GefenPRO®

DVI FM1500
Optical Extender
with Recordable EDID

**GEF-DVI FM1500
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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Congratulations on your purchase of the DVI FM1500 Optical Extender with Recordable EDID. Your complete satisfaction is very important to us.

GefenPRO

In the realm of video distribution, certain features are invaluable in a commercial or broadcast environment. Accommodations such as a build-in power supply and flat black rack-mount enclosures set GefenPRO apart from our traditional products. Complex distribution units allow for professional DVI, 3G-SDI, and HDMI signals to be routed and converted easily and seamlessly, while being backed up by a renowned and dependable technical support team. Gefen invites you to explore the GefenPRO product line and hopes that you find the solution that fits your needs.

The GefenPRO DVI FM1500 Optical Extender with Recordable EDID

The GefenPRO DVI FM1500 Optical DVI Extender with Recordable EDID extends a DVI source up to 3280 feet (1000 meters) using single-mode (50 micron) fiber optic cable. Recordable EDID programming provides fast integration and compatibility with the input video source and the display. Resolutions up to 1920 x 1200 (WUXGA) at 60 Hz are supported.

How It Works

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

READ THESE NOTES BEFORE INSTALLING OR OPERATING
THE DVI FM1500 OPTICAL EXTENDER WITH RECORDABLE EDID

- The DVI FM1500 Optical Extender with Recordable EDID can use both single-mode and multi-mode SC-terminated optical fiber cables.

- When using multi-mode fiber optic cables, DVI can be extended to 1640 feet (500 meters).

- The DVI FM1500 Sender unit has a default built-in EDID of 1920 x 1200. If the Sender unit is programmed with another EDID (see page 9), the default EDID will be erased. Once the default EDID is erased, it cannot be restored.

Features

- Extends DVI up to 3280 feet (1000 meters) using single-mode fiber optic cable

- Extends DVI up to 1640 feet (500 meters) using multi-mode fiber optic cable

- Supports resolutions up to 1920 x 1200 (WUXGA)

- Optical signal transmission provides good immunity to electromagnetic interference

- Virtual EDID programming feature provides quick installation and compatibility between source and display

- Uses single-mode or multi-mode fiber optic cable

- Fully supports DVI 1.0 Specifications and DDC2B via virtual DDC

- Sender module does not require power if the DVI source provides sufficient power on pin 14 of the DVI connector (most sources do)

Package Includes

(1) GefenPro DVI FM1500 - Sender unit
(1) GefenPro DVI FM1500 - Receiver unit
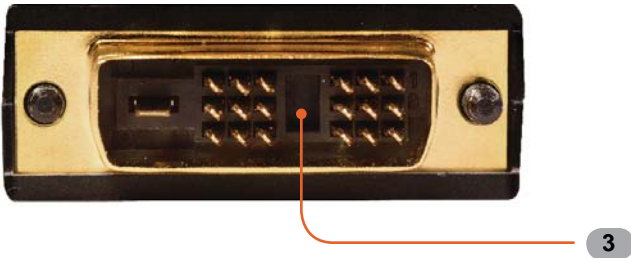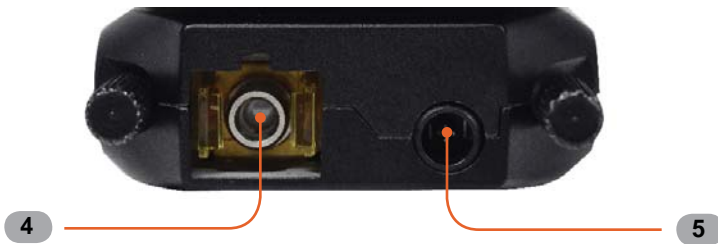(1) 5V DC power supply
(1) Quick Start Guide

Sender unit

Top

1

2

Front

3

Back

4

5

1   ***Status***
  This LED indicator will slowly blink bright green, indicating that there is a valid connection between the Sender unit and Receiver unit.

2   ***Power***
  This LED indicator will glow bright green, when power is applied to the Sender unit.

3   ***DVI Input***
  Connect this part of the Sender unit to the DVI source.

4   ***SC Fiber Connector***
  Connect an SC-terminated fiber cable from this SC connector to the SC-connector on the Receiver unit.

5   ***5V DC Power Supply Connector***
  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.
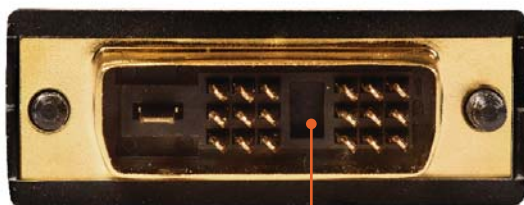
Receiver unit

Top

Front

Back

1 Status
This LED indicator will slowly blink bright green, indicating that there is a valid connection between the Sender unit and Receiver unit.

2 Power
This LED indicator will glow bright green, when power is applied to the Receiver unit.

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

4 SC Fiber Connector
Connect an SC-terminated fiber cable from this SC connector to the SC-connector on the Sender unit.

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

How to Connect the DVI FM1500 Optical Extender with Recordable EDID

STOP: Before continuing, connect the included 5V DC power supply to the Receiver unit.

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 an SC-terminated multi-mode (or single-mode) fiber optic cable.

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 FM1500 Optical Extender.

Wiring Diagram for the
DVI FM1500 Optical Extender with Recordable EDID

GefenPRO®

FIBER OPTIC CABLE

Sender

DVI Source

Receiver
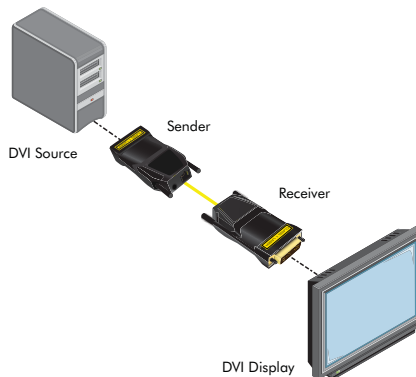
DVI Display

GEF-DVI-FM1500

Virtual 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 1920 x 1200 (WUXGA).

> ⚠️ **IMPORTANT:** The DVI FM1500 Sender unit has a default built-in EDID of 1920 x 1200. If the Sender unit is programmed with another EDID (see page 9), the default EDID will be erased. Once the default EDID is erased, it cannot be restored.

1. Power on the DVI display.

2. Connect the 5V DC power supply to the power receptacle of the Sender unit. Make sure that the Power LED is ON and that the Status LED is blinking slowly.

3. Press and hold the EDID PRGM button on the Sender unit using a small pointed object. The Status LED will turn OFF.

Sender unit

Press and hold the EDID PRGM button.

4. Connect the Sender unit to the display (not to the source).

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 display and stored in the Sender unit. After about 10 seconds, the Status LED will blink slowly to indicate that the EDID programming procedure was successful.

6. Disconnect the Sender unit from the display.

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.

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)..SC 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 0.57" H x 2.68" 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. 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.

This product uses UL listed power supplies.