MC² AUDIO

Ti Series

Networked Audio Power Amplifiers

Ti2000

Empowered By iCORE

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.

The control circuitry provides full protection against short circuits, DC and excessive temperature together with inrush current limiting and delayed "turn-on".

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.

Main Specifications

Ti2000

Output Power (per channel): 8 ohms: 625W, 4 ohms: 1150W, 2 ohms: 2100W
Measured using continuous music with Crest Factor of 4.8 (14dB)
Output Power (bridged): 8 ohms: 2300W, 4 ohms: 4200W
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 32/36dB Sensitivity (for maximum power)+7.5/3.5dBu (1.80/1.20V)
Frequency Response: 20Hz to 20kHz (+0dB / -0.5dB)
Power Consumption: Nominal @ 240V into 4 ohms 2.8A, Nominal @ 120V into 4 ohms 5.6A
Dimensions: Amplifier (2U) (mm)88(h) x 482(w) x 460(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 20.5kg, Boxed (shipping weight) 22.3kg

Additional Specifications

Ti2000

Input Impedance: 20k ohms (Active balanced)Damping Factor:>400 (8 ohms / 1kHz)
Input CMRR: > 60dB **Damping Factor:** > 400 (8 ohms / 1kHz)
SNR: Better than 106dB (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): 550W (8R), 1025W (4R), 1725W (2R)
Continuous music (with Crest Factor of 2.8 (9dB)): 600W (8R), 1075W (4R), 1850W (2R)
Continuous music (with Crest Factor of 4.8 (14dB)): 625W(8R), 1150W(4R), 2100W (2R)*
Continuous music (with Crest Factor of 7.8 (18dB)): 650W(8R), 1175W (4R),2300W (2R)

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

MC² AUDIO

www.mc2-audio.co.uk
Tel. +44 (0)1404 44633 Fax. +44(0)1404 44660
MC² AUDIO | Units 6-8 Kingsgate | Heathpark Industrial Estate
Honiton | Devon | England | EX14 1YG

5 Year Warranty

Ti Series

High Performance Power Amplifiers

Ti2000

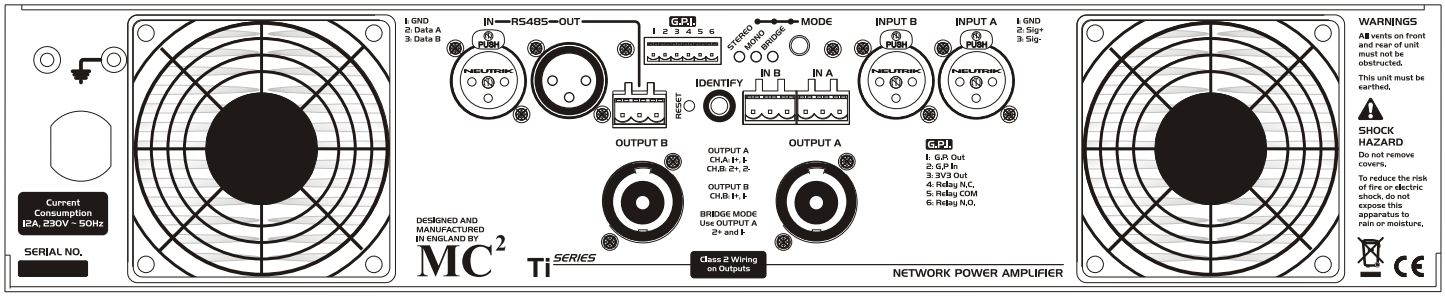
Empowered By iCORE

Power Consumption & Thermal Emissions

Mains (V)	Load (R)	Current Draw (A) No Sig'l	Light	Average	Heavy	Thermal Emissions (W) No Sig'l	Light	Average	Heavy
240	8	0.8	1.2	1.9	3.6	192	216	255	357
240	4	0.8	1.5	2.8	5.8	192	235	309	488
240	2	0.8	2.2	4.4	9.4	192	277	405	701
120	8	1.6	2.4	3.7	7.2	192	216	255	357
120	4	1.6	3.1	5.5	11.6	192	235	309	488
120	2	1.6	4.4	8.8	18.7	192	277	405	701

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.

Ti2000



Controls, Indicators & Connectors

Front Panel: 2 x Level Controls, 1 x Power Switch, 1 x Power/Standby LED(green/red)*
2 x Limiter Active LEDs(red), 2 x Signal Present LEDs(blue)
1 x Protection Active (red), 1 x Bridged Mode(yellow), 1 x Comms (green/yellow)**

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 6-way mini-Phoenix connector (GPI port)
1 x Captive Mains Cable

*Green = active, Red = Standby, Flashing G/R = waking up timer or shutting down.
**Green = data received, Yellow = data received and transmitted.

Ti2000

Architect's and Engineer's Specification

The power amplifier shall be a 2 channel class AB design with a minimum guaranteed power of 625W into 8R (20Hz to 20kHz). THD shall be better than 0.03% (20Hz to 20kHz) and the signal to noise ratio shall exceed 106dB (unwtd). Minimum load shall be 2R, and 4R in bridge mode. Input sensitivity shall be +7.5dBu for full power output. Frequency response shall be 20Hz to 20kHz (±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 20.5kg. AC mains supply shall be nominal 240V, 50/60Hz.
The amplifier shall be designated the MC² Ti2000.

MC² AUDIO
www.mc2-audio.co.uk
Tel. +44 (0)1404 44633 Fax. +44(0)1404 44660
MC² AUDIO | Units 6-8 Kingsgate | Heathpark Industrial Estate
Honiton | Devon | England | EX14 1YG