Extron

Specifications

NetPA U 2002 SB

Audio system

Voltage gain	
Line outputs	Unbalanced output: -6 dB Balanced output: 0 dB
Frequency response	
Through DSP	20 Hz to 20 kHz, ±0.5 dB
Through amplifier	20 Hz to 20 kHz, ±1 dB
THD + Noise	
Through DSP	<0.01% @ 1 kHz at maximum output level
Through amplifier	0.1% @ 1 kHz at 3 dB below clipping
S/N	
Mic/Line In to Line Out	90 dB, 20 Hz to 20 kHz at maximum output (unweighted)
Mic/Line In to Speaker Out	90 dB, 20 Hz to 20 kHz at maximum output (unweighted)
Mic/Line In to Digital Out	90 dB, 20 Hz to 20 kHz at maximum output (unweighted)
Digital in to line out	100 dB, 20 Hz to 20 kHz at maximum output (unweighted)
Digital in to speaker out	100 dB, 20 Hz to 20 kHz at maximum output (unweighted)
Crosstalk	<-90 dB @ 1 kHz, fully loaded
Volume control	-100 dB to 0 dB (control 0 to 100 in 0.1 dB steps)

Audio input (Mic/Line Inputs)

Number/signal type	4 mono, mic/line, balanced/unbalanced
Connectors	(2) 3.5 mm captive screw connectors, 6-pole, mono, balanced/unbalanced
Impedance	>10k ohms balanced/unbalanced
Nominal level	-60 dBV, +4 dBu, -10 dBV adjustable via input gain
Maximum level	+21 dBu at rated THD+N when input gain is set to 0 dB
Equivalent input noise	<-120 dBV (1 µVrms) at 45 dB input gain
CMRR	>60 dB typical
Input gain adjustment	-18 dB to +60 dB in 0.1 dB steps, adjustable per input

Audio line output

Number/signal type	2 mono, line, balanced/unbalanced
Connectors	(1) 3.5 mm captive screw connector, 6-pole
Impedance	100 ohms balanced, 50 ohms unbalanced
Gain error	±0.1 dB channel to channel
Maximum level (Hi-Z)	>+21 dBu balanced; +15 dBu unbalanced

Audio processing

D/A conversion	24 bit, 48 kHz

AT port — Audio Transport

Transmission type	Dante/AES-67, software selectable
Connectivity	1 RJ-45 connector, 1-port 100 Mbps to Dante interface
Inputs	2 channels Rx
Outputs	2 channel Tx
Audio format	24-bit uncompressed, selectable at 44.1, 48, 88.2, and 96 kHz sampling rate
Latency	Deterministic, based on user selection: 1.0 ms (default), 2.0 ms, 5.0 ms

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu

Audio speaker output

Number/signal type..... 2 channels, 4 or 8 ohms; or 1 bridged mono, 8 ohms, 16 ohms, 70 V, or 100 V
Connectors..... (1) 5 mm screw lock captive screw connector, 4-pole

NOTE: These connectors accept wires of 22 AWG to 12 AWG

Load impedance
- Stereo mode (8 ohm)..... 8 ohms minimum
- Stereo mode (4 ohm)..... 4 ohms minimum
- Bridged mono mode (8 ohm)... 8 ohms minimum
- Bridged mono mode (16 ohm). 16 ohms minimum
- Bridged mono mode (70V)..... 12.5 ohms minimum
- Bridged mono mode (100V)..... 25 ohms minimum

Amplifier type..... Class D

Output power
- Stereo mode ..... 200 watts per channel, 4 or 8 ohms, 1 kHz, <0.1% THD
- Bridged mono mode (Low impedance)..... 400 watts per channel, 8 or 16 ohms, 1 kHz, <0.1% THD
- Bridged mono mode (High impedance) ..... 400 watts per channel, 70 V or 100 V, 1 kHz, <0.1% THD

High pass filter
- Bridged mono mode (70V or 100V) ..... 80 Hz, 12 dB per octave rolloff (default, changeable via software)

Control/remote

Control port ..... (1) 3.5 mm captive screw connector, 5 pole

Serial
- Serial host control port ..... 1 bidirectional RS-232
- Baud rate and protocol..... 38,400 baud, 8 data bits, 1 stop bit, no parity
- Pin configuration..... Pin 1 = Tx, Pin 2 = Rx, Pin 3 = GND

Standby
- Standby power control ..... Contact Closure
- Pin configuration..... Pin 4 = Gnd, Pin 5 = Standby

USB control port..... 1 rear panel female USB mini B
USB standards ..... USB 2.0, high speed
Ethernet host port..... 1 RJ-45 female connector
Ethernet data rate..... 10/100 Base-T
Program control..... Configuration program for Windows®
Extron Simple Instruction Set (SIS™)

General

Power supply ..... Internal
Input: 100-240 VAC, 50-60 Hz, 1.0 A

Power consumption and thermal dissipation

		115 VAC, 60 Hz				230 VAC, 50 Hz			
		AC Line Current	AC Power Consumed	Thermal Dissipation		AC Line Current	AC Power Consumed	Thermal Dissipation	
Condition		A	W	W	BTU/hr	A	W	W	BTU/hr
Active (1/8 power), all channels driven	Stereo 8 Ω	0.6	67.2	17.2	59	0.4	66	16	55
	Stereo 4 Ω	0.7	70.5	20.5	70	0.4	69.4	19.4	66
	Bridged 8 Ω	0.7	70	20	68	0.4	68.7	18.7	64
	Bridged 70 V	0.6	67.7	17.7	60	0.4	66.5	16.5	56
	Bridged 100 V	0.6	65	15	51	0.4	63.7	13.7	47
Quiescent (idle)		0.2	8.9	8.9	30	0.2	8.9	8.9	30
Standby		<0.1	<4	<4	<14	<0.1	<4	<4	<14

Temperature/humidity
- Storage ..... -40 to +158 °F (-40 to +70 °C) / 10% to 90%, non-condensing
- Operating ..... +32° to +122° F (0° to +50° C) / 10% to 90%, non-condensing
- Cooling ..... Convection, no vents

Protection ..... Clip limiter, thermal, short circuit, DC output

Indication ..... Limiter/Protect LED indicates the onset of clip limiting, thermal cycling, or a short circuit.
Power LED indicates power state, DC output protection (see NetPA U 2002 SB User Guide for details).

Mounting
- Rack mount ..... Yes, with included brackets or optional 1U rack shelf

Enclosure type ..... Metal

Enclosure dimensions ..... 1.7" H x 8.7" W x 10.5" D (1U high, half-rack wide)
(43 mm H x 221 mm W x 267 mm D)

Product weight ..... 3.8 lbs (1.7 kg)

Regulatory compliance
- Safety ..... CE, c-UL, UL. Meets UL 60065, IEC 60065, and BSEN 60065 for AV equipment
- EMI/EMC ..... CE, C-tick, EN 55103-1, EN 55103-2, FCC Class B, ICES, VCCI Class B
- Environmental ..... Complies with the appropriate requirements of ENERGY STAR® (ENERGY STAR qualified amplifier), RoHS, WEEE.

Product warranty ..... 3 years parts and labor

Everlast power supply warranty ..... 7 years parts and labor

NOTE: All nominal levels are at ±10%.

NOTE: Specifications are subject to change without notice.

NOTE: Shipping weights and dimensions are available at **www.extron.com**.

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