

# Gefen®

## DVI Audio to HDMI Adapter

EXT-DVIAUD-2-HDMI

User Manual



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

## ASKING FOR ASSISTANCE

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### Notice

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**Rev A2**

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# INTRODUCTION

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Congratulations on your purchase of the DVI Audio to HDMI Adapter. 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 DVI Audio to HDMI Adapter**

The DVI Audio to HDMI Adapter is a unique device that combines digital video (DVI) and digital audio into HDMI to seamlessly integrate into modern home theaters.

## **How It Works**

Simply connect the supplied DVI cable to the input side of the DVI Audio to HDMI Adapter. Then connect the S/PDIF digital audio cable to the audio input of the DVI Audio to HDMI Adapter. Now connect the HDMI display or projector to the HDMI output of the DVI Audio to HDMI Adapter. The adapter encodes digital audio on to the digital video signal to generate an HDMI signal.

## OPERATION NOTES

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### **READ THESE NOTES BEFORE INSTALLING OR OPERATING THE DVI AUDIO TO HDMI ADAPTER**

- The DVI Audio to HDMI is designed to include a S/PDIF digital audio source seamlessly integrating it into modern home theater situations.
- The adapter encodes the digital audio onto the digital video signal to generate the HDMI signal.
- The DVI Audio to HDMI will combine the video and audio stream into an HDMI signal having separately routed each signal type. The connected HDMI display will output EDID to the display data channel (DDC.) By default, the EDID used is from the connected HDMI display. This EDID will carry the required audio information that the HDMI display needs to ascertain what type of audio will be output.

# FEATURES

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## Features

- Allows the connection of computers or other sources with DVI output and S/PDIF to an HDMI-compliant display
- Encodes digital audio on to the video signal for HDMI-compliant video and audio
- Supports HDTV resolutions
- Supports resolutions up to 1080p, 2K, and 1920 x 1200
- HDMI compliant
- HDCP pass-through
- Installs in seconds

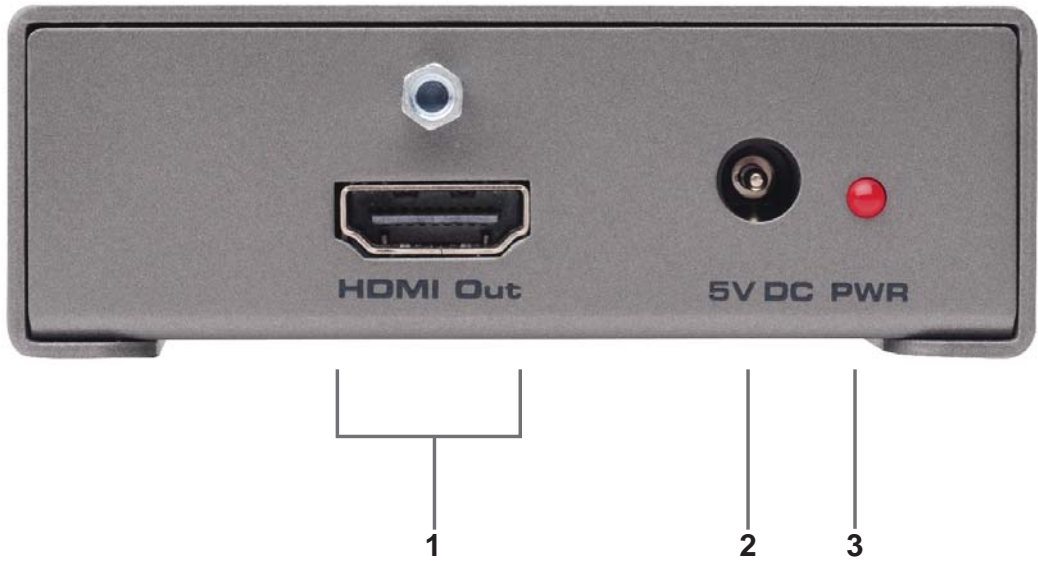
## Package Includes

- (1) DVI Audio to HDMI Adapter
- (1) 5V Power Supply
- (1) 6 ft DVI Cable
- (1) Users Manual

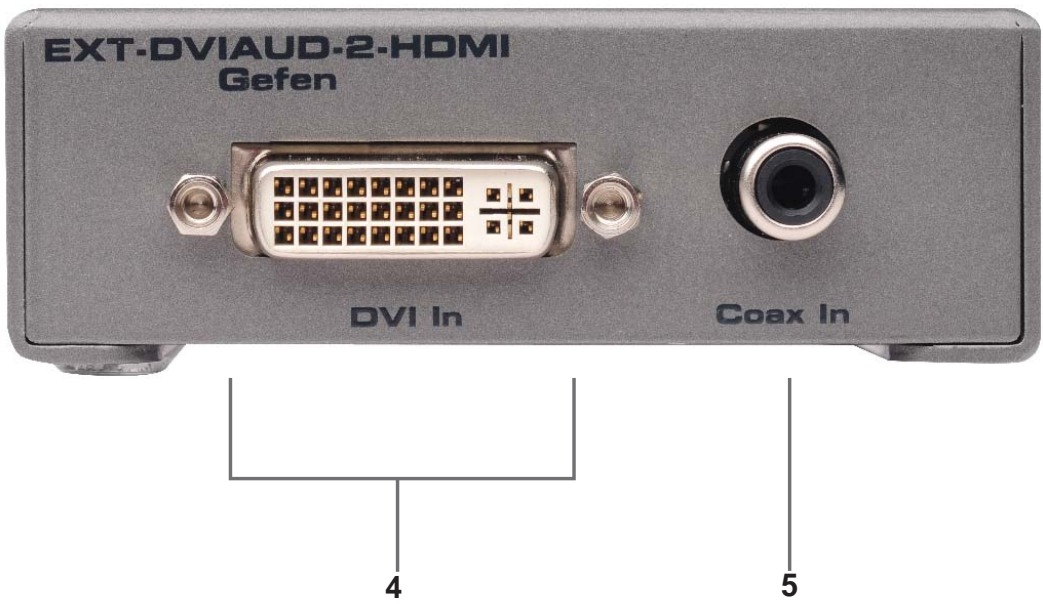
# PANEL LAYOUT

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## Front Panel



## Back Panel



## PANEL DESCRIPTIONS

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**1 HDMI Output Jack**

Run an HDMI cord from here to the display

**2 5VDC Input Jack**

Plug the 5VDC line from the Supplied Power Supply in here

**3 Power On LED**

When this LED is illuminated, the power to the device is on

**4 DVI Input Jack**

Plug the DVI cord from the source in here

**5 Coaxial (S/PDIF) Jack**

Plug in the coaxial digital audio from the source in here



# **CONNECTING & OPERATING THE DVI AUDIO TO HDMI ADAPTER**

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## **How to Connect the DVI Audio to HDMI Adapter**

1. Connect your HDMI compliant display to the HDMI connector at the output side of the DVI Audio to HDMI Adapter.
2. Then simply connect the supplied DVI cable, from your source, to the input side of the DVI Audio to HDMI Adapter.
3. Then connect the S/PDIF digital audio cable, from your audio source, to the audio input of the DVI Audio to HDMI Adapter.
4. Connect the power supply.
5. The adapter encodes the digital audio onto the digital video signal to generate the HDMI signal.

**NOTE:** The DVI Audio to HDMI only accepts DVI-D (digital only).

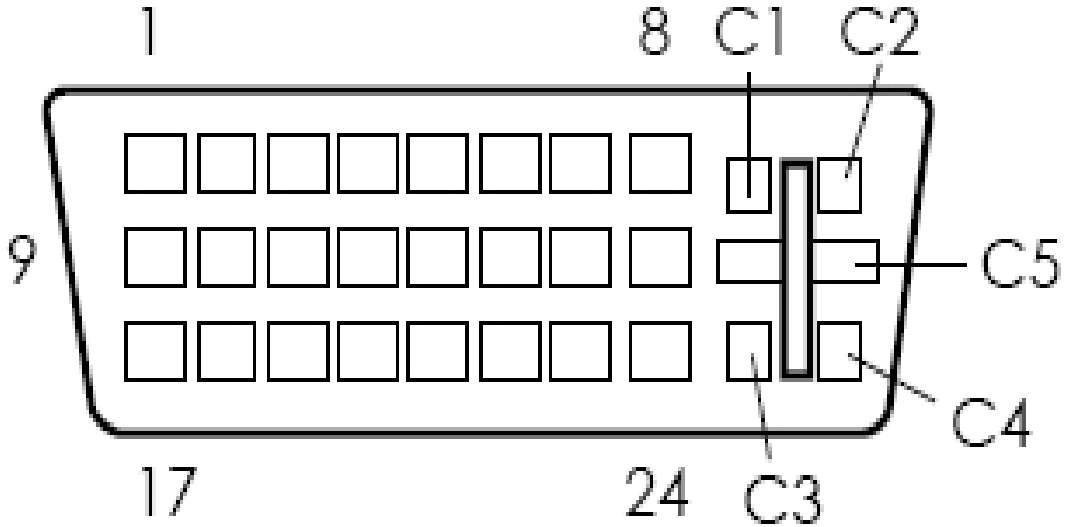
## **How to Operate the DVI Audio to HDMI Adapter**

- Use the Adapter to hook up DVI and S/PDIF audio to an HDMI display where there are separate video and audio source signals which need to be combined to a single HDMI output signal.

## DVI PIN CONFIGURATION & ASSIGNMENTS

### DVI-I Input Pin Assignment

DVI-Digital(DVI-D): Supports digital-only connections between the host computer and display. This interface is designed for a 12 or 24-pin connections to enable single or dual-link mode activation.

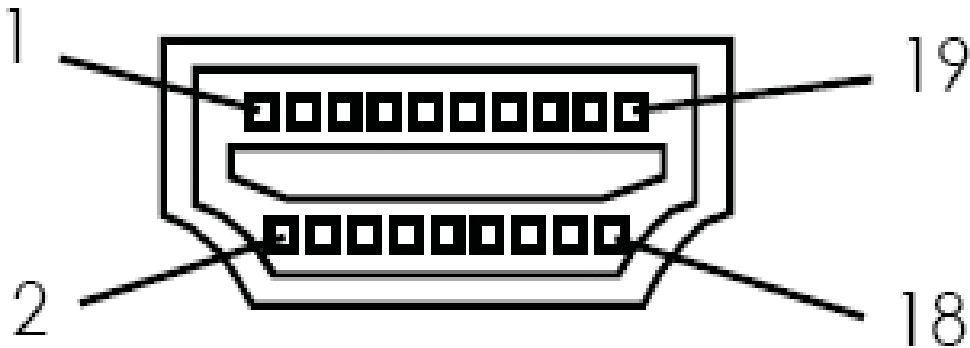


### DVI-I Input Pin Assignment

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	T.M.D.S. Data2-	9	T.M.D.S. Data1-	17	T.M.D.S. Data0-
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+
3	T.M.D.S. Data2 Shield	11	T.M.D.S. Data1 Shield	19	T.M.D.S. Data0 Shield
4	N.C.	12	N.C.	20	N.C.
5	N.C.	13	N.C.	21	N.C.
6	DDC Clock	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data	15	Ground (for +5V)	23	T.M.D.S. Clock +
8	No Connect	16	Hot Plug Detect	24	T.M.D.S. Clock -
C1	N.C.	C3	N.C.	C3	N.C.
C2	N.C.	C4	N.C.		

# HDMI PIN CONFIGURATION & ASSIGNMENTS

## HDMI Output Pin Assignment



## HDMI Output Pin Assignment

Pin	Function Assignment	Pin	Function Assignment
1	T.M.D.S. Data2+	2	T.M.D.S. Data2 Shield
3	T.M.D.S. Data2-	4	T.M.D.S. Data1+
5	T.M.D.S. Data1 Shield	6	T.M.D.S. Data1-
7	T.M.D.S. Data0+	8	T.M.D.S. Data0 Shield
9	T.M.D.S. Data0-	10	T.M.D.S. Clock+
11	TMDS Clock Shield	12	T.M.D.S. Clock-
13	CEC	14	Reserved (N.C. on device)
15	SCL	16	SDA
17	DDC/CEC Ground	18	+5V Power
19	Hot Plug Detect		

## SPECIFICATIONS

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Video Amplifier Bandwidth .....	165 MHz
Pixel clock frequency .....	24Mhz - 165 Mhz
Input Video Signal .....	1.2 volts p-p
Input DDC Signal .....	5 volts p-p (TTL)
HDMI Connector .....	Type A (19 pin) Female
DVI Connector .....	DVI-I (29 pin) female (digital only)
Audio Connector .....	S/PDIF
Power Consumption .....	10 Watts (max.)
Power Supply .....	5V DC
Dimensions .....	5"W x 1"H x 4"D
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 listed power supplies.