# It's not your imagination.

Imagine a name brand amplifier, famous for fixed or touring applications.

Next imagine the same amplifier with studio quality fidelity and low noise specifications.

Now image this amplifier hundreds of dollars cheaper.

Stop imagining! The Pro Power HP and XP Series amplifiers are here.





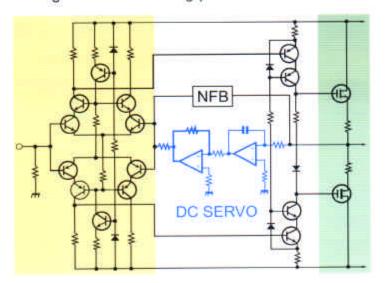
#### **FEATURES**

- \* XP models feature built-in sweepable 2-way active crossover
- \* Applications range from touring to fixed installations
- ★ Low profile (2U) Professional Dual Channel Amplifier
- \* Powerful, high-current, low-noise toroidal transformer
- **★** Quick connections XLR signal & Speakon <sup>™</sup> speaker connectors
- \* High power output
- \* Sonic clarity to rival the best studio amplifier
- \* Nearly immeasurable distortion

- \* Extremely quite, ultra-low noise
- ★ High quality components
- \* Parallel / Bridging capability

#### PSS HP and XP Series Amplifiers feature a highly dynamic, ultra-low distortion predriver circuit.

The discrete complementary-symmetrical push-pull cascade amplifier circuit of this type is only found on high end amplifier models. The amplifier's excellent sonic characteristics have been applianded by professionals. Transparent sound is maintained from low signal levels to blazing peaks. We are convinced



that the PSS HP and XP Series Amplifiers can compete with the best available amplifiers for power output, high-quality sound and reliability.

### Powerful MOSFET current-driver transistors are used to drive the output stages.

Only one pair of MOSFET current-driver transistors is used in the design to drive the output power transistors in order to get the best current acceleration and to reduce distortion, which comes from too many orders of current amplifying. The design arrangement also minimizes the possibility of feedback.

### Direct coupled NFB and DC servo easily handle subwoofers.

A stable direct couple negative feedback with DC servo circuitry is applied for the best ultra-low frequency performance.





### Rated outputs

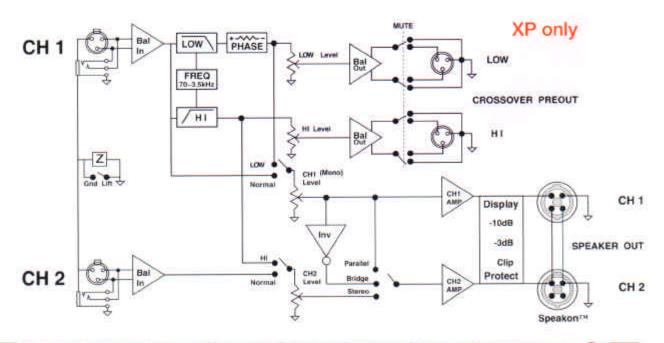
Stereo operation (two channels driven)
HP-20 / XP-20: 1000W/ch, 4 ohms
HP-16 / XP-16: 800W/ch, 4 ohms
HP-12 / XP-12: 600W/ch, 4 ohms

PSS HP and XP Series Amplifiers use high current, low noise toroidal transformers in their power supplies instead of less expensive and heavy EI-type transformers. Matched with 100,000uF capacitance (HP-20 / XP-20), the amplifiers can offer extremely quick transient response to the speaker load. To prevent a large start-up current, a soft power-up limiter is standard on all models.

#### **ACTIVE CROSSOVER NETWORK**

The XP Series Amplifiers feature a 2-way electronic crossover. The crossover frequency is continuously variable from 70Hz to 3.5kHz. Level controls, output jacks, mute and phase reverse switches are provided for both low pass and high pass. The active crossover slope is 24 dB/octave, while the phase range of the low frequency is adjustable from 0° to 180° to facilitate phase alignment of any speaker system.

- \* Professional high-precision 2-way mono crossover
- ★ 24dB/octave, state-variable Linkwitz-Riley filters for precise frequency separation
- \* Absolutely flat summed amplitude response, zero phase difference
- \* Individual output level controls







## HP & XP SERIES SPECIFICATIONS TABLE

MODEL		HP-20 XP-20	HP-16 XP-16	HP-12 XP-12
Output (program)	4 ohm both Ch.	1200W×2	1000W×2	800W×2
Output (rms)	4 ohm both Ch.	1000W×2	800W×2	600W×2
Output (program)	8 ohm both Ch.	700W×2	600W×2	500W×2
Output (rms)	8 ohm both Ch.	600W×2	500W×2	400W×2
Output (rms)	8 ohm bridged	2000W×1	1600W×1	1200W×1
Input connector	Balanced in	2-Female XLR, 2 phone jack(TRS)		
Output connector(HP)	Speaker out	2 Speakon™		
Output connector(XP)	Speaker out Balanced pre out	2 Speakon™ 2-Male XLR & 2 phone jack for crossover Low/Hi		
Controls (HP)		2 Level controls, Bridged/Stereo/Parallel, Gnd/Lift		
Controls (XP)		2 Level controls, Bridged/Stereo/Parallel, Gnd/Lift Normal/Hi, Normal/Low, 2 way crossover control		
Cooling		Two variable speed fan		
Protection		Turn-on, Short, DC, Over temperature		
Status indicators		-10dB, -3dB, Clip, Protect, Power		
Freq. response		20Hz~20kHz +0, -0.5dB		
Freq. bandwidth		5Hz~50kHz +0, -3dB		
THD distortion		<0.01%		
IM distortion		<0.03%		
Input sensitivity		0.775 Vrms		
Input impedance		10k ohm		
Damping factor		>500		
Noise (A-weighted)		<-105 dB		
Crosstalk		<-90 dB		
Dimensions	2U Rack	3 1/2"(H) × 19"(W) × 15"(D)		
Slew rate (V/µS)		40	30	20
Voltage gain (dB)		36	35	34
Power consumtion (W)	14.30/4-2003-0-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	3000	2500	2000
Max current (A)	AC230V (115V)	12(24)	10(20)	8(15)
Net weight lbs (kg)		44(20)	38(17)	33(15)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

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