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





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™ 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.

## Technology

## Class I™

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

#### **Ultra Low-load Capacity**

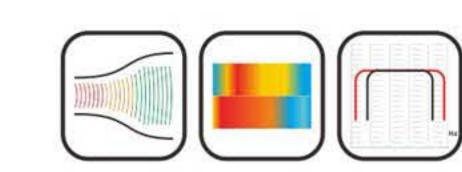
Even though speakers are commonly specified with a fixed rated load, in reality its electrical impedance is a function of the signal frequency applied to them. As the frequency lowers down the speakers' impedance decrease accordingly approaching to a  $0\Omega$ load with subwoofer speaker signals. SAE 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.

#### **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.



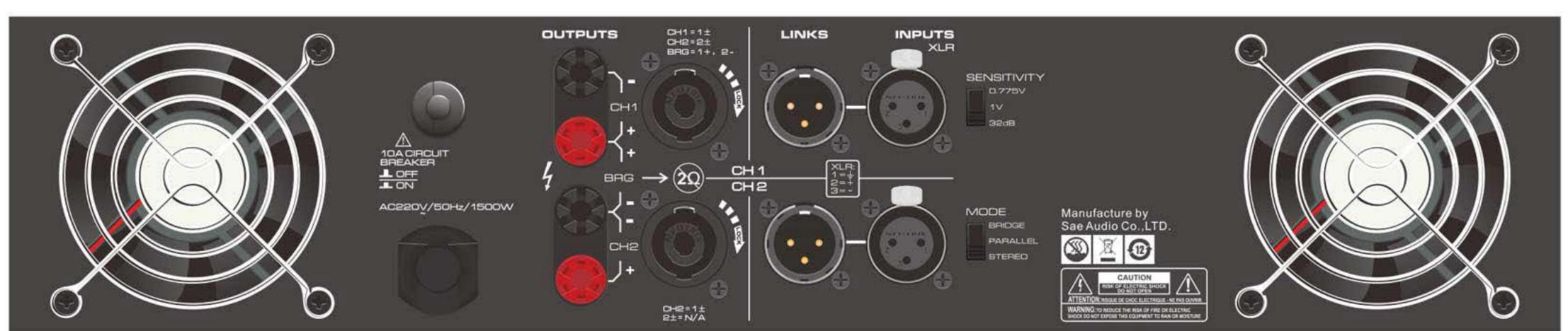
### Features

- 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 -5dB / -10dB / -20dB 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.

## 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.

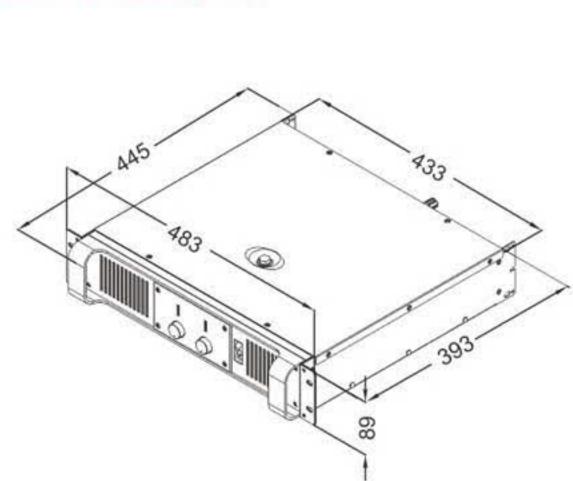


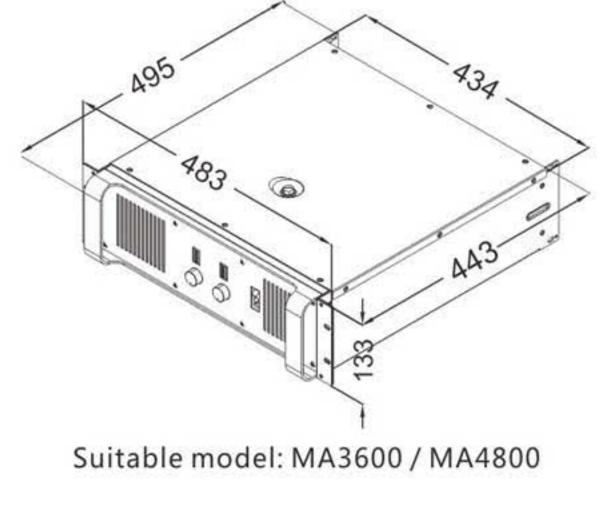
MA1200 rear panel

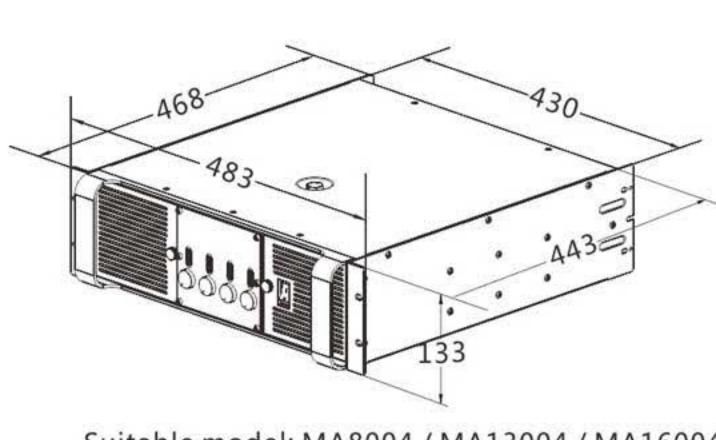
# Specifications

Model	MA1200	MA3600	MA4800	MA8004	MA13004	MA16004
Output power (AC 220V / 50H	lz. ±10%, All channe	els driven output pow	ver, THD=1%)			
8Ω Stereo	850W x2*	1500W x2*	2000W x2*	900W x4*	1300W x4*	1600W x4*
4Ω Stereo	1500W x2**	2500W x2**	3200W x2**	1300W x4*	2100W x4*	2300W x4*
2Ω Stereo	2000W x2**	3300W x2**	4600W x2**	1900W x4**	2700W x4**	3000W x4**
8Ω Bridge	3000W**	5000W**	6400W**	2600W x2*	4200W x2*	4600W x2*
4Ω Bridge	3500W**	6000W**	7200W**	3800W x2**	5400W x2**	6000W x2**
Other specification						
Frequency response 20H	z-20kHz(+0/-0.5dB)	20Hz-20kHz (+0/-1dB)				
THD+N	< 0.02%	< 0.05%	< 0.05%	< 0.5%	< 0.5%	< 0.5%
S/N rate	≥ 85dB	≥ 85dB	≥ 85dB	>90dB	>90dB	>90dB
Input sensitivity	0.775v / 1v / 32dB			0.775v	0.775v	0.775v
Input impedance (bal/unbal)	$20k\Omega / 10k\Omega$					
Voltage gain	40.5dB	43dB	44.2dB	40.8dB	42.3dB	43.2dB
Cooling	Air flow from front to rear					
Dimension / Weight						
Product dimensions (mm)	483 x 445 x 89	483 x 495 x 133	483 x 495 x 133	483 x 495 x 133	483 x 495 x 133	483 x 495 x 13
Packing dimensions (mm)	595 x 565 x 170	620 x 585 x 210	620 x 585 x 210	620 x 585 x 220	620 x 585 x 220	620 x 585 x 22
racking annensions (mm)						

# Product dimension(mm)







Suitable model: MA8004 / MA13004 / MA16004

Remark: 1, \*, The power is tested under EIA standard.

Suitable model: MA1200

- 2, \*\*, The power is tested under the condition of 40ms burst, 1KHz sine wave and 1% THD. 3. SAE reserves the right to make any changes to the product specifications without prior notice. Final specifications to be found in the user manual. .