SAVANT

SmartLink HDBaseT™ Transmitter
Quick Reference Guide

The Savant® HTX-SLN501 SmartLink HDBaseT™ Transmitter is capable of transmitting audio and video, IR and RS-232 control, Ethernet and Power up to 328 ft (100 meters) via a single Cat 5e/6/7 cable. Endpoints can be a Savant HDBaseT receiver or any HDBaseT-compliant receiver.

⚠ **IMPORTANT!**

The HDBaseT connections on the SmartLink Matrix are 5Play compliant and feature Power over HDBaseT (PoH) which can supply power to compatible HDBaseT receivers.
Read the Using Power over HDBaseT (PoH) section before making any connections to avoid damaging connected devices.
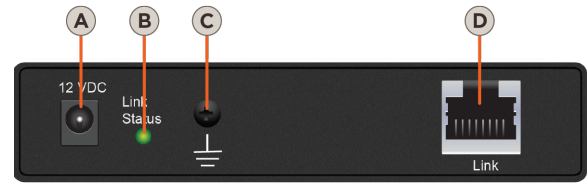
Box Contents

(1) SmartLink (HTX-SLN501)
(1) Installation Kit (075-0167-xx):
  (1) 12V DC 1.5A Power Supply with Multi-country plugs (025-0132-xx)
  (2) M3 x 4 mm Screws (039-0302-xx)
  (1) Wall Mounting Bracket (017-0872-xx)
  (1) 4 in Cable Tie (014-0071-xx)
  (1) 4-Pin Screw Down Plug in Connector (028-9395-xx)
(1) Quick Reference Guide (this document)

Specifications

Environmental	
Temperature	32° to 104° F (0° to 40° C)
Humidity	10% to 90% Relative Humidity (non-condensing)
Cooling	25 cubic feet per minute (CFM) recommended.
Maximum BTU	7 BTU/hr
Dimensions and Weight	
Height	0.94 in (2.39 cm)
Width	4.56 in (11.58 cm)
Depth	3.18 in (8.07 cm)
Weight	Shipping: 1.35 lb (0.61 kg)
Power	
Power Supply	12V DC 1.5A 120-230V AC 50/60Hz
Maximum Power	6 Watts 18 Watts (when powering remote receiver)
Compliance	
Safety and Emissions	FCC Part 15 | CE Mark | C-Tick
RoHS	Compliant
Enclosure	
Metal enclosure with Savant's Design Signature, black	
Minimum Supported Release	
Savant OS	da Vinci 6.0.1

Front Panel

A	12 VDC	12V DC 1.5A - Connect to included power supply.
B	Link Status LED	**Green:** Link with HDBaseT 5Play compatible receiver has been established. **Red:** Power is present, but link to HDBaseT™ 5Play™ compatible transmitter has not been established. **Off:** HTX-SLN501 is not receiving power.
C	⏚	Ground Connector (Optional) - Used to connect to a suitable ground reference when using Power over HDBaseT (PoH).
D	Link	8-pin RJ-45 female shielded HDBaseT 5Play compatible - Connect to Link connection on SmartLink HDBaseT Receiver, SmartLink HDMI Matrix, or 3rd party HDBaseT 5Play compatible receiver.

Rear Panel

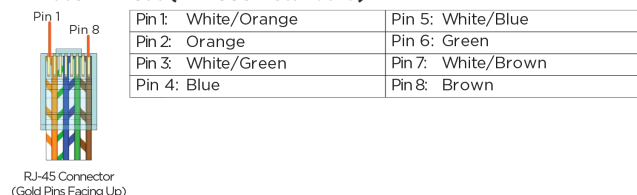| A	IR In/Out	4-pin Screw Down Plug-in Connector **IR In:** Receives IR Signals from a Savant or 3rd party controller to control devices located near the endpoint. **IR Out:** Sends IR signals received from the endpoint to control devices located near the start point. Can be connected to an IR Flasher or directly to a devices IR Input. See IR Wiring for important precautions regarding IR functionality before making any connections.
B	HDMI In	19-pin type A HDMI female Supports HDMI and DVI (DVI/D Compatible) DVI requires DVI to HDMI adapter (not included)
C	LAN	RJ-45 10/100 Base-T, auto-negotiating port with Link/Activity LEDs.
D	Link LED	**Off:** Ethernet link is not established. **Green Solid:** Ethernet link is established. **Green Blinking:** Ethernet activity is occurring.
E	Data Rate LED	**Off:** 10 Mbps data rate **Green:** 100 Mbps data rate
F	RS232	Used to transmit and receive serial binary data to and from serial controllable devices located at the end point. 8-pin RJ-45 female. See RS-232 Wiring for pinouts.

Wiring and Connections

HDBaseT Link Wiring

⚠ **IMPORTANT! Precautions and Recommendations**

- The HDBaseT connections on the SmartLink Matrix are 5Play compliant and feature Power over HDBaseT (PoH) which can supply power to compatible HDBaseT receivers.
  Read the Using Power over HDBaseT (PoH) section before making any connections to avoid damaging connected devices.

- HDBaseT differs from Ethernet and PoH has different specifications than PoE. The HDBaseT connections should never be connected to a network router or switch. Doing so may cause damage to connected equipment.

- While HDBaseT transmission technology is much less susceptible to electromagnetic interference (EMI) than other transmission technologies, Savant recommends that shielded Cat 5e/6/7 cable, and shielded RJ-45 connectors are used for maximum signal reliability.

HDBaseT Pinout (EIA 568B Standard)

Pin 1: White/Orange	Pin 5: White/Blue
Pin 2: Orange	Pin 6: Green
Pin 3: White/Green	Pin 7: White/Brown
Pin 4: Blue	Pin 8: Brown

RJ-45 Connector
(Gold Pins Facing Up)

Using Power over HDBaseT (PoH)

Power over HDBaseT allows for 5Play compliant HDBaseT receivers to receive power on the same cable as the audio, video, IR, RS-232, and Ethernet. This eliminates the need for a power supply connected to the receiver. When non 5Play compliant receivers are used, PoH must be turned OFF on the transmitters link port before making any connections.

DIP Switch 2

Bottom view of HTX-SLN501

HDMI Input
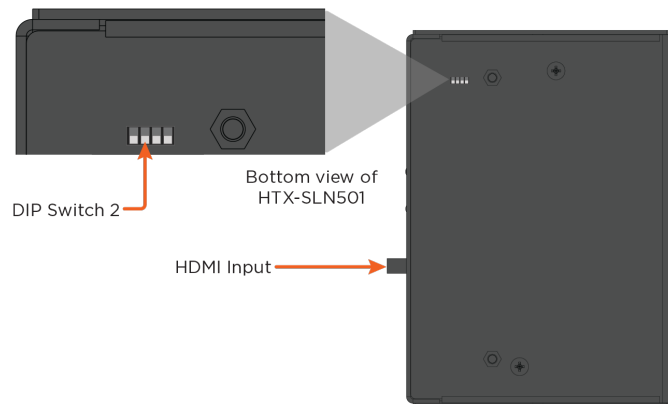
DIP Switch Settings

Power Over HDBaseT Enabled
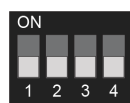
1: Off (Down)
2: OFF (Down)
3: Off (Down)
4: Off (Down)

Power Over HDBaseT Disabled

1: Off (Down)
2: ON (Up)
3: Off (Down)
4: Off (Down)

RS-232 Wiring

The RS-232 ports follow the Savant standard with pin 5 as RXD (receive) and pin 6 as TXD (transmit). The diagram below shows the wiring for the HTX-SLN501 side of the cable, the wiring on the opposite side may vary based on the devices pin configuration.

Pin 1: -------	**Pin 6: RXD (RS-232)**
Pin 2: -------	**Pin 5: TXD (RS-232)**
Pin 3: -------	Pin 7: -------
Pin 4: GND (RS-232)	Pin 8: -------

- Wire coloring is included to identify the pins used for this connection. Colors shown do not represent any wiring standard.

RJ-45 Connector
(Gold Pins Facing Up)
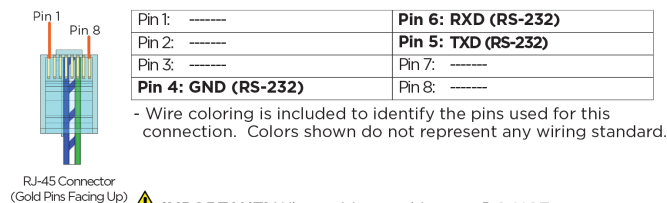
⚠ **IMPORTANT!** When wiring to this port, DO NOT connect any wires within the cable that are not required for communication.

RJ-45 to DB9 Adapters

Savant offers RJ-45 to DB9 adapters in a variety of configurations that can be used for RS-232/422/485 control.

Refer to the **RS-232 Conversion to DB9 and RS-422/485 Pinout Application Note** located on the **Savant Community** for more information on RJ-45 to DB9 adapters.

⚠ **IMPORTANT!**

If you are using RJ-45 to DB9 adapters not supplied by Savant:

- Ensure that any wires required for communication/control are terminated within the adapter.

- Ensure that all wires NOT required for communication/control are NOT terminated in the connector.

- Ensure that the unused wires in the connector are cut to prevent them shorting out, as they are still terminated in the RJ-45 connector on the controller side.

IR Wiring

IR connections are made using 4-pin Screw Down Plug-in Connector supplied with receiver. The wire slips into the hole and locks with the screw located at the top of the connector.

⚠ **IMPORTANT! IR Wiring Precautions**

- Ensure that all IR emitters are within 15 feet (4.6 meters) from the controllers location.

- Use of 3rd party flashing IR emitters with Talk Back is not recommended. These types of emitters can draw voltage away from the IR signal that can degrade IR performance.

1: IN -
2: IN +
3: OUT -
4: OUT +

Use White Stripe for Positive (+)
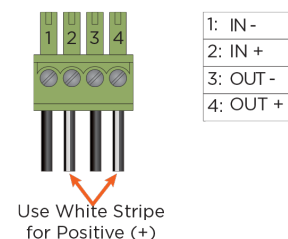
Additional Information

Refer to the following documents located on the **Savant Community** for additional information.

- SmartLink Matrix Blueprint Deployment Guide