



**DVI CAT-5**  
**Extender**  
USER MANUAL

## ASKING FOR ASSISTANCE

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

**The DVI CAT-5 Extender** is a trademark of Gefen Inc.

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## OPERATION NOTES

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### READ THESE NOTES BEFORE INSTALLING OR OPERATING THE DVI CAT-5 EXTENDER

- The DVI CAT-5 Extender is housed in a metal box for better RF shielding.
  - Your CAT-5 cable should not exceed 150 feet.
  - If you don't need DDC data you can use a single CAT-5 cable for the video only. The DDC will not be connected. An additional 5 VDC power supply will be needed for the receiver side.
  - If the source requires EDID present, you can use the Gefen DVI Detective to provide EDID information. This will also provide an additional 5v power supply for the receiver side.
- \* CAT6 cable is suitable for high resolutions at 50 meters.

# INTRODUCTION

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The DVI CAT-5 Extender sender unit sits next to your computer, DVD player or any set-top box with a DVI output. The cable supplied with the DVI CAT-5 Extender connects your DVI source to the send unit. The DVI CAT-5 Extender receiver unit sits next to your DVI display - up to 150 feet away. The display plugs into the back of the DVI CAT-5 Extender receiver unit. Two CAT-5 cables connect the DVI CAT-5 Extender-S and the DVI CAT-5 Extender-R units to each other.

## **CONTENTS**

The DVI CAT-5 Extender system consists of:

- the DVI CAT-5 Extender-S
- the DVI CAT-5 Extender-R
- One DVI to DVI 6 foot M-M
- Two DVI CAT5 Extender Wallmounts
- One 5 volt power supply

# DVI CAT-5 EXTENDER SENDER FRONT PANEL DESCRIPTIONS



Connects to 5 volt power supply

DVI input connects to DVI source



CAT-5 carries TMD5 signals

CAT-5 carries DDC/HDCP signals

# DVI CAT-5 EXTENDER RECEIVER FRONT PANEL DESCRIPTIONS



Connects to DVI display

Connects to 5 volt power supply



CAT-5 carries DDC/HDCP signals

CAT-5 carries TMDS signals

## HOW TO CONNECT THE DVI CAT-5 EXTENDER

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- 1 Connect your display to the DVI Extender receiver unit.
- 2 Connect your source to the DVI Extender sender unit
- 3 Connect your CAT-5 cables between the sender and the receiver
- 4 Plug the 5V power supply into the DVI CAT-5 Extender sender unit
- 5 You should now have picture. If you do not see a picture, try unplugging and re-plugging the DVI input on the DVI Extender sender unit. Make sure your CAT-5 cables are not crossed. Recycle the power on the unit.

\* If problems persist try adjusting the Dip Switches by following the Dip Switch Usage Guide.



## DIP SWITCH USAGE GUIDE

Gefen CAT5 Extenders (sender and receiver) both contain a pair of dip switches located on the board. These dip switches are used to select from a set of configurations that will equalize the signal to best match the conditions in your setup.

### How to open the DVI CAT5 Extender:

1. Unscrew the four screws underneath the unit.
2. Unscrew the 2 hex nuts beside the DVI connector.
3. Slide the top plate off the base to expose the circuit board.
4. The dip switches are located directly on the circuit board.

### Sender Dip Switches

| Option No. | Switch 1 Position | Switch 2 Position | Description               |
|------------|-------------------|-------------------|---------------------------|
| 1          | 0 (OFF)           | 0 (OFF)           | Medium Boost<br>(Default) |
| 2          | 1 (ON)            | 0 (OFF)           | Strong Boost              |

### Receiver Dip Switches

| Option No. | Switch 1 Position | Switch 2 Position | Description       |
|------------|-------------------|-------------------|-------------------|
| 1          | 0 (OFF)           | 0 (OFF)           | EQ 0<br>(Default) |
| 2          | 1 (ON)            | 0 (OFF)           | EQ 1              |
| 3          | 0 (OFF)           | 1 (ON)            | EQ 2              |
| 4          | 1 (ON)            | 1 (ON)            | EQ 3              |

### Adjustment Guidelines:

- 1) Higher EQ level is used to equalize poor/low quality CAT-5e cables
- 2) Stronger boost is used to drive signals through longer cables
- 3) It is an optimal balance of Boost and EQ that will result in the best possible picture.

# CAT5 LINK CABLE - WIRING DIAGRAM

**RJ-45 Jack**



**White/Orange**

**Orange**

**White/Green**

**Blue**

**White/Blue**

**Green**

**White/Brown**

**Brown**

**RJ-45 Jack**



**1**

**2**

**3**

**4**

**5**

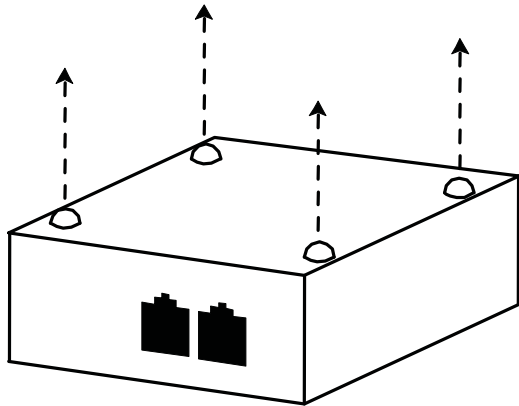
**6**

**7**

**8**

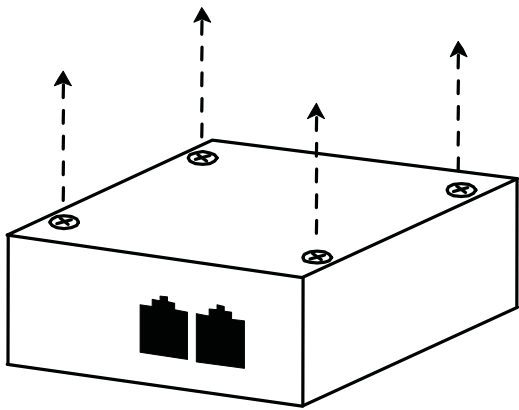


# Mounting Plate Installation



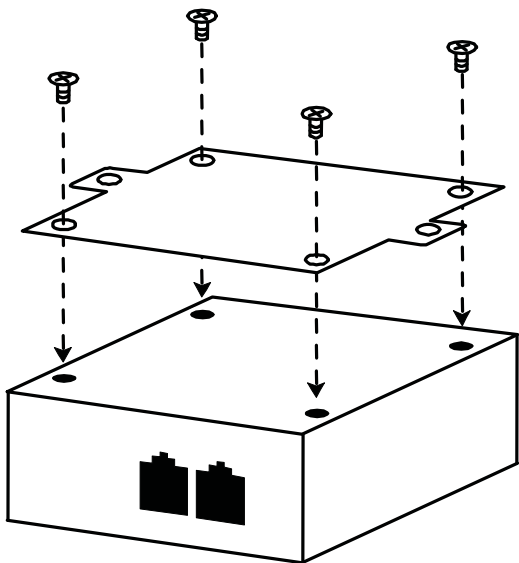
**1**

Remove the rubber feet covering the screws off the bottom of the unit.



**2**

Remove the screws.



**3**

Line up the mounting plates and screw it on to the unit.

## SPECIFICATIONS

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|                                 |                         |
|---------------------------------|-------------------------|
| Video Amplifier Bandwidth ..... | 1.65 GHz                |
| Vertical Frequency Range .....  | 50-60 Hz                |
| Single Link Range .....         | 1920 x 1200             |
| Input Video Signal.....         | 1.2 volts p-p           |
| Input DDC Signal.....           | 5 volts p-p             |
| DVI Input Connector Type .....  | DVI-D                   |
| DVI Output Connector Type ..... | DVI-D                   |
| Power Consumption .....         | 15 Watts (max.)         |
| Dimensions .....                | 3.4"W x 3.25"H x 1.25"D |
| Shipping Weight .....           | 3 Lbs                   |

## WARRANTY

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Gefen Inc. warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen Inc. is notified within one (1) year from the date of shipment, Gefen System 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 shipment 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.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen Inc. assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen Inc., 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 DVI CAT-5 Extender features and specifications is subject to change without notice.