



# Gefentv

Wireless for **HDMI**™ Extender

GTV-WHDMI

User Manual

## ASKING FOR ASSISTANCE

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### Notice

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# INTRODUCTION

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Congratulations on your purchase of the Wireless for HDMI. Your complete satisfaction is very important to us.

## **Gefen TV**

Gefen TV 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 Gefen TV Wireless for HDMI**

The GefenTV Wireless for HDMI Extender delivers a plug and play wireless solution for HDMI sources placed up to 100 feet (30 meters) away. Hi-def resolutions of up to 1080p/30 or 1080i/60 are supported with 5.1 digital audio and additional L/R analog audio inputs. Broadcast mode allows extension of HDMI to up to 256 wireless locations (without HDCP), while Unicast mode extends HDMI to a single wireless location (with HDCP).

The GefenTV Wireless for HDMI Extender is a wireless solution for extending any A/V sources utilizing HDMI such as satellite boxes, DVD players, and Blu-Ray players to a remote display. The Wireless for HDMI will even penetrate through walls and does not require line-of-sight alignment of the units.

## **How It Works**

The GefenTV Wireless for HDMI Extender uses one sender and one or more receiver units. A short cable connects the HDMI input of the sender unit to the HDMI output of an HDMI source. At the display side, a short cable connects the HDMI output of the receiver unit(s) to the HDMI input of the HDTV display(s). The HDMI signal from the HDMI source travels to the HDMI display(s) over 5 GHz radio waves, and a vibrant and crisp High Definition picture emerges on the HDTV display(s).

Note: Multichannel Audio: Compressed audio as well as analog audio are formats supported depending on the capability of the input device. Please refer to the Specifications section for further details.

## OPERATION NOTES

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### READ THESE NOTES BEFORE INSTALLING OR OPERATING THE WIRELESS FOR HDMI

- This equipment may only be operated indoors. Operation outdoors is in violation of 47 U.S.C.301 and could subject the operator to serious legal penalties. Operation is subject to the following two conditions:
  1. This device may not cause harmful interference.
  2. This device must accept any interference received including interference that may cause undesired operation.
- Multiple sets in close proximity may cause interference with each other. This rule does not apply when using the **Broadcast Mode** as multiple receiver units are used to connect to one sender unit. All receiving units in this scenario will be on the same channel.
- HDMI 1.2 compliant
- Maximum extension distance is 100 feet with a clear line-of-sight. Obstructions such as walls and furniture may reduce performance and distance ratings.
- Maximum supported resolution is 1080p at 30Hz
- Gefen recommends placing both units into the provided stands to help produce the strongest possible transmission signal.
- When using the units in **Broadcast Mode** HDCP encrypted material **cannot** be used.
- A maximum of 256 receiver units can be connected to one sender unit while using **Broadcast Mode**.
- When using the units in **Unicast Mode** HDCP encrypted material **can** be used with an HDCP compliant display.
- Supported Resolutions: 640x480, 800x600, 1024x768, 480i, 480p, 576i, 576p, 720p, 1080i and 1080p@30Hz
- CEC protocol pass-through supported



**The equipment may only be operated indoors**  
**Diese Anlage darf nur Innen betrieben werden**  
**El equipo sólo puede funcionar en entornos interiores**  
**L'équipement de mai seulement être utilisé à l'intérieur**  
**L'attrezzatura pu essere azionata soltanto interna**

# FEATURES

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## Features

- Fully HDMI 1.2 compliant
- HDCP compliant
- CEC protocol pass-through supported
- Real-time un-compressed audio/video
- Multichannel compressed 5.1 audio support
- PCM Supported when using HDMI @ 32, 44.1 and 48 KHz
- Dolby Digital™ 5.1 Surround Sound output on HDMI supported with number of channels dependent on how many channels the sink device supports
- Receiver Connectors: HDMI output, Analog Audio outputs (1 pair Left and Right RCA jacks)
- Sender Connectors: HDMI input

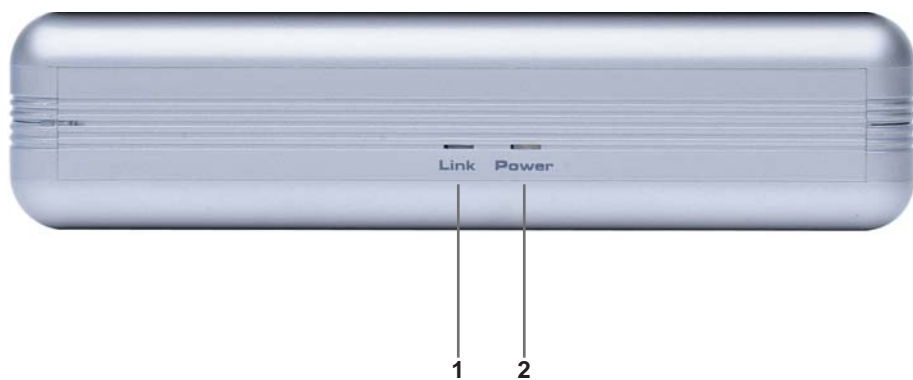
## Package Includes

- (1) Wireless for HDMI Sender unit
- (1) Wireless for HDMI Receiver unit
- (1) Two Universal 5V DC 2.6A Power Supplies
- (1) 6-Foot HDMI Cable (M-M)
- (1) User's Manual

# SENDER PANEL LAYOUT

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## Front Panel



## Back Panel



## SENDER PANEL DESCRIPTIONS

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### **1 *Link LED Indicator***

This LED will become active once a solid link has been established between the sending and receiving units. If the distance between the units are too great and a link can not be established, shorten the distance between the units until the link indicator activates.

Behavior:

A quick blinking LED means that the Sender unit and Receiver unit are establishing a connection (including HDCP authentication) wirelessly. A slow blinking LED means that the connection has been established and the audio / video is about to be passed over from Sender to Receiver. A steady LED means that the whole set of GTV-WHDMI units are on proper operation and there is picture showing on the display connected to the Receiver unit.

### **2 *Power LED Indicator***

This LED indicator will become active once the included 5V DC power adapter has been properly connected to the unit and an open wall power socket.

### **3 *5V DC Power Receptacle***

Connect the included 5V DC power supply to this receptacle and an open wall power socket. Only use the power supply that is provided with this product. Usage of non-authorized power supply may damage the unit and void the warranty.

### **4 *HDMI Input***

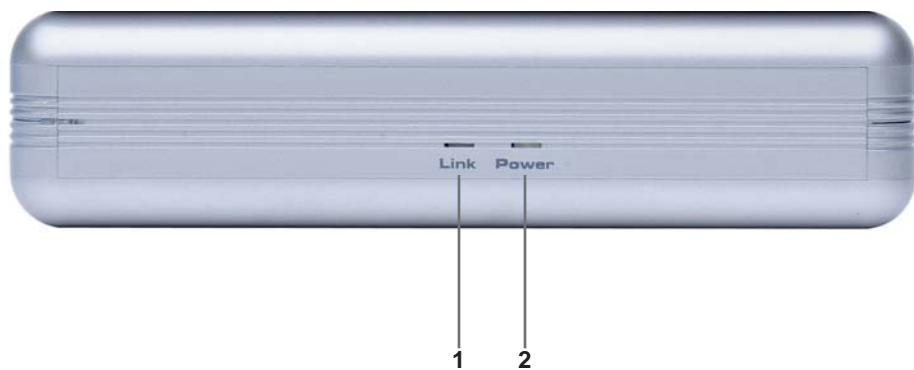
This input will accept a single HDMI source device. Use a DVI to HDMI cable/ adapter when using a DVI input device.

### **5 *Mode Change Button***

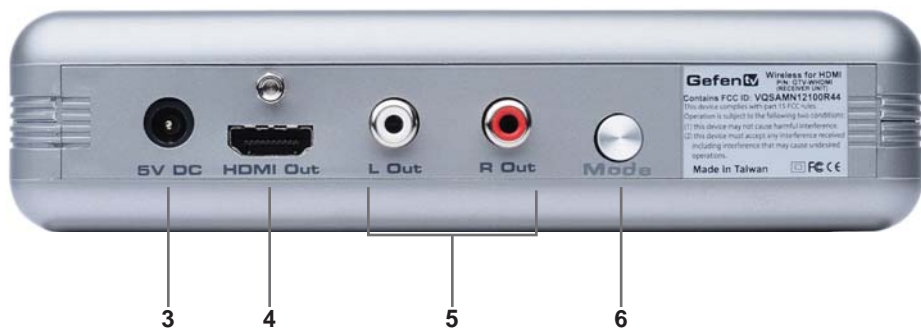
This button will toggle the mode of the sender unit between Unicast and Broadcast mode. For a description of these modes and instructions on how to set them please see page 8.

# RECEIVER PANEL LAYOUT

## Front Panel



## Back Panel



# RECEIVER PANEL DESCRIPTIONS

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## **1 *Link LED Indicator***

This LED will become active once a solid link has been established between the sending and receiving units. If the distance between the units are too great and a link can not be established, shorten the distance between the units until the link indicator activates.

Behavior:

A quick blinking LED means that the Sender unit and Receiver unit are establishing a connection (including HDCP authentication) wirelessly. A slow blinking LED means that the connection has been established and the audio / video is about to be passed over from Sender to Receiver. A steady LED means that the whole set of GTV-WHDMI units are on proper operation and there is picture showing on the display connected to the Receiver unit.

## **2 *Power LED Indicator***

This LED indicator will become active once the included 5V DC power adapter has been properly connected to the unit and an open wall power socket.

## **3 *5V DC Power Receptacle***

Connect the included 5V DC power supply to this receptacle and an open wall power socket. Only use the power supply that is provided with this product. Usage of non-authorized power supply may damage the unit and void the warranty.

## **4 *HDMI Output***

This output will accept a single HDMI capable output device. Use a HDMI to DVI cable/adaptor when using a DVI capable output device.

## **5 *Analog Stereo Audio RCA Outputs***

Connect an amplified stereo output device, such as a stereo receiver, for external amplification of audio transmitted from the sender unit. These outputs will only be active when the audio carried along the HDMI source is 2 channel LPCM.

## **6 *Mode Change Button***

This button will toggle the mode of the receiver unit between Unicast and Multicast. For a description of these modes and instructions on how to set them please see page 8.

# CONNECTING AND OPERATING THE WIRELESS FOR HDMI

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## How to Connect the Wireless for HDMI

1. Connect the source device to the Wireless for HDMI sender input using the supplied HDMI cable. Use a DVI to HDMI cable/adaptor when using a DVI source device.
2. Connect the HDMI display to the Wireless for HDMI receiving device's HDMI output port using a user supplied HDMI cable. Use a HDMI to DVI cable/adaptor when using a DVI capable display.
3. Connect the stereo analog audio output on the Wireless for HDMI receiver unit to the stereo analog audio inputs on either an external audio receiver or the display using a user supplied 2 RCA stereo analog audio cable.

**NOTE:** This output will only be active when the audio carried along the HDMI source is 2 channel LPCM.

4. Connect the included 5V DC power supplies to the Wireless for HDMI sending and receiving units.
5. Power on the display first and the source devices second.

**NOTE:** The Wireless for HDMI will detect and link the sending and receiving units together and will require no further configuration to begin video and audio transmission.

## Unicast and Broadcast Modes

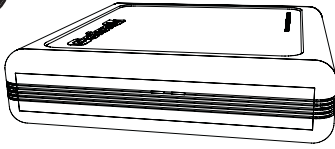
**Unicast Mode** will only allow one receiver unit to be connected to one sender unit at any given time. By default, the units will be configured for **Unicast**. In **Unicast Mode** the power LED on both units will be **GREEN**. Both units must be in the same mode for proper operation. Modes cannot be mixed.

**Broadcast Mode** will allow multiple receiver units (up to 256) to be connected to one sender unit. In this mode, HDCP encrypted material is **not** usable. In **Broadcast Mode** the power LED will be **RED**. To change modes--**Unicast** to **Broadcast** or **Broadcast** to **Unicast**--please use the directions below.

1. With both sender and receiver units powered on, press and hold the **Mode** button on the sender unit for approximately 10 seconds.
2. Release the **Mode** button. The front panel LED lights should turn off and re-initialize in the new mode. The power LED will change colors depending on what mode the unit has been switched to. If, after releasing the button, the LED does not turn off, repeat steps one and two while holding the **Mode** button down for a longer period of time.
3. Repeat the above steps, but with the receiver unit(s).
4. The units will re-establish a link and video transmission will begin.

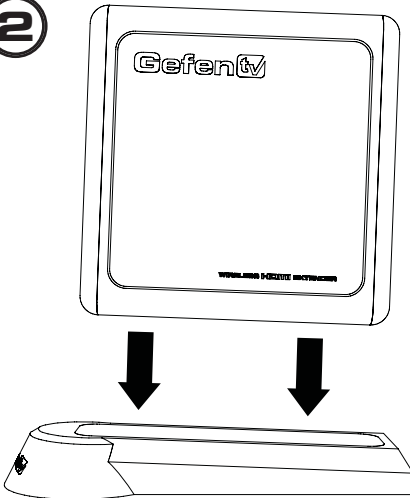
## USING THE VERTICAL STAND

1

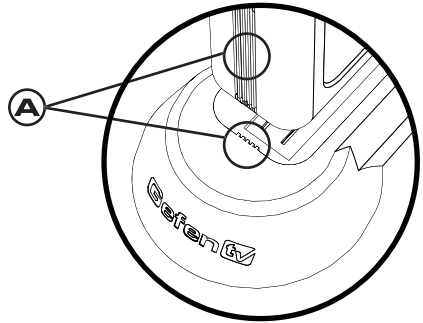


A vertical stand is included for placing the each main unit in an upright position. Vertical orientation is preferred because of the way that the radio waves are transmitted/received. Remove the main units and the stands from the packaging.

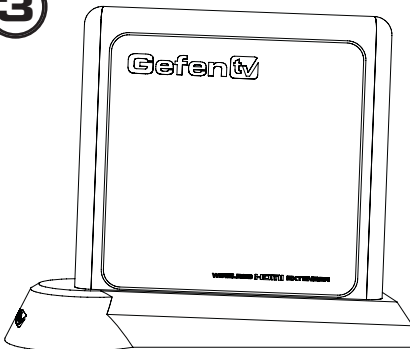
2



To place a main unit into a stand, first orient the front of the stand (where the logo is located) with the LED's on the front panel of the main unit. Lower the unit into the stand. There are channels **A** located on both the main unit and stand that will help guide the main unit into the stand.



3



Apply firm pressure until the units snap together. Both the front and rear sections of the main unit must click into the stand. To remove the main unit from the stand, simply pull the main unit and stand apart.

**WARNING:** Placing the main units into the stand in the improper direction may result in damage to the main unit and/or stand.

## SPECIFICATIONS

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Frequency band range .....	5.1 - 5.8 GHz
HDMI Versions Supported.....	v1.2a, 1.2, 1.1
CEC Protocol Support: .....	Pass-Through
Supported Resolutions: 640x480, 800x600, 1024x768, 480i, 480p, 576i, 576p, 720p, 1080i and 1080p@30Hz	
Distance Rating .....	100 feet line-of-sight
Operating temperature .....	0 to 50 degrees C
Operating humidity .....	10% to 90% relative humidity, non-condensing
Power Supply / Consumption .....	5V DC / 13W (max)
Dimensions (Sender & Receiver) .....	6.5" W x 1.5" H x 6.5" D
Dimensions (Plastic Bases, Each) .....	3.4" W x 0.8-1.1" H x 8.5" D
FCC Compliancy .....	Part 15
Shipping Weight .....	10 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>**







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