

SAVANT




HDBaseT Extenders with 4K HDR up to 100M (HCX-4KHDR100)

Quick Reference Guide

Box Contents

- (1) HDBaseT Transmitter
- (1) HDBaseT Receiver
- (1) Power Cords (Regional adapters included)
- (1) Power Supply
- (4) Brackets
- (3) 3-pin Control Connector
- (1) IR Emitter
- (1) IR Connector Cable
- (1) IR Receiver
- (1) Regulatory Card

Specifications

Environmental			
Temperature	32° to 113° F (0° to 45° C)		
Humidity	10% to 90% Relative Humidity (non-condensing)		
Dimensions and Weights			
Height	0.82 in (2.1 cm)		
Width	7.68 in (19.5 cm)		
Depth	3.73 in (9.5 cm)		
Weight	Shipping 4.20 lb (1.91 kg)		
Power			
Input Power	12V DC 3A		
Power Consumption	27 Watts (maximum)		
Power over HDBaseT (PoH)	2-way Power over HDBaseT (PoH). Power connected to either the transmitter or receiver can be used to power the opposite device.		
Video			
HDR	Supported		
Supported Formats	800x600 ⁴	1360x768 ⁴	1680x1050 ⁴
	1024x768 ⁴	1366x768 ⁴	1920x1080 ⁴
	1280x760 ⁴	1440x900 ⁴	1920x1200 ⁴
	1280x800 ⁴	1600x900 ⁴	3840x2160 ^{1,2,3,4}
	1280x960 ⁴	1600x1200 ⁴	4096x2160 ^{1,2,3,4}
1 = at 24 Hz 2 = at 25 Hz 3 = at 30 Hz 4 = at 60 Hz			
Audio			
Supported Formats	Pass-through of all HDMI audio formats are supported.		
Audio Return Channel (ARC)	Supported		
Compliance			
Safety and Emissions	FCC Part 15	CE	C-Tick
			
RoHS	Compliant		

Transmitter



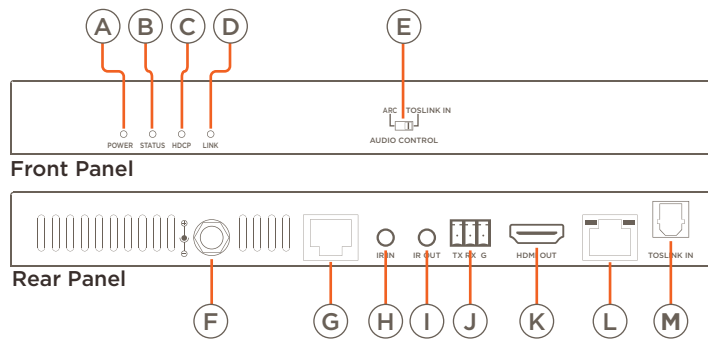
Front Panel



Rear Panel

A Power LED	Off: Device is off. No power applied. Red: Main board is powered.
B Status LED	Off: HDBaseT processor is not running. Blinking Blue: HDBaseT processor is running.
C HDCP LED	Off: No HDMI stream. Blue: HDCP present in HDMI stream. Rapid Blinking Blue: Non-encrypted HDCP signal.
D Link LED	Off: No connection established. Blue: Connection established between Transmitter and Receiver.
E Audio Output	3-pin analog audio output.
F Power Input	12V DC locking power connection. (2-way PoH)
G HDBaseT Out	RJ-45 HDBaseT connection.
H IR In	3.5 mm IR input for IR pass-through. Transmits IR signals via an IR Flasher (5V tolerant) to devices with an IR input or IR receiver.
I IR Out	3.5 mm IR output connection. Transmits IR signals via an IR flasher (5V tolerant) to devices with an IR input or IR receiver.
J RS-232	3-pin Control Connector. Transmits and receives serial data to and from serial controllable devices. For pin-out information, refer to the RS-232 Wiring section below.
K HDMI In	19-Pin Type A HDMI female digital audio/video input. Supports HDMI 2.0b. An HDMI 2.0 compliant cable is required for 4K content.
L Ethernet	RJ-45 10/100 Base-T, auto-negotiating port with Link/Activity LEDs. For use of pass-through of network connection. Link LED: Off: Ethernet link is not established. Green Solid: Ethernet link is established. Activity LED: Off: No Activity. Green Blinking: Activity (Rx/Tx).
M TOSLink Out	Digital optical output.

Receiver



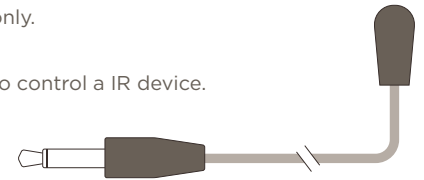
A Power LED	Off: Device is off. No power applied. Red: Main board is powered.
B Status LED	Off: HDBaseT processor is not running. Blinking Blue: HDBaseT processor is running.
C HDCP LED	Off: No HDMI stream. Blue: HDCP present in HDMI stream. Rapid Blinking Blue: Non-encrypted HDCP signal.
D Link LED	Off: No connection established. Blue: Connection established between Transmitter and Receiver.
E Audio Control	Selector switch to allow Audio Return Channel (ARC) or TOSLink Input. ARC - When the dip-switch on the face of the HCX-4KHDR100 RX is in the ARC position, HDMI audio received from the display connected to HDMI OUT port on the HCX-4KHDR100 RX will be output from the TOSLINK OUT port on the HCX-4KHDR100 TX TOSLink - When the dip-switch on the face of the HCX-4KHDR100 RX is in the TOSLINK position, TOSLINK audio from a device connected to the HCX-4KHDR100 RX TOSLINK IN will be output from the TOSLINK OUT port of the HCX-4KHDR100 TX.
F Power Input	12V DC locking power connection. (2-way PoH)
G HDBaseT In	RJ-45 HDBaseT connection.
H IR In	3.5 mm IR input for IR pass-through. Transmits IR signals via an IR Flasher (5V tolerant) to devices with an IR input or IR receiver.
I IR Out	3.5 mm IR output connection. Transmits IR signals via an IR flasher (5V tolerant) to devices with an IR input or IR receiver.
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M TOSLink In	Digital optical input.

IR Wiring

IR Control is pass-through only.

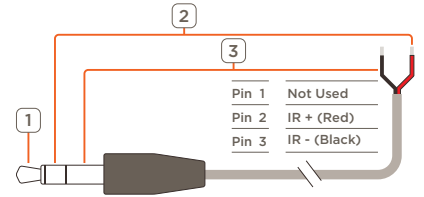
IR Emitter

Connect to 3.5 mm IR Out to control a IR device.



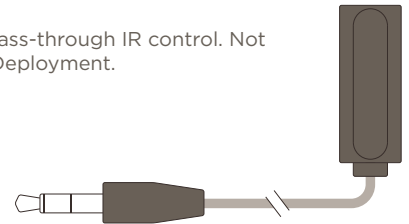
IR Connector Cable

Connect to 3.5 mm IR In to pass-through IR control from a Savant Controller.



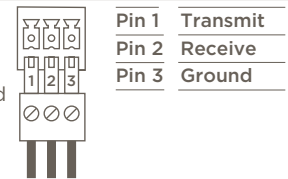
IR Receiver

Connect to 3.5 mm IR In to pass-through IR control. Not commonly used in a Savant Deployment.



RS-232 Wiring

RS-232 control signal pass-through only. Serial control connections are made using a 3-pin Control Connector supplied with the device. The wire slips into the hole and locks with a screw located at the top of the connector.



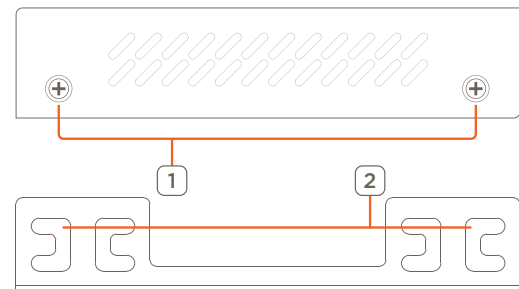
IMPORTANT NOTE! Use of a crossover cable between the controller and the Transmitter is required.

Installation

An HDBaseT extender can be placed on a standard 1U rack shelf, or the extender can be installed using the included mounting brackets.

To install the mounting brackets, follow the steps below.

1. Remove the two case screws on the side of the device (Shown in the image below).
2. Align the bracket using the top holes.
NOTE: This will leave an air gap behind the device.
3. Replace the case screws attaching the bracket.



HDBaseT Cable Information

Category 6 or greater twisted pair cable with RJ-45 connectors between the transmitter and the receiver is recommended. TIA/EIA-568B straight-through wiring connections must be used.

Transport Distance (4K)

Cat6	230 ft (70 m)
Cat6a/7	328 ft (100 m)

Transport Distance (1080P)

Cat6	328 ft (100 m)
Cat6a/7	328 ft (100 m)

