

Gefen

DL DVI 2FO Extender

EXT-DVI-FM2500
User Manual



www.gefen.com

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Notice

Gefen LLC reserves the right to make changes in the hardware, packaging, and any accompanying documentation without prior written notice.

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CONTENTS

- 1 Introduction
- 2 Operation Notes
- 3 Features
- 4 Sender Module Layout
- 5 Sender Module Descriptions
- 6 Receiver Module Layout
- 7 Receiver Module Descriptions
- 8 Connecting the DL DVI 2FO Extender
- 8 Wiring Diagram
- 9 EDID Programming
- 10 Specifications
- 11 Warranty

INTRODUCTION

Congratulations on your purchase of the DL DVI 2FO Extender. Your complete satisfaction is very important to us.

Gefen

Gefen delivers innovative, progressive computer and electronics add-on solutions that harness integration, extension, distribution and conversion technologies. Gefen's reliable, plug-and-play products supplement cross-platform computer systems, professional audio/video environments and HDTV systems of all sizes with hard-working solutions that are easy to implement and simple to operate.

The Gefen DL DVI 2FO Extender

The Dual Link DVI fiber optic module extender with Virtual EDID extends dual-link DVI up to 3300 feet (1 kilometer) to a display supporting resolutions up to 3840 x 2400 (WQXGA) using a two-strand 50/125µm laser-optimized multimode (OM3) LC-terminated fiber optic cable. Optical signal transmission provides galvanic isolation and immunity to electromagnetic interference compared to similar copper-based extension modules.

The Virtual EDID feature programs the display EDID into the Sender module to ensure fast integration and compatibility between the source and the display.

The attractive and compact Sender and Receiver modules fit neatly behind the equipment for a clean installation, making it a great way to extend dual-link DVI.

How It Works

The Sender module plugs into the DVI source. The Receiver module plugs into the dual-link display. Connect a two-strand multimode LC-terminated fiber optic cable from the Sender to the Receiver module. Plug the power supply into the Receiver module and a vibrant Hi-Def picture will appear on your display.

OPERATION NOTES

READ THESE NOTES BEFORE INSTALLING OR OPERATING THE DL DVI 2FO EXTENDER

- The fiber optics cable must be treated carefully when connectors are exposed. They are susceptible to dust which can contribute to loss of pixels.
- The DL DVI 2FO Extender works for all DVI displays and supports dual link resolutions up to 3840 x 2400.
- The Sender module does not need to be powered externally unless the source does not supply enough power through the DVI connector.
- Extension distance will depend upon the type of fiber optic cable that is used:
 - Up to 3300 feet (1 kilometer) using two-strand OM3 multimode fiber optic cable.
 - Up to 1650 feet (500 meters) using two-strand OM2 multimode fiber optic cable.
 - Up to 1000 feet (300 meters) using two-strand OM1 multimode fiber optic cable.
- Supports DDWG standard for DVI monitors.

FEATURES

Features

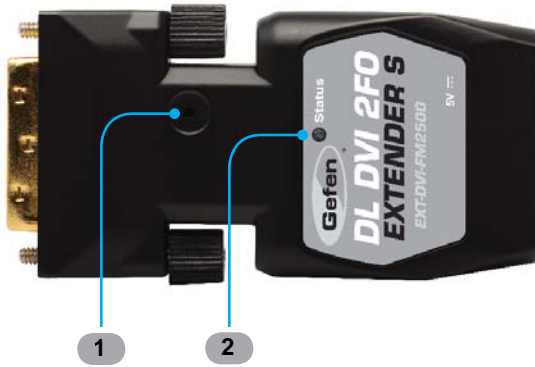
- Extends dual-link DVI up to 3300 feet (1 kilometer) over two strands of OM3 (laser-optimized 50/125µm) multimode fiber optic cable
- Supports resolutions up to 3840 x 2400 (dual-link DVI)
- Virtual EDID allows EDID copying from the display to the source
- Fiber optic transmission eliminates electromagnetic interference (EMI)
- Sturdy metal die-cast enclosures are perfect for professional and industrial applications
- Compact Sender and Receiver modules provide a clean, easy installation
- Use Gefen CAB-2LC-xxx OM1 Fiber Optic Link Cables for distances from 30 - 330 feet (9 - 100 meters)
- FCC and CE-compliant for EMI/RFI emission

Package Includes

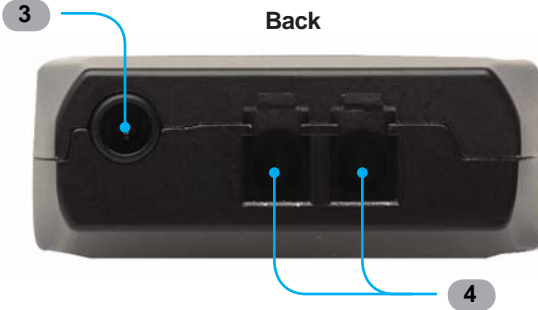
- (1) DL DVI 2FO Extender - Sender module
- (1) DL DVI 2FO Extender - Receiver module
- (2) 5V DC Power supplies
- (1) Quick Start Guide

SENDER MODULE LAYOUT

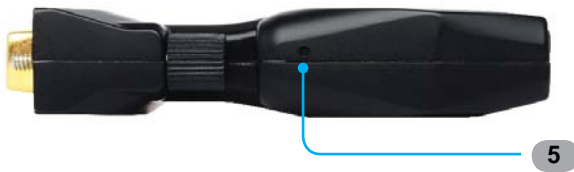
Top



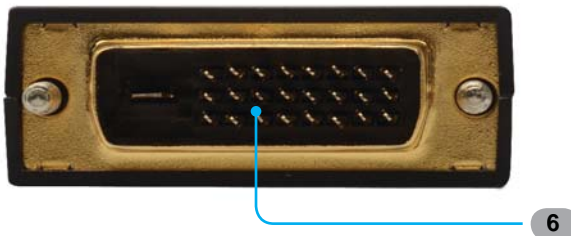
Back



Side



Front



SENDER MODULE DESCRIPTIONS

1 **Power Indicator**

This LED will glow bright blue when the Sender module is powered.

2 **Status Indicator**

This LED will flash bright blue during the EDID programming procedure. See page 9 for more information.

3 **5V DC Power Receptacle**

Connect the optional 5V DC power supply to this receptacle only if the source does not supply enough voltage to power the Sender module.



IMPORTANT: In most cases the Sender module will *not* require a power supply as long as the DVI source provides sufficient power on pin 14 of the DVI connector. If the source does not supply enough power to the Sender module (indicated by a flashing power indicator), then connect the other included power supply to the Sender module.

4 **LC Fiber Connectors**

Connect a two-strand OM3 LC-terminated multimode fiber optic cable from the Sender module to the Receiver module. OM1 and OM2 multimode fiber cables are also supported. See page 2 for more information.

5 **EDID Programming Button**

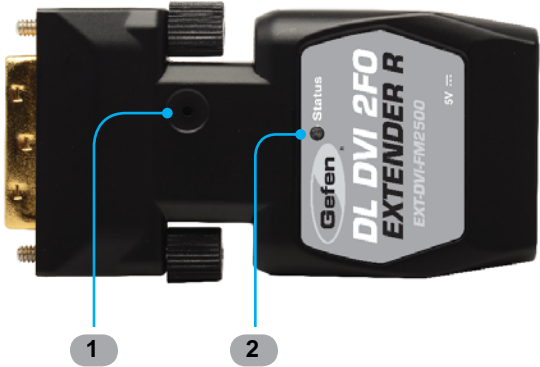
See page 9 for more information on using this feature.

6 **DVI Input**

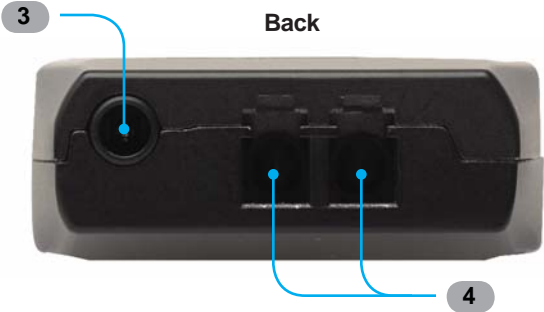
Connect this part of the Sender module to the DVI port on the computer.

RECEIVER MODULE LAYOUT

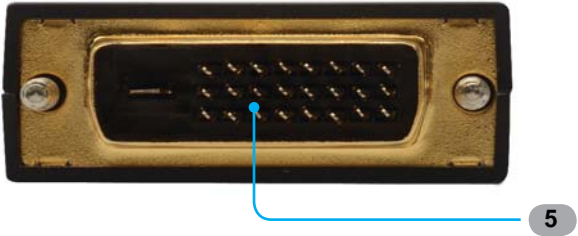
Top



Back



Front



RECEIVER MODULE DESCRIPTIONS

1 Power Indicator

This LED will glow bright blue when the Receiver module is powered.

2 Status Indicator

This LED will flash bright blue during the EDID programming procedure. See page 9 for more information.

3 5V DC Power Receptacle

Connect this cable to the included 5V DC power supply.

4 LC Fiber Connectors

Connect a single strand of OM3 LC-terminated multimode fiber optic cable from the Sender module to the Receiver module. OM1 and OM2 multimode fiber cables are also supported. See page 2 for more information.

5 DVI Output

Connect this part of the Receiver module to the DVI display.

CONNECTING THE DL DVI 2FO EXTENDER

How to Connect the DL DVI 2FO Extender



STOP: If EDID programming is required, then skip to the EDID Programming Procedure on the next page. If an EDID is not required by the DVI source, then programming is not necessary.

1. Connect the Sender module to the DVI source.
2. Connect the Receiver module to the DVI display.
3. Connect the Sender module and Receiver module together using two-strand multimode LC-terminated fiber optic cable.
4. Connect the included power supply to the Receiver module.

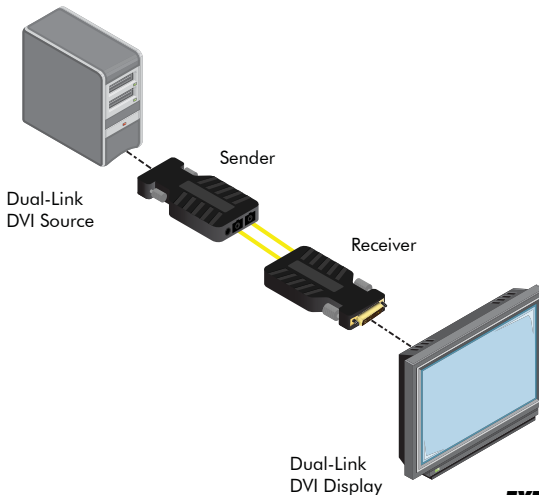


IMPORTANT: In most cases the Sender module will *not* require a power supply as long as the DVI source provides sufficient power on pin 14 of the DVI connector. If the source does not supply enough power to the Sender module (indicated by a flashing power indicator), then connect the other included power supply to the Sender module.

Wiring Diagram for the DL DVI 2FO Extender



FIBER OPTIC CABLE



EDID PROGRAMMING

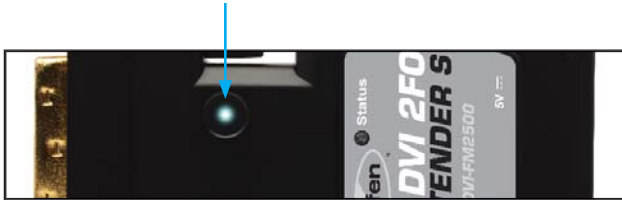
EDID Programming Procedure

EDID programming is *required* if the maximum resolution of the display does not support 2560 x 1600 (WQXGA).



IMPORTANT: The DL DVI 2FO Extender (Sender module) has a default built-in EDID of 2560 x 1600. If the Sender module is programmed with another EDID, the default EDID will be erased. Once the default EDID is erased, it cannot be restored.

1. Power on the DVI display (or other sink device).
2. Connect one of the included 5V DC power supplies to the Sender module and make sure that the status indicator is ON, as shown below.



3. Use a small pin or paperclip to press the recessed EDID button on the Sender module. The blue status indicator LED light will blink and then turn off.



4. Connect the Sender module to the display (or the sink device containing the EDID to be recorded).
5. The status indicator on the top of the Sender module will begin to blink rapidly, indicating that the EDID is being read from the display and stored by the Sender module. After about 7 - 8 seconds, the status indicator will stop flashing, indicating that the EDID programming is complete.
6. Disconnect the Sender module from the sink.
7. Disconnect the power supply from the Sender module.
8. Refer to the instructions on the previous page for information on connecting the *DL DVI 2FO Extender*.

SPECIFICATIONS

Maximum Pixel Clock.....	2 x 165 MHz
Video Input Connector (Sender).....	(1) DVI-D 24-pin, male
Video Output Connector (Receiver).....	(1) DVI-D 24-pin, male
Link Connector (Sender / Receiver).....	(2) Type LC
Power Supply (Sender).....	5V / 1A DC (not needed for most applications)
Power Supply (Receiver).....	5V / 1A DC
Power Consumption (Receiver).....	1.5W (max.)
Operating Temperature.....	0° to +50° C
Storage Temperature.....	-30° to +70° C
Relative Humidity.....	0% to 85%
Dimensions (W x H x D).....	1.54" x 0.59" x 2.83" (39mm x 15mm x 72mm)
Shipping Weight.....	2 lbs (0.91 kg)

WARRANTY

Gefen warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen is notified within two (2) years from the date of shipment, Gefen will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications. Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for ninety (90) days from the day of reshipment to the Buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed.

1. Proof of sale may be required in order to claim warranty.
2. Customers outside the US are responsible for shipping charges to and from Gefen.
3. Copper cables are limited to a 30 day warranty and cables must be in their original condition.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding the features and specifications is subject to change without notice.

For the latest warranty coverage information, refer to the Warranty and Return Policy under the Support section of the Gefen Web site at www.gefen.com.

PRODUCT REGISTRATION

Please register your product online by visiting the Register Product page under the Support section of the Gefen Web site.



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This product uses UL or CE listed power supplies.