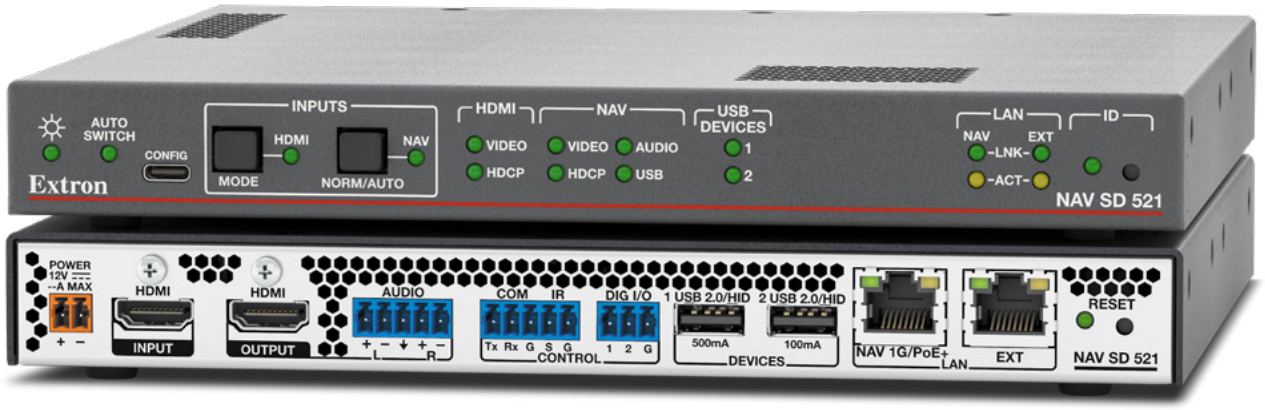
NAV SD 521

1G PRO AV OVER IP SWITCHING SCALING DECODER WITH HDMI, USB AND ETHERNET



The **NAV SD 521** is a Pro AV over IP switching scaling decoder with USB and Ethernet Extension that receives, decodes, and scales real-time, visually lossless video, audio, and USB signals over 1 Gbps Ethernet at efficient bitrates. It also has a local HDMI® input with versatile switching modes configurable as auto or manual switching. Both USB-A ports are configured as device ports supporting USB 2.0 or HID extensions that allow connecting multiple USB devices to one USB host. Purpose-built to support demanding professional AV applications, the highly scalable and powerful NAV® platform enables secure deployment of AV signals to thousands of endpoints.

- **Switching scaling decoder for NAV streams or local HDMI® input, Ethernet Extension, and USB device ports supporting USB 2.0 or HID extension**
- **Connect multiple decoders and USB devices to one USB host**
- **Advanced Extron Vector™ 4K scaling technology ensures critical-quality 4K imagery, with best-in-class image upscaling and downscaling, enhanced color accuracy, and picture detail**
- **Patented PURE3® codec delivers visually lossless 4K/60 4:4:4 video with ultra-low latency, efficient bit rates, and improved network resiliency**
- **Enhanced AES67 audio, HDMI, and analog audio out. Transmit or receive an AES67 audio stream between Extron DSPs or other third-party devices**

Extron

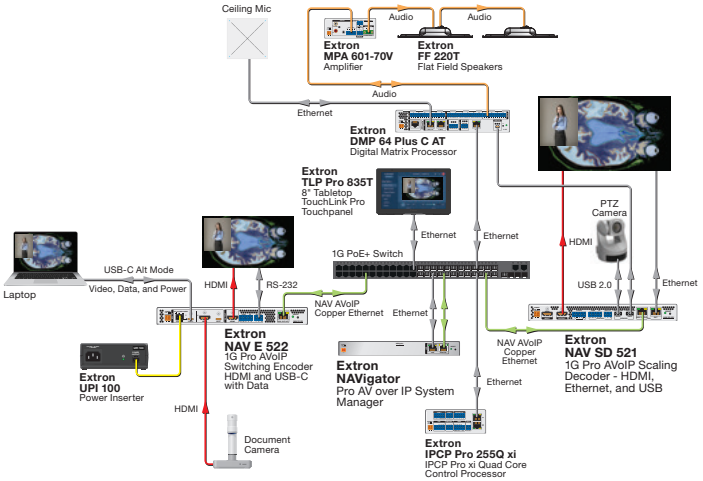
DESCRIPTION

The **NAV SD 521** is a Pro AV over IP switching scaling decoder with USB and Ethernet Extension. A single NAV E 522 encoder can connect to multiple NAV SD 521 decoders, extending USB connectivity across the system. Each decoder can support multiple USB 2.0 devices; all connected to a single USB host. The NAV SD 521 and NAV E 522 can be used to extend cameras, DSPs, touchscreens, card readers, storage devices, keyboards, and mice over the network to the Host. It also supports NAV®, HDMI®, analog, and AES67 audio over IP standard, facilitating flexible integration with DMP Plus DSPs or other IP-enabled audio components.

FEATURES

- Configurable Power Priority selects PoE+ or line power priority for power management and redundancy
- Confidence Preview of the encoder video is available in either the endpoint or NAVigator browser interface, or TLP Pro 35 Series
- PURE3® Codec delivers improved network resiliency tolerating the bursty network traffic found on converged networks, and is the ONLY codec designed for the Pro AV industry that delivers robust, pristine video on converged or isolated networks
- PURE3 Intelligent Selective Streaming leverages periods of low motion video to achieve extremely low bitrates while maintaining lossless video performance, significantly reducing the bandwidth required

APPLICATION DIAGRAM



SPECIFICATIONS

TRUE 4K SPECIFICATION

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

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 v 1.0, HDMI® v1.4 and v2.0, HDCP v1.4 and v2.3
Max. video data rate	18 Gbps (6 Gbps per color)

VIDEO INPUT — HDMI	
Number/signal type	1 digital HDMI video
VIDEO INPUT STREAM	
Number/signal type	1 PURE3® digital video over IP
VIDEO PROCESSING	
Latency	<1 frame (encode/decode)
Scaling	Vecto™
VIDEO OUTPUT	
Number/signal type	1 digital HDMI video
Resolution range	Up to 4K (4096x2160 at 60 Hz) and UHD (3840x2160 at 60 Hz)
AUDIO INPUT STREAM	
Number/signal type	1 audio over IP LPCM 1 audio over IP AES67*
AUDIO OUTPUT	
Number/signal type	1 analog stereo, unbalanced or balanced 1 digital stereo, de-embedded from HDMI
USB EXTENSION (USB)	
USB device port configuration – Device mode configuration	
Number/signal type	2 USB (configurable for USB 2.0 or HID only)
NETWORK INTERCONNECTION (NAV)	
Ethernet standards	1GbE (802.3ab), 10/100/1000 Base-T. half/full duplex with autodetect.
Power over Ethernet (PoE)	Complies with IEEE 802.3at Type 2 (PoE+), class 4
NETWORK EXTENSION (EXT)	
Ethernet standards	1GbE (802.3ab), 10/100/1000 Base-T. half/full duplex with autodetect.
GENERAL	
Enclosure	1.00" H x 8.75" W x 8.00" D (half rack wide) (25 mm H x 222 mm W x 203 mm D) (depth excludes connectors)
Product warranty	3 years parts and labor

Model	Version Description	Part number
NAV SD 521	1G Switching Scaling Decoder HDMI, USB, Ethernet	60-2091-01

For complete specifications, please go to www.extron.com
Specifications are subject to change without notice.

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