DIGITALINX

VALUE-ENGINEERED DIGITAL SOLUTIONS

DL-HD70LS-H2 Quick Install Guide

This guide is for quick installation only.
For complete owners manual go to www.libav.com or use a QR reader to access the manual via QR code below.

Scan QR Code with your Smart-phone or Tablet

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Product Overview

The DigitaLinx DL-HD70LS-H2 extender set transmits HDMI 2.0 audio and video, up to 4K@60Hz 4:4:4/8 bit color with HDR support, and bidirectional IR up to 70 meters away using a single solid core, shielded Category 6 twisted pair cable. The extender set support HDCP versions up to 2.2. With its slim design the DL-HD70LS-H2 is easy to install in the tightest of spaces. Built in re-clocking circuitry ensures that extender set is backwards compatible with older HDMI version chip sets.

The extender system uses 2:1 data compression when the signal surpasses 10Gbps, anything under 10Gbps will never be compressed. System supports flexible power so entire extender circuit can be powered by either the TX or RX side. Supports static HDR (HDR10) only when data rate exceeds 18Gbps, supports dynamic HDR (HDR10+ / Dolby Vision) when data rate is 10Gbps or less.

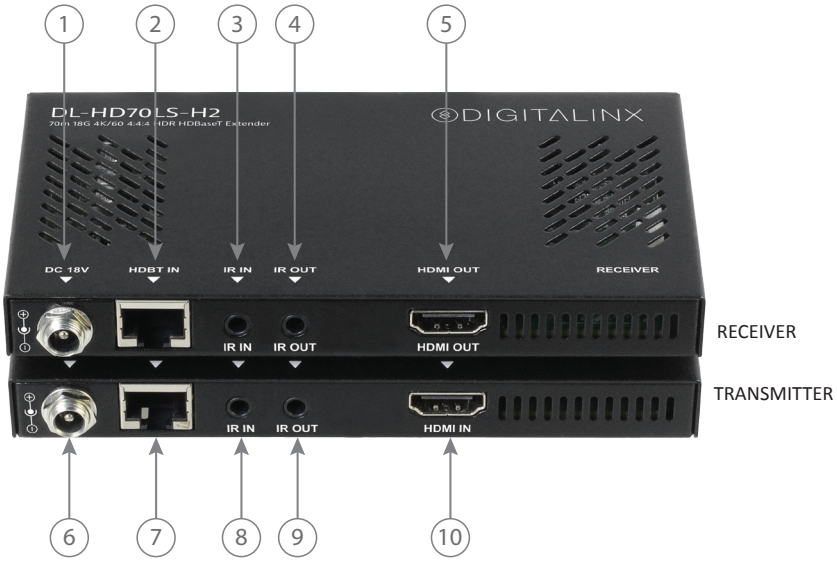
Built-in surge protection helps ensure hassle-free and robust installations. The 18 volt power supply is secured with a screw-on connector to prevent the power from being accidentally disconnected.

The DL-HD70LS-H2 is sold only as a set. The individual transmitter and receiver are not compatible with other HDBaseT devices due to proprietary PoE circuitry.

Package Contents

- DL-HD70LS-H2 Extender Set
- Quick Install Guide
- (1) IR Emitter
- (1) IR Broadband Receiver (30-50KHz)
- (1) DC18V 1A power supply with US, UK, EU and AU power adapter plugs
- (4) Mounting clips with mounting screws
- (1) IR-AC IR coupler cable

Transmitter and Receiver View



1. **DC 18V** - Locking power supply port (receiver)
2. **HDBT IN** - HDBaseT input; RJ45 connection
3. **IR IN** - 3.5mm IR input port for connection to IR receiver or 3rd party IR system
4. **IR OUT** - 3.5mm IR output port for connection to IR emitter
5. **HDMI OUT** - HDMI output port for connection to display
6. **DC 18V** - Locking power supply port (transmitter)
7. **HDBT OUT** - HDBaseT output; RJ45 connection
8. **IR IN** - 3.5mm IR input port for connection to IR receiver or 3rd party IR system
9. **IR OUT** - 3.5mm IR output port for connection to IR emitter
10. **HDMI IN** - HDMI input port for connection to HDMI video source

Front Panel LED States for Transmitter / Receiver

POWER (RED)- Solid when device is powered ON
STATUS (BLUE)- When blinking the device is working properly
HDCP (BLUE) - Solid when HDMI signal is encrypted; blinking when non-HDCP protected content is transmitted; OFF when no content is being transmitted
LINK (GREEN)- Solid when successful link between transmitter and receiver is established; off or blinking indicates a physical link error

Connectivity Instructions

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 Category 6 or greater twisted pair cable with RJ45 connectors between the DL-HD70LS-H2 transmitter and the receiver. TIA/EIA-568B straight-through wiring connections must be used with all HDBaseT extenders.

5. Connect an HDMI cable and any desired IR control accessories between the display and the DL-HD70LS-H2 receiver.

6. Connect an HDMI cable and any desired IR control accessories between the source and the DL-HD70LS-H2 transmitter.

7. Connect the included power supply to the DL-HD70LS-H2 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.

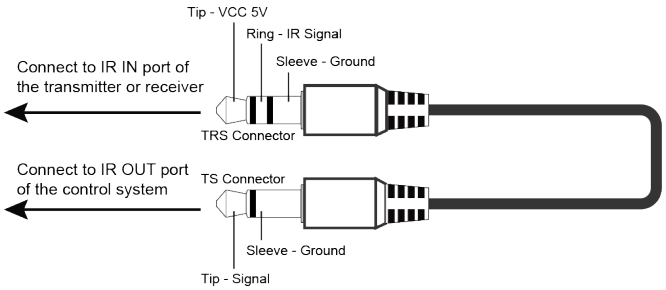
Passing IR Signals:

The DL-HD70LS-H2 is capable of passing IR signals between 30 and 50 KHz. To prevent damage to any of the electronics, the extenders should be powered off while inserting or removing any IR components. Inserting an IR transmitter into the IR IN port may damage the IR circuit for that extender.

IR OUT: The IR transmitter (IR emitter) must be plugged into the IR OUT port.

IR IN: The IR receiver (IR eye) must be plugged into the IR IN port.

To pass 3rd party IR system signals through the DL-HD70LS-H2, such as a control system, connect the TS connector of the IR-AC coupling cable (provided) to the IR output port of the control system and connect the TRS connector of the IR-AC cable to the IR IN to either transmitter or receiver of the DL-HD70LS-H2



Cabling Wiring Requirements

HDBaseT Cabling

To ensure proper performance of the DL-HD70LS-H2, it is recommended that you use solid core, shielded Category 6 F/UTP cabling at a minimum. Category 5e F/UTP may perform well but may not support power over HDBaseT reliably over longer distances.

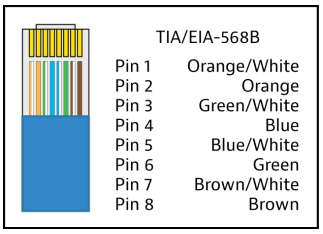
When using shielded category cabling *ALWAYS*...

....use shielded connectors
....properly ground the category cable

For optimized HDBaseT performance use the following Liberty Wire and Cable branded cabling;

Category 6 plenum; **24-4P-P-L6SH**
Category 6A plenum; **24-4P-P-L6ASH**

Category 6 NON-plenum; **24-4P-L6SH**
Category 6A NON-plenum; **24-4P-L6ASH**



Twisted Pair Wiring
Use TIA/EIA-568B wiring for Category 6 connection between send and receive units.

Technical Specifications

Supported Audio and Video	
Video Compliance	HDMI 2.0+, HDCP2.2, and CEC (Consumer Electronics Control)
Input / Output Resolution Support	*SMPTE*: Up to 4096x2160@60Hz (4:4:4 chroma sub-sampling / 8 bit deep color) *VESA*: Up to 1920x1200
Maximum Pixel Clock	600MHz
Embedded Audio	Up to PCM 8 channel, Dolby Digital, DTS, TrueHD, DTS-HD Master Audio and Dolby Atmos
IR Carrier Frequency Range	30-50kHz at 5 volts
HDBaseT Signal Characteristics	
Maximum Distance	*1080p*: 70 meters / 231 feet *4K@60Hz 4:4:4*: 40 meters / 132 feet
Cable Requirements	Solid core shielded Category 6 F/UTP or greater with TIA/EIA-568B crimp pattern
Bandwidth	18 Gbps (compressed) / 10.2 Gbps (uncompressed)
Chassis and Environmental	
Dimensions (H x W x D)	15.2 mm x 136 mm x 74 mm (.60 in x 5.37 in x 2.92 in)
Product Weight	.24kg / 0.53lbs for each transmitter / receiver
Operating Temperature	0° to +45° C (+32° to +113° F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Operating Humidity (Environment)	10% to 90%, Non-condensing
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) ±4kV (Contact discharge
Surge Protection	Voltage: ±1 kV
Power	
Maximum Power Consumption	12.8 watts
Power Supply Input Voltage	100-240V AC at 50-60 Hz
Power Supply Output Voltage	18V DC
Regulatory	CE, FCC, RoHS
Other	
Standard Warranty	5 Years
Included Items	Quick Guide, Power Supply, Adapter Plugs (US, EU, AU, UK), (4) Mounting Brackets, (4) Mounting Screws, (1) IR-AC IR adapter cable (1) IR Emitter and (1) IR Receiver

Distances and picture quality may be affected by cable grade, cable quality, source and destination equipment, RF and electrical interference, and cable patches.

Thank you for your purchase.

For Technical Support please call our toll free number at
800-530-8998 or email us at supportlibav@libav.com

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