



DVI FM Extender PLUS

**EXT-DVI-FMP
User Manual**



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Notice

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INTRODUCTION

Congratulations on your purchase of the DVI FM Extender PLUS. 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 DVI FM Extender PLUS

The DVI FM Extender PLUS extends your DVI display up to 2000 feet away from your source, with only a tiny transmitter and receiver required, using a 100% optical fiber solution. It's a great way to extend DVI video easily and unobtrusively.

How It Works

The Sender unit plugs into your computer. The Receiver unit plugs into your DVI display - up to 2000 feet away. Multimode LC fiber optic cable (4 strand) connect the Sender unit and Receiver unit together.

Breakthrough Auto-EDID programming technology quickly and easily collects and preserves monitor resolution/capability information inside the Sender unit, so that the computer properly syncs up with the display at all times and "knows what it is connecting to" -- eliminating the necessity of an add-on device such as Gefen's DVI Detective.

All-fiber signal transmission media insures that the video signal possesses complete EMI (electromagnetic interference) invulnerability.

OPERATION NOTES

READ THESE NOTES BEFORE INSTALLING OR OPERATING THE DVI FMP

- 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 DVI FM Extender PLUS works for all DVI displays and supports resolutions up to 1920 x 1200.
- Supports DDWG standard for DVI-compliant monitors.

FEATURES

Features

- Extends any DVI (Digital Visual Interface) - compliant device up to 2000 ft (600 m) from the computer
- Supports video resolutions up to 1080p, 2K, and 1920 x 1200
- Uses inexpensive and widely available four-strand multimode LC fiber optic cable
- Automatic EDID Programming feature enables quick and correct sync of source to display
- Invulnerability to electromagnetic influences (EMI), thanks to all-fiber construction.
- Saves space on your desktop and Increases Productivity
- Eliminates computer noise where you work
- Supports DDWG standard for DVI compliant monitors

Package Includes

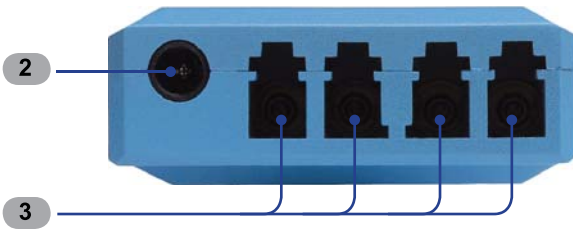
- (1) DVI FM Extender PLUS - Sender unit
- (1) DVI FM Extender PLUS - Receiver unit
- (2) 5V DC Power supplies
- (1) Quick Start Guide

SENDER UNIT LAYOUT

Top



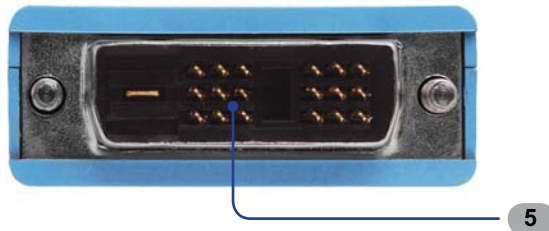
Back



Side



Front



SENDER UNIT DESCRIPTIONS

1 **Status Indicator**

This LED will glow bright blue when the Sender unit is powered. This LED is also used to indicate the status of the Sender unit when programming the EDID. See page 9 for details.

2 **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 unit.



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 you are unsure that the source will supply enough power to the Sender unit, it is recommended that the included power supplies be connected to *both* the Sender and Receiver unit when powering the DVI FM Extender PLUS.

3 **LC Fiber Connectors**

Connect four LC-terminated Fiber Optic cables from the Sender unit to the Receiver unit. Make sure that each fiber cable on the Sender unit is connected to the associated fiber optic connector on the Receiver unit. See page 8 for details.

4 **EDID Programming Button**

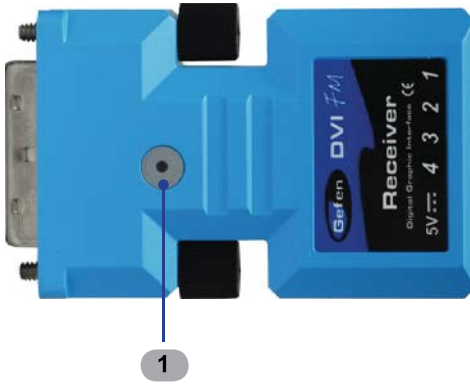
See page 9 for more information on using this feature.

5 **DVI Input**

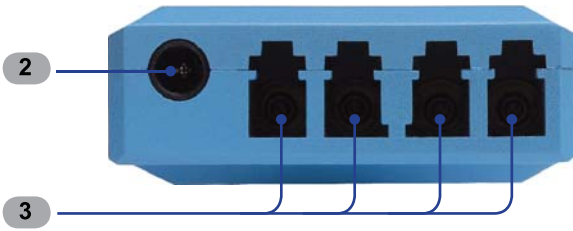
Connect this part of the Sender unit to the DVI port on the computer.

RECEIVER UNIT LAYOUT

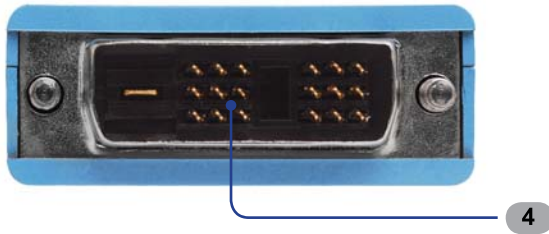
Top



Back



Front



RECEIVER UNIT DESCRIPTIONS

1 Status Indicator

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

2 5V DC Power Receptacle

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

3 LC Fiber Connectors

Connect four LC-terminated Fiber Optic cables from the Receiver unit to the Sender unit. Make sure that each fiber cable on the Receiver unit is connected to the associated fiber optic connector on the Sender unit. See page 8 for details.

4 DVI Output

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

CONNECTING THE DVI FM EXTENDER PLUS

How to Connect the DVI FM Extender PLUS

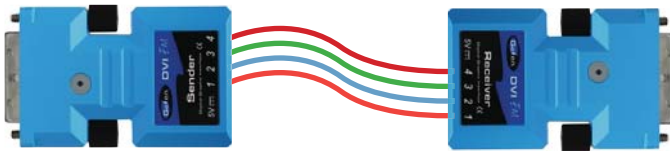


STOP: If EDID programming is required, then skip to the EDID Programming Procedure on the next page.

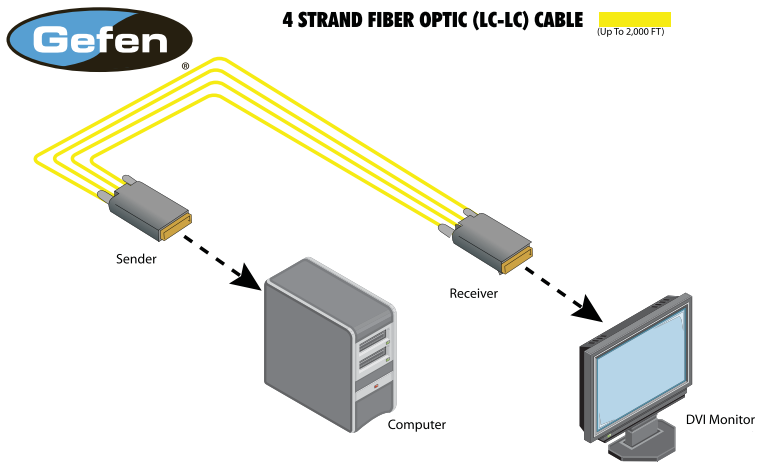
1. Connect the Sender unit to the DVI source.
2. Connect the Receiver unit to the DVI display.
3. Connect the Sender unit and Receiver unit together using a four-strand LC-terminated multi-mode fiber optic cable.



IMPORTANT: Each fiber optic port on both the Sender unit and Receiver unit are identified by the numerical values 1, 2, 3, and 4. Make sure that the fiber optic cables between the Sender unit and Receiver unit are connected to the proper port, as shown below.



Wiring Diagram for the DVI FM Extender PLUS



EDID PROGRAMMING

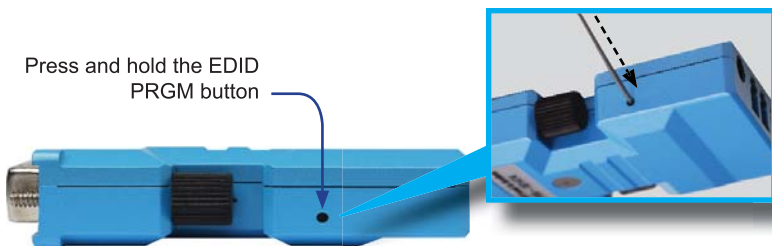
EDID Programming Procedure

If an EDID *is not required* by the DVI source, then EDID programming will not be necessary. EDID programming *is required* if the maximum resolution of the display does not support 1600 x 1200 (UXGA).



IMPORTANT: The DVI FM Extender PLUS (Sender unit) has a default built-in EDID of 1600 x 1200. If the Sender unit 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. Make sure that the Sender unit is powered using one of the included 5V DC power supplies.
3. Use a small pin to push the EDID button on the Sender unit. The blue LED light will blink twice and then turn off.



4. Connect the Sender unit to the display (or the sink device containing the EDID to be recorded).
5. The Status LED on the top of the Sender unit will begin to blink rapidly, indicating that the EDID is being read from the sink and stored by the Sender unit. The Status LED will stop flashing once EDID programming is complete.
6. Disconnect the Sender unit from the sink.
7. Disconnect the power supply from the Sender unit.
8. Connect the 5V DC power supply to the Receiver unit and connect the Receiver unit to the display (sink).
9. Connect the Sender unit to the DVI source.

SPECIFICATIONS

Maximum Pixel Clock.....	165 MHz
Input Video Signal.....	1.2 volts p-p
Input DDC Signal.....	5 volts p-p (TTL)
DVI Connector (Sender / Receiver).....	DVI-D, 19-pin, male
Fiber Optic Connector (Sender / Receiver).....	LC type
Power Supply (Sender / Receiver).....	5V DC
Power Consumption.....	2.5 Watts (max.) per unit
Operating Temperature.....	0 ~ 50 °C
Dimensions (Sender / Receiver).....	1.54" W x 0.75" H x 3.25" D
Shipping Weight.....	1 lb.

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.