

Specifications

NAV E 101 DTP

TRUE 4K specification

Max. 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max. Bit Depth per Color
4096 x 2160 at 30 Hz	4:4:4	8 bit
3840 x 2160 at 30 Hz		
4096 x 2160 at 60 Hz	4:2:0	
3840 x 2160 at 60 Hz		

Frame rate¹ 24, 25, 30, 50, or 60 fps
 Chroma sampling¹ 4:4:4, 4:2:2, or 4:2:0
 Color bit depth¹ 8 bits per color
 Signal type DVI v1.0, HDMI v1.4, HDCP v1.4 and v2.3
 Max. video data rate 10.2 Gbps (3.4 Gbps per color)

NOTE: ¹Subject to the maximum data rate limit. Use our calculator at www.extron.com/8Kdata rate to determine video parameters supported by this data rate.

Video input and loop through

NOTE: *Appropriate DVI-D to HDMI or DisplayPort to HDMI cables or adapters are required for DVI or DisplayPort signal loop-through.

Number/signal type 1 DTP
 1 digital HDMI video (loop through)
 Connectors 1 female RJ-45 (input)
 1 female HDMI type A (loop through)
 Resolution range Up to 2560x1600* @ 60 Hz or
 4K (4096x2160) @ 30 Hz, UHD (3840x2160) @ 30 Hz,
 4K/UHD @ 60 Hz with 4:2:0 chroma subsampling
 (* reduced blanking)
 Standards DVI v1.0, HDMI v1.4, HDCP v1.4/v2.3

Video processing

Digital sampling 8 or 10 bits per color; 300 MHz pixel clock maximum
 Compression PURE3®
 Bit rate 250 Mbps to 900 Mbps
 Latency <1 frame (encode/decode)**

NOTE: **Indicates minimum end-to-end latency. Network and video processing dependencies may apply.

Video output stream

Number/signal type 1 PURE3 digital video over IP
 Connector 1 RJ-45 connector

Specifications • NAV E 101 DTP (Continued)

Audio

Gain	
Analog to analog	Unbalanced output: -12.5 dBu, balanced output: -6.5 dBu
HDMI to analog	Unbalanced output: -11.3 dBu, balanced output: -5.3 dBu
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 DTP (de-embedded HDMI - PCM only or remote unbalanced analog)
Connectors	1 RJ-45 female (shared with video input)
Supported formats.....	LPCM (2 channel), analog stereo audio
Impedance.....	$\geq 10k$ ohms unbalanced, $\geq 20k$ 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
Ethernet standards	1GbE (802.3ab), 10/100/1000 Base-T, half/full duplex with autodetect
Termination	Auto-MDIX, TIA/EIA T568B
Protocols	
Streaming.....	SRTP (AES-128) on video and audio
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

Specifications • NAV E 101 DTP (Continued)

Communications - external devices

Serial

Quantity/type.....	1 bidirectional RS-232
Connector	1 RJ-45 DTP pass-through SPD port (shared with IR and CEC)
Baud rates.....	300 to 115200 baud (9600 = default)
Protocol.....	8 (default) or 7 data bits 1 (default) or 2 stop bit no parity (default), even or odd parity

IR control

Quantity/type.....	1 unidirectional infrared
Connector	1 RJ-45 DTP pass-through SPD port (shared with RS-232 and CEC)
IR output carrier frequency	30 kHz to 60 kHz

USB configuration port

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

General

Power supply	Internal Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 4.0A, 48 watts
Power consumption	
Device and power supply	35.13 watts
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 front to rear
Thermal dissipation	
Device and power supply	110.0 BTU/hour
Mounting	
Rack mount.....	Yes, with optional rack shelf
Furniture mount	Yes, with optional under desk mounting kit
Enclosure type	Metal
Enclosure.....	1.66" H x 8.75" W x 10.5" D (half rack wide) (42 mm H x 222 mm W x 267 mm D)
Product weight	2.85 lbs (1.3 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 ±10%.

NOTE: Specifications are subject to change without notice.

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

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