

Intelix DIGI-DVI-F

Installation Manual



Introduction

The active Intelix DIGI-DVI-F balun allows a DVI (digital visual interface) video signal to be transmitted up to 150 feet via inexpensive twisted pair cabling, such as Cat 5e or Cat 6. The DIGI-DVI-F supports standard HDTV and VESA resolutions, as well as the DDWG standard for DVI compliant monitors. In addition, the unit is Mac compatible and HDCP compliant.

Two individual runs of twisted pair cable are required when installing the DIGI-DVI-F balun. Two runs of Cat 5e are required for 480i, 480p, 720p, and 1080i video. In environments susceptible to high electromagnetic interference, two shielded twisted pair cables should be used.

The Intelix DIGI-DVI-F includes a send balun, receive balun, and one power supply. The system is powered on either the send or receive end.

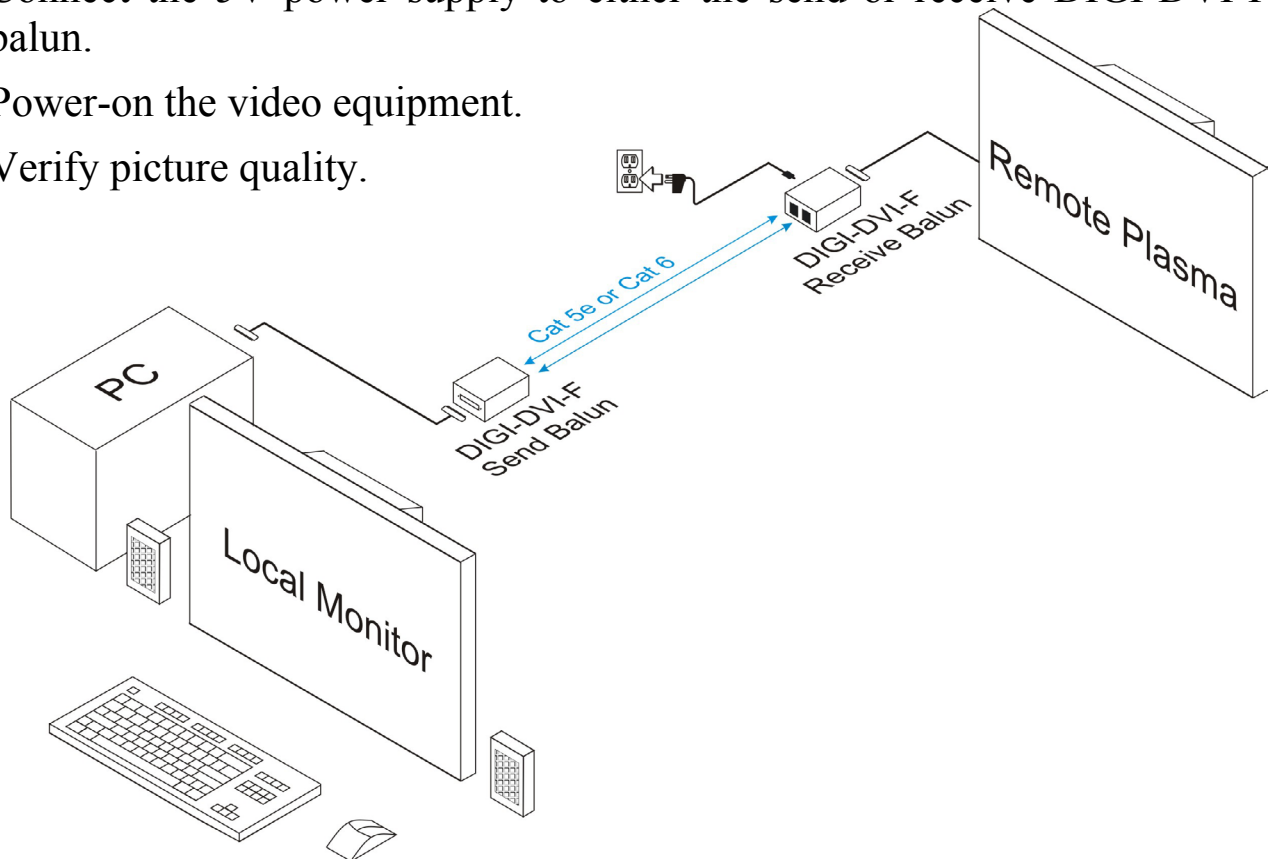
Installation

To install the Intelix DIGI-DVI-F baluns, perform the following steps:

1. Identify the pin configuration of the baluns and RJ45 connectors on the twisted pair cabling. To eliminate crosstalk, the pin configuration must follow the EIA/TIA 568B standard. Please ensure that wiring is straight-through.

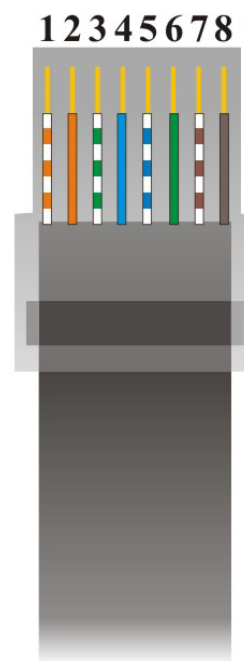
Warning! To minimize the possibility of equipment damage from electrostatic discharge (ESD), all source and destination equipment must be turned off during the installation of video equipment. This includes signal extenders, splitters and switches.

2. Connect the DIGI-DVI-F send balun to the DVI output of the video source.
3. Connect the DIGI-DVI-F receive balun to the DVI input of the receiving device at the remote end. Do **not** connect the 5V power supply.
4. Complete the connection between the send and receive baluns using two runs of twisted pair cable. Ensure that there are no split pairs or taps.
5. Connect the 5V power supply to either the send or receive DIGI-DVI-F balun.
6. Power-on the video equipment.
7. Verify picture quality.



| Symptom | Probable Causes | Possible Solutions |
|---|--------------------------------------|---|
| No video | No continuity in video link | Verify cable continuity between pairs of baluns. Verify the max distance has not been exceeded. |
| No video | Power off | Check power supplies of video equipment. |
| No signal | Improper connection or swapped pairs | Check that baluns are connected to correct video inputs and outputs. Verify both ends of the twisted pair cable conform to the EIA 568B crimp pattern. |
| Unusual colors Rolling signal Horizontal video bars | Improper grounding or cable type | Verify the source and destination devices are grounded. Different electrical circuits may cause a voltage differential on the building's electrical ground plain. The video display or source device may need to be grounded. |
| Background pattern | EMI interference | Identify possible radiating frequency sources (i.e.; wireless LANs, switching power supplies) and isolate them. Replace any unshielded twisted pair cable with shielded twisted pair cable. |

| 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

Technical Specifications

| | |
|------------------------------------|--|
| Video Amplifier Bandwidth | 1.65 Gbps |
| Supported Video Resolutions | 480i, 480p, 720p, 1080i |
| Max Recommended Distance | 1280 x 1024 with Cat 5e: 150 feet 1680 x 1050 with Cat 5e: 100 feet 1900 x 1200 with Cat 5e: 60 feet |
| Input Video Signal | 1.2 volts p-p |
| Input DDC Signal | 5.0 volts p-p (TTL) |
| Vertical Frequency Range | 75 Hz |
| Input Unit Connectors | (1) DVI-D connector to (2) RJ45s |
| Output Unit Connectors | (1) DVI-D connector to (2) RJ45s |
| Cabling | Two individual runs of twisted pair |
| Power | External 5 VDC |
| Power Connector | Powered on either the send or the receive end; side mounted connector |
| Dimensions | 3.25" x 1.75" x 0.88" |
| Temperature | Operating: 0° to 55°C Storage: -20° to 85°C Humidity: up to 95% |
| Shipping Weight | 1 lb. |
| Warranty | 2 years |
| Compliance | CE, RoHS |
| Ordering Information | <i>DIGI-DVI-F</i> package includes both send and receive units, one power supply, and one mounting bracket |

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



Intelix LLC

2222 Pleasant View Road
Middleton, WI 53562
www.intelix.com

Phone: 608-831-0880
Toll-Free: 866-4-MATMIX
intelix@intelix.com