

Specifications • NAV E 501 (Continued)

Audio

Gain.....	Analog to analog: -6.5 dBu balanced, -12.5 dBu unbalanced HDMI to analog: -5.3 dBu balanced, -11.3 unbalanced
Frequency response	20 Hz to 20 kHz, ± 0.5 dB
THD + Noise.....	<0.1% @ 20 Hz to 20 kHz at nominal level
S/N.....	Analog to digital: >90 dB, at full scale output, unweighted Digital to analog: >90 dB, at maximum balanced output, unweighted Analog to analog: >90 dB, at maximum balanced output, unweighted
Crosstalk	≤ -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 audio
Impedance.....	≥ 10 k ohms unbalanced, ≥ 20 k ohms balanced
Nominal level.....	+4 dBu, -10 dBV configurable
Maximum level.....	+21 dBu balanced, +15 dBu 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 RJ-45 connector

NOTE: *AES67 specifications are compatible with the Extron DSPs.

Network interconnection (NAV)

Connector type.....	1 RJ-45 female
Ethernet standards	1GbE (802.3ab), 10/100/1000 Base-T, half/full duplex with autodetect
Termination	Auto-MDIX, TIA/EIA T568B
Power over Ethernet (PoE).....	Complies with IEEE 802.3at Type 2 (PoE+), class 4
Protocols	
Streaming.....	SRTP (AES-128) on video, audio, and USB
Transport.....	Multicast UDP
All supported	DHCP, HTTPS, IGMPv2/v3, IPv4, PTPv2, QoS, SSH, TCP, UDP
Security	AES-256, 802.1X, Active Directory authentication
Signal transmission distance.....	330' (100 m) using CAT 5e/6/6a/7 cables

Network extension (EXT)

Connector.....	1 RJ-45 female
Ethernet standards	1Gbe, (802,3ab), 10/100/1000 Base-T, half/full duplex with autodetect
Termination	Auto-MDIX, TIA/EIA T568B
Signal transmission distance.....	330' (100 m) using CAT-5e/6/6a/7 cables

Specifications • NAV E 501 (Continued)

USB extension (USB)

USB device port — Host mode configuration (default mode)	
Number/signal type	1 USB 2.0 high speed
Connector	1 USB type C female
Power.....	N/A
Maximum built-in USB hubs	1
Minimum built-in USB hubs	0
Optional built-in USB hubs	1 (peripheral emulation enabled)
USB device port configuration — Device mode configuration	
Number/signal type	1 USB 2.0 high speed
Connector	1 USB type C female
Power.....	5V DC, 500mA (when in device mode)
Maximum built-in USB hubs	0
Minimum built-in USB hubs	0
Optional built-in USB hubs	0
Host support.....	xHCI (USB 3.0), EHCI (USB 2.0), OHCI/UHCI (USB 1.1)
Data rates	Low speed (1.5 Mbps), full speed (12 Mbps), high speed (480 Mbps)
Traffic types.....	Bulk, control, interrupt, and isochronous
Network switch hops	5 hops (typical)

NOTE: Network switch hop limitations may apply. Typical limit is up to five network switches.

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
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

Specifications • NAV E 501 (Continued)

General

Power supply External
Input: 100-240 VAC, 50-60 Hz
Output: 12 VDC, 2.0 A, 24 watts

NOTE: Each 1G endpoint can be powered either locally by an external power supply or remotely using optional PoE+.

Power consumption
Device 23.6 watts
Device and power supply 27.3 watts
PoE Complies with IEEE 802.3at type 2 (PoE+), class 4
Temperature/humidity Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing
Operating: +32 to +104 °F (0 to +40 °C) / 10% to 85%, noncondensing
Cooling Fan, air flows from top to rear
Thermal dissipation
Device 71.7 BTU/hr
Device and power supply 83.7 BTU/hr
Device with PoE 82.4 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*)
(Depth excludes connectors)
Product weight 1.5 lbs (0.68 kg)
Regulatory compliance CE, c-UL UL, C-tick, FCC Class A, ICES, KC, 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 ±10%.

NOTE: Specifications are subject to change without notice.

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

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