

# Dante AV Ultra™ Encoder / Decoder

Perfect AV Synchronization with Extremely Low Latency



- Transport up to 4K HDR UHD video sources with imperceptible subframe latency over 1GbE Network.
- Advanced signal management for independent routing of audio, video, USB / KVM, RS-422 and IR.
- ProAV-optimized Colibri codec preserves visually lossless quality for video/moving pictures.
- Utilizing a single network clock enables perfect audio and video synchronization.
- The DAV-01ST features 12G-SDI and HDMI input ports (HDMI exclusive to DAV-01HT).
- The DAV-01SR features dual 12G-SDI and HDMI output ports per channel (DAV-01HR exclusively offering dual HDMI output).
- 2.0-inch IPS screen for video images preview, audio level meters and Dante setting feature.
- Incoming audio check using a headphone output.
- Auto-downscaling and HDCP revision conversion on HDMI output ports.
- HDCP 1.x/2.x compliant with advanced EDID management.
- PoE+ (30W IEEE802.3at PoE+) or DC (12V) power to power the device.
- EIA Rack mountable - 1U half-rack width.
- Compatible with Dante Controller, Dante Studio and Dante Domain Manager (DDM).



## Dante AV Ultra Encoder DAV-01HT

### Encode HDMI to Dante AV Ultra Colibri

- Up to 4K Ultra HD 60p 4:4:4
- HDR 10 & HLG
- HDMI 2.0a in and loop-out
- 1GbE PoE+ and Secondary 1GbE IP
- USB HID, IR in/out and RS-422 (VISCA)



## Dante AV Ultra Decoder DAV-01HR

### Decode Dante AV Ultra Colibri to HDMI

- Up to 4K Ultra HD 60p 4:4:4
- HDR 10 & HLG
- Simultaneous 2 x HDMI out
- Auto-Downscaling and HDCP conversion
- 1GbE PoE+ and Secondary 1GbE IP
- USB HID, IR in/out and RS-422 (VISCA)



## Dante AV Ultra Encoder DAV-01ST

### Encode 12G-SDI/HDMI to Dante AV Ultra Colibri

- Up to 4K Ultra HD 60p 4:4:4
- HDR 10 & HLG
- 12G-SDI in and loop-out
- HDMI 2.0a in and loop-out
- 1GbE PoE+ and Secondary 1GbE IP
- USB HID, IR in/out and RS-422 (VISCA)



## Dante AV Ultra Decoder DAV-01SR

### Decode Dante AV Ultra Colibri to 12G-SDI/HDMI

- Up to 4K Ultra HD 60p 4:4:4
- HDR 10 & HLG
- Simultaneous 2 x 12G-SDI and 2 x HDMI out
- Auto-downscaling and HDCP conversion
- 1GbE PoE+ and Secondary 1GbE IP
- USB HID, IR in/out and RS-422 (VISCA)



## What is Dante AV

Dante AV is a simplified, scalable and interoperable platform for managing and distributing networked audio & video signals everywhere.

## Adaption of ProAV-optimized Colibri codec

In the main use case of ProAV, preserving high quality of complex graphical content poses a significant challenge. The new Colibri codec has been specially designed to bridge this gap, providing seamless distribution and delivery of high-quality complex graphical content for 4K60 over 1GbE. The ADTECHNO Dante AV Ultra incorporates this newly optimized video codec to flawlessly encode any graphical content while preserving visually lossless quality for graphical and video content.

\* Interoperability requires consistency in the video codec used on both the encoder and decoder.

## Quad Output with 12G-SDI and HDMI

Dante AV Ultra Decoder, DAV-01SR supports simultaneous quad output, providing 2x12G-SDI video and 2x HDMI video outputs for connecting to multiple screens.



## User-friendly 2.0-inch IPS screen

The ADTECHON Dante AV Ultra comes equipped with a user-friendly 2.0-inch IPS screen that provides a preview of incoming video images and displays 8-channel audio level meters. Additionally, it boasts a Dante Setting menu, allowing you to easily modify settings such as sampling rate, latency and more using a rotary switch knob.



Preview



Audio Level Meter



Settings

## Perfect Synchronization of Audio and Video

Dante AV Ultra employs a single clock to synchronize seamlessly with one another over the network using the IEEE 1588 Precision Time Protocol (PTP), delivering sub-microsecond synchronization.

## Imperceptible subframe latency

Dante AV Ultra streams and transport video and audio content with highest performance and lowest latency - 4K60 with 8ms or less latency

## Auto-downscaling and HDCP revision co-nversion

The HDMI ports on The ADTECHNO Dante AV Ultra decoder reads Extended Display Identification Data (EDID) of every connected screen and adjusts the output video resolution automatically to ensure the optimal display resolution for each screen. Additionally, HDCP is automatically converted to the appropriate revision for each connected screen.

## The largest AV over IP technology ecosystem

Compatible with over 3,800 existing Dante products available on the market. Controlling video, audio and control signals has never been easier with the familiar Dante Controller Software. Installing ADTECHNO Dante AV Ultra onto an existing 1GbE network infrastructure is straightforward, without encountering management difficulties and performance issue.



50,000+  
certified users

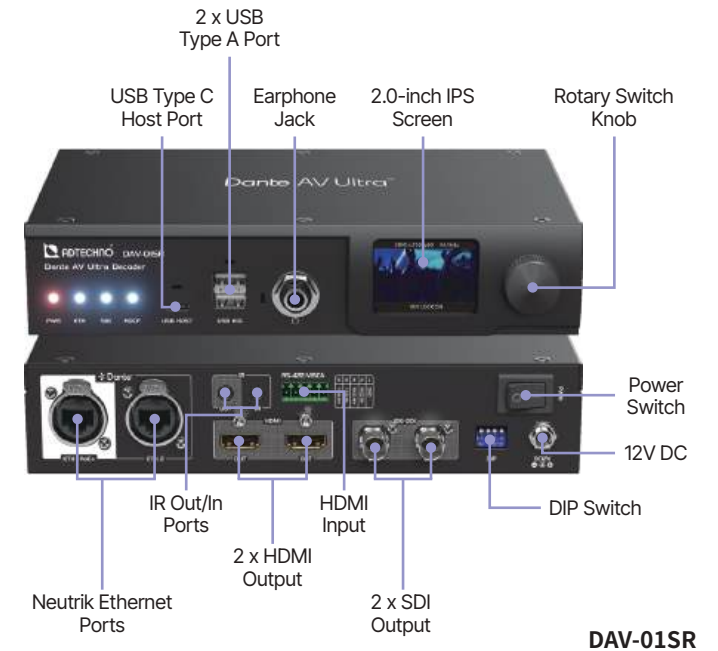
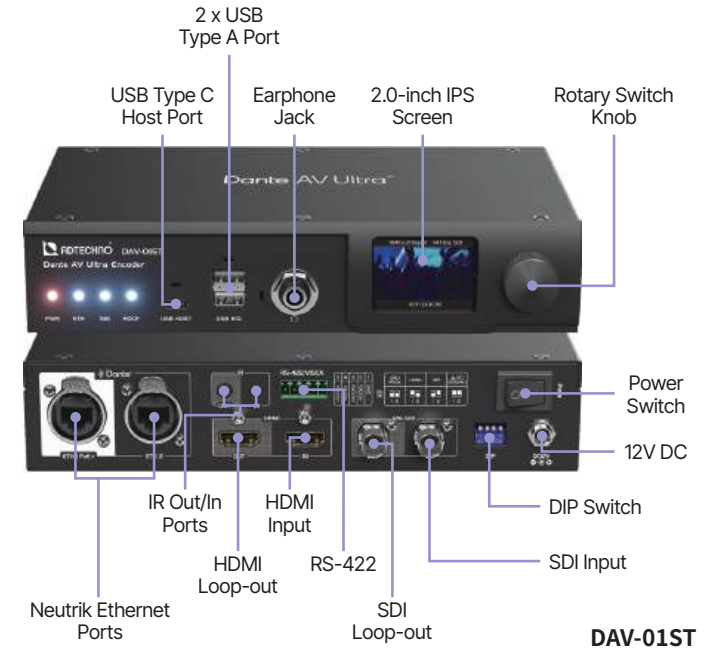


3,800+  
products



550+  
manufacturers

## Connections



\*DAV-01HT and DAV-01HR are not equipped with SDI ports.

# Specifications

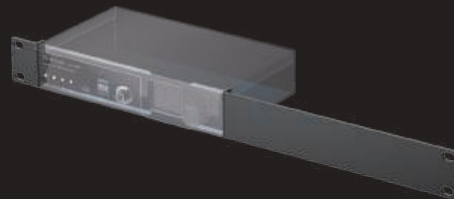
Model No.	DAV-01HT	DAV-01HR	DAV-01ST	DAV-01SR
Audio/Video Input	SDI	-	1 × 12G-SDI BNC	-
	HDMI	1 × HDMI Type A (*1)	-	1 × HDMI Type A (*1)
	LAN	-	2 × etherCONRJ-45 (*2)	2 × etherCONRJ-45 (*2)
Audio/Video Output	SDI	-	1 × 12G-SDI BNC loop-out	2 × 12G-SDI
	HDMI	1 × HDMI Type A loop-out (*1)	2 × HDMI Type A (*1)	1 × HDMI Type A loop-out (*1)
	LAN	2 × etherCONRJ-45 (*2)	-	2 × etherCONRJ-45 (*2)
	Earphone Jack	1 × 6.3mm standard stereo jack		
Other I/O	USB/KVM	1 × USB Type C Host / 2 × USB Type A HID		
	RS-422	1 × 5-Pin Phoenix connector		
	IR Input	1 × 3.5mm stereo jack		
	IR Output	1 × 3.5mm stereo jack		
LCD Panel	2.0-inch IPS			
Dimensions	210 (W) × 127 (D) × 44 (H) mm *protrusions not included			
Weight	Approx 1,500g			
Power	PoE 802.3at or 12V DC (AC adapter optional)			
Power Consumption	20W (*3)	24W (*3)	20W (*3)	24W (*3)
Operating Temperature	0 to 40 °C (32 to 104 °F)			
Storage Temperature	-40 to 60 °C (-40 to 140 °F)			
Operating Humidity	10 – 90% *noncondensing			
Box Content	1 × Quick User Guide			
Warranty	1 year			
Regulatory Compliance	FCC / CE / UKCA / RoHS			

\*1) HDCP1.4/2.2. CEC pass through \*2) Port 1 with PoE+ \*3) max load incl. USB HID

## Optional Items

### Rack Shelf Mount Kit DAV-01RU1

The DAV-01RU1 rack shelf is tailor-made for securing the DAV-01 within a standard 19-inch EIA rack. These rack shelf mount kits are perfectly suited for a 1U space, ensuring a clean and efficient setup.



# Formats

HDMI Video Input Format (DAV-01HT/DAV-01ST)		HDMI Video Output Format (DAV-01HR/DAV-01SR)	
4096 × 2160p	23.976/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60	23.976/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60	
3840 × 2160	23.976/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60	23.976/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60	
2560 × 1600	60	60	
2048 × 1080p	23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60	-	
1920 × 1200p	60	60	
1920 × 1080p	23.976/ 23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60	23.976/ 23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60	
1600 × 1200	60	60	
1280 × 1024	60	-	
1280 × 720p	25/ 29.97/ 30/ 50/ 59.94/ 60	25/ 29.97/ 30/ 50/ 59.94/ 60	
1080i	50/ 59.94/ 60	50/ 59.94/ 60	
1024 × 768	60	60	
576p	50	50	

\*YCbCr 4:2:0 is not supported. \*4K is supported only in 8-bit. \*576P is displayed in 4:3 aspect ratio.

SDI Video Input Format (DAV-01ST)		SDI Video Output Format (DAV-01SR)	
12G-SDI	4096 × 2160p	50/ 59.94/ 60	50/ 59.94/ 60
	3840 × 2160p	50/ 59.94/ 60	50/ 59.94/ 60
6G-SDI	4096 × 2160p	23.98/ 24/ 25/ 29.97/ 30	23.98/ 24/ 25/ 29.97/ 30
	3840 × 2160p	23.98/ 24/ 25/ 29.97/ 30	23.98/ 24/ 25/ 29.97/ 30
SMPTE 292, 425-A, 2081 3G-SDI	2048 × 1080p	50/ 59.94/ 60	-
	1920 × 1080p	50/ 59.94/ 60	50/ 59.94/ 60
HD-SDI	2048 × 1080p	23.98/ 24/ 25/ 29.97/ 30	-
	1920 × 1080p	23.98/ 24/ 25/ 29.97/ 30	23.98/ 24/ 25/ 29.97/ 30
	1080i	50/ 59.94/ 60	50/ 59.94/ 60
	720p	50/ 59.94/ 60	50/ 59.94/ 60

\*Only YCbCr 4:2:2 is supported. \*Only 3G-SDI Level A is supported.

The latest information and the detailed product specifications are available at [www.ad-techno.com/en/](http://www.ad-techno.com/en/)



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