

Gefen PRO®

DVI FM 2000

GEF-DVI-FM2000
User Manual



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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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INTRODUCTION

Congratulations on your purchase of the GefenPRO DVI FM 2000. 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 GefenPRO DVI FM 2000

The Gefen DVI FM 2000 extends a Dual Link DVI source up to 1000 feet (300 meters) using a two-strand multi-mode (50 or 62.5 micron) fiber optic cable. Resolutions up to 1080p Full HD and 3840 x 2400 at 60 Hz are supported.

How It Works

Connect the Sender unit to the Dual Link DVI source. Connect the Receiver unit to the Dual Link DVI display. Use a two-strand SC-terminated fiber optic cable to connect the Sender unit to the Receiver unit. Use the included 5V DC power supply to connect the Receiver unit to an available electrical outlet.

OPERATION NOTES

READ THESE NOTES BEFORE INSTALLING OR OPERATING THE DVI DUAL LINK FIBER EXTENDER

- The DVI Dual Link Fiber Extender only uses multi-mode SC fiber cables.



ATTENTION: Multi-mode fiber optic cable with a core diameter 50 or 62.5 microns is required, in order to extend to distance of 1000 feet (300 meters).

- The included power supply is required for the Receiver unit. However, if the source does not supply enough power to the Sender unit, then an optional power supply (Gefen part no. EXT-PS52AIP-1.3) must be used. In most situations, powering the Sender unit will not be necessary.

FEATURES

Features

- Extends Dual Link DVI up to 1000 feet (300 meters) using multi-mode (50 or 62.5 micron) fiber optic cable.
- Supports HD resolutions up to 1080p Full HD.
- Supports VESA resolutions up to 1920 x 1200 (WUXGA) and 3840 x 2400 (WQUXGA).
- Optical signal transmission provides improved immunity from electromagnetic interference (EMI).
- Supports HDCP pass-through.

Package Includes

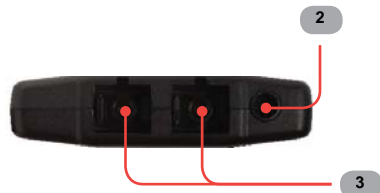
- (1) DVI Dual Link Fiber Extender - Sender unit (GEF-DVI-FM2000S)
- (1) DVI Dual Link Fiber Extender - Receiver unit (GEF-DVI-FM2000R)
- (1) 5V / 2A DC Power Supply (EXT-PS52AIP-1.3)
- (1) Quick-Start Guide (QSG-GEF-DVI-FM2000)

SENDER UNIT LAYOUT

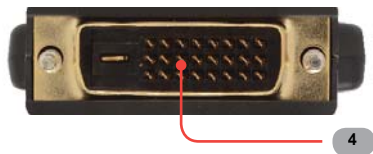
Bottom



Front



Back



SENDER UNIT DESCRIPTIONS

1 **Status**

This LED indicator will glow bright blue, indicating that there is a valid connection between the Sender unit and Receiver unit. This LED will glow red when there is an interruption in the signal between the Sender unit and the Receiver unit.

2 **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. In most situations, the power supply will not be required.

3 **SC Fiber Connectors**

Connect two SC Fiber Optic cables from the Sender unit to the Receiver unit. Make sure that the Fiber Optic cables from both port A and B are connected to the same ports on the Receiver unit. See page 8 for details.

4 **DVI Input**

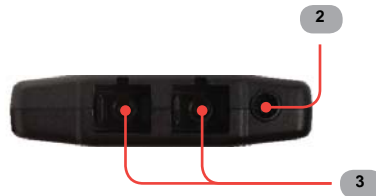
Connect this part of the Sender unit to the DVI port on the computer.

RECEIVER UNIT LAYOUT

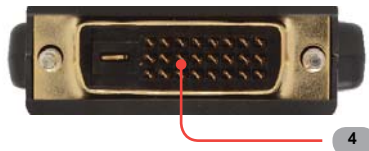
Bottom



Front



Back



RECEIVER UNIT DESCRIPTIONS

1 Status

This LED indicator will glow bright blue, indicating that there is a valid connection between the Receiver unit and Sender unit. This LED will glow red when there is an interruption in the signal between the Receiver unit and the Sender unit.

2 Power Receptacle

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

3 SC Fiber Connectors

Connect two SC Fiber Optic cables from the Receiver unit to the Sender unit. Make sure that the Fiber Optic cables from both port A and B are connected to the same ports on the Sender unit. See page 8 for details.

4 DVI Input

Connect this part of the Receiver unit to the DVI port on the Dual Link DVI display.

CONNECTING THE DVI FM 2000

How to Connect the DVI FM 2000

1. Connect the Dual Link DVI source to the Sender unit.
2. Connect the Dual Link DVI display to the Receiver unit.
3. Connect the Sender unit and Receiver unit together using two SC multi-mode fiber optic cables.



IMPORTANT: On the bottom of both the Sender unit and Receiver unit, each fiber optic port is identified by the letter A or B. Make sure that the fiber optic cables between the Sender unit and Receiver unit are connected to the proper port, as shown below:

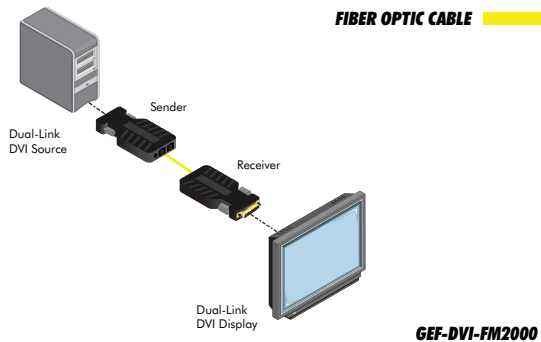


4. Connect the 5V DC power supply to the Receiver unit.

WIRING DIAGRAM

Wiring Diagram for the DVI FM 2000

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SPECIFICATIONS

Maximum Pixel Clock.....	2 x 165 MHz
Input Video Signal.....	1.2V p-p
Input DDC Signal.....	5V p-p (TTL)
DVI Connector (Sender / Receiver).....	DVI-D, 19-pin, male
Fiber Optic Connector (Sender / Receiver).....	SC type
Power Supply (Sender / Receiver).....	5V DC
Power Consumption.....	2.5W (max.) per unit
Operating Temperature.....	0 ~ 50 °C
Storage Temperature.....	-20 ~ 70 °C
Relative Humidity.....	10% ~ 80%
Dimensions (Sender / Receiver).....	1.97" W x 0.59" H x 2.98" D
Shipping Weight.....	2 lbs.

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. The two year warranty is only valid on new products purchased as of January 2007. All products purchased before this date still retain their 1 year warranty. 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. Please note that if a product is returned for repair, proof of sale may be required in order to claim the warranty. Customers returning products for repair from locations outside the USA are responsible for shipping charges to and from Gefen. The warranty for copper cables is limited to 30 days and returned 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, please visit Gefen's Warranty page at <http://www.gefen.com/kvm/aboutus/warranty.jsp>

PRODUCT REGISTRATION

**Please register your product online by visiting Gefen's web site at
<http://www.gefen.com/kvm/Registry/Registration.jsp>**

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This product uses UL listed power supplies.