



**NETWORK
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XTENDEX® Series

ST-2FODVIDD-LC

DVI-D Dual Link Extender via Fiber Optic Cable

Installation and Operation Manual



TRADEMARK

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INTRODUCTION

The XTENDEX® DVI-D Dual Link Extender via Fiber Optic Cable extends a digital flat panel display up to 1,640 feet (500 meters) away from a DVI-D dual link video source using a 2-strand fiber optic cable. Each DVI optical extender consists of a transmitter that connects to a computer and a receiver that connects to a monitor.

The ST-2FODIVDD-LC optical DVI module transmits uncompressed WQXGA (2560x1600@60Hz) or WQUXGA (3840x2400@33Hz) of Dual-link DVI up to 500 meters (1,640feet) over two (2) LC multi-mode fibers. The EDID (Extended Display Identification Data) in a display can be read and stored by just connecting the transmitter to the display once. This Self-EDID programming feature makes the installation of the ST-2FODVIDD-LC easy and flexible to any variable resolution display system. For your convenience, 2560x1600@60Hz EDID has been pre-factory-programmed as a default.

Features:

- Supports uncompressed 2560x1600 WQXGA and 3840x2400 WQUXGA resolutions for dual link devices.
- Signal transmission via two-strand multimode LC fiber optic cable – no RF interference.
- Small form factor – allowing for easy connection and placement.
- Cables can be installed in conduit prior to extender installation.
- Virtual DDC by self-EDID programming.
- Low RFI/EMI for sensitive applications.
- No software to install.

MATERIALS

Materials supplied with this kit:

- NTI ST-2FODVIDD-LC Transmitter and Receiver
- 2 x 100-240VAC, 50 or 60Hz-5VDC/1A AC Adapter
- URL Slip with path to this manual

Materials *Not* supplied but **REQUIRED**:

2-strand multi-mode LC fiber optic cable

Cables can be purchased from Network Technologies Inc by calling (800) 742-8324 (800-RGB-TECH) in the US and Canada or (330) 562-7070 (worldwide).

Hardware Requirements

PC, SUN, or Mac computer with DVI graphic controller card and DVI-D Dual Link port

PREPARATION FOR INSTALLATION

- Locations should be chosen for the monitor and video source that also have space to connect the Receiver and Transmitter modules within the distance provided by the fiber optic cables.
- All cables should be installed in such a way that they do not cause stress on their connections to the equipment. Extended lengths of cable hanging from a connection may interfere with the quality of that connection. Secure cables as needed to minimize this.
- Properly shut down and disconnect the power from the video source and monitor to be separated. If other equipment is involved whose connections are being interrupted, be sure to refer to the instruction manuals for that equipment for proper disconnection and re-connection procedures before proceeding.

INSTALLATION

1. Plug the 5V AC adapters into the Transmitter and Receiver. The Power LED will illuminate solid blue and the Status LED will slowly blink blue.

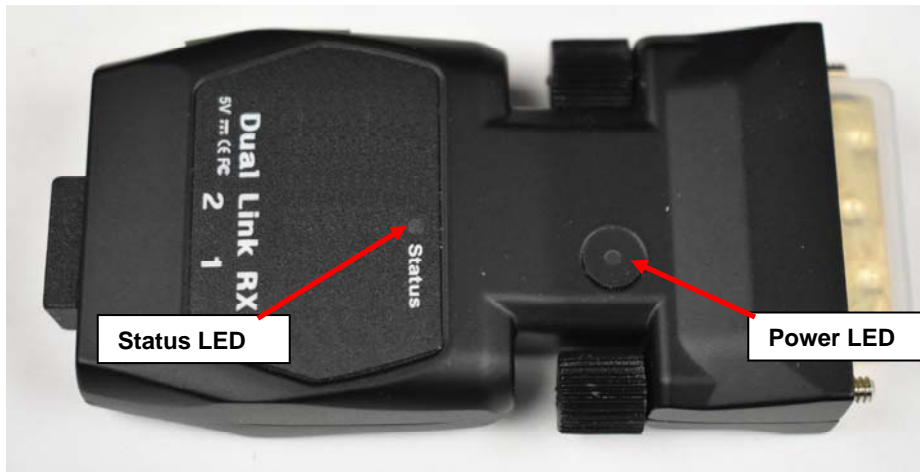


Figure 1- Location of LEDs

2. Check to see if the display supports a resolution of 2560x1600 (WQXGA)@60Hz. This is the default resolution setting of the ST-2FODVIDD-LC. If the display does not support this resolution, follow the Self-EDID programming Procedure.
3. Connect two (2) LC optical fibers between the Transmitter and Receiver. Be sure to connect port 1 on the Transmitter to port 1 on the Receiver, and port 2 on the Transmitter to port 2 on the Receiver. Make sure the fiber connectors are snapped in securely.

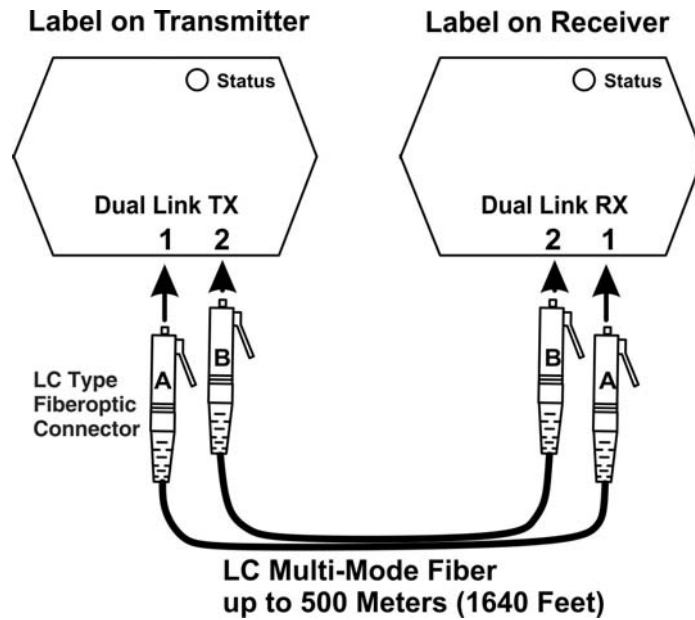


Figure 2- Fiber Optic cable connection

4. Plug the transmitter to the DVI port of the DVI source (such as a PC) and the receiver to the DVI port of the display.

Note 1: The maximum extension length by multi-mode fiber is 500 meters.

Note 2: We recommend NOT to use any intermediate cable or adapter between the fiber and the Receiver or Transmitter to avoid undesirable performance degradation.

5. Power ON the PC and the display and ensure that the Status LED in the Transmitter and receiver illuminate.

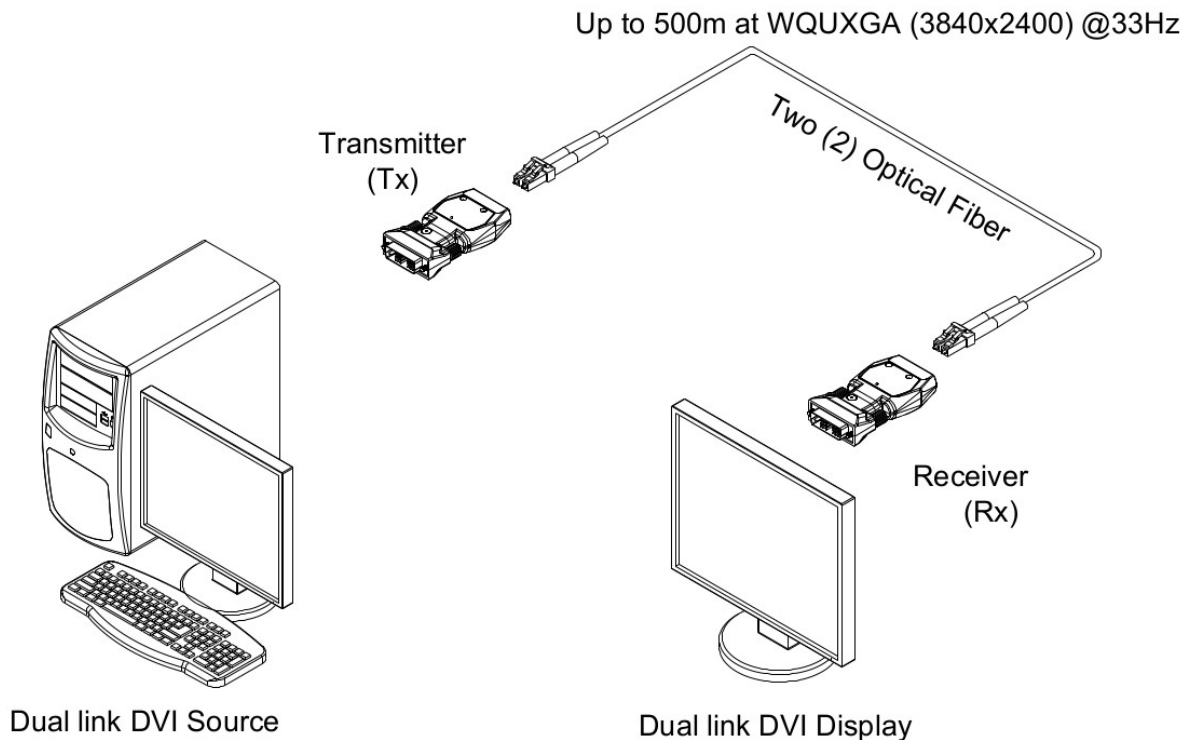


Figure 3- Connect to Source and Display

SELF-EDID PROGRAMMING PROCEDURE

The video source generally requires supported EDID information (resolution and timing) from the connected display. ST-2FODVIDD-LC supports Self-EDID programming. The Transmitter can read the EDID from the display and store it. It may be necessary to perform the Self-EDID Programming Procedure if the display does not support the pre-programmed resolution of 2560x1600@60Hz. Follow the steps below to perform the procedure.

Note 1: If you know that EDID is not required by the video source, Self-EDID programming will not be necessary.

1. Power ON the display.
2. Plug the 5V power adapter into the power jack of the Transmitter. Ensure the Power LED illuminates.
3. Push the EDID Programming button of the Transmitter with a narrow pin. The status LED will illuminate.



Figure 4- Location of EDID Programming Button

4. Connect the transmitter to the display, **not to the PC**. The status LED will begin to blink rapidly. This indicates reading the EDID from the display and storing it. After 7 to 8 seconds, the status LED will illuminate solid ON indicating completion of programming.
5. Disconnect the Transmitter from the display. Install the Transmitter and Receiver as previously described.

TROUBLESHOOTING

The display shows only a black screen.	<ul style="list-style-type: none"> • Ensure that all power supply connections are firmly seated. Ensure that the Power and Status LEDs are illuminated. • Ensure that the Transmitter and Receiver are firmly plugged in to the video source and display. • Check if the PC and display are powered ON and properly booted. • Reset the system by unplugging and re-plugging the Transmitter to the video source or Receiver to the display, or by unplugging and re-plugging the power connections to the Transmitter and Receiver modules. • Re-boot up the video source.
Screen is distorted or displays electrical noise (static)	<ul style="list-style-type: none"> • Check if the display resolution is properly set. Go to the display settings in Windows and adjust as needed. Ensure that the resolution is set at 3840x2400 at 33Hz or less. • Re-boot the video source and display. • Disconnect and reconnect the fiber optic cables and/or 5VDC adapters.

TECHNICAL SPECIFICATIONS

Connectors (Transmitter and Receiver)	One male DVI-D dual link connector and two LC fiber connectors
Resolutions supported	HDTV resolutions up to 1080p and computer resolutions up to 3840x2400@30Hz / 2560x1600@60Hz.
Dimensions (WxDxH)	1.54x2.83x0.59 in (39x72x15 mm)
Power	100 to 240 VAC at 50 or 60 Hz-5VDC/1A AC adapter (US AC adapters included)
Operating temperature	32 to 122°F (0 to 50°C)
Storage temperature	22 to 158°F (-30 to 70°C)
Operating/storage relative humidity	0 to 85% non-condensing RH
Maximum distance	1,640 feet (500 meters) over 50µm or 62.5µm multimode LC fiber optic cable
Cable type	Use one duplex LC 50-micron or 62.5-micron multimode fiber optic cable to extend the Receiver from the Transmitter up to 1,640 feet (500 meters).
Regulatory Approvals	CE, FCC, RoHS

WARRANTY INFORMATION

The warranty period on this product (parts and labor) is two (2) years from the date of purchase. Please contact Network Technologies Inc at **(800) 742-8324** (800-RGB-TECH) or **(330) 562-7070** or visit our website at <http://www.networktechinc.com> for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.