MA SERIES

The best power amp we've ever built. The MA Series is designed to deliver unmatched efficiency, and the cleanest, most reliable performance possible.

MA 500.8
MA 500.4
MA 250.8
MA 250.4

The MA Series represents a new pinnacle in power amps. We can proudly and confidently state that the MA Series is the best amplifier that we've ever built (and perhaps that anyone has ever built).

Ashly's proprietary D-MAX™ technology (first implemented in the CA Series) takes Class D performance and efficiency to a whole new level. By starting with a clean slate, our engineers were able to throw away the old rule book and apply cutting-edge design practices and state-of-the-art components to achieve something truly unique.

ASHLY®

5 YEAR WARRANTY

DATA SHEET on **PAGE THREE**

MA Series

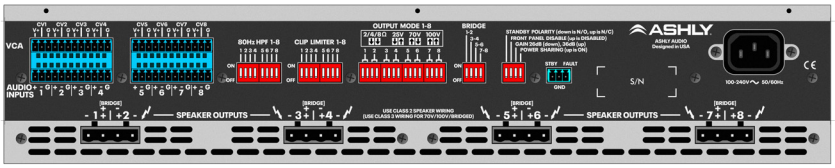
Ultra-High Efficiency Power Amplifiers

The MA Series delivers unprecedented performance with unique Intelligent Power Sharing capabilities and proprietary Ultra High-Efficiency design. Add flexible Multi-mode operation (selectable per channel) and the MA is near impossible to beat.

MA Series are available in 4 x 250W, 8 x 250W, 4 x 500W and 8 x 500W models.

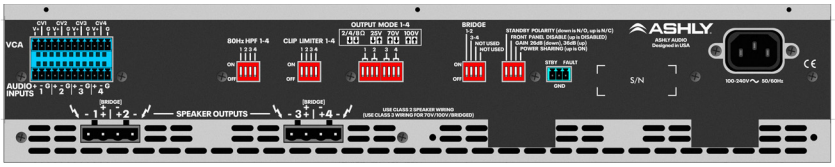
- **Intelligent Power-Sharing**
- **Ultra High-Efficiency**
- **Selectable Multi-Mode Output**

MA 500.8 /MA 250.8 front panel



MA 500.8 /MA 250.8 back panel

MA 500.4 /MA 250.4 front panel



MA 500.4 /MA 250.4 back panel

AI Power Sharing

Advanced intelligent power sharing dynamically distributes power to channels where needed and adapts to varying conditions.

Power Sharing, the feature that allows the amplifier to balance power between channels to match asymmetrical speaker loads, has become a highly demanded feature in recent years - That can prove useful when designing systems. The MA Series advanced AI-based Power Sharing picks up where other amplifiers leave off by intellligently and automatically adapting to your varying power demands.

Ultra-High Efficiency

Ultra-High Efficiency means more power with less power consumption.

The MA Series is by far the most efficient amp we've built and tested thus far. The pay-off is less heat, lower noise and distortion, more stable operation, and greater reliability. You can operate as many as any three MA amps on a single 20A service! The MAs run so cool, that bulky heat sinks found in most other amplifiers are no longer required. Instead, we were able to optimize active air cooling using our newly developed SailFlow™ design, which moves the air along a selective path, to where it's needed most. Coupled with our new Ashly-engineered ultra-high-speed switching power-supply, the use of high-speed, lossless Silicon-Carbide switches and intelligent power management, the end-result is nothing short of stunning.

Multi-Mode Operation

Multi-Mode Operation provides total flexibility.

With selectable Multi-mode operation, the MA Series fits a wider range of applications than most other amplifiers. In multi-zone, multi-use configurations, the MA is truly unbeatable. Taken individually or in bridged mode, MAs can supply from 250W to 1,000W for a single channel (even more when power sharing is engaged) in low Z (2, 4 & 8 Ohms) or constant voltage (25/70 or 100V) which can be selected per channel. MA amps are designed to excel in performance installations, such as theaters, school auditoriums and Houses of Worship. Power-hungry sub-woofers? No problem. You can also select 25, 70 & 100V operation. MA also has more integration-friendly features than you'd typically find on many amplifiers, and with 4 and 8-channel models to choose from they are also right at home in the most demanding multi-zone commercial installations.

MA Series

Ultra-High-Efficiency Power Amplifiers

SPECIFICATIONS

General Power Amplifier Specifications (0dBu = 0.775V rms)				
Amplifier Model	**MA500.8**	**MA500.4**	**MA250.8**	**MA250.4**
Maximum Output Power, ***(Power Sharing OFF*)***				
Watts per channel, all channels driven at rated load				
Low Z output, per channel				
2 Ohm	500	500	250	250
4 Ohm	500	500	250	250
8 Ohm	500	500	250	250
Low Z output, per bridged channel pair**				
4 Ohm	1000*	1000*	500*	500*
8 Ohm	1000*	1000*	500*	500*
25V/70V/100V output, per channel**				
25V	500	500	250	250
70V	500	500	250	250
100V	500	500	250	250

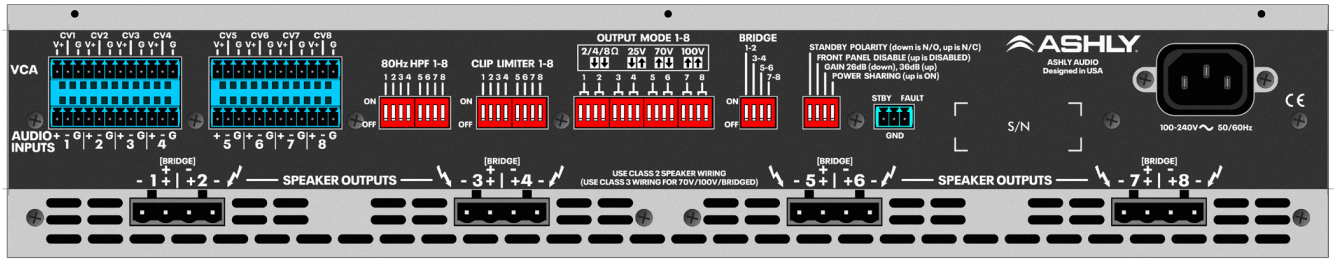
* ***With Power Sharing ON:*** *The total available power across each group of four channels is intelligently allocated based on signal and speaker load characteristics, up to a maximum of 900W/ch on MA500 models, and 450W/ch on MA250 models.*

** May require Class 3 speaker wiring, all others use Class 2 wiring. See section 2.3

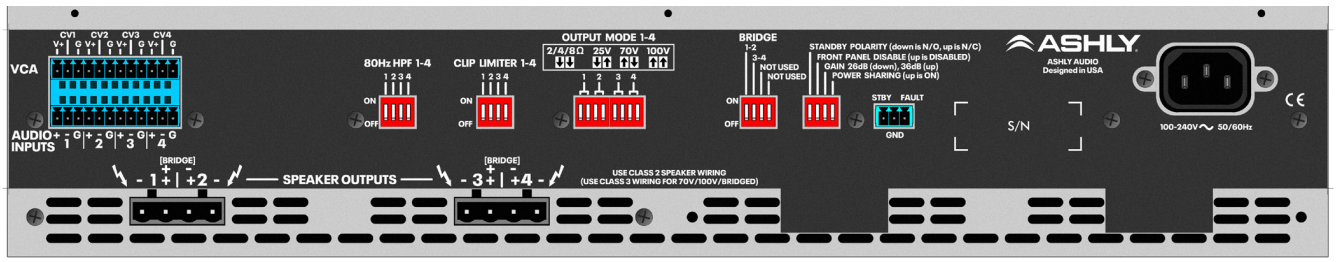
Total Power Draw - Watts, all channels driven, 1/8 power sinewave				
Standby	20	10	20	10
Idle (no signal)	110	55	110	55
1/8 max power 2 Ohm	740	375	435	225
1/8 max power 4 Ohm	680	340	390	195
1/8 max power 8 Ohm	660	335	390	195
1/8 max power 25V	790	380	425	205
1/8 max power 70V	660	335	385	190
1/8 max power 100V	650	330	380	190
Total Current Draw - in Amps, all channels driven, 1/8 power sinewave, 120VAC (divide by 2 for 240VAC)				
Standby mode	0.4	0.2	0.4	0.2
Idle (no signal)	1.08	0.55	1.08	0.55
1/8 max power 2 Ohm	6.3	3.2	3.7	1.95
1/8 max power 4 Ohm	5.8	2.9	3.35	1.7
1/8 max power 8 Ohm	5.65	2.85	3.35	1.7
1/8 max power 25V	6.75	3.25	3.65	1.75
1/8 max power 70V	5.65	2.8	3.35	1.65
1/8 max power 100V	5.6	2.8	3.3	1.65

Total Thermal Dissipation - in BTU/hour with typical input, all channels driven, 120VAC				
Amplifier Model	**MA500.8**	**MA500.4**	**MA250.8**	**MA250.4**
Standby mode	76	44	65	32
Idle (no signal)	209	105	184	96
1/8 max power 2 Ohm	818	426	631	341
1/8 max power 4 Ohm	614	307	477	239
1/8 max power 8 Ohm	546	290	477	239
1/8 max power 25V	989	443	597	273
1/8 max power 70V	546	290	460	222
1/8 max power 100V	512	272	443	222
Input Sensitivity - in Volts(rms) and dBu, per back panel Gain Switch				
@26dB gain	3.87V (+14.0dBu)	3.87V (+14.0dBu)	3.16V (+12.2dBu)	3.16V (+12.2dBu)
@36dB gain	1.22V (+4dBu)	1.22V (+4dBu)	1.00V (+2.2dBu)	1.00V (+2.2dBu)

Audio Specifications		
Signal to Noise Ratio, 26dB input sensitivity, 20Hz-20kHz, unweighted	**500W Models**	**250W Models**
Low-Z Mode	>108	>105
25V Mode	>99	>99
70V Mode	>108	>108
100V Mode	>112	>112
Distortion (SMPTE, typical)	<0.5%	
Distortion (THD+N, typical, 8 Ohm, 10dB below rated power), 20Hz-20kHz	<0.2%	
Frequency Response	20Hz-20kHz, +/-0.05dB	
Channel Separation (dB from full output, 1kHz)	-75dB	
Damping Factor (8 Ohm load, <1kHz)	>250	
Input Impedance	10k Ohm	
Maximum Input Level	+21dBu	



MA 500.8 /MA 250.8 back panel



MA 500.84/MA 250.4 back panel

SPECIFICATIONS (continued)

DIP Switch settings (per channel)	
Input High Pass Filter	80Hz 2nd order HPF, On (UP), Off (DOWN)
Clip Limiter	On (UP), Off (DOWN)
Output Mode (two DIP switches per ch.)	Lo-Z (2/4/8 Ohm), 25V, 70V, 100V
Bridge (per channel pair)	Bridge (UP), Normal (DOWN)
DIP Switch settings (global)	
Standby Polarity	Normally Open (DOWN) Normally Closed (UP)
Front Panel Disable	Disabled (UP), Normal (DOWN)
Gain	26dB (DOWN), 36dB (UP)
Power Sharing	On (UP), Off (DOWN)
Connectors	
Audio Inputs	Euroblock (3.5mm), (+), (-), Gnd
Remote DC Volume Control VCA Inputs	Euroblock (3.5mm), (V+), (CV), Gnd
Standby Contact Closure	Euroblock (3.5mm), Stby, Gnd
Fault Logic Out	Euroblock (3.5mm), Fault, Gnd
Speaker Output	Euroblock (7.62mm)
Front Panel LED Indicators	
Power Switch LED (white)	On, Off, Standby (flashing)
Clip/Mute LED, per channel (red)	On at 95% max output (0.5dB below max), Mute
Signal LED, per channel (green)	On at 25% max output voltage
Current LED, per channel (green)	On at >2 Amps to speaker load
Temp LED, per channel (yellow)	On when thermal counter-measures are being applied
Bridge LED, per channel pair (green)	On, Off
Protect LED (red) -see troubleshooting section for Protect LED error codes	On for fault condition counter-measures or shut-down, Off
Front Disable / Power Share LED	On red when front panel disabled, On green if power share enabled

Other	
Attenuators	Per channel: front panel, Fully off = Mute
Remote Control Options	WR-1, WR-1.1 DC level control
Amplifier Protection	In-rush current, over-temperature, output DC, output over-power, AC mains voltage, mains fuses
Cooling	Continuously variable fan
Power Requirements	
Nominal Voltage Input	100-240VAC, 50-60Hz
Operating Range	70-270VAC, 50-60Hz
Minimum Power-up	85VAC, 50-60Hz
Power Supply Type	SMPS with active PFC (Power Factor Correction)
AC Mains Line Cord Connector	Detachable Nema 5-15 for USA (may vary for export)
Environmental	32°F-140°F, (0°C-60°C) at rated power, noncondensing
Unit Dimensions (all models)	19"W x 3.5"H x 16.1"D (483 x 89 x 409mm)
Unit Weight by Model	MA500.8: 24.5 lbs (11.1kg) MA500.4: 18.5 lbs (8.39kg) MA250.8: 24.5 lbs (11.1kg) MA250.4: 18.5 lbs (8.39kg)
Shipping Dimensions (all models)	21.9"W x 5.43"H x 19.3"D (556mm x 13.8mm x 489mm)
Shipping Weight by Model	MA500.8: 29lbs (13.2kg) MA500.4: 23lbs (10.5kg) MA250.8: 29lbs (13.2kg) MA250.4: 23lbs (10.5kg)
Safety/Compliance	cTUVus, CE, FCC, RoHS

MA SERIES ARCHITECT & ENGINEERING SPECIFICATIONS are available in the DOWNLOADS section of https://ashly.com/

USER MANUAL

SCAN ME

Or download the complete User Manual at https://ashly.com/

MA SERIES 2D AUTOCAD FILES are available in the DOWNLOADS section of https://ashly.com/

Ashly Audio, Inc. • 847 Holt Road • Webster, NY
USA • US toll-free +1.585.872.0010
Fax +1.585.872.0739 • Sales@Ashly.com

ASHLY®
ashly.com

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