

Specifications

NAV E 401 D

TRUE 4K specification

Max. 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max. Bit Depth per Color
4096 x 2160 at 60 Hz ¹	4:4:4	8 bit
3840 x 2160 at 60 Hz		
4096 x 2160 at 30 Hz		10 bit
3840 x 2160 at 30 Hz		
4096 x 2160 at 60 Hz	4:2:0	
3840 x 2160 at 60 Hz		

Frame rate ²	24, 25, 30, 50, or 60 fps
Chroma sampling ²	4:4:4, 4:2:2, or 4:2:0
Color bit depth ²	8, or 10 bits per color
Signal type.....	DVI v1.0, HDMI v1.4 and v2.0, HDCP v1.4 and v2.3
Max. video data rate	18 Gbps (6 Gbps per color)

NOTE: ¹4096 x 2160 @ 50-60 Hz is available only for HDMI connectors.

NOTE: ²Subject 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 input.

Number/signal type.....	1 digital HDMI video* 1 digital HDMI video (loop through)
Connectors	2 female HDMI type A: 1 for input, 1 for loop through
Resolution range.....	Up to 4K (4096x2160 at 60 Hz) and UHD (3840x2160 at 60 Hz)
Standards.....	DVI v1.0, HDMI v1.4 and v2.0, HDCP v1.4/v2.3

Video processing

Digital sampling.....	8 or 10 bits per color; 600 MHz pixel clock maximum
Compression	PURE3®
Bit rate.....	150 Mbps to 900 Mbps
Latency.....	<1 frame (encode/decode)**

NOTE: **Indicates minimum latency. Network and video processing dependencies apply.

Video output stream

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

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Audio

Sampling rates.....	32, 44.1, 48 kHz
Bit depths	16, 20, 24 bit

Audio input

Number/signal type.....	1 digital stereo, de-embedded from HDMI
Connectors.....	1 female HDMI type A (shared with video input)
Supported formats.....	LPCM (2 channel)

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
Power over Ethernet (PoE)	Complies with IEEE 802.3at Type 2 (PoE+), class 4
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

Network extension (EXT)

Connector.....	1 RJ-45 female
Termination	Auto-MDIX, TIA/EIA T568B
Ethernet standards	1Gbe, (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

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

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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	20.1 watts
Device and power supply	22.9 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 bottom to top
Thermal dissipation	
Device	67.7 BTU/hour
Device and power supply	77.2 BTU/hour
Device with PoE	77.7 BTU/hour
Mounting	
Rack mount.....	No
Furniture or wall mount.....	Yes, in a standard US 3-gang electrical junction box or mud ring.
Enclosure type	Metal

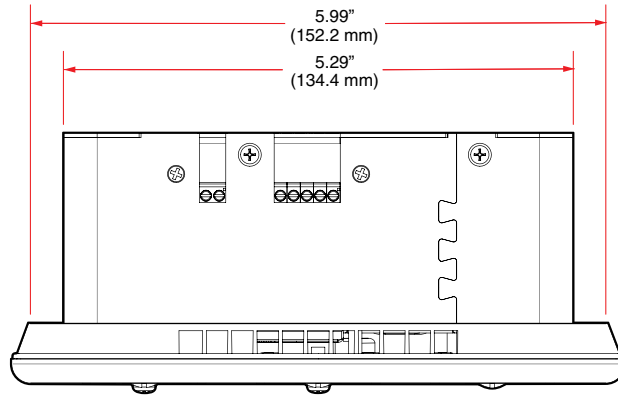
Specifications • NAV E 401 D (Continued)

Enclosure

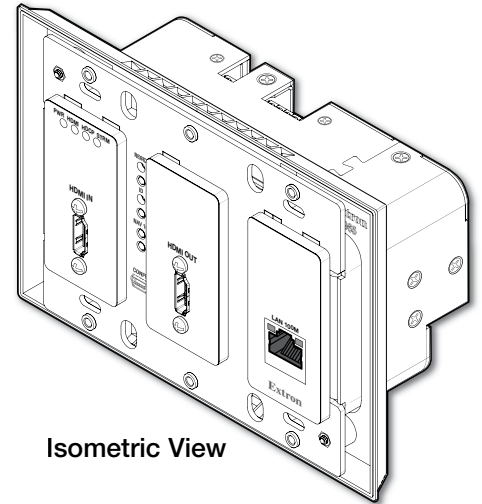
Faceplate	4.5" H x 6.4" W x 0.72" D (11.4 cm H x 16.3 cm W x 1.82 cm D)
Device	2.72" H ¹ x 5.29" W x 1.81" D ² (6.9 cm H ¹ x 13.4 cm W x 4.6 cm D ²)

NOTE: ¹ Overall height is 4.1" (10.4 cm) including mounting tabs

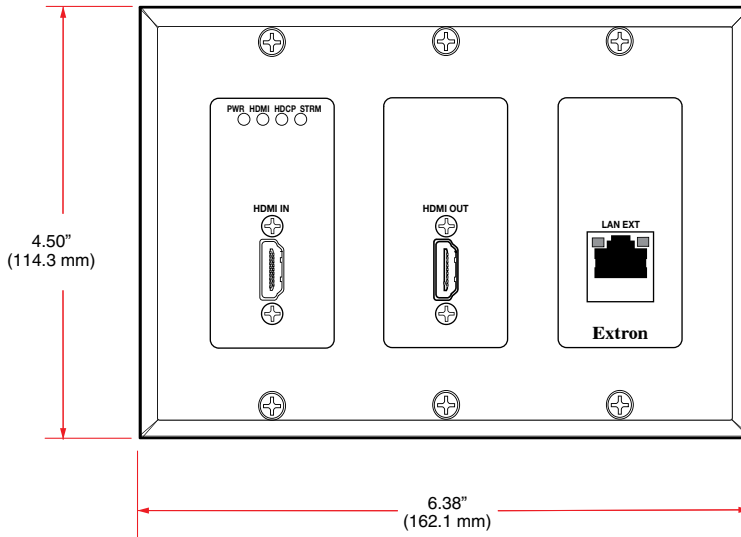
NOTE: ² Depth excludes connectors. Fits the openings in a 3-gang decorator-style wallplate.



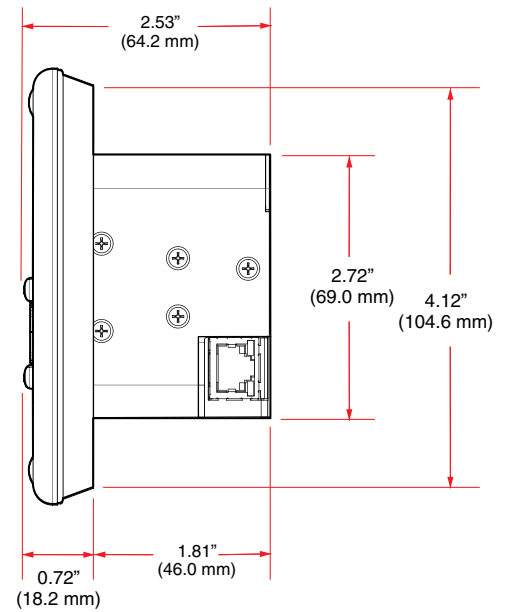
Top View



Isometric View



Front View



Side View

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

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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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