T Series

2/4-Channel High-Performance Amplifier Platform with DSP and Dante™





















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 3000 W.

All models deliver the same 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 input via Dante, AES3, and analog. The Dante[™] and 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, which may consist of a daisy chain with the mixing console at one end, a WiFi access point at the other end, and the amplifiers in between.

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
- ► Very long FIR filters (42.6 ms)

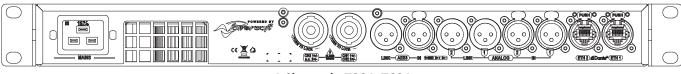
* DANTE version only



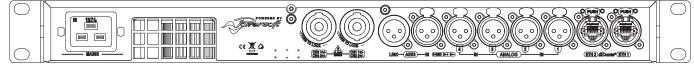
T Series

2/4-Channel High-Performance Amplifier Platform with DSP and Dante™

2 Channel - T302, T602



4 Channel - T304, T604



Specifications

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

Audio							
	Gain	T302	T602	T304	T604		
Input sensitivity @ 8 Ω	32 dB	2.57	2.57	2.57	2.57	Vrms	
S/N (20 Hz - 20 kHz @ 8 Ω)		>110	>110	>110	>110	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	< 0.1% (typical < 0.05%)						
SMPTE IMD (from 0.1 W t	< 0.1% (typical < 0.05%)						
Output impedance at 100 H	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

Data subject to change without notice.

	Output Stage	T302	T602	T304	T604
Ŀ	per channel @ 8 Ω (symmetrical)*	1200 W	1300 W	750 W	1250 W
	per channel @ 4 Ω (symmetrical)*	1500 W	2500 W	750 W	1500 W
powe	per channel @ 2 Ω (symmetrical)*	1500 W	3000 W	750 W	1500 W
Maximum output power	per channel @ 8 Ω (asymmetrical)**	1300 W	1400 W	1200 W	1250 W
	per channel @ 4 Ω (asymmetrical)**	2200 W	2500 W	1200 W	2100 W
	per channel @ 2 Ω (asymmetrical)**	1600 W	3800 W	1200 W	1600 W
	@ 4 Ω Bridged	3000 W	6000 W	1500 W	3000 W
	@ 8 Ω Bridged	3000 W	5000 W	1500 W	3000 W
Maximum unclipped output voltage		$145\;V_{peak}$	$145 \; V_{peak}$	$145 \; V_{peak}$	$145 \; V_{\text{peak}}$
Maximum output current		50 A _{peak}	100 A _{peak}	50 A _{peak}	50 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	T602	T304	T604		
	Standby	Power	13.5	15	15	15	W
>	Idle	Power	23	32	32	32	W
@ 120 V	1/8	Power	517	824	532	1054	W
@	Power	Current Draw	4.6	7.6	4.7	9.5	A _{rms}
	@ 4Ω	Thermal Loss	485	678	537	1039	BTU/h
	Standby	Power	14	16	16	16	W
≥	Idle	Power	23	32	32	32	W
@ 230V	1/8 Power	Power	527	839	525	1027	W
@		Current Draw	2.7	4.3	2.7	5.2	A_{rms}
	@ 4Ω	Thermal Loss	517	731	512	944	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					0 inlet (20 A fic power co		

Networking					
Standards compliance	auto sensing Gigabit Ethernet IEEE 802.3ab				
Supported topologies	Star				
Remote interface	ArmoníaPlus™				
Construction	T302	T602	T304	T604	
Dimensions	484 x 405 x 44.5 mm (19 x 16 x 1.75 in)				
Weight	6.7 kg	7.5 kg	7.1 kg	7.5 kg	

