

S Series

S800

Signature Reference Power Amplifiers



Designed for use in the best studio monitoring environment,

but equally at home in any application where transparency and "no compromise" performance are the focus, the S800 delivers the sound quality and reliability expected from MC².

The S800 utilises the best complimentary AB bipolar output stages, combined

with the unique MC² current driven floating drive stage along with analogue level controls for minimal signal degradation.

Sophisticated "side-chain" limiters prevent distortion and speaker damage, but are out-of-circuit until the onset of clipping so do not compromise the signal path under normal working conditions. A bespoke high fidelity shielded toroidal power supply combined with low noise fans provide optimum conditions for the output stages, ensuring the only thing you will ever hear is your sound.

Main Specifications

Output Power (per channel): 8 ohms: 475W, 4 ohms: 950W, 2 ohms: 1550W

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

Output Power (bridged): 8 ohms:1900W, 4 ohms: 3100W

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

THD: (@1dB below maximum output power) @ 1kHz <0.007%, 20Hz to 20kHz <0.03% **Gain / Sensitivity:** Gain 32/36dB Sensitivity (for maximum power)+5.5/1.5dBu (1.4/0.9V)

Frequency Response: 20Hz to 20kHz (+0dB / -0.5dB)

Power Consumption: Nominal @ 240V into 4 ohms 2.1A, Nominal @ 120V into 4 ohms 4.2A

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) 250/2.8 x 610/24.0 x 600/23.6 (Double boxed)

Weight: Amplifier 20.5kg(45.2lbs), Boxed (shipping weight) 22.3kg(49.2lbs)

Additional Specifications

Input Impedance: 20k ohms (Active balanced)

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): 450W (8R), 800W (4R), 1300W (2R) Continuous music with Crest Factor of 2.8 (9dB): 475W (8R), 900W (4R), 1500W (2R) Continuous music with Crest Factor of 4.8 (14dB): 475W(8R), 950W(4R), 1550W (2R) Continuous music with Crest Factor of 7.8 (18dB): 500W(8R), 1000W (4R),1700W (2R)

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

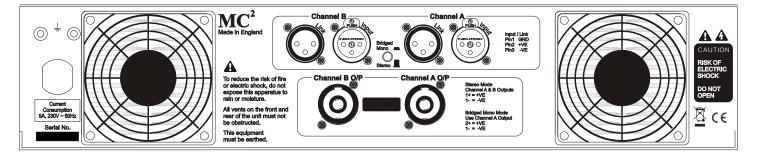


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Power Consumption & Thermal Emissions

Mains (V)	Load (R)	No Sig'l	Current Light	Draw (A) Average	Heavy	The No Sig'l		nissions (V Average	V) Heavy
240	8	0.5	0.8	1.3	2.7	120	139	168	251
240	4	0.5	1.1	2.1	4.7	120	157	216	368
240	2	0.5	1.6	3.1	7.4	120	183	277	533
120	8	1.0	1.6	2.6	5.4	120	139	168	251
120	4	1.0	2.2	4.2	9.3	120	157	216	368
120	2	1.0	3.1	6.3	14.9	120	183	277	533

No Sig'l = Quiescent, Light = Crest Factor of 7.818dB], 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

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 (green),

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 Captive mains cable

Architect's and Engineer's Specification

The power amplifier shall be a 2 channel class AB design with a minimum guaranteed power of 475W 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, 22Hz-22kHz). Minimum load shall be 2R, and 4R in bridge mode. Input sensitivity shall be +5.5dBu for full power output. Frequency response shall be 20Hz to 20kHz (+0/-0.5dB). 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 20.5kg. AC mains supply shall be nominal 240V, 50/60Hz. The amplifier shall be designated the MC² S800.

