



# User Guide

## Wireless HD multimedia system

MODEL: HDS-WHDI100



HDMI™  
HIGH-DEFINITION MULTIMEDIA INTERFACE

peerless-AV®



## GENERAL SAFETY PRECAUTIONS

### WARNING

#### RISK OF ELECTRICAL SHOCK

To reduce the risk of electric shock, do not disassemble the unit under any circumstances. No user serviceable parts inside. All product services should be done by the Peerless-AV certified service personnel.

#### Read before operating equipment

Thank you for purchasing our product. Before using it, please read this user manual carefully and follow the instructions correctly for safe operation. Please keep this manual handy for future reference. Also, please be sure to always include this user manual in the packaging when transferring or transporting this product to a different location.

#### Batteries Installed Warning

**CAUTION** - Danger of explosion if batteries are incorrectly replaced. Replace only with the same or equivalent type. The batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

#### CAUTION:

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do NOT perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

- Power to the units must be switched off before any work is undertaken, such as any AV device connection or TV connection.
- To prevent electric shock, make sure to use the supplied DC adapters as power supply to the Transmitter and Receiver.
- Be sure the power cord is routed so that it will not be stepped on or pinched by heavy items.
- Avoid overloading electrical outlets or extension cords which otherwise could result in electric shock or fire.
- Disconnect the product from the power source if it is left unattended for an extended period of time, and to protect the product from lightning.
- To reduce the risk of electric shocks or fire, always disconnect the power cord from the power outlet when you are not using your device for an extended period of time.
- This product should not be exposed to dripping or splashing liquids. No object filled with liquids, such as vases, should be placed on the product.
- To avoid electric shock, never stick anything in the slots on the case or remove the cover.
- Place Transmitter and Receiver on a flat, hard and stable surface.
- Do NOT block the ventilation slots on the Transmitter or Receiver or place any heavy object on the top cover. Blocking the airflow could damage the Transmitter or Receiver. Arrange components so that air can flow freely around the Transmitter and Receiver. Ensure that there is adequate ventilation if the Transmitter and/or Receiver is placed in a cabinet. Put the Transmitter and Receiver in a properly ventilated area, away from direct sunlight or any source of heat.
- To reduce the risk of fire or electric shock, do NOT expose the Transmitter and/or Receiver to water or moisture.
- This product is intended for indoor use only.

## ⚠ WARNING

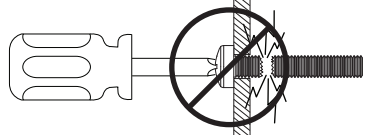
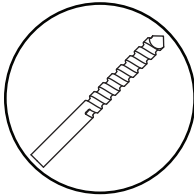
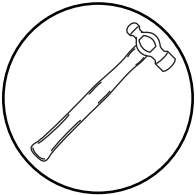
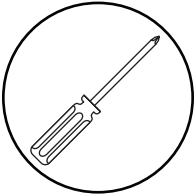
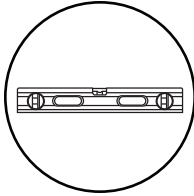
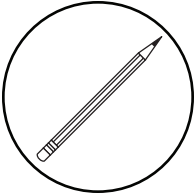
ENG - Before installing make sure the supporting surface will support the combined load of the equipment and hardware. Screws must be tightly secured. Do not overtighten screws or damage can occur and product may fail. Never exceed the Maximum Load Capacity. Always use an assistant or mechanical lifting equipment to safely lift and position equipment. This product is intended for indoor use only. Use of this product outdoors could lead to product failure or personal injury. For support please call customer care at 1-800-865-2112.

### ENG Symbols



### ENG WARNING

### ENG Tools Needed for Assembly.

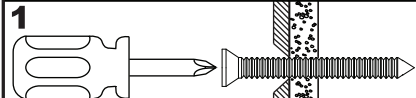


ENG Do not overtighten screws.

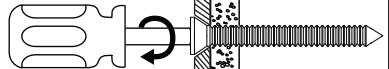


ENG To properly tighten screws: Tighten until screw head makes contact, then tighten another 1/2 turn. Do not overtighten screws.

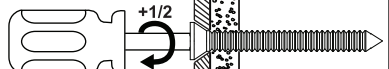
1



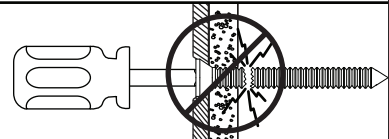
2



3



4



# Federal Communication 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:

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

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this 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.

## FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

## Radiation Exposure Statement (Transmitter):

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

## Radiation Exposure Statement (Receiver):

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

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only



## Industry Canada Statement

-English Warning Statement:

"This device complies with Industry Canada licence-exempt RSS standard(s).

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."

The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

-French Warning Statement:

"Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

**Radiation Exposure Statement:** This equipment complies with ISED radiation exposure limits set forth for an un-controlled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

### **Déclaration d'exposition aux radiations:**

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED 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.

## Important Information

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- The PeerAir™ Wireless HD Multimedia System delivers Full HD 1080p content to your existing HDTV set wirelessly.
- This system operates in the 5GHz RF band and creates an 802.11n AdHoc network for communication between transmitter and receiver. With dual external omnidirectional antennas, this system transmits Full HD 1080p content up to 100ft (30m) away line of sight.
- Never use this product in an aircraft or a medical facility as it can cause interference or an undesirable effect.
- The use of this product in the following locations may result in abnormal video and audio output (noise, blocked image... etc.).
  - When the product is placed near a large appliance or metal structure.
  - 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 installations. If interference happens, decrease the distance between the Transmitter and Receiver.
- This product may interfere with 5GHz wireless devices.
- Optimal use of this product is for in-room/multi-room applications with a range of up to 100 ft. (30m) away line of sight.
- Any changes or modifications not expressly approved by the manufacturer of this device could void the product warranty.
- This equipment must be installed and operated in accordance with the provided instructions. The Transmitter must be installed to provide a separation distance of at least 8" (20cm) from all persons and must not be operating near or in conjunction with any other Transmitter. End users and installers must be provided with installation instructions and Transmitter operating conditions for satisfying RF exposure compliance.
- 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.
- CEC/ HDMI Control - The HDS-WHD100 does not support CEC/HDMI Control. Please ensure that CEC/ HDMI Control is disabled on all connected source equipment and displays. Instructions for this process can be found in the User Manuals for the connected devices.

## Care Of The Unit

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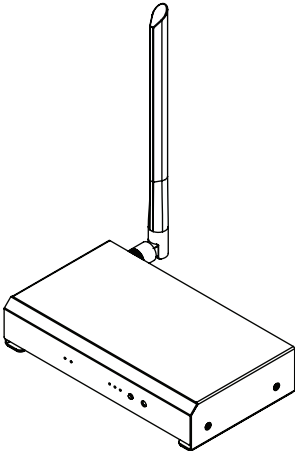
To clean, use a soft, dry cloth only. Do not use water or other cleaning products as they may cause electrical failure or damage the surface of the product.

# Parts List

|   | Description      | Qty |
|---|------------------|-----|
| A | transmitter      | 1   |
| B | receiver         | 1   |
| C | antenna          | 2   |
| D | remote control   | 1   |
| E | DC power adaptor | 2   |
| F | IR blaster       | 1   |
| G | IR extender      | 1   |

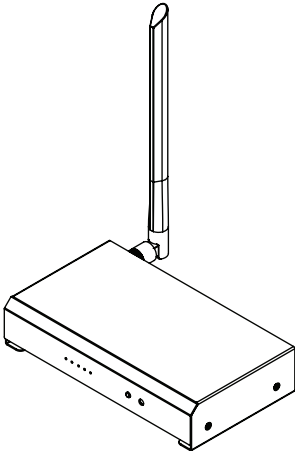
**A (1)**

transmitter



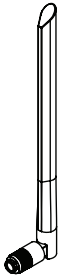
**B (1)**

receiver



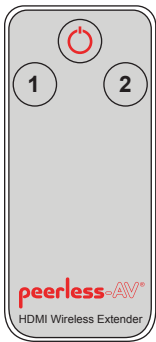
**C (2)**

antenna



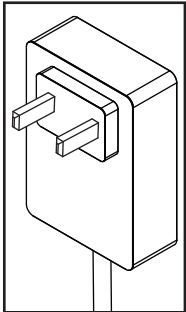
**D (1)**

remote control



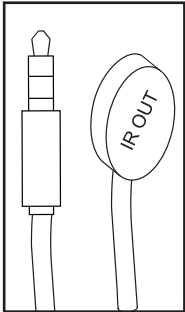
**E (2)**

DC power adaptor



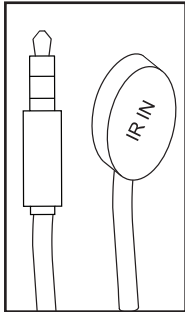
**F (1)**

IR blaster

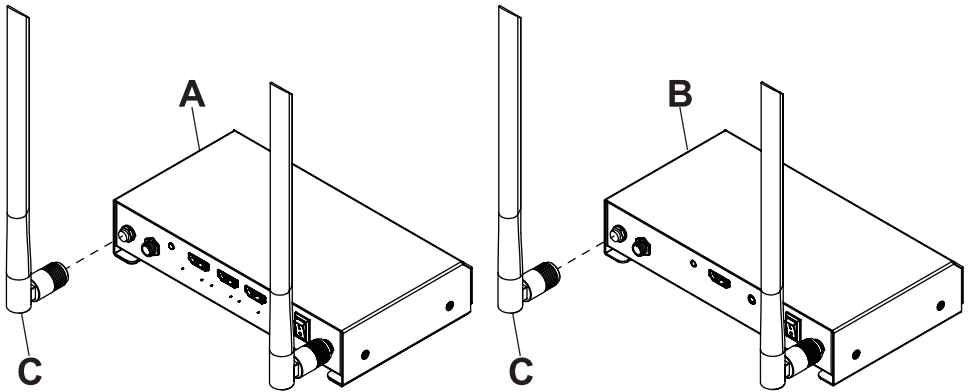


**G (1)**

IR extender



# 1

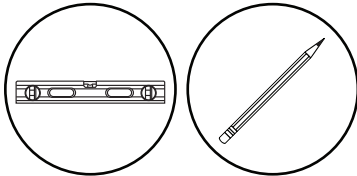


# 2

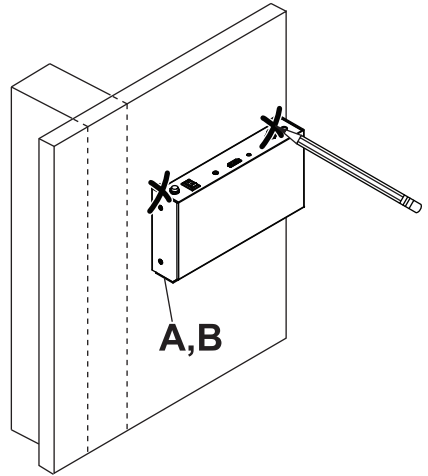
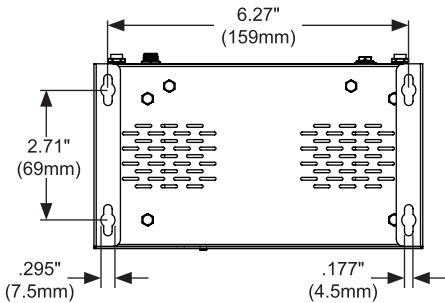
## ▲ WARNING

ENG - When installing Peerless media devices directly to gypsum board (drywall), verify that the gypsum board (drywall) has a minimum depth of 5/16" (8mm).

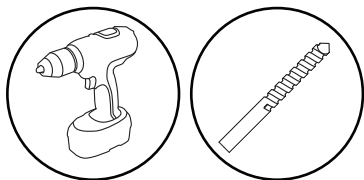
# 2-1



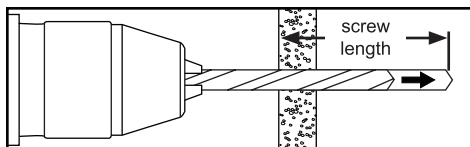
**ENG** Level. Use dimensions below to mark mount holes.



## 2-2

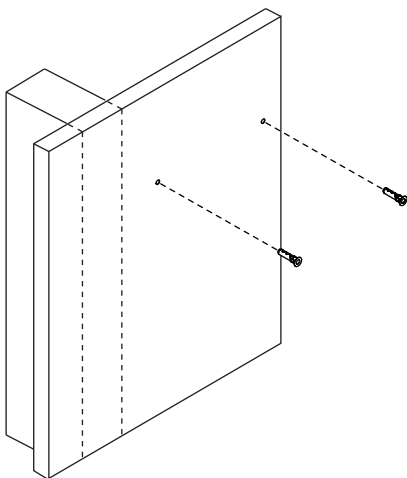
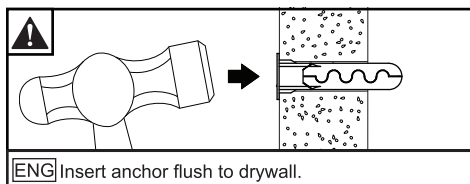
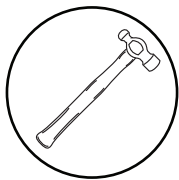


**ENG** Drill mounting holes into supporting surface (minimum depth = screw length).



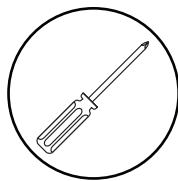
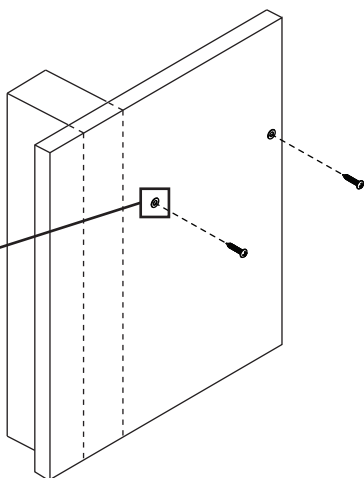
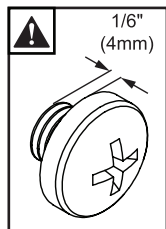
## 2-3

**ENG** Mounting hardware not supplied.



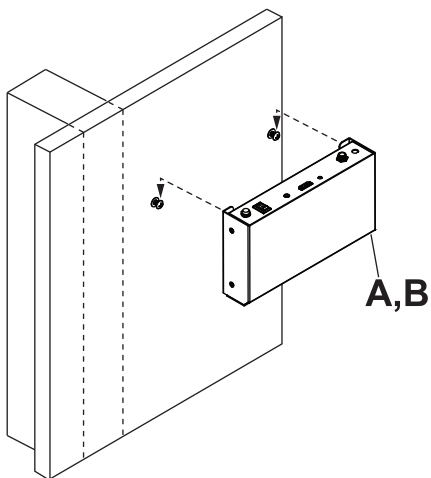
## 2-4

**ENG** Mounting hardware not supplied.

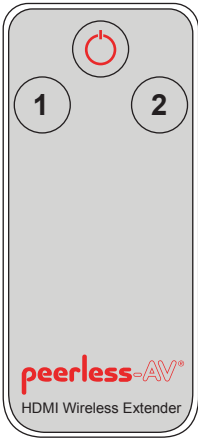


## 2-5

**ENG** Install.



# Using the Remote Control



## Power

- Toggles transmitter and receiver to standby mode

1

- Switches input to HDMI 1

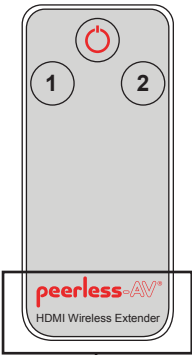
2

- Switches input to HDMI 2

## Remote Control Battery Installation And Replacement

The remote control is powered by one CR2025 battery.

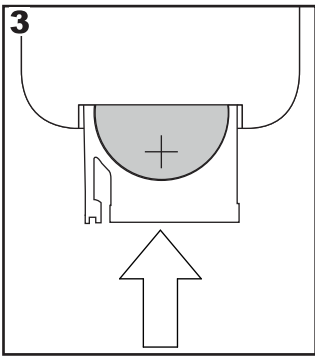
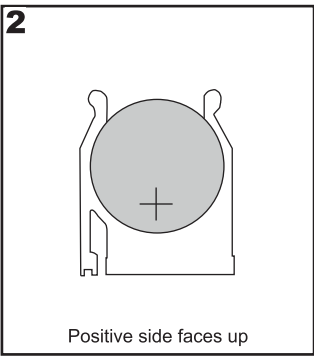
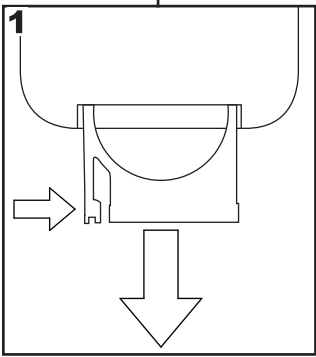
1. To remove the battery cover of the remote control, pinch then pull out battery cover.
2. Insert new CR2025 battery into the battery module with positive side facing up.
3. Slide the battery cover back into the remote control.



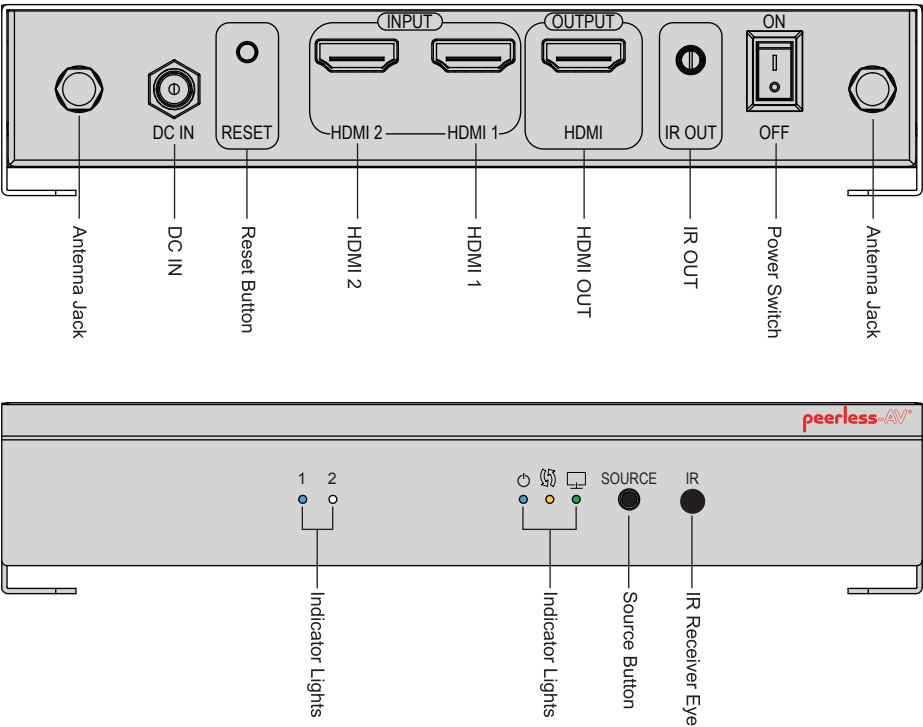
## CAUTION

Incorrect usage of batteries can result in leaks or bursting. Peerless-AV recommends the following battery use:

- Remove dead batteries immediately to prevent battery acid from leaking into the battery compartment.
- Do not touch exposed battery acid as it may injure skin.
- Remove the batteries if you do not intend to use the remote control for a long period of time.



# Transmitter Connection Panel



## Antenna Jack

- Connects antenna to transmitter

## Power Switch

- Toggles power on/off

## IR OUT

- Connects IR blaster to the transmitter for remote control of AV devices that are connected to the transmitter (e.g. Blu-ray player, DVD, STB, etc.)

## HDMI OUT

- HDMI pass-through output port

## HDMI 1

- HDMI 1 input port

## HDMI 2

- HDMI 2 input port

## Reset Button

- Re-establishes connection with the receiver

## DC IN

- 5V DC power input port

## IR Receiver Eye

- Accepts commands from Peerless-AV remote only

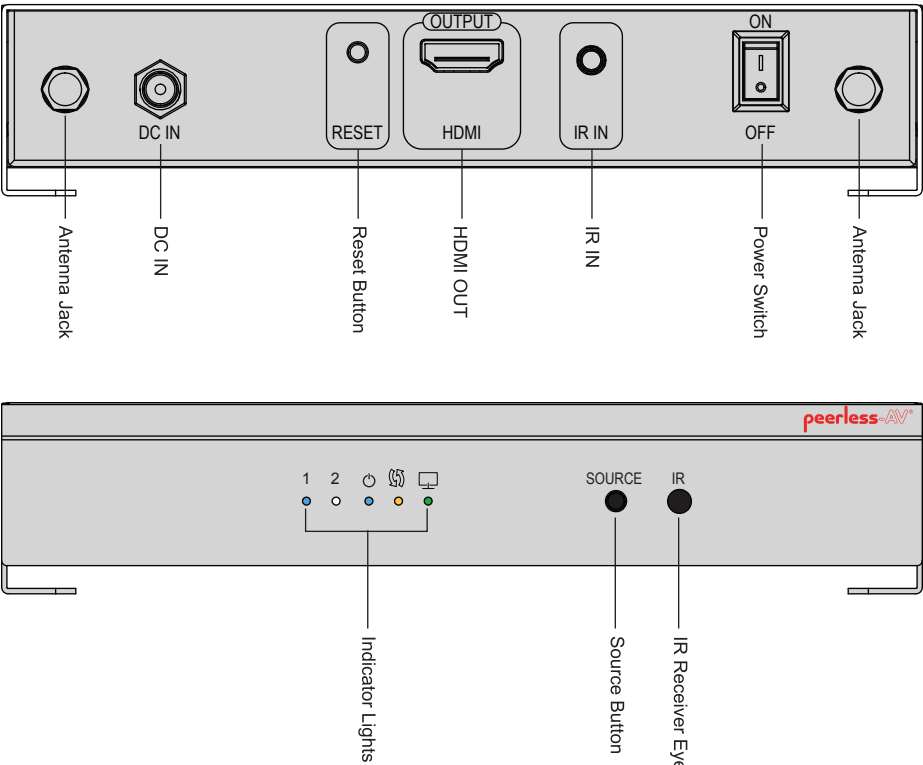
## Source Button

- Toggles AV device inputs

## Indicator Lights

- Indicates power, connection, signal and source

# Receiver Connection Panel



## Antenna Jack

- Connects antenna to receiver

## Power Switch

- Toggles power on/off

## IR IN

- Allows IR commands to be sent to the system and source equipment remotely when IR extender is connected

## HDMI OUT

- HDMI output port

## Reset Button

- Re-establishes connection with the transmitter

## DC IN

- 5V DC power input port

## IR Receiver Eye

- Accepts commands from Peerless-AV remote only. For control of source equipment the IR extender must be connected to the IR in port of the receiver

## Source Button

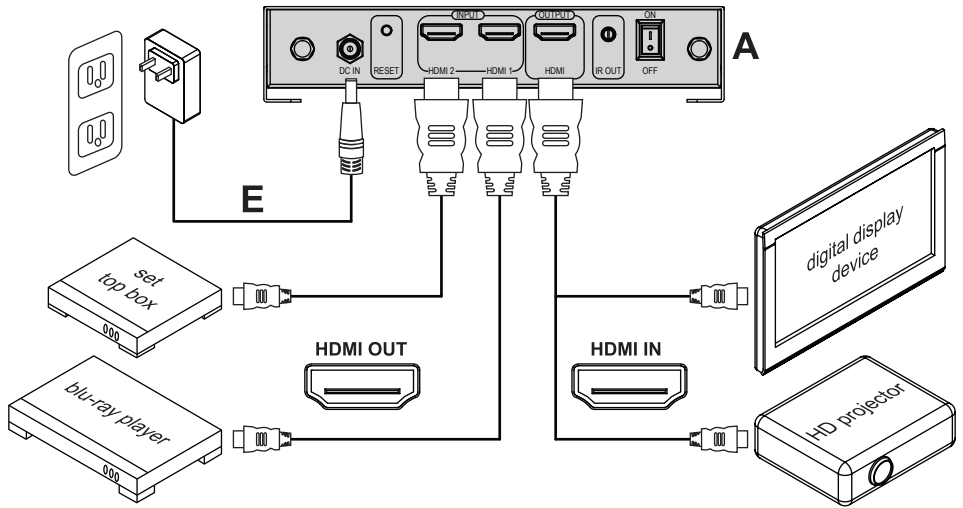
- Toggles AV device inputs

## Indicator Lights

- Indicates power, connection, signal and source

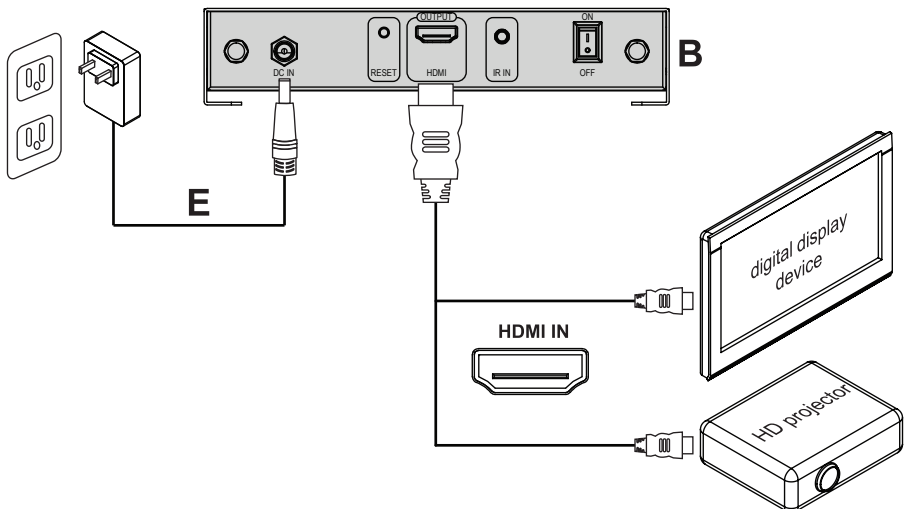
## Transmitter Setup

1. Connect HDMI cable (not included) from source device's **HDMI OUT** port to Transmitter's **HDMI 1** port. Repeat for **HDMI 2** port if a second source device is to be connected.
2. (Optional) If connecting to digital display device using wired connection, plug HDMI cable (not included) from Transmitter's **HDMI OUT** port to digital display device's **HDMI IN** port.
3. Plug DC Power Adapter into power outlet.



## Receiver Setup

1. Connect HDMI cable from Receiver's **HDMI OUT** port to digital display device's **HDMI IN** port.
2. Plug DC power adapter into a power outlet.



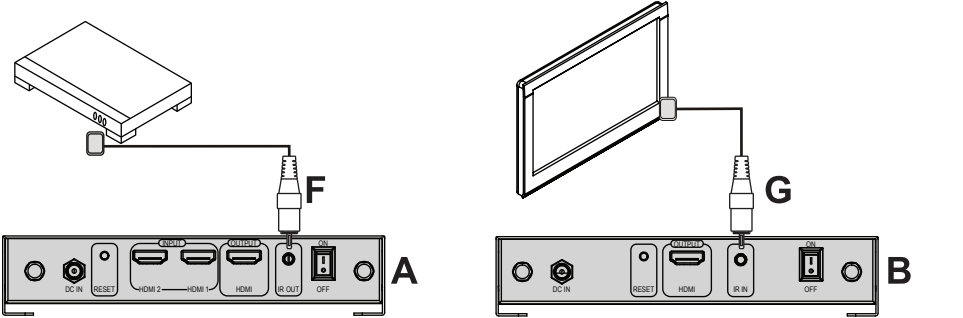
# IR Blaster and Extender Setup

Connect the IR Blaster into the **IR OUT** port of the Transmitter. Place the IR Blaster near the IR window of the source devices and adhere the IR Blaster in place, so that it does not move.

Connect the IR Extender into the **IR IN** port of the Receiver. Adhere the IR Extender Eye in a location that is unobstructed. The IR Extender Eye is where the remote should be aimed for source or system control

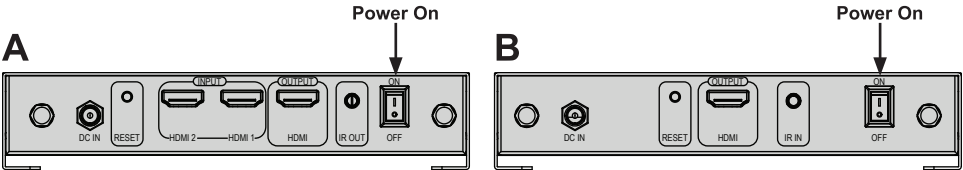
When the IR Blaster and IR Extender are connected, source devices can be controlled from Receiver location.

Note: The IR extender supports 20KHZ - 60KHz carrier frequencies.

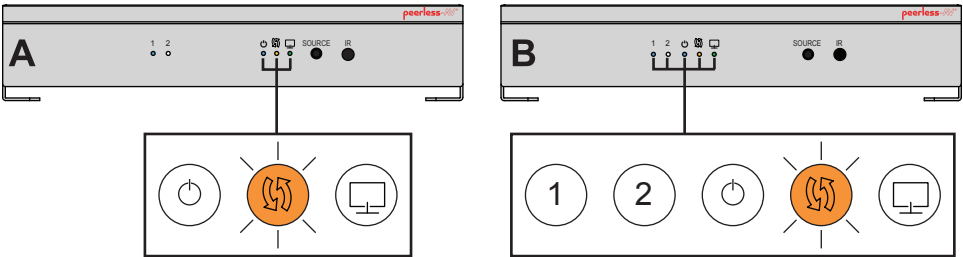


## System Operation

1. Power on the transmitter, receiver and the display that you would like to view content on.

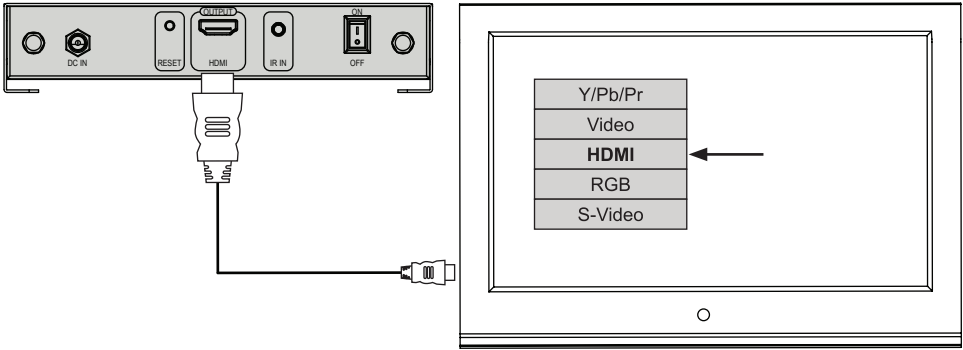


2. During boot-up, the connection indicator light will slowly blink orange until the signal link between the Transmitter and Receiver is established, between 60 - 70 seconds. Once the transmitter and receiver have established a connection the orange connection indicator light will begin to blink rapidly.

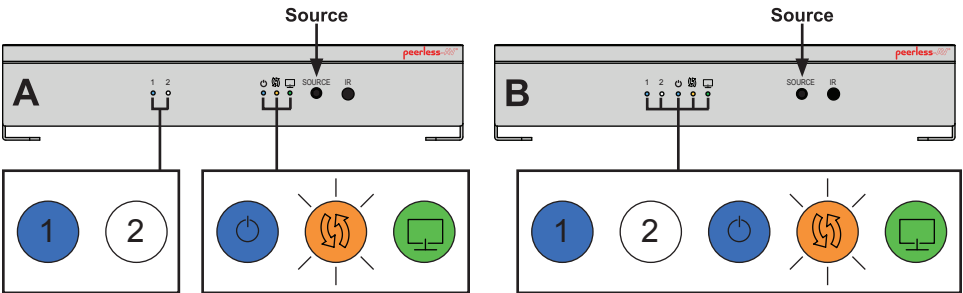
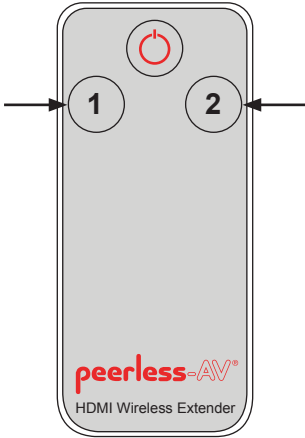


# System Operation

3. Check that your digital display device is turned on and set to the proper HDMI input.



4. Press the desired HDMI input on the remote control, or the **SOURCE** button on the front of the Transmitter or Receiver, to select the desired AV source input.



5. Under normal operation the Power indicator light will be illuminated solid blue, the orange connection light will rapidly blink orange, the signal detection light will illuminate solid green, the selected source indicator light will be solid blue and the unselected source light will not be illuminated.

## Troubleshooting

|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Power indicator light does not light up</b>            | <ul style="list-style-type: none"> <li>• Check the power connections on the transmitter and receiver to ensure they are properly inserted into a functioning power outlet.</li> <li>• Ensure the power switch is in the ON position.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                              |
| <b>No video is displayed on screen</b>                    | <ul style="list-style-type: none"> <li>• Verify that the proper cables have been selected and installed between the Transmitter input and your source device output.</li> <li>• On the digital display device's side (connected to the Receiver), select the HDMI port that the receiver is connected to as the input source.</li> <li>• Ensure the transmission range between the Transmitter and Receiver is NOT over 100 ft. (30m) line of sight (LOS)</li> <li>• Move the Transmitter closer to the Receiver.</li> </ul>                                                                                                 |
| <b>"Please check TX input signal" displayed on screen</b> | <ul style="list-style-type: none"> <li>• Ensure your video resolution and frame rate is supported and within the transmission range.</li> <li>• Connect the source device to your digital display device to check and modify the video format compatibility.</li> <li>• Check that the resolution of your source device is set to 1080p, 1080i, 720p, 576p, 576i, 480p, or 480i. Refer to the Supported Resolution section.</li> <li>• Ensure the proper cables are connected between the Transmitter and your source devices.</li> <li>• Ensure your source devices connected to the Transmitter are powered on.</li> </ul> |
| <b>No signal displayed on screen</b>                      | <ul style="list-style-type: none"> <li>• Ensure the proper cables are connected between receiver and digital display device.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Poor picture quality or intermittent video</b>         | <ul style="list-style-type: none"> <li>• Check that the resolution of your device is set to 1080p, 1080i, 720p, 576p, 576i, 480p, or 480i. Please refer to the Supported Resolution section.</li> <li>• Ensure the transmission distance is less than 100 ft. (30m) line of sight (LOS).</li> </ul>                                                                                                                                                                                                                                                                                                                          |
| <b>No audio</b>                                           | <ul style="list-style-type: none"> <li>• Check your digital display device's volume is properly set and not set to "MUTE" mode.</li> <li>• Check if your source device's audio volume has been turned up.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>IR Blaster cannot control AV device</b>                | <ul style="list-style-type: none"> <li>• Ensure that the IR extender is plugged into the IR IN port on the Receiver and that the source remote is being aimed at the extender.</li> <li>• Check the location and position of the IR Blaster on the AV device. Refer to IR Blaster Setup in the Setup and System Operation section of this manual.</li> </ul>                                                                                                                                                                                                                                                                 |

Supported Resolutions

| Video Format Timings       | Resolution | Support |
|----------------------------|------------|---------|
| Primary CEA Video Timing   |            |         |
| 720x480i @ 60Hz            | 480i       | YES     |
| 720x480p @ 60Hz            | 480p       | YES     |
| 720x576i @ 50Hz            | 576i       | YES     |
| 720x576p @ 50Hz            | 576p       | YES     |
| 1280x720p @ 50Hz           | 720p       | YES     |
| 1280x720p @ 60Hz           |            | YES     |
| 1920x1080i @ 50Hz          | 1080i      | YES     |
| 1920x1080p @ 50Hz          | 1080p      | YES     |
| 1920x1080p @ 60Hz          |            | YES     |
| Secondary CEA Video Timing |            |         |
| 1920x1080p @ 24Hz          | 1080P / 24 | YES     |
| 1920x1080p @ 25Hz          |            | YES     |
| 1920x1080p @ 30Hz          |            | YES     |
| PC Resolutions             |            |         |
| 800x600p @60Hz             | 600p       | YES     |
| 1280x720p @60Hz            | 720p       | YES     |
| 1360x765p @60Hz            | 765p       | YES     |
| 1024x768p @60Hz            | 768p       | YES     |
| 1280x768p @60Hz            |            | YES     |
| 1366x768p @60Hz            |            | YES     |
| 1280x800p @60Hz            | 800p       | YES     |
| 1440x900p @60Hz            | 900p       | YES     |
| 1280x1024p @60Hz           | 1024p      | YES     |
| 1440x1050p @60Hz           | 1050p      | YES     |
| 1680x1050p @60Hz           |            | YES     |
| 1920x1080p @60Hz           | 1080p      | YES     |

Audio Bit Rate Support

• 2-channel PCM: 16 - 24 bits audio sampling with 32 - 192KHz sampling rate as below:

| 2 Channel PCM | 32 - 192 KHz |
|---------------|--------------|
| 16 bits       | YES          |
| 24 bits       | YES          |

Product Specifications

| HDS-WHDI100                 |                                     |                                             |
|-----------------------------|-------------------------------------|---------------------------------------------|
| Supported Video Resolutions | HDMI Input                          | 1080p, 10080i, 720p, 576p, 576i, 480p, 480i |
| Supported Audio Resolutions | Digital Audio                       | LPCM, PCM                                   |
| Transmission Distance       | Up to 100 feet line of sight        |                                             |
| Antenna                     | 4x omnidirectional (external)       |                                             |
| Operating Frequencies       | 5.745-5.825GHz                      |                                             |
| Power Supply                | 100-240V AC in, 5V DC power adaptor |                                             |
| Operating Temperature       | 32° F - 140° F (0° C - 60° C)       |                                             |
| Operating Relative Humidity | 10% - 90%                           |                                             |

\* Transmission distance will depend on actual environment. Distance based on line-of-sight. Structures constructed of steel, wood, concrete, or/and brick may decrease transmission distance.

| Interface              | Transmitter                              | Receiver                                 |
|------------------------|------------------------------------------|------------------------------------------|
| Dimensions (W x H x D) | 6.85" x 1.41" x 5.43" (174 x 36 x 138mm) | 6.85" x 1.41" x 5.43" (174 x 36 x 138mm) |

## ONE YEAR LIMITED WARRANTY

The Product is warranted to be free from defects in material and workmanship, given normal use and care, for 1 Year from the original purchase date with proof of purchase. Please retain a copy of your receipt as you will need this to obtain warranty work. We will repair or replace the product which fails as a result of such a defect during the warranty period. The accessories are not covered by this warranty.

**This warranty is the customers' exclusive remedy for product defect and does not apply to:**

- Any modifications made to the product in any way by the consumer
- Attachments to the product by the consumer that causes product damage
- Any product which the seals/and or serial numbers and/or logos have been broken, removed or tampered with, defaced, or altered in any manner
- Damage caused by abuse, misuse, accident, water, or theft
- Physical damage
- Loss of the Accessories

Except as stated above, Peerless Industries, Inc. makes no express or implied warranties as to any product, in Particular, makes no warranty of merchantability or fitness for any particular purpose. Peerless Industries, Inc. shall not be liable for consequential or incidental damages arising from any product defect. Our liability is limited to replacement of any defective product as stipulated under the warranty conditions. Peerless Industries, Inc. expressly disclaims all warranties not satisfied in this limited warranty. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty.



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