



- ✓ Touring
- ✓ Installation

8 lo-Z
hi-Z
channels



Armonía
Pro Audio Suite™



- ✓ Full-range loudspeakers
- ✓ Subwoofers
- ✓ High-power stage monitoring
- ✓ Medium to large-scale touring systems
- ✓ Arenas & concert halls
- ✓ Stadiums & open-air events
- ✓ Multi-zone venues & live clubs

Powersoft X8 raises power amplification to a new standard of quality and usability.

Equally useful for most subwoofers as well as high-power fullrange systems, Powersoft X 8 suit any configuration and purpose.

Managing power with Powersoft X8 becomes extremely easy thanks to the integrated revolutionary Zero Latency DSP providing outstanding quality in signal processing as well as innovative routing of the fully processable 8x8 input/output channels.

With Powersoft X8, any of its 8 input channels – both analog and digital via AES3 and Dante™ by Audinate® – can be easily routed, mixed and grouped to any of the 8 output channels.

Completely integrated into Armonía Pro Audio Suite™, the new Powersoft X8 interface is also available for smartphone and tablet, providing a new experience in power management.

Ultimately flexible and safe, Powersoft's legendary power supply is now suitable to Single Phase, Bi-Phase or Three Phase operation from 85 V_{AC} up to 440 V_{AC} without need of selection. True Three Phase load balancing is directly achievable by the unit without any complex load assignment in the power distribution system design.

✓ Innovative power supply design

- ▶ Suitable for Single Phase, Bi-Phase or Three Phase operation from 85 V_{AC} up to 440 V_{AC}, the X8 power supply provides maximum flexibility and versatility in any power distribution design.
- ▶ Power Load Balancing with Power Factor Correction enhances efficiency in power distribution.
- ▶ Smart Rails Management increases efficiency by means of the dynamic rails modulation.
- ▶ The legendary Powersoft Green Audio Power® technologies improves efficiency and minimizes the 'carbon footprint' and the operational costs.

✓ New standard of quality and usability

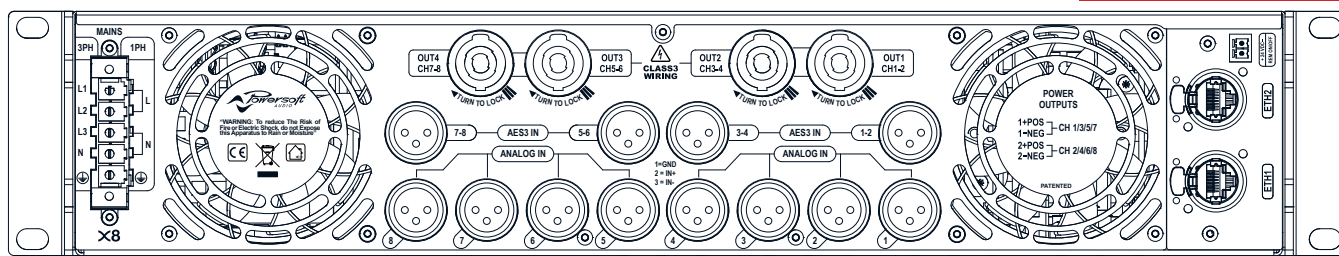
- ▶ Extremely flexible routing provided by the internal 8x8 input/output matrix, allows the user to mix and route analog and digital I/O.
- ▶ Easy plug-and-play Dante™ networking allows easy routing of the signal from any node within the network to Powersoft X8.
- ▶ 8 input channels with physical analog and digital AES3 connectors and 2x8 digital input channels via Dante™ connection providing up to 16 input channels.
- ▶ Improved reliability thanks to the customizable input backup policy that allows to automatically switch input source in case of signal failure.
- ▶ Complete user interface integrated into Armonía Pro Audio Suite™
- ▶ WiFi remote management through smartphone and tablet app.

✓ Highly integrated

- ▶ Top-grade DSP with high dynamic range and extensive feature set.
- ▶ Multi-stage signal processing: innovative solutions for modeling speakers behaviour and power handling.
- ▶ Input and output IIR, FIR, IIR+FIR equalizers and raised-cosine filters.
- ▶ Complete sets of limiters: peak, RMS voltage, RMS current, and TruePower™.
- ▶ Speaker wire compensation with Active DampingControl™ and LiveImpedance™ load monitoring.

✓ Even more reliable

- ▶ Full protection circuitry: over/under AC voltage; troublesome signals (clipping, VHF, long-term RMS); DC; thermal; short circuit; mute at power on/off.



Specifications

Channel Handling		Power Supply	
Number of output channels	8 mono, bridgable per ch. pair	Maximum Short Term Output Power	20000 W _{avg}
Number of input channels		Maximum Long Term Output Power (thermal Limit)	5000 W _{avg}
Analog	8 (8x XLR)	Stored Energy Available for Output Stages	910 J
AES3	8 (4x XLR)		
Dante™	16 (2x RJ45)		
Audio		Output Stage	
Output Noise	< -70.0 dBV	Peak Unclipped Voltage @ no Load	175 V _{peak}
A-Weighted @ 8 Ω - Analog to Analog / Digital to Analog		Peak Unclipped Voltage @ 8 Ω Load	156 V _{peak}
Dynamic Range	114,3 dB	Peak Unclipped Voltage @ 4 Ω Load	150 V _{peak}
A-Weighted @ 8 Ω - Analog to Analog / Digital to Analog		Peak Unclipped Voltage @ 2 Ω Load	140 V _{peak}
Damping Factor @ 8 Ω, 20Hz - 500Hz	> 5000	Maximum Unclipped Output Power @ 8 Ω	1600 W _{avg}
Slew Rate (input filter bypassed)	> 50 V/μs	Maximum Unclipped Output Power @ 4 Ω	3000 W _{avg}
Frequency Response (-3 dB, 1W @ 8 Ω)	5 Hz - 30 kHz	Maximum Unclipped Output Power @ 2 Ω	5200 W _{avg}
Crosstalk (1 kHz)	-70 dB	Maximum Unclipped Output Power @ 8 Ω Bridged	6000 W _{avg}
THD+N (from 0.1 W to Full Power)	< 0.5% (typical < 0.01%)	Maximum Unclipped Output Power @ 4 Ω Bridged	10400 W _{avg}
DIM (from 0.1 W to Full Power)	< 0.5% (typical < 0.01%)	Peak Output Current before Shut Down	150 A _{peak}
Input Impedance	20 kΩ balanced	Rms Output Current (T < 50 ms)	100 A _{rms}
Input Acceptance	18 dBu	Rms Output Current (T < 500 ms)	50 A _{rms}
		Rms Output Current Continuous	25 A _{rms}
DSP		AC Mains Power	
AD converters	24 Bit Tandem 96 kHz 129 dB Dynamic Range - 0.00056 % THD+N	Single Phase	
DA converters	24 Bit Tandem 192 kHz 121 dB Dynamic Range - 0.00084 % THD+N	Nominal Voltage Operating Range	100 - 240 V _{rms} 50/60Hz
Sample rate converter	24 Bit 44.1 kHz to 192 kHz 140 dB Dynamic Range - 0.0001 % THD+N	Current Draw	32 A _{rms}
Internal precision	40 bit floating point	1/8 Maximum Output Power @ 4 Ω	
Delay	4 s + 200 ms for time alignment	Maximum Current Draw	120 A _{rms}
Equalizer	Raised-cosine, custom FIR, parametric IIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass	Power Factor	> 0.9
Crossover	linear phase (FIR), hybrid (FIR-IIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR)	1/8 Maximum Output Power @ 4 Ω	
Limiters	TruePower™, RMS voltage, RMS current, Peak limiter	Maximum Current Draw	100 A _{rms}
Damping control	Active DampingControl™ and LiveImpedance™ measurement	Power Factor	> 0.9
Input Impedance	20 kΩ balanced	1/8 Maximum Output Power @ 4 Ω	
Input Acceptance	18 dBu	Idle Consumption (all mains cases)	< 200 W
Construction			
Dimensions	483 mm x 88 mm x 495 mm (19.0 in x 3.5 in x 19.5 in)		
Weight	20.5 kg (45.2 lb)		