



# HDMI Detective Plus

**EXT-HDMI-EDIDP**  
**User Manual**



**[www.gefen.com](http://www.gefen.com)**



## ASKING FOR ASSISTANCE

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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.

**HDMI Detective Plus** is a trademark of Gefen LLC

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# INTRODUCTION

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Congratulations on your purchase of the HDMI 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 HDMI Detective Plus**

Computers and HDTV video source devices can sometimes lose the EDID -- (which is 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. The HDMI Detective Plus product allows you to switch or relocate HDTV or Computer video displays while "tricking" the source devices into thinking that the display is still present -- maintaining smooth video operations throughout the process.

## **How It Works**

The Gefen HDMI Detective Plus attaches to the HDTV display's HDMI input connector for initial programming. Power is applied and the HDMI Detective Plus reads and stores the attached displays EDID to the internal memory. Then the HDMI Detective Plus is attached to your source HDMI output and it will never lose EDID again.

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

## **OPERATION NOTES**

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# FEATURES

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## Features

- Quick and easy recording of EDID information from HDTV displays
- Write custom EDID information using an external source (e.g. signal generator, etc)
- Selection of preset EDIDs
- Maintains 1920 x 1200, 1080p Full HD, and 2k resolution video
- No power required after initial programming
- HDCP Compliant
- Compact unit hides well behind equipment

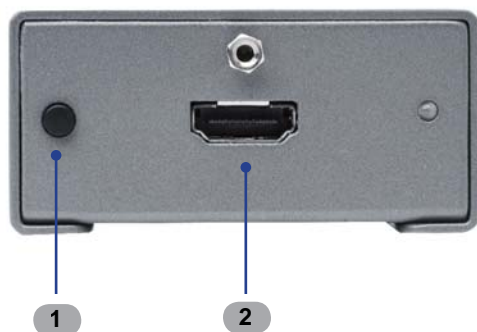
## Package Includes

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

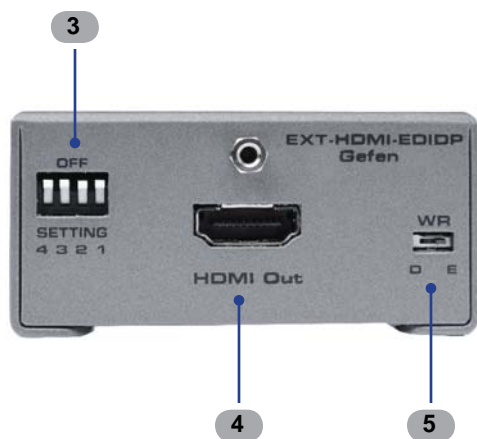
## PANEL LAYOUT

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Front



Back





## PANEL DESCRIPTIONS

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**1    *Programming Button***

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

**2    *HDMI In***

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

**3    *DIP Switches***

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

**4    *HDMI Out***

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

**5    *WR***

Enables / disables the EDID write status. Set the WR switch to the “E” position to allow the HDMI Detective Plus to be programmed with an EDID. Set the WR switch to the “D” position to disable programming and prevent an accidental erasure.

## CONNECTING THE HDMI DETECTIVE PLUS

### How to Connect the HDMI Detective Plus

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



4. Set the WR (Write) switch to the "E" (enable) position to allow the *HDMI Detective Plus* to be programmed.



5. Connect the included 5V DC power supply to the *HDMI 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.
6. Press and hold the Program button on the front panel of the *HDMI 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 *HDMI 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.

## CONNECTING THE HDMI DETECTIVE PLUS



**NOTE:** If the *HDMI 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.

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



**IMPORTANT:** If the source uses HDCP, then DIP switch 4 must be enabled 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.

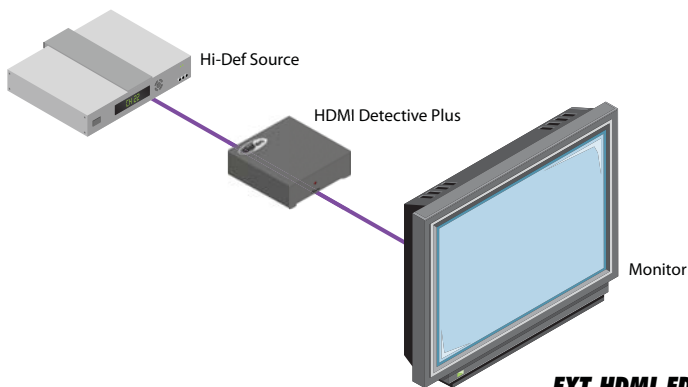
9. Apply power to the source.

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

### Wiring Diagram for the HDMI Detective Plus



**HDMI CABLE**



# OPERATING THE HDMI DETECTIVE PLUS

## Using a built-in EDID

The HDMI 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 WR (write) switch on the *HDMI Detective Plus* is in the “E” 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 *HDMI 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 *HDMI Detective Plus* until the power indicator begins to rapidly flash bright green, then release the Program button.

EDID	Resolutions	Refresh Rate	Audio	DIP Switches		
				1	2	3
1	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	8 CH PCM	ON	OFF	OFF
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 HDMI DETECTIVE PLUS

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### Writing an EDID using a source device

The *HDMI 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.

1. Make sure that the WR (write) switch on the *HDMI Detective Plus* is in the "E" (enable write) position and make sure all DIP switches are in the OFF position.
2. Use an HDMI cable to connect the source (generator) device to the HDMI In port on the *HDMI Detective Plus*.
3. Connect the included 5V DC power supply to the HDMI Detective Plus.
4. Use the source (generator) device to send the EDID data to the *HDMI Detective Plus*.

## SPECIFICATIONS

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Maximum Pixel Clock .....	340 MHz
Input DDC Signal .....	5V p-p (TTL)
Video Input Connector .....	HDMI Type A, 19-pin, female
Video Output Connector .....	HDMI Type A, 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 .....	2 lbs.

## 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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This product uses UL or CE listed power supplies.