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# Specifications

## MPA 401 Series

### Audio

Voltage gain	
MPA 401-70V	
RCA and TRS inputs .....	222x (47 dB)
Captive screw input .....	57x (35 dB)
MPA 401-100V	
RCA and TRS inputs .....	317x (50 dB)
Captive screw input .....	81x (38 dB)
CMRR .....	75 dB (typical) @ 1 kHz
Bass adjustment .....	±10 dB @ 100 Hz
Treble adjustment.....	±10 dB @ 10 kHz

### Audio input

Number/signal type .....	1 stereo/mono, balanced/unbalanced input 2 stereo/mono, unbalanced inputs (The three inputs are individually buffered and mixed together. Stereo signals are actively summed into a mono signal.)
Connectors .....	(1) 3.5 mm captive screw connector, 5 pole (main input) (1) 3.5 mm mini audio jack (tip, ring, sleeve) 1 pair RCA
Impedance .....	>10k ohms balanced/unbalanced, DC coupled
Maximum level.....	+20 dBu (balanced, captive screw) or +4 dBV (unbalanced, RCA/TRS) at 1% THD+N
Input sensitivity	
RCA and TRS inputs.....	-10 dBV
Captive screw input .....	+4 dBu if driven by one input -2 dBu if both inputs are summed
Input signal detection threshold .....	RCA and mini audio jacks: -44 dBV ±3 dB, unbalanced Captive screw connector: -30 dBu ±3 dB, balanced

**NOTE:** 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu

### Audio output

Number/signal type	
MPA 401-70V .....	1 single channel (mono) 70 V
MPA 401-100V.....	1 single channel (mono) 100 V
Connectors .....	(1) 5 mm screw lock captive screw connector, 2 pole
Load impedance	
MPA 401-70V .....	125 ohms minimum
MPA 401-100V .....	250 ohms minimum
Frequency response.....	80 Hz to 20 kHz, +1 dB/-3 dB, 1 watt
THD + Noise.....	<0.2% @ 1 kHz at 3 dB below clipping
S/N.....	>75 dB, 20 Hz to 20 kHz, unweighted
Damping factor.....	>100
High pass filter .....	80 Hz, 12 dB/octave roll off

Amplifier type .....	Class D
Output power	
MPA 401-70V .....	40 watts (rms), 70 V, 1 kHz, 1% THD
MPA 401-100V .....	40 watts (rms), 100 V, 1 kHz, 1% THD

### Control/remote — amplifier

Control port .....	(1) 3.5 mm captive screw connector, 3 pole
Pin configuration .....	Pin 1 = +10 VDC (50 mA max.), pin 2 = volume/mute control (variable voltage), pin 3 = GND
Volume control voltage range .....	0 V (mute) to 10 V (maximum volume)

### General

Power supply .....	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 3 A, 36 watts
Power consumption	
Typical (1/8 power), MPA 401-70V	
Device .....	11.0 watts, 125 ohm load
Device and power supply ...	13.9 watts, 125 ohm load
Typical (1/8 power), MPA 401-100V	
Device .....	12.3 watts, 250 ohm load
Device and power supply ...	15.3 watts, 250 ohm load
Quiescent, MPA 401-70V	
Device .....	4.6 watts
Device and power supply ...	7.1 watts
Quiescent, MPA 401-100V	
Device .....	5.9 watts
Device and power supply ...	8.4 watts
Standby .....	<1 watt (triggered after 25 minutes [ $\pm$ 5 minutes] with no signal)
Temperature/humidity .....	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling .....	Convection, no vents
Thermal dissipation	
Standby	
Device and power supply ...	<1 watt (3 BTU/hr)
Idle, MPA 401-70V	
Device .....	4.6 watts (16 BTU/hr)
Device and power supply ...	7.1 watts (24 BTU/hr)
Idle, MPA 401-100V	
Device .....	5.9 watts (20 BTU/hr)
Device and power supply ...	8.4 watts (29 BTU/hr)
1/8 power, MPA 401-70V	
Device .....	6.0 watts (20 BTU/hr)
Device and power supply ...	7.1 watts (24 BTU/hr)
1/8 power, MPA 401-100V	
Device .....	7.3 watts (25 BTU/hr)
Device and power supply ...	10.3 watts (35 BTU/hr)
Mounting	
Rack mount .....	Yes, with optional 1U rack shelf or back of rack mounting kit
Furniture mount .....	Yes, with optional under-desk mounting kit
Pole mount .....	Yes, with optional pole mounting kit

Enclosure type.....	Metal
Enclosure dimensions .....	1.7" H x 4.3" W x 6.0" D (1U high, quarter rack wide) (4.3 cm H x 10.9 cm W x 15.2 cm D) (Depth excludes connectors.)
Product weight.....	0.6 lbs (0.3 kg)
Shipping weight.....	3 lbs (2 kg)
Vibration.....	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety .....	UL rated for use in plenum airspaces: meets UL 2043 for heat and smoke release, excluding the power supply; meets UL 60065 and IEC 60065 for AV equipment safety.
MPA 401-70V .....	CCC, CE, c-UL, UL
MPA 401-100V .....	CE, c-UL, UL
EMI/EMC .....	CE, C-tick, FCC Class B, ICES Class B, VCCI
Environmental.....	Complies with the appropriate requirements of CEC, ENERGY STAR® (ENERGY STAR® qualified amplifier), EU code of conduct, RoHS, WEEE
Warranty.....	3 years parts and labor

**NOTE:** All nominal levels are at  $\pm 10\%$

**NOTE:** Specifications are subject to change without notice

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