

Designed for use in a variety of applications in the fixed installation market, where sonic quality and reliability are the highest priorities, the high performance T500 uses complimentary AB bipolar output stages, combined with the unique MC<sup>2</sup> current driven floating drive stage and conventional analogue level controls.

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".

### 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/in) 88/3.5(h) x 482/18.9(w) x 428/16.8(d)

Boxed (shipping size - UK) 230/9.0 x 580/22.8 x 560/22.0 (Single boxed)

Boxed (shipping size - all except UK) 250/9.8 x 610/24.0 x 600/23.6 (Double boxed)

**Weight:** Amplifier 12.6kg(27.7lbs), Boxed (shipping weight) 14.1kg(31.0lbs)

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### 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.

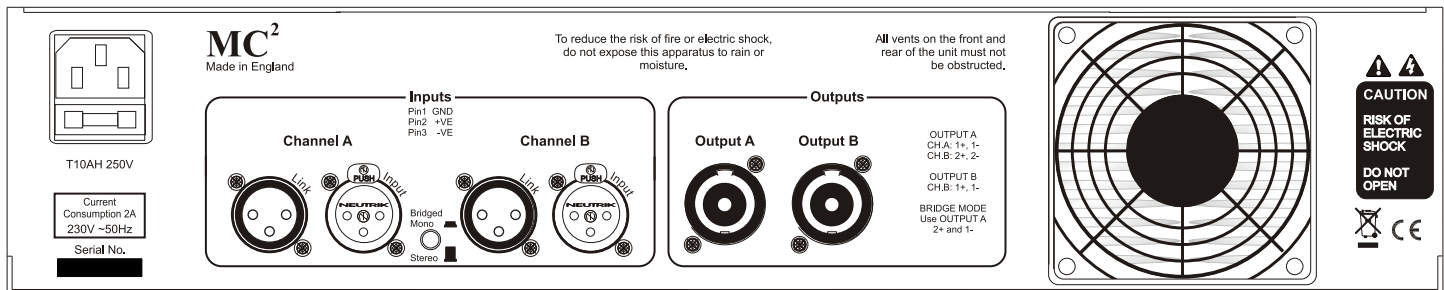
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### Power Consumption & Thermal Emissions

| Mains (V) | Load (R) | Current Draw (A) |       |         |       | Thermal Emissions (W) |       |         |       |
|-----------|----------|------------------|-------|---------|-------|-----------------------|-------|---------|-------|
|           |          | No Sig'l         | Light | Average | Heavy | No Sig'l              | Light | Average | Heavy |
| 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.

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### Controls, Indicators & Connectors

**Front Panel:** 2 x Level controls, 1 x power switch, 1 x power on indicator (green), 2 x limiter active indicators (yellow), 2 x signal present indicators (blue), 1 x protection active (red), 1 x bridged mode active (green)

**Rear Panel:** 1 x Bridged mode selector switch.  
2 x Neutrik Speakon output connectors (4 pole) (See operators manual)  
2 x Neutrik XLR input connectors. (Pin 1 = Gnd, Pin 2 = hot, Pin 3 = cold)  
1 x Fused IEC 3-pin mains inlet

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### 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 0.03% (20Hz to 20kHz) and the signal to noise ratio shall exceed 103dB (unwtd). The minimum load shall be 4R. Input sensitivity shall be +2.0dBu for full power output. Frequency response shall be 20Hz to 20kHz ( $\pm 0.25$ dB).

The front panel shall have individual input level controls and a front panel non-isolating main power switch shall be fitted.

The front panel shall have indication of signal present and limiter active for each channel, power, 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 inputs shall be on Neutrik 3 pole XLR connectors. Mode switching between stereo and bridge/mono shall be on the rear panel. Optional 24dB/Oct. crossover cards shall be available for internal fitting.

The amplifier shall be 2U, 19" rackmount in format with dimensions of 8.8cm X 48cm X 43cm and a weight of 12.6kg. AC mains supply shall nominal 240V, 50/60Hz.

The amplifier shall be designated the MC<sup>2</sup> T500.