

Specifications • NAV E 511 (Continued)

Video output stream

Number/signal type.....	1 PURE3 digital video over IP
Connector.....	1 SFP connector (SM or MM)

Audio

Gain.....	Analog to Analog: -6.5dBu balanced, -12.5 unbalanced HDMI to Analog: -5.3dBu 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: >90dB, 20 Hz to 20kHz, at Full scale output, unweighted Digital to Analog: >90dB, 20 Hz to 20kHz, at Maximum balanced output, unweighted Analog to Analog: >90dB, 20 Hz to 20kHz, 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 kohms unbalanced, ≥ 20 kohms 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 AES 67*
Connector.....	1 SFP connector (SM or MM)

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

Network interconnection (NAV)

Number/type.....	2 fiber optic
Connector type.....	(1) 1G SFP connector (SM or MM), supporting 2 LC fiber connectors
Ethernet standards	1GbE (802.3z), 1000 Base-LX (SFP) SM, 1000 Base-SX (SFP) MM
Termination	MDI (SFP)
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	
Singlemode.....	1000Base-LX (SFP) SM - up to 10km (6.25 miles)
Multimode	1000Base-SX (SFP) MM - up to 550m (1804 feet)
Nominal peak wavelength	850 nm for multimode, 1310 nm for singlemode

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Transmission power	
Singlemode	TBD dBm, minimum
Multimode	TBD dBm, minimum
Maximum receiver sensitivity	
Singlemode	TBD dBm, maximum
Multimode	TBD dBm, maximum
Optical loss budget	
Singlemode	TBD dB, maximum
Multimode	TBD dB, maximum

Network extension (EXT)

Connector	1 RJ-45 female
Termination	Auto-MDIX, TIA/EIA T568B
Ethernet standards	1Gbps (802.3ab), 10/100/1000 Base-T, half/full duplex with autodetect
Signal transmission distance	330' (100 m) using CAT-5e/6/6a/7 cables

USB extension (USB)

Quantity/type	1 USB type-C port
Power	200 mA (max)
Configuration	Host (default) or device
Host support	xHCI (USB 3.0), EHCI (USB 2.0), OHCI/UHCI
Data rates	Low speed (1.5 Mbps), full speed (12 Mbps), high speed (480 Mbps)
Traffic types	Bulk, control, interrupt, and isochronous
Device usage	Min: 0 (host/per emulation off) Max: 2 (all emulation on)

NOTE: Hub usage is dependent on the system configuration.

Network switch hops	5 hops (typical)
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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
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)

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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 +104 °F (0 to +40 °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	TBD lbs (TBD kg)
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.

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