



HDBT™ **HDMI®** **HDCP™**
ASE HIGH-DEFINITION MULTIMEDIA INTERFACE HIGH-BANDWIDTH DIGITAL CONTENT PROTECTION

ULTRA SLIM 70M (100M HD) 4K60 4:4:4, HDR HDBaseT EXTENDER AC-EX70-444-KIT

THE AC-EX70-444 IS A REVOLUTIONARY 4K60 4:4:4, HDR AND 18GBPS SUPPORTED HDBaseT EXTENDER OVER SINGLE CAT-5E/6A/7 UTP/STP. USING ICT (INVISIBLE COMPRESSION TECHNOLOGY) WE HAVE ACHIEVED WHAT WAS THOUGHT TO BE IMPOSSIBLE. WE CAN DELIVER A VIRTUALLY LOSSLESS, HIGH BANDWIDTH, 4K HDR SIGNAL WITH SUPPORT FOR ALL SIGNALS UP TO 18GBPS. THAT MEANS DEEP COLOR AND HDR META DATA REMAIN INTACT MAKING THE TRANSMISSION FREE OF ARTIFACTS WITH LESS BANDING. 10.2GBPS IS NO LONGER THE MAX BANDWIDTH WHEN USING CATEGORY CABLE, ICT IS CHANGING THE GAME.



ICT is a revolution in HDMI extension. This proprietary technology can compress high bandwidth HDMI signals into a more manageable size to fit through a CAT Cable "pipe". The ICT algorithm can manage all flavors of HDR including 4:4:4, 4:2:2, and 4:2:0 as well as signals up to 18Gbps and 4K 60Hz 4:4:4. This industry first allows integrators to install the latest sources with confidence and impress customers with an immersive HDR experience. With bi-directional power, left/right audio breakouts, EDID management, scaling, built-in 4K test patterns, Ethernet, IR, and RS-232 included, these extenders are unparalleled.

CONNECTION DIAGRAM



EXTEND YOUR 18GBPS 4K60 (4:4:4) HDMI SIGNAL 70 METERS VIA STANDARD CATEGORY CABLE

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
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 DIGITAL, DTS 5.1, DOLBY DIGITAL PLUS, DOLBY TRUEHD, DTS-HD MASTER AUDIO, DTS-X, DOLBY ATMOS
AUDIO FORMATS SUPPORTED EXTRACTED (2CH PORT)	PCM 2 CH (NO DOWNMIX)

DISTANCE

HDBaseT (CAT) DISTANCE (4K)	70M (230 FEET)
HDBaseT (CAT) DISTANCE (FULL HD)	100M (328 FEET)
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)
BANDWIDTH	18 Gbps (w/ITC)
HDCP	HDCP 2.2 AND EARLIER

PORTS

HDMI (TX & RX)	TYPE A
AUDIO (EXTRACTED ANALOG) (TX & RX)	3 PIN TERMINAL BLOCK (UNBALANCED)
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
ETHERNET	2 RJ45 CONNECTORS

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 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: 157 x 103 x 12 INCH: 6.18 x 4.06 x .47
DIMENSIONS (PACKAGED LENGTH/WIDTH/HEIGHT) (KIT)	MM: 203 x 165 x 91 INCH: 8 x 6.5 x 3.6
WEIGHT (UNIT) (TX OR RX EACH ALONE)	.4LBS (.18KG)
WEIGHT (PACKAGED)	2.5LBS (1.13KG)

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

IN THE BOX:

- AC-EX70-444-TX (Transmitter)
- AC-EX70-444-RX (Receiver)
- 48V Power Supply (One supplied as Rx is powered by Tx)
- 1 x IR Tx Unit
- 1 x IR Rx Unit
- 3 Pin Terminal blocks for Audio and RS-232 Ports (x4)
- Mounting Ears
- Operating Instructions

FULL FEATURE SET

- HDMI 2.0(a/b)
- 18Gbps Bandwidth Support (Using ICT)
- Ultra Slim (.43 inch/11mm)
- 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 in to Tx and Rx for troubleshooting
- L/R Audio Extraction on Tx and Rx
- HDCP 2.2 (and all earlier versions supported)
- CEC Pass Through
- 3D Support
- 100M (328ft) on 1080P (CAT6a)
- Up to 70m (230ft) on 4K (up to 4K60 4:4:4, HDR) (CAT6a)
- Bi-directional 48v PoH (Power Over HDBaseT, only one Power Supply Needed)
- I-Pass Feature for control system "pass-through"
- 3-20v protection circuit built in for safe IR transport
- Bi Directional RS-232 Transport
- LED Status, Link, Power indication lights
- Use single UTP/STP LAN cable (CAT-5E/6A) with substitute HDMI cable to achieve long distance transmission.
- Supports uncompressed PCM 2- Ch., LPCM 5.1 & 7.1, Dolby Digital, DTS, Dolby TrueHD, DTS HD-Master Audio, Atmos
- ESD protection circuitry (Inputs & Outputs) to 7KV
- Can Cascade