

# SAVANT

## HDBaseT Extenders with 4K HDR up to 40M (HCX-4KHDR40)

### Quick Reference Guide

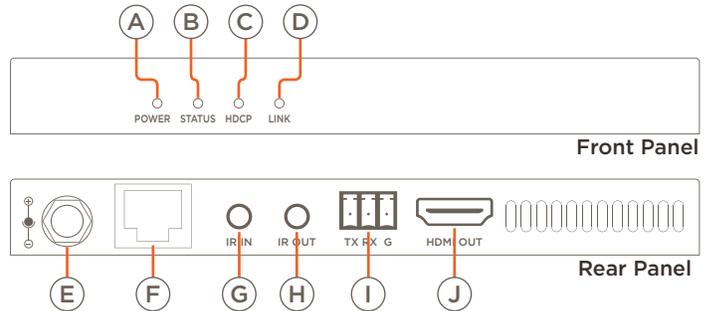
#### Box Contents

- (1) HDBaseT Transmitter
- (1) HDBaseT Receiver
- (1) Power Supply (Regional clips included)
- (4) Brackets
- (2) 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	0.60 in (1.52 cm)		
Width	5.37 in (13.64 cm)		
Depth	2.92 in (7.42 cm)		
Weight	Shipping 2.05 lb (0.93 kg)		
Power			
Input Power	18V DC 3A		
Power Consumption	54 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 <sup>4</sup>	1360x768 <sup>4</sup>	1680x1050 <sup>4</sup>
	1024x768 <sup>4</sup>	1366x768 <sup>4</sup>	1920x1080 <sup>4</sup>
	1280x760 <sup>4</sup>	1440x900 <sup>4</sup>	1920x1200 <sup>4</sup>
	1280x800 <sup>4</sup>	1600x900 <sup>4</sup>	3840x2160 <sup>1,2,3,4</sup>
	1280x960 <sup>4</sup>	1600x1200 <sup>4</sup>	4096x2160 <sup>1,2,3,4</sup>
1280x1024 <sup>4</sup>			
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.		
Regulatory			
Safety and Emissions	FCC Part 15	CE	C-Tick
			
	RoHS	Complaint	

#### Device

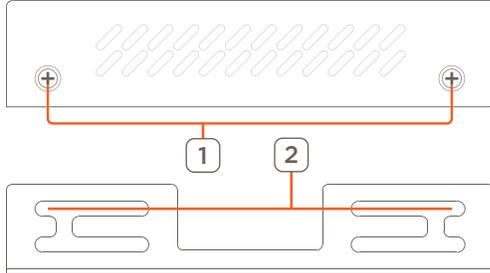


<b>A</b> Power LED	<b>Off:</b> Device is off. No power applied. <b>Red:</b> Main board is powered.
<b>B</b> Status LED	<b>Off:</b> HDBaseT processor is not running. <b>Blinking Blue:</b> HDBaseT processor is running.
<b>C</b> HDCP LED	<b>Off:</b> No HDMI stream. <b>Blue:</b> HDCP present in HDMI stream. <b>Rapid Blinking Blue:</b> Non-encrypted HDCP signal.
<b>D</b> Link LED	<b>Off:</b> No connection established. <b>Blue:</b> Connection established between transmitter and receiver.
<b>E</b> Power Input	18V DC locking power connection. (2 way PoH)
<b>F</b> HDBaseT	RJ-45 HDBaseT connection.
<b>G</b> 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.
<b>H</b> 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.
<b>I</b> RS-232	3-pin Control Connector. Transmits and receives serial data to and from serial controllable devices. For pin-out information, refer to the <b>RS-232 Wiring</b> section below.
<b>J</b> HDMI Out	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.

## Installation

An HDBaseT extender can be placed on a standard 1U rack shelf, or 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.

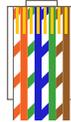
### Transport Distance (4K)

Cat6	115 ft (35 m)
Cat6a/7	131 ft (40 m)

### Transport Distance (1080P)

Cat6	197 ft (60 m)
Cat6a/7	230 ft (70 m)

TIA/EIA-568B



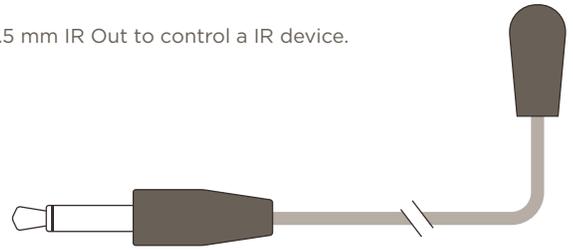
RJ-45 Connector  
(Gold pins facing up)

## IR Wiring

IR Control is pass-through only.

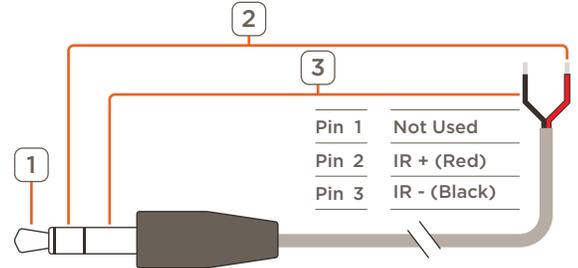
### IR Emitter

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



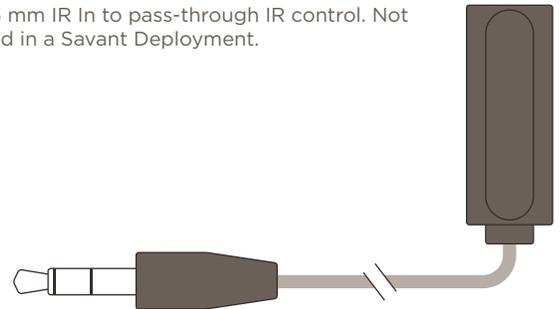
### IR Connector Cable

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.



Pin 1	Transmit
Pin 2	Receive
Pin 3	Ground

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