Gefen tv

HDMI to HDMI Plus Audio Converter

GTV-HDMI-2-HDMIAUD

User Manual

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ASKING FOR ASSISTANCE

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Rev A

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Congratulations on your purchase of the GefenTV HDMI to HDMI Plus Audio Converter. Your complete satisfaction is very important to us.

GefenTV

GefenTV is a unique product line catering to the growing needs for innovative home theater solutions. We specialize in total integration for your home theater, while also focusing on going above and beyond customer expectations to ensure you get the most from your hardware. We invite you to explore our distinct product line and hope you find your solutions. Don't see what you are looking for here? Please call us so we can better assist you with your particular needs.

The GefenTV HDMI to HDMI Plus Audio Converter

The GefenTV HDMI to HDMI Audio Converter is a product that takes a Hi Def source using HDMI and outputs it to an HDTV display using HDMI and, in addition, up to 8 channels of LPCM audio output through eight RCA connectors. Also, if a Bitstream audio is desired it outputs this to an Optical digital connector.

Additional features include switchable audio selections between auto mode and manual mode affording further selection between two-channel audio only, multi-channel bitstream and 7.1 LPCM audio.

How It Works

Connect a Hi Def source to the GefenTV HDMI to HDMI Audio Converter's input with the included HDMI cable. Connect another HDMI cable from the output of the Converter to an HDTV display. Connect an optical audio cable from the Converter to an external amplifier. Alternatively connect an amplifier to the 8 channel RCA connectors. Finally connect the 5V DC power supply to the locking connector and to an electric outlet.

Features

- Resolution Supported up to 1080p Full HD

- Switchable selection between Auto mode and Manual mode

- HDMI v1.3 supported features:
  Deep Color, Dolby TrueHD, DTS-HD Master Audio, Lip Sync (through the HDMI connector only)

- Bitstream Audio via Optical Toslink and LPCM 7.1 via 8 RCA connectors

- Locking power supply

- CEC pass-through

Package Includes

(1) HDMI to HDMI Audio (GTV-HDMI-2-HDMIAUD)

(1) 6 ft HDMI cable black, non-locking

(1) 5V DC Power Supply

(1) User's Manual

How to Connect the GefenTV HDMI to HDMI Plus Audio Converter

1. Connect a Hi Def source to the GefenTV HDMI to HDMI Audio Converter's input with the included HDMI cable.

2. Connect another HDMI cable from the output of the Converter to an HDTV display.

3. Connect an optical audio cable from the Converter to an external amplifier. Alternatively connect an amplifier to the 8 channel RCA connectors..

4. Finally connect the 5V DC power supply to the locking connector and to an electric outlet and enjoy crisp and vibrant sound played through the connected amplifier while watching clear video.

Wiring Diagram for the GefenTV HDMI to HDMI Plus Audio Converter

SUPPORTED AUDIO FORMATS

The Audio Selector Switches

The audio output supports uncompressed LPCM 7.1 and lossless compressed digital Bitstream (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio).

There are two switches on the front of the unit to the right of the power LED. (See Panel Layout and Description on pages 6 and 7.) The switch at the left makes changes to the input audio and the right switch changes from "Auto" to "Manual."

Unless the right-hand switch is set to "Manual," the audio selector switch will not change the audio format from what is coming from the HDMI input. When this switch is set to "Manual" the audio portion is changed according to what has been selected.

Determining the Supported Audio Formats

The unit passes audio through its circuits according to the type of signal. See the table below:

Audio Format	HDMI Out	TOSLINK	8-Ch RCA
2 Channel LPCM	X	X	X
5.1 Channel LPCM	X		X
7.1 Channel LPCM	X		X
Dolby Digital	X	X	
DTS	X	X	
Dolby True HD	X		
DTS-HD Master Audio	X		

A Note About Audio Processing in the GefenTV HDMI to HDMI Plus Audio Converter:

When "2.1" is selected, the audio signal is output to the RF and LF only. When "5.1 / 7.1" is selected audio is output from the "Multi-CH" output. When "Bitstream" is selected, the signal is output from the "Optical" output only. The signal output from TOSLINK should be LPCM 2 ch, AC3 5.1, or DTS 5.1.

The unit supports uncompressed digital LPCM 7.1, 5.1 or 2 channels and compressed digital Bitstream (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) through the HDMI input and the RCA output.

It only supports Hi Res Audio via HDMI. It does not decode Hi Res Audio.

Mode Selection:

AUTO MODE:

To use this mode, set the EDID Mode Switch on the front panel to the **AUTO** position. In Auto mode, the Converter directly retrieves EDID data from each connected A/V display device and builds a new EDID created from the highest common video resolution that all display devices can use together and the highest audio capability. This new EDID is sent back to the source device.

MANUAL MODE:

To use this mode, set the Mode Switch on the front panel to the **MANUAL** position. This mode will use a preset EDID that is stored in the Converter for HDMI 1.3 from the factory. This pre-programmed standard EDID data structure is compatible with most A/V display devices. All resolutions and audio formats specified in this EDID will be passed to the source device. For a complete listing of the resolutions and audio formats listed in this please see below.
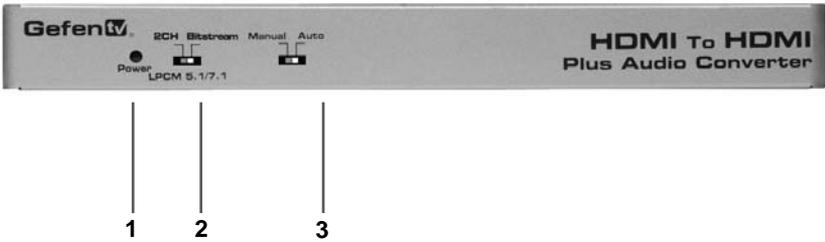
Below are the settings programmed in MANUAL mode:

Video Resolution:	Audio Format:	Color Space:
1080p@60Hz	2-channel:	xvYCC 709
1080p@50Hz	LPCM 2CH	xvYCC 601
1080i@60Hz (native)	Multi-channel:	
1080i@50Hz	LPCM 2CH	
	LPCM 8CH	
	AC-3 6CH	
	DTS 7CH	
	Dolby Digital+ 8CH	
	Dolby TrueHD 8CH	
	DTS-HD 8CH	
	MAT(MLP) 8CH	

Front Panel

1   **2**   **3**

Back Panel

4 **5**   **6**   **7**   **8**
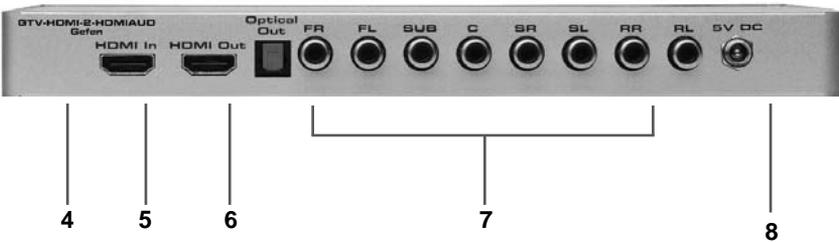
1 ***Power LED***
When the LED is lit it shows that the unit is powered.

2 ***2.1 / 5.1 -7.1 / Bit Stream Switch***
This enables the 3-way choice between 2.1, 5.1 and 7.1, and bit stream audio (when in manual mode only) .

3 ***Mode Switch***
This switch will toggle between MANUAL and AUTO modes. (See Page 5)

4 ***HDMI Input***
Connect a Hi Def source device to this input port.

5 ***HDMI Output***
Connect an HDMI cable to an HDTV display.

6 ***TOSLINK Optical Audio Output***
Connect a TOSLINK (Optical) audio output here.

7 ***RCA 7.1 Surround-Sound Audio Output:***
FR - The Front Right audio channel
FL - The Front Left audio channel
SUB - The low frequency Subwoofer audio channel
C - The Center audio channel
SR - The Side Right audio channel
SL - The Side Left audio channel
RR - The Rear Right audio channel
RL - The Rear Left audio channel

8 ***5V DC Power Input Receptacle***
Using the power supply that was shipped with the unit use this to power the unit

SPECIFICATIONS

Digital Video Amplifier Bandwidth..225 MHz
Maximum Resolutions..1080p, 1920 x 1200
HDMI Input...1 x HDMI 19-pin
HDMI Output..1 x HDMI 19-pin
Digital Audio output..1 x TOSLINK
Analog Audio Outputs..8 x RCA
Power Supply...5V / 2.6A DC
Power Consumption...13 Watts (max)
Operating Temperature...0 - 40 °C
Dimensions...10.25"W x1"H x 4.25"D
Shipping Weight...4 lbs

WARRANTY

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

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