System Power Amplifiers





Xa2600 / PM 2600

The heart of any Xa-system, PowerMax system or of a freely configured 2-way system is one of our 2600 Series Controller Amps.

Based on the topology of the "LINEAR PRECISION" Series power amps, these system power amplifiers offer an output power capacity of 2,600 watts (RMS) each, when operated in active 2-way mode. Both models provide integrated active frequency crossovers, several processor-controlled functions and extensive protection circuitry.

The provided output power is:

2 x 700 watts Lo

2 x 600 watts Hi

The multitude of processor functions includes our patented LPN-filters, the "Thermal Brain Circuit" protection, and an APC-controlled limiter for each amplifier channel. Additional protection circuitry prevents thermal overload, HF, DC or short-circuit in the output stage. The Linear Precision Series' Back-EMF-protection circuitry contributes to the overall operational stability.

The integrated bass equalizer is meant to be used for live concerts. The 4 kHz Dip-switched EQ allows the adjustment of several different cabinets to match varying acoustical environments. A 12 dB/oct. Lo-Cut filter attenuates ultra-low frequencies.

· LPN Processor Function

The patented LPN-Processors (Low Pass Notch Filter) electronically neutralize speaker-typical transient response distortion already within the power amp.

· APC Processor Function

Four super-high-speed audio processors continuously monitor the amplifier's internal and external operational state, activating the four internal dynamic limiters on the occurrence of any non-linear operation.

· TBC Processor Function

Four Thermal-Brain circuits simulate the thermal model of a typical voice coil and limit the energy fed to the speaker components during impending overload.

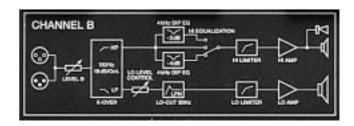


Originally designed for the Xa-Systems, this system power amplifier offers various adjustment features and reveals its true versatility when being used with any other Hi/Mid/Sub woofer speaker system combination.

The Mid/Hi-Equalizer with integrated horn-equalization at 12 kHz can be optimally used with medium or long-throw Mid/Hi speaker systems.

Separating the LF-range from the rest of the audio signal, an active Butterworth/Constant-Power-Response-Crossover provides a crossover frequency at 160 Hz with 18 dB/oct. slope. A 12 dB/oct. Lo-Cut filter cuts ultra-low frequencies below 30 Hz.

Dual Active 2-Way Processed Precision Power Amplifier 2600 Watts

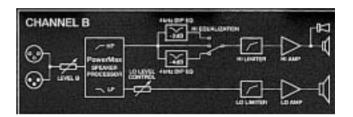




PM2600 Dual Active 2-Way "PowerMax" Controlled Amplifier 2600 Watts

Basically, the PM2600 can drive any active 2-way system that consists of full-range cabinets and sub woofers. The integrated frequency crossover operates in PowerMax function mode and has been optimised for those combinations. Intelligently configuring system components leads to outstanding results. For more details, please refer to the PowerMax Systems and PowerMax230 Controller descriptions.





SPECIFICATIONS

Crossover Section	Xa2600	PM2600
Crossover Type	3rd Order BU, Constant-Power-Response	PowerMax12*, Stereo active 2-way
	Stereo active 2-way	
Crossover Frequency	160 Hz	110 Hz
Lo-Cut	12dB/octave, 30Hz at -3dB ref. 1kHz	12dB/octave, 25Hz at -3dB ref. 1kHz

^{*}Patent pending

Xa2600, PM2600

	HI-Channels		LO-Channels			
Load Impedance	Ω 8	4Ω	8Ω	4Ω		
Maximum Midband Output Power, THD = 1%, 1kHz, 60Hz	380W	700W	380W	700W		
Rated Output Power, THD < 0.1%	300W	600W	350W	700W		
Maximum Single Channel Output Power,	400W	750W	400W	750W		
Dynamic-Headroom, IHF-A						
Maximum RMS Voltage Swing, THD = 1%	58.7V					
Frequency Response, -3dB, ref. 1kHz, Lo-Cut	25Hz 45kHz					
Minimum Load Impedance	2.5 Ω					
Input Sensitivity at rated output power @ 4Ω	0dBu (775mV)					
Maximum Input Level	+21dBu (8.7V)					
THD at rated output power, MBW =80kHz	< 0.05%					
Crosstalk Attenuation	> 60dB					
Slew Rate	30V/µs					
Power Bandwith, THD = 1%, ref. 1kHz, half power @ 4Ω	10Hz 50kHz					
Input Impedance, 20Hz 20kHz, balanced	20kΩ					
Damping Factor	> 300					
Signal-to-Noise Ratio, A-weighted	> 100dB					
Power Requirements	230V, 50Hz 60Hz					
Power Consumption at 1/8 maximum output power @ 4Ω	1800W					
Protection	Audio limiter (APC), TBC, High temperature,					
		DC, HF, Back-EMF, Peak current limiter,				
	Inrush current limiter, Turn-on delay					
Cooling	Front-to-rear, 4-stage-fans					
Safety Class		I				
Dimensions (W x H x D), mm	483 x 177 x 426					
Weight	30kg					

Amplifier at rated conditions, all channels driven, 8Ω loads, HI-Channel rated at 1kHz, LO-Channel rated at 60Hz unless otherwise specified. Note: 0dBu = 0.775V