# **MONOPRICE**

# BitPath AV™ 4K HDMI® Wireless Transmitter & Receiver Kit, 200m

P/N 16223

User's Manual

## SAFETY WARNINGS AND GUIDELINES

Please read this entire manual before using this device, paying extra attention to these safety warnings and guidelines. Please keep this manual in a safe place for future reference

- This device is intended for indoor use only.
- Do not expose this device to water or moisture of any kind. Do not place drinks
  or other containers with moisture on or near the device. If moisture does get in
  or on the device, immediately unplug it from the power source and allow it to
  fully dry before reapplying power.
- Do not touch the device, the power cord, or any other connected cables with wet hands.
- Do not expose this device to excessively high temperatures. Do not place it in, on, or near heat sources, such as a fireplace, stove, radiator, etc. Do not leave it in direct sunlight.
- Prior to operation, check the units and power adapters for physical damage. Do not use if physical damage has occurred.
- Take care to prevent damage to the power cord. Do not allow it to become crimped, pinched, walked on, or become tangled with other cords. Ensure that the power cord does not present a tripping hazard.
- Never unplug the unit by pulling on the power cord. Always grasp the connector head or adapter body.
- Ensure that power is turned off and disconnected before making any electrical connections.
- Clean using a soft, dry cloth only. Do not use chemical cleaners, solvents, or detergents. For stubborn deposits, moisten the cloth with warm water.
- This device has no user serviceable parts. Do not attempt to open, service, or modify this device.

## INTRODUCTION

Thank you for purchasing this BitPath AV™ 4K HDMI® Extender Kit! This extender wirelessly transmits an HDMI signal to distances up to 656 feet (200 meters). It supports resolutions up to 4K@30Hz, including 1080p@60Hz, and uses the BitPath AV™ transmission protocol. It includes a dual-band IR extender, allowing you to control your video source equipment from the display end.

## **FEATURES**

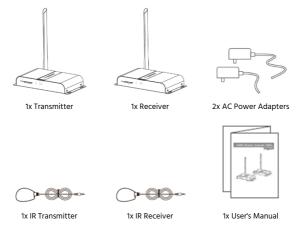
- Wirelessly transmits an HDMI signal to distances up to 656 feet (200 meters)
- Supports resolutions up to 4K@30Hz, including 1080p@60Hz
- Uses the BitPath AV™ transmission protocol
- Includes dual band IR extender to allow for remote control of the video source device
- · Fully supports HDCP

## CUSTOMER SERVICE

The Monoprice Customer Service department is dedicated to ensuring that your ordering, purchasing, and delivery experience is second to none. If you have any problem with your order, please give us an opportunity to make it right. You can contact a Monoprice Customer Service representative through the Live Chat link on our website **www.monoprice.com** during normal business hours (Mon-Fri: 5am-7pm PT, Sat-Sun: 9am-6pm PT) or via email at **support@monoprice.com** 

# PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact Monoprice Customer Service for a replacement.



## PRODUCT OVERVIEW

#### Transmitter



- 1. Power LED: Illuminates when power is applied.
- Data Transmission LED: The LED flashes slowly when a connection is being established, then flashes rapidly when successfully connected and transmitting data.
- Connection LED: The LED illuminates when there is a solid wireless connection with the receiver.
- 4. DC in: DC barrel connector for attaching the included AC power adapter.
- 5. HDMI Input: HDMI® connector for connecting the video source device.
- 6. IR Out: 3.5mm jack for connecting the IR transmitter.
- 7. Reset: Button for restarting the transmitter.
- 8. BitPath AV™ TX: Connector for attaching the antenna.

## Receiver



- 1. Power LED: Illuminates when power is applied.
- Data Transmission LED: The LED flashes slowly when a connection is being established, then flashes rapidly when successfully connected and transmitting data.
- Connection LED: The LED illuminates when there is a solid wireless connection with the transmitter.
- 4. DC In: DC barrel connector for attaching the included AC power adapter.

- HDMI Output: HDMI<sup>®</sup> connector for connecting the video display.
- 6. IR In: 3.5mm jack for connecting the IR receiver.
- 7. Reset: Button for restarting the receiver.
- BitPath AV™ RX: Connector for attaching the antenna.

## INSTALLATION AND OPERATION



Perform the following steps to connect the BitPath AV™ system:

- 1. Place or mount the transmitter and receiver in their desired locations.
- Position the antennas on each unit to a vertical position, then ensure the antenna connector is tight.
- Using a High Speed HDMI<sup>®</sup> Cable (not included), plug one end into the HDMI input on your television, then plug the other end into the HDMI Output (5) connector on the receiver.
- Plug the included IR Receiver into the IR Input (6) jack on the receiver, then position the IR receiver bulb in a position so that it can receive IR signals from your remote control.
- Using a High Speed HDMI® Cable (not included), plug one end into the HDMI Input (5) connector on the transmitter, then plug the other end into the HDMI output on your video source device.

- Plug the included IR Transmitter into the IR Out (6) jack on the transmitter, then position the IR emitter bulb in a position where it can transmit IR signals to the video source device.
- Plug the DC barrel connector on one of the AC power adapters into the DC In (4)
  jack on the receiver, then plug the adapter into a nearby AC power outlet. The
  Power LED (1) on the receiver will illuminate.
- 8. Plug the DC barrel connector on the other AC power adapter into the DC In (4) jack on the transmitter, then plug the adapter into a nearby AC power outlet. The Power LED (1) on the transmitter will illuminate. At the same time the Data Transmission LED (2) on both the transmitter and receiver will start flashing slowly to indicate that a connection is being established. Once the connection is completed, the Connection LED (3) on each unit will illuminate.
- Start playing video content on your video source device. As data is being
  transmitted, the **Data Transmission LED (2)** on each device will start flashing
  rapidly, indicating that data is being transmitted and received. Verify that video
  is being displayed on your remote television.
- 10. Use your video source device's remote control at the remote television to verify that you can control the video source device from the remote location.
  Congratulations, your BitPath AV™ system is now installed and ready for use!

## TROUBLESHOOTING

- Q1: The television only shows "waiting for connection" in the bottom right corner.
- A1: Verify that the AC power adapters for both the transmitter and receiver are plugged in and that the **Power LED (1)** on each unit is illuminated. Try swapping out the HDMI<sup>®</sup> cable with a known good one.
- O2: The television displays "Please check the TX input signal".
- A2: Verify that the video source device is playing video content. Try swapping out the HDMI cable between the video source device and the transmitter with a known good one. Try connecting the video source device directly to the television to verify that it is transmitting video. Verify that the video resolution on the video source does not exceed the 4K@30Hz / 1080p@60Hz limits of the system.
- O3: The video on the television is unstable
- A3: Press the Reset (7) button on each unit to allow them to reestablish a wireless connection. Try reducing the distance between the receiver and transmitter. Remove any obstacles between the two units. Ensure that there are no other wireless devices are transmitting on the 2.4GHz and 5.8GHz bands.

## TECHNICAL SUPPORT

Monoprice is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website <a href="https://www.monoprice.com">www.monoprice.com</a> during regular business hours, 7 days a week. You can also get assistance through email by sending a message to tech@monoprice.com

## **SPECIFICATIONS**

Model	16223
Video Standard	HDMI® with HDCP support
Maximum Video Resolution	4K@30Hz, including 1080p@60Hz
Transmission Protocol	BitPath AV™
Maximum Transmission Distance	up to 656 feet (200 meters)
IR Extender Bandwidth	20 ~ 60 kHz
Maximum Power Consumption (each)	15 watts
Power Source	5 VDC, 3.5A AC power adapters
Operating Temperature	+32 ~ +140°F (0 ~ +60°C)
Dimensions (each)	7.7" x 5.4" x 1.3" (195 x 137 x 32 mm)
Weight (each)	19.8 oz. (560g)

## REGULATORY COMPLIANCE

## Notice for FCC



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.

Modifying the equipment without Monoprice's authorization may result in the equipment no longer complying with FCC requirements for Class A digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part Is of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial 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. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

#### Radio Notice for FCC

#### Caution

This FCC Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by Monoprice, including the use of non-approved antennas, could void the user's authority to operate this device.

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.

## Radio Notice for Industry Canada

#### Caution

This IC RSS-210 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by Monoprice, including the use of non-approved antennas. could void the user's authority to operate this device.

This device complies with IC RSS-210. 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.

BitPath AV™ is a trademark of Monoprice Inc.

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