

M SERIES AMPLIFIERS

FEATURES

- 1U Compact 4-channel amplifiers delivering up to 2800 W (M2800-4) or 5000 W (M5000-4) in 7.3 kg / 16 lb
- Switch mode power supply, internally switchable 230 / 115 V nominal
- Fixed frequency switch mode amplifier output stages
- Able to drive 100 V distributed lines directly without the need for transformers
- Optimised for 4 ohm loads – on each channel
- Clip limiter to prevent severely clipped waveforms reaching loudspeakers
- DC, VHF, Thermal, and short circuit protection on all channels.
- Bridge mode operation between CH1 / CH2 and CH3 / CH4



APPLICATIONS

INSTALLATIONS

The **M series amplifiers'** four channels of amplification combined with the external DSP presets for Outline loudspeaker systems provide the perfect solution for many applications. The flexible two/four channel format is ideal for installations where space is at a premium, but where output power is essential. Capable of driving 100 V line systems, making this an ideal choice for all installation challenges.

PORTABLE SYSTEMS

Users of portable systems are also well served by the **M series amplifiers**: they will appreciate the compact design, high power output, lightweight format and the ease of matching Outline loudspeaker systems, using carefully designed factory preset files.

LIVE PERFORMANCE

Sonic quality is one of the key characteristics of the **M series amplifiers**. In addition to this, the compact nature combined with the output power make this an ideal choice for where high performance is demanded within the critical live environment.

DESCRIPTION

Equally versatile in both portable and installed system configurations, and with its four channels delivering up to 2800 W (M2800-4) or 5000 W (M5000-4) all neatly packed in one single rack unit weighing just over 7.3 kg / 16 lb, the **M series amplifiers** are a flexible, cost-effective solution for small to medium sound systems.

As standard, the **M series amplifiers** come with fully protected circuit design that includes: AC protection that shuts down the power supply when AC mains voltage is outside operating range. The Clip Limiter prevents severely clipped waveforms from reaching loudspeakers while still maintaining full peak power output, and the DC protection protects against infrasonic signal at the outputs. Added to this the VHF protection protects the loudspeakers against destructive non-audible, non-musical high frequency signals. Finally, the Short Circuit protection acts to protect the amplifier from short circuits or similar events on the outputs (with an automatic protection reset).

Bridge mode can also be obtained between CH 1/2 and CH 3/4 by picking up on pins 2+/- on the NL4 output connector. When running in Bridge Mode the amplifier will deliver 1400 W (M2800-4) or 2500 W (M5000-4) into a minimum 8 ohm load.

Benefitting from these core technologies the **M series amplifiers** set a class standard in efficiency, leading to low power consumption, and consequently to substantial money savings, all in an eco-friendly way. The legendary sound quality given by the unique, patented Class D output stage design, make the **M series amplifiers** a superior commercial and practical value.

TECHNICAL SPECIFICATIONS:

NUMBER OF CHANNELS 4 mono, bridgable per channel pair

MAX OUTPUT POWER PER CHANNEL - EIAJ TEST (1% THD)

	Four-channel mode			100 V	8 Ω / Ch pair
	4 Ω / Ch	8 Ω / Ch	70 V		
M2800-4	700 W	360 W	--	--	1400 W
M5000-4	1250 W	750 W	1200 W	1250 W	2500 W

MAX OUTPUT VOLTAGE (PEAK)

M2800-4	85 V / 60 A	M5000-4	135 V / 65 A
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GAIN 32 dB, 30 dB, 28 dB, 26 dB, 24 dB, 22 dB, 20 dB, 18 dB, 14 dB, 4 dB, -∞, user selectable

FREQUENCY RESPONSE (1 W, 8 Ω) 10 Hz ÷ 30 kHz ±3 dB

SLEW RATE 40 V / μs @ 8 Ω input filter bypassed

S/N RATIO (AMPLIFIER SECTION) > 110 dB (20 Hz - 20 kHz, A weighted)

INPUT SENSITIVITY @ 8 Ω

M2800-4	1.34 V rms / +4.76 dBu
M5000-4	1.94 V rms / +7.97 dBu

MAX INPUT LEVEL 6 V rms / +17.8 dBu

OPERATING TEMPERATURE 0° ÷ 45° C / 32° ÷ 113° F

THERMAL DISSIPATION Fan, variable speed, temperature controlled front to rear airflow

POWER SUPPLY Universal, regulated switch mode

NOMINAL POWER REQUIREMENTS AC 115 V - 230 V (factory selection), 50 / 60 Hz

INRUSH CURRENT

M2800-4	< 26 A rms	M5000-4	< 34 A rms
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CONSUMPTION / CURRENT DRAW (1/4 OF MAX POWER @ 4 Ω)

	230 V	115 V
M2800-4	1066 W / 6.52 A	1066 W / 13.04 A
M5000-4	1772 W / 11.1 A	1772 W / 22.2 A

INPUT CONNECTORS 4 x balanced Neutrik® XLR female

OUTPUT CONNECTORS 4 x Neutrik® Speakon NL4MD

WEIGHT 7.3 kg (16 lb)

DIMENSIONS

Height	44.5 mm	3.5"
Width	483 mm	19"
Depth	358 mm	14.1"

PWM POWER AMPLIFIERS