

Gefen

HDMI Detective Plus

USER MANUAL



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INTRODUCTION

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.

FEATURES

Features

- Quick and easy saving of EDID information from HDTV displays
- Compact unit hides well behind equipment
- Selection of preset EDIDs
- Maintains 1920 x 1200, 1080p, and 2k resolution video
- No power required after initial programming step
- HDCP Compliant

Includes:

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

PANEL LAYOUT

Front Panel



Back Panel



CONNECTING AND OPERATING THE HDMI 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 HDMI Out port on the HDMI Detective Plus. Turn on the display to ensure that an EDID is being transmitted.
3. Plug the supplied 5V DC power supply into the HDMI 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 HDMI 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 HDMI DETECTIVE PLUS

5. Once a successful EDID record is complete, remove the 5V DC power supply from the HDMI Detective Plus. At this time, it is recommended that you write protect the HDMI 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 HDMI In port on the HDMI 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 HDMI 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			
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)				OFF	OFF	ON	N/A
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)				ON	OFF	ON	N/A

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 HDMI 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 HDMI 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



Pre-Programmed
EDID DIP SWITCHES

WRITE PROTECTING THE HDMI DETECTIVE



Once the HDMI Detective Plus 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 HDMI Detective Plus is currently write protected.

SPECIFICATIONS

Video Amplifier Bandwidth	340 MHz
Input DDC Signal	5 volts p-p (TTL)
Maximum Single Link Range	1920 x 1200 x 60hz
HDMI Input/Output Connector Type	Type A 19-pin Female
Power Consumption	5 Watts (max.)
Power Supply	5VDC
Dimensions	2.7"W x 1.5"H x 2"D
Shipping Weight	2 Lbs