

Gefen

DVI Detective Plus

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.

Write To:

Gefen Inc.
C/O Customer Service
20600 Nordhoff St.
Chatsworth, CA 91311

support@gefen.com
www.gefen.com

Notice

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

The DVI Detective Plus is a trademark of Gefen Inc.

© 2008 Gefen Inc., All Rights Reserved

TABLE OF CONTENTS

1. Introduction
2. Features
3. Panel Layout
4. Connecting and Operating the DVI Detective Plus
5. Connecting and Operating the DVI Detective Plus
6. Using a Pre-Programmed EDID
7. Using a Pre-Programmed EDID
8. Pre-Programmed EDID Diagram
9. Write Protecting the DVI Detective Plus
10. Specifications
11. Warranty

INTRODUCTION

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

You simply program the DVI Detective Plus for the display that you will use, by performing a programming step while having the device connected to the display and a power adapter. Next, you put it into place on the video output of your video source and restart your equipment. When all sources and displays are powered on, seamless functioning of video source and display equipment will commence.

External buttons make EDID programming and settings operations a breeze -- formerly, some operations could require opening the unit.

FEATURES

Features

- Store EDID information for displays
- Supports resolutions up to 1920x1200, 2K, and 3840x2400 (Dual Link)
- Keeps computer systems from deactivating inactive DVI ports
- Can eliminate CAT-5 lines used to carry DDC signals when extending computer video
- Passes HDCP copy-protection protocols for full HDTV, using an HDMI to DVI adapter (not included)
- No power required after initial programming

Includes:

- (1) DVI Detective Plus
- (1) 1' DVI cable (m-m)
- (1) 5VDC Power Supply
- (1) User's Manual

PANEL LAYOUT

Front Panel



Back Panel



CONNECTING AND OPERATING THE DVI DETECTIVE PLUS

1. Before proceeding, please ensure that the write protect switch is in the E (write enabled) position and all SETTING DIP SWITCHES are in the OFF (down) position Please see the diagram on the page 8.
2. Connect the display to the DVI Out port on the DVI Detective Plus. Turn on the display to ensure that an EDID is being transmitted.
3. Plug the supplied 5V DC power supply into the DVI Detective Plus. The power LED should be glowing either solid RED (an EDID is not programmed) or solid GREEN (an EDID is properly programmed).
4. Once you are ready to program the EDID, press and hold the Program button on the front panel of the DVI Detective Plus until the unit's LED begins to rapidly flash green. Once the recording sequence is initiated, release the button and wait until the LED glows a solid green color. A successful EDID programming sequence is indicated with a green LED while an unsuccessful EDID record is indicated with a red LED.

NOTE: If the unit does not initiate the recording sequence, indicated by a flashing green LED, please 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 being recorded is bad. Please refer to the USING A PRE-PROGRAMMED EDID section on page 6 and 7 for instructions on how to use one of the built in EDID's.

CONNECTING AND OPERATING THE DVI DETECTIVE PLUS

5. Once a successful EDID record is complete, remove the 5V DC power supply from the DVI Detective Plus. At this time, it is recommended that you write protect the DVI Detective Plus to prevent an accidental overwrite. Please see page 9 for instructions on this procedure.
6. If HDCP is required by the source, the display must also be HDCP compliant and DIP SWITCH 4 will have to be enabled for HDCP pass through to function. Please refer to your source and display manuals for HDCP compatibility and enable DIP SWITCH 4 appropriately.
7. The source should be powered off when connecting it to the DVI In port on the DVI Detective Plus.
8. Power on the source.

Note: If using a PC, restart your computer only after you've made all the connections.

USING A PRE-PROGRAMMED EDID

The DVI Detective Plus includes 5 built-in manually-selectable generic EDIDs (display identities) for forcing several standard home theater setups with multi-channel audio and standard HDTV resolutions. This functionality is vital when equipment reaches a state of indeterminate function and will not respond to signals or controls properly, and a certain resolution size with specific audio must be forced upon all connected equipment. Below is a table with the listed resolutions, refresh rates, and audio channels for each pre-programmed EDID.

EDID	Resolutions - Aspect Ratio		Refresh Rate	Audio	Setting DIP SWITCHES			
1	720 x 576p 4:3	720 x 576p 16:9	50 hz	Linear PCM 2 Channel	1	2	3	4
	1280 x 720p 16:9	1920 x 1080p 16:9			ON	OFF	OFF	N/A
	1920 x 1080i 16:9 (native)							
2	720 x 480p 16:9	1440 x 480p 16:9	59.94/60 hz	Linear PCM 2 Channel	1	2	3	4
	1280 x 720p 16:9	1920 x 1080p 16:9			OFF	ON	OFF	N/A
	1920 x 1080i 16:9 (native)							
3	720 x 576p 4:3	720 x 576p 16:9	50 hz	Linear PCM 8 Channel	1	2	3	4
	1280 x 720p 16:9	1920 x 1080p 16:9			ON	ON	OFF	N/A
	1920 x 1080i 16:9 (native)							

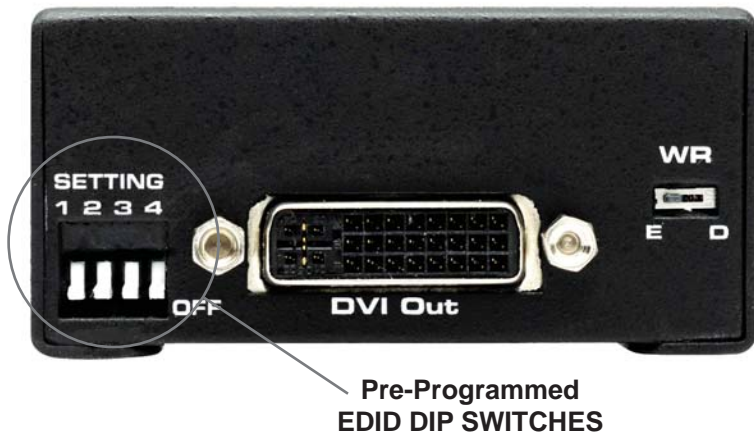
USING A PRE-PROGRAMMED EDID

EDID	Resolutions - Aspect Ratio		Refresh Rate	Audio	Setting DIP SWITCHES			
					1	2	3	4
4	720 x 480p 16:9	1440 x 480p 16:9	59.94/60 hz	Linear PCM 8 Channel	1	2	3	4
	1280 x 720p 16:9	1920 x 1080p 16:9			OFF	OFF	ON	N/A
	1920 x 1080i 16:9 (native)							
5	720 x 480p 16:9	1440 x 480p 16:9	59.94/60 hz	Linear PCM 2 Linear PCM 8 Linear DTS Linear AC-3	1	2	3	4
	1280 x 720p 16:9	1920 x 1080i 16:9			ON	OFF	ON	N/A
	1920 x 1080p 16:9 (native)							

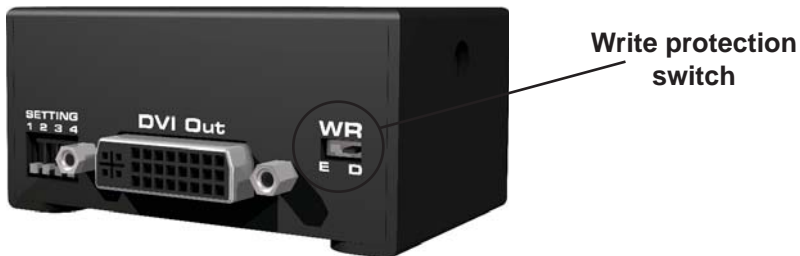
1. Choose the desired EDID from the table above and enable the corresponding DIP SWITCHES.
2. Follow steps 3 through 8 in the section CONNECTING AND OPERATING THE DVI DETECTIVE PLUS (Page 4 and 5)

NOTE: Only when the DIP SWITCHES are set in the combinations above will an pre-programmed EDID be written to the DVI Detective Plus. Please set all DIP SWITCHES to the OFF (down) position to enable the default setting and record an EDID from an attached display.

PRE-PROGRAMMED EDID DIAGRAM



WRITE PROTECTING THE DVI DETECTIVE



Once the DVI Detective is programmed and working, you can write protect the unit to prevent an accidental overwrite. This is done by simply moving the write protect switch to the D (write disabled) position. By default, the unit is shipped in the E (write enabled) position. This is done so that the unit is ready to be programmed right out of the box. Whenever the unit is going to be programmed, make sure that the switch is in the “E” position, otherwise the procedure will not work. The power LED will flash in alternating green and red colors to indicate that the DVI Detective Plus is currently write protected.

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 x 60hz
DVI Input/Output Connector Type	DVI-I
Power Consumption	5 Watts (max.)
Power Supply	5VDC
Dimensions	2"W x 1.7"H x 1.75"D
Shipping Weight	2 Lbs