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# User Manual

## Long Range Wireless 5x2 HDMI Matrix PRO

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**GWHDMS52MB**

PART NO. M1275



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## Important Information

Please take the time to read this user manual before using the Transmitter and Receiver. It contains important information about operating your Full HD video wireless kit.

Our limited warranty applies when the product is handled properly for intended use, in accordance with its operating instruction. However, the warranty may be void in the following cases:

- Repair, product modification or alteration have been performed by unauthorized service personnel
- Damages caused by accidents, including but not limited to, lightning, water, fire, or moisture
- Use of an AC adapter not compatible with the product and its voltage rating
- The model number on the product has been altered, deleted, removed or made illegible

### Safety Precautions

|                                                                                                                                                |                                                                          |                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                                               | <b>Warning!</b><br><br>RISK OF<br>ELECTRICAL<br>SHOCK<br><br>DO NOT OPEN |  |
| TO REDUCE THE RISK OF ELECTRICAL SHOCK. DO NOT REMOVE THE COVER. NO USER-SERVICEABLE PARTS ARE INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL. |                                                                          |                                                                                   |



**Danger:** Be careful with electricity.

- Power to the units must be switched off before any work is undertaken, such as any AV device connection or TV connection.
- Power outlet: To prevent electric shock, make sure to use the appropriate AC adapters as power supply to the transmitter and the receiver.

- Power cord: Be sure the power cord is routed so that it will not be stepped on or pinched by heavy items
- Power overloading: Avoid overloading electrical outlets or extension cords which otherwise could result in electric shock or fire
- Lightning: Disconnect the product from the power source if it is left unattended for a long period of time, and to protect the product from lightning.
- Always disconnect the power cord from the power outlet when you are not using your Full HD Video wireless kit. This reduces the risk of electric shocks or fire



### Warning

- This product should not be exposed to dripping or splashing. No object filled with liquids, such as vases, should be placed on the product
- Object Entry: To avoid electric shock, never stick anything in the slots on the case or remove the cover
- Place receiver/transmitter on a flat, hard and stable surface
- Ventilation: Do not block the ventilation slots on the receiver/transmitter or place any heavy object on the top cover.
- Blocking the air flow could damage the receiver. Arrange components so that air can flow freely around the receiver. Ensure that there is adequate ventilation if the receiver is placed in a stand
- Put the receiver/transmitter in a properly ventilated area, away from direct sunlight or any source of heat
- Water Exposure: To reduce the risk of fire or electric shock, do not expose the receiver/transmitter to rain or moisture.
- This is indoor solution
- Our company has the right to modify this document without any notice

## Special Notice

- Never use this product nearby an aircraft or medical facility. It can cause interference or undesirable effect on the operation result
- Use of this product in the following locations may result in abnormal video and audio output (noise, blocked image... etc.).
  1. Product installed in the walls made of concrete
  2. Product is situated near the refrigerator or metal fitment
  3. A cluttered room where the wireless signals may be blocked
- This product has been tested and manufactured to comply with each country's safety rules. However, there is no guarantee that interference will not occur in some installation scenario. If the interference happens, increase the distance between the transmitter and receiver
- GWHDS52MB may interfere 5GHz wireless devices, such as routers or other wireless devices. Therefore, if you have an 802.11n/ac router, configure it to the 2.4 GHz band rather than the 5GHz band
- Optimal range between GWHDS52MB transmitter and receiver is between 2 and 20 meters within line of sight

## System Warning

### FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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. 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



### **CAUTION: Using the System in the US**

- Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.
- 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.

### **RF exposure warning**

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

This device operates in the 5150 – 5250 MHz frequency range, then restricted in indoor use only. Outdoor operations in the 5150~5250MHz is prohibited.

This device is slave equipment, the device is not radar detection and not ad-hoc operation in the DFS band.



### **Canada, Industry Canada (IC) Notices**

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

### **Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

#### **Caution:**

1. the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
2. High-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5470~5600MHz, 5650~5725MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

### **Radio Frequency (RF) Exposure Information**

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has also been evaluated and shown compliant with the IC RF Exposure limits under mobile exposure conditions. (antennas are greater than 20cm from a person's body).

#### **IMPORTANT NOTE:**

- In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the Canada authorization is no longer considered valid and the IC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate Canada authorization.

#### **French Translation**

##### **Canada, avis d'Industry Canada (IC)**

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210.

Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

##### **Informations concernant l'exposition aux fréquences radio (RF)**

La puissance de sortie émise par l'appareil de sans fil est inférieure à la limite d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez l'appareil de sans fil de façon à minimiser les contacts humains lors du fonctionnement normal.

Ce périphérique a également été évalué et démontré conforme aux limites d'exposition aux RF d'IC dans des conditions d'exposition à des appareils mobiles (antennes sont supérieures à 20 cm à partir du corps d'une personne).

#### **NOTE IMPORTANTE:**

Déclaration d'exposition aux radiations:  
Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

- i. les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- ii. De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5 50-5350 MHz et 5470-5600MHz, 5650-5725MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

En vertu de la réglementation de l'industrie du Canada, cet émetteur de radio ne peut fonctionner à l'aide d'une antenne d'un type et un maximum (ou moins) Gain approuvé pour l'émetteur par Industrie Canada. Pour réduire le risque d'interférence aux autres utilisateurs, le type d'antenne et son gain doivent être choisis afin que la puissance isotrope rayonnée équivalente (PIRE) ne dépasse pas ce qui est nécessaire pour une communication réussie.

## Introduction

### Wireless HDMI

IOGEAR's Long Range Wireless 5x2 HDMI Matrix PRO with Multicast is the first to send uncompressed Full HD 1080p up to an astonishing 200 feet\*, including the ability of multicasting up to a total of 4 wireless HDMI receivers.

Natively the kit consists of a Transmitter with connections for HDMI and Component (5-port switch / matrix) and a Wireless Receiver. It also provides a loop through (local port) on the transmitter for an advanced 2 HDTV set up. The wireless matrix feature allows a user to switch and independently select any of 5 sources between 2 HDTVs, creating 2 completely different audio/video environments.

### Wireless Matrix

The Wireless 5x2 HDMI Matrix PRO is setting a new standard in wireless connectivity, flexibility, convenience and décor.

The wireless matrix feature is the biggest breakthrough in wireless A/V solutions today. This means you can watch cable TV in the living room while the bedroom independently selects a Blu-ray® movie to watch wirelessly at the same time. It's capable of streaming uncompressed Full HD 1080p with support for 3D content and digital audio up to 200 feet\* away within the home or desired set up.

### Multicast Capability

Expand beyond one wireless display to multiple wireless displays with Multicast capabilities. Simply add up to 3 additional wireless receivers\*\* broadcasting to a total of 4 wireless receivers from the same HD video source.

### Discrete Remote

Our newly designed discrete remote gives installers and prosumers the flexibility to consolidate functions with professional A/V systems.

### Infrared (IR)

Supports IR pass-through - Use remotes from your current source devices such as a DVD / Blu-ray players, DVR / Cable boxes, A/V receivers and media streaming devices such as Apple® TV to design your own custom entertainment space.

\*Distances may vary depending on environment; solid objects such as steel, concrete and brick may view shorter distances

\*\*Additional wireless receivers sold separately. Visit the GWHDRX01 product page for more information.

## **EDID Management**

The default EDID resolution setting is 720p, to ensure HD video on every initial set up. The PRO unit provides three (3) EDID management modes for the best installation every time. This gives flexibility and power for any install or end customer's desired set up.

- EDID 1 Mode: Changes the default setting to 1080p Full HD.
- EDID 2 Mode: Refreshes the screens and sets the highest common resolution of ALL the connected displays.
- EDID 3 Mode: Restores the factory default video resolution back to 720p

## **Home Design**

Take re-decorating, retrofitting and designing to a new level of creativity and convenience. Ever wanted to set up another HDTV in the bedroom, kitchen, den or patio? Now you can have an HDTV in almost any room of the house. Set up the HDTV in the back patio for sporting events while the kids play video games or watch a Blu-ray movie in the living room!

The Long Range Wireless 5x2 HDMI Matrix PRO does not require a line-of-sight placement, keeping home theater devices neatly out of sight, which enables a quick, simple, and flexible wireless HD or 3D audio/video solution.

## Package Contents

1 x Wireless HDMI Transmitter  
1 x Wireless HDMI Receiver  
2 x Remote Controls  
1 x Component Adapter Cable  
1 x IR Blaster Cable (Transmitter)  
1 x IR Sensor Extender Cable (Receiver)  
2 x Power Adapters  
1 x HDMI Cable  
4 x AAA Batteries  
1 x User Manual  
1 x Warranty Card

## System Requirements

### Display

HDTV

or

HD Projector

### Media Source

1 HDMI Output

or

1 Component Output\*

### Multicast

Additional Wireless HDMI Receivers sold separately - Part# GWHDRX01

### Cables

- HDMI Cables (1 included)
- Component Cable (not included)
- RCA Audio Cable (L&R, not included)

\*Only 1 Component Input available on the Transmitter

## Overview

### Transmitter

#### Top View

1. **Source LED Indicators**

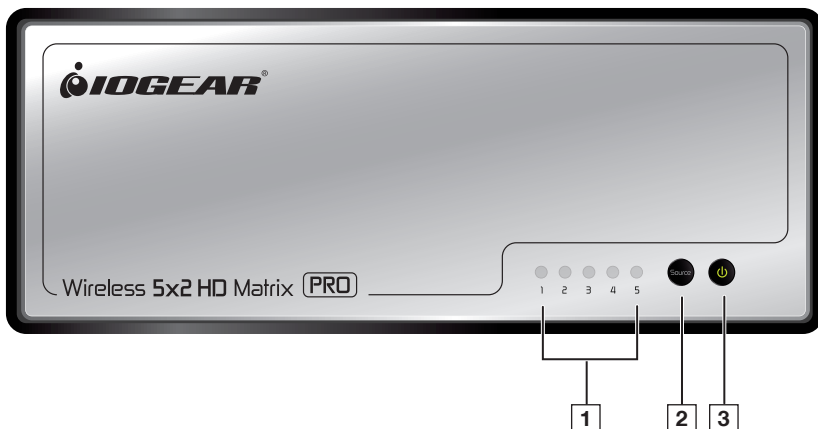
These LED indicators light solid green to show current input.

2. **Source Selection Button**

Press the Source button to switch inputs connected to the Transmitter

3. **Power Button with LED Indicator**

Press the power button to turn the transmitter ON / OFF. The LED indicator lights solid green when the power is ON and lights red when in Standby Mode.



#### Back View

1. **Power Adapter DC IN**

2. **IR OUT Blaster Extender Jack**

Plug the IR Blaster Cable into the IR OUT jack on the transmitter.

3. **Component IN (YPbPr)**

Connects the Transmitter to source device Component port with the provided Adapter Cable.

4. **HDMI IN**

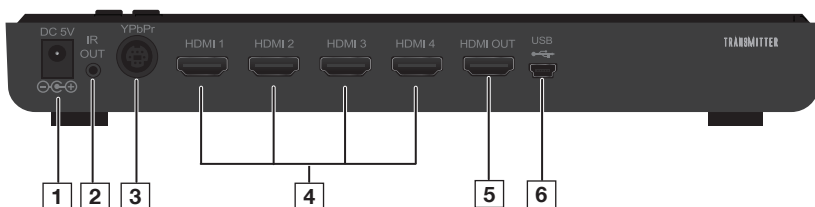
Connects the Transmitter to High-definition audio / video devices via an HDMI cable.

5. **HDMI OUT**

Connect to an HDTV via an HDMI cable.

6. **Mini USB Port**

For firmware upgrade purpose only.



## Receiver

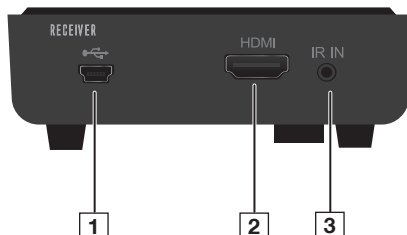
### Front View

1. **Power Button with LED Indicator**  
Press to turn the receiver ON / OFF.  
The LED indicator lights green when powered on and lights red when in Standby Mode.
2. **Source Button**  
Press for Source device input selection.
3. **Video status LED**  
For video input status indication.  
Please refer to page 21, section 5 for detailed information.
4. **Wireless Signal status LED**  
For wireless link status indication.  
Please refer to page 21, section 5 for detailed information.



### Back View

1. **Power Adapter DC IN**  
Connect to receiver's power adapter.
2. **HDMI OUT**  
Connects the Receiver to an HDTV via an HDMI cable.
3. **IR IN**  
Available to connect IR sensor extender cable.



## Remote Control

### 1. Power ON / Power OFF Buttons

Press Power ON to turn on the Transmitter & Receiver. Press Power OFF to enter Standby Mode.

### 2. INFO Button

Displays the On-Screen Display (OSD) for the GWHDS52MB system related information on the HDTV.

### 3. Transmitter Source Selection\*:

H1=HDMI Port 1  
H2=HDMI Port 2  
H3=HDMI Port 3  
H4=HDMI Port 4  
Comp=Display Component Port

### 4. Receiver Source Selection:

H1=HDMI Port 1  
H2=HDMI Port 2  
H3=HDMI Port 3  
H4=HDMI Port 4  
Comp=Display Component Port

### 5. EDID 1 Button

Press to change the video output resolution from the Transmitter and Receiver(s) to 1080p.

### 6. EDID 2 Button

Press to change the video output resolution from the Transmitter and Receiver(s) to the highest common resolution of ALL the displays connected to the GWHDS52MB system.

### 7. EDID 3 Button

Press to restore the factory default video resolution output setting of BOTH the Transmitter and Receiver(s) to 720p.

### 8. Up and Down Arrow Buttons

Press to select the source inputs for Transmitter display. Press OK to switch to the source input selected

### 9. Left and Right Arrow Buttons

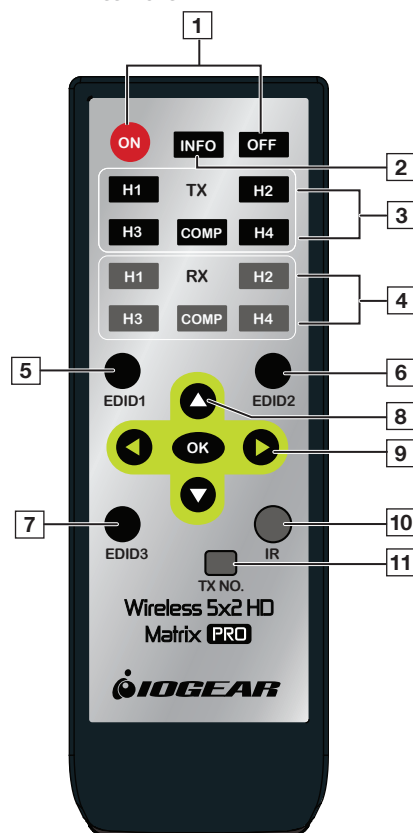
Press to select the source input for Receiver display. Press OK to switch to the source input selected.

### 10. IR Button

Press to switch the IR Blaster frequency to meet Source device's requirement. It can switch the IR Blaster frequency from AUTO to 38KHz to 56KHz recurring

### 11. TX NO. Button

Allows the Wireless Receiver to select and stream media from another paired Wireless Transmitter.\*\*

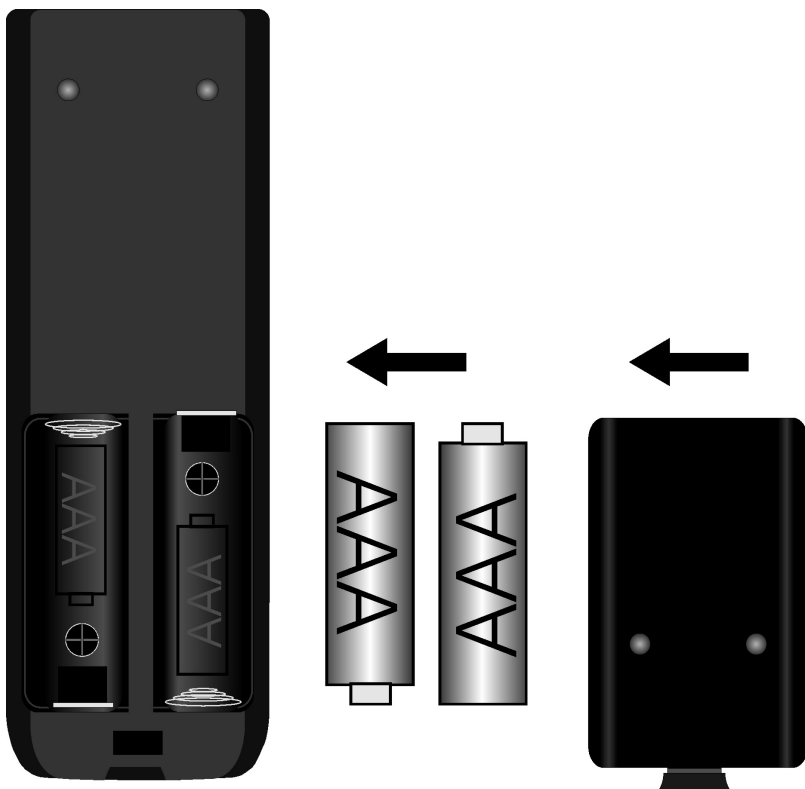


\*Source selection can be done from both Transmitter and Receiver

\*\*Additional pairing instructions are available at <https://www.iogear.com/support/dm/manual/GWHDS52MB>

### Battery Compartment

- Remove the remote control battery door by pushing the bottom clip in and lifting on the battery door.
- Place the two AAA batteries into the remote control and replace the battery door until it snaps in place.

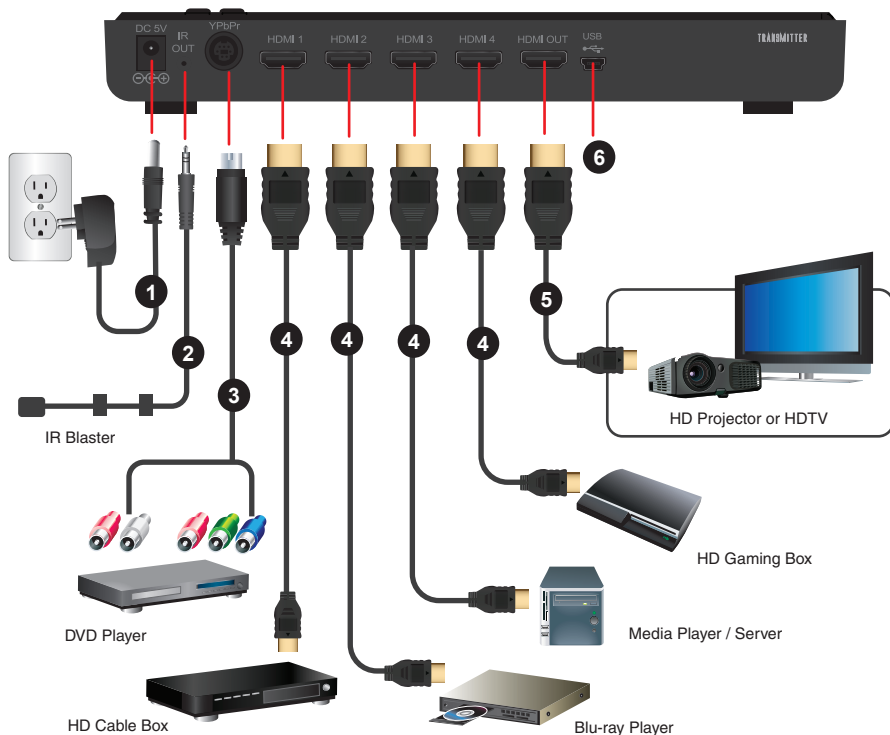


## Hardware Installation

### Step 1: Setup the Transmitter

Connect up to 5 HD Audio/Video Source Devices and 1 HDTV to the transmitter

1. Connect the Transmitter Power Adapter to the DC IN jack on the Transmitter.
2. Connect the IR blaster cable. Please refer to Page 17, Step 3A for more detailed setup instructions.
3. Connect a source device with Component Video Out using the included Component Video Adapter.
4. Connect up to 4 HDMI source devices using HDMI cables (Ports 1-4).
5. Connect the local HD display / projector using an HDMI cable to the HDMI OUT port on the Transmitter.
6. The Mini USB port is used for firmware upgrades only.



## Step 2: Setup the Receiver

1. Connect the Receiver Power Adapter into the Mini USB power jack.
  2. Connect an HDMI cable to the HDMI OUT port on the Receiver to an HDMI IN port on the HDTV or HD Projector.
  3. Connect the IR Sensor Extender cable to the IR IN port on the back of the Receiver.
- Please refer to Page 17, Step 3B for more detailed setup instructions.



### Step 3: Setup the IR blaster extender cable and IR sensor extender cable

The IR relays infrared commands from your remote control to your device. Users can control their A/V devices by pointing their remote control to the receiver or IR sensor extender cable. (IR distance from remote to receiver / IR sensor cable is 30 feet line of sight.)

#### A: Transmitter

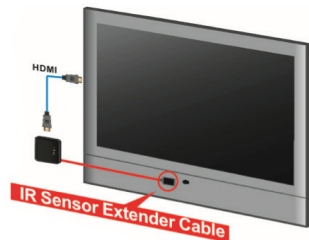
1. Plug the IR Blaster cable into the IR OUT jack on the transmitter.
2. Apply the IR blaster head directly over the eye of the IR sensor on your source device. This allows the remote controls to your devices to work from another room when using the wireless receiver\*.



Note: Transmitter and source devices connected to the Transmitter within the local location must all be in line of site for IR control.

#### B: Receiver

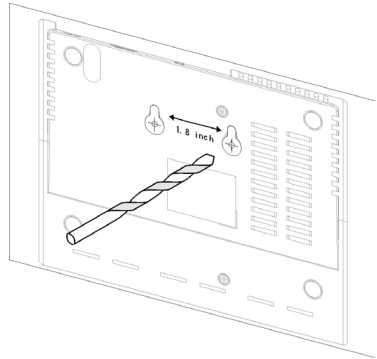
1. Place the wireless receiver out of sight and use the IR sensor extender to control your devices with their remote control.
2. Plug the IR sensor extender cable into the IR IN jack on the receiver and place the sensor on the front of the TV for convenient operation.



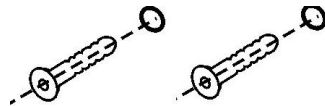
\*In some instances, the IR sensor on your source device may be difficult to find. To help simplify this process, you can use a flash light to locate the IR sensor on the front panel of your device. Be sure to place the IR Blaster directly over the eye of the sensor.

#### Step 4: Mounting the Receiver to a Wall (Optional)

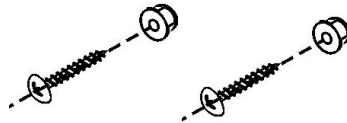
1. Refer to the drawing at the right that has a relative position of the main holes that will be needed to be drilled into the wall.
2. Drill two 1/4" pilot holes.



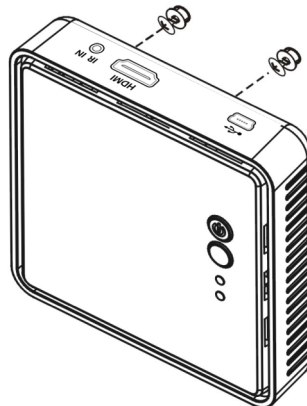
3. Insert the supplied two Anchors into the wall. If necessary, use a small hammer to lightly tap the anchors flush to the wall.



4. Insert two screws into the anchors. Leave 1/4" length for mounting the Transmitter, 5/8" for the Receiver.



5. Place receiver main holes over the protruding screws and slide down into position



## Basic Operation

1. After initial setup, plug the power adapters for both the Transmitter and Receiver into an available power outlet.

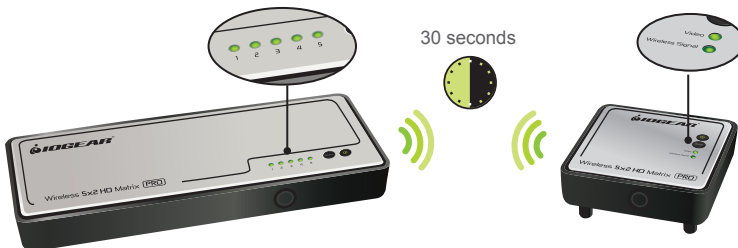
Note: The HDMI OUT on the Transmitter will always be active, even when in Standby mode.  
(For more information about Standby Mode, refer to page 21)



2. Once the Transmitter and Receiver have been powered ON, the LED indicators will light green and begin the start-up process.



3. During start-up, the **Source LED indicators** on the Transmitter and the **Wireless Signal** status LED on the Receiver will flash green until the signal link has been established with the Transmitter. This process takes approximately 30 seconds.



4. Power on all connected displays (i.e. HDTV or HD Projector) and source devices (i.e. Cable box, Blu-ray player, game console).

When the GWHDS52MB kit is powered on for the first time, the default input is set to HDMI 1. To select a different source to be displayed, use one of the following options:

Note: When selecting a different source, it will take approximately 5~7 seconds for the image to appear.

### Option A

#### Source button on Transmitter or Receiver

Press the SOURCE button on the top of the Transmitter or Receiver to cycle through each source input until the desired input is shown on the On Screen Display (OSD).

i.e. Pressing SOURCE button on Transmitter will switch source on Transmitter ONLY.



### Option B

#### Remote Control Source Buttons

When pointing at Transmitter or Receiver:

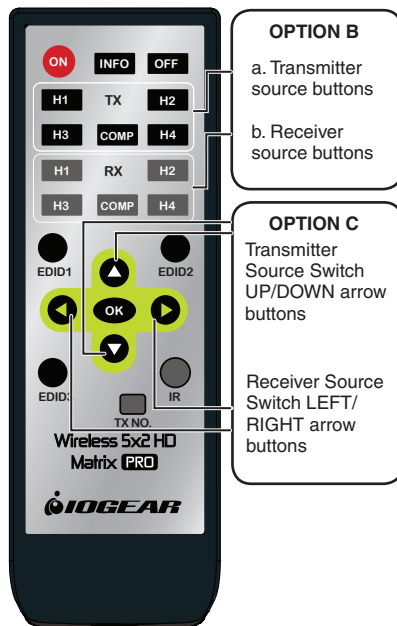
- a. To select a specific source on the Transmitter, press the corresponding source button in the area marked TX.
- b. To select a specific source on the Receiver(s), press the corresponding source button in the area marked RX.

### Option C

#### Remote Control Arrow Buttons

1. When pointing remote at Transmitter:
  - a. Pressing the **UP** or **DOWN** arrow button will cycle through inputs for the Transmitter. Once the desired input is displayed on the OSD, press **OK** to select.
  - b. Pressing the **LEFT** or **RIGHT** arrow button will cycle through inputs for the Receiver(s). Once the desired input is displayed on the OSD, press **OK** to select.
2. When pointing remote at Receiver:
 

Pressing the **LEFT** or **RIGHT** arrow button will cycle through inputs for the Receiver(s). Once the desired input is displayed on the OSD, press **OK** to select.



Note: Pressing "Up" or "Down" on receiver side will not initiate switching.

5. If the Operation is normal, the Power / Wireless status LED and Source Status LED will glow in solid green, please refer to the LED status table below that contains detailed LED indicator and OSD descriptions for the transmitter and receiver:

| Item / Mode                         | Status Description                                                                                    | Tx / Rx Power LED                    | Tx/Rx Source / Video LED | Rx Wireless LED | OSD Display                                                                                                     |
|-------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Standby</b>                      | For power saving mode.                                                                                | Static Red                           | OFF                      | OFF             |                                |
| <b>Initial Boot up / Warm up</b>    | It will spend 15 ~ 20 seconds for system boot up.                                                     | Tx Blinking Green<br>Rx Static Green | Blinking                 | Blinking        |  4 levels looping              |
| <b>Searching available channels</b> | Continuing search available channels<br>If system can't establish link over 80s after initialization. | Tx Blinking Green<br>Rx Static Green | Blinking                 | Blinking        |  Looping display these two OSD |
| <b>Wireless linked Mode</b>         | No input from selected source (Note B)                                                                | Static Green                         | Blinking (Quickly)       | Static Green    |                                |
|                                     | Video format not recognized (Note C)                                                                  | Static Green                         | Blinking (Slowly)        | Static Green    |                                |
|                                     | Video format is recognized                                                                            | Static Green                         | Static Green             | Static Green    | -                                                                                                               |

Notes:

- Please make sure the source device has been powered ON and the signal output is set to HDMI out; also try to re-plug the HDMI cable to make sure the HDMI connector is seated properly.
- If there is no video displayed and OSD display shows "Not Supported Format", this is an indication that the video resolution or frame rate from the computer is not supported, please refer to page 20 to switch to a supported video resolution.
- If you have more than one pair of this product, each transmitter and receiver should be at least 6.5 feet away from one another.
- If the RF connection boot-up has exceeded 80 seconds and still not established a link between the transmitter and receiver, it is due either to lost link or the transmitter is most likely out of range. You may have to verify the range and adjust or shorten the distance between your HDTV set with the transmitter and the receiver. The maximum video transmission range for 1080p content is up to 200ft. The minimum range is 6.5ft.

## 6. On Screen Display (OSD) vs. Remote Control Instruction

### Standby Mode

In Active mode, press the **POWER** button on top of the Transmitter or Receiver to have the ENTIRE system enter Standby mode or press the **OFF** button when pointing the remote at either the Transmitter or Receiver to have the ENTIRE system enter Standby mode. The HDMI OUT port on the Transmitter remains active in Standby mode.

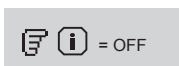
OSD Displays: (Display 3secs and then enter Standby Mode.)



### System Information

Press the **INFO** button on the remote control to display signal quality, source, channel and resolution information for user reference. Press the **INFO** button again to exit the INFO OSD.

OSD Displays:



### Source Selection

Press the arrow buttons or discrete source button to select the desired input for either the Transmitter or Receiver(s).



### IR Frequency Selection

While pointing remote control at Receiver, press the **IR** button and then the **UP** and **DOWN** keys on the remote control to change the IR Blaster frequency. The IR frequency can be switched from AUTO to 38KHz and to 56KHz.

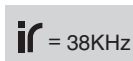
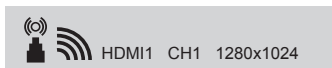
Note that the IR Blaster frequency default setting is AUTO. Press once for current IR frequency status display.

OSD Displays:  
Example



While pointing remote control at Receiver, press **UP** or **DOWN** arrows to switch IR blaster frequency.

OSD Displays:



Press **OK** to accept.

## Advanced Operation

### EDID Management

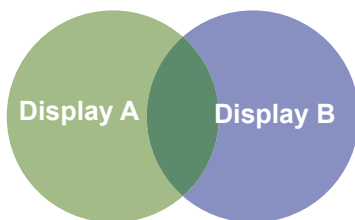
The factory default video output resolution for the GWHDM52MB is 720p, to ensure HD video on every initial set up.

Extended Display Identification Data (EDID) is a data structure provided by a digital display (i.e. HDTV or Projector) to describe its capabilities to a video source (i.e. Blu-Ray Player or HD Cable Box) such as compatible resolutions and refresh rates.

Note: If the desired video resolution is not being displayed correctly, make sure to change the video output resolution setting on your source device to AUTOMATIC. This allows the source to determine the highest output resolution that the connected display can playback.

The PRO unit provides three (3) EDID management modes for the best installation every time. This gives flexibility and power for any install or end customer's desired set up.

- EDID 1 Mode: Changes the default setting to 1080p Full HD, from previous set setting.
- EDID 2 Mode: Refreshes the screens and sets the highest common resolution of ALL the connected displays.

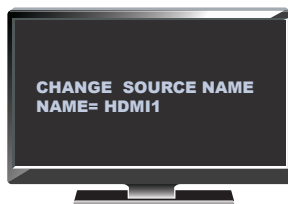
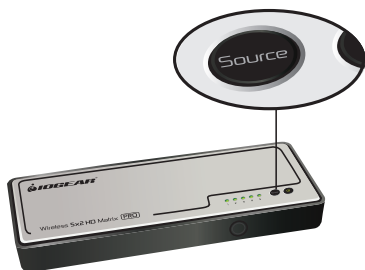


- Loop-through TV: 1080p 3D
- Remote TV: 720p
- Best Common: 720p

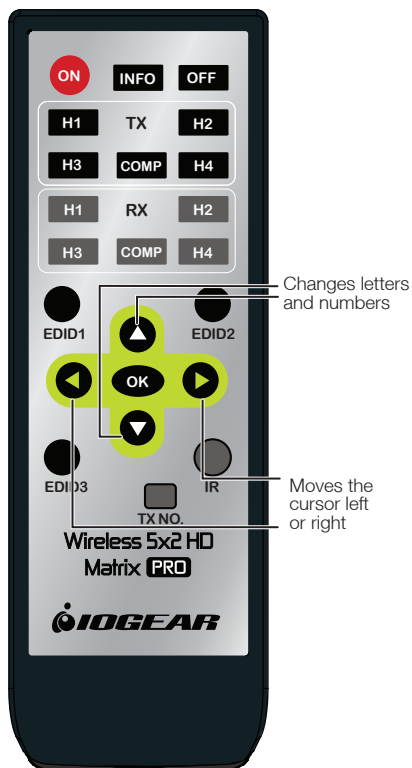
- EDID 3 Mode: Restores the factory default video resolution back to 720p

## Naming the Input Source Devices

1. Press and hold the **SOURCE** button on the Transmitter for 4~5 seconds. The source naming On Screen Display will appear.



2. To name the current source input, point the remote control towards the Transmitter and use the **UP** and **DOWN** buttons to change the alphanumeric character; use the **LEFT** and **RIGHT** buttons to move the cursor.
3. After entering the desired name for the source input, press the **OK** on the remote control or press the **SOURCE** button on the Transmitter to confirm and save the new source name.



4. The new source name will now be displayed on both the Transmitter and Receiver when selected.

## Pairing additional receivers (Part# GWHDRX01) to the existing Transmitter (Optional)

### Enter Pairing Mode for the Transmitter:

1. Unplug the power adapter from the Transmitter.
2. Press and hold down the Power button on the Transmitter.
3. Plug the power adapter back into the Transmitter.
4. Keep pressing down on the Power button until the LED indicator begins flashing orange, indicating that the Transmitter has entered into Pairing Mode.



### Enter Pairing Mode for the Receiver:

1. Unplug the power adapter from the Receiver.
2. Press and hold down the Power button on the Receiver.
3. Plug the power adapter back into the Receiver.
4. Keep pressing down on the Power button until the LED indicator begins flashing orange, indicating that the Receiver has entered into Pairing Mode.

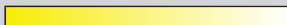


5. Once the Receiver enters pairing mode, the On Screen Display will show:

Searching...

6. The Transmitter and Receiver will pair automatically. Once the pairing process is completed, the Transmitter and Receiver will reboot and link to each other automatically.

Adding GWHDS52MB...



Note: This process MUST be repeated for every additional receiver. A total of THREE (3) additional receivers can be paired to the Transmitter.

## Supported Resolution

If the SOURCE LED continues to blink in green (slower than “no signal” mode); OSD display:  , and there is no video displayed or the video quality suffers, it indicates that the video frame rate from your A / V source device is not supported. Ensure that the consumer timing of your HDMI device is compliant with the standard listed below:

| 2D Video Format Timings     | Resolution | Support |
|-----------------------------|------------|---------|
| Primary CEA Video Timing    |            |         |
| 640x480p @ 59.94 / 60Hz     | 480p       | YES     |
| 720x480p @ 59.94Hz          |            | YES     |
| 720x480p @ 60Hz             |            | YES     |
| 720x576p @ 50Hz             | 576p       | YES     |
| 1280x720p @ 50Hz            | 720p       | YES     |
| 1280x720p @ 59.94 / 60Hz    |            | YES     |
| 1920x1080i @ 50Hz           | 1080i      | YES     |
| 1920x1080i @ 59.94 / 60Hz   |            | YES     |
| 1920x1080p @ 50Hz           | 1080p / 60 | YES     |
| 1920x1080p @ 59.94 / 60Hz   |            | YES     |
| Secondary CEA Video Timing  |            |         |
| 1920x1080p @ 23.98 / 24Hz   | 1080p / 24 | YES     |
| 1920x1080p @ 25Hz           |            | YES     |
| 1920x1080p @ 29.97 / 30Hz   |            | YES     |
| VESA Timing (DVI only)      |            |         |
| 640x480 @ 59.94 / 72.809Hz  | VGA        | YES     |
| 800x600 @ 60.317 / 72.188Hz | SVGA       | YES     |
| 1024x768 @ 60 / 70.069Hz    | XGA        | YES     |
| 1280x768 @ 60 Hz            | WXGA       | YES     |
| 1280x1024 @ 60 Hz           | SXGA       | YES     |

If the Source / Status LED continues to blink green (slower than “no signal” mode); or OSD display shows **3D**, please check the TVs that are connected to the transmitter and receiver support 3D video format and try to switch the 3D video format to one of the 3D timings listed below.

| Mandatory CEA 3D Video Format Timings         | Support |
|-----------------------------------------------|---------|
| 1280x720p @ 50Hz Top-and-Bottom               | Yes     |
| 1280x720p @ 50Hz Frame packing                | Yes     |
| 1280x720p @ 59.94 / 60Hz Top-and-Bottom       | Yes     |
| 1280x720p @ 59.94 / 60Hz Frame packing        | Yes     |
| 1920x1080i @ 50Hz Side-by-Side (Half)         | Yes     |
| 1920x1080i @ 59.94 / 60Hz Side-by-Side (Half) | Yes     |
| 1920x1080p @ 23.98 / 24Hz Top-and-Bottom      | Yes     |
| 1920x1080p @ 23.98 / 24Hz Frame packing       | Yes     |

## Audio Bit Rate Support

- Digital Audio from HDMI inputs: Up to 6Mbit/s bit-rate support.
- Support AC3 and DTS.
- 2-channel PCM: 16~24 bits audio sample with 32~96KHz sampling rate as below:

| 2channel PCM | 32KHz | 44.1KHz | 48KHz | 96KHz |
|--------------|-------|---------|-------|-------|
| 16 bits      | YES   | YES     | YES   | YES   |
| 24 bits      | YES   | YES     | YES   | YES   |

## Specifications

|                             |                                    |                                                                                                           |                                                         |
|-----------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Supported Video Resolutions | HDMI Input                         | 3D, 1080p, 1080i, 720p, 576p, 480p                                                                        |                                                         |
|                             | Component Input                    | 1080i, 720p, 576p, 576i, 480p                                                                             |                                                         |
| Supported Audio Formats     | Digital Audio                      | Up to 6 Mbps AC3 and DTS                                                                                  |                                                         |
|                             | Analog Audio                       | 48KHz and 24-bit Per Sample                                                                               |                                                         |
| Transmission Distance       |                                    | The maximum video transmission range is 200ft (the minimum range is 6.5ft). Line of sight (LOS) scenarios |                                                         |
| Remote Control Range        |                                    | 30 feet LOS                                                                                               |                                                         |
| System Latency              |                                    | Very low latency (<1ms)                                                                                   |                                                         |
| Antenna                     |                                    | High Performance Internal Antennas                                                                        |                                                         |
| Operating Frequencies       |                                    | 4.9~ 5.9GHz (Include non-DFS and DFS Frequency Bands)                                                     |                                                         |
| Power Supply                |                                    | 100~ 240V AC in, 5V DC out Power Adapter                                                                  |                                                         |
| Operating Temperature       |                                    | 0~40°C                                                                                                    |                                                         |
| <b>Interfaces</b>           |                                    | <b>Transmitter (Tx)</b>                                                                                   | <b>Receiver (Rx)</b>                                    |
| A / V Interfaces            | HDMI Input                         | Four (Type A)                                                                                             | -                                                       |
|                             | Component Input                    | One w/ specific adapter cable                                                                             |                                                         |
|                             | HDMI Output                        | One (Type A)                                                                                              | One (Type A)                                            |
| Control Signal Interfaces   | IR Sensor                          | YES                                                                                                       | YES                                                     |
|                             | IR Blaster Extender                | 2.5mm Jack                                                                                                | -                                                       |
|                             | IR Sensor Extender                 | -                                                                                                         | 2.5mm Jack                                              |
| Power Interface             | Power Input                        | 5V DC Jack                                                                                                | 5V mini USB                                             |
| Switches                    | Power Switch                       | YES (One Push Button)                                                                                     | YES (One Push Button)                                   |
|                             | Source Switch                      | YES (One Push Button)                                                                                     | YES (One Push Button)                                   |
| LEDs                        | Power LED                          | 1 x LED<br>(Two Tone: Green / Red)                                                                        | 1 x LED<br>(Two Tone: Green / Red)                      |
|                             | Source LED (Tx)<br>Status LED (Rx) | 5 x Green LEDs                                                                                            | 2 x Green LEDs: Video signal,<br>Wireless signal        |
| Dimensions inches (mm)      |                                    | 9.2"(w) x 3.8"(h) x 1.28" (h)<br>(234mm x 96.5mm x 32.5mm)                                                | 3.74"(w) x 3.74"(l) x 1.4"(h)<br>(95mm x 95mm x 35.5mm) |

## Troubleshooting

### 1. **Problem:** The power indicator LED doesn't light up.

#### **Solution:**

Check the power adapters of the Transmitter / Receiver to see if they are properly inserted into a functioning power outlet.

### 2. **Problem:** No video is displayed on your TV screen.

#### **Solution:**

- Verify that the proper cables have been selected and installed between the transmitter input and your High-Definition device output.
- On your TV side (connected to the Receiver), select the HDMI as input source.
- Verify the status of POWER LED and SOURCE / Status LED indicator as below:

|                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Power LED Flashing in Green<br/>OSD displayed:<br/>(4 levels looping)</p>           | <ul style="list-style-type: none"> <li>• Ensure that the transmission range between the transmitter and the receiver is NOT over 200 feet (LOS - line of sight) transmission distance.</li> <li>• Try to move the transmitter closer to the receiver.</li> </ul>                                                                                                                                                                                 |
| <p>POWER LED in solid Green + Slow and Flashing<br/>SOURCE LED<br/>OSD displayed:</p>  | <ul style="list-style-type: none"> <li>• Ensure that your video resolution and frame rate is recognized, supported and within the transmission range.</li> <li>• Connect the source device to your TV to check and modify the video format compatibility.</li> <li>• Check if the video resolution from your display is set to 1080p, 1080i, 720p, 576p or 480p resolution. Please refer page 20 for the detail supported Resolution.</li> </ul> |
| <p>POWER LED in solid Green<br/>status LED Flash Quickly<br/>OSD displayed :</p>     | <ul style="list-style-type: none"> <li>• Ensure the proper cables are connected between the transmitter and your A / V source devices.</li> <li>• Ensure your source devices connected to the transmitter are powered on.</li> <li>• Ensure the proper cables are connected between the receiver and your 2nd HDTV near the receiver.</li> </ul>                                                                                                 |

### 3. **Problem:** Poor picture quality or intermittent video

#### **Solutions:**

- Check if your video resolution with HDMI input from your device is either 1080p, 1080i, 720p, 576p or 480p. Please refer to page 20 where the video frame rate from your device GWHDS52MB can support is defined.
- Ensure that the transmission distance is less than 200 feet (LOS)
- Barriers - Consider an installation plan that has the least numbers of barriers (walls, panels, beams) possible between the transmitter and receiver.

\*Distances, quality and signal may vary depending on environment; solid objects such as steel, concrete and brick may view shorter distances or complete loss of signal.

**4. Problem:** No audio

**Solution:**

- Check your TV's volume is properly set and not set in "MUTE" mode.
- Check if your source player's audio volume has been turned up.
- Ensure that the bit rate of audio from the source device can be supported by GWHDMS52MB. Please refer to the details in page 27 Audio Bit Rate Support.

**5. Problem:** IR Blaster can't control Source device.

**Solution:**

- Check where is IR sensor is located on the Source device. Make sure that the IR Blaster sensor is close and straight in front of the Source device's IR sensor. Please refer Installation, step 3 for reference setup.
- Change IR Blaster frequency to meet Source device's requirement. See the page 22 for the IR blaster frequency switch.

**6. Problem:** No 3D video output. OSD displayed: Tx  and/or Rx 

**Solutions:**

Check if both TVs (including Tx and Rx side) support 3D video format. If either one of the TVs only supports 2D format, then 3D output might not be supported.

- If user wants to display 3D video on HDTV which supported 3D video, please turn off the 2D HDTV and press the EDID 2 button while pointing to the transmitter or the receiver. Then set the source player to 3D video format output for the 3D display.
- Check the video output setting of Source player (ex. Blu-ray Disc, PS3..etc.). If the video output setting of Source player is 3D video format, it might produce a display on the HDTV which not supports 3D format.
- 3D video format do not support on current equipments status. If user wants to display 3D video on HDTV which supported 3D video, please turn off 2D HDTV and RE-power on 3D HDTV. Then set the source player to 3D video format output for the 3D display.
- 3D video format do not support on current equipments status. Please switch the 3D video format to HDMI 1.4a 3D format. Please check page 27 for a list of all supported 3D format of this product.

## Federal Communications Commission (FCC) Statement

The user is cautioned that this device should be used only as specified within this manual to meet RF exposure requirements. Use of this device in a manner inconsistent with this manual could lead to excessive RF exposure conditions.

## CE Compliance

This device has been tested and found to comply with the following European Union directives: Electromagnetic Capability (2004/108/EC), Low Voltage (2006/95/EC) and R&TTED (1999/5/EC).

## Limited Warranty

### Warranty Information

This product carries a 1 Year Limited Warranty. For the terms and conditions of this warranty, please go to <http://www.iogear.com/support/warranty>

Register online at <http://www.iogear.com/register>

### Important Product Information

Product Model \_\_\_\_\_

Serial Number \_\_\_\_\_

## Contact

### WE'RE HERE TO HELP YOU! NEED ASSISTANCE SETTING UP THIS PRODUCT?

Make sure you:

1. Visit [www.iogear.com](http://www.iogear.com) for more product information
2. Visit [www.iogear.com/support](http://www.iogear.com/support) for live help and product support

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