



# Gefentv

Wireless VGA Extender LR

GTV-WVGA-LR

User Manual

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

## ASKING FOR ASSISTANCE

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### Technical Support:

Telephone (818) 772-9100  
(800) 545-6900

Fax (818) 772-9120

### Technical Support Hours:

8:00 AM to 5:00 PM Monday thru Friday.

### Write To:

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

[www.gefen.com](http://www.gefen.com)  
[support@gefen.com](mailto:support@gefen.com)

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# INTRODUCTION

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Congratulations on your purchase of the Wireless VGA LR. 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 Wireless VGA LR**

The Wireless VGA Extender LR allows a VGA display or projector to be conveniently located up to 100 feet away from the source.

The Wireless VGA Extender LR features line-of-sight signal transmission and through walls at resolutions of up to 1280x1024, using industry-proven 2.4GHz 802.11b/g/n Wireless network technology. The Extender can be operated on any one of 4 channels to minimize interference.

## **How It Works**

This product is a plug-and-play solution. No special configuration is necessary. The Wireless VGA Extender LR system consists of a Sender and a Receiver. The Sender is connected to the VGA source with a VGA cable. The Receiver is connected to the display with a VGA cable. 12V external power supplies are connected to the Sender and the Receiver.

Supported A/V input sources also include Component, S-Video and Composite Video. A/V sources can be individually selected by pressing the Source Selector button on the front panel of either the Sender unit or the Receiver unit. The current wireless channel can be selected in the same way with the Channel Selector button.

## OPERATION NOTES

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### READ THESE NOTES BEFORE INSTALLING OR OPERATING THE WIRELESS VGA LR

- The Wireless VGA LR will accept component video signals (YPbPr) up to 1080p. However, 1080i and 1080p signals will be down scaled and transmitted at 1280x720. Please see the table at the bottom of this page for a list of input and output resolutions and framerates.
- For better transmitting quality, please do not place units into cabinets or cupboards that will reduce the wireless transmitting signal.
- The following input formats are accepted:

Composite: NTSC / PAL / SECAM

S-Video: NTSC / PAL / SECAM

Y/Pb/Pr: 480i/p, 576i/p, 720p (50/60Hz), 1080i/p (50/60Hz).

VGA: 640X480, 800X600, 1024X768, 1280X768, 1280X1024.

- The following are the output formats:

Y/Pb/Pr: 480p (60Hz), 576p (50Hz), 720p (60Hz)

VGA: 640x480 , 800X600 , 1024X768 ,1280X768 ,1280X1024

- The following shows the transfer frame rates:

Composite : 480i (60Hz)→720X480 (60fps)

576i (50Hz)→720X576 (50fps)

S-Video : 480i (60Hz)→720X480 (60fps)

576i (50Hz)→720X576 (50fps)

Y/Pb/Pr : 480i (60Hz) →720X480 (60fps)

480p (60Hz) →720X480 (60fps)

576i (50Hz) →720X576 (50fps)

576p (50Hz) →720X576 (50fps)

720p (60Hz) →1280X720 (30fps)

720p (50Hz) →1280X720 (25fps)

1080i (60Hz) →1280X720 (30fps)

1080i (50Hz) →1280X720 (25fps)

1080p (60Hz) →1280X720 (30fps)

1080p (50Hz) →1280X720 (25fps)

VGA : 800X600(60Hz)(4:3) → 800X600 (60fps)

1024X768(60Hz)(4:3) → 1024X768 (30fps)

1280X768(60Hz)(5:3) → 1280X768 (30fps)

1280X960(60Hz)(4:3) → 1024X768 (30fps)

1280X1024(60Hz)(5:4) → 1280X1024 (30fps)

# FEATURES

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## Features

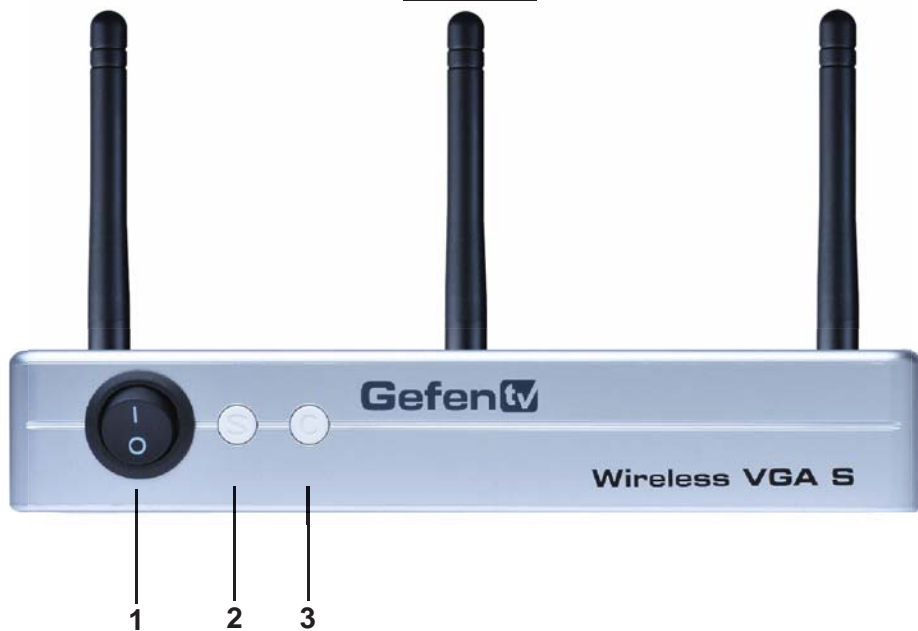
- Wireless extension of VGA up to 100 feet
- Resolutions of up to 1080i/p@60 Hz (Component) and 1280x1024 (VGA) are supported
- Video Formats Supported: VGA @ 1280x1024 (max), Component (720p, 1080i max), S-Video, Composite
- Switch between four audio/video sources from the sender's location
- Plug-and-Play installation with no special configuration required
- 4 wireless channels for resistance to interference
- L/R Analog Audio supported

## Package Includes

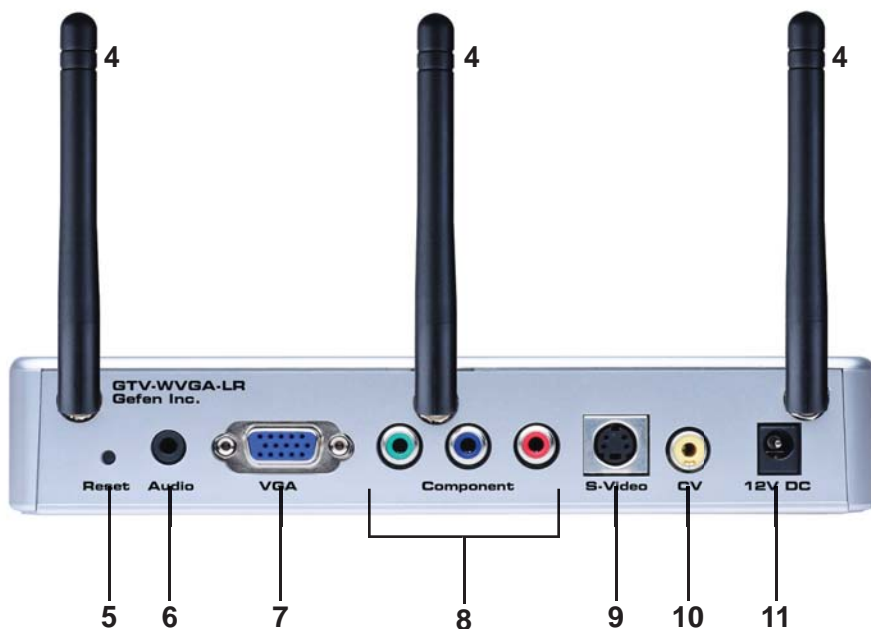
- (1) GTV-WVGA-LR Wireless VGA Sender
- (2) GTV-WVGA-LR Wireless VGA Receiver
- (2) 12V / 1A Power Supplies
- (1) 6 foot VGA cable (M-M)
- (1) User's Manual

# SENDER PANEL LAYOUT

## Front Panel



## Back Panel



## SENDER PANEL DESCRIPTIONS

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### 1 **Power Switch**

This switch will toggle the main power on and off.

### 2 **Source Selector Button**

This button will cycle through the available input video sources. The cycle is outlined below:



### 3 **Channel Selection Button**

This button will cycle through the available radio channels. There are 4 channels to choose from. This feature is useful when a certain channel is oversaturated and another needs to be used. Changes made on this unit will automatically be reflected on the opposite unit.

### 4 **Transmission Antennas**

These antennas will transmit the video/audio signals to the receiver unit.

### 5 **Reset Button**

These button will restore the units to factory defaults.

### 6 **3.5mm Mini-Jack Audio Input**

This input will accept a 3.5mm mini-jack for analog stereo audio transmission. This input will accept a 3.5mm mini-jack audio device for analog audio. Audio from this input will be transmitted to the receiver.

### 7 **VGA Video Input**

This input will accept a single VGA video source for transmission to the receiver at the remote location.

### 8 **Component Video Input**

This input will accept a single Component video source for transmission to the receiver at the remote location.

### 9 **S-Video Input**

This input will accept a single S-Video source for transmission to the receiver at the remote location.

### 10 **Composite Input**

This input will accept a single Composite video source for transmission to the receiver at the remote location.

### 11 **5V DC Power Input**

This input will receive power from one of the included 5V DC power supplies.

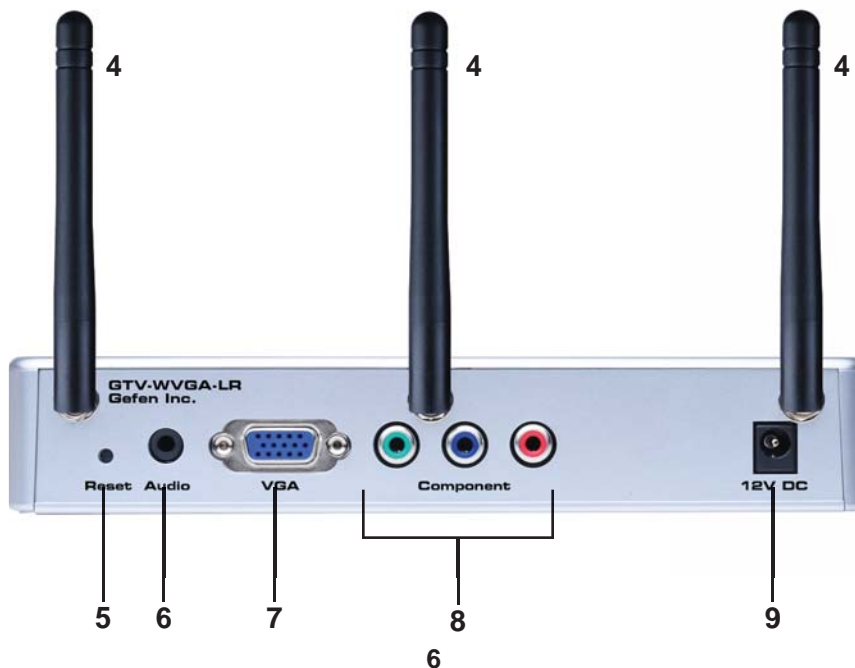


# RECEIVER PANEL LAYOUT

## Front Panel



## Back Panel



# RECEIVER PANEL DESCRIPTIONS

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**1 Power Switch**

This switch will toggle the main power on and off.

**2 Output Selector Button**

This button will cycle through the available output choices. The cycle is outlined below:



**3 Channel Selection Button**

This button will cycle through the available radio channels. There are 4 channels to choose from. This feature is useful when a certain channel is oversaturated and another needs to be used. Changes made on this unit will automatically be reflected on the opposite unit.

**4 Receiving Antennas**

These antennas will receive the video/audio signals from the sender unit.

**5 Reset Button**

These button will restore the units to factory defaults.

**6 3.5mm Mini-Jack Audio Output**

This input will accept a 3.5mm mini-jack audio device for analog audio. Audio from the audio input on the sender will be output through this connector.

**7 VGA Video Output**

This output will accept a single VGA capable device.

**8 Component Video Input**

This input will accept a single Component capable source.

**9 5V DC Power Input**

This input will receive power from one of the included 5V DC power supplies.

## SENDER LED LAYOUT

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LED	Color	Behavior	Indication
Wi-Fi	Green	On	Wireless function is active.
		Blinking	Data receiving.
	Red	Blinking	Data transmitting overflow.
CH 1~ CH 4	Blue	On	Wireless channel firm.
		Blinking	Switch channels.
VGA	Blue	On	VGA source is active.
		Blinking	Switching sources.
YPbPr	Blue	On	YPbPr source is active.
		Blinking	Switching sources.
S-Video	Blue	On	S-Video source is active.
		Blinking	Switching sources.
Composite (CVBS)	Blue	On	Composite source is active.
		Blinking	Switching sources.

## RECEIVER LED LAYOUT

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LED	Color	Behavior	Indication
Wi-Fi	Green	On	Wireless function is active.
		Blinking	Data receiving.
	Red	Blinking	Data transmitting overflow.
CH 1~ CH 4	Blue	On	Wireless channel firm.
		Blinking	Switch channels.
VGA	Blue	On	VGA source is active.
		Blinking	Switching sources.
YPbPr	Blue	On	YPbPr source is active.
		Blinking	Switching sources.

# CONNECTING AND OPERATING THE WIRELESS VGA LR

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## How to Setup the Wireless VGA LR Sender Unit

1. Connect source devices to the Wireless VGA LR sender unit. The sender unit has the following connection options:
  - VGA
  - Component
  - S-Video
  - Composite
2. Connect a single analog audio source to the Wireless VGA LR sender unit using a 3.5mm mini-jack audio cable.
3. Connect one or both of the following output device types to the Wireless VGA LR receiver unit:
  - VGA (VGA cable included)
  - Component
4. Connect a single analog audio output device to the 3.5mm mini-jack output on the Wireless VGA LR receiver unit.
5. Connect the included 5V DC power supplies to both the Wireless VGA LR sender and receiver units.
6. Toggle the power switch on both the Wireless VGA LR sender and receiver units.
7. Turn on all output and source devices.

## How to Operate the Wireless VGA LR

Once all units, sources, and output devices are powered and turned on, the sending and receiving units will begin their boot-up sequence.

During this sequence all channel LEDs (blue) on the sender and receiver units will turn on and remain on. The output will display a blue screen with the text:

“Wi-Fi initial...”

Once the initial boot-up sequence is complete, the currently selected input (on the sender) and output (on the receiver) will be active (blue). The LED for the channel in operation will also be on (blue). The output will display a blue screen with the text:

“Search channel XX” (where XX is the current channel)

During the final stages of the boot-up sequence, the Wi-Fi LED should turn on (green) while the sender and receiver units attempt to establish contact with each other.

Once a link has been established, the Wi-Fi LED will begin to blink rapidly. This will indicate that data is being transmitted from the sender to the receiver unit.

Video should now be output through the Wireless VGA LR receiver unit.

## CONNECTING AND OPERATING THE WIRELESS VGA LR

If the Wi-Fi LED remains on (green) and does not blink, the sender and receiver units are not linked and video/audio is not being transmitted. When this occurs, video will not be displayed and the output will remain on a blue screen. This text will be displayed:

“No Wi-Fi connection”

Try moving the sender or receiver unit’s location until a link is established and the Wi-Fi LED is blinking green.

The Wi-Fi LED may occasionally blink red. This indicates low signal strength. While the link between the sender and receiver units will most likely remain intact, video/audio drop-outs may occur. Try moving the sender or receiver unit’s location until a link is established and the Wi-Fi LED is blinking green.

If the Wi-Fi LED remains red, the signal strength is too low and no video will be output. Try moving the sender or receiver unit’s location until a link is established and the Wi-Fi LED is blinking green.

### How to Switch Input Sources on the Wireless VGA LR

Use the switch button on the front panel of the Wireless VGA LR sender unit, labeled “S”, to cycle between the available input sources. The currently selected source will be indicated by a blue LED. Each press will progress to the next input in the following order:



### How to Switch Outputs on the Wireless VGA LR

Use the switch button on the front panel of the Wireless VGA LR receiver unit, labeled “S”, to cycle between the available outputs. The currently selected source will be indicated by a blue LED. Each press will progress to the next output in the following order:



### How to Switch Channels on the Wireless VGA LR

If there is significant interference on a particular channel, or the currently selected channel is unstable, changing the channel may alleviate the issue. To change the channel, press the channel button, labeled “C” on either the sender or receiver unit. Changes on one unit will automatically be reflected on the other unit. If there is currently no link between the sender and receiver, the channel button will not be operational.

## SPECIFICATIONS

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Wireless Standard .....	IEEE 802.11b/g/n
Antenna Type .....	External Dipole antenna 2dBi
PCM Encoding .....	48KHz 16-bit sampling
Power Supply .....	2 x 12V @ 1A each
Audio Inputs/Outputs .....	3.5mm mini-stereo jacks
Video Inputs:	
Composite & S-Video .....	NTSC / PAL / SECAM
Y/Pb/Pr .....	480i/p , 576i/p , 720p (50/60Hz) , 1080i/p (50/60Hz)
VGA .....	800X600 , 1024X768 , 1280X768 ,1280X960, 1280X1024
Video Outputs:	
Y/Pb/Pr .....	480p (60Hz), 576p (50Hz), 720p (60Hz)
VGA .....	640x480 , 800X600 , 1024X768 ,1280X768 ,1280X1024
Switchable 802.11b/g/n Channels .....	3, 6, 9, 12
Operating Temperature .....	0-40 C ambient temperature
Operating Humidity .....	90% maximum (non-condensing)
Dimensions .....	7.05 (L) x 4.17 (W) x 0.9 (H) per unit

## 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.





Rev A

20600 Nordhoff St., Chatsworth CA 91311

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

[www.gefentv.com](http://www.gefentv.com) [support@gefentv.com](mailto:support@gefentv.com)

