



Introduction

The Atlona AT-AVA-EX70C-KIT is an Avance™ Series HDBaseT extender kit that supports control pass-through and remote power capability. The kit transmits 4K/UHD 60Hz 4:2:0 video up to 130 feet (40 meters) or 1080P 60Hz 4:4:4 video up to 230 feet (70 meters). In addition to video with embedded multi-channel audio, RS-232 and IR control signals, and remote power from the transmitter to the receiver are supported on the single CAT6A/7 cable. EDID filtering and clock stretching ensure video transmission integrity and stable connections. Integrated HDBaseT link test allows quick verification of cable, termination, and link quality. The AT-AVA-EX70C-KIT includes both transmitter and receiver endpoints. Compact enclosures and included brackets allow the devices to be surface mounted in furniture or behind a display. The AT-AVA-EX70C-KIT delivers a cost-effective solution for extension of video, audio, control, and receiver power at resolutions up to 4K/UHD.

Applications

- **Conference room** - Transmit 4K/UHD content from a laptop or room PC to the flat panel display at the front of the room.
- **Classroom** - Transmit 4K/UHD content from an instructor computer to a projector or flat panel display.
- **Residential** - Advanced integration features ensure transmission of content to a remote TV at resolutions up to 4K/UHD

Key Features

Long distance HDMI extension

- Transmitting 4K/UHD video up to 130 feet (40 meters) or 1080P video up to 230 feet (70 meters).
- Reliably send HDMI signals further using cost effective CAT-type twisted pair cable.

4K/UHD capable

- Transmits high resolution video up to and including 4K/UHD @ 30Hz 4:4:4 8 bit, 4K/UHD @ 60Hz 4:2:0 8 bit, and 4K/UHD @ 30Hz 4:2:2 10bit.
- Ensures compatibility with common high resolutions source and display devices.

Extends control signals over HDBaseT

- Includes bidirectional RS-232 and IR on the single cable connection between transmitter and receiver.
- Eliminates multiple cable runs between source, control system, and display.

Integrated HDBaseT Link Testing

- Verifies cable, termination, and link quality.
- Quickly diagnose cable related issues and ensure reliable performance for all installations.

Remote Power

- Transmitter provides remote power to the receiver.
- Increases mounting flexibility for the receiver because no local power supply is required.

HDMI clock stretching

- Prevents loss of video due to source clock impairments.
- Improve interoperability with legacy HDMI sources and low quality HDMI video sources.

EDID filtering

- Prevents transmission of unsupported resolutions with large bandwidths.
- Increases integrity of video transmission.

Multi-channel audio compliant

- Supports PCM, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, DTS 5.1, DTS-HD Master Audio, DTS:X.
- Allows any multi-channel audio stream to be used within a professional audio system.

Compact enclosure

- One inch high, quarter rack-width enclosures can be surface mounted in furniture, on a wall behind a display, or installed in a rack.
- Allows devices to be hidden from view.

Compatible with locking HDMI connectors for secure cable connections

Specifications

Video		
Signal	HDMI	
Copy Protection	HDCP 1.4/2.2	
Pixel Clock	300MHz	
UHD/HD/SD	4096x2160@60 ⁽¹⁾ /50 ⁽¹⁾ /30/25/24Hz 3840x2160@60 ⁽¹⁾ /50 ⁽¹⁾ /30/25/24Hz 1080p@60/59.9/50/30/29.97/25/ 24/23.98Hz 1080i@30/29.97/25Hz	720p@60/59.94/50Hz 576p@50Hz 576i@25Hz 480p@60/59.96Hz 480i@30Hz
VESA	2560x1600 2048x1536 1920x1200 1680x1050 1600x1200 1440x900 1400x1050 1280x1024	1280x800 1366x768 1360x768 1152x864 1024x768 800x600 640x480
All resolutions are 60Hz		
Color Space	YUV, RGB	
Chroma Subsampling	4:4:4, 4:2:2, 4:2:0	
Color Depth	8-bit, 10-bit, 12-bit	

Audio			
HDMI / HDBaseT Pass-Through Formats	PCM 2.0 LPCM 5.1 LPCM 7.1	Dolby® Digital Dolby Digital Plus™ Dolby TrueHD Dolby Atmos®	DTS® Digital Surround™ DTS-HD Master Audio™ DTS:X®
Bit Depth	up to 24-bit		
Sample Rate	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz		

Resolution / Distance	4K/UHD - Feet / Meters		1080p - Feet / Meters	
HDMI IN/OUT	15	5	30	10
CAT5e/6	115	35	200	60
CAT6a/7	130	40	230	70

Control	
RS-232	Pass through, up to 115200 baud
IR	Pass through, 30kHz to 60kHz
CEC	Pass through

Buttons and Indicators	
TEST button	1 - momentary, tact-type
Function Indicators:	
Power	1 - LED, green
Link	1 - LED, yellow
Test	1 - LED, multi-colored

Connectors	
HDMI IN (TX)	1 - Type A, 19-pin female
HDBaseT OUT (TX)	1 - RJ45, female
HDMI OUT (RX)	1 - Type A, 19-pin female
HDBaseT IN (RX)	1 - RJ45, female
FW - Firmware (RX and TX)	1 - Micro-A USB
PWR (TX)	1 - 2-pin 48V captive screw connector
RS-232 (RX and TX)	1 - 3-pin captive screw connector
IR (RX and TX)	1 - 4-pin captive screw connector 1 - 5-pin captive screw connector

Environmental	Fahrenheit	Celsius
Operating	32 to 122	0 to 50
Storage	-4 to 140	-20 to 60
Humidity (RH)	20% to 60%, non-condensing	

Power	
Consumption	7.71 W
Supply	Input: AC100~240V 50/60Hz Output: DC 48V/0.83A

Dimensions	Inches	Millimeters
H x W x D	0.93 x 4.2 x 2.95	23.7 x 106.8 x 75

Weight	Pounds	Kilograms
TX	0.55	0.25
RX	0.55	0.25

Certification	
Device	CE, FCC
Supply	CE, FCC, cULus, RoHS

Accessories

SKU	Description
AT-LC-H2H-1M	LinkConnect HDMI to HDMI 1 Meter Cable
AT-LC-H2H-2M	LinkConnect HDMI to HDMI 2 Meter Cable
AT-LC-H2H-3M	LinkConnect HDMI to HDMI 3 Meter Cable

Footnotes

(1) 4K/UHD @ 50/60Hz only supports 4:2:0 over HDBaseT.