

XPA 4002

TWO CHANNEL POWER AMPLIFIER
400 WATTS PER CHANNEL

- ▶ Dual channel, high powered amplifier in a 1U enclosure
- ▶ 800 watts rms output power:
2 x 400 watts @ 4 ohms;
2 x 200 watts @ 8 ohms;
1 x 800 watts @ 8 ohms – bridged
- ▶ ENERGY STAR® qualified amplifier
- ▶ Professional grade signal-to-noise and THD+N performance
- ▶ Extron Patented CDRS™ - Class D Ripple Suppression
- ▶ Convection cooled, fanless operation
- ▶ Power factor correction
- ▶ Ultra low inrush current - eliminates need for power sequencing



The Extron XPA 4002 power amplifier features an Extron exclusive, highly efficient, advanced Class D amplifier design with patented CDRS technology that provides a smooth, clean audio waveform and an improvement in signal fidelity over conventional Class D amplifier designs. The XPA 4002 two channel power amplifier offers 400 watts per channel output for large, high powered speaker systems.



Extron® Electronics
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

The Extron XTRA™ Series **XPA 4002** is a 1U, convection-cooled power amplifier delivering two channels of 400 watts rms into 4 ohms or 200 watts into 8 ohms, or a single bridged channel of 800 watts into 8 ohms. This professional grade amplifier features a 100 dB signal-to-noise ratio with 0.1% THD+N. The XPA 4002 is an ENERGY STAR® qualified amplifier with an Extron exclusive, highly efficient, advanced Class D amplifier design. It also features patented CDRS™ - Class D Ripple Suppression technology that provides a smooth, clean audio waveform and an improvement in signal fidelity over conventional Class D amplifiers. The XPA 4002 is half the size of comparable amplifiers, conserving rack space and weighing only 9 lbs (4 kg). The Extron exclusive, high efficiency design generates very little heat and allows the amplifier to be convection cooled.

FEATURES

- ▶ **400 watts rms per channel for low impedance speaker systems** – The XPA 4002 is designed for large, high powered program audio speaker systems in corporate and museum auditoriums, houses of worship, and other large presentation environments.
- ▶ **ENERGY STAR qualified amplifier** – The XPA 4002 is an ENERGY STAR qualified amplifier and energy efficient product that conserves energy and reduces costs.
- ▶ **Professional grade signal-to-noise and THD+N performance** – The XPA 4002 delivers professional grade performance with 100 dB signal-to-noise ratio and 0.1% THD+N.
- ▶ **Extron Patented CDRS - Class D Ripple Suppression** – CDRS is an Extron Patented technology that provides a smooth, clean audio waveform and an improvement in signal fidelity over conventional Class D amplifier designs. CDRS eliminates the high frequency switching ripple characteristic of Class D amplifiers, a source of RF emissions which can interfere with sensitive AV equipment such as wireless microphones.
- ▶ **Convection cooled, fanless operation** – The XPA 4002 does not require internal fans or vents for cooling, ensuring quiet, reliable operation. It generates substantially less heat than conventional power amplifiers, making it ideal for rack-mount applications.
- ▶ **Ultra low inrush current - no need for power sequencing** – Allows multiple XTRA Series amplifiers to be powered on simultaneously without overloading power circuits. This eliminates the need for power sequencing.
- ▶ **Rack-mountable 1U, full rack width enclosure** – With the capability to deliver full-sized amplifier power in one half the size of many comparable power amplifiers, the XPA 4002 reduces rack space requirements for many installations.

SPECIFICATIONS

AUDIO		
Voltage gain	33x (30 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	
Nominal level	+4 dBu (1.23 Vrms), balanced	
Input sensitivity	+4 dBu (1.23 Vrms)	
Input signal detection threshold	-40 dBu ±3 dB, balanced	
AUDIO OUTPUT		
Number/signal type	2 channels, 4 or 8 ohms; or 1 bridged mono, 8 ohms	
Connector	(1) 5 mm screw lock captive screw connector, 4 pole	
Load impedance	4 ohms (8 ohms if bridged) minimum	
Amplifier type	Class D	
Output power	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	
Frequency response	20 Hz to 20 kHz, ±1 dB	
THD + Noise	0.1%, 20 Hz to 20 kHz, 8 ohms, 3 dB below clipping	
S/N	100 dB, 20 Hz - 20 kHz, unweighted	
GENERAL		
Power supply	Internal Input: 100-240 VAC, 50-60 Hz	
Power consumption at 115 VAC, 60 Hz	Typical (1/8 power) 4 ohms (x2): 154.0 watts 8 ohms (x2): 93.1 watts Quiescent 28.3 watts Standby <1 watt (triggered by contact closure or after 25 minutes [±5 minutes] with no signal)	
Cooling	Convection, no vents, with heat sinks on the sides	
Thermal dissipation at 115 VAC, 60 Hz	Standby <1 watt (3 BTU/hr) Idle 28.3 watts (97 BTU/hr) 1/8 power 4 ohms (x2): 54.0 watts (185 BTU/hr) 8 ohms (x2): 43.1 watts (147 BTU/hr)	
Protection	Clip limiting, thermal, short circuit, DC output	
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	Safety CE, c-UL, UL Meets UL 60065, IEC 60065, and BSEN 60065 for AV equipment. EMI/EMC CE, CISPR 22 Class B, CISPR 24, C-tick, EN55103-1, EN55103-2, FCC Class B, ICES, VCCI Class B	
MTBF	200,000 hours	
Warranty	3 years parts and labor	
Model	Version Description	Part number
XPA 4002	Two Channel AMP – 400 Watts-chan	60-1244-01

For complete specifications, please go to www.extron.com
Specifications are subject to change without notice.

Worldwide Sales Offices

Anaheim, CA • Raleigh, NC • Dallas, TX • Washington, DC • London • Paris • Amersfoort, NL
Frankfurt • Dubai • Singapore • Seoul • Shanghai • Beijing • Tokyo • Bangalore

UNITED STATES

+800.633.9876
Inside USA/Canada
+1.714.491.1500

EUROPE

+800.3987.6673
Inside Europe
+31.33.453.4040

ASIA

+800.7339.8766
Inside Asia
+65.6383.4400

MIDDLE EAST

+971.4.2991800