

# P-S Series

## Power Amplifiers



P7000S

P5000S

P3500S

P2500S

P7000S Rear Panel



***Reliable, professional-quality power amplification for a broad range of applications.***

- In 4Ω bridged mode the P7000S delivers 3200 watts, the P5000S 2600 watts, the P3500S 2000 watts, and the P2500S 1300 watts.
- Yamaha's exclusive EEEngine technology significantly reduces power consumption and heat generation.
- Independent sweepable high-pass and low-pass filters on each channel so you can optimize output for subwoofer or full range systems.
- Neutrik Speakon output jacks and 1/4-inch output jacks for each channel, in addition to 5-way binding post.
- Balanced XLR and 1/4-inch TRS jacks are provided for channel input.
- Variable-speed fans offer quiet, efficient cooling.
- Comprehensive protection includes power on/off muting, DC detection, thermal protection, current limiting, and a protective cover for the attenuators.
- YS Processing (Yamaha Speaker Processing) achieves optimum matching with Yamaha Club Series loudspeaker systems.

## GENERAL SPECIFICATIONS

Model		P7000S	P5000S	P3500S	P2500S
<b>Output Power</b>	4Ω per channel	1100W	750W	590W	390W
	8Ω per channel	750W	525W	390W	275W
THD+N=1%	8Ω / BRIDGE	2200W	1500W	1180W	780W
	4Ω per channel	950W	700W	450W	310W
20Hz-20kHz	8Ω per channel	700W / 650W(230V)	500W	350W	250W
	8Ω / BRIDGE	1900W	1400W	900W	620W
THD+N=0.1%	8Ω / BRIDGE	1900W	1400W	900W	620W
	1kHz	2Ω per channel	1600W	1300W	1000W
20ms nonclip	4Ω / BRIDGE	3200W	2600W	2000W	1300W
	4Ω / BRIDGE	3200W	2600W	2000W	1300W
<b>Sensitivity (dBu)</b>	RL=8Ω Att. max	+8.0	+6.0	+4.0	+3.0
<b>S/N Ratio</b>	20Hz-20kHz (DIN AUDIO)	104dB	103dB	102dB	100dB
<b>Idle Power Consumption</b>		35W	35W	30W	25W
<b>1/8 Power Consumption (4Ω)</b>		700W	550W	450W	320W
<b>Power Bandwidth</b>	(half power THD+N=0.5%)	10Hz-40kHz (THD+N=0.5%)			
<b>THD+N</b>	20Hz – 20kHz, half power	≤ 0.1%			
<b>Intermodulation Distortion</b>	60Hz: 7kHz, 4:1, half power	≤ 0.1%			
<b>Frequency Response</b>	8Ω, P <sub>0</sub> =1W,HPF=OFF	MAX +0.5dB, TYP 0dB, MIN -1dB f=20Hz-50kHz			
<b>Channel Separation</b>	Half power RL=8Ω 1kHz ATT. Max input 600Ω shunt	≥ 70dB			
<b>Residual Noise</b>	ATT. Min 20Hz-20kHz (DIN AUDIO)	≤ -70dB			
<b>Damping Factor</b>	8Ω, f=1kHz	≥ 350		≥ 200	
<b>Voltage Gain</b>	ATT. max	32.1dB			
<b>Input Impedance</b>		30kΩ (balanced) 15kΩ (unbalanced)			
<b>Controls</b>	Front panel	POWER switch (push on/push off) attenuator (31 position) x 2			
	Rear panel	MODE switch (STEREO/BRIDGE/PARALLEL), FILTER switch (SUB WOOFER/LOW CUT/OFF) x 2, FREQ.CONTROL (25Hz-150Hz) x 2, YAMAHA SPEAKER PROCESSING switch (ON/OFF)			
<b>Connectors</b>	Input	XLR-3-31 type/ch, 1/4" TRS/ch			
	Output	SPEAKON, 5way binding post, 1/4" phone/ch			
<b>Indicators</b>		POWER: x 1 (Green), PROTECTION: x 1 (Red), TEMP: x 1 (Red) heatsink temp ≥ 85°C, YS PROCESSING: x 1 (Yellow), SIGNAL: x 2 (Green), CLIP: x 2 (Red)			
<b>Load Protection</b>		POWER switch on/off mute, DC-fault power supply shutdown(P7000S/5000S), DC-fault power output cut (P3500S/2500S)			
<b>Amplifier Protection</b>		Thermal (heatsink temp ≥ 90°C), VI limiter (RL ≤ 1Ω)			
<b>Limiter Circuit</b>		comp. THD ≥ 0.5%			
<b>Cooling</b>		Dual variable-speed fan		Single variable-speed fan	
<b>Power Requirements</b>		120V / 60Hz, 230V / 50Hz, 240V / 50Hz			
<b>Dimensions (W x H x D)</b>		480 x 88 x 456mm (18-7/8" x 3-7/16" x 17-15/16")			
<b>Weight</b>		12kg (26.5lbs)	12kg (26.5lbs)	15kg (33.1lbs)	14kg (30.9lbs)
<b>Included Accessories</b>		Security cover (with a hex wrench), Owner's Manual			

\*1: 1/8 Power = 9dB below rated power  
 \*2: Half Power = 3dB below rated power  
 \*3: 0dBu = 0.775Vrms

Neutrik® and Speakon® are trademarks of Neutrik®.  
 All trademarks used are properties of their respective owners.

## DIMENSIONS

unit : mm

