

MP-A Series MP-A20V | MP-A40V | MP-A80V

Multi-channel amplifiers

Features

- FlexAmp Technology allows each pair of amplifier channels to deliver up to 400 W total power, in any ratio.
- Class-D output circuitry and switchmode power supply for high efficiency and low cost of ownership
- 1RU amplifier design for rack space savings
- Load selector for driving 4 Ω, 8 Ω, 70 V or 100 V on each channel
- Selectable 80 Hz highpass filter offered on each channel
- Power saving features Auto-standby (after 28 minutes with seamless autoramp when signal returns) and remote standby input
- Amp status remote output
- Legacy of rock-solid QSC amplifier dependability



Introduction

The MP-A Series music and paging amplifier family builds on a 50 year legacy of QSC amplifier dependability and quality while offering an incredible amount of flexibility for business music and paging applications.

FlexAmp Technology

FlexAmp Technology simplifies system design by allowing a single high channel count amplifier to meet the needs of systems that would typically utilize multiple amplifiers of different power levels. It achieves this by allowing the installer to configure each pair of channels (e.g. ch 1-2, or 3-4, etc.) to deliver up to 400 W combined output power, in any mix. This makes for an amazing amount of flexibility, especially when paired with the output mode switch that offers settings for 4 Ω , 8 Ω , 70 V and 100 V.

Additional capabilities of the MP-A series include an 80 Hz highpass filter available on each output, as well as a remote input for putting the amplifier into standby mode for fire safety systems and an amplifier status signal on the remote output for system verification.

Flexibility

For an example of versatility of the MP-A Series, imagine the MP-A40V in a typical restaurant scenario. Output A of the amplifier is set up for a 20 W 70 V load for a pair of ceiling loudspeakers in the bathrooms while output B is set up in 4 Ω mode for driving one or two Lo-Z subwoofers with up to 380 W. Output C is set up with the highpass filter engaged for driving 250 W into 70 V ceiling loudspeakers in the main dining room, while output D is driving 150 W into 8 Ω surfacemount loudspeakers on the patio.

Power and Space Efficiency

MP-A Series amplifiers are extremely efficient with class-D output circuitry and switchmode power supplies. In addition, all models offer seamless Standby mode when not in use for 28 minutes and auto-ramp circuitry that ensures quiet and fast power up from Standby when signal is present. This combination of output topology and energy saving circuitry make for extreme efficiency and low operational costs. The 1RU chassis means that the MP-A Series amplifiers are perfect for installations with rack space restrictions.

MP-A Series

Model	MP-A20V	MP-A40V	MP-A80V	
Channels	2	4	8	
Power (all channels driven)				
4 Ω	200 W	200 W	200 W	
8 Ω	200 W	200 W	200 W	
70 V	200 W	200 W	200 W	
100 V	200 W	200 W	200 W	
FlexAmp Technology	Allows each pair of amplifier chanr	Allows each pair of amplifier channels to deliver up to 400 W total power, in any ratio		
Typical distortion (4-8 Ω)	< 0.01%	< 0.01%		
Maximum distortion (4-8 Ω)	< 1%			
Damping factor	100	100		
Output circuitry	Class D	Class D		
Protection	Short circuit, open circuit, over cur	Short circuit, open circuit, over current, thermal, RF protection, DC fault, inrush limiting		
Gain at 8 Ω	30 dB	30 dB		
Input impedance	> 10k, balanced or unbalanced	> 10k, balanced or unbalanced		
Input sensitivity	1.23 V (+4 dBu)	1.23 V (+4 dBu)		
Maximum input level	12.3 V (+24 dBu)	12.3 V (+24 dBu)		
Frequency response at 8 Ω	20 Hz – 20 kHz +/- 0.5 dB	20 Hz – 20 kHz +/- 0.5 dB		
Signal to noise	> 103 dB	> 103 dB		
User-configurable operating modes (per channel)	DIP switch selectable, low impeda	DIP switch selectable, low impedance 4 Ω or 8 $\Omega,$ high impedance direct drive 70 V or 100 V		
Highpass filter	80 Hz DIP switch engaged per cha	80 Hz DIP switch engaged per channel		
Cooling				
Туре	Forced air cooling, thermally regula	Forced air cooling, thermally regulated fan speed, side/rear-to-front airflow		
Operating temperature range	Maximum: -10° - 50° C, recomme	Maximum: -10° - 50° C, recommended: 0° - 35° C, performance may be reduced above 40° C		
Connectors				
Input connectors	Two 3.5 mm Euro, 3-pin (green)	Four 3.5 mm Euro, 3-pin (green)	Eight 3.5 mm Euro, 3-pin (green)	
Remote connectors	One 3.5 mm Euro, 5-pin (black)	One 3.5 mm Euro, 5-pin (black)	One 3.5 mm Euro, 5-pin (black)	
Output connectors	One 5.0 mm Euro, 4-pin (green)	Two 5.0 mm Euro, 4-pin (green)	Four 5.0 mm Euro, 4-pin (green)	
Front panel indicators	Power, signal (per channel), limit /	Power, signal (per channel), limit / mute / protect (per channel)		
Rear panel indicators	Bi-Color LED signal / limit / mute /	Bi-Color LED signal / limit / mute / protect		
Remote I/O	Remote standby, amplifier status e	Remote standby, amplifier status enunciation on 3.5 mm connectors		
AC Power Input	Universal power supply with PFC,	Universal power supply with PFC, 100-240VAC, 50 - 60 Hz		
Agency approvals	UL, CE, RoHS/WEEE compliant, F	UL, CE, RoHS/WEEE compliant, FCC Class B (conducted and radiated emissions)		
Dimensions (HWD) inches	1.75 in x 19 in x 14.8 in	1.75 in x 19 in x 14.8 in		
Dimensions (HWD) mm	44 mm x 483 mm x 377 mm	44 mm x 483 mm x 377 mm		
Net weight	7.7 lb (3.5 kg)	9.3 lb (4.2 kg)	12.8 lb (5.8 kg)	
Shipping weight	12.3 lb (5.6 kg)	13.9 lb (6.3 kg)	17.4 lb (7.9 kg)	

Specifications subject to change without notice.



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