T Series A

2/4-Channel High-Performance Amplifier Platform with DSP

⊘ TOURING
◯ INSTALLATION

The T Series is a flexible and cost effective amplifier platform loudspeaker processor. The range consists of 2 and 4 channel models supporting channel powers from 750 W to 4000 W.

All models deliver high peak voltage allowing high SPL with single 8/16 ohm cabinets. The high voltage is also good for sharing power between the channels for applications such as bi-amped loudspeakers or subwoofers with passive tops.

The T Series offers analog and AES3 inputs. The AES3 solutions are optimized for daisy-chained distribution of 2-channel audio, enabling routing to many amplifiers without the need for external switches, repeaters, or splitters.

This helps in simplifying the process of setting up a typical networked system.

The loudspeaker processing features set a new benchmark for cost-effective amplification for small and medium sized systems and stage monitoring applications.

The T Series can be controlled and configured in various ways:

• through ArmoníaPlus, where it can be in mixed groups with advanced EQ together with other Powersoft products

• from the front panel display for things like preset recall (also per output), gain, delay, mute. This makes it the perfect match for powering the smaller solutions that are offered by rental companies. The display also shows the available headroom, along side with other status monitoring

• with the dedicated webapp, that runs on any device with a browser (e.g. a tablet) and access the amplifier via an external WiFi access point to control all parameters.
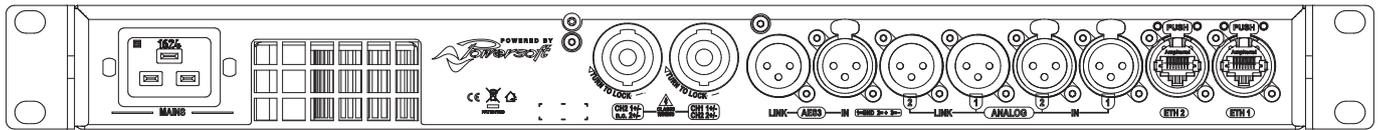
▶ Renowned sound clarity
▶ Group controllable advanced EQ with raised cosine filters
▶ Large preset library
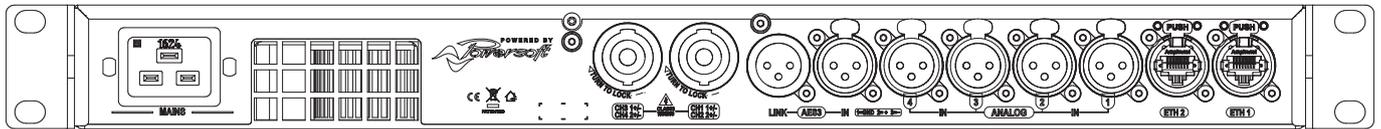▶ Preset compatibility with X Series
▶ Long FIR filters (42.6 ms)

T Series A

2/4-Channel High-Performance Amplifier Platform with DSP

2 Channel - T302 A, T602 A, T902 A

4 Channel - T304 A, T604 A, T904 A

Specifications

Channel Handling

	T302 A - T602 A - T902 A	T304 A - T604 A - T904 A
Number of output channels	2 (2 Speakon NL4)	4 (2 Speakon NL4)
	(bridgeable per channel pair)	
Number of input channels		
Analog	2 XLR (female) 2 XLR LINK (male)	4 XLR (female)
Digital	AES3 - 1 XLR (female) LINK - 1 XLR (male)	

Audio

Gain		T302 A	T602 A	T902 A	T304 A	T604 A	T904 A	
Input sensitivity @ 8 Ω	32 dB	2.57	2.57	3.10	2.57	2.57	3.10	Vrms
S/N (20 Hz - 20 kHz @ 8 Ω, Typ.)		110	110	108	110	110	108	dB(A)
Max input level		24 dBu						
Frequency Response		20 Hz - 20 kHz +/-0.5 dB						
Crosstalk (1 kHz)		<-70 dB						
Input impedance		20kΩ Balanced						
CMRR		>65 dB						
THD+N (from 0.1 W to Half Power)		< 0.1% (typical < 0.05%)						
SMPTE IMD (from 0.1 W to Half Power)		< 0.1% (typical < 0.05%)						
Output impedance at 100 Hz		26 mΩ						

DSP

AD converters	24 Bit Tandem™ @ 48 kHz 125 dB-A Dynamic Range - 0.005 % THD+N
DA converters	24 Bit Tandem™ @ 48 kHz 117 dB-A Dynamic Range - 0.003 % THD+N
Sample rate converter	24 Bit @ 96 kHz 140 dB Dynamic Range - 0.0001 % THD+N
Internal precision	32 bit floating point
Latency	2.5 ms fixed latency architecture
Memory/Presets	256 MB (RAM) plus 512 MB flash for presets
Delay	2 s (input) + 100 ms (output) for time alignment
Equalizer	Raised-cosine, custom FIR, parametric IIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass
Crossover	linear phase (FIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR)
Limiters	TruePower™, RMS voltage, RMS current, Peak limiter
Damping control	Active DampingControl™ and LiveImpedance™ measurement

Display Panel

Display	1.8" Colour TFT, 160x128 pixels, 600 nits
Control	8 pushbuttons with RGB backlight
Extra	USB port for external memory

Output Stage

Output Stage		T302 A	T602 A	T902 A	T304 A	T604 A	T904 A
per channel @ 8 Ω (symmetrical)*		1200 W	1300 W	1800 W	750 W	1250 W	1600 W
per channel @ 4 Ω (symmetrical)*		1500 W	2500 W	3200 W	750 W	1500 W	2000 W
per channel @ 2 Ω (symmetrical)*		1500 W	3000 W	4000 W	750 W	1500 W	1800 W
per channel @ 8 Ω (asymmetrical)**		1300 W	1400 W	1800 W	1200 W	1250 W	1800 W
per channel @ 4 Ω (asymmetrical)**		2200 W	2500 W	3600 W	1200 W	2100 W	2300 W
per channel @ 2 Ω (asymmetrical)**		1600 W	3800 W	4600 W	1200 W	1600 W	1800 W
@ 4 Ω Bridged		3000 W	6000 W	8000 W	1500 W	3000 W	3600 W
@ 8 Ω Bridged		3000 W	5000 W	6400 W	1500 W	3000 W	4000 W
Maximum unclipped output voltage		145 V$_{peak}$	145 V$_{peak}$	175 V$_{peak}$	145 V$_{peak}$	145 V$_{peak}$	175 V$_{peak}$
Maximum output current		50 A$_{peak}$	100 A$_{peak}$	110 A$_{peak}$	50 A$_{peak}$	50 A$_{peak}$	55 A$_{peak}$

*Calculated by driving and loading symmetrically all the channels.
**Calculated by driving all channels, but with every second channel at -6dB

Power & Thermal

			T302 A	T602 A	T902 A	T304 A	T604 A	T904 A	
@ 120 V	Standby	Power	13.5	15	15	15	15	15	W
	Idle	Power	23	32	33	32	32	34	W
	1/8 Power @ 4Ω	Power	517	824	1073	532	1054	1702	W
		Current Draw	4.6	7.6	9.6	4.7	9.5	15	A$_{rms}$
		Thermal Loss	485	678	931	537	1039	1713	BTU/h
@ 230V	Standby	Power	14	16	16	16	16	16	W
	Idle	Power	23	32	33	32	32	34	W
	1/8 Power @ 4Ω	Power	527	839	1068	525	1027	1676	W
		Current Draw	2.7	4.3	5.3	2.7	5.2	8.2	A$_{rms}$
		Thermal Loss	517	731	913	512	944	1624	BTU/h

Power supply	Universal regulated switch mode with PFC, SRM
Nominal voltage (±10%)	100-240 VAC @ 50-60Hz
Operating Voltage	90-264 VAC @ 50/60 Hz
AC Mains connector	IEC C20 inlet (20 A max) region-specific power cord provided

Networking

Standards compliance	auto sensing Gigabit Ethernet IEEE 802.3ab
Supported topologies	Daisy chain, Star
Remote interface	ArmoníaPlus™

Construction

	T302 A	T602 A	T902 A	T304 A	T604 A	T904 A
Dimensions	484 x 405 x 44.5 mm (19 x 16 x 1.75 in)					
Weight	6.7 kg	7.5 kg	7.8 kg	7.1 kg	7.5 kg	7.8 kg

Data subject to change without notice.