



Gefentv

Wireless for **HDMI™** 60 GHz Extender

GTV-WIRELESSHD

User Manual

www.gefentv.com



ASKING FOR ASSISTANCE

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, Pacific Standard Time.

Write To:

Gefen Inc.
c/o Customer Service
20600 Nordhoff St
Chatsworth, CA 91311

www.gefentv.com
support@gefentv.com

Notice

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

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INTRODUCTION

Congratulations on your purchase of the **Wireless for HDMI 60 GHz**. 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 insure that you get the most from your hardware. We invite you to explore our distinct product line and hope you find your solutions. Do you find that a particular product is not carried on our website or in our catalogs? Please call us so we can better assist you with your particular needs.

The Gefen TV Wireless for HDMI

The GefenTV Wireless for HDMI 60 GHz Extender delivers a plug-and-play wireless solution for HDMI sources placed up to 30 feet (9 meters) away. Hi-def resolutions of up to 1080p/60 fps are supported with 8-channel embedded digital audio.

The GefenTV Wireless for HDMI 60 GHz Extender is a wireless solution for extending any HDMI A/V sources to a remote HDMI-compliant display such as satellite boxes, DVD players, and Blu-Ray players. The Wireless for HDMI 60 GHz operates best in open indoor spaces with minimum obstructions between the Sender and Receiver units. Range will be significantly reduced otherwise.

How It Works

The GefenTV Wireless for HDMI 60 GHz Extender uses one sender and one Receiver unit. 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 to the HDMI input of the HDTV display. Power is applied to the Sender and Receiver, and both are reset. There is a slight pause while the Sender and Receiver locate each other and begin communicating. The HDMI signal from the HDMI source then travels to the HDMI display over 60 GHz radio waves and a vibrant and crisp High Definition picture emerges on the HDTV display. Indicator lights on the front panels of both units assist in troubleshooting should there be objects in the path of the radio waves or other problems to resolve.

Note on 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

READ THESE NOTES BEFORE INSTALLING OR OPERATING THE WIRELESS FOR HDMI 60 GHZ

This radio 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.

Federal Communication Commission



Interference Statement

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
2. NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
3. In order to comply with FCC RF Exposure requirements, a separation distance of at least 20 cm must be maintained between the antenna and all persons. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
4. Reorient or relocate the device(s) causing the interference.
5. Increase the separation between the devices.
6. Connect equipment into an outlet on a circuit different from that to which the device experiencing interference is connected.
7. Consult the dealer or an experienced radio/TV technician for help.

FEATURES

Features

- 30-ft maximum extension distance if set up properly in a wide open indoor environment
- Fully HDMI 1.3 compliant and HDCP (copy protection signal) compliant
- CECS protocol pass-through supported
- Uncompressed LPCM audio output support at 192 KHz (2 channels) and 96 KHz (8 channels)
- AC3 (Dolby™) and DTS™ at 2ch~6ch @ 48 KHz supported
- 36-element ceramic antenna array for good signal reception
- Bank of LED indicators to show operational status
- Dedicated system reset button on each unit
- Low-power sleep mode for reduced power consumption (2.5W ea)
- Field-upgradeable firmware

Package Includes

- (1) Wireless for HDMI 60 GHz Sender unit
- (1) Wireless for HDMI 60 GHz Receiver unit
- (2) 12V DC Power Supply
- (1) 4-Foot HDMI Cable (M-M)
- (1) User's Manual
- (1) IR Remote Control

SENDER / RECEIVER PANEL LAYOUT

Front Panel



Back Panel



SENDER/RECEIVER PANEL DESCRIPTIONS

The Sender and Receiver units share the same identical panel layout:

1 IR window for remote control (Receiver Front Panel Only)

Receives the IR control signal from the IR remote.

2 LED Indicators (Front Panel x 3): Link, Weak Signal, Strong Signal

This bank of 3 LEDs provides operational status and aids troubleshooting during the initial connection phase and sustained operation phase. LEDs will be in the states of OFF, blinking and ON to indicate the connection link status and radio signal strength. Please refer to pages 6 (bottom) and 7 (bottom) for a detailed discussion of this functionality.

3 Power LED Indicator (Front Panel)

This LED indicator will become active once the included 5V DC power adapter has been properly connected to the unit and a live power outlet.

4 5V DC Power Receptacle (Back Panel)

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

5 Power Switch (Back Panel)

Turns the power on/off.

6 HDMI Input (Back Panel)

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

SENDER/RECEIVER PANEL LAYOUT, CONT'D

Right Side Panel



Front Right Panel
Close-Up of LED Indicators



SENDER/RECEIVER PANEL LAYOUT, CONT'D

1 *Reset Button (clears settings)*

This button is used to reset the unit to default factory settings. To use the reset button, insert a sharp object, push firmly then let go. A full reset operation takes approximately 5 seconds.

2 *CFG (Configuration Buttons)*

These two push buttons currently have no function.

CONNECTING THE SENDER AND RECEIVER

1. Connect the HDMI source device to the Wireless HD 60 GHz Sender input using the supplied HDMI input cable. Use a DVI to HDMI cable/adaptor when using a DVI source device.
2. Connect the HDMI-compliant display to the Receiver's HDMI output port using a user- supplied HDMI cable. Use a HDMI to DVI cable/adaptor when using a DVI-compliant display.
3. Sender and Receiver should be oriented in a visually unobstructed, line-of-sight path without objects between them, at the same height as each other, preferably in a wide open indoor area with tall ceilings.
4. Connect the included 5V power supplies to the Wireless HD 60 GHz Sender and Receiver units. Power on the display device (monitor or projector).
5. Switch on the Receiver and Sender units. Automatic pairing (linkup) will begin. The units will search for each other, and four (4) LED indicators on the front right hand panel of the units will indicate operational status as follows (Please see diagram on the bottom of page 6, opposite):

LINK: OFF (connection failed, try again), ON (connection good),
BLINKING (waiting for link completion)

WEAK: OFF (no signal), ON (wireless signal is weak)

STRONG: OFF (weak signal), ON (wireless signal is strong)

POWER: OFF (power off), ON (unit ON), BLINKING (unit sleeping)

*If 4 LEDs blink at once despite multiple power ON/OFF attempts, do not continue operation. Please call Gefen Technical Support at 1-800-545-6900.

If a pairing operation does not commence and/or the WEAK LED stays on, the units must be relocated for better signal penetration. To retry pairing, relocate them and reapply power.

REMOTE CONTROL



The included remote control has two buttons on it, one labelled “HDMI” and one labelled “SLEEP”. Only the SLEEP button functions on this model. Its purpose is to put the Wireless for HDMI 60 GHz system into standby mode so that it can be kept ready for use at any time without consuming a significant amount of electrical power.

The remote control runs off of a single CR2032 battery (included). To change the battery, push in the retaining clip inward from the side rear of the remote while simultaneously pulling the battery containment sleeve out of the rear of the remote. Note the positive orientation of the battery facing upwards. Replace with an identical type of battery in the same orientation.

When operating the remote control for the first time, please remove the protective acetate plastic sheet inserted between the circuit board and the battery. This insert keeps the battery from prematurely discharging in transit.



SPECIFICATIONS

AV Parameters:

Frequency band range 60 GHz
HDMI Versions Supported..... v1.3, 1.2a, 1.2, 1.1
Max. Distance Rating (Open air line of sight) 30 feet
Maximum Video Resolution: 2048x1080p/60 (2K)
Maximum Audio Bandwidth:8-channel, 24-bit / 96 kHz LPCM
Supported Video Formats:

HDTV: 640x480i/p @60Hz; 720x480p@60Hz; 720x576i/p@50Hz; 1280x720p at 50,60Hz; 1920x1080i@50,60Hz; 1920x1080p@24,50,60Hz.

Deep Color is supported by all of the above formats *except* 1920x1080p/24 and 1920x1080p/60 (in YUV 4:2:2). These both support only 12-bit Deep Color.

PC: Supported VESA computer display formats at 60 Hz: 640x480 (VGA), 800x600, 1024x768, and 1280x1024.

Connectors and Indicators for both Sender and Receiver (identical):

A/V Connector: .(rear).....One (1) Female 19-pin HDMI port
Power Connector: (rear).....One (1) 12V DC input jack
Power Switch: .(rear).....One (1) sliding rocker switch
CFG Button: .(side).....One (1) push button on side panel
Reset Button: .(side)..... One (1) recessed push button on side panel
Unusual Button (for future use): (side).....One (1) push button on side panel
LED Indicators (4):Power, Strong Signal, Weak Signal, Link

Physical and Electrical Characteristics:

Dimensions (ea):7.35" W x 1.78" H x 3.35" D (units are identical)
Humidity:.....Operating: 10%-90% relative, non-condensing; Storage: 5%-90%
Power Supply / Consumption:12V DC / 18W each (sleep mode 2.5W)
Transmitting Power (ea unit):27 dBm
Receive Sensitivity:-65 dBm
Operating temperature:0 to 40 degrees C (AC adapter is 0-40 degrees C)
Storage temperature:-30 to 70 degrees C
Shipping Weight 10 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.



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20600 Nordhoff St., Chatsworth CA 91311

1-800-545-6900 818-772-9100 fax: 818-772-9120

www.gefentv.com support@gefentv.com

