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DIGI-HDXL Installation Guide

RX/Receiver
DIGI-HDXL-R

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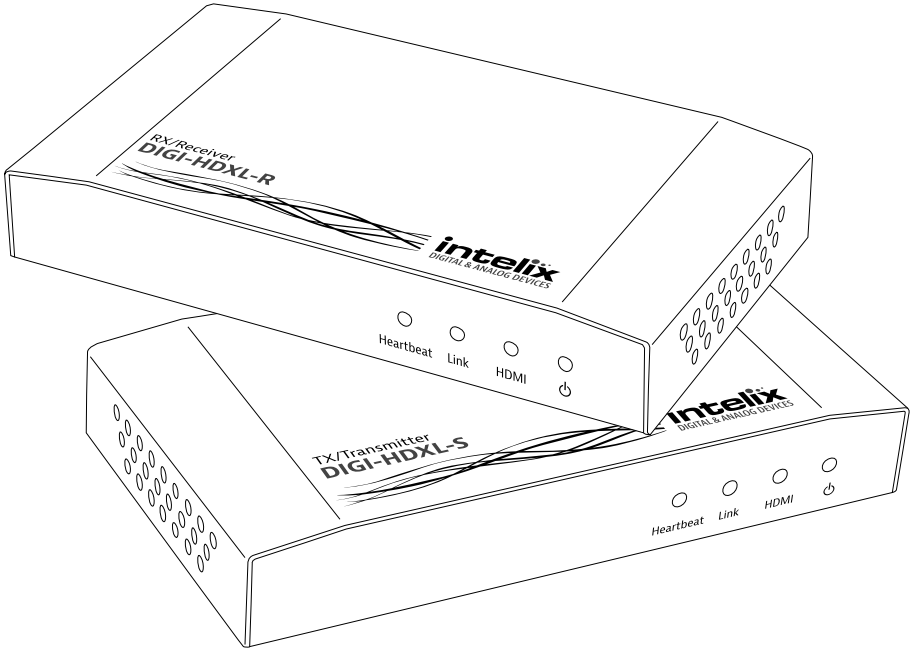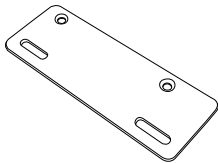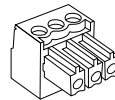Heartbeat Link HDMI ⏻

TX/Transmitter
DIGI-HDXL-S

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Heartbeat Link HDMI ⏻

Included Accessories:

Mounting brackets with screws - 2 ea
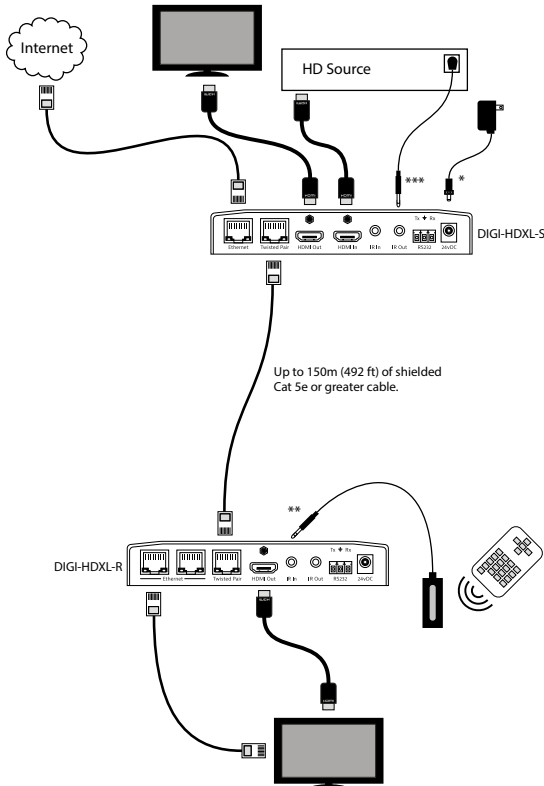
3-pole terminal block - 1 ea

Important notice:

• Do not attempt to disassemble or alter the extender housing. There are no user-serviceable parts inside the unit. Doing so will void your warranty.

• To minimize the possibility of equipment damage from electrostatic discharge (ESD), all source and destination equipment must be powered off during installation.

• Do not connect the extender to a telecommunication outlet wired to unrelated equipment. Doing so may damage the unit or any connected equipment. Ensure all connected twisted pair cabling is straight-through (point-to-point).

• Allow proper ventilation to reduce the risk of thermal failure.

The Intelix DIGI-HDXL extends HDMI over a single cable by incorporating HDBaseT technology. The DIGI-HDXL supports 1080p 150 meters (492 feet) including multichannel audio. Built-in surge protection and diagnostic LEDs ensure hassle-free and robust installations. Key features of the new extender series include local HDMI output on the transmitter, power over Ethernet (PoE), bidirectional IR, bidirectional RS232, and Ethernet pass-through with a 2-port network switch on the receiver.

The HDMI distribution chip in the DIGI-HDXL-S sends one signal to the HDBaseT output and the other signal to the local HDMI output for a local display. This new feature also allows HDMI source devices that do not support DDC clock stretching (HDMI 1.2 and below) to be extended over the HDBaseT link without issues. Flexible power design allows the DIGI-HDXL series extenders to be powered at either the TX or RX end, and only one power supply is required. The power supply (PS-24D-25) is sold separately. The bidirectional wideband IR, bidirectional RS232, and Ethernet pass-through capabilities make the DIGI-HDXL compatible with most control systems. The two-port network switch on the DIGI-HDXL-R allows a second device to share the 100BaseT Ethernet pass-through connection without adding additional hardware to the installation.

The DIGI-HDXL series extenders are only compatible with Intelix XL-series HDBaseT product offerings. An HDBaseT link will not be established with other HDBaseT products.

Example Diagram

TIA/EIA-568B

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

Twisted Pair Wiring
Use TIA/EIA-568B wiring for cable connections between send and receive units and when using the Ethernet connections.

Up to 150m (492 ft) of shielded Cat 5e or greater cable.

* Power supply (PS-24D-25) can be connected on either end and is sold separately.

** IR receiver (DIGIB-EYE) is to be connected into the IR In port and is sold separately. Supports IR carrier frequencies between 33 and 55 KHz.

*** IR Transmitter (DIGIB-EMT) is to be connected to the IR Out port and is sold separately. Affix to the IR window of the device to be controlled. Supports IR carrier frequencies between 33 and 55 KHz.
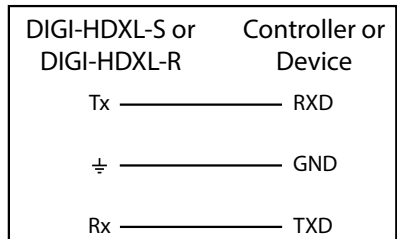
Instructions

The following instructions describe the installation process for a point-to-point installation. The procedure is similar for compatible HDBaseT components. In the event a compatible HDBaseT product cannot provide power over the HDBaseT cable connection, the DIGI-HDXL product will require a local power supply.

1.   Verify all components included with the extender set are present before installation.

2.   If the extenders are going to be permanently mounted to a surface, attach the included mounting brackets with the supplied screws.

3.   Turn off power and disconnect the audio/video equipment by following the manufacturer's instructions.

4.   Connect shielded Category 5e or greater twisted pair cable with RJ45 connectors between the transmitter (DIGI-HDXL-S) and the receiver (DIGI-HDXL-R). TIA/EIA-568B straight-through wiring connections must be used with all HDBaseT extenders.

5.   Connect an HDMI cable and any desired control accessories between the display and the receiver (DIGI-HDXL-R).

6.   Connect an HDMI cable and any desired control accessories between the source and the transmitter (DIGI-HDXL-S).

7.   Connect the power supply (PS-24D-25, sold separately) to the transmitter or receiver and lock the power supply to the power connector by twisting the locking collar clockwise.

8.   Power on attached audio/video devices.

RS232 Wiring

Connect the controller or device RXD signal to Tx on the DIGI-HDXL extender. Connect the controller or device TXD signal to Rx on the DIGI-HDXL extender.

Tx ╪ Rx

DIGI-HDXL-S or DIGI-HDXL-R	Controller or Device
Tx ————————	RXD
╪ ————————	GND
Rx ————————	TXD

Diagnostic LEDs:

Heartbeat   Link   HDMI   ⏻

The DIGI-HDXL provides four LEDs to indicate the current operating status and to assist troubleshooting an installation.

Power: Solid, the DIGI-HDXL extender is receiving power from the power supply or from the remote extender via shielded Category 5e or greater cabling.

Heartbeat: Flashes once per second, the HDBaseT processor is running.

Link: Solid, the two DIGI-HDXL extenders are communicating via shielded Category 5e or greater cabling.

HDMI: Solid, HDCP signal is present in the HDMI stream. Flashes quickly, no HDCP signal is present in the HDMI stream.

Technical Specifications

Supported Audio, Video, and Control

Maximum Video Compatibility	Deep Color 24 Bit at 1080p
Video Compliance	HDMI, HDCP, and CEC (Consumer Electronics Control)
Embedded Audio	Up to PCM 8 channel, Dolby Digital TrueHD, and DTS-HD Master Audio
IR Carrier Frequency Range	33-55kHz at 5 volts
Ethernet	100BaseT
RS232 Baud Rate	Up to 115200 baud

HDBaseT Signal Characteristics

Maximum Distance	150 m
Cable Requirements	Solid core shielded Category 5e, Category 6 or greater with TIA/EIA-568B crimp pattern
Bandwidth	10.2 Gbps

Chassis and Environmental

Dimensions	85 mm x 151 mm x 24 mm (3.35 in. x 5.94 in x 0.95 in)
Operating Temperature (Environment)	0° to +40° C (+32° to +104° F)
Operating Temperature (Chassis)	31° C (88° F) (S); 38° C (100° F) (R)
Operating Humidity (Environment)	20% to 90%, Non-condensing

Power, ESD and Regulatory

Maximum Power Consumption	22 watts
ESD Protection	15 kV
Regulatory	CE, RoHS

Other

Standard Warranty	2 Years
Included Items	Installation Guide, Mounting Brackets (2 ea), Mounting Screws (4 ea)

DIGI-HDXL-S Compatible Receivers

AV, PoE, and Control	DIGI-HDXL-R

DIGI-HDXL-R Compatible Transmitters

AV and Control	FLX-BO4A-XL
AV, PoE, and Control	DIGI-HDXL-S

Accessories

Power Supply	PS-24D-25
IR Emitter	DIGIB-EMT
IR Receiver	DIGIB-EYE

Complete Technical Specifications can be found on Intelix.com.

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