

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

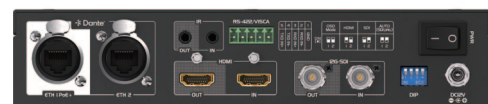
Decode Dante AV Ultra Colibri to HDMI

- 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

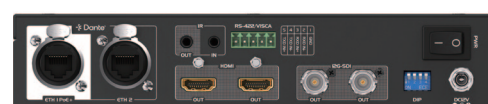
- Up to 4K Ultra HD 60p 4:4:4
- HDR 10 & HLG
- 12G-SDI in and loop-out
- HDMI 2.0a in and loop-out
- 1GbE PoE+ and Secondary 1GbE IP
- USB HID, IR in/out and RS-422 (VISCA)



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.

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

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

Quad Output with 12G-SDI and HDMI

Dante AV Ultra Decoder, DAV-01SR supports simultaneous quad output, providing 2 x 12G-SDI video and 2 x HDMI video outputs for connecting to multiple screens.

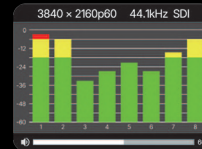


User-friendly 2.0-inch IPS screen

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

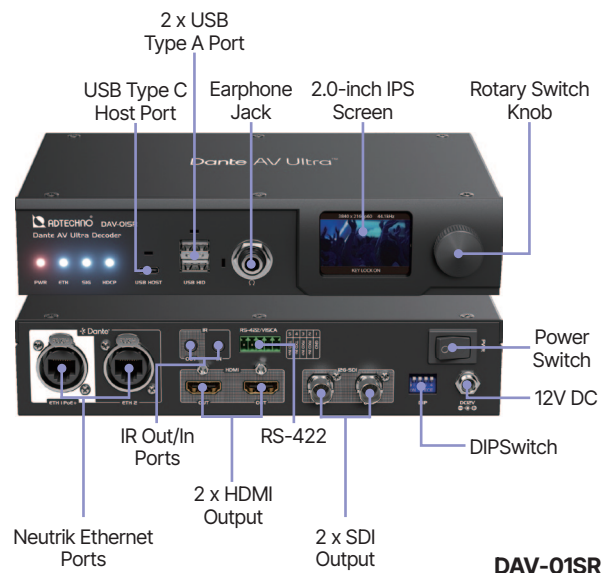
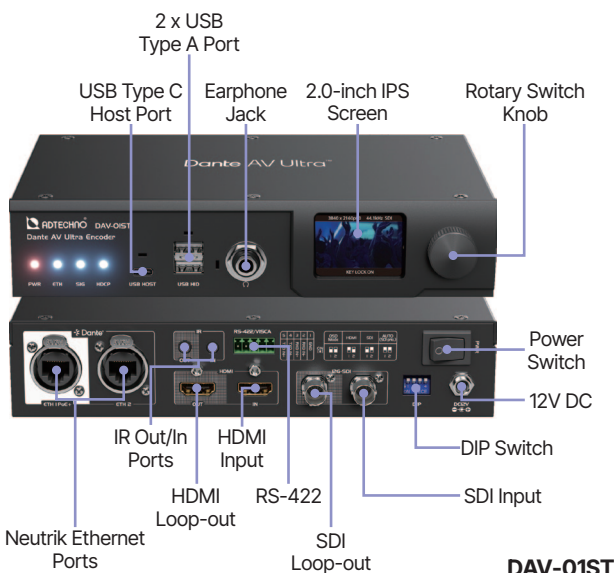


Settings

Auto-downscaling and HDCP revision co-version

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.

Connections



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

Specifications

Model No.	DAV-01HT		DAV-01HR	
Product Name	Dante AV Ultra Encoder HDMI to Dante AV Ultra Colibri		Dante AV Ultra Decoder Dante AV Ultra Colibri to HDMI	
Audio/Video Input	HDMI	1 x HDMI Type A *HDCP1.4/2.2, CEC pass through		-
	LAN	-	2 x Neutrik etherCON RJ-45 - 1GbE *Port 1 with PoE+	
Audio/Video Output	HDMI	1 x HDMI Type A loop-out *HDCP 1.4/2.2, CEC pass through		2 x HDMI Type A *HDCP 1.4/2.2, CEC pass through
	LAN	2 x Neutrik etherCON RJ-45 - 1GbE *Port 1 with PoE+		
	Earphone Jack	1 x 6.3mm standard stereo jack		
Other I/O	USB/KVM	1 x USB Type C Host / 2 x USB Type A HID		
	RS-422	1 x 5-Pin Phoenix connector		
	IR Input	1 x 3.5mm stereo jack		
	IR Output	1 x 3.5mm stereo jack		
Extend Distance	SDI	70 Meters at 12G, 100 Meters at 6G, 200 meters for 3G and 270 meters at 1.5G *with Canare Cable		
	HDMI	5 meters maximum at 4Kp60, 10 meters maximum at 1080p60		
	RJ-45	100 meters maximum with CAT 5e/6		
LCD Panel	2.0-inch IPS			
Dimensions	210 (W) x 127 (D) x 44 (H) mm *protrusions not included			
Weight	528g		540g	
Power	PoE 802.3 at or 12V DC			
Power Consumption	PoE	14.4W (max load)		16.8W (max load)
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 x DAV-01HT, 1 x Quick User Guide		1 x DAV-01HR, 1 x Quick User Guide	
Warranty	1 year			
Regulatory Compliance	FCC/CE/UKCA/RoHS			

Model No.	DAV-01ST		DAV-01SR	
Product Name	Dante AV Ultra Encoder HDMI to Dante AV Ultra Colibri		Dante AV Ultra Decoder Dante AV Ultra Colibri to HDMI	
Audio/Video Input	SDI	1 x 12/6/3/1.5G-SDI BNC		-
	HDMI	1 x HDMI Type A *HDCP 1.4/2.2, CEC pass through		-
	LAN	-	2 x Neutrik etherCON RJ-45 - 1GbE *Port 1 with PoE+	
Audio/Video Output	SDI	1 x 12/6/3/1.5G-SDI BNC loop-out		2 x 12/6/3/1.5G-SDI BNC
	HDMI	1 x HDMI Type A loop-out *HDCP 1.4/2.2, CEC pass through		2 x HDMI Type A *HDCP 1.4/2.2, CEC pass through
	LAN	2 x Neutrik etherCON RJ-45 - 1GbE *Port 1 with PoE+		
Other I/O	Earphone Jack	1 x 6.3mm standard stereo jack		
	USB/KVM	1 x USB Type C Host / 2 x USB Type A HID		
	RS-422	1 x 5-Pin Phoenix connector		
	IR Input	1 x 3.5mm stereo jack		
Extend Distance	SDI	70 Meters at 12G, 100 Meters at 6G, 200 meters for 3G and 270 meters at 1.5G *with Canare Cable		
	HDMI	5 meters maximum at 4Kp60, 10 meters maximum at 1080p60		
	RJ-45	100 meters maximum with CAT 5e/6		
LCD Panel	2.0-inch IPS			
Dimensions	210 (W) x 127 (D) x 44 (H) mm *protrusions not included			
Weight	528g		540g	
Power	PoE 802.3 at or 12V DC			
Power Consumption	PoE	14.4W (max load)		16.8W (max load)
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 x DAV-01HT, 1 x Quick User Guide		1 x DAV-01HR, 1 x Quick User Guide	
Warranty	1 year			
Regulatory Compliance	FCC/CE/UKCA/RoHS			

Formats

HDMI Video Input Format (DAV-01HT/DAV-01ST)

4096 × 2160p	23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60
3840 × 2160	23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60
2560 × 1600	60
2048 × 1080p	23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60
1920 × 1200p	60
1920 × 1080p	23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60
1600 × 1200	60
1280 × 1024	60
1280 × 720p	50/ 59.94/ 60
1080i	50/ 59.94/60
1024 × 768	60
576i	50
480i	60

*YCbCr 4:4:4/ 4:2:2/ 4:2:0 *4:2:0 limited to 3840 × 2160@50/59.94/60

*RGB

*8/ 10/ 12-bit *3840×2160 limited to 8-bit

SDI Video Input Format (DAV-01ST)

SMPTE 292, 425-A, 2081		
12G-SDI	4096 × 2160p	50/ 59.94/ 60
	3840 × 2160p	50/ 59.94/ 60
6G-SDI	4096 × 2160p	23.98/ 24/ 25/ 29.97/ 30
	3840 × 2160p	23.98/ 24/ 25/ 29.97/ 30
3G-SDI	2048 × 1080p	50/ 59.94/ 60
	1920 × 1080p	50/ 59.94/ 60
HD-SDI	2048 × 1080p	23.98/ 24/ 25/ 29.97/ 30
	1920 × 1080p	23.98/ 24/ 25/ 29.97/ 30
	1080i	50/ 59.94/ 60
	720p	50/ 59.94/ 60

HDMI Video Output Format (DAV-01HR/DAV-01SR)

4096 × 2160p	23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60
3840 × 2160	23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60
2560 × 1600	60
1920 × 1200p	60
1920 × 1080p	23.98/ 24/ 25/ 29.97/ 30/ 50/ 59.94/ 60
1600 × 1200	60
1280 × 720p	50/ 59.94/ 60
1080i	50/ 59.94/60
1024 × 768	60
576i	50
480i	60
576i	50
480i	60

SDI Video Input Format (DAV-01ST)

SMPTE 292, 425-A, 2081		
12G-SDI	4096 × 2160p	50/ 59.94/ 60
	3840 × 2160p	50/ 59.94/ 60
6G-SDI	4096 × 2160p	23.98/ 24/ 25/ 29.97/ 30
	3840 × 2160p	23.98/ 24/ 25/ 29.97/ 30
3G-SDI	1920 × 1080p	50/ 59.94/ 60
	1920 × 1080p	23.98/ 24/ 25/ 29.97/ 30
HG-SDI	1080i	50/ 59.94/ 60
	720p	50/ 59.94/ 60

The latest information and the detailed product specifications are available at www.ad-techno.com/en/

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