

# Intelix DIGI-HD-UHR2-R

## Installation Manual



## Introduction

When used with a compatible Intelix transmitter, the Intelix DIGI-HD-UHR2-R transmits HDMI up to 300' over a single twisted pair cable. In environments with high electromagnetic interference (EMI), a shielded twisted pair cable should be used.

Built-in HDshāk® technology provides dynamic HDMI, EDID/DDC and HDCP mode selection, guaranteeing performance and image quality. Plus, onboard HDMI amplification and buffering allows multiple extenders to be daisy-chained for greater distances.

The DIGI-HD-UHR2-R features electrostatic discharge (ESD) protection circuitry which safeguards the HDMI circuit against static electricity and other destructive stray voltage.

# Installation

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

To install the Intelix DIGI-HD-UHR2-R balun, perform the following steps:

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

**Caution: To minimize the possibility of equipment damage from electrostatic discharge (ESD), all source and destination equipment must be powered off during installation. This includes signal extenders, splitters, and switches.**

2. Make certain that outlets and cross connects to which you will connect the DIGI-HD-UHR2-R are configured properly and labeled correctly to identify the point-to-point circuit.

**Caution: Do not connect the balun 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).**

3. Verify the desired twisted pair cable is not being used for other LAN or telephony equipment.

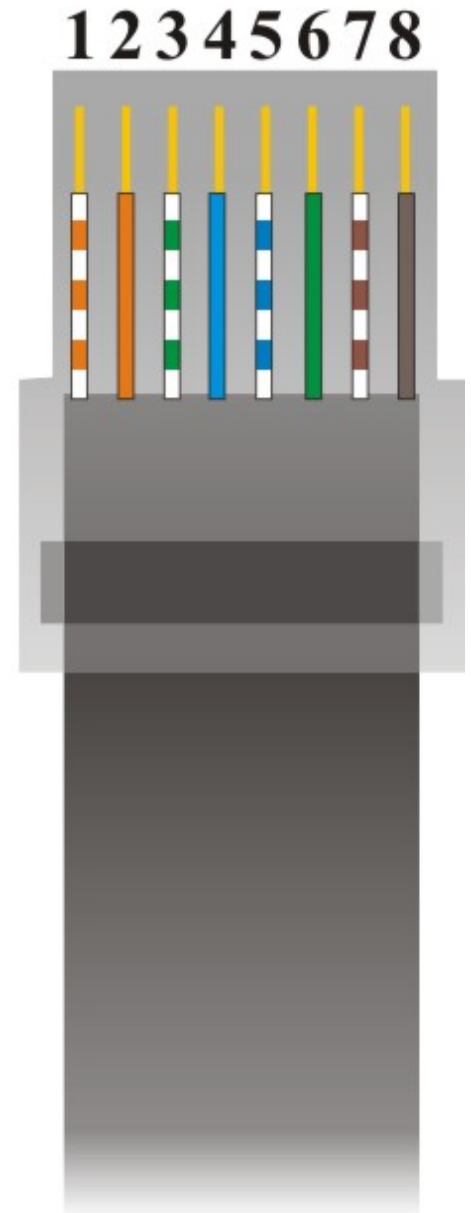
**Note: For your convenience, it is recommended that you uniquely mark the ends of the twisted pair cable before pulling them through a wall or conduit.**

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 a compatible transmitter to the HDMI output of the video source. Do **not** connect the 5V power supply.
6. Connect the DIGI-HD-UHR2-R receive balun to the HDMI input of the receiving device at the remote end. Do **not** connect the 5V power supply.
7. Complete the connection between the transmitter and receive balun using one run of twisted pair cable. Ensure the cable conforms to EIA 568B crimp standards and there are no split pairs or taps.
8. Connect the 5V power supply to the DIGI-HD-UHR2-R receive balun.
9. Connect the 5V power supply to the transmitter. Power-on the video equipment.
10. Verify picture quality.

11. If necessary, adjust the dip switches on the receive balun to select modes of operation.

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

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

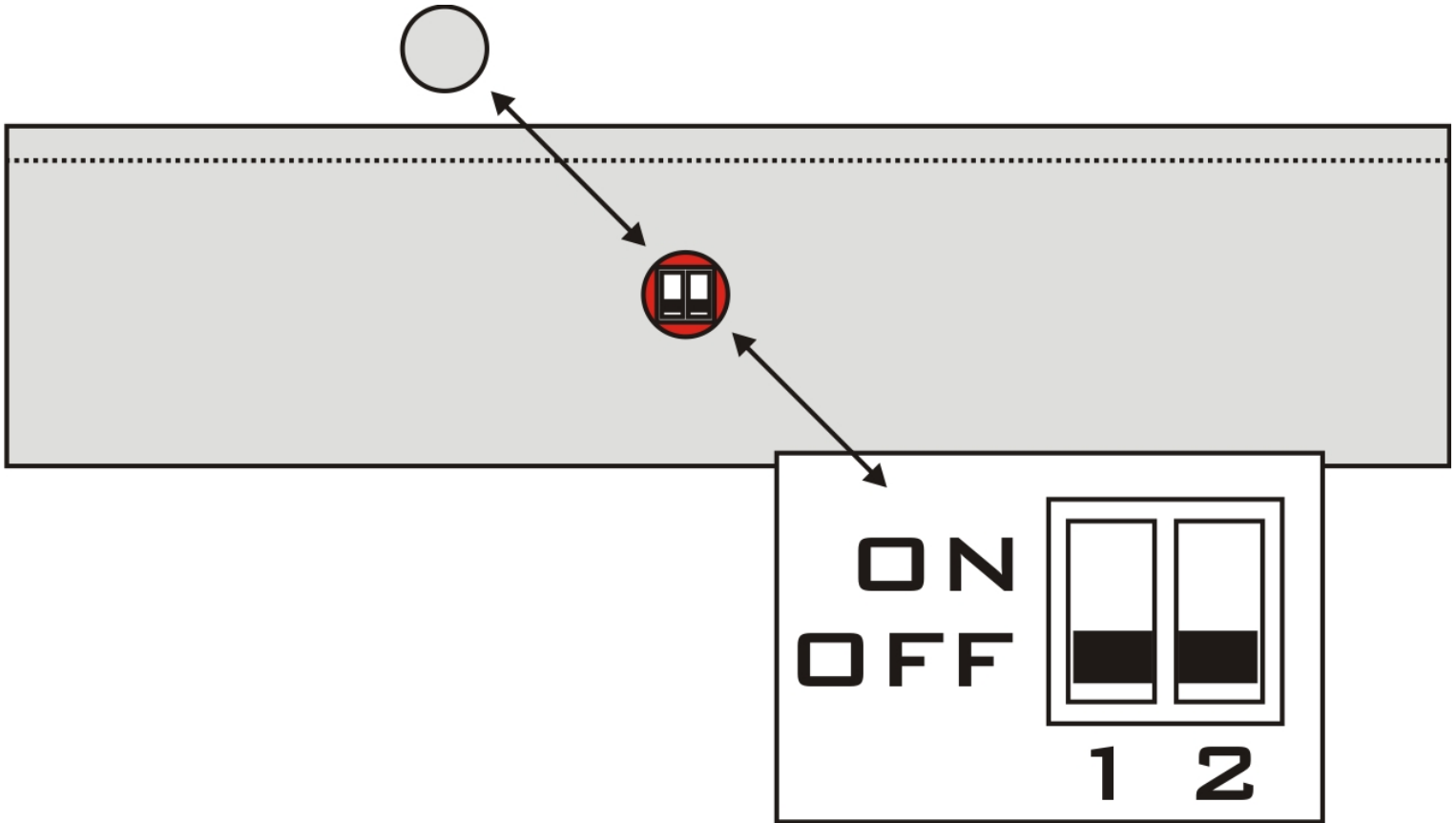


**EIA/TIA 568B Crimp Pattern Standard**

## DIGI-HD-UHR2-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-UHR2 system must be power cycled for the changes to take effect.**



# Troubleshooting

| Symptom  | Probable Causes                           | Possible Solutions  |
|--|---|---|
| No signal<br>Status LED is off   | Incorrect cable termination               | Verify that both ends of the twisted pair cables use 568B crimp pattern.  |
| No signal  | Insufficient power                        | Verify the power supplies are connected to both the send and receive baluns.<br><br>Verify the power LEDs on both the send and receive units are brightly illuminated.  |
| Unusual colors in the video  | HDMI synchronization issues               | Power off the destination device and power it back on to force renegotiation.<br><br>Unplug and re-plug the HDMI cable from receive balun to force renegotiation.   |
| No signal<br>Screen is completely snowy<br>Speckling in the video image<br>Occasional signal dropouts<br>Video without audio | Video signal exceeds bandwidth of cabling | Use a shorter run of twisted pair cabling.<br><br>Drop the HDMI signal to the next lower resolution; i.e., decrease resolution from 1080p to 1080i, etc.<br><br>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   | Unsupported video resolution              | 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  | Unsupported audio codec                   | Change source device to output PCM other than Bitstream audio<br><br>Enable PCM down sampling if supported by your source device  |

## Technical Specifications

|                                    |  |
|------------------------------------|--|
| <b>Video Amplifier Bandwidth</b>   | 1.65 Gbps  |
| <b>Supported Video Resolutions</b> | 480i, 480p, 576i, 576p, 720p, 1080i, 1080p                                   |
| <b>Max Distance<br/>(Cat 5e)</b>   | 1080p: 100'<br>1080i/720p: 200'  |
| <b>Max Distance<br/>(Cat 6)</b>    | 1080p: 150'<br>1080i/720p: 300'  |
| <b>Input Video Signal</b>          | 1.2 volts p-p  |
| <b>Input DDC Signal</b>            | 5.0 volts p-p (TTL)  |
| <b>Connectors</b>                  | one (1) HDMI<br>one (1) shielded RJ45  |
| <b>Cabling</b>                     | One run of Cat 5e or Cat 6   |
| <b>Power</b>                       | External 5 VDC   |
| <b>Dimensions</b>                  | 4.38" x 2.50" x 1.00"  |
| <b>Temperature</b>                 | Operating: 0° to 55°C<br>Storage: -20° to 85°C<br>Humidity: up to 95%        |
| <b>Shipping Weight</b>             | 1 lb.  |
| <b>Warranty</b>                    | 2 years  |
| <b>Regulatory</b>                  | CE, RoHS   |
| <b>Intelix Part Number</b>         | DIGI-HD-UHR2-R   |
| <b>Ordering Information</b>        | <i>DIGI-HD-UHR2-R</i> package includes one receive unit and one power supply |

**The Intelix DIGI-HD-UHR2 conforms to HDMI and HDCP specifications. Intelix does not guarantee operation with devices that do not conform to these specifications. The Intelix DIGI-HD-UHR2 passes HDCP signals and does not manipulate them in any way.**

Distances and picture quality may be affected by cable grade, cable quality, source and destination equipment, RF and electrical interference, and cable patches. Intelix specifications are based on straight-through cabling with standard-grade Cat 5e.

**Thank you for your purchase.**