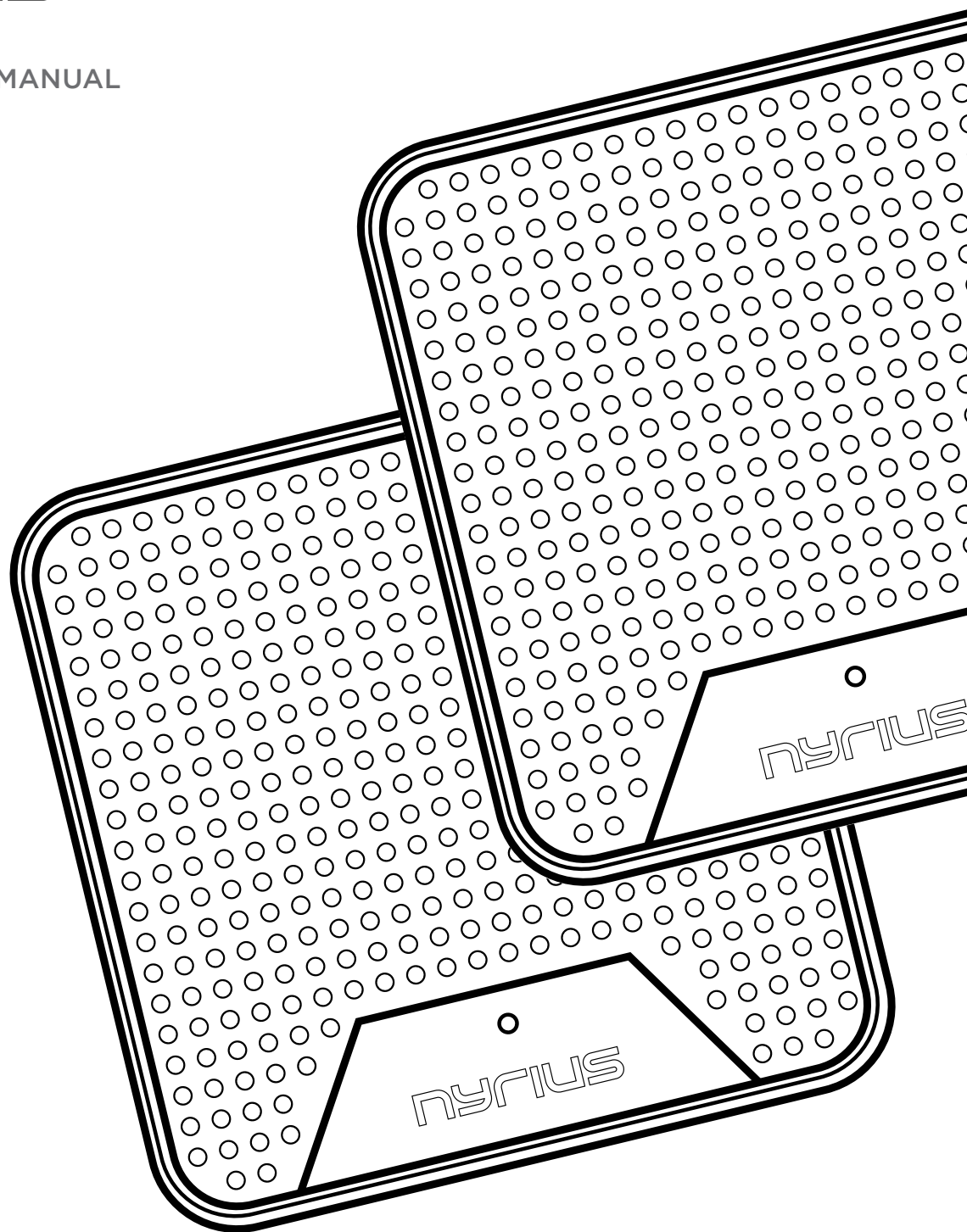


# nyrius®

WS54

INSTRUCTION MANUAL



WIRELESS HD TRANSMITTER

CONTENT

WHAT’S INCLUDED..... 3

OVERVIEW ..... 3

INSTALLATION ..... 4

LED BEHAVIOR .....7

WALL MOUNTING..... 9

TROUBLESHOOTING .....10

SPECIFICATIONS ..... 13

FCC STATEMENT .....14

IC STATEMENT.....14

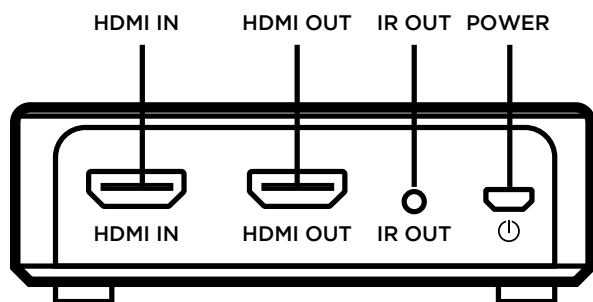
SAFETY INFORMATION.....15

WARRANTY.....16

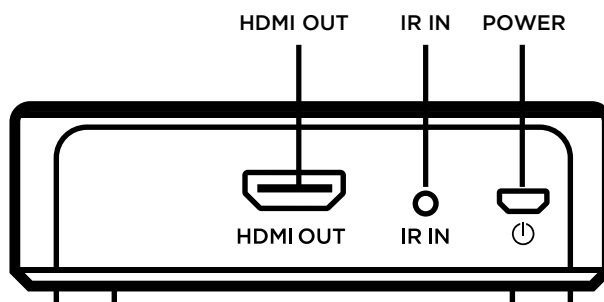
## WHAT'S INCLUDED

- Digital Wireless HD Transmitter
- Digital Wireless HD Receiver
- 2x External IR Remote Extender
- 2x 100-240V AC Power Adapters
- 5ft HDMI Cable
- 2x Screws/Screw Anchors
- 1 Year Warranty
- Lifetime Customer Support

## OVERVIEW



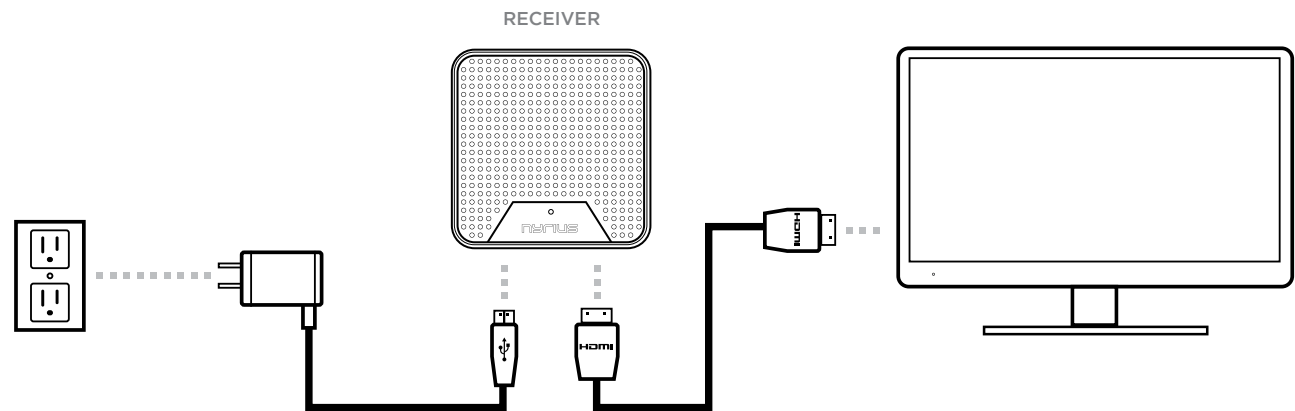
TRANSMITTER



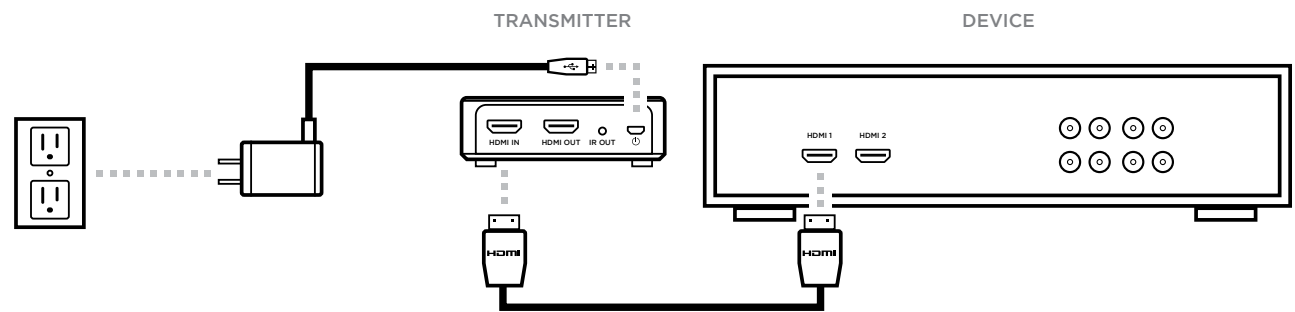
RECEIVER

# INSTALLATION

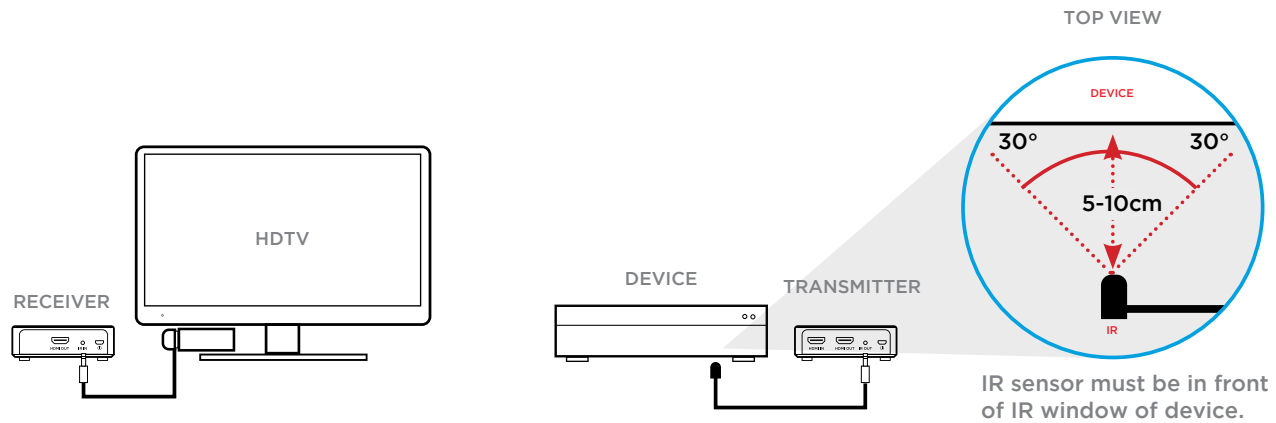
## RECEIVER



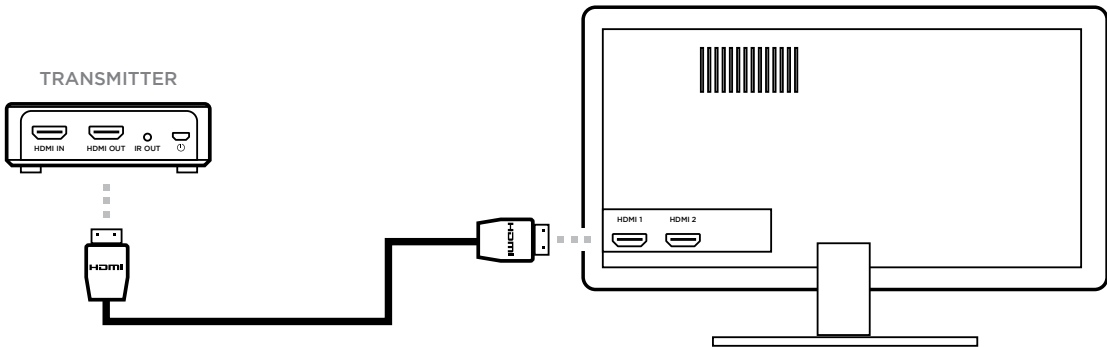
## TRANSMITTER



IR EXTENDER SETUP



OPTIONAL: HDTV TO TRANSMITTER



## SPLASH SCREENS



### CONNECTING SCREEN:

Receiver is searching for Transmitter. Please wait.



### TROUBLESHOOTING SCREEN:

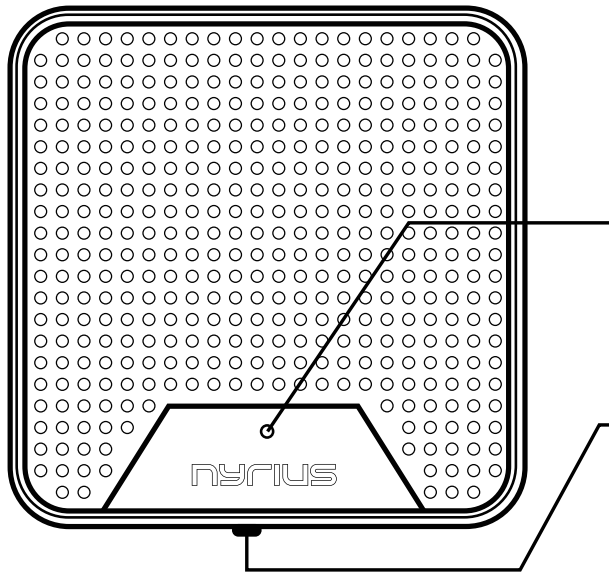
Receiver has not yet found Transmitter, please check the displayed tips to ensure connection.



### PAIRING MODE SCREEN:

Receiver has entered manual pairing mode.

## LED BEHAVIOR



### WHEN CONNECTED:

LED will remain solid white permanently

### WHEN NOT CONNECTED:

LED will turn on for 1 second, then off for 3 seconds and repeat

### PAIRING BUTTON:

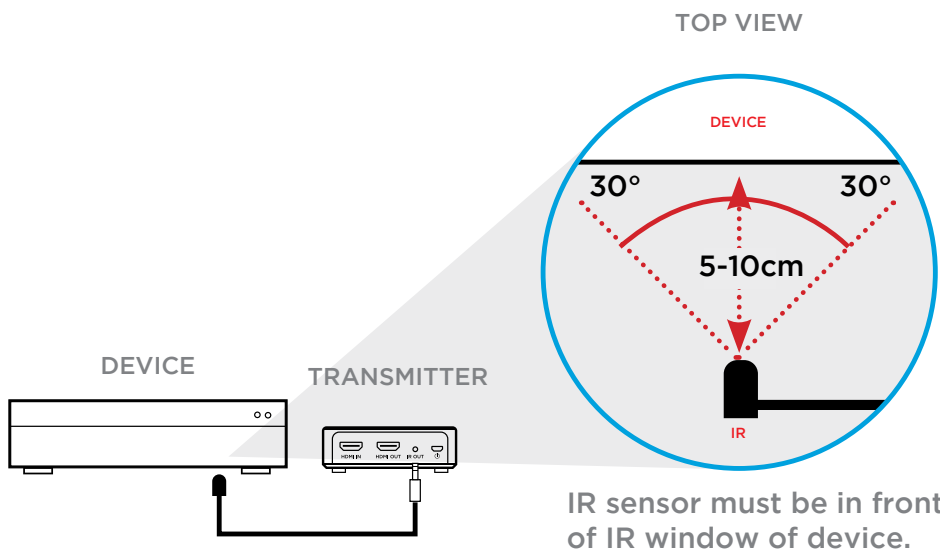
To use to pair with additional receivers or to manually re-pair included Transmitter and Receiver.

**NOTE:** Transmitter and Receiver are already paired when manufactured.

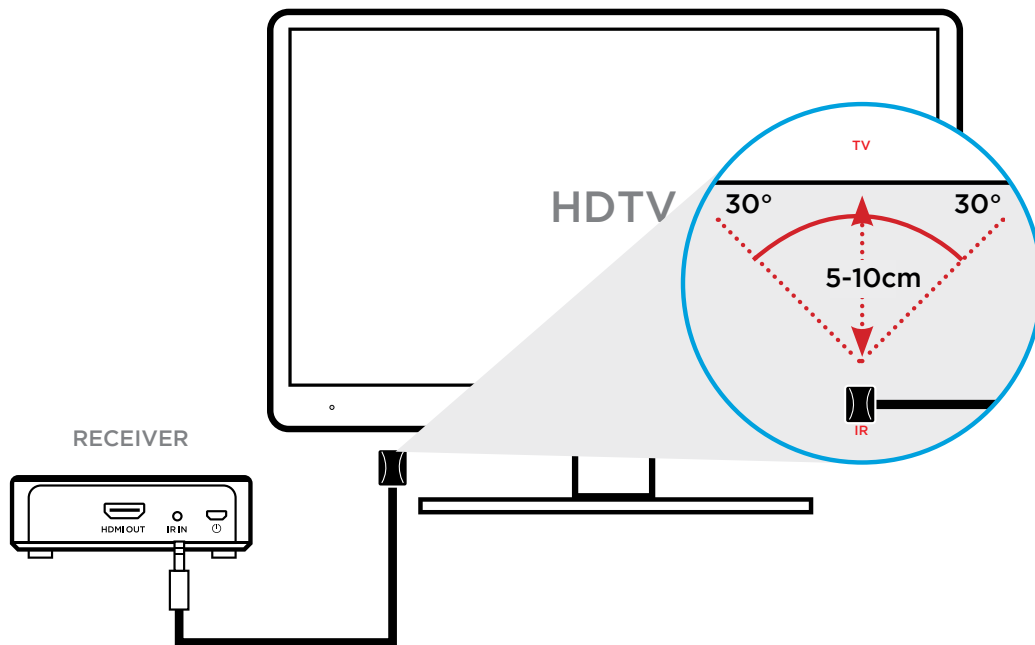
## IR EXTENDER

Plug the external IR remote extender lead into the IR socket on the back of the transmitter

1. Place the IR remote extender bubble in front of the HD device



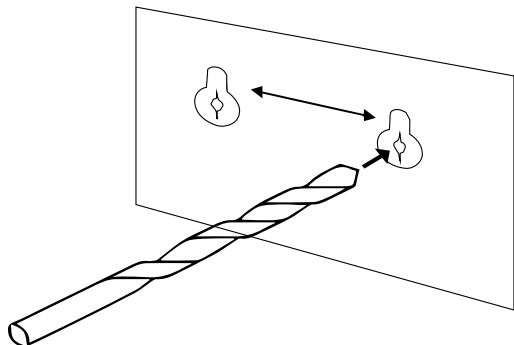
2. Plug the external IR remote extender lead into the IR socket on the back of the receiver
3. Place the IR remote extender bubble in front of the TV



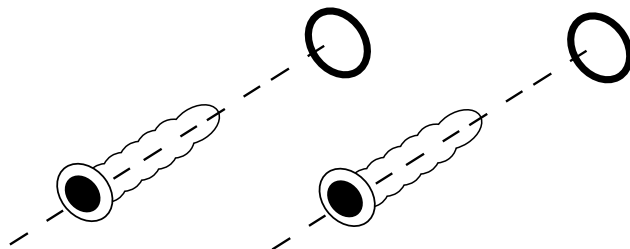


## WALL MOUNTING

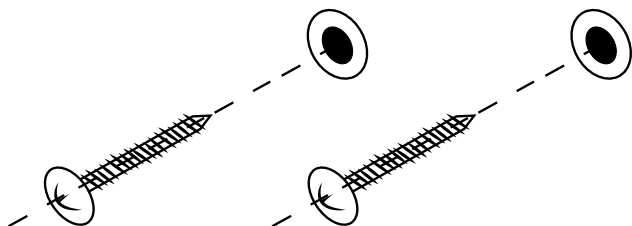
1. Drill pilot holes.



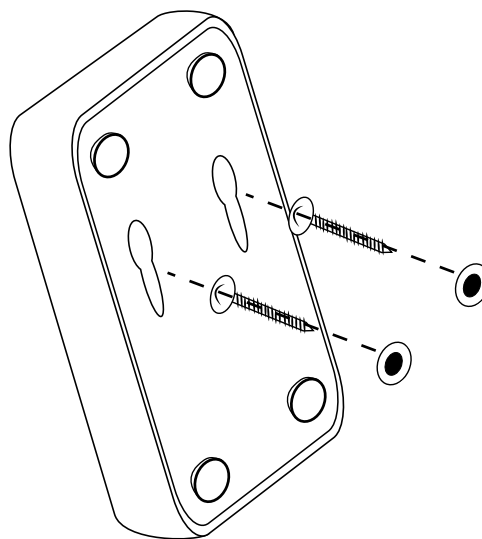
2. Insert the supplied two Anchors into the wall.



3. Insert two screws into the anchors. Leave 1/8" length for mounting the Transmitter or receiver.



4. Place WS54 main holes over the protruding screws and slide down into position.



## TROUBLESHOOTING

No Video	<p>Check the status of the Link LEDs, and check if the HD device is working normally.</p> <p>Check the HDMI lead is undamaged and is plugged into the correct socket.</p> <p>Check that the correct HDMI output has been selected from the HD device's menu and that the HDMI lead is plugged into the correct output socket.</p> <p>Check that the correct HDMI input has been selected from the TV menu and that the HDMI lead is plugged into the input socket selected.</p> <p>Make sure that it is the Receiver that is connected to the HDTV display, and the Transmitter that is connected to your HD device.</p>
Power LED OFF	Make sure the power is connected, and check the power adapter output 5V/3A DC.
Transmitter Video LED OFF	<p>Check the HD device is powered on.</p> <p>Make sure the Transmitter is powered on. Make sure the HD device is on, connected to the HDMI socket and outputting a supported resolution (1080p, 1080i, 720p, 720i, 576p, 576i, 480p).</p>
Receiver Video LED is ON	<p>Part of the system is not properly connected or the signal received is not of good enough quality/strength.</p> <p>Make sure the HD display is connected, switched ON and set to the right channel/input (e.g. HDMI channel).</p> <p>Check the HDMI lead is undamaged and is plugged into the correct socket.</p>
Transmitter / Receiver Link LED Flashes	<p>Make sure the Transmitter and Receiver are not positioned too far apart. Move them closer together to check minimum effective range.</p> <p>Make sure the HD device is switched ON and had been connected to Transmitter.</p>
Bad Picture	<p>Make sure the HDMI leads used are undamaged and that you can get a good picture when the source is connected directly to the display with an HDMI lead.</p> <p>Make sure nothing is touching or blocking the signal to the built in antennas.</p> <p>Move Transmitter and Receiver closer together. Restart the HD device or reconnect the HDMI lead.</p>
Bad Audio/ No Audio	<p>Make sure that the source is outputting supported audio formats. If the audio signal drops out, restart the audio source and reconnect the HDMI lead. Make sure there is no 5.8GHz wireless phone within 50cm of the Receiver.</p> <p>Some phones use substandard transmission schemes.</p>
Other Issues/ Unresolved Issues	If any other issue occurs or if the above issues persist, try switching OFF both Transmitter and Receiver and repeating the link set-up process.

## FAQ

Thank you for your purchase of the Nyrius WS54. If you require any assistance please review the below Frequently Asked Questions.

### 1. WHAT DOES THE STATUS OF THE LED'S MEAN?

SOLID WHITE	LINKED	Transmitter/Receiver is linked.
FLASHING WHITE	SEARCHING	Transmitter/Receiver not in range. No HDMI Input connected.
SOLID RED	POWER ON	The WS54 is now powered on and will begin connecting shortly.
FLASHING RED (Transmitter)	PAIRING MODE	The WS54 transmitter has now entered pairing mode and will attempt to pair to a receiver which is also in pairing mode.

### 2. WHAT IS THE MAXIMUM TRANSMISSION RANGE?

The maximum range is 60 feet line of sight. If transmitting through walls or obstacles the range will be reduced.

### 3. WHAT STEPS CAN I TAKE IF THE IR EXTENDER IS NOT WORKING?

For proper IR Extender configuration please refer to the included Quick Start Guide. To locate the IR sensor on your device, please contact the manufacturer of your HDMI enabled product. (E.G. Cable box, Blue Ray player, DVD Player). If the issue persists the IR Frequency can be adjusted by pressing IR on the remote control. The available frequencies are 38 KHz, 47 KHz, and 58 KHz.

### 4. HOW DO I TRANSMIT TO MULTIPLE RECEIVERS?

The WS54 can transmit to up to four receivers simultaneously. Please consult the manual at [Nyrius.com/support](http://Nyrius.com/support) for detailed instructions.

## 5. THE WS54 APPEARS WARM AFTER PROLONGED USE.

To transmit 3D or Full HD content wirelessly, the WS54 must process a large amount of data. Due to this, the unit may run at warmer temperatures than other electronic devices. We have designed the housing to provide proper ventilation to the unit as well as have designed the electronic components to withstand temperatures up to 80°C. To ensure maximum performance ensure both the Transmitter and Receiver are placed in well ventilated areas that do not exceed 30°C.

## 6. WHAT ARE THE TROUBLESHOOTING STEPS IF NO VIDEO IS DISPLAYED?

The Transmitter/Receiver may require a few seconds to connect. Ensure the correct HDMI video input is selected on your TV and that your HDMI cables are connected properly. Check that your video resolution from the source device is set to 1080p, 1080i, 720p, 576p, or 480p. Please ensure the WS54 is not located near a wireless access point as interference may affect connectivity.

## PAIRING MULTIPLE RECEIVERS / RE-PAIRING:

The WS54 can transmit to up to four receivers simultaneously. If you wish to pair additional receivers or just re-pair your existing transmitter and receiver see below:

1. Ensure your WS54 Receiver is powered on and connected to your TV via HDMI input.
2. Set your TV/Monitor to the WS54's HDMI input.
3. Press the "Pairing Button" on the front of the receiver:
  - a. The TV/Monitor screen will read "PAIRING MODE ACTIVATED, PLEASE PRESS PAIRING BUTTON ON FRONT OF TRANSMITTER."
  - b. Press the "Pairing Button" on the front of the transmitter. The LED will now begin to flash red.
  - c. Once the Transmitter has been paired. The TV/Monitor will read "CONNECTED."

## SPECIFICATIONS

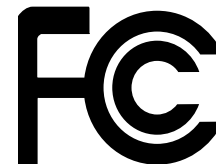
<b>SUPPORTED VIDEO RESOLUTION</b>	1080p, 1080i, 720p, 576p, 480p
<b>3D COMPATIBLE</b>	Yes
<b>AUDIO FORMATS</b>	PCM 2CH, Dolby 5.1
<b>PORTS &amp; INTERFACES</b>	Transmitter: HDMI input, HDMI Loop Through (Output), Micro USB (for power), 2.5mm Jack (for IR Emitter)
Receiver: HDMI Output, Micro USB (for power), 3.5mm Jack (for IR Emitter)	
<b>WIRELESS RANGE</b>	60ft (clear line of sight)
<b>TRANSMISSION FREQUENCIES</b>	802.11 a,b,g,n ; 5.8GHz (Band 1 & 4)
<b>SYSTEM LATENCY</b>	< 500ms (average 150ms)
<b>IR FREQUENCY</b>	30-60KHz
<b>ANTENNA</b>	High Performance Internal Antennas
<b>WIRELESS TECHNOLOGY</b>	GigaXtreme
<b>ENVIRONMENTAL REQUIREMENTS</b>	Keep a distance of 1.5m with any other wireless product
<b>SOURCE COMPATIBILITY</b>	Any source containing an HDMI port
<b>DISPLAY COMPATIBILITY</b>	Any high-definition television or projector with HDMI including popular models from these manufacturers: Samsung, Sony, Sharp, Vizio, Hitachi, JVC, LG, Mitsubishi, Panasonic etc.
<b>WALL MOUNTABLE</b>	Yes, Transmitter/Receiver have built-in keyhole slots
<b>REMOTE CONTROL</b>	No
<b>POWER SUPPLY</b>	DC 5V/1A (Energy efficient)
<b>TRANSMITTER DIMENSIONS</b>	3.4 x 3.3 x 0.9 inches; 87.5 x 83.5 x 25 mm
<b>RECEIVER DIMENSIONS</b>	3.4 x 3.3 x 0.9 inches; 87.5 x 83.5 x 25 mm
<b>CERTIFICATIONS</b>	FCC, ICES, CUL, UL

## FCC STATEMENT

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

This device may not cause harmful interference, and

This device must accept any interference received, including interference that may cause undesired operation.



### WARNING:

This equipment has been tested and is 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

### WARNING:

Changes or modifications not expressly approved by the party responsible for compliance with the FCC Rules could void the user's authority to operate this equipment.

## IC STATEMENT

### Industry Canada Statement

This class B digital apparatus complies with Canadian ICES-003.

This device complies with Industry Canada license-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.

## SAFETY INFORMATION

Read all instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with a dry cloth.

Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Only use attachments/accessories specified by the manufacturer.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged. Liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Apparatus shall not be exposed to dripping or splashing, and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

The battery shall not be exposed to excessive heat such as sunshine, fire or the like.

The direct plug-in adapter is used as disconnect device, the disconnect device shall remain readily operable.

**WARNING:** The battery is recyclable. Batteries shall not be exposed to heat such areas.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.



This marking indicates that this product should not be disposed with other household wastes throughout North America. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

## WARRANTY

Thank you for choosing NYRIUS® Consumer Electronics Products!

NYRIUS gives the following express warranty to the original consumer purchaser or gift recipient for this NYRIUS product, when shipped in its original container and sold or distributed by NYRIUS or by an Authorized NYRIUS Dealer: NYRIUS warrants that this product is free, under normal use and maintenance, from any defects in material and workmanship. If any such defects should be found in this product within the applicable warranty period, NYRIUS shall, at its option, repair or replace the product as specified herein. Replacement parts furnished in connection with this warranty shall be warranted for a period equal to the unexpired portion of the original equipment warranty.

- A. This warranty shall not apply to:
- B. Any defects caused or repairs required as a result of abusive operation, negligence, accident, improper installation or inappropriate use as outlined in the owner's manual.
- C. Any NYRIUS product tampered with, modified, adjusted or repaired by any party other than NYRIUS or NYRIUS's Authorized Service Centers.
- D. Damage caused or repairs required as a result of the use with items not specified or approved by NYRIUS including but not limited to head cleaning tapes and chemical cleaning agents.
- E. Any replacement of accessories, glassware, consumable or peripheral items required through normal use of the product including but not limited to earphones, remote controls, AC adapters, batteries, stylus, trays, filters, cables, paper, cabinet, cabinet parts, knobs, buttons, baskets, stands and shelves.
- F. Any cosmetic damage to the surface or exterior that has been defaced or caused by normal wear and tear.
- G. Any damage caused by external or environmental conditions, including but not limited to transmission line/power line voltage or liquid spillage.
- H. Any product received without appropriate model, serial number and CSA /cUL /cULus /cETL /cETLus markings.
- I. Any products used for rental or commercial purposes.
- J. Any installation, setup and/or programming charges.

Should this NYRIUS product fail to operate during the warranty period, warranty service may be obtained upon delivery of the NYRIUS product together with proof of purchase and a copy of this LIMITED WARRANTY statement to an Authorized NYRIUS Service Centre. In-home warranty service may be provided at NYRIUS discretion on any NYRIUS television with the screen size of 40" or larger. This warranty constitutes the entire express warranty granted by NYRIUS and no other dealer, service center or their agent or employee is authorized to extend, enlarge or transfer this warranty on behalf of NYRIUS. To the extent the law permits, NYRIUS disclaims any and all liability for direct or indirect damages or losses or for any incidental, special or consequential damages or loss of profits resulting from a defect in material or workmanship relating to the product, including damages for the loss of time or use of this NYRIUS product or the loss of information. The purchaser will be responsible for any removal, re-installation, transportation and insurance costs incurred. Correction of defects, in the manner and period of time described herein, constitute complete fulfillment of all obligations and responsibilities of NYRIUS Electronics to the purchaser with respect to the product and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise.

### 1 YEAR PARTS & LABOUR WARRANTY PERIOD

To obtain the name and address of the nearest authorized NYRIUS service center or for more information on this warranty contact NYRIUS support:

NYRIUS Customer Service

4080 Montrose Road, Niagara Falls, ON. L2H 1J9

**[nyrius.com/support](http://nyrius.com/support)**

Nyrius is a registered trade-mark of Circus World Displays Limited