

# Class I<sup>™</sup> Toroidal Power Amplifier

## MA series



In pursuit of the best sounding quality with the highest power density and equipment stability SAE Audio has developed the MA series of power amplifiers. Featuring SAE Audio high efficiency Class I<sup>™</sup> power modules, a premium heavy-duty toroidal transformer power supply and top audio-specific electronic elements, the excellent MA series of power amplifiers can deliver an enormous amount of power with an unmatched sonic quality even on continuous operation in the most critic working conditions. Being also equipped with SAE Audio robust Ultra Low-Loading Capacity technology, the MA series is the ideal power stage for subwoofer reinforcement applications with the highest SPL requirements.

#### Features

- Premium heavy-duty toroidal transformer power supply.
- High efficiency Class I™ power modules.
- Highly sensitive CMRR balanced inputs for improved noise rejection.
- Ultra low-load output capacity.
- Top electronic elements for a superior sonic quality.
- Backlit front panel controls.
- Channel independent power and -3dB / -6dB / -12dB / -24dB / clip indicators on the front panel.
- Channel independent protection warning indicator on the front panel.
- XLR input and signal link connectors.
- SpeakON NL4 and binding post output connectors.
- Input sensitivity selector on the back panel (32dB / 1v / 0.775v).
- Routing mode selector (stereo / bridge-parallel) with status indicator on the back panel.
- Channel independent soft-clipping selector on the back panel.

### Technology

#### Ultra Low-load Capacity

Even though speakers are commonly specified with a fixed rated load, in reality its electrical impedance is a function of the signal frequency applied to them. As the frequency lowers down the speakers' impedance decrease accordingly approaching to a  $0\Omega$ load with subwoofer speaker signals. SAE Audio MA series of power amplifiers are equipped with an intelligent short-circuit protection and unprecedented robust electronics to continuously deliver an enormous power density without any lost on sonic quality even on those situations where subwoofers approach a critic low-loading limit.

#### Class I™

SAE Audio patented Class I<sup>™</sup> is the most advanced technology on high power audio amplification. The output signal amplified through a Class I<sup>™</sup> power module accurately tracks the input signal waveform, achieving a much greater efficiency and sonic quality than on other standard amplifier classes. Class I<sup>™</sup> amplification is capable to deliver extremely high power density with an unprecedented audio fidelity.

## Applications

- Mid and big sized high-end installation applications.
- Clubs with high sound quality and power density requirements.
- Subwoofer amplification on continuous full-power operation.

#### **HS-CMRR** Balanced Inputs

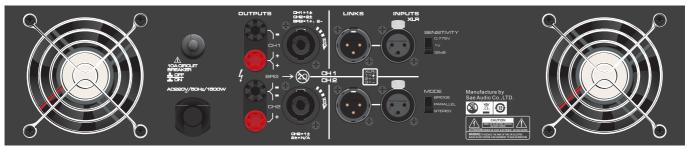
The best signal quality at an amplifier output can only be achieved with the best signal quality at its input. With the MA series is not a problem to have long signal input cables along with power lines or other induced noise sources. The balanced signal inputs on the MA amplifiers implement a High Sensitivity CMRR (Common Mode Rejection Ratio) design in order to reject even the slightest added distortion on the signal, thus assuring the best possible audio signal at the input.

#### **Top Electronic Elements.**

The MA series solely mount the best premium quality audiospecific electronic elements with the highest proven durability available on the market. Any sound performance influential parts inside the Precision amplifiers, including the operational amplifiers, power supply capacitors or power module bipolar junction transistors, are thoroughly selected among the best available audio-specific components in order to reach the best possible audio quality.



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MA rear panel

### **Specifications**

Model	MA1200	MA3600	MA4800	MA8004	MA16004
Output power (AC 220v / 50Hz. ±10	9%, All channels driven ou	tput power, THD=1%)			
8Ω Stereo*	850W x2	1500W x2	2000W x2	800W x4	1600W x4
4Ω Stereo**	1500W x2	2500W x2	3600W x2	1300W x4	2300W x4
2Ω Stereo**	2000W x2	3300W x2	5200W x2	1900W x4	3000W x4
8Ω Bridge**	3000W	5000W	7200W	2500W x2	4600W x2
4Ω Bridge**	4000W	6000W	8200W	3500W x2	6000W x2
Other specification					
Frequency response	20Hz - 20kHz , +0/-0.5dB				
THD+N	< 0.02%	< 0.05%	< 0.05%	< 0.1%	< 0.1%
S/N rate	>95dB	>95dB	>95dB	>90dB	>90dB
Damping factor	> 280	> 280	> 280	> 200	> 200
Input sensitivity	0.775v / 1v / 32d	JB		0.775v	0.775v
Input impedance (bal/unbal)	20kΩ / 10kΩ				
Voltage gain	40.5dB	43dB	44.2dB	40.3dB	43.2dB
Cooling	Air flow from fro	nt to rear			
Dimension / Weight					
Product dimensions (mm)	483 x 448 x 89 (2U)		483 x 495 x 133 (3U)		

\*Power tested under the condition of 40ms burst, 1KHz sine wave and 1% THD. \*\*Power tested under the condition of 20ms burst, 1KHz sine wave and 1% THD. SAE reserves the right to make any changes to the product specifications without prior notice. Final specifications to be found in the user manual.