

Ti Series Networked Audio Power Amplifiers





A brand new software package, iCore, has been developed to work alongside all Ti Series components (amplifiers, breakout boxes, processors) and provides a centralised point for all control and monitoring. Breakout boxes can be programmed to monitor the system without a computer being connected for total peace of mind. Available in a variety of power outputs to cater for all live and installation needs, the Ti Series represents the very best in sound quality, coupled with extensive remote control capabilities for monitoring and off-line set-up.

The sound quality is maintained over a very wide range of load and temperature conditions. Sophisticated "side-chain" limiters prevent distortion and speaker damage, but are out-of-circuit until the onset of clipping.

Front panel controls can be disabled but internal VCAs allow for remote control either from a PC or locally using the GPI port, which can also be used to signal programmable alarms and mute/stand by the amplifier.

Main Specifications

Output Power (per channel): 8 ohms: 215W, 4 ohms: 375W, 2 ohms: ----Measured using continuous music with Crest Factor of 4.8 (14dB) Output Power (bridged): 8 ohms: 750W, 4 ohms: ----Measured using continuous music with Crest Factor of 4.8 (14dB) THD: (@1dB below maximum output power) @ 1kHz<0.008%, 20Hz to 20kHz<0.03% Gain / Sensitivity: Gain 32dB Sensitivity (for maximum power)+2.0dBu (1.00V) Frequency Response: 20Hz to 20kHz (+0dB / -0.5dB) Power Consumption: Nominal @ 240V into 4 ohms 1.0A, Nominal @ 120V into 4 ohms 2.0A Dimensions: Amplifier (2U) (mm)88(h) x 482(w) x 428(d) Boxed (shipping size - UK)230 x 580 x 560 (Single boxed) Boxed (shipping size - all except UK)250 x 610 x 600 (Double boxed) Weight: Amplifier 13.2kg, Boxed (shipping weight) 15.0kg

Additional Specifications

Input Impedance: 20k ohms (Active balanced) Input CMRR: > 60dB Damping Factor: > 400 (8 ohms / 1kHz) SNR: Better than 103dB (unwtd, 22Hz-22kHz) Signal Limiters: Operate at maximum power to prevent excessive clipping. Protection: Output short circuit, DC output, over-temperature, mains in-rush control. Output Power: Continuous sine wave @ 1kHz (per channel): 175W (8R), 300W (4R), ---- (2R) Continuous music (with Crest Factor of 2.8 (9dB)): 200W (8R), 350W (4R), ---- (2R) Continuous music (with Crest Factor of 4.8 (14dB)): 215W(8R), 375W(4R), ---- (2R)

Continuous music (with Crest Factor of 7.8 (18dB)): 225W(8R), 400W (4R),---- (2R)

For details of Power measurement methods please refer to the Technical Support area of our website.



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Power Consumption & Thermal Emissions

Mains (V)	Load (R)	No Sig'l	Current Light	Draw (A) Average	Heavy	The No Sig'l	rmal En Light	nissions (V Average	
240	8	0.4	0.5	0.8	1.3	96	104	118	151
240	4	0.4	0.6	1.0	2.0	96	111	134	192
240	2	•	·	•	•	•	·	•	•
120	8	0.8	1.1	1.5	2.7	96	104	118	151
120	4	0.8	1.3	2.1	4.0	96	111	134	192
120	2								

No Sig'l = Quiescent, Light = Crest Factor of 7.8(18dB), Average = Crest Factor of 4.8(14dB), Heavy = Crest Factor of 2.8(9dB) For details of measurement methods please refer to the Technical Support area of our website.



Controls, Indicators & Connectors

Rear Panel: 1 x Mode Selector Switch (Mono/Stereo/Bridge), 1 x Identify Switch, 1 x Reset Switch (recessed) 2 x Neutrik Speakon output connectors (4 pole) 2 x Neutrik XLR female (audio input), 2 x Phoenix 3-way connectors (audio input/link) 1 x Neutrik XLR female (RS485 input), 1 x Neutrik XLR male (RS485 output). 1 x Phoenix 3-way connectors (RS485 input/link) 1 x Fused IEC 3-pin mains inlet	2 x Limiter Active L	x Power Switch, 1 x Power/Standby LED(green/red),* EDs(red), 2 x Signal Present LEDs(blue), (red), 1 x Bridged Mode(yellow), 1 x Comms (green/yellow)**	
	Rear Panel: 1 x Mode Selector Sw 2 x Neutrik Speakon 2 x Neutrik XLR fem 1 x Neutrik XLR fem 1 x Phoenix 3-way co	tch (Mono/Stereo/Bridge), 1 x Identify Switch, 1 x Reset Switch (recessed) output connectors (4 pole) le (audio input), 2 x Phoenix 3-way connectors (audio input/link) le (RS485 input), 1 x Neutrik XLR male (RS485 output). Innectors (RS485 input/link) 1 x 6-way mini-Phoenix connector (GPI port) ains inlet	

Architect's and Engineer's Specification

The power amplifier shall be a 2 channel class AB design with a minimum guaranteed power of 215W into 8R (20Hz to 20kHz). THD shall be better than 0.02% (20Hz to 20kHz) and the signal to noise ratio shall exceed 103dB (unwtd). Minimum load shall be 8R, and 4R in bridge mode. Input sensitivity shall be +2.0dBu for full power output. Frequency response shall be 20kHz (\pm 0.25dB). The front panel shall have individual input level controls that may be separately disabled via internal links. A front panel non-isolating main power switch shall be fitted. The amplifier shall have a low power (<5W) standby mode with a programmable wake up time to prevent mains distribution overload when installed in multiples. The front panel shall have indication

of signal present and limiter active for each channel, comms activity, power/status, bridge mode and protect/fault. The rear panel shall have outputs on Neutrik Speakon connectors, with one connector being wired to allow both channels to be accessed from a single plug (4 pole). The audio and RS485 comms inputs shall be on Neutrik 3 pole XLR connectors, with connections parallelled on 3-way Phoenix connectors. Mode switching between mono/stereo/bridge shall be on the rear panel. An "Identify" button shall be on the rear panel to flash indicators on the front/rear and highlight the amplifier when under remote control.

Remote control shall be via an RS485 2-wire interface and allow adjustment of output levels using voltage controlled amplifiers (separate from the front panel controls), muting, and monitoring of temperature, voltage and current draw of connected loads, naming of the amplifier and individual outputs, and configuration of off-line monitoring. A GPI port shall be fitted as standard which shall include an input line for VCA control or remote muting/power control and a programmable output for indicating faults, combined with an isolated relay output. The amplifier shall be 2U, 19" rackmount in format with dimensions of 8.8cm X 48cm X 43cm and a weight of 13.2kg. AC mains supply shall be nominal 240V, 50/60Hz. The amplifier shall be designated the MC² Ti500.



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