

DVI FM 1000 PLUS

EXT-DVI-FM1000P User Manual



www.gefen.com

ASKING FOR ASSISTANCE

Technical Support:

Telephone (818) 772-9100

(800) 545-6900

Fax (818) 772-9120

Technical Support Hours:

8:00 AM to 5:00 PM Monday through Friday, Pacific Time

Write To:

Gefen LLC c/o Customer Service 20600 Nordhoff St Chatsworth, CA 91311

www.gefen.com support@gefen.com

Notice

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

DVI FM 1000 PLUS is a trademark of Gefen, LLC

© 2012 Gefen, LLC. All rights reserved. All trademarks are the property of their respective owners.

CONTENTS

- 1 Introduction
- 2 Operation Notes
- 3 Features
- 4 Sender Layout
- 5 Sender Descriptions
- 6 Receiver Layout
- 7 Receiver Descriptions
- 8 Connecting the DVI FM 1000 PLUS
- 8 Wiring Diagram
- 9 EDID Programming
- 10 Specifications
- 11 Warranty

INTRODUCTION

Congratulations on your purchase of the DVI FM 1000 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 1000 PLUS

The DVI FM 1000 Plus extender uses two small transceivers to extend a DVI source to a display up to 3300 feet (1000 meters) using a single-strand of SC-terminated multimode fiber optic cable. Automatic EDID Programming enables quick integration of the video source to the display. The optical signal transmission provides immunity from electromagnetic interference (EMI).

How It Works

The Sender module plugs into a DVI source. The Receiver module plugs into a DVI display. A single strand of multimode SC-terminated fiber optic cable connects the Sender to the Receiver module.

OPERATION NOTES

READ THESE NOTES BEFORE INSTALLING OR OPERATING THE DVI FM 1000 PLUS

The DVI FM 1000 PLUS only uses a multi-mode SC fiber optic cable.



ATTENTION: Multi-mode fiber optic cable with a core diameter of 50/125 is required, in order to extend to distance of 3300 feet (1000 meters).

- The supplied power adapter must only be used on the Receiving module. Power to the Sender module is supplied by the source through the DVI connector. If the LED on the Sender module does not activate when the source is connected and powered, an external power supply will be necessary.
- 62.5/125μm (OM1) fiber may also be used at reduced maximum range of up to 1000 feet (300 meters).

FEATURES

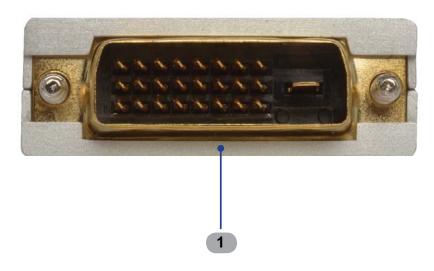
Features

- Extends DVI up to 3300 feet (1 km) over a single-strand of OM2 (50/125μm) multimode fiber optic cable
- Extends DVI up to 1000 feet (300 meters) over a single-strand of OM1 (62.5/125µm) multimode fiber optic cable
- Supports resolutions up to 1920 x 1200 (WUXGA)
- Automatic EDID programming provides continuous connection of source to display
- Sturdy die-cast metal enclosures provide a robust solution for professional and industrial applications
- Compact Sender and Receiver modules provide a clean, easy installation

Package Includes

- (1) DVI FM 1000 PLUS Sender Module
- (1) DVI FM 1000 PLUS Receiver Module
- (1) 5V DC Power Supply
- (1) Quick Start Guide

Front



Back



SENDER DESCRIPTIONS

1 DVI Input

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

2 SC Fiber Connector

Connect an SC fiber optic cable from the Sender to the Receiver module.

3 Power Receptacle

If the source does not supply enough voltage to power the Sender module, connect a 5V DC power supply to this receptacle. In most situations, the power supply will not be required.

4 Status Indicator

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

Front



Back



RECEIVER DESCRIPTIONS

1 DVI Output

Connect this part of the Receiver module to a dual-link DVI display.

2 SC Fiber Connector

Connect an SC fiber optic cable from the Receiver to the Sender module.

3 Power Receptacle

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

4 Status Indicator

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

CONNECTING THE DVI FM 1000 PLUS

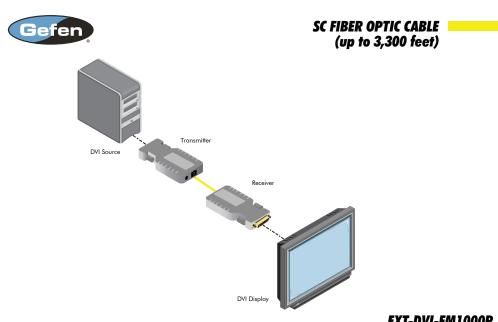
How to Connect the DVI FM Extender PLUS

- Connect a dual-link DVI source to the Sender module. 1.
- 2. Connect a dual-link DVI display to the Receiver module.
- Connect the Sender to the Receiver module using an SC multimode fiber 3. optic cable.



Connect the 5V DC power supply to the Receiver module.

Wiring Diagram for the DVI FM 1000 PLUS



EDID PROGRAMMING

EDID Programming Procedure

Display information (EDID) contains resolution and timing information for your display. This information is needed by the source for proper video output. Follow these steps to record the EDID of the display into the Sender module. If you know that EDID is not required by the source, the followings steps for recording will not be necessary.

- 1. Connect the Sender module to a display.
- 2. Power on the display.
- 3. Connect the included 5V DC power supply into the Sender module. The LED on the back of the module will flash rapidly. Once the LED stops flashing and is solid, the displays EDID will have been successfully recorded.
- 4. Disconnect the power supply from the Sender module then from the display.

SPECIFICATIONS

| Maximum Pixel Clock | 165 MHz |
|---|-------------------|
| Video Input Connector (Sender)(1) DVI-D (2 | 24 pin), male |
| Video Output Connector (Receiver)(1) DVI- | D (24 pin), male |
| Link Connector (Sender / Receiver) | (1) Type SC |
| Power Supply (Receiver) | 5V DC |
| Power Consumption | 2.5 Watts (max.) |
| Operating Temperature+32° to +122° | °F (0° to +50° C) |
| Storage Temperature4° to +158°F | (-20° to +70° C) |
| Relative Humidity | non-condensing |
| Dimensions(W x H x D): 1.6" x 0.6" x 2.8" (40mm x | 14mm x 70mm) |
| Shipping Weight: | 1 lb (0.45 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.



20600 Nordhoff St., Chatsworth CA 91311
1-800-545-6900 818-772-9100 fax: 818-772-9120
www.gefen.com support@gefen.com











