NetPA

AUDIO POWER AMPLIFIERS WITH DANTE







The Extron NetPA 502 AT and NetPA 1001-70V AT are half rack 1U, convection cooled power amplifiers that feature Dante™ audio networking. These professional grade amplifiers are ENERGY STAR® qualified and feature an Extron exclusive, highly efficient Class D amplifier design. NetPA™ amplifiers are ideal for amplifying audio content from remote Dante-equipped audio processors in low or high impedance speaker systems.

- Receives input signals via the Dante audio network
- NetPA 502 AT:
 2 x 50 watts @ 4 ohms, or
 2 x 25 watts @ 8 ohms
- NetPA 1001-70V AT: 1 x 100 watts @ 70 volts
- ► ENERGY STAR® qualified amplifier
- Dante audio networking provides a wide range of expansion capabilities
- ▶ Dante audio to line level outputs
- Professional grade signal-to-noise and THD+N performance
- Extron Patented CDRS[™] Class D Ripple Suppression
- ▶ Convection cooled, fanless operation
- Ultra low inrush current eliminates need for power sequencing
- Rack-mountable 1U, half rack width enclosure



DESCRIPTION

The Extron NetPA 502 AT and NetPA 1001-70V AT are half rack 1U, convection cooled power amplifiers featuring Dante digital audio networking. They deliver two channels of 50 watts into 4 ohms, or a single channel of 100 watts at 70 volts. NetPA amplifiers receive audio from Dante-enabled devices over a standard local area network, allowing for decentralized distribution of audio throughout a building. In addition to amplifying incoming Dante audio, NetPA amplifiers feature line level outputs that can simultaneously feed an additional speaker zone or audio system. They are ENERGY STAR qualified amplifiers with an Extron exclusive, highly efficient, advanced Class D amplifier design. They also feature patented CDRS™ - Class D Ripple Suppression that provides improved signal fidelity over conventional Class D amplifiers.

NetPA 502 AT

The NetPA 502 AT two channel amplifier delivers 50 watts rms per channel into 4 ohms or 25 watts rms per channel into 8 ohms. The NetPA 502 AT is ideal for amplification of voice or program content to stereo speakers, or two sets of 8 ohm ceiling speakers in a dual zone application. The professional grade amplifier also features greater than 90 dB signal-to-noise ratio and less than 0.1% THD+N.

NetPA 1001-70V AT

The NetPA 1001-70V AT mono amplifier delivers 100 watts rms for 70 volt high impedance speaker systems in voice reinforcement and distributed audio applications. The professional grade amplifier features greater than 90 dB signal-to-noise ratio and less than 0.1% THD+N. The NetPA 1001-70V AT also includes a switch selectable, high pass filter that rolls off frequencies below 80 Hz to prevent saturation of speaker transformers.

Dante Audio Networking

Dante enables audio system scalability over a local area network using standard Internet protocols. The family of Dante-enabled products from Extron work together as part of a complete networked audio system solution and integrate with other Dante-enabled products to create efficient, scalable system designs. They accommodate a range of audio routing needs in a variety of applications.

Setting up a network of Extron Dante-enabled products, including the NetPA amplifiers, requires Dante Controller software. Dante Controller is used to easily assign an output from a Dante-equipped device, such as the Extron DMP 128 AT, to an input on a NetPA amplifier.

Professional Integration Features

The NetPA 502 AT and NetPA 1001-70V AT can output incoming Dante channels as fixed line level signals to simultaneously feed the audio into another speaker zone or audio system. Both amplifiers also include recessed, detented level controls located on the rear panel to prevent tampering. These controls facilitate adjustment of audio system gain structure, or setting an individual level for each zone. Additionally, the NetPA amplifiers include multiple protection circuits that momentarily activate when an abnormal condition, such as overheating, is detected. An advanced, automatic clip limiter protects speakers from clipping distortion.

FEATURES

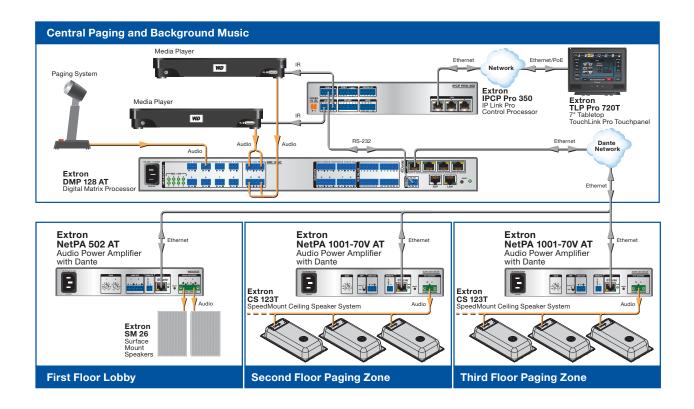
- ▶ Receives input signals via the Dante audio network Select one or two channels from remote digital signal processors on the Dante network to be brought into the NetPA for amplification.
- ▶ ENERGY STAR qualified amplifier The NetPA amplifiers are ENERGY STAR qualified amplifiers and energy efficient products that conserve energy and reduce costs.
- Dante audio networking provides a wide range of expansion capabilities – Dante-equipped audio products provide scalability for creating larger audio systems over a local area network using standard Internet protocols.
- ▶ Dante audio to line level outputs The NetPA provides fixed line level outputs that allow the incoming Dante audio to be delivered to additional speaker zones, or another audio system such as an ALS assistive listening system.
- ▶ Professional grade signal-to-noise and THD+N performance The NetPA delivers professional grade performance with greater than 90 dB signal-to-noise ratio and THD+N 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.
- Convection cooled, fanless operation The NetPA does not require internal fans or vents for cooling, ensuring quiet, reliable operation.
- ▶ Ultra low inrush current Allows multiple NetPA amplifiers to be powered simultaneously without overloading power circuits. This eliminates the need for power sequencing.
- Rack-mountable 1U, half rack width enclosure
- Auto power-down with fast power-up The NetPA meets ENERGY STAR qualification requirements with an auto powerdown feature that automatically places the amplifier into standby after 25 minutes of inactivity, dramatically reducing power consumption. It quickly returns to full power status in less than one second upon signal detection.
- Rear panel recessed, detented level controls
- Automatic clip limiter Detects actual onset of clipping by comparing input and output waveforms.
- Multiple protection circuits Activate during output shorts, thermal overload, or DC faults to prevent damage to the amplifier and speakers.
- Remote standby port Enables the NetPA to be remotely powered down when not in use, reducing operating cost.
- ▶ High pass filter for high impedance model This switch selectable filter, available on the 70 volt model, rolls off frequencies below 80 Hz to prevent saturation of speaker transformers.
- Front-mounted signal and protection indication LEDs Provides convenient indication of input signal presence and protection circuit activation.
- ▶ Link LED indicator for Dante port Provides visual indication of synchronization to the master clock on the Dante network.
- Highly reliable, energy efficient internal universal power supply

SPECIFICATIONS

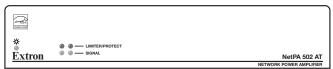
Number/signal type NetPA 502 AT NetPA 1001-70V AT Connectors Maximum level AUDIO PROCESSING D/A conversion AT PORTS — AUDIO TRANSPOR Transmission type Connectivity Inputs NetPA 502 AT NetPA 1001-70V AT Audio format Latency	1 stereo or 2 mono 1 mono 1 RJ-45 0 dBFS (digital) 24 bit, 48 kHz sampling TT Dante 1 RJ-45 connector, 1-port 100 Mbps to Dante interface 2 channels Rx 1 channel Rx
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Inputs NetPA 502 AT NetPA 1001-70V AT Audio format	2 channels Rx
NetPA 502 AT NetPA 1001-70V AT Audio format	=
NetPA 1001-70V AT Audio format	=
Audio format	1 channel Rx

Latency	24-bit, 48 kHz sampling, uncompressed
	Deterministic, based on user selection: 2.0 ms (default), 5.0 ms
AUDIO LINE OUTPUT	
Number/signal type	
NetPA 502 AT	2 channels, balanced/unbalanced
NetPA 1001-70V AT	1 channel, balanced/unbalanced
Connectors	
NetPA 502 AT	(1) 3.5 mm captive screw connector, 6 pole
NetPA 1001-70V AT	(1) 3.5 mm captive screw connector, 3 pole
Impedance	50 ohms unbalanced, 100 ohms balanced
Maximum level (at 0 dBFS digital input)	>+15 dBu balanced; +9 dBu unbalanced
Frequency response	20 Hz to 20 kHz, ±1 dB
THD + Noise	0.03% @ 1 kHz at nominal level,
	0.3% @ 20 kHz at nominal level
S/N	>90 dB, at maximum output (unweighted)
AUDIO SPEAKER OUTPUT	
Number/signal type NetPA 502 AT	O channels A or O chms
NetPA 1001-70V AT	2 channels, 4 or 8 ohms
	1 channel, 70 V
Connectors	(1) F 00 mm covery last continue covery composter. A nata
NetPA 502 AT	(1) 5.08 mm screw lock captive screw connector, 4 pole
NetPA 1001-70V AT	(1) 5.08 mm screw lock captive screw connector, 2 pole
Load impedance	A alama maining una
NetPA 502 AT	4 ohms minimum
NetPA 1001-70V AT	50 ohms minimum
Amplifier type	Class D
Output power	FO walls was new shannel Ashare dille O 400 THO
NetPA 502 AT	50 watts rms per channel, 4 ohms, 1 kHz, 0.1% THD
No+DA 1001 701/AT	25 watts rms per channel, 8 ohms, 1 kHz, 0.1% THD
NetPA 1001-70V AT	100 watts rms, 70 V, 1 kHz, 0.1% THD
Frequency response	00 II- to 00 III 4/ 0 dD @ 4
NetPA 502 AT	20 Hz to 20 kHz, +1/-3 dB @ 1 watt
NetPA 1001-70V AT	20 Hz to 20 kHz, +1/-3 dB @ 1 watt
THD + Noise	<0.1% @ 1 kHz, 3 dB below clipping
	>90 dB, 20 Hz - 20 kHz, unweighted
S/N	
S/N High pass filter	0011-40-10
S/N	7 1
S/N High pass filter	$80\ Hz,12\ dB$ per octave rolloff for $70\ V$ line output (switch selectable)
S/N High pass filter	7 1

GENERAL			
Power supply		Internal	
	Input: 100-240 VAC, 50-60 Hz, 0.5 A		
Power consumption	at 115 VAC, 60 Hz		
Typical (1/8 power)			
NetPA 502 AT		4 ohms (x2): 22.3 watts	
		8 ohms (x2): 14.6 watts	
NetPA 1001-70V AT		70 V (x1): 22.7 watts	
Quiescent			
NetPA 502 AT		7.4 watts	
NetPA 1001-70V AT		7.5 watts	
Standby		<2 watts (triggered after 25 minutes [±5 m	inutes]
-		with no signal)	
Power consumption	at 230 VAC, 50 Hz		
Typical (1/8 power)			
NetPA 502 AT		4 ohms (x2): 24.2 watts	
		8 ohms (x2): 16.9 watts	
NetPA 1001-70V AT		70 V (x1): 24.2 watts	
Quiescent			
NetPA 502 AT		9.9 watts	
NetPA 1001-70V AT		9.0 watts	
Standby		<2 watts (triggered after 25 minutes [±5 m	inutes]
		with no signal)	
Cooling		Convection, no vents, with internal heat sink	(
Protection		Clip limiting, thermal, short circuit, DC output	
Furniture mount		Yes, with optional under-desk mounting kit	
Enclosure dimensio	ns	1.7" H x 8.7" W x 9.5" D (1U high, half rack	(wide)
		(4.3 cm H x 22.1 cm W x 24.1 cm D)	
Product weight			
NetPA 502 AT		2.6 lbs (1.2 kg)	
NetPA 1001-70V AT		2.6 lbs (1.2 kg)	
Shipping weight			
NetPA 502 AT		5 lbs (2 kg)	
NetPA 1001-70V AT		5 lbs (2 kg)	
Regulatory complia	nce		
Safety		CE, c-UL, UL	
		Meets UL 60065, IEC 60065, and BSEN 60	065 for AV
		equipment.	
Environmental		Complies with the appropriate requirements	
		STAR® (ENERGY STAR qualified amplifier), F	RoHS, WEEE.
Model	Version Description		Part number
NetPA 502 AT	Two Channel Amp with D	Nante - 50 Watts/Ch	60-1500-01
	70 V Mono Amp with Da		60-1501



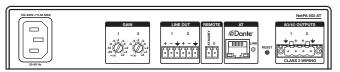
PANEL DRAWINGS



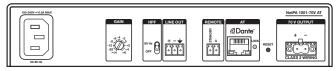
NetPA 502 AT - Front



NetPA 1001-70V AT - Front



NetPA 502 AT - Back



NetPA 1001-70V AT - Back