Ultra Slim 48Gbps 70M HDMI via HDBaseT Extension Kit
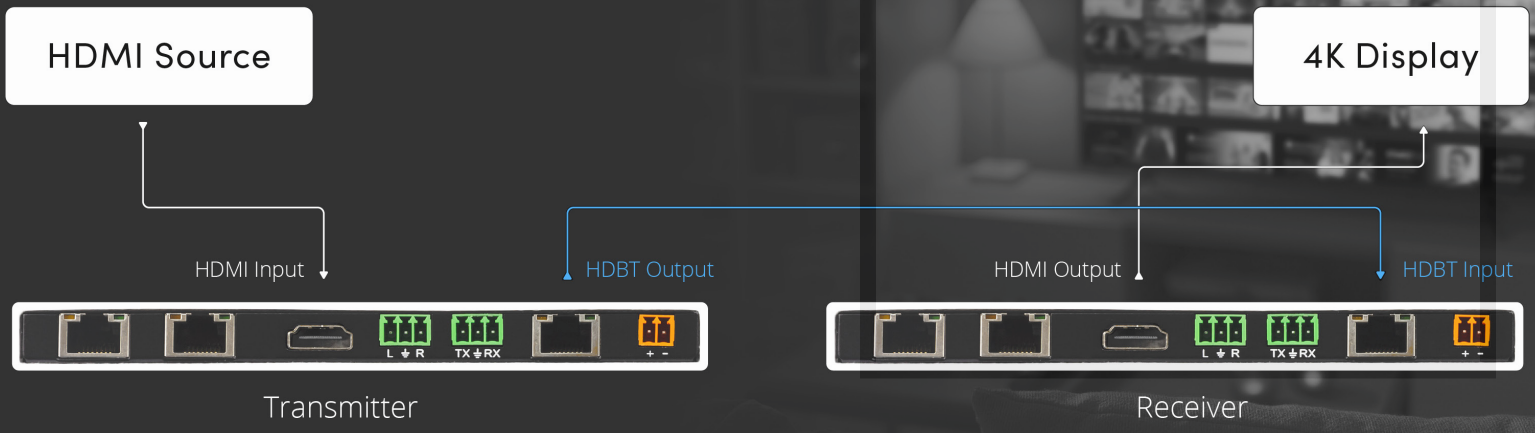
AC-EX70-444-KIT

The AC-EX70-444-KIT was one of the first HDMI-over-HDBaseT extension kits on the market to transmit 4K/60fps 4:4:4 video signals. HDR10, plus dynamic metadata formats such as Dolby Vision, HDR10+, and Hybrid Log Gamma, are transported over Cat6A copper cabling at 18Gbps, as image fidelity remains damage-free from source to display. Employing AVPro Edge's proprietary Invisible Compression Technology algorithm, ICT, 4K/60fps signals containing high dynamic range video enhancements, with high-bitrate audio codecs, remain unaltered and artifact-free from the transport process.

The AC-EX70-444-KIT is augmented by resourceful features such as EDID management, resolution downscaling, bidirectional IR and RS-232 signal control, onboard test pattern generation, dual 10/100 ethernet ports for LAN extension, and Left/Right audio extraction from PCM 2-channel input signals.

AVProedge
AC-EX70-444-KIT

Connection Diagram

70m (230ft) 4K60 HDMI Extension with HDBaseT

| HDMI | → |
| Cat 6a | → |

HDMI Source

4K Display

HDMI Input

HDBT Output

HDMI Output

HDBT Input

Transmitter

Receiver

PRODUCT SPECIFICATIONS

VIDEO:

VIDEO RESOLUTIONS	UP TO 4K 60HZ 4:2:0 & 4K30 4:4:4
VESA RESOLUTIONS	UP TO 2560X2048 (QSXGA)
HDR FORMATS/RESOLUTIONS	4K24 4:2:2 12 BIT, 4K24 4:2:0 10 BIT
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 (1080) UP TO 12 BIT (4K)

AUDIO:

AUDIO FORMATS SUPPORTED HDMI	PCM 2.0 CH, LPCM 5.1 & 7.1, DOLBY DIGITAL, DTS 5.1, DOLBY DIGITAL PLUS, DOLBY TRUEHD, DTS-HD MASTER AUDIO, DTS:X, DOLBY ATMOS

DISTANCE:

HDBASET DISTANCE (4K & HDR)	40 METERS (131 FEET) (CAT 6A)
HDBASET DISTANCE (FULL HD)	70 METERS (230 FEET) (CAT 6A)
HDMI LEAD IN/OUT	UP TO 50 FEET (USING BULLET TRAIN HDMI)
HDMI LEAD IN/OUT (W/ AOC CABLE)	UP TO 130 FEET (USING BULLET TRAIN AOC)

OTHER:

BANDWIDTH	10.2 GBPS
CEC	YES
HDCP	HDCP 2.3 AND EARLIER

PORTS:

HDMI (TX & RX)	TYPE A
HDBASET	RJ45 W/ POH FOR HDBASET RECEIVERS
IR RX	3.5MM STEREO (3 CONDUCTOR)
IR OUT & I-PASS	3.5MM MONO (2 CONDUCTOR)
RS232	3.5MM STEREO (3 CONDUCTOR)

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)	7.5 WATTS MAX
POWER SUPPLY - MATRIX	INPUT: AC 100-240V ~ 50/60HZ OUTPUT: DC 48V .5A

DIMENSIONS:

DIMENSIONS (TX/RX ONLY, HEIGHT/DEPTH/WIDTH)	MM: 12.7 X 80 X 100.3 INCH: 0.5 X 3.15 X 3.95
DIMENSIONS (PACKAGED HEIGHT/DEPTH/WIDTH)	MM: 90 X 135 X 155 INCH: 3.54 X 5.31 X 6.1
WEIGHT (UNIT)	0.68 LBS (0.31 KG)
WEIGHT (PACKAGED)	1.74 LBS (0.79 KG)

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

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KEY FEATURES

- 70M 4K/60fps 4:4:4 through CAT6A with AVPro Edge ICT
- 100M 1920 X 1080P 24/60fps 4:4:4
- HDR10 and all Dynamic Metadata video formats supported
- Full EDID management
- Compact placement depth (.47 inches / 12mm)

KEY BENEFITS

COMPREHENSIVE EDID MANAGEMENT: Legacy HD displays are often retained for use in new installation projects and occasionally their dated EDIDs impart problems contending with present-day sources. Robust EDID control on the AC-EX70-UHD-KIT enables juggling video resolutions and audio codec combinations for an EDID that provides a congenial match for reliable system operation. EDID Copy allows for acute copying and saving of a known, working EDID, for stable kit functionality and HDCP repeatability.

DISTANCE CAPABILITIES: Transmission distance varies by resolution bandwidth. HD 1080P signals can be sent 70 meters (230') while 4K resolutions reliably reach 40 meters (115'). For new construction or whenever possible, shielded CAT6A is recommended.

POWER REQUIREMENTS: Power over HDBaseT (PoH) allows both devices to be fully powered from a user-selectable, single unit. The individual chassis of the AC-EX70-UHD-KIT are approximately cell phone-dimensioned, making placement options unlimited. Typical applications find the RX unit mated to the rear, jack panel area of the display with the TX unit and power supply positioned at the source end.

CONTROL OPTIONS: Configurable, bidirectional control for IR & RS-232 signals provides a carefully nuanced added plus to the AC-EX70-UHD-KIT, consolidating wiring to a solitary pull and mitigating the use of supplemental devices for a clean, efficient installation. Simplified control requirements can take advantage of the AC-EX70-UHD-KIT's I-PASS, forwarding commands directly from a control system IR-out port into the TX unit I-PASS input, proceeding to the receiving end and routing directly from the RX unit's IR-out into the display's IR input jack (if equipped) or through an attached IR emitter.

IN THE BOX

- AC-EX70-UHD-T2 (Transmitter)
- AC-EX70-UHD-R2 (Receiver)
- 48V Power Supply (One supplied, Rx is powered by Tx)
- 1 x IR Emitter Unit
- 1 x IR Eye Unit
- 3.5mm stereo plug to male DB9 for RS-232 to serial port
- 3.5mm stereo plug to female DB9 for RS-232 to PC
- 4 x Mounting Brackets
- 8 x Screws for Mounting Brackets