

Specifications

XPA 4002 Series

Audio

Voltage gain	
XPA 4002	33x (30 dB)
XPA 4002-70V.....	57x (35 dB)
Crosstalk	75 dB (typical) @ 1 kHz
CMRR.....	75 dB (typical) @ 1 kHz

Audio input

Number/signal type.....	2 balanced/unbalanced
Connectors.....	(2) 3.5 mm captive screw connectors, 3 pole
Impedance.....	>10k ohms unbalanced/balanced, DC coupled
Nominal level.....	+4 dBu (1.23 Vrms), balanced
Maximum level	+21 dBu (8.69 Vrms), balanced
Input sensitivity	+4 dBu (1.23 Vrms)
Input signal detection threshold.....	-40 dBu ±3 dB, balanced

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

Audio output

Number/signal type	
XPA 4002	2 channels, 4 or 8 ohms; or 1 bridged mono, 8 ohms
XPA 4002-70V.....	2 channels 70 V
Connectors	
XPA 4002	(1) 5 mm screw lock captive screw connector, 4 pole
XPA 4002-70V.....	(2) 5 mm screw lock captive screw connectors, 2 pole

NOTE: These connectors accept wires of 22 AWG to 12 AWG.

Load impedance

XPA 4002	4 ohms (8 ohms if bridged) minimum
XPA 4002-70V.....	12.5 ohms minimum

Amplifier type

Class D

Output power

XPA 4002	200 watts rms per channel, 8 ohms, 1 kHz, 0.05% THD
	400 watts rms per channel, 4 ohms, 1 kHz, 0.05% THD
	800 watts rms (bridged mono), 8 ohms, 1 kHz, 0.05% THD

XPA 4002-70V..... 400 watts rms per channel, 70 V, 1 kHz, 0.1% THD

Frequency response

20 Hz to 20 kHz, ±1 dB

THD + Noise

XPA 4002	0.1%, 20 Hz to 20 kHz, 8 ohms, 3 dB below clipping
XPA 4002-70V.....	0.1%, 1 kHz, 3 dB below clipping

S/N.....

100 dB, 20 Hz - 20 kHz, unweighted

Specification • XPA 4002 Series (Continued)

Damping factor

XPA 4002 >100 @ 8 ohms

XPA 4002-70V >100 @ 12.5 ohms

High pass filter

XPA 4002-70V 80 Hz, 12 dB per octave rolloff for 70 V line output (switch selectable)

Control/remote — amplifier

Control port (1) 3.5 mm captive screw connector, 2 pole

Pin configurations

Standby power control

(contact closure) Pin 1 = GND, pin 2 = standby

General

Power Internal Input: 100-240 VAC, 50-60 Hz

Power consumption and thermal dissipation

XPA 4002

		115 VAC, 60Hz				230 VAC, 50Hz			
		AC Line Current	AC Power Consumed	Thermal Dissipation		AC Line Current	AC Power Consumed	Thermal Dissipation	
Condition		A	W	W	BTU/hr	A	W	W	BTU/hr
Active (1/8 power), all channels driven	8Ω	0.8	94.3	44.3	151	0.5	95.3	45.3	155
	4Ω	1.4	153.9	53.9	184	0.7	153.6	53.6	183
Quiescent (idle)		0.3	28.1	28.1	96	0.2	29.6	29.6	101
Standby		<0.1	<1	<1	<3	<0.1	<1	<1	<3

XPA 4002-70V

		115 VAC, 60Hz				230 VAC, 50Hz			
		AC Line Current	AC Power Consumed	Thermal Dissipation		AC Line Current	AC Power Consumed	Thermal Dissipation	
Condition		A	W	W	BTU/hr	A	W	W	BTU/hr
Active (1/8 power), all channels driven	70 V	1.3	149.7	49.7	170	0.7	149.7	49.7	170
Quiescent (idle)		0.2	22.0	22.0	75	0.2	24.2	24.2	83
Standby		<0.1	<1	<1	<3	<0.1	<1	<1	<3

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, with heat sinks on the sides

Protection Clip limiting, thermal, short circuit, DC output

Indication Limiter/Protect LED indicates the onset of clip limiting, thermal cycling, or a short circuit

Mounting

Rack mount Yes, with included mounting brackets

Enclosure type Metal

Specification • XPA 4002 Series (Continued)

Enclosure dimensions	1.7" H x 17.4" W* x 12.0" D (1U high, full rack wide) (4.3 cm H x 44.2 cm W* x 30.5 cm D)
	*Width excludes rack ears. 19.0" (48.3 cm) W with rack ears.
Product weight	9.2 lbs (4.2 kg)
Regulatory compliance.....	BSMI, CE, c-UL, CISPR Class B, CISPR, C-tick, FCC Class B, ENERGY STAR® (ENERGY STAR qualified amplifier), EU code of conduct, ICES, KCC, RoHS, UL, VCCI Class B, WEEE
Warranty	3 years parts and labor

NOTE: All nominal levels are at ±10%.

NOTE: Specifications are subject to change without notice.

NOTE: Shipping weights and dimensions are available at www.extron.com.

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