# MONOPRICE

# BitPath AV<sup>™</sup> VGA Wireless Transmitter & Receiver Kit, 200m

P/N 16224

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<sup>™</sup> VGA Extender Kit! This extender wirelessly transmits a VGA video signal and an analog audio signal to distances up to 656 feet (200 meters). It supports VGA resolutions up to 1920x1080@60Hz, analog audio, and uses the BitPath AV<sup>™</sup> transmission protocol.

### FEATURES

- Wirelessly transmits a VGA signal and analog audio signal to distances up to 656 feet (200 meters)
- Supports VGA resolutions up to 1920x1080@60Hz
- Uses the BitPath AV™ transmission protocol

### 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.



1x Transmitter



1x Receiver









1x 3.5mm TRS Audio Cable

1x User's Manual

## PRODUCT OVERVIEW

#### Transmitter



- 1. Audio In: 3.5mm TRS jack for connecting analog audio from the video source.
- 2. DC In: DC barrel connector for attaching the included AC power adapter.
- 3. Power LED: Illuminates when power is applied.
- 4. Reset: Button for restarting the transmitter.

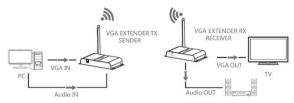
- Data Transmission LED: The LED flashes slowly when a connection is being established, then flashes rapidly when successfully connected and transmitting data.
- Connection LED: The LED illuminates when there is a solid wireless connection with the receiver.
- 7. VGA Input: 15-pin VGA connector for connecting the video source device.
- 8. BitPath AV™ TX: Connector for attaching the antenna.

#### Receiver



- Audio Out: 3.5mm TRS jack for connecting headphones, powered speakers, or an external amplifier.
- 2. DC In: DC barrel connector for attaching the included AC power adapter.
- 3. Power LED: Illuminates when power is applied.
- 4. Reset: Button for restarting the receiver.
- 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.
- 7. VGA Output: 15-pin VGA connector for connecting the video display.
- 8. BitPath AV™ RX: Connector for attaching the antenna.

## INSTALLATION AND OPERATION



Perform the following steps to connect the BitPath AV<sup>™</sup> 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 VGA cable (not included), plug one end into the VGA input on your monitor, then plug the other end into the VGA Output (7) connector on the receiver.
- Plug a pair of powered speakers, headphones, or an audio cable (not included) into the Audio Out (1) jack on the receiver.
- Using a VGA cable (not included), plug one end into the VGA Input (7) connector on the transmitter, then plug the other end into the VGA output on your computer or other video source device.
- Using the included 3.5mm Audio Cable, plug one end into the Audio In (1) jack on the transmitter, then plug the other end into the audio output jack on your computer or other video source device.
- Plug the DC barrel connector on one of the AC power adapters into the DC in (2) jack on the receiver, then plug the adapter into a nearby AC power outlet. The Power LED (3) on the receiver will illuminate.
- Plug the DC barrel connector on the other AC power adapter into the DC In (2) jack on the transmitter, then plug the adapter into a nearby AC power outlet. The Power LED (3) on the transmitter will illuminate. At the same time the Data Transmission LED (5) 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 (6)** on each unit will illuminate.

9. Start playing video content on your video source device. As data is being transmitted, the **Data Transmission LED (5)** on each device will start flashing rapidly, indicating that data is being transmitted and received. Verify that video is being displayed on your remote monitor and that audio can be heard on your powered speakers, headphones, or other audio output device.

Congratulations, your BitPath AV™ system is now installed and ready for use!

### TROUBLESHOOTING

- Q1: The monitor only shows "waiting for connection" in the bottom right corner.
- A1: Verify that the AC adapters for both the transmitter and receiver are plugged in and that the **Power LED (3)** on each unit is illuminated. Try swapping out the VGA cable with a known good one.
- Q2: The monitor displays "Please check the TX input signal".
- A2: Verify that the video source device is playing video content. Try swapping out the VGA 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 1920x1080@60Hz limit of the system.
- Q3: The video on the monitor is unstable.
- A3: Press the Reset (4) 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 **www.monoprice.com** 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	16224
Video Standard	VGA
Minimum Video Resolution	800x600@60Hz
Maximum Video Resolution	1920x1080@60Hz
Transmission Protocol	BitPath AV™
Maximum Transmission Distance	up to 656 feet (200 meters)
Maximum Transmitter Power Consumption	9 watts
Maximum Receiver Power Consumption	6.5 watts
Power Source	5 VDC, 3A AC power adapters
Operating Temperature	+32 ~ +140°F (0 ~ +60°C)
Dimensions (each)	7.7" x 5.5" x 1.3" (196 x 139 x 32 mm)
Weight (each)	20.3 oz. (575g)

# **REGULATORY COMPLIANCE**

### Notice for FCC

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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 15 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.