

# Gefen

## DVI FM500 Extender

EXT-DVI-FM500

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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# CONTENTS

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- 1 Introduction**
- 2 Operation Notes**
- 3 Features**
- 4 Panel Layout**
- 5 Connecting And Operating The DVI FM500 Extender**
- 6 EDID Programming**
- 7 Specifications**
- 8 Warranty**

# INTRODUCTION

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Congratulations on your purchase of the DVI FM500 Extender. 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 FM500 Extender**

The DVI FM500 Extender lets you extend your DVI source up to 5,000 feet away using a 100% fiber optic extension solution. Attractive and compact DVI-to-fiber modules connect to each other via just two LC fiber optic cable strands. Extender units fit neatly behind equipment for a clean installation.

The on the fly EDID programming feature enables quick and correct synchronization of the video resolution to the display without any manual configuration. It's a great way to extend DVI easily and cleanly.

## **How It Works**

The DVI FM 500 Sender unit plugs into a DVI port (either a computer source or another device transmitting a DVI signal). The DVI FM 500 Receiver unit plugs into a DVI display - up to 5,000 feet away. Two-strand LC fiber optic cable connects the DVI FM 500 Sender unit and the DVI FM500 Receiver units to each other. Power is connected to the DVI FM 500 receiver using the 5V wall adapter and a crisp, vibrant HD picture appears on the display.

# OPERATION NOTES

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## READ THESE NOTES BEFORE INSTALLING OR OPERATING THE DVI FM500 EXTENDER

- The distance that DVI can be extended will depend on the type of fiber optic cable used. For a maximum resolution of 1920x1200 at 60 frames per second (60 Hz), the distances possible are as follows:
  - Single mode: 8(9)/125 microns core: 1500m (5,000 ft)
  - Multi mode: 50(62.5)/125 microns core: 500m (1,500 ft)
- There are two included power supplies. The receiver unit must always be powered using the external power supply. If the LED on the sender unit does not activate once the source is connected and powered, please use the second included power supply to provide operational power to the sender unit.
- The EDID from the display is stored in the sender unit but must be recorded from the display first. Please see instructions on page 6 for the proper EDID recording procedure.

# FEATURES

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## Features

- Extends resolutions up to WUXGA (1920x1200) @60 Hz up to 5,000 feet away
- Immune to EMI (electromagnetic interference) thanks to all-fiber signal transmission media
- Automatic EDID Programming feature enables quick and correct sync of source to display
- Compact Sender and Receiver units install in minutes
- Supports single- and multi-mode fiber optic cable types

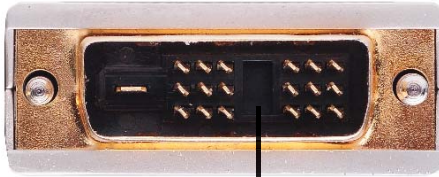
## Package Includes

- (1) DVI FM 500 Sender unit
- (1) DVI FM 500 Receiver unit
- (2) 5V 1A Power Supply
- (1) User's Manual

# PANEL LAYOUT

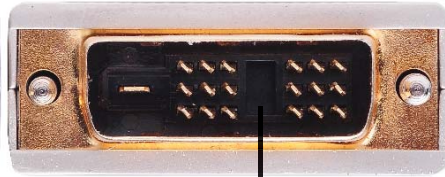
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*Sender Front Panel*



DVI In

*Receiver Front Panel*



DVI Out

*Sender Back Panel*



2 Strand LC-LC  
Fiber Optic Cable Input

5V DC In

*Receiver Back Panel*



2 Strand LC-LC  
Fiber Optic Cable Input

5V DC In

# CONNECTING AND OPERATING THE DVI FM500 EXTENDER

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## How to Connect the DVI FM500 Extender

### Connecting the DVI FM500 Extender System

1. Record the monitor's EDID using the instructions on the next page.
2. Connect the DVI FM500 Extender sender unit to the DVI source device.
3. Connect DVI FM500 Extender receiving unit to the DVI display.
4. Connect the DVI FM500 Extender sender and receiving units together using a user supplied LC terminated single or multi-mode fiber optic cable.

**NOTE: This unit will only operate with LC terminated single or multi-mode fiber optic cable.**

5. Connect one of the included 5V DC power adapters to the DVI FM500 receiving unit.
6. Power on the DVI source.

**NOTE: If the source does not supply the required 5V of operational power to the DVI FM500 Extender sender unit, the second included power supply must be attached to the sender unit.**



# EDID PROGRAMMING

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## EDID Recording

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 unit. If you know that EDID is not required by the source, the followings steps for recording will not be necessary.

1. Power on the display.
2. Insert the included 5V DC power adapter into the sender unit. Using a small pin, press the EDID program button on the sender unit. The LED on the top panel of the unit will blink twice and turn off.
3. Connect the DVI FM500 Extender sender unit to the display using a user/monitor supplied DVI cable.
4. The LED will blink rapidly for approximately 8 seconds while the EDID is being recorded. Once the LED stops blinking and turns off again the monitors EDID will have been successfully recorded.
5. Disconnect the power adapter from the DVI FM500 Extender sender unit, and then disconnect the DVI FM500 Extender sender unit from the display.

# SPECIFICATIONS

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Maximum Single Link Resolution .....	WUXGA (1920x1200)
Operating Temperature .....	0°C to +50°C
Storage Temperature .....	-10°C to +85°C
Operating Humidity .....	5% to 85%
Formats Supported: .....	Supports DVI 1.0 and DDC2B via virtual DDC
Default EDID .....	UXGA (1600x1200)
Dimensions .....	1.5" / 0.6" / 2.7 " (W/H/D)
Shipping Weight .....	2.0 lb.

# WARRANTY

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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](http://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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**Rev A4**

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