



8K 1x2 Distribution Amplifier AC-DA-12X2

AC-DA-12X2 is an AVPro Edge one-input to two-output, 48 Gbps HDMI 2.1b distribution amplifier that flawlessly divides incoming HDMI signals up to 8K/60 fps into two separate output streams. Current 8K media consoles or 4K sources pass through HDMI 1 to a capable display, while downscaling may be enabled to allow HDMI Output #2 to lower output resolution for compatibility with legacy display devices, particularly projectors. Additional features such as extensive EDID management, extracted audio, and USB setup capability make the AC-DA-12X2 perfect for use by residential and commercial integrators whenever mixed-use systems pose installation challenges.



CONNECTION DIAGRAM

HDMI

HDMI 2.1 SOURCE

8K DISPLAY

PROJECTOR



PRODUCT SPECIFICATIONS

Video:	
Video Resolutions	Up to 8K 60Hz 4:2:0/8K 30Hz 4:4:4/4k 120Hz
HDR Formats/Resolutions	420, 422, 444 (10 AND 12 DEEP COLOR) HDR10, HDR10+, DOLBY VISION, HLG
Color Space	YUV (Component), RGB (CSC: Rec. 601, Rec. 709, BT2020, DCI, P3 D6500)
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0 Supported
Deep Color	Up to 16 bit
Scaling (resolution, Output 2 & 4 only)	8k to 4k or 8k/4k to 1080p
Audio:	
Audio Formats Supported (HDMI)	LPCM up to 7.1, 192 kHz 24-bit, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos (All Formats), DTS-Digital Surround, DTS-ES Discrete, DTS-HD High Res Audio, DTS-HD Master Audio, DTS:X
Audio Formats Supported Extracted (TOSLINK)	LPCM up to 2.0, 96 kHz 24-bit, Dolby Digital 5.1, Dolby Digital Plus, DTS-HD High Resolution Audio, DTS-Digital Surround, DTS-ES Discrete
Audio Formats Supported Extracted (2CH Port)	PCM 2 CH
Distance:	
HDMI In/Out (4k60 4:4:4)	UP TO 50 FEET (USING BULLET TRAIN HDMI)
HDMI In/Out (W/ AOC Cable) (4k60 4:4:4)	UP TO 130 FEET (USING BULLET TRAIN AOC)
Other:	
Bandwidth	48 Gbps (FRL 6)
HDCP	HDCP 2.3 and Earlier
Ports:	
HDMI	Type A
Audio (Extracted Digital)	Toslink
Audio (Extracted Analog)	5 PIN Terminal Block (Balanced)
Firmware	USB Type-C
Environmental:	
Operating Temperature	23 to 125°F (-5 to 51°C)
Storage Temperature	-4 to 140°F (-20 to 60°C)
Humidity Range	5-90% RH (No Condensation)
Power:	
Power Consumption (Total)	3 watts max
Power Supply	Input: AC 100-240V ~ 50/60Hz Output: DC 12V 3A
Dimensions:	
Dimensions (Unit Only Length/Width/Height)	mm: 76.2 X 75.44 X 304.8 inch: 3 X 2.97 X 12
Dimensions (Packaged Length/Width/Height) (Kit)	mm: 150.88 X 76.2 X 20.6375 inch: 5.94 X 3 X .81
Weight (Unit)	0.68 lbs (0.31 Kg)
Weight (Packaged)	1.21 lbs (0.55 Kg)

*Specifications subject to change without notice. Mass & dimensions are approximate

KEY FEATURES

48 Gbps Support (8K FLR 6)

Full 8K bandwidth extension (select 10K FRL 3, FRL 4, and FRL 5 resolutions supported). Available dynamic range headroom for any 8K source.

Downscaling

Each HDMI output may configured for downscaling. An 8K signal may be downscaled to 4K or 1080p, while 4K content may be downscaled to 1080p for systems with legacy display technology.

Extracted Audio

Multi-channel digital audio up to 7.1 may be intercepted from the HDMI stream and output via TOSLINK. 2-channel Analog audio may be output via the 5-pin balanced terminal block; however, note that the source must originate as 2-channel PCM.

Fixed FRL Rate

The FRL rate may be set to a fixed rate from a front panel menu setting or via the device API. First-generation new technology displays may not be able to contend with higher bandwidth signals as the latest models do. Limiting the signal bandwidth to first-gen models in mixed systems maintains system stability.

Extended EDID Management

The AC-DA-12X2 features 20 pre-configured EDID slots, including support for FRL Lanes 3 through 6 and three User EDID slots.

HF-EEODB (HDMI Forum EDID Extension Override Data Block) is also supported. HF-EEODB is used to optionally expose an extension count different than the base block claims, revealing more EDID data. Our deep-look, 4-Block EDID Support analyzes up to 512 bytes of EDID data to ensure HDMI handshake and HDCP compatibility with the latest next-gen displays containing a massive amount of EDID data.

Gaming-Focused HDMI 2.1b Features

Quick Media Switching for multimedia use is based on Variable Refresh Rate technology, developed to ensure smooth gameplay from PS5, Xbox Series X, and PC games. VRR reduces or eliminates artifacts such as image tearing (like tearing a piece of paper), and judder (slow "camera" pans that should be smooth but instead abruptly stutter).

USB Command List Control

The front panel USB-C port enables Windows Input and Output command setup control, assisted by MyUart (available for free download).