

# Gefen

®

## 1:2 Splitter For HDMI™ 1.3

EXT-HDMI1.3-142D

User Manual



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

## ASKING FOR ASSISTANCE

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### Notice

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# CONTENTS

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- 1 Introduction**
- 2 Operation Notes**
- 3 Features**
- 4 Panel Descriptions**
- 5 Panel Descriptions**
- 6 Connecting And Operating The 1:2 Splitter For HDMI**
- 7 Specifications**
- 8 Warranty**

# INTRODUCTION

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Congratulations on your purchase of the 1:2 Splitter For HDMI. 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 1:2 Splitter For HDMI**

The 1:2 Splitter for HDMI 1.3 allows set-top boxes, DVD players, DVRs and other HDMI sources with an HDMI output to be connected to two HDMI-compliant displays while also supplying digital audio to an external amplifier or receiver. A TOSLINK output on the 1:2 Splitter allows connection of an external amplifier or receiver for greater installation flexibility. A greater number of displays can be split by daisy-chaining multiple 1:2 Splitters together to create a larger distribution.

## **How It Works**

An HDMI source connects to the HDMI input connector on the Gefen 1:2 Splitter for HDMI 1.3. Two HDMI outputs from the 1:2 Splitter connect to two HDMI-compliant Displays. Vibrant, sharp HDMI video with embedded multichannel digital audio will now be observed on the HDMI Displays. TOSLINK digital audio output on the rear of the unit allows connection of an external amplifier or receiver.

### **Note:**

HDMI output 1 is connected to the Primary Display, from which the video resolution, timing information and audio formats (EDID) is obtained. This information is used to create an identical picture on the Secondary Display. Both HDMI displays must be capable of the same video resolution(s) or the Secondary Display may not show a picture.

DVI video may be input to the Splitter with an optional DVI-to-HDMI adapter cable.

## OPERATION NOTES

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### READ THESE NOTES BEFORE INSTALLING OR OPERATING THE 1:2 SPLITTER FOR HDMI

- **By default, display information from the display connected to HDMI output port 1 is sent back to the source. Therefore, the other display connected to the 1:2 Splitter for HDMI 1.3 must be capable of accepting the timings, resolutions and audio formats of the display that is connected to HDMI output port 1. It is recommended that the display with the lowest native resolution be connected to HDMI output port 1. This is to ensure that a compatible video signal will be able to be displayed on all connected monitors. There is a generic EDID programmed into the 1:2 Splitter for HDMI 1.3 that can be used instead. Please see page 6 for more details.**
- HDMI/HDCP compliant
- Compatible with all HDMI and DVI\* displays
- The digital TOSLINK output only supports the transmission of the following audio formats:
  - LPCM 2-channel (32 ~ 192 Khz sampling rate)
  - Dolby AC3 2-channel and 5.1-channel
  - Dolby Digital Plus 5.1-channel
  - DTS 2-channel and 5.1-channel
- LPCM of more than 2 channels, Dolby Digital Plus of 7.1 channel, DTS-HD, and Dolby TrueHD are supported through the HDMI output only (not on the TOSLink output).

\*When used with a HDMI to DVI adapter

# FEATURES

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## Features

- Connects up to two HDMI / DVI displays from one HDMI source
- Optionally add more displays by connecting splitters
- Easily attains resolutions up to 1080p, 2k, and 1920 x 1200
- HDMI and HDCP compliant

## HDMI 1.3 Features

- Lip-Sync Pass Through
- 225 MHz (up to 12 bit YUV 444 supported @ 1080p)
- Deep Color Supported (XV Color Supported)
- Color Space Conversion Supported
- Dolby Tru-HD & DTS Master Supported
- CEC Pass Through

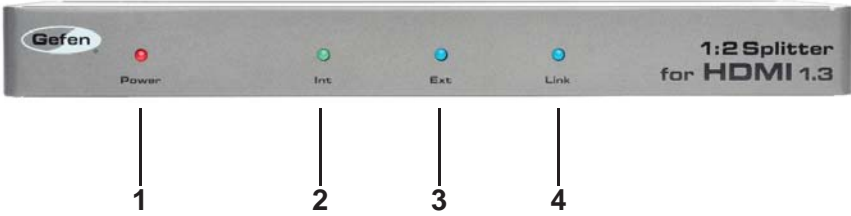
## Includes:

- (1) 1:2 Splitter for HDMI 1.3
- (1) 6 ft HDMI cable (m-m)
- (1) 5V DC Power Supply
- (1) User's Manual

# PANEL LAYOUT

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## Front Panel



## Back Panel



## PANEL DESCRIPTIONS

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### 1 **Power LED**

This LED will activate once a valid power source is applied.

### 2 **Internal EDID LED**

This LED will activate only when the pre-programmed internal EDID is being used. Please see page 6 for more details on the internal EDID.

### 3 **External EDID LED (default EDID routing)**

This LED will activate only when the external EDID is being used. Please see page 6 for more details on the external EDID.

### 4 **Link LED**

This LED activates when a valid link between source and splitter is detected.

### 5 **TOSLINK Digital Audio Output**

This optical output will supply supported audio formats for output to an external audio decoder or device such as an amplifier or receiver. Please see the Operation Notes on page 2 for more information about supported audio formats on this output.

### 6 **EDID Button**

This button will activate the onboard EDID. Press this button (the Int. EDID should turn on and the Ext. LED should turn off) and reset the unit using the Reset button (below) to initialize this EDID mode. To use an external EDID, press the EDID button again (the Int. LED should turn off and the Ext. LED should turn on) and press the Reset button to initialize this EDID mode. Please see page 6 for more information.

### 7 **Reset Button**

This button will reset the unit and initialize whichever EDID mode is currently selected.

### 8 **HDMI Input**

This is the input for the HDMI source device. When a valid source is detected by the splitter, the Link LED will activate.

### 9 **HDMI Out 1**

This is the first HDMI output port. Connect a valid HDMI display to this port. When the External EDID mode is active, the EDID from the display connected to this port will be used to send to the source.

### 10 **HDMI Out 2**

This is the second HDMI output port. Connect a valid HDMI display to this port.

### 11 **5V DC Power Input**

This port is for the included 5V DC power supply. When a valid 5V power supply is attached, the Power LED will activate.

# **CONNECTING AND OPERATING THE 1:2 SPLITTER FOR HDMI 1.3**

## **How to Connect the 1:2 Splitter For HDMI 1.3**

1. Connect the supplied cable from the HDMI source into the 1:2 Splitter for HDMI 1.3 input.
2. Connect the cables from your displays (monitor or projector) into the HDMI outs of the 1:2 Splitter for HDMI 1.3. Up to 2 displays are supported.
3. If using the TOSLINK optical audio output, connect a TOSLINK optical audio cable between the 1:2 Splitter for HDMI 1.3 and a appropriate audio decoder or device.
4. Plug the 5V DC power supply into the 1:2 Splitter for HDMI 1.3.

**NOTE:** By Default, the display information from the display connected to HDMI output port 1 is sent back to the source. Therefore, the other display that is connected to the 1:2 Splitter for HDMI 1.3 must be capable of accepting the timings and resolutions of the display that is connected to HDMI output port 1. It is recommended that the display with the lowest native resolution be connected to HDMI output port 1. This is to ensure that a compatible video signal will be able to be displayed on all connected monitors. There is a generic EDID programmed into the 1:2 Splitter for HDMI 1.3 that can be used instead. Please see below for the activation process.

## **EDID MODE**

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The HDMI 1:2 has an EDID button which will determine if the EDID is used from the display attached to output 1 (Ext. mode) or if the onboard EDID (Int. mode) will be used.

The current EDID mode can be determined by which EDID mode LED is active on the front panel. The Ext LED will indicate that the external EDID (from output port 1) is being used, and the Int LED will indicate that the internal pre-programmed EDID is being used.

If you want to use the onboard EDID, press the EDID button on the rear panel and then press the reset button to activate the new EDID mode. To revert back to using the external EDID, press the EDID button again and then reset the unit using the reset button to activate the new EDID mode.

Listed Resolutions in the Internal EDID:

1280x720p (Native)	50 Hz	720 x 576p	50 Hz
1280x720p (Native)	59.94 / 60 Hz	1920 x 1080p	50 Hz
1920 x 1080i	50 Hz	1920 x 1080p	59.94 / 60 Hz
1920 x 1080i	59.94 / 60 Hz	1440 x 480p	59.94 / 60 Hz
720 x 480p	59.94 / 60 Hz	1440 x 576p	50 Hz

Listed Audio Formats:  
2 Channel LPCM

## SPECIFICATIONS

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Video Amplifier Bandwidth .....	225 MHz
Input Video Signal .....	1.2 Volts p-p
Input DDC Signal .....	5 Volts p-p (TTL)
Single Link Range .....	1080p/1920 x 1200
HDMI Connector .....	Type A, 19 Pin Female
Power Supply .....	5V DC
Power Consumption .....	13 Watts (max)
Dimensions .....	10.25"W x 1"H x 4.25"D
Shipping Weight .....	3.5 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, please visit Gefen's Warranty web page at <http://www.gefen.com/kvm/aboutus/warranty.jsp>

## PRODUCT REGISTRATION

**Please register your product online by visiting Gefen's web site at <http://www.gefen.com/kvm/Registry/Registration.jsp>**





\* ma-HDMI 1.3-142\*

**Rev B**

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