TTM Series

4 Channel OEM Touring Amplifier





















TTM is an OEM only platform developed by Powersoft to allow a fast time to market (TTM) for companies wishing to have their own amplifier line.



TTM includes comprehensive signal processing, analog, AES3, Dante/AES67 inputs and outputs, and a bright 4.3" IPS display with capacitive touch.

The 4 channels, 2U TTM offers ample power and voltage, allowing for high SPL even with 8 or 16Ohm loads, and is capable of delivering a massive 4 x 3000W output on 4 Ohm loads.

The PFC equipped power supply is able to operate anywhere in the world, and it sports 750J of energy storage to keep a consistent performance.

Powersoft can ship a complete

unit with black front grille, handles and brackets, but the OEM might replace them with its own parts. Alternatively, OEM can negotiate a customized version.

ProManagerPlus software can be used to configure the TTM with OEM data, and to preload the preset library of the OEM full product line.

The amplifier can be controlled locally through the display interface. Available functions includes preset recall, gain, delay, and muting functions. This satisfies the requirements of most rental companies.

TTM can also be controlled remotely with ArmoníaPlus or with a third party software.

Applications:

- ← Small to medium scale touring systems
- ← Arenas & concert halls
- ← Stadiums & open-air events
- ← Multi-zone venues & live clubs

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Specifications

Channel Handling					
Outputs	4 x Speako	4 x Speakon NL4			
Outputs	4 Dante/AES67 TX (from local input or DSP)				
Inputs	4 VI D 5	-1-			
Analog	4 XLR female				
	4 XLR male (LINK) 2 XLR female (4 x audio channels)				
Digital AES3	2 XLR male	•	,		
Digital Dante/AES67	2 XLR Ethercon (4 x audio channels)				
Audio					
	Gain	TTM8K4	TTM12K4		
Input sensitivity @ 8 Ω	32 dB	2.86	3.22	Vrms	
S/N (20 Hz - 20 kHz	@8Ω)	109 Typ.	110 Typ.	dB(A)	
Max input level		2	4 dBu		
Frequency Response @ 8 O	hm load	20 Hz - 20 kHz +/- 1.0 dB			
Crosstalk (1 kHz)		-75 dB typ.			
Input impedance		20 kΩ Balanced			
CMRR		65 dB typ.			
THD+N (from 0.1 W to Half P	ower)	< 0.1% (typical < 0.05%)			
SMPTE IMD (from 0.1 W to Half Power)		< 0.1% (typical < 0.05%)			
Output impedance at 100 Hz	lance at 100 Hz $30 \text{ m}\Omega$				
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	50 amplifier snapshots, virtually unlimited speaker 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 Specs					
Resolution	480x272, 4.3" diagonal				
Brightness	600 nit				

Multitouch capacitive. Rotary encoder 20 steps/turn with pushbutton

Output Stage		TTM8K4	TTM12K4
Max output power	per channel @ 8 Ω (symmetrical)*	1500 W	1800 W
	per channel @ 4 Ω (symmetrical)*	2000 W	3000 W
	per channel @ 2 Ω (symmetrical)*	2500 W	2500 W
	per channel @ 8 Ω (asymmetrical)**	1600 W	1900 W
	per channel @ 4 Ω (asymmetrical)**	2500 W	3600 W
	per channel @ 2 Ω (asymmetrical)**	2500 W	2500 W
	$@8\Omega$ bridged	4000 W	6000 W
	@ 4 Ω bridged	5000 W	5000 W
Maximum unclipped output voltage		$160 \; V_{\text{peak}}$	$180 V_{peak}$
Maximum output current		>55 A _{peak}	>55 A _{peak}

^{*} All channels driven and loaded symmetrically ** All channels driven, but channels 2 and 4 at -6dB

Power & Thermal		TTM8K4	TTM12K4		
@ 120 V	Standby	Power	TBD	TBD	W
	Idle	Power	TBD	TBD	W
	1/8 Power @ 4Ω	Power	TBD	TBD	W
		Current Draw	TBD	TBD	A _{rms}
	-	Thermal Loss	TBD	TBD	BTU/h
	Standby	Power	TBD	TBD	W
@ 230N	Idle	Power	TBD	TBD	W
	1/8 Power @ 4Ω	Power	TBD	TBD	W
		Current Draw	TBD	TBD	A_{rms}
		Thermal Loss	TBD	TBD	BTU/h
Power supply		Universal regulated swit	ch mode with P	FC, 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)			

Networking				
Connectivity	Two Gigabit Ethernet ports, integrated switch, Ethercon connectors			
Supported topologies	Star, Daisy Chain			
Remote interface	ArmoníaPlus or other preferred software			
Construction				
Dimensions	483 x 381 x 88.9 mm (19 x 15 x 3.5 in)			
Weight	TTM8K4	TTM12K4		
	10 kg	10 kg		



Control