# Gefen tv

# Digital Audio Decoder

## GTV-DD-2-AA

### User Manual

DOLBY
DIGITAL

# ASKING FOR ASSISTANCE

**Technical Support**:

| | |
|---|---|
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**Technical Support Hours:**
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**Notice**

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

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**Rev A2**

# CONTENTS

# INTRODUCTION

Congratulations on your purchase of the Digital Audio Decoder. 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.
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**The GefenTV Digital Audio Decoder**
The GefenTV Digital Audio Decoder takes audio encoded in Dolby Digital (at up to 5.1 channels) from your multichannel S/PDIF or TOSLINK digital audio source and converts it to L/R analog audio -- without the need for any other external equipment!

With the GefenTV Digital to Analog Decoder you can listen to digital audio sources such as DVD and CD players or digital computer audio on your legacy analog sound system, preserving your current investment.

**How It Works**
A coaxial or optical audio output on your digital audio source connects into the input on the Digital to Analog Decoder. The input type is chosen with the Decoder's selector button. The Decoder is connected to power. Analog RCA connectors on the Decoder output L/R analog audio to powered speakers.

# OPERATION NOTES

**READ THESE NOTES BEFORE INSTALLING OR
OPERATING THE GEFENTV DIGITAL AUDIO DECODER**

- This decoder supports both Linear PCM and Dolby Digital audio input formats.

- The Digital Audio Decoder is not an amplification device and cannot be used directly with earphones or other passive devices.

- Do not use this decoder with a power supply other than the one that is provided.

**Features**

- Converts S/PDIF or TOSLINK digital audio to L/R analog audio
- Digital interpolation filter and digital to analog converter (DAC)
- Supports up to 6 channels (up to 5.1 Surround) of audio encoded in Dolby Digital
- Auto samples at frequencies of 32, 44.1, 48 kHz
- 24-bit incoming bitstream on left and right channels
- Allows listening to digital audio sources on legacy analog sound systems
- Compact and easy to install

**Package Includes**

(1) Digital Audio Decoder
(1) 5V DC Power Supply
(1) User Manual
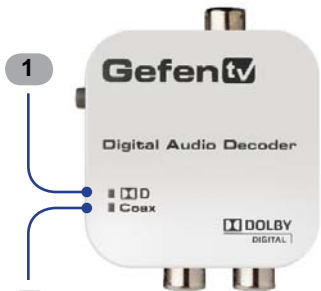
# UNIT DESCRIPTIONS

*1*   ***Dolby Digital***
This LED indicator will glow bright red when a Dolby Digital signal is detected on the input.

*2*   ***Coax***
This LED indicator will glow bright green when the Coax input is activated.

*3*   ***Out (L/R)***
Connect L/R RCA stereo cables from these audio outputs to an external amplifier.

*4*   ***Coax In***
Use a coax audio cable to connect an external digital audio source to this S/PDIF connector.

*5*   ***Opt In***
Use an optical cable to connect an external digital audio source to this TOSLINK connector.

*6*   ***5V DC***
Connect the included 5V DC power supply to this power receptacle.  Only use the power supply that is included with this product.

*7*   ***Input***
Press this button to toggle between Coax (S/PDIF) and Optical (TOSLINK) inputs.

# CONNECTING THE DIGITAL AUDIO DECODER

**How to Connect the Digital Audio Decoder**

1. Connect a Coax and/or Optical cable between the audio source and the S/PDIF and/or TOSLINK connectors on the Digital Audio Decoder.

2. Connect a pair of L/R RCA-type cables between the L/R output connectors on the Digital Audio Decoder and the

3. Connect the included 5V DC power supply to the power receptacle on the Digital Audio Decoder.

4. Connect the AC power cord to an available electrical outlet.

**Wiring Diagram for the Digital Audio Decoder**



GefenⓉ
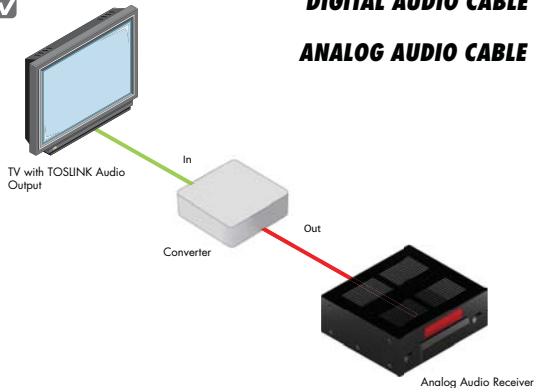
DIGITAL AUDIO CABLE
(Up to 200 ft)

ANALOG AUDIO CABLE

In

TV with TOSLINK Audio
Output

Out

Converter

Analog Audio Receiver

*GTV-DD-2-AA*

# OPERATING THE DIGITAL AUDIO DECODER

**LED Indicators**

The following illustrations below show the different states of audio input and the audio type which is displayed by the LED indicators on the Digital Audio Decoder. Pressing the Input button switches between Coax and Optical inputs.

Coax LED = OFF, Dolby LED = OFF
**Active Input:** Optical (TOSLINK)
**Audio Type:** Linear PCM

Coax LED = OFF, Dolby LED = RED
**Active Input:** Optical (TOSLINK)
**Audio Type:** Dolby Digital

**Linear PCM**

**Dolby Digital**

Coax LED = GREEN , Dolby LED = OFF
**Active Input:** Coax (S/PDIF)
**Audio Type:** Linear PCM

Coax LED = GREEN , Dolby LED = RED
**Active Input:** Coax (S/PDIF)
**Audio Type:** Dolby Digital

**Linear PCM**

**Dolby Digital**

# SPECIFICATIONS

Audio Inputs..............................................................................................(1) Coax / (1) TOSLINK

Audio Outputs.............................................................................................Analog L/R, RCA-type

Output Impedance............................................................................................................500 Ω

Output Voltage........................................................................................1.8V RMS @ 0 dB (max.)

Frequency Response.............................................................................................< +/-0.5 dB

Signal-to-Noise Ratio.......................................................> 90 dB (20 Hz - 20 kHz A-Weighting)

Power Supply....................................................................................................................5V DC

Power Consumption...................................................................................................5 W (max.)

Operating Temperature...........................................................................................0° C ~ 70° C

Dimensions..............................................................................1.7" W x 0.9" H x 1.6" D

Shipping Weight..................................................................................................................1 lb.

# 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 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.**

Rev A2

*MA-GTV-DVIDL-2-MDP*