

# 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](http://www.extron.com)  
Specifications are subject to change without notice.

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