



## Specifications • NAV 10E 101 (Continued)

### Audio

Gain.....	Unbalanced output: 0 dB, balanced output: +6 dB
Frequency response .....	20 Hz to 20 kHz, $\pm 0.5$ dB
THD + Noise.....	<0.1% @ 20 Hz to 20 kHz at nominal level
S/N.....	>90 dB, at maximum output, balanced (unweighted)
Crosstalk .....	$\leq -80$ dB @ 1 kHz, fully loaded
Stereo channel separation.....	>80 dB @ 1 kHz
Sampling rates.....	32, 44.1, 48 kHz
Bit depths .....	16, 20, 24 bit

### Audio input

Number/signal type.....	1 analog stereo, unbalanced or balanced 1 digital stereo, de-embedded from HDMI
Connectors.....	(1) 3.5 mm captive screw connector, 5 pole 1 female HDMI type A (shared with video input)
Supported formats.....	LPCM (2 channel), analog stereo input
Impedance.....	$\geq 10$ kohms unbalanced, $\geq 20$ kohms balanced
Nominal level.....	+4 dBu, -10 dBV configurable
Maximum level.....	+21 dBu balanced, +15 dBV unbalanced
Gain adjustment range.....	Adjustable, -18 dB to +10 dB

**NOTE:** 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV  $\approx$  2 dBu

### Audio output stream

Number/signal type.....	1 audio over IP LPCM 1 audio over IP AES67*
Connector.....	1 SFP+ connector (SM or MM)

**NOTE:** \*AES 67 specifications are compatible with the Extron DSPs.

### Network interconnection (NAV)

Number/signal type.....	2 fiber optic
Connectors.....	(1) 10G SFP+ connector, 2 LC connectors
Termination .....	MDI (SFP+)
Ethernet standards .....	10 Gb Ethernet 802.3ae, 10GBase-LR (SFP+) SM, and 10GBase-SR (SFP+) MM
Protocols	
Streaming.....	SRTP (AES-128) on video and audio
Transport.....	Multicast UDP
All supported.....	DHCP, HTTPS, IGMPv2/v3, IPv4, PTPv2, QoS, SNMP (v2c), SSH, TCP, UDP, VLAN tagging
Security .....	AES-256, 802.1x, Active Directory authentication
Signal transmission distance	
Singlemode .....	10 km (6.25 miles) with singlemode (SM) cables with 10GBASE-LR (SFP+)
Multimode .....	400 m (1312') with 50/125 $\mu$ m OM4 cables with 10GBase-SR (SFP+)

**NOTE:** Operating distance is approximate. These are typical maximum distances that may vary depending on factors such as fiber type, fiber bandwidth, connector splicing, losses, modal or chromatic dispersion, environmental factors, and kinks.

Nominal peak wavelength .....	850 nm for multimode, 1310 nm for singlemode
Transmission power	
Singlemode .....	-5.2 dBm, minimum
Multimode .....	-3.3 dBm, minimum
Maximum receiver sensitivity	
Singlemode .....	-12.6 dBm, maximum

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Multimode .....	-13.0 dBm, maximum
Optical loss budget	
Singlemode .....	7.4 dB, maximum
Multimode .....	9.7 dB, maximum

### Communications - external devices

#### Serial

Quantity/type.....	1 bidirectional RS-232
Connector .....	(1) 3.5 mm captive screw connector, 5 pole (shared with IR port)
Baud rate and protocol.....	300 to 115200 baud (9600 baud = default) 8 (default) or 7 data bits 1 (default) or 2 stop bits no parity (default), even or odd parity
Pin configuration.....	Tx, Rx, and Gnd

#### IR control

Quantity/type.....	1 TTL level (0 to 5 V) infrared (carrier and non-carrier) up to 300 kHz
Connector .....	(1) 3.5 mm captive screw connector, 5-pole (shared with RS-232)
Pin configuration.....	S = signal and G = Gnd
IR output carrier frequency .....	30 kHz to 300 kHz

CEC control ..... 1 HDMI type A loop through connector

#### Contact closure

Quantity/type.....	1 contact closure input
Connector .....	(1) 3.5 mm captive screw connector, 2 pole (shared with tally)
Input voltage range.....	0 to 5 VDC, clamped at +5.1 VDC
Pin configuration.....	C = contact input (+5 VDC) (Ground is supplied by HDMI connector on an Extron Show-Me cable)

#### Tally port

Quantity/type.....	1 tally output
Connector .....	(1) 3.5 mm captive screw connector, 2 pole (shared with contact closure)
Pin configuration.....	T = tally output (GND) (+5 VDC is supplied by HDMI connector on an Extron Show-Me cable)

#### USB configuration port

Quantity/type.....	1 front panel USB mini-B
Standard .....	Ethernet over USB

### General

Power supply .....	External Input: 100-240 VAC, 50-60 Hz Output: TBD
Power consumption	
Device .....	TBD watts nominal, TBD watts max.
Device and power supply .....	TBD watts nominal, TBD watts max.
Temperature/humidity .....	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 85%, noncondensing
Cooling .....	Fan, air flows from top to rear
Thermal dissipation	
Device .....	TBD BTU/hr
Device and power supply .....	TBD BTU/hr
Mounting	
Rack mount.....	Yes, with optional rack shelf
Furniture mount .....	Yes, with optional under desk mounting kit
Enclosure type .....	Metal
Enclosure.....	1.00" H x 8.75" W x 6.00" D (half rack wide) (25 mm H x 222 mm W x 152 mm D)
Product weight .....	1.4 lbs (0.7 kg)

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Regulatory compliance.....	CE, c-UL UL,C-tick, FCC Class A, ICES, VCCI, Complies with the appropriate requirements of RoHS, WEEE
Product warranty .....	3 years parts and labor
Everlast power supply warranty.....	7 years parts and labor

**NOTE:** All nominal levels are at  $\pm 10\%$ .

**NOTE:** Specifications are subject to change without notice.

**NOTE:** Shipping weights and dimensions are available at [www.extron.com](http://www.extron.com).

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