

## Audio-Performance AP44M Series



Offering a unique combination of power and audio performance, seamlessly combined with advanced DSP and network control, the 44M Series range of four channel amplifiers is available in models developing between 1,500 Watts and 5,000 Watts per channel.

Over designed high capacity power supplies ensure the full power specification can be delivered into 2 ohms with all channels driven while remaining highly efficient.

Audio Performance's 44M Series of four channel amplifiers are optimised for live sound applications. Offering a unique combination of massive power and peerless audio performance integrated with unique DSP, the 44M Series represents an unmatched advancement in amplifier technology.

Sharing the same feature set and form factor as AP's 48M Series of eight channel amplifiers the 44M Series is available in models that develop between 1,500 Watts and 5,000 Watts per channel (up to 10,000 Watts for a bridged pair). Unusually these are not, 'transient', 'burst' or 'peak' power figures, they are the power levels that are delivered by all channels simultaneously even when driven with the same dense program material.

With AP amplifiers there is no need to ration power between channels, you can use all the power you have paid for all the time. This has been independently verified.

Uniquely, each channel can be configured to deliver its maximum power into 2, 4 or 8 Ohms (2 or 4 Ohms for the M20 model), nominal loads as well as 25V, 70V & 100V constant Voltage (CV) lines. This offers designers and integrators unparalleled flexibility and cost effectiveness.

Ethernet is used for remote control and monitoring while a front panel, optimised for use in challenging live environments, allows full local control of all features. Control via AP's intuitive Podware PC application provides many convenient and time saving features such as very flexible management of presets, and Overlay grouping of Mutes, Gains, Delays and EQ across an entire system.

The advanced 96kHz DSP is fully integrated into the product and provides an array of unique and genuinely useful features. Because all aspects of the DSP algorithms are designed and hand crafted in house by Linea, they are not available on products from any other manufacturer. For example, LIR linear phase crossover filters which are as easy to use as more conventional filter shapes, and have less latency than FIR filters. Also the powerful VX Limiter suite which sports Peak, RMS and Excursion limiting, as well as multiband limiting for passive 2-way enclosures.

## FEATURES

Four channels of sonically pure Class D amplification

6'000 to 20'000 watts RMS total output

Full front panel user interface

Unique, precise, 96KHz DSP

Ethernet network for system operation and monitoring

Analogue, AES3 and optional Dante™ digital network audio

Factory presets for all AP non-powered loudspeaker products



## ELECTRONICS

# AP44M Series Specifications

### AUDIO

Input Impedance .....	10K $\Omega$ balanced, 6.7K $\Omega$ unbalanced
Max. Input Level .....	+ 20 dBu
Frequency response .....	10Hz - 20KHz, +/- 0.25dB, 5Hz - 30KHz, +/- 1dB
Output noise .....	-110dB A weighted, Ref max output, 22KHz BW
Distortion .....	< 0.05% - 1KHz, -3dB output, 22KHz BW

### PROTECTION

Over Current .....	Initially limiters applied, persistent over current causes shutdown.
Temperature .....	Limiters applied, persistent over temperature causes shutdown.
Brownout .....	Automatic protection & recovery
Mains .....	Inrush current limiting
DC fault .....	Shut down power cycle to recover

### CONTROLS

Front panel display .....	Graphical, high contrast, daylight visible
Front panel encoders .....	Two, indented, velocity sensitive
Front panel push buttons .....	Large, tactile, illuminated
Led indicators .....	Bright, easily differentiated

### AMPLIFIER SECTION

Output power .....	RMS per channel, 20Hz - 20KHz, 4 channels driven
<b>AP44M20</b> (8 / 4 / 2 - $\Omega$ ).....	4x 1'500 / 3'000 / 5'000 W
<b>AP44M10</b> (8 / 4 / 2 - $\Omega$ ).....	4x 1'500 / 2'500 / 2'500 W
<b>AP44M06</b> (8 / 4 / 2 - $\Omega$ ).....	4x 1'500 / 1'500 / 1'500 W
Slew rate .....	> 80V/us
Efficiency .....	> 90% typical

### POWER SUPPLY

Input Voltage .....	115V / 230V nominal +/- 10%
Input voltage selection .....	Automatic

### PHYSICAL

Height .....	2U, 88mm
Width .....	19", 483mm
Depth .....	14", 360mm (behind rack ears)
Weight .....	12.5 Kg

### CONNECTIONS

Mains .....	Neutrik 32A POWERCON
Analogue Audio Input & Link .....	4x XLR female 3 pin and 4x XLR male 3 pin
AES3 dual channel IN & Link .....	1x XLR female and 1x XLR male
Dante Primary and secondary .....	2x Shielded RJ45
Output (per channel) .....	Neutrik SPEAKON NL4
Network Input & Link .....	RJ45
Auxiliary facilities .....	RJ45