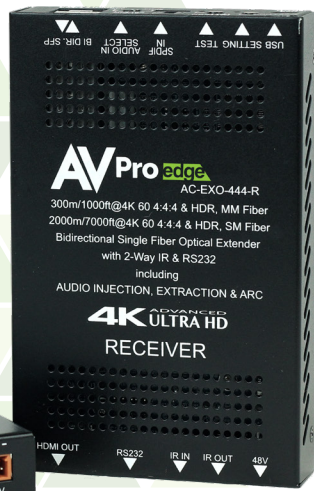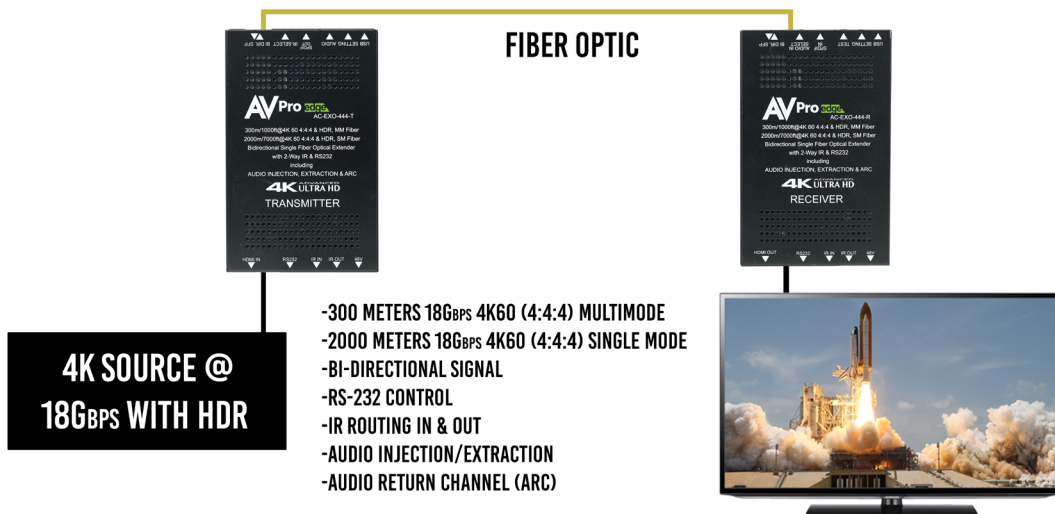# AVPro edge

4K HDMI EXTENDER
VIA OPTICAL FIBER
AC-EXO-444-KIT

THE AC-EXO-444 IS A HDMI EXTENDER OVER FIBER OPTIC CABLE. IT ALLOWS FOR ULTRA LONG DISTANCE EXTENSION OF HDMI SIGNALS (1.25 MILES OR MORE). ALL HDMI 2.0 A/B SIGNALS ARE SUPPORTED AS THE BANDWIDTH IS BEYOND 18GBPS. THIS IS AVPRO EDGE'S FLAGSHIP FIBER OPTIC EXTENDER, ALLOWING THE USER TO EXTEND AN HDMI SIGNAL 2 KILOMETERS VIA SINGLE-MODE FIBER, AND UP TO 300 METERS USING MULTI-MODE FIBER. YOU CAN GO EVEN FURTHER BY INSTALLING YOUR OWN SFP PORT.

This extender solves problems for both commercial and residential markets for distributing high value 4K 18Gbps content from rack to display. These extenders go the distance, no need to find power and cascade extenders for ultra long runs. Additionally, the AC-EXO-444 offers solutions for 18Gbps distribution in residential, digital entertainment centers, retail stores, AV events that require reliable and long distance distribution, suitable for data center, control rooms, conference rooms, schools and corporate training environments.

FIBER OPTIC EXTENDER DIAGRAM

FIBER OPTIC

4K SOURCE @ 18GBPS WITH HDR

- -300 METERS 18GBPS 4K60 (4:4:4) MULTIMODE
- -2000 METERS 18GBPS 4K60 (4:4:4) SINGLE MODE
- -BI-DIRECTIONAL SIGNAL
- -RS-232 CONTROL
- -IR ROUTING IN & OUT
- -AUDIO INJECTION/EXTRACTION
- -AUDIO RETURN CHANNEL (ARC)

EXTEND YOUR 18GBPS 4K60 (4:4:4) HDMI SIGNAL OVER 1 KILOMETER VIA FIBER OPTIC

PRODUCT SPECIFICATIONS

VIDEO

VIDEO RESOLUTIONS	UP TO 4K 60HZ 4:4:4
VESA RESOLUTIONS	UP TO DCI 4K (4096x2160)
HDR FORMATS/RESOLUTIONS	420, 422, 444 (10 AND 12 DEEP COLOR) HDR10, HDR10+, HLG, DOLBY VISION
COLOR SPACE	YUV (COMPONENT), RGB (CSC: REC. 601, REC. 709, BT2020, DCI, P3 D6500)
CHROMA SUB-SAMPLING	4:4:4, 4:2:2, 4:2:0 SUPPORTED
DEEP COLOR	UP TO 16 BIT (1080), UP TO 12 BIT (4K)

AUDIO

AUDIO FORMATS SUPPORTED HDMI	PCM 2.0 CH, LPCM 5.1 & 7.1, DOLBY DIGTAL, DTS 5.1, DOLBY DIGITAL PLUS, DOLBY TRUEHD, DTS-HD MASTER AUDIO, DTS-X, DOLBY ATMOS
AUDIO FORMATS SUPPORTED EXTRACTED: TRANSMITTER (TOSLINK OUT)	PCM 2.0 CH, LPCM 5.1 & 7.1, DOLBY DIGTAL, DTS 5.1, DOLBY DIGITAL PLUS (NO DOWNMIXING) - EXTRACT LOCAL OR ARC
AUDIO FORMATS SUPPORTED: RECEIVER (TOSLINK INPUT)	PCM 2.0 CH, LPCM 5.1 & 7.1, DOLBY DIGTAL, DTS 5.1, DOLBY DIGITAL PLUS (NO DOWNMIXING) - INPUT FOR ARC
ARC (AUDIO RETURN CHANNEL)	VIA TOSLINK OR HDMI

FIBER

TYPE	MULTIMODE (OM3 RECOMMENDED) OR SINGLEMODE
CONNECTOR	LC (LUCENT)
RECOMMENDED FIBER	CLEERLINE SSF
SFP (SMALL FORM-FACTOR PLUGGABLE TRANSCEIVER)	UNIVERSAL AND CHANGEABLE - 300M/2KM BUILT IN.

DISTANCE

OM3 MULTI-MODE (FULL 4K)	300M (1000 FEET)
SINGLE-MODE (FULL 4K)	2KM (1.25 MILES)
HDMI LEAD IN/OUT (UP TO 4K60 4:4:4)	UP TO 50 FEET (BULLET TRAIN HDMI)
HDMI LEAD IN/OUT (W/ AOC CABLE) (UP TO 4K60 4:4:4)	UP TO 130 FEET (W/ BULLET TRAIN AOC)

OTHER

BANDWIDTH	BEYOND 18 GBPS
HDCP	HDCP 2.2 AND EARLIER

PORTS

HDMI (TX & RX)	TYPE A
AUDIO (EXTRACTED/EMBEDDED) (TX & RX)	TOSLINK
IR TX (TX & RX)	3.5MM MONO (2 CONDUCTOR)
IR RX (TX & RX)	3.5MM STEREO (3 CONDUCTOR)
RS-232 (TX & RX)	3 PIN TERMINAL BLOCK
POWER (TX & RX)	2 PIN TERMINAL BLOCK

ENVIRONMENTAL

OPERATING TEMPRATURE	23 TO 125°F (-5 TO 51°C)
STORAGE TEMPRATURE	-4 TO 140°F (-20 TO 60°C)
HUMIDITY RANGE	5-90% RH (NO CONDENSATION)
POWER CONSUMPTION	9 WATTS MAX PAIR
POWER SUPPLY	INPUT: AC 100-240V ~ 50/60HZ OUTPUT: DC 48V .5A (WALL VERSION)
DIMENSIONS (SINGLE UNIT ONLY, Tx & Rx ARE SAME) (LENGTH/WIDTH/HEIGHT)	MM: 131 X 85 X 21 INCH: 5.15 X 3.34 X .82
DIMENSIONS (PACKAGED LENGTH/WIDTH/HEIGHT) (KIT)	MM: 138 X 165 X 91 INCH: 5.5 X 6.5 X 3.6
WEIGHT (UNIT) (TX OR RX EACH ALONE)	1LBS (.13KG)
WEIGHT (PACKAGED)	5LBS (.90KG)

*SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE. MASS & DIMENSIONS ARE APPROXIMATE.

IN THE BOX:

- AC-EXO-444-TX (Transmitter)
- AC-EXO-444-RX (Receiver)
- 2x 48V Power Supply
- 1 x IR Tx Unit
- 1 x IR Rx Unit
- Mounting Ears
- Operating Instructions

FULL FEATURE SET

- HDMI 2.0(a/b)
- Beyond 18Gbps Bandwidth Support (Using ICT)
- Up to 4K60 4:4:4 Support
- Full HDR Support (HDR 10 & 12 Bit)
- HDR, HDR10+ and HLG Support
- Dolby Vision Support
- 4K --> 1080P Down-scaling for mixed systems
- EDID Management and EDID emulate
- 4K & HD Test Patterns built into Tx and Rx for troubleshooting
- Toslink Multichannel Audio Extraction
- ARC Support (Toslink or HDMI)
- HDCP 2.2 (and all earlier versions supported)
- CEC Pass Through
- 3D Support
- 300m (1000ft) on full 4K (Multi-mode OM3)
- 2km (1.25 Miles) on full 4K (Single-mode Fiber)
- HDCP 2.2 & Earlier
- Bi Directional IR Passthrough
- Bi Directional RS232 Transport
- I-Pass Feature for control system "pass-through"
- 3-20v protection circuit built in for safe IR transport
- LED Status, Link, Power indication lights
- Use single fiber optic cable (Multi-mode or Single-mode
- Removable/changeable SFP for even longer distances
- Supports uncompressed PCM 2- Ch., LPCM 5.1 & 7.1, Dolby Digital, DTS, Dolby TrueHD, DTS HD-Master Audio, Atmos (On HDMI)
- ESD protection circuitry (Inputs & Outputs) to 7KV
- Can Cascade
- Single LC Connector Type