

DIGI-HD-IR2 Installation Manual



The Intelix DIGI-HD-IR2 transmits HDMI and IR up to 300' over two twisted pair cables, such as Cat 5e or Cat 6. In environments with high electromagnetic interference (EMI), two shielded twisted pair cables should be used.

Built-in HDshāk® technology provides dynamic HDMI, EDID/DDC and HDCP mode selection, guaranteeing performance and image quality.

The DIGI-HD-IR2 features electrostatic discharge (ESD) protection circuitry which safeguards the HDMI circuit against static electricity and other destructive stray voltage.

Design with Intelix and Design with Intelligence.

Maximum Recommended Distances

| | 1080p | 1080i | 720p | 576i/p | 480i/p |
|------------------|-------|-------|------|--------|--------|
| Cat 6 (low-skew) | 150' | 300' | 300' | 300' | 350' |
| Cat 6 | 110' | 220' | 220' | 220' | 220' |
| Cat 5e | 100' | 200' | 200' | 200' | 200' |

Caution: 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.

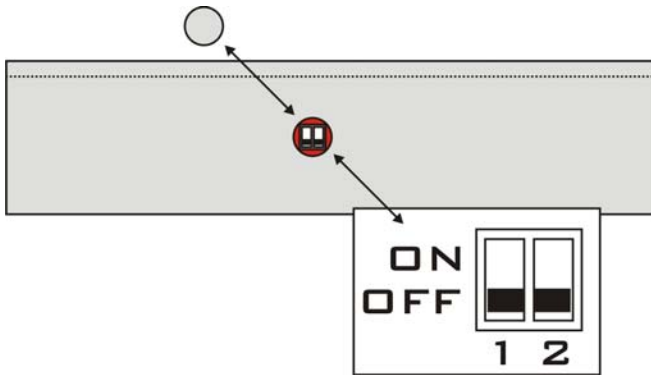
Caution: To minimize the possibility of equipment damage from electrostatic discharge (ESD), all source and destination equipment must be powered off during installation.

Caution: 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

Instructions

1. Turn off power and disconnect the audio/video equipment by following the manufacturer's instructions.
2. Make certain that outlets and cross connects to which you will connect the DIGI-HD-IR2 are configured properly and labeled correctly to identify the point-to-point circuit.
3. Verify the desired twisted pairs are not being used for other LAN or telephony equipment.
4. Verify that the source and destination equipment work when directly connected with HDMI cables. Be sure to test both HDMI cables required for system installation.
5. Connect the IR emitter to the DIGI-HD-IR2 send extender.
6. Connect the DIGI-HD-IR2 transmitter to the HDMI output of the video source. Do **not** connect the 5V power supply.
7. Connect the IR receiver to the DIGI-HD-IR2 receive extender.
8. Connect the DIGI-HD-IR2 receiver to the HDMI input of the receiving device at the remote end. Do **not** connect the 5V power supply.
9. Complete the connection between the transmit and receive extenders using two runs of twisted pair cable. Ensure the cable conforms to EIA 568B crimp standards and there are no split pairs or taps.
10. Connect the 5V power supply to the DIGI-HD-IR2 receiver.
11. Connect the 5V power supply to the DIGI-HD-IR2 transmitter. Power-on the video equipment.
12. Verify picture quality.
13. If necessary, adjust the DIP switches on the transmit and receive extenders to select modes of operation.

Note: Dip switches are located under the cap on the side of the unit.



| DIGI-HD-IR2-S Transmitter Dip Switch Positions | | |
|--|------------|---------------------------------|
| Position 1 | Position 2 | Mode |
| Off | Off | Read EDID data from displays |
| Off | On | Turn on Dolby TrueHD and DTS-HD |
| On | Off | Turn on stereo audio |
| On | On | No function |

*The DIGI-HD-IR2 system must be power cycled for the changes to take effect.

| DIGI-HD-IR2-R Receiver Switch Positions | | |
|---|------------|---------------------|
| Position 1 | Position 2 | Mode |
| Off | Off | Extended cable |
| Off | On | Force signal output |
| On | Off | Normal cable |
| On | On | No function |

*The DIGI-HD-IR2 system must be power cycled for the changes to take effect.

Troubleshooting

| Symptom | Possible Solutions |
|--|--|
| No signal Status LED is off | Verify that both ends of the twisted pair cables use 568B crimp pattern. Swap the twisted pair cables in the AV and HDCP RJ45 inputs on the receive balun. Verify HDMI cables and source and destination HDMI ports are operational. |
| No signal | Verify the power supplies are connected to both the send and receive baluns. Verify the power LEDs on both the send and receive units are brightly illuminated. |
| Unusual colors in the video | Power off the destination device and power it back on to force renegotiation. Unplug and re-plug the HDMI cable from receive balun to force renegotiation. |
| No signal Screen is completely snowy Speckling in the video image Occasional signal dropouts Video without audio | Use shorter runs of twisted pair cabling. Drop the HDMI signal to the next lower resolution; i.e., decrease resolution from 1080p to 1080i, etc. Replace the twisted pair cable with a higher grade twisted pair cable; i.e., replace Cat 5e with Cat 6. |
| Speckling in the video image | If the destination device is incapable of displaying the video signal, alter the source signal; i.e., decrease resolution from 1080p to 1080i, etc. |
| Video without audio | Change source device to output PCM other than Bitstream audio. Enable PCM down sampling if supported by your source device. |

The Intelix DIGI-HD-IR2 conforms to HDMI and HDCP specifications. Intelix does not guarantee operation with devices that do not conform to these specifications. The Intelix DIGI-HD-IR2 passes HDCP signals and does not manipulate them in any way.

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



EIA/TIA 568B Crimp Pattern Standard

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

| | |
|----------------------------------|-----------------------|
| Recommended Temperatures: | Operating: 0° to 55°C |
| | Storage: -20° to 85°C |
| | Humidity: up to 95% |