

XPA 2002-70V XPA 2002-100V

70 VOLT & 100 VOLT
TWO CHANNEL POWER AMPLIFIERS
200 WATTS PER CHANNEL

- ▶ Dual high powered, high impedance outputs in a 1U enclosure
- ▶ 400 watts rms output power:
2 x 200 watts @ 70 or 100 volts
- ▶ ENERGY STAR® qualified and UL verified
- ▶ 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 2002-70V and XPA 2002-100V power amplifiers feature 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. Both power amplifiers offer 200 watts per channel output, and are ideal for high impedance distributed speaker systems utilizing a large number of 70 volt or 100 volt speakers.



Extron® Electronics
INTERFACING, SWITCHING AND CONTROL

DESCRIPTION

The Extron XTRA™ Series **XPA 2002-70V** and **XPA 2002-100V** are 1U, convection-cooled power amplifiers delivering two channels of 200 watts rms at 70 or 100 volts. These professional grade amplifiers feature a 100 dB signal-to-noise ratio with 0.1% THD+N. The XPA 2002-70V and XPA 2002-100V are ENERGY STAR® qualified and UL verified amplifiers with an Extron exclusive, highly efficient, advanced Class D amplifier design. They also feature 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 2002-70V and XPA 2002-100V are 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 amplifiers to be convection cooled.

FEATURES

- ▶ **200 watts rms per channel for high impedance speaker systems** – The XPA 2002-70V and XPA 2002-100V are designed for high impedance distributed speaker systems utilizing a large number of 70 volt or 100 volt speakers.
- ▶ **ENERGY STAR qualified and UL verified** – The XPA 2002-70V and XPA 2002-100V are ENERGY STAR qualified amplifiers and energy efficient products that conserve energy and reduce costs. They have earned the Energy Efficiency Certification from UL Environment to verify that stringent ENERGY STAR qualifications have been met.
- ▶ **Professional grade signal-to-noise and THD performance** – The XPA 2002-70V and XPA 2002-100V deliver 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 A/V equipment such as wireless microphones.
- ▶ **Convection cooled, fanless operation** – The XPA 2002-70V and XPA 2002-100V do not require internal fans or vents for cooling, ensuring quiet, reliable operation. They generate substantially less heat than conventional power amplifiers, making them 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.
- ▶ **Power factor correction** – The XPA 2002-70V and XPA 2002-100V feature power factor correction technology that smooths out the high peak currents of the amplifier's current draw, thus minimizing the presence of high frequency harmonics on the AC power line, and therefore preventing audible artifacts from being transmitted to other audio equipment in the system.
- ▶ **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 2002-70V and XPA 2002-100V reduce rack space requirements for many installations.

SPECIFICATIONS

AUDIO		
Voltage gain		
XPA 2002-70V	57x (35 dB)	
XPA 2002-100V	81x (38 dB)	
AUDIO INPUT		
Number/signal type	2 balanced/unbalanced	
Connectors	(2) 3.5 mm captive screw connectors, 3 pole	
AUDIO OUTPUT		
Number/signal type		
XPA 2002-70V	2 channels 70 V	
XPA 2002-100V	2 channels, 100 V	
Connectors	(2) 5 mm screw lock captive screw connectors, 2 pole	
Amplifier type	Class D	
Output power		
XPA 2002-70V	200 watts rms per channel, 70 V, 1 kHz, 0.1% THD	
XPA 2002-100V	200 watts rms per channel, 100 V, 1 kHz, 0.1% THD	
Frequency response	20 Hz to 20 kHz, ±1 dB	
THD + Noise	0.1%, 1 kHz, 3 dB below clipping	
S/N	100 dB, 20 Hz - 20 kHz, unweighted	
GENERAL		
Power	100 VAC to 240 VAC, 50-60 Hz, 1.5 A, internal power supply	
Power consumption		
Typical (1/8 power)		
XPA 2002-70V	70 V (x2): 80 watts	
XPA 2002-100V	100 V (x2): 80 watts	
Quiescent	18 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		
Standby	<1 watt (3 BTU/hr)	
Idle	18 watts (61 BTU/hr)	
1/8 power (pink noise)		
XPA 2002-70V	70 V (x 2): 30 watts (102 BTU/hr)	
XPA 2002-100V	100 V (x 2): 30 watts (102 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 A/V equipment.	
EMI/EMC	CE, CISPR 22 Class B, CISPR 24, C-tick, EN55103-1, EN55103-2, FCC Class B, ICES, VCCI Class B	
Environmental	Complies with the appropriate requirements of CEC, ENERGY STAR® (ENERGY STAR qualified amplifier), EU code of conduct, RoHS, WEEE	
MTBF	200,000 hours	
Warranty	3 years parts and labor	
Model	Version Description	Part number
XPA 2002-70V	70 V Two Channel Power Amplifier	60-883-02
XPA 2002-100V	100 V Two Channel Power Amplifier	60-883-12

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



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