

# XPA 2003C-70V

THREE CHANNEL COMBO POWER AMPLIFIER  
200 WATTS PER CHANNEL

- Low impedance and 70 volt outputs in a 1U enclosure
- 600 watts rms output power:  
2 x 200 watts @ 4 ohms  
1 x 200 watts @ 70 volts
- ENERGY STAR® qualified
- Professional grade signal-to-noise and THD performance
- Extron Patented CDRS™ - Class D Ripple Suppression
- Convection cooled, fanless operation
- Ultra low inrush current - eliminates need for power sequencing
- 1U full rack enclosure



The Extron XPA 2003C-70V is a power amplifier that 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 unique XPA 2003C-70V three channel power amplifier offers two channels of 200 watts into 4 ohms plus a third channel with 200 watts into a 70 volt line, and is ideal for both speech reinforcement over distributed speaker systems and stereo material through program speakers.



**Extron. Electronics**  
INTERFACING, SWITCHING AND CONTROL

## DESCRIPTION

The Extron XTRA Series **XPA 2003C-70V** is a full rack-sized, three channel power amplifier with dedicated low and high impedance outputs. This professional grade amplifier delivers 600 watts of continuous output power. The XPA 2003C-70V offers two channels of 200 watts into 4 ohms plus a third channel with 200 watts into a 70 volt line, a 100 dB signal-to-noise ratio, and THD of less than 0.1%. This ENERGY STAR qualified amplifier features an Extron exclusive, highly efficient, advanced Class D amplifier design with patented CDRS - Class D Ripple Suppression technology that provides a smooth, clean audio waveform and an improvement in signal fidelity over conventional Class D amplifier designs. This Extron exclusive, high efficiency design generates very little heat and allows the amplifier to be convection cooled.

## FEATURES

- 200 watts rms per channel for low and high impedance speaker systems** – The unique XPA 2003C-70V is designed to support both speech reinforcement over distributed speaker systems and stereo material through program speakers.
- ENERGY STAR qualified** – The XPA 2003C-70V is an ENERGY STAR qualified amplifier and energy efficient product that conserves energy and reduces costs.
- Professional grade signal-to-noise and THD performance** – The XPA 2003C-70V delivers professional grade performance with 100 dB signal-to-noise ratio and THD of less than 0.1%.
- 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 2003C-70V does not require internal fans or vents for cooling, ensuring quiet, reliable operation. It generates substantially less heat than similar power amplifier designs.
- Ultra low inrush current - no need for power sequencing** – Allows many XTRA Series amplifiers to be powered on simultaneously without overloading power circuits. Eliminates the need for power sequencing.
- Power factor correction** – The XPA 2003C-70V features power factor correction technology that smoothes 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.
- 1U full rack enclosure** – With the capability to deliver full-sized amplifier power in one half the size of many comparable power amplifiers, the XPA 2003C-70V reduces rack space requirements for many installations.

## SPECIFICATIONS

AUDIO		
<b>Voltage gain</b>		
Channels 1 and 2 .....	23x (27 dB)	
Channel 3 .....	57x (35 dB)	
<b>Crosstalk</b> .....	>100 dB @ 1 kHz	
AUDIO INPUT		
<b>Number/signal type</b> .....	1 stereo or 2 mono, balanced/unbalanced (channels 1 and 2) 1 mono, balanced/unbalanced (channel 3)	
<b>Connectors</b> .....	(3) 3.5 mm captive screw connectors, 3 pole	
<b>Input sensitivity</b> .....	+4 dBu (1.23 Vrms)	
AUDIO OUTPUT		
<b>Number/signal type</b> .....	1 stereo, 8 ohms direct 1 mono, 70 V line	
<b>Connectors</b> .....	(1) 5 mm screw lock captive screw connector, 4 pole (1) 5 mm screw lock captive screw connectors, 2 pole	
<b>Load impedance</b>		
Channel 1 or 2 .....	4 ohms minimum	
Channel 3 .....	25 ohms minimum	
<b>Amplifier type</b> .....	Class D	
<b>Output power</b>		
Channel 1 or 2 (8 ohm) .....	100 watts rms per channel, 1 kHz, <0.05% THD	
Channel 1 or 2 (4 ohm) .....	200 watts rms per channel, 1 kHz, <0.05% THD	
Channel 3 (70 V output) .....	200 watts rms per channel, 70 V, 1 kHz, <0.1% THD	
<b>Frequency response</b> .....	20 Hz to 20 kHz, ±1 dB	
<b>THD + Noise</b>		
Channel 1 or 2 .....	0.05% @ 20 Hz to 20 kHz, 8 ohms, 3 dB below clipping	
Channel 3 .....	<0.1% @ 1 kHz, 3 dB below clipping	
<b>S/N</b> .....	100 dB, 20 Hz - 20 kHz, unweighted	
<b>High pass filter</b> .....	80 Hz, 12 dB per octave rolloff for 70 V line output (switch selectable)	
CONTROL/REMOTE — AMPLIFIER		
<b>Control port</b> .....	(1) 3.5 mm captive screw connector, 2 pole	
GENERAL		
<b>Power</b> .....	100 VAC to 240 VAC, 50-60 Hz, internal	
Quiescent .....	30 watts	
Typical .....	85 watts (1/8 power [pink noise] at 8 ohms)	
Standby .....	<1 watt (triggered by contact closure or after 1 hour with no signal)	
<b>Cooling</b> .....	Convection, no vents, with heat sinks on the sides	
<b>Thermal dissipation</b>		
Standby .....	<1 watt (3 BTU/hr)	
Idle .....	30 watts (102 BTU/hr)	
1/8 power (pink noise) .....	4 ohms (x2) + 70 V: 47 watts (160 BTU/hr) 8 ohms (x2) + 70 V: 37 watts (124 BTU/hr)	
<b>Protection</b> .....	Clip limiting, thermal, short circuit, DC output	
<b>Mounting</b>		
Rack mount .....	Yes, with included mounting brackets	
<b>Enclosure dimensions</b> .....	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.	
<b>Product weight</b> .....	8.0 lbs (3.6 kg)	
<b>Regulatory compliance</b>		
Safety .....	CE, c-UL, UL Meets UL 60065, IEC 60065, and BSEN 60065 for A/V equipment.	
EMI/EMC .....	CE, CISPR 22 Class B, C-tick, FCC Class B, ICES, VCCI Class B	
Environmental .....	Complies with the appropriate requirements of CEC, EU code of conduct, RoHS, WEEE	
<b>Warranty</b> .....	3 years parts and labor	
<b>Model</b>	<b>Version Description</b>	<b>Part number</b>
2003C-70V	Three Channel Combo Power Amplifier .....	60-848-01

Specifications are subject to change without notice.



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