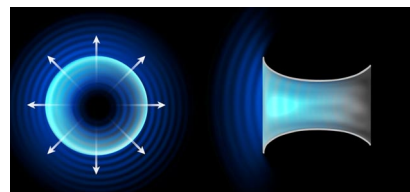
Large (16cm; 6.5") Driver with Magnetic Shielding

The powerful, multi-range driver is exceptionally large (16cm; 6.5") for this class of subwoofer. Magnetic shielding means there is no distortion-causing interference when the speaker is placed near a TV or other monitor.

Environmentally Friendly

Internal parts and circuit boards do not contain lead, which is often used in other subwoofer brands, and is harmful to the environment.

Effect of New "Half Pipe" Port



Advanced YST produces rich bass sound, and the addition of a Linear Port reduces extraneous noise for even higher quality.



A semicircular Half Pipe Port provides the benefits of full 180° dispersion when placed against a wall, compact design and minimal extraneous noise for high sound quality.

Advanced YST Concept



The effectiveness of Advanced YST (Yamaha Active Servo Technology) is based upon two principles: the Helmholtz Resonator and negative-impedance drive. Active Servo Processing speakers reproduce the bass frequencies through an "air woofer," which is a port or opening in the speaker cabinet. This port is used instead of, and performs the functions of, a conventional woofer. Low amplitude signals inside the cabinet can, due to the Helmholtz Resonance principle, be output from this port as high amplitude waves if the design is such that the size of the port and the volume of the cabinet are in a certain proportion. In addition, the wave amplitudes inside the cabinet must be precise and of sufficient power, in order to overcome the "load" presented by the air within the cabinet.

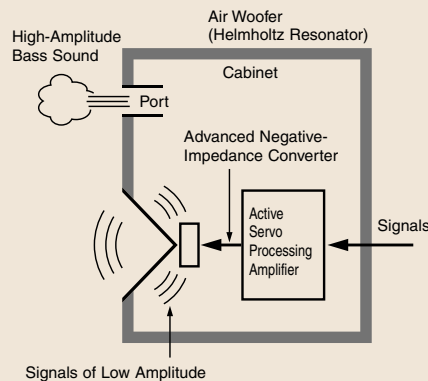
This is accomplished by employing an amplifier that is capable of supplying

special signals. If the electrical resistance of the voice coil could be reduced to zero, the movement of the speaker unit would become linear with respect to signal voltage. To achieve this, a special negative-impedance output drive amplifier is used, so the impedances cancel out and become zero.

By employing negative-impedance drive circuits, the amplifier is able to generate precise, low-amplitude low frequency waves with superior damping characteristics. These waves are then radiated from the cabinet opening as high amplitude signals. This amplifier/speaker combination is capable of reproducing an extremely wide range of frequencies with excellent sound quality and low distortion.

The Advanced YST takes this concept a step further by adopting Advanced Negative Impedance Converter (ANIC) circuits. These circuits

allow the converter to dynamically vary in order to select the optimum values for speaker impedance variation. With these new circuits, Advanced Yamaha Active Servo Technology provides more stable performance and higher sound pressure levels than the former system, resulting in more natural and energetic bass reproduction.



• Product designs and specifications are subject to change without notice.