

DVI Detective Plus

EXT-DVI-EDIDP 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 Detective Plus is a trademark of Gefen LLC

© 2011 Gefen, LLC. All rights reserved. All trademarks are the property of their respective owners.

CONTENTS

- 1 Introduction
- 2 Operation Notes
- 3 Features
- 4 Panel Layout
- 5 Panel Descriptions
- 6 Connecting the DVI Detective Plus
- 7 Wiring Diagram
- 8 EDID Programming
- 8 Using a built-in EDID
- 9 Writing an EDID using a source device
- 10 Specifications
- 11 Warranty

INTRODUCTION

Congratulations on your purchase of the DVI Detective 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 Detective Plus

Computers and HDTV video source devices can sometimes lose the EDID -- basically the electronic identification of a display which lists its possible resolutions and frequencies. When displays are switched away or disconnected and then reconnected, the EDID can be lost and the computer or HD video source device can lose the ability to display the image properly.

How It Works

Connect the DVI Detective Plus connects to the display's DVI input for initial programming. Power is applied and the DVI Detective Plus reads and stores the display's EDID to the internal memory on the DVI Detective Plus. Connect the DVI Detective Plus between the source and the display and it will never lose EDID again.

The DVI Detective Plus includes 4 built-in selectable generic EDIDs that can be used for meeting standard display setups. They can be selected by moving the DIP switches between the different settings.

OPERATION NOTES

THIS PAGE LEFT INTENTIONALLY BLANK

FEATURES

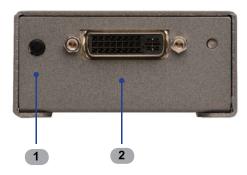
Features

- · Quick and easy recording of EDID information from DVI displays
- Write custom EDID information using an external source (e.g. signal generator, etc)
- Selection of preset EDIDs
- Supports resolutions up to 1920 x 1200, 2k, and 3840 x 2400 (Dual Link)
- HDCP-compliant
- No power required after initial programming
- · Compact unit hides well behind equipment

Package Includes

- (1) DVI Detective Plus
- (1) 1 ft. DVI cable (M-M)
- (1) 5V DC power supply
- (1) Quick Start Guide

Front



Back 4 EXT-DVI-EDIDP Gefen WR 1 2 3 4 OFF DVI Out 5 5

PANEL DESCRIPTIONS

1 Programming Button

Press and hold this button to program an EDID. See page 8 for more information on recording an EDID.

2 DVI In

Connect the included DVI cable from this DVI port to the source device.

3 DIP Switches

Use these DIP switches to use one of the pre-programmed EDIDs.

4 DVI Out

Connect an DVI cable from this DVI port to the display (or other sink device).

5 Write-Protect Switch

Enables / disables the write-protect feature, protecting the currently stored EDID from being accidentally overwritten.

How to Connect the DVI Detective Plus



STOP: Before proceeding, make sure that the write protect switch is in the E (write enabled) position and all DIP switches are in the OFF (UP) position. Also make sure the source device is powered OFF.

- Power-on the display (or other sink device) containing the EDID to be recorded.
- Use a DVI cable to connect the sink device to the DVI Out port on the DVI Detective Plus.
- Set all four DIP switches in the OFF (down) position, as shown in the illustration below.



- Connect the included 5V DC power supply to the DVI Detective Plus. The
 power LED will glow bright green if the sink device contains a valid EDID. If
 the sink's EDID is corrupt or invalid, then the power LED will glow bright red.
- 5. Press and hold the Program button on the front panel of the *DVI Detective Plus* until the power indicator begins to rapidly flash bright green, then release the Program button. The power LED will continue to flash as the EDID is written to the DVI Detective Plus.

A successful recording will be indicated with a solid green LED. If the recording process was unsuccessful, the LED will glow bright red.



NOTE: If the *DVI Detective Plus* does not initiate the recording sequence, indicated by a flashing green LED, unplug the display and 5V DC power supply from the unit and repeat steps 2 and 3. If a solid red LED is indicated after several unsuccessful recording attempts, it is possible that the EDID from the display is bad. In this case, see page 8 for instructions on using a built-in EDID.

CONNECTING THE DVI DETECTIVE PLUS

- 6. Remove the 5V DC power supply from the *DVI Detective Plus*.
- 7. Set the write-protect switch to the "E" position (enable) in order to prevent an accidental erasure of the stored EDID.
- 8. Use the included DVI cable to connect the source to the DVI Detective Plus.

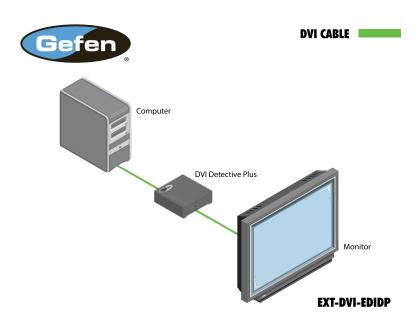


IMPORTANT: If the source uses HDCP, then DIP switch 4 must be enabled (in the ON position) in order to enable HDCP pass-through. In this case, the display must also be HDCP-compliant. Refer to your source and display manuals for HDCP compatibility.

9. Apply power to the DVI source.

If a computer is being used as the source, restart the computer only after all connections have been made.

Wiring Diagram for the DVI Detective Plus



OPERATING THE DVI DETECTIVE PLUS

Using a built-in EDID

The DVI Detective Plus includes five built-in EDIDs for use with several standard home theater setups with multi-channel audio and standard HD resolutions. Asterisks ("*") indicate native resolutions.

- 1. Make sure that the write-protect switch on the *DVI Detective Plus* is in the "D" position and that all DIP switches are in the OFF (down) position.
- 2. Select the desired EDID from the Resolutions column.
- 3. Set DIP switches 1 3 on the *DVI Detective Plus* using the DIP Switches column. DIP switch 4 is not used when programming an EDID.
- 4. Press and hold the Program button on the front panel of the *DVI Detective Plus* until the power indicator begins to rapidly flash bright green, then release the Program button.

EDID	Resolutions	Refresh Rate	Audio	DI	P Switc	hes
1	720 x 576p 4:3 720 x 576p 16:9 1280 x 720p 16:9	50 Hz	8 CH PCM	1 ON	2 OFF	3 OFF
	1920 x 720p 10:9 1920 x 1080p 16:9 *1920 x 1080i 16:9					
2	720 x 576p 4:3 1440 x 480i 16:9 1280 x 720p 16:9 1920 x 1080p 16:9 *1920 x 1080i 16:9	59.94 / 60 Hz	8 CH PCM	OFF	ON	OFF
3	720 x 576p 4:3 720 x 576p 16:9 1280 x 720p 16:9 1920 x 1080p 16:9 *1920 x 1080i 16:9	50 Hz	2 CH PCM	ON	ON	OFF
4	720 x 480 16:9 720 x 576p 16:9 1280 x 720p 16:9 1920 x 1080p 16:9 *1920 x 1080i 16:9	59.94 / 60 Hz	2 CH PCM	OFF	OFF	ON
5	720 x 480p 4:3 1440 x 480p 4:3 720 x 480p 16:9 1440 x 480p 16:9 1280 x 720p 16:9 1920 x 1080i 16:9 *1920 x 1080p 16:9	59.94 / 60 Hz	2 CH PCM 8 CH PCM DTS® Dolby®	ON	OFF	ON

OPERATING THE DVI DETECTIVE PLUS

Writing an EDID using a source device

The *DVI Detective Plus* allows a signal generator (or other source device) to write an EDID to the Detective. This provides additional flexibility when programming custom timings and refresh rates.

- Make sure that the write-protect switch on the *DVI Detective Plus* is in the "D" (disable write-protect) position and make sure all DIP switches are in the OFF (down) position.
- 2. Use an DVI cable to connect the source (generator) device to the DVI In port on the *DVI Detective Plus*.
- 3. Connect the included 5V DC power supply to the DVI Detective Plus.
- Use the source (generator) device to send the EDID data to the DVI Detective Plus.

SPECIFICATIONS

Maximum Pixel Clock	165 MHz
Input Video Signal	1.2V p-p
Input DDC Signal	5V p-p (TTL)
Video Input Connector	DVI-I, 29-pin, female
Video Output Connector	DVI-I, 19-pin, female
Power Supply	5V DC
Power Consumption	5W (max.)
Dimensions (W x H x D)2	.7" x 1.5" x 2" (68.5mm x 38mm x 50.8mm)
Shipping Weight	

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.
- 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











