



# 1 HDMI source to 2 HDMI displays

## Optional Accessories



HDMI Cables

## Related Products



1:2 HDMI Splitter Black

## 1:2 HDMI Splitter

### Distribute HDMI Video and Audio

The HDMI™ Splitter allows set-top boxes, DVD players, D-VHS players and other HDTV devices with an HDMI™ output to be connected to two HDTV displays. Greater numbers of displays can be connected by chaining multiple splitters together to create a larger distribution.

### How It Works

The HDMI™ Splitter is connected using a HDMI cable from the HDMI source to the HDMI splitter input. There are two HDMI outputs.

**Note:** This HDMI product supports BOTH Audio and Video signals.

The HDMI Display connected to Output #1 is the Primary Display. A Secondary display connected to Output #2 must be able to show the same video resolution(s) as the Primary Display, or this display may fail to show a picture. Secondary displays follow the Primary by sharing the resolution and capability information (EDID) obtained from the Primary Display.

DVI, HDCP & HDMI Defined

### Features:

- Connects two HDMI™/DVI displays at the same time to the same video source
- Allows simultaneous display
- Maintains high resolution video - beautiful, sharp HDTV resolutions up to 1080p, 2k, and computer resolutions up to 1920 x 1200 are easily achieved
- HDMI™ compliant
- HDCP compliant

### Specifications:

- Video Amplifier Bandwidth: 165 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 Consumption: 20 watts (max.)
- Power Supply 5V DC
- Dimensions: 10.25"W x 1"H x 4.25"D
- Shipping Weight: 4 lbs.

### Package Includes:

- the HDMI Splitter
- One 5v Power Supply
- One 6ft cable
- User's Manual



EXT-HDMI-142

# Gefen

## 1:2 Distribution Amplifier For HDMI™

Model # EXT-HDMI-142

USER MANUAL



**1080P**  
PROGRESSIVE

**HDMI**  
HIGH DEFINITION MULTIMEDIA INTERFACE

**EDTV**

**HD DVD**

**Blu-ray Disc**

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

## ASKING FOR ASSISTANCE

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### **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 PST

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### **Notice**

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

**1:2 Distribution Amplifier For HDMI** is a trademark of Gefen Inc.  
HDMI™ is a trademark of HDMI.org

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# INTRODUCTION

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The Gefen 1:2 HDMI Distribution Amplifier is the perfect solution for anyone who needs to send one source of digital high definition video to multiple displays at the same time. It supports all HDMI equipment, such as DVD players and satellite set top boxes and all HDMI displays. In operation, the digital video source is connected to the distribution amplifier's one input while two HDMI outputs are available to be used in part or in full. Once the unit is connected and powered, your source can be distributed up to two digital displays at the same time.

## How It Works

Simply connect your HDMI video source to the 1:2 HDMI Distribution Amplifier's input using the supplied HDMI cable. Then connect up to two HDMI displays to the unit's two HDMI outputs. Once connected and powered, your source can be seen on all both displays at the same time.

# OPERATION NOTES

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

- **Display information from the display connected to HDMI output port 1 is sent back to the source. Therefore, all other displays connected to the 1:2 Distribution Amplifier For HDMI 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.**
- HDMI/HDCP compliant
- Compatible with all HDMI and DVI\* displays

\*When used with a HDMI to DVI adapter

## FEATURES

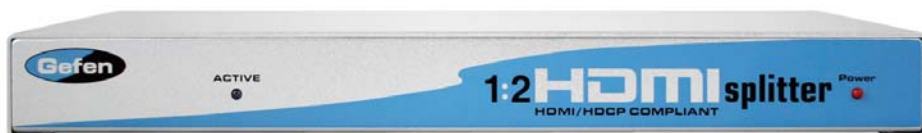
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### Features

- Connects up to two HDMI/DVI\* displays at the same time to one video source
- Allows simultaneous display
- Supports resolutions up to 1080p, 2K, and 1920 x 1200
- Extends the range of HDMI compliant devices by equalizing and re-clocking the HDMI signal
- Digital optical output port for easy connectivity with external audio processors
- HDMI/HDCP compliant

### Includes:

- (1) 1:2 Distribution Amplifier For HDMI
- (1) 6 Ft HDMI cable (M-M)
- (1) 5V DC Power Supply
- (1) Set of Rack Ears
- (1) Users Manual



\*When used with a HDMI to DVI adapter

*Front Panel*



Active LED Indicator

Power LED Indicator

*Back Panel*



HDMI Input

HDMI Output 1\*

HDMI Output 2

Digital Optical Output

5V DC Power Input

\*See Note on page 4

## **CONNECTING AND OPERATING THE 1:2 DISTRIBUTION AMPLIFIER FOR HDMI**

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### **How to Connect the 1:2 Distribution Amplifier For HDMI**

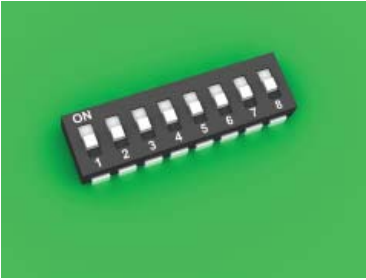
- 1** Connect the supplied cable from the HDTV HDMI source into the HDMI input port of the 1:2 Distribution Amplifier For HDMI.
- 2** Connect the user supplied cable(s) from your display(s) into the HDMI output port(s) of the 1:2 Distribution Amplifier For HDMI.
- 3** Optionally, connect an external audio processor to the 1:2 Distribution Amplifier For HDMI using a user supplied digital optical cable.
- 4** Plug the 5V DC power supply into the 1:2 Distribution Amplifier For HDMI.

Note: Display information from the display connected to HDMI output port 1 is sent back to the source. Therefore, all other displays connected to the 1:2 Distribution Amplifier For HDMI 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.



# DIP SWITCH GUIDELINES

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## DIP SWITCH EDID GUIDE

Extended display identification data (EDID) is a data structure provided by a display to describe its capabilities to any source that asks for it. The EDID includes manufacturer name, product type, timings supported by the display, display size, luminance data, (for digital displays only) pixel mapping data, supported audio channels and formats. This information is used by the source to cater its output to resolutions and audio formats that are supported by the display.

Additional EDID modes are available and configured using a combination of dip switches 1, 2, and 5. Please refer below for the different EDID modes.

To access the Dip Switches, remove all screws from the bottom and sides of the Gefen unit. Carefully slide the unit apart. The 8 Bank of Dip Switches are located on the main PCB. Once adjustments are complete, slide the unit back together and replace all removed screws.

EDID Mode 0 (Switch 1=OFF Switch2=OFF Switch5=ON)  
-EDID is copied from the first HDMI port

EDID Mode 1 (Switch 1=ON Switch2=OFF Switch5=ON)  
-Same as Mode 0 and adds basic audio support

EDID Mode 2 (Switch 1=OFF Switch2=ON Switch5=ON)  
-Same as Mode 0 and adds full audio support

EDID Mode 3 (Switch 1=ON Switch2=ON Switch5=OFF)  
-EDID is generated based on the common video and audio features of all of the connected devices

EDID Mode 4 (Switch 1=OFF Switch2=ON Switch5=OFF)  
-Same as Mode 3 and adds basic audio support

EDID Mode 5 (Switch 1=ON Switch2=OFF Switch5=OFF)  
-Same as Mode 3 and adds full audio support

EDID Mode 6 (Switch 1=OFF Switch2=OFF Switch5=OFF) **DEFAULT**  
-EDID is generated based on the common video features of all of the connected devices and the combined audio features of all of the connected devices

## SPECIFICATIONS

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Video Amplifier Bandwidth .....	165 MHz
Input Video Signal .....	1.2 Volts p-p
Input DDC Signal .....	5 Volts p-p (TTL)
Single Link Range .....	1080p / 1920 x 1200
Input Connector Type .....	HDMI Type A 19 Pin
Output Connector Type .....	HDMI Type A 19 Pin
Audio Output .....	TOSLINK
Power Consumption .....	15 Watts (max.)
Power Supply .....	5V DC
Dimensions .....	10.25"W x 1.25"H x 4.125"D
Shipping Weight .....	4 Lbs