

# MyWirelessTV3 4K Wireless HD Connection Kit

Model#: MWTV3TX & MWTV3RX

User Manual v0

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# Part I. Introduction

Thank you for purchasing MyWirelessTV3. This product will allow you to transmit 4K Ultra High Definition content from a set top box, gaming console, or other source with an HDMI port, to an HDTV monitor in another location, without lag or picture quality loss. It allows you to view movies and television programs in two different locations at the same time, without wires.

This user manual will take you through the procedures needed to connect, configure, and enjoy MyWirelessTV3, and describe a few different possible scenarios concerning setup locations.

## 1.1. Features

- Wirelessly sends live HD audio and video from HDMI-enabled media device to the HDTV
- Delivers up to 4K resolution, and uncompressed LPCM audio over wireless
- Transmitter supports 5.1 surround audio input and pass-through
- A/V quality auto adjustment based on wireless operating environment
- Supports controlling of device's IR (e.g. Cable/Sat STB) with existing remote control over IR Blaster cable
- Supports one HDMI source input and one HDMI pass-through
- HDMI pass-through port maintains original audio and video quality for local TV, and supports 4K resolution
- Compatible with most HDMI-enabled Cable/Sat STBs
- Compatible with most Blu-ray & DVD players
- Compatible with most HD Gaming consoles and Media players
- Supports protected (HDCP) and non-protected content
- Operates on standard 802.11ac wireless (5GHz bands) and auto/manual channel selection
- Plug-and-play and auto connect
- Does not interfere with home wireless networks
- Functions at up to 150 feet apart and works through most walls and floors

## 1.2. Minimum System Requirements

- Media devices equipped with HDMI output port, such as Blue-ray player, HD set top box, gaming console, or computer
- HDTV monitor with HDMI input

## 1.3. Package Contents

Contents in the package are listed below:

- (1) Wireless HD Video Transmitter
- (1) Wireless HD Video Receiver
- (2) Power Adapter
- (2) High-speed HDMI 1.4 Cable
- (1) IR Blaster Cable (for Transmitter)
- (1) IR Receiver Extension Cable (for Receiver)
- (1) Velcro mounting pad kit (for Receiver)
- Documentation

## 1.4. Getting to Know MyWirelessTV3

This section contains a quick overview of MyWirelessTV3, including all ports and LEDs on both the MyWirelessTV3 Transmitter and Receiver.

### 1.4.1. MyWirelessTV3 Transmitter

The MyWirelessTV3 Transmitter features five ports (**Power**, **HDMI Input**, **HDMI Out to TV**, **IR Transmit**, and **USB**), two buttons (**SELECT** and **RESET**), and one LED (**LINK**).



- **LINK LED.** The **LINK** LED is used to display the power state of the Transmitter, the state of pairing between the Transmitter and Receiver, and firmware upgrade status.
  - When the Transmitter is powered on, the LED glows steadily in orange, then it blinks slowly in orange while loading system.
  - It glows steadily in green when it has paired with the Receiver. It blinks fast in orange while it is pairing with the Receiver or when pairing fails.
  - It blinks slowly in red while it is being upgraded. And it glows steadily in red when the upgrade fails.
- **SELECT** button. Reserved.
- **RESET** button. The **RESET** button is used to assist firmware upgrade.
- **USB** port. The **USB** port is used to update firmware for the Transmitter. See "**Updating**

MyWirelessTV3 Firmware" for more details.



- **Power** port. The **5V DC / 2A** power port is used to connect the Transmitter to a power source.
- **HDMI Input** port. The **HDMI Input** port is used, via an HDMI cable, to connect the Transmitter to an HDMI source (set top box, Blu-ray player, gaming console, etc.).
- **HDMI Out to TV** port. The **HDMI Out to TV** port (a pass-through port) is used, via an HDMI cable, to connect the Transmitter to a local HDTV to allow continued video viewing on the monitor located nearest to the Transmitter. Connection to this port is optional. This port supports UHD 4K video output.
- **IR Transmit** port. The **IR Transmit** port is used to connect the IR Blaster cable to the Transmitter, enabling the use of the source device remote control in tandem with MyWirelessTV3.

#### 1.4.2. MyWirelessTV3 Receiver

The MyWirelessTV3 Receiver features four ports (Power, **HDMI Out to TV**, **IR Ext**, and **USB**), three buttons (**MENU**, **SELECT** and **RESET**), and one LED (**LINK**).



- **LINK LED**. The **LINK LED** is used to display the power state of the Receiver, the state of pairing between the Receiver and Transmitter, and firmware upgrade status.
  - When the Receiver is powered on, the LED glows steadily in orange, then it blinks slowly in orange while loading system.

- It glows steadily in green when it has paired with the Transmitter. It blinks fast in orange while it is pairing with the Transmitter or when pairing fails.
  - It blinks slowly in red while it is being upgraded. And it glows steadily in red when the upgrade fails.
- **MENU** and **SELECT** buttons. The **MENU** and **SELECT** buttons are used together to access the GUI menu. Pressing the **MENU** button selects an option, and pressing the **SELECT** button saves the setting.  
**Note:** You can access the GUI menu when the receiver has connected to the transmitter or when the receiver has not paired with any transmitter.
  - **RESET** button. The **RESET** button is used to assist firmware upgrade.
  - **USB** port. The **USB** port is used to update firmware for the Receiver. See "**Updating MyWirelessTV3 Firmware**" for more details.



- **Power Port.** The **5V DC / 2A** power port is used to connect the Receiver to a power source.
- **HDMI Out to TV Port.** The **HDMI Out to TV** port is used, via an HDMI cable, to connect the Receiver to an HDMI-ready display, such as a high-definition TV.
- **IR Ext Port.** The **IR Ext** port is used to connect the IR Receiver cable, used to extend the range of the source device's remote control (in conjunction with the IR Blaster cable connected to the Transmitter).  
**Note:** The use of the IR Receiver Extension Cable is optional.

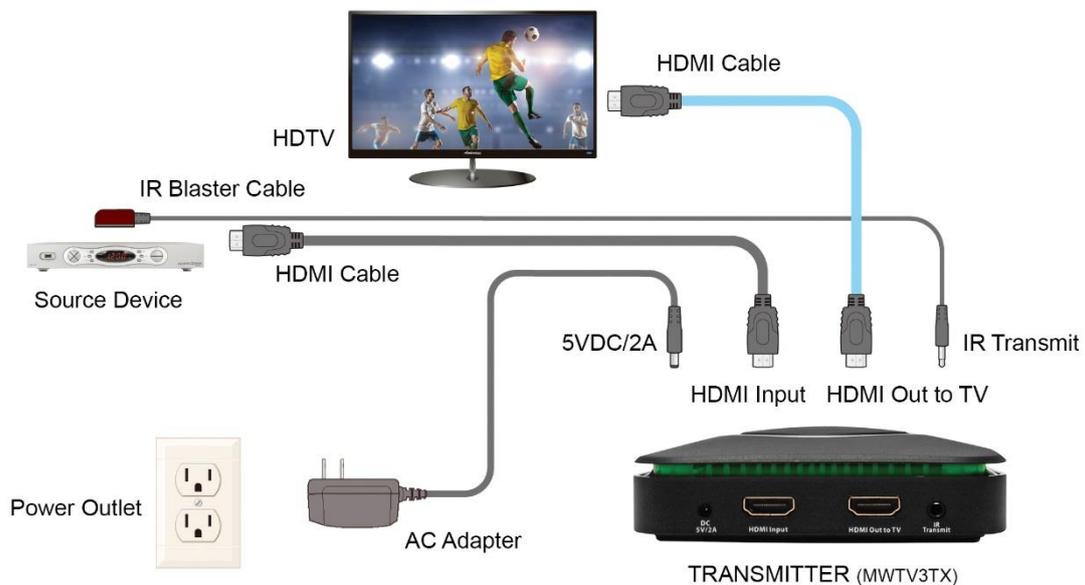
# Part II. Connecting MyWirelessTV3

Connecting MyWirelessTV3 consists of two parts: connecting the Transmitter to a source of high-definition video, and connecting the receiver to a high-definition television monitor. This chapter will take you through both procedures, as well as setting up the IR Blaster and IR Receiver to allow you to use the remote control of the source device in the location you are watching (or playing) your content.

## 2.1. Typical MyWirelessTV3 Connection Configuration

### 2.1.1. Transmitter

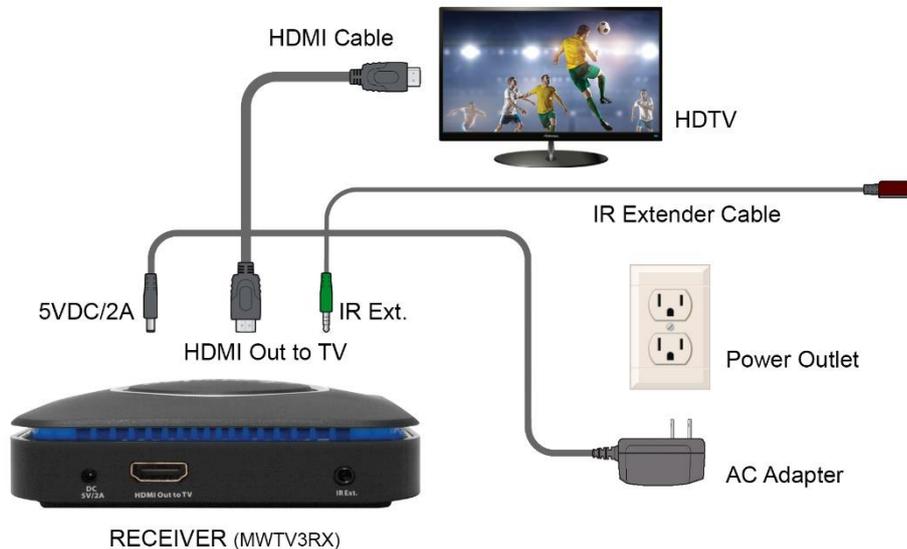
A typical connection for the Transmitter is shown below:



**Note:** Connecting a TV to the **HDMI Out to TV** port is optional.

## 2.1.2. Receiver

A typical connection for the Receiver is shown below:



## 2.2. Connecting the MyWirelessTV3 Transmitter

You should install the Transmitter near the video source device (set top box, Blu-ray player, gaming console, etc.). Follow the procedure below to set up the MyWirelessTV3 transmitter:

1. Select the source device (i.e. a Cable/Satellite set-top box or Blu-ray player) you wish to transmit signal to the TV, and power off that device. Get the Wireless HD Video Transmitter unit from MyWirelessTV3 Kit box.
2. (Optional) If the source device is previously connected to an HDTV, unplug the HDMI cable from the back of the source, and then plug the free end of the HDMI cable into the **HDMI Out to TV** port on the back of the Transmitter.
3. Otherwise, get an HDMI cable from MyWirelessTV3 Kit box. Plug one end into the **HDMI Input** port on the back of the Transmitter.
4. Plug the other end into an HDMI port on the source device. This cable should now connect the Transmitter to the source device.
5. Get one power supply from the MyWirelessTV3 kit box and plug the connector of the power cord into the **5V DC / 2A** (Power) port on the back of the Transmitter. Plug the AC adapter of the power supply into a power outlet.
6. Verify that the **LINK** LED is solid orange and then blinking.
7. Turn on the HDTV and the video source device, and make sure you can see video from your source device.

## 2.3. Connecting the MyWirelessTV3 Receiver

You should install the Receiver near the HDTV monitor where you intend to watch the content being streamed from the source device.

1. Get the Wireless HD Video Receiver, HDMI cable and power supply. Go to the TV that you want to connect.
2. Plug one end of the HDMI cable into an HDMI port on the HDTV monitor.
3. Plug the other end of the HDMI cable into the **HDMI Out to TV** port on the back of the Receiver.
4. Plug the connector of the power cord into the **5V DC / 2A** port on the back of the Receiver. And plug the AC adapter of the power supply into a power outlet.
5. Verify that the **LINK** LED on the Receiver is SOLID orange and then blinking.
6. Wait for a bit as the Receiver connects to the Transmitter. The **LINK** LED should show SOLID Green once they're connected.
7. Turn on the TV and switch the source to the HDMI input that the Receiver is connected to. You should see content being streamed from the source device.

## 2.4. Setting up IR Control

The IR Blaster Cable connects to your Wireless HD Video Transmitter. The IR Blaster can receive IR signal from your source device's remote control over MyWirelessTV3 network, and emits the IR signal to control the source device. Thus, you can control the source device from wherever the TV and Wireless HD Video Receiver are located.

The IR Receiver Extension Cable extends the IR receiver of the Wireless HD Video Receiver. Thus, it allows the Receiver to receive IR signal from the remote control, if the device is placed in an area where IR signal is not in line-of-sight of the source's remote control.

**Note:** If the Receiver and Transmitter are in the same room, setting up IR Blaster cable is not required.

### 2.4.1. Connecting the IR Blaster Cable

The IR Blaster cable receives the source device remote control signal from the Receiver and delivers it to the source device.

1. Get the IR Blaster cable from the MyWirelessTV3 kit box. The IR Blaster cable has a black connector.
2. Plug the black connector of the IR Blaster cable into the **IR Transmit** port on the back of the Transmitter.
3. Locate the Infrared (IR) sensor on your source device box.
4. The IR Blaster head comes with a hook-and-loop fastener. Detach the loop strip from the fastener, and peel off the release liner of the adhesive tape. Stick the loop strip near the Infrared (IR) sensor on your source device.
5. Mount the IR Blaster head by attaching the hook and loop strips together.

## 2.4.2. Connecting the IR Receiver Extension Cable

The IR Receiver Extension Cable receives signals from the source device remote control and sends them back to the source device.

1. Get the IR Receiver Extension Cable from the MyWirelessTV3 kit. The IR Receiver Extension Cable has a green connector.
2. Plug the green connector of the IR Receiver Extension Cable into the green **IR Ext** port on the back of the Receiver.
3. Remove the protective covering of the double-stick tape and attach the flat end of the IR Receiver Extension Cable to the front corner of the HDTV monitor's bezel or frame.

You should now be able to use the remote control of the source device from the location of the HDTV monitor to which you are streaming content.

**Note:** The IR Receiver Extension Cable should be mounted in such a place that it is in line-of-sight of the remote control.

# Part III. Configuring MyWirelessTV3

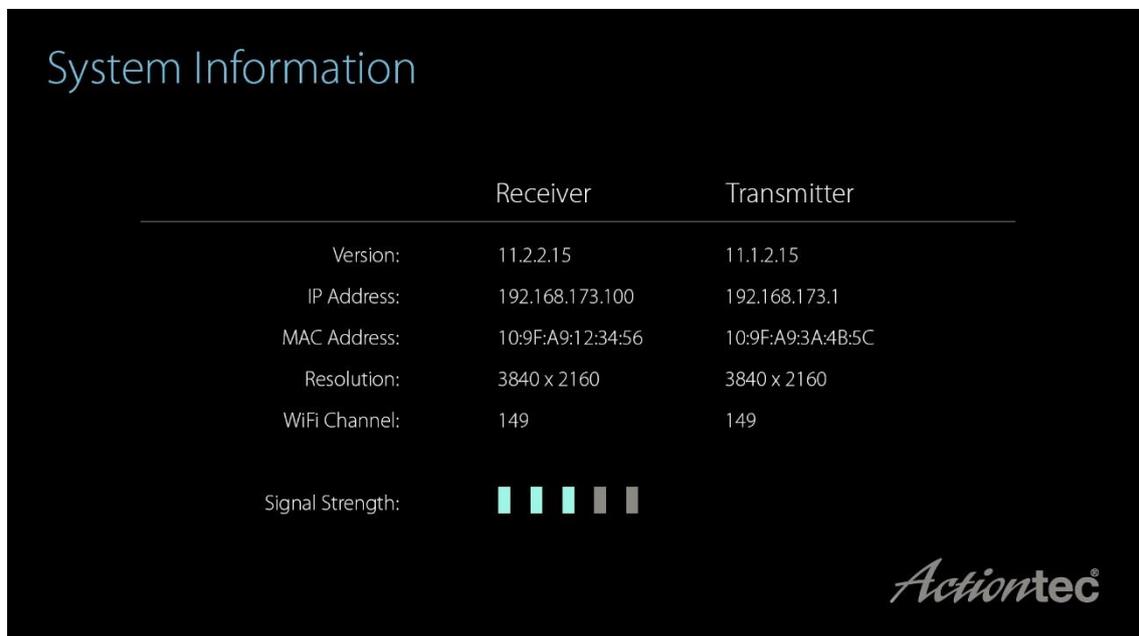
This chapter describes using the MyWirelessTV3 graphical user interface, which allows you to configure various aspects of MyWirelessTV3, including viewing system information, selecting a Wi-Fi channel.

## 3.1. Viewing System Information

To access MyWirelessTV3's system information, press the **MENU** button on the Receiver when the Receiver has paired with the Transmitter.

System information, such as firmware version, IP address, MAC address, resolution, Wi-Fi channel, and signal strength, are displayed on the connected display.

- **Version:** It indicates the firmware versions of the transmitter and receiver.
- **IP Address:** It indicates the IP addresses of the transmitter and receiver.
- **MAC Address:** It indicates the MAC addresses of the transmitter and receiver.
- **Resolution:** It indicates the maximum resolution of display that is connected to the transmitter and the maximum resolution of display that is connected to the receiver.
- **Wi-Fi Channel:** It indicates the Wi-Fi channels on which the transmitter and receiver are using.
- **Signal strength:** It indicates the strength of Wi-Fi signal between the receiver and the transmitter. The more blue bars display, the stronger the signal is.



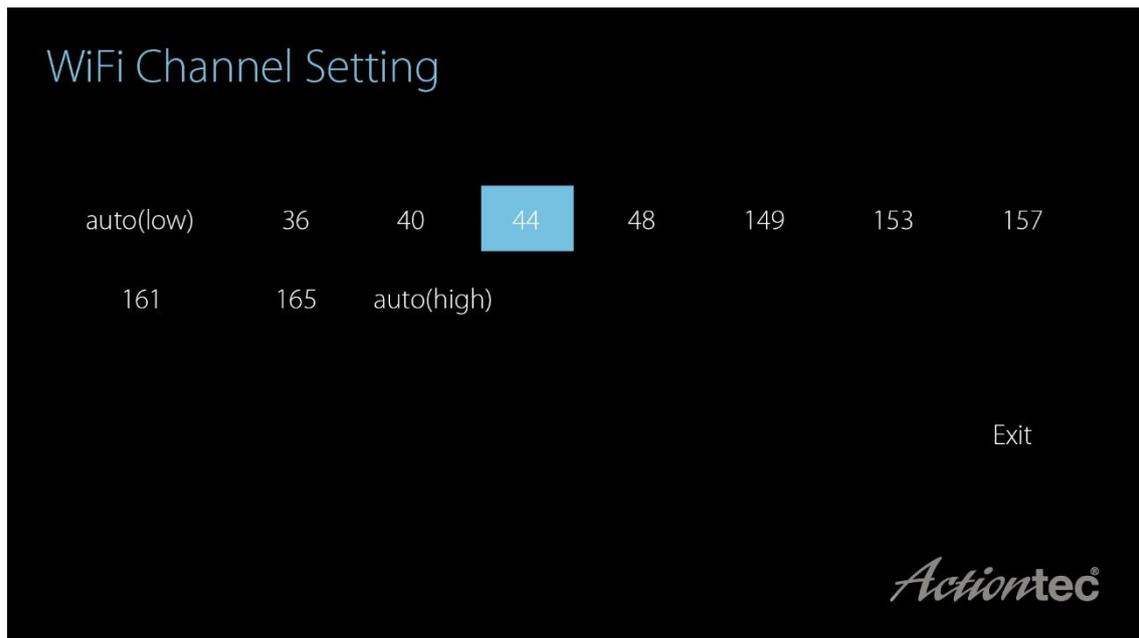
## 3.2. Selecting a Wi-Fi Channel

MyWirelessTV3 uses the 802.11ac protocol for wireless networking. If you encounter lagging or pixilation with MyWirelessTV3's streaming video, you may be using a congested channel. Select a channel to have MyWirelessTV3 stream using a different channel, or select Auto (recommended) to have MyWirelessTV3 select a clean wireless channel automatically.

**Note:** Selecting a different channel will automatically restart your MyWirelessTV3 transmitter. And Wi-Fi channel setting is available when the receiver and the transmitter are connected.

To access the **WiFi Channel Selection** Page, press and hold the **Select** button for at least six seconds, and release the button when the **Wi-Fi Channel Setting** screen appears. Press the **Menu** button to highlight the desired channel and press the **Select** button to confirm.

- **Auto (Low):** MyWirelessTV3 will automatically select a clean channel on the 5.2 GHz band (channels from 36 to 48 ).
- **Channel numbers:** Select a desire channel manually.
- **Auto (High):** MyWirelessTV3 will automatically select a clean channel on the 5.8 GHz band (channels from 149 to 165).



# Part IV. Updating MyWirelessTV3

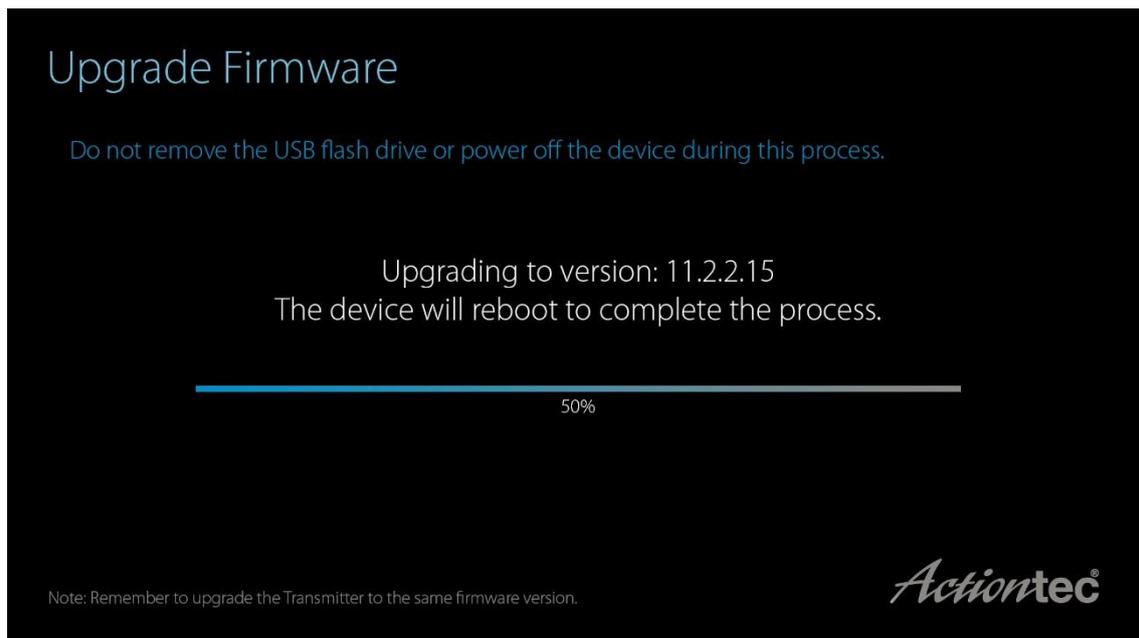
## Firmware

Actiontec recommends that all MyWirelessTV3 users update their device with the latest firmware update to take advantage of recently developed performance enhancements, new features, and bug fixes. Check the current firmware version number on the **System Information** Screen (pressing the **MENU** button on the Receiver). Compare this version number with the latest version available at <http://www.actiontec.com/mwvtv3>. If the version on your MyWirelessTV3 device is older, perform the following procedure.

 **Warning:** Do NOT power off the device or remove the USB flash drive during the firmware upgrade process. Updating firmware for the transmitter will take about five minutes, and about one minute for the receiver.

To update the firmware on your MyWirelessTV3 devices:

1. Using a web browser, go to <http://www.actiontec.com/mwvtv3>
2. Follow the online instructions to download the latest MyWirelessTV3 firmware. Extract the file and copy “**MWTV3TX.img**” and “**install.img**” to a USB flash drive (FAT32 formatted).
3. Go to your MWTV3 receiver (at the TV end), and power off the device.
4. Plug the USB flash drive into the **USB** port on the receiver.
5. Press and hold the **RESET** button with a pin, and then power on the device.
6. The firmware upgrade begins when the **LINK** LED blinks slowly in red. You can now release the **RESET** button. A progress bar is also displayed on the connected TV.



7. The device reboots to finish the upgrade. And firmware upgrade is complete when the

**LINK** LED blinks fast in orange (pairing). When this occurs, remove the USB flash drive from the device.

**Note:** If firmware update fails, the **LINK** LED will glow steady in red for about 10 seconds, and then the device reboots.

8. Go to your MWTV3 transmitter (at the source end) and power off the device.
9. Plug the USB flash drive into the **USB** port on the transmitter.
10. Press and hold the **RESET** button with a pin, and then power on the device.
11. The firmware upgrade begins when the **LINK** LED blinks slowly in red. You can now release the **RESET** button.
12. The device reboots to finish the upgrade. And firmware upgrade is complete when the **LINK** LED blinks fast in orange (pairing) or glows steady in green (paired). When this occurs, remove the USB flash drive from the device.

**Note:** If firmware update fails, the **LINK** LED will glow steady in red for about 10 seconds, and then the device reboots.

Once the firmware update has been applied to all MyWirelessTV3 devices, the MyWirelessTV3 devices will pair automatically, and stream audio and video.

After the transmitter and receiver are paired again, go to the receiver, and press the **MENU** button to display system information. You can check if the devices are updated to the desired firmware on the system information screen.

# Appendix I. Troubleshooting

This chapter describes some problems you may encounter using MyWirelessTV3, and possible solutions to those problems. Also included are frequently asked questions (FAQs), and the answers to the questions.

## FAQs

### **Do I need to power off MyWirelessTV3 after watching TV?**

No. It is designed to stay on and connect 24/7.

### **How do I control the video source (e.g. cable/DirecTV box) remotely?**

You need to use the same remote control. The control signal is passed through the air from the MyWirelessTV3 Receiver to the MyWirelessTV3 Transmitter and sent to the video source.

### **I'm not seeing anything on the remote TV connected to the receiver. The LINK light is solid green on both MyWirelessTV3 units.**

Make sure the HDMI cable is securely connected between the receiver and TV. Power-on the TV with the receiver input selected, then power-cycle the receiver.

### **I'm not seeing video on the TV that's connected to the transmitter.**

Check the power and connection from the video source to the transmitter, and the connection from the transmitter to the TV.

### **Must I connect a TV to the transmitter's HDMI Out-to-TV port?**

No. This step is optional.

### **Sometimes the infrared (IR) signal is not responsive.**

Make sure the infrared (IR) blaster cable is properly connected to the MyWirelessTV3 and the sensor is positioned above the cable/satellite box or media player device's IR sensor window.

### **The audio and video on the receiver's TV seems slower than on transmitter's TV.**

This is expected since the receiver receives AV transmission from the transmitter over the air.

### **The remote TV displays "Video signal is not detected."**

Make sure the TVs are connected to the HDMI Out to TV ports and the cable/satellite box or media player device is connected to the HDMI Input port. Verify your cable/satellite box or media player device is powered on. If you're using a cable/satellite box and there's still

an issue, make sure you have an HD subscription plan and an HDMI signal is coming from your cable box.

### **The video quality is poor and sometimes there's no video display on the receiver's TV**

You may need to adjust the orientation of the transmitter and receiver units and direct them to be facing each other. You can view the MyWirelessTV3 connection strength on the Menu page of the receiver. To access the Menu page, press the MENU button once on the receiver.

### **How do I upgrade the firmware?**

Follow the steps for both the transmitter and receiver. Updating the transmitter will take about five minutes and the receiver will take about one minute.

#### *Prepare the firmware*

1. On a PC, go to <http://www.actiontec.com/mwTV3>. Browse to the support section and download the latest firmware.
2. Extract the zip file, and copy both MWTV3TX.img and install.img to the top directory of a USB flash drive.

#### *Upgrade the devices*

You must complete all steps for both the transmitter and receiver. Upgrade order does not matter.

1. Power off the MyWirelessTV 3 by unplugging the power cable.
2. Plug the USB flash drive into the USB port of the MyWirelessTV 3.
3. Press and hold the RESET button and keep holding it while you plug in the power cable on the MyWirelessTV 3 to turn it on. When the LINK LED starts to blink red, release the RESET button.
4. Once the LINK LED blinks orange, the upgrade is complete.
5. Remove the USB flash drive from the MyWirelessTV 3.

***Warning: Do NOT power off the MyWirelessTV3 or remove the USB flash drive during the firmware upgrade process.***

# Appendix II. Specifications

This chapter lists the specifications of the MyWirelessTV3 devices.

## Video:

- H.264 video compression
- Supports up to 4K resolution<sup>1</sup>

## Audio:

- Non-compressed LPCM
- Pass-through 5.1 surround<sup>2</sup> on Transmitter only

## A/V interface:

- Transmitter: One HDMI input & one HDMI pass-through
- Receiver: One HDMI output

## Wireless:

- 802.11ac Wireless
- Operates on 5GHz frequency
- AES 128-bit WPS pairing
- Range: up to 150 ft<sup>2</sup>

**Content Protection:** HDCP 2.x for HDMI

## Power:

- Input: 5V/2A
- Consumption: ~7W (transmitter), ~4W (receiver)

## LED Indicators:

- Transmitter: Link
- Receiver: Link

## Dimensions:

- 105mm W x 120mm D x 30mm H (per unit)

## Dimensions:

- 4.7oz (per unit)

- 
1. Actual display resolution depends on number of factors, including source's video quality and operating range.
  2. Devices can operate up to 150' range apart. Ideally at home environment through 2-3 walls or floors that are not constructed in nonporous materials (e.g. brick, plaster, cement, metal, stone or double-glazed glass).

## Environmental:

- Operating temperature: 0 °C to 40 °C (32 °F to 104 °F)

- Storage temperature: 0 °C to 70 °C (32 °F to 158 °F)
- Operating humidity: 10% to 85%, non-condensing
- Storage humidity: 5% to 90%, non-condensing

**Regulatory and compliance:**

- FCC, UL

**Warranty:**

- One (1) year limited