

High performance subwoofer with Yamaha's latest technologies, including PWM Digital Drive Amplifier, Advanced YST II, Linear Port and front-firing design resulting in dynamic power of 270W and incredible sound clarity.



Cherry finish available in some areas.



- Advanced YST II (Yamaha Active Servo Technology II)
- PWM Digital Drive Amplifier
- Front-firing active design
- Linear Port for minimizing extraneous noise
- High 270W dynamic power
- 25cm (10") long-stroke cone driver with magnetic shielding
- 20–160Hz frequency response

YST-RSW300 Main Specifications

Dynamic Power	270 W
Output Power	
(5 ohms, 100Hz)	250 W
Frequency Response	20–160 Hz
Driver	25cm (10") long-stroke cone
Dimensions (W x H x D)	372 x 400 x 428 mm
	14-5/8" x 15-3/4" x 16-7/16"
Weight	20 kg; 44.1 lbs.

The Subwoofer: a Vital Part of Your System

DVDs and digital music sources hold a huge amount of audio data, including a considerable amount in the low frequency range. Multi-channel sound formats dedicate an entire channel to the low frequencies (the “.1” in 5.1-channel sound), used to deliver the bass in music and explosions, thunder and other low frequency sound effects in

movies. Ordinary speakers are not large and robust enough to handle these frequencies, especially for long periods. This is where the subwoofer comes in. By outputting bass sounds with high power and low distortion, it ensures that you are not missing anything, and it also makes the overall sound richer and properly balanced. A subwoofer is thus a vital part of any home theater or even music-focused system.

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.



PWM Digital Drive Amplifier

The YST-RSW300 delivers high power outputs at deep bass levels, with excellent stability and low power consumption, thanks to a highly efficient PWM Digital Drive amplifier. The amplifier achieves superior conversion efficiency by supplying maximum power (minimizing power loss) from the power transistors according to the output level. It delivers stable power output with high efficiency while minimizing power

consumption and heat production. It does not require an output filter coil, resulting in extremely low noise and distortion. High speed transient response is also excellent.

Front-Firing Active Design

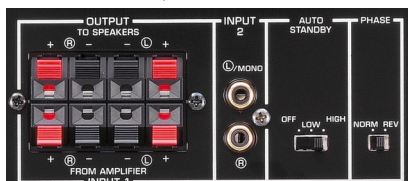
The subwoofer features a high performance front-firing, active design. It provides power and detailed, accurate reproduction in a compact unit.

270W Dynamic Power

Capable of handling 270W of dynamic power, this subwoofer ensures that you hear all bass sounds, even the loudest short bursts, with fast attack and total clarity.

Linear Port

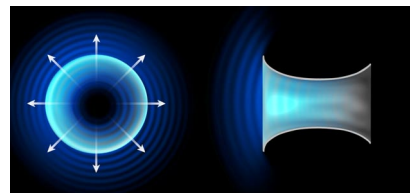
The Linear Port provides smooth bass



YST-RSW300 Connection Panel

response during playback and minimizes extraneous noise.

Effect of Linear Port



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

Large (25cm; 10”) Long-Stroke Cone Driver with Magnetic Shielding

The powerful, long-stroke cone driver is exceptionally large (25cm; 10”) for this class of subwoofer. Magnetic shielding means there is no distortion-causing interference when used near a TV or other monitor.

Other Notable Features

- 20–160Hz frequency response
- Auto standby with sensitivity selector (High, Low and Off)
- Phase control (Normal or Reverse)

Advanced YST II Brings You Super Bass.

The effectiveness of Advanced YST II (Yamaha Active Servo Technology II) 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.

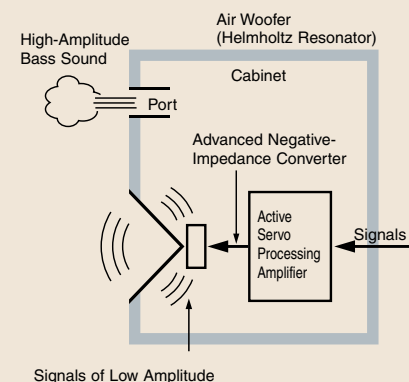
This is accomplished by employing an amplifier that is capable of supplying special signals. If the electrical resistance of the voice coil could be reduced to zero, the

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 II 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 YST II provides more stable performance and higher sound pressure levels than the former system, resulting in more natural and energetic bass reproduction.



• Dolby, Pro Logic and Double D are trademarks of Dolby Laboratories Corporation. • “DTS” and “DTS Digital Surround” are registered trademarks of DTS, Inc. • CINEMA DSP is a trademark of Yamaha Corporation. • SILENT CINEMA is a trademark of Yamaha Corporation. • Product designs and specifications are subject to change without notice.