



Delta Series offers the assurance of MC²'s highest quality audio power amp technology with future proofing via the inclusion of simple to use digital audio networking.

A rear panel switch allows the amplifier to accept either four channels of analogue audio or pick up four channels of networked audio, via Dante, which is then converted using 24 bit 96kHz ADCs.

Running cool in even the most difficult conditions, the Delta 40 can deliver 4 x 1000W into 4 ohms with all channels driven, and an substantial 2 x 2400W bridged (4R), with outstanding distortion and noise figures right up to maximum output. This power is maintained even with reduced mains voltages thanks to generous limiter headroom.

Connect to a Delta DSP amplifier using a single CAT5 cable to realise a stereo 4 way system with no further external processing required. Run bridged channel pairs or link adjacent inputs for total flexibility in either analogue or digital mode.

This model, uniquely in the range, also features back-up speaker inputs to connect to a back-up amplifier.

Main Specifications

Output Power (per channel): 8 ohms: 500W, 4 ohms: 1000W, 2.7 ohms: 1400W. 2 ohms: 1200W*

Measured using continuous music with Crest Factor of 4.8 (14dB)

Output Power (bridged): 8 ohms: 2000W, 4 ohms: 2400W

Measured using continuous music with Crest Factor of 4.8 (14dB)

THD: (@1dB below maximum output power) @ 1kHz < 0.18%, 20Hz to 20kHz < 0.2%

Gain / Sensitivity: Gain 32dB Sensitivity (for maximum power) +6.2dBu (1.6V)

Frequency Response: 20Hz to 20kHz (±0.5dB)

Power Consumption: Nominal @ 240V into 4 ohms 2.9A, nominal @ 120V into 4 ohms 6.0A

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 10.0kg (22.0lbs), Boxed (shipping weight) 12.0kg (26.5lbs)

DELTA 40

Additional Specifications

Input Impedance: 20k ohms (Active balanced)

Input CMRR: > 60dB **Damping Factor:** > 400 (8 ohms / 1kHz)

Input Sources: 4 x Analogue, 4 x Networked Audio (Switchable in bank of 4)

Signal Limiters: Operate at maximum power to prevent excessive clipping

Protection: Output short circuit, DC; Over-temperature; Mains in-rush control, over voltage, over current.

Output Power(per channel):

Continuous music (with Crest Factor of 2.8 (9dB)): 485W (8R), 970W (4R), 1365W (2.7R)

Continuous music (with Crest Factor of 4.8 (14dB)): 500W(8R), 1000W(4R), 1400W(2.7R)

Continuous music (with Crest Factor of 7.8 (18dB)): 515W(8R), 1025W (4R), 1435W (2.7R)

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

*2.7 ohm power quoted for highest single ended output and greatest efficiency (3 x 8 ohm parallel drivers). Amplifier is stable with 2 ohm loads but output will be reduced.

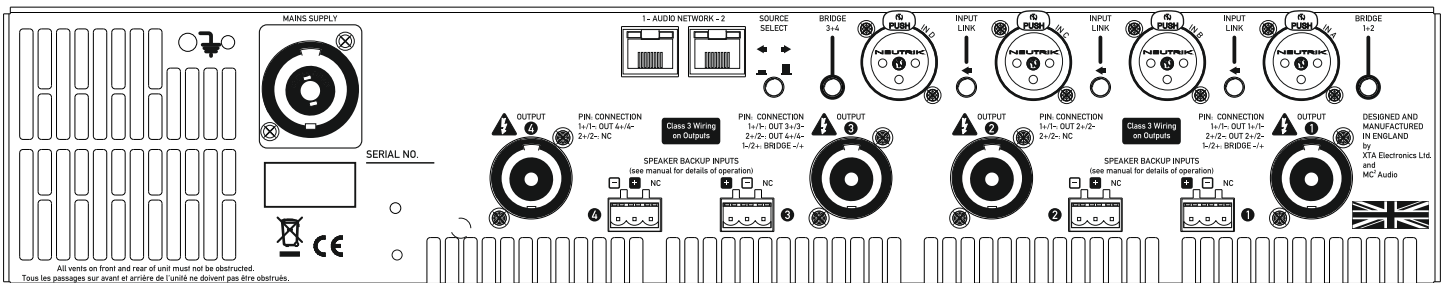
DELTA 40

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	1.0	1.4	2.1	3.7	240	251	269	312
240	4	1.0	1.7	2.9	5.8	240	258	290	366
240	2.7	1.0	1.9	3.4	7.1	240	264	304	402
120	8	2.2	3.0	4.4	7.7	267	277	295	338
120	4	2.2	3.6	6.0	11.7	267	285	317	392
120	2.7	2.2	4.0	7.1	14.5	267	290	331	428

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.

DELTA 40



Controls, Indicators & Connectors

Front Panel: 1 x Power Switch, 1 x STBY LED (orange)

4 x 6 point LED level indicators, 4 x level controls

3 x Channel Audio LINK LEDs (yellow)

1 x PROTECTION LED(red), 2 x BRIDGE LEDs (green)

1 x POWER LED, 1 x ANALOGUE LED, 1 x NETWORK AUDIO LED (3 x yellow)

Rear Panel: 4 x Neutrik Speakon output connectors (4 pole), 4 x Phoenix back-up output connectors

4 x Neutrik XLR female connectors (audio input)

2 x Ethernet RJ45 (Audio Network)*

3 x Channel Link Switches

2 x Bridge Mode Switches

1 x Analogue/Network Audio Source Select Switch

Captive mains cable

*Dante Audio Network is a factory fit option

DELTA 40

Architect's and Engineer's Specification

The power amplifier shall be a 4 channel class D design with a minimum guaranteed power of 1000W into 4R (20Hz to 20kHz). THD shall be better than 0.18% (20Hz to 20kHz). The minimum load shall be 2R, and 4R in bridge mode. Input sensitivity shall be 8.3dBu for full power output. Frequency response shall be 20Hz to 20kHz (± 0.5 dB).

The front panel shall have individual input level controls each with a 6 point LED meter showing output level and onset of limiting. A front panel non-isolating main power switch shall be fitted. The rear panel shall have outputs on Neutrik Speakon connectors, with two being wired to allow channel pairs to be accessed from a single plug (4 pole).

The audio inputs shall be on Neutrik 3 pole XLR connectors. Mode switching between stereo/bridge shall be on the rear panel, per channel pair (1&2, 3&4). Inputs to channels shall be linkable via 3 channel link switches, with corresponding indication on the front panel.

The amplifier shall accept analogue or networked audio if fitted with the optional Dante network audio card with global source switching across all four channels on the rear panel and front panel indication of either analogue or digital source.

The amplifier shall be 2U, 19" rackmount in format with dimensions of 8.8cm X 48cm X 43cm and a weight of 10.0kg. AC mains supply shall be switchable between 120V(60Hz) and 240V(50Hz).

The amplifier shall be designated the MC² Delta 40.