



2km 18Gbps Fiber Optic Extender

AC-EXO-444-KIT

The AC-EXO-444-KIT extends 18 Gbps HDMI 4K/60 fps content, including HDR, HDR10+, HLG, and Dolby Vision (@ 24 fps or 30 fps) to distances as great as 1.25 miles (2 kilometers) using single-mode OS2 fiber optic cabling. AVPro Edge's Invisible Compression Technology (ICT) preserves metadata during transmission to deliver a visually lossless 4K High Dynamic Range image free from banding artifacts and color shift. Fiber removes any possibility of EMI/RFI interference that plagues Category cabling. Pixel-level details are preserved, making the AC-EXO-444-KIT ideal for Control Rooms, Data Centers, Surveillance facilities, and all noise-prone hostile commercial/industrial installations. Expansive residential projects also benefit from the distance boost that challenges Category cable-based extension devices.

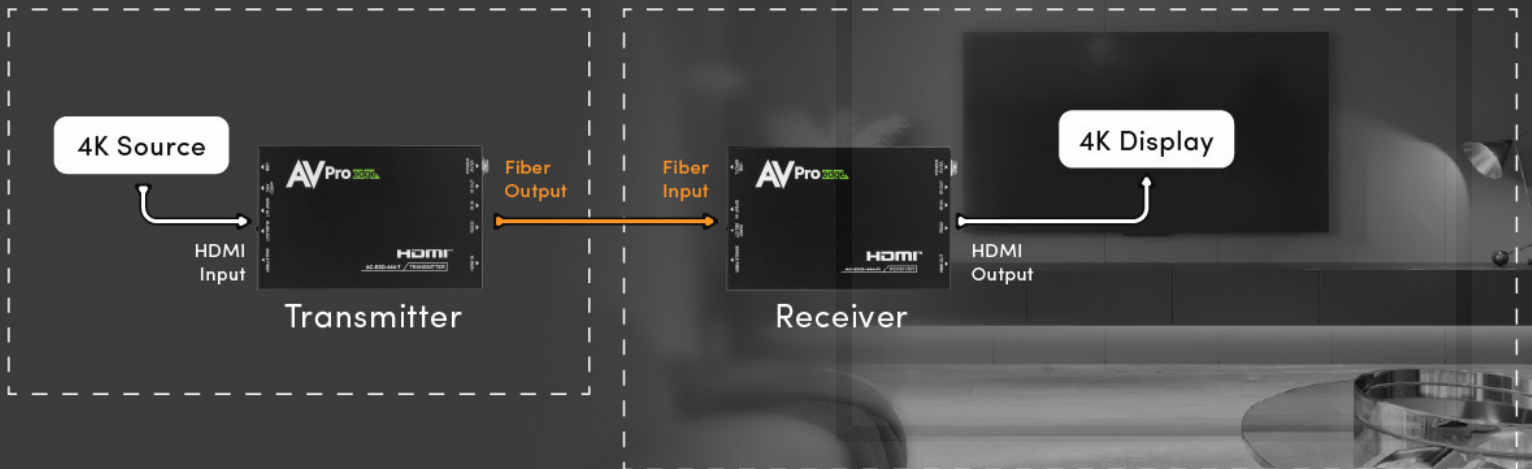


Home Application



Rack room

Living room



PRODUCT SPECIFICATIONS

VIDEO:	
Video Resolutions	Up to 4K/60 fps, 4:4:4
VESA Resolutions	Up to DCI 4K (4096x2160)
HDR Formats	HDR10, HDR10+, Dolby Vision (24 fps & 30 fps), HLG, Dolby Vision
Color Space	YUV (Component), RGB (CSC: Rec. 601, Rec. 709, BT.2020, DCI-P3-D65)
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0 Supported
Color Bit Depth	Up to 16-bit (1080), Up to 12-bit (4K)
Down Scaling	4K (and HDR) down to 1080p
AUDIO:	
Audio Formats Supported HDMI	PCM 2.0-Ch., LPCM 5.1 & 7.1, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, DTS 5.1, DTS-HD Master Audio, DTS:X
Audio Formats Supported Extracted (Toslink Out, TX Only)	PCM 2.0-Ch., LPCM 5.1 & 7.1, Dolby Digital, Dolby Digital Plus, DTS 5.1 (No Downmixing) - Extract Local or ARC
Audio Formats Supported (Toslink Input, RX Only)	PCM 2.0 Ch, LPCM 5.1 & 7.1, Dolby Digital, Dolby Digital Plus, DTS 5.1 (No Downmixing) - Input for ARC
ARC (Audio Return Channel)	Via Toslink or HDMI
FIBER:	
Type	"Single-mode (OS2 Recommended) Multi-mode (OM3 Recommended)"
Connector	LC (Lucent)
Recommended Fiber	Cleerline SSF
SFP (Small Form-factor Pluggable Transceiver)	Universal and Changeable – 2 km built-in
DISTANCE:	
Single-Mode (Full 4k)	2 km (1.25 mi)
Multi-Mode (Full 4k)	300 m (1000 ft)
HDMI Lead In/Out (4K60 4:4:4)	Up to 50 ft (using Bullet Train HDMI)
HDMI Lead In/Out (w/ AOC Cable) (4K60 4:4:4)	Up to 130 ft (using Bullet Train AOC)
OTHER:	
Bandwidth	18 Gbps (W/ ICT)
HDCP	HDCP 2.3 and earlier versions
PORTS:	
HDMI (TX & RX)	Type A
Audio (Extracted / Embedded) (TX & RX)	TOSLINK
IR TX (TX & RX)	3.5 mm Mono (2-conductor)
IR RX (TX & RX)	3.5 mm Stereo (3-conductor)
RS-232 (TX & RX)	3-Pin Euroblock
Power (TX & RX)	2-Pin Euroblock
ENVIRONMENTAL:	
Operating Temperature	23°F to 125°F (-5°C to 51°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Humidity Range	5% to 90% RH (No Condensation)
POWER:	
Power Consumption (Total)	12 W Max
Power Supply - Matrix	Input: AC 100-240 V ~ 50/60 Hz
Output	DC 48 V 0.5 A
DIMENSIONS:	
Dimensions (Unit Only Depth/Width/Height)	mm: 83.4 X 131.23 X 21.37 in: 3.28 X 5.17 X 0.84
Dimensions (Packaged Depth/Width/Height)	mm: 138 x 165 x 91 in: 5.5 x 6.5 x 3.6
Weight (Unit)	0.6 lbs. (0.27 kg)
Weight (Packaged)	1.6 lbs. (0.72 kg)

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

KEY BENEFITS

- Extend content up to 4K/60 fps:** Distance is no longer an obstacle to transmitting content, including signals featuring high dynamic range metadata. The AC-EXO-444-KIT spans the expanse of nearly any project demand. Readily available 10G SFP+ interface modules provide extension options if additional distance is required.
- Downscaling Capable:** Precision downscaling circuitry is incorporated into the AC-EXO-444-KIT transmitter to scale 4K, including HDR to 1080p, where a legacy display device remains in use. System resolution does not need to conform to the lowest denominator.
- EDID Management:** Dynamic EDID management, including EDID Copy, preserves system interoperability.
- Control Signal Transport:** Three-way bidirectional IR passthrough and RS-232 throughput provide control capabilities to/from devices tethered to the AC-EXO-444-KIT. I-PASS accepts direct control system commands via a mono 3.5 mm cable.
- ARC Capable:** Audio Return Channel enables HDMI ARC pass-through audio from the receiver to the transmitter. NOTE: No downmixing occurs; original signals up to Dolby Digital+ are passed through via TOSLINK. Dolby Atmos is passed over HDMI ARC.
- Onboard Troubleshooting Aids:** LED chassis indicators on the RX and TX provide visual status confirmation for power and HDMI signal presence. The RX unit generates HD and UHD test patterns via button press. The TX unit is capable of test pattern generation; however, this is available only via the API command line.

