

# **DVI** extension using fiber optic modules

### **DVI FM Extender PLUS**

### **DVI Extension for Computers -- Elegant and Reliable**

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

#### **How It Works**

The DVI FM sender unit plugs into your computer. The DVI FM receiver unit plugs into your DVI display - up to 2000 feet away. Multi mode LC fiber optic cable (4 strand) connect the DVI FMP and the DVI FMR units to each other.

Breakthrough Auto-EDID programming technology quickly and easily collects and preserves monitor resolution/capability information inside the DVI-FMP Sender, 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.

### 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

#### **Specifications:**

- Video Amplifier Bandwidth: 165 MHz
- •
- Input Video Signal:1.2 volts p-p Input DDC Signal: 5 volts p-p (TTL) ٠
- DVI Connector: Type DVI-D (19 pin) male
   Link Connector: LC
   Power Supply: 5V DC

- Power Consumption: 2.5 Watts (max.)
  Dimensions: 3.25" D x 0.75" H x 1.5"W
  Shipping Weight: 5 lbs.

### **Package Includes:**

- One DVI FM Sender Unit
  One DVI FM Receiver Unit
- Two 5V 1A Power Supplies
- One User Manual

#### **FXT-DVI-FMP**



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# **DVI Fiber Optic Extender**

EXT-DVI-FMP

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 thru Friday.

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#### Notice

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# INTRODUCTION

Congratulations on your purchase of the DVI FMP. 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 FMP

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

#### How It Works

The DVI FM sender unit plugs into your computer. The DVI FM receiver unit plugs into your DVI display up to 2000 feet away. Multi mode LC fiber optic cable (4 strand) connect the DVI FMP and the DVI FMR units to each other.

Breakthrough Auto-EDID programming technology quickly and easily collects and preserves monitor resolution/capability information inside the DVI-FMP Sender, 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.
- DVI FM Plus Extender works for all DVI displays and supports resolutions up to 1920x1200
- Supports DDWG standard for DVI compliant monitors

# FEATURES

#### Features

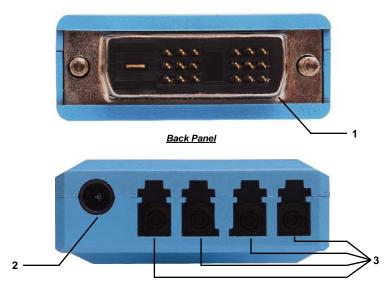
- Extends any DVI (Digital Visual Interface) compliant device up to 2000 ft (600 m) from the computer
- Supports video resolutions up to 1080p, 2K, and 1920 x 1200
- Uses inexpensive and widely available four-strand multimode LC fiber optic cable
- Automatic EDID Programming feature enables quick and 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 Sender (Computer (Tx)) Unit
- (1) DVI FM Monitor (Monitor (Rx)) Unit
- (2) 5V Power supply for the DVI FM Receiver Unit
- (1) User's Manual

### SENDER/ RECEIVER PANEL LAYOUT

### Front Panel



### 1 DVI Input/Output

The sending unit will connect to the DVI output of the source, and the receiving unit will connect to the DVI input of the display.

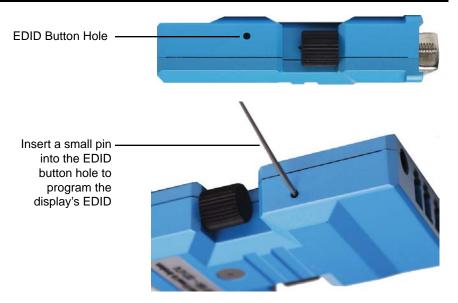
### 2 5V DC Power Supply Input

While both the sending and receiving units have the power supply input, only the sending unit should have the included power supply attached.

### 3 Fiber Optic Cable Inputs

Connect the 4 LC terminated fiber optic cables between the sending and receiving units. Ensure that each cable is connected to the same numbered output on both units. These cables will transmit the red, green, blue. and clock signals used for the DVI extension.

# SENDER UNIT EDID BUTTON LOCATION



# CONNECTING AND OPERATING THE DVI FMP

#### How to Connect the DVI FMP

- 1. Plug the 5V power supply to the power input of the sender, and connect the power supply to the nearest power outlet. Ensure that the blue LED is ON.
- 2. How to program the sender with the displays EDID:
  - A. Push the EDID button on the sender unit. The blue LED light will blink twice and then turn off.
  - B. Connect the powered sender to the display while turned on, and not to the PC. The LED will blink several time to indicate that it is reading and recording the display's EDID. The LED will turn OFF after it blinks several time to indicate that the EDID has been programmed.
  - C. Disconnect the sender from the display and the LED should turn ON again.

**Note:** If you want to change the display, you will have to repeat step 2. The default EDID that is programmed in the sender is the VESA standard of UXGA (1600x1200) 60Hz.

 Plug the sender to the DVI input of the PC and confirm that the blue LED is ON. If it is not ON, then connect 5V power supply to the power input of the sender.

**Note:** Be sure to NOT to use any other cable or adapter between them to avoid undesirable performance and/or degradation.

**Note:** If you are using a laptop or Desktop PC with PCI Express graphic card, we recommend that you power the sender by inserting the power supply on the sender.

# SPECIFICATIONS

Video Amplifier Bandwidth	165 MHz
Input Video Signal	1.2 Volts p-p
Input DDC Signal	5 Volts p-p (TTL)
Maximum Single Link Range	1920 x 1200
DVI Input/Output Connector Type	DVI-D (19 pin) male
Fiber Requirement	50 or 62.5 micron multimode fiber
Link Connector	LC
Power Consumption	2.5 Watts (max.)
Power Supply	
Dimensions	1.5"W x 0.75"H x 3.25"D
Shipping Weight	