

# INT-BSR4K-H2 Quick Install Guide



This guide is for quick installation only.  
For complete owners manual and list of commands, go to [www.libav.com](http://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

**Important notice:**

- Do not attempt to disassemble or alter the 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 device 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.

## Product Overview

The INT-BSR4K-H2 is an HDMI 2.0 and HDCP 2.2 compliant HDBaseT scaling 4K receiver that distributes uncompressed 4K@60Hz UHD video, digital coax / analog stereo audio, Ethernet, RS232 and bi-directional IR up to 100m/330ft over a single category cable. The INT-BSR4K-H2 can be controlled by telnet or RS232 but also can also store and pass display commands via RS232 as well as generate CEC display ON and OFF commands. The two-port network switch on the INT-BSR4K-H2 allows a second device to share the 100BaseT Ethernet pass-through connection without adding additional hardware to the installation. The INT-BSR4K-H2 requires local power, however it can provide power to a compatible HDBaseT transmitter.

The INT-BSR4K-H2 is compatible with all Intelix HDBaseT product offerings and any product that meets the HDBaseT specifications.

## Package Contents

- INT-BSR4K-H2 HDBaseT Scaling Receiver
- Quick Install Guide
- DC12V 3A power supply with US, UK, EU and AU power cords
- (1) IR Emitter
- (1) IR Receiver
- (2) 3.5mm 3 pin phoenix male connectors
- (2) Mounting Brackets

## Front and Back View



1. 12V DC - Locking power port to connect DC12V power adapter
2. ETHERNET 1 - Ethernet Port 1
3. ETHERNET 2 - Ethernet Port 2
4. HDBT IN- HDBaseT input to connect to HDBaseT output from transmitter via category cable
5. IR IN- IR Input to connect to IR receiver
6. IR OUT- IR Output to connect to IR emitter
7. HDMI OUT - HDMI output for display connectivity
8. S/PDIF OUT- Digital (S/PDIF) Coax Audio Output
9. AUDIO OUT- Analog Audio Output
10. RS232- Serial control port for display control / 3rd party control
11. POWER STATUS LED- **When solid, the transmitter is receiving power**
12. STATUS LEDS
  - **SCALER**- When blinking slowly, the scaler chip is working properly
  - **STATUS**- When blinking slowly, the transmitter is working properly
  - **HDCP** - When solid, HDCP content is being transmitted; when blinking NON HDCP content is being transmitted; when off there is no audio or video data transmitted
  - **LINK**- When solid, the link between transmitter and receiver is normal. When blinking or off the link between transmitter and receiver is not operable

## Connectivity Instructions

1. Verify all components included are present before installation.
2. Connect HDMI source devices to HDMI inputs on transmitter (not included)
3. Connect an HDMI display device to the HDMI output port on receiver
4. Connect a Category 6 F/UTP or greater twisted pair cable with RJ45 connectors between compatible HDBaseT transmitter (not included) and the INT-BSR4K-H2.

**Note:** The HDBaseT receiver supports distances up to 100m / 330' for 1080p applications and 70m / 230' for 4K applications when using Cat6 F/UTP cabling. Cat6A F/UTP can be used to achieve distances of 100m / 330' for 4K applications.

5. Connect the S/PDIF or AUDIO OUTPUT port on receiver to audio amplifier (optional)
6. Connect the supplied IR emitter to the IR OUT port and an IR receiver to the IR IN port of the receiver for bi-directional IR pass through control (optional)

**Note:** The INT-BSR4K-H2 is capable of passing IR signals between 33 and 55 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.

7. Connect RS232 port for serial control (optional)
8. Connect LAN port to control LAN for telnet system control (optional)

**Note:** A complete list of command sets are located on the INT-BSR4K-H2 product page online at [www.libav.com](http://www.libav.com)

9. Connect the included power supply to the receiver and lock the power supply to the power connector by twisting the locking collar clockwise.
10. Power on attached audio / video and control devices

# Cabling Requirements

To ensure proper performance of the INT-BSR4K-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.



When using shielded category cabling ALWAYS...

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

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

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

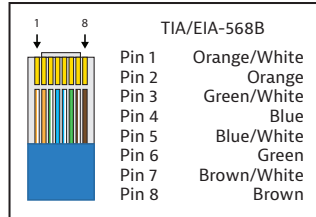
Category 6A plenum; **24-4P-P-L6ASH**

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

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

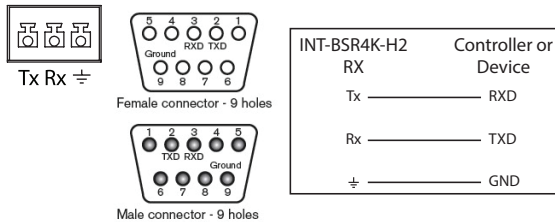
## Twisted Pair Wiring

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



## RS232 Wiring

Connect the controller or device RX signal to TX port of the INT-BSR4K-H2 receiver. Then connect the controller or device TX signal to the RX port on the INT-BSR4K-H2 receiver.



# Technical Specifications

<b>Video</b>	
Video Output	(1) HDMI
Video Output Connector	(1) HDMI type A
Output Video Signal	HDMI
Output Resolutions Supported	<p><b>SMPTE:</b> 4096 x 2160@24/30/60 (YUV4:2:0); 3840 x 2160@24/30/60 (YUV4:2:0); 1920 x 1080@60; 1280 x 720@60; 720 x 576p@60; 720 x 480p@60</p> <p><b>VESA:</b> 1920 x 1200@60; 1680 x 1050@60; 1600 x 1200@60; 1600 x 900@60; 1440 x 990@60; 1366 x 768@60@60; 1360 x 768@60; 1280 x 1024@60; 1280 x 960@60; 1280 x 800@60; 1280 x 768@60; 1024 x 768@60; 800 x 600@60</p>
Standards	Compliant with HDMI 2.0 & HDCP2.2
<b>Audio</b>	
Supported output formats	Analog and Digital: PCM 2.0
Audio Outputs	Stereo analog and digital coax
Audio Output Connectors	Analog: (1) 3 Pin phoenix Digital: (1) Digital S/PDIF Coax
Audio Output Impedance	70 Ohms
Frequency Response	20Hz~20K Hz
<b>CONTROL</b>	
Control Port / Connector	(2) LAN / RJ45 (1) RS232 / 3 pin phoenix
<b>Other</b>	
System Bandwidth	9Gbps
Transmission Distance	1080p 100m / 330' or less when using Cat6 F/UTP, 4K 70m or less when using Cat6 F/UTP .  1080p 100m / 330' or less when using Cat6A F/UTP, 4K 100m or less when using Cat6A F/UTP .
Operating Temperature	0 ~ +45 C (32 to + 113 °F)
Storage Temperature	-20 to +70°C (-4 to + 158 °F)
Humidity	10% ~ 90%
Power Supply	DC12V 3A
Power Consumption	16.4w
Dimension (W*H*D)	234.4. mm x 25mm x 143mm 9.2" x 1" x 5.6"
Weight	.9kg / 1.9 lbs
Warranty	5 years
Certification	CE, FCC, RoHS

Liberty AV Solutions  
 11675 Ridgeline Drive  
 Colorado Springs, CO 80918  
 800-530-8998  
 supportlibav@libav.com



Thank you for your purchase.

For Technical Support please call our toll free number at  
800-530-8898 or email us at [supportlibav@libav.com](mailto:supportlibav@libav.com)

[www.libav.com](http://www.libav.com)

Intelix is a brand of:



**LIBERTY**<sup>®</sup>  
**AV SOLUTIONS**  
A SUBSIDIARY OF WESCO DISTRIBUTION, INC.

11675 Ridgeline Drive  
Colorado Springs, Colorado  
80921 USA  
Phone: 719-260-0061  
Fax: 719-260-0075  
Toll-Free: 800-530-8998