



Wi Pro AudioMatrix™

2.4GHz Stereo Digital Multicast Wireless Audio System
For DJ Gear & Powered Loud Speakers



Wi™ DIGITAL SYSTEMS

— OWNER'S MANUAL —
OPERATING INSTRUCTIONS

CONGRATULATIONS!



Thank You For Choosing Wi Digital Systems

Congratulations on your purchase of the Wi Pro AudioMatrix 2.4GHz Stereo Digital Multicast Wireless Audio System for DJ Gear & Active Loud Speakers

Please thoroughly read this User's Manual for all the feature operation information necessary to install and operate your new Wi Pro AudioMatrix system

Notice: Product specifications and package contents are subject to change without notice
Package contents may vary according to the different regions

For additional support, please visit www.widigitalsystems.com

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TECHNICAL SUPPORT

Getting Answers!

We want you to get the most from your new Wi Pro AudioMatrix stereo digital wireless audio system! Simply logon to www.widigitalsystems.com and access the resources available online including instructional manuals and more.

Our customer service support staff are ready to assist you with any question you may have. Your Wi Pro AudioMatrix comes with 90 days of telephone support and one year of service coverage.

There are many ways to contact Wi Digital Systems customer service support.

E-Mail:	support@widigitalsystems.com
Website:	www.widigitalsystems.com/support
Technical support:	(714) 505-4567

PACKING LIST



Wi Transmitter with
1/4"-20 Tripod Stand (x1)



Wi Receivers with
1/4"-20 Tripod Stands (x2)



Roll Bar Zip-Tie Style Universal Mounting
Brackets For Speakers & Stands (x3)



Carrying Case (x1)



1/8" to 1/8" TRS Stereo
Cable & 1/4" Adapter (x1)



Mini XLR to Female
XLR Cables (x2)



Mini XLR to Male XLR
Cables (x4)



USB Power
Cables (x3)



Universal USB
Power Adapters (x3)

SYSTEM HIGHLIGHTS

- **Elegant Simplicity, Superior Sound, Professional Dependability**

The Wi Pro AudioMatrix WI-AMP50 is designed to enable users to create a stereo digital wireless audio distribution matrix from one transmitter to up to 50 digital wireless receivers without the need to route cables to speakers.

- **Wi Digital's Seek-and-Link Technology**

Designed to look, sound and configure like no other pro audio wireless system. This elegant plug-and-play system features Wi Digital's Seek-and-Link algorithms that enable receivers to search for audio stream acquisition and automatically link to the transmitter, rendering manual pairing a thing of the past!

- **Rugged Construction, Secure Mount, Portable Design**

The Wi Pro AudioMatrix transmitter and receivers are engineered with a super strong aluminum chassis and universal mounting metal belt clip with a 1/4"-20 screw mount that can be securely or permanently attached to speakers and DJ gear, including stands, tripods and bipods for elevated and unobstructed line of sight setups.

- **Extreme Power Flexibility**

The Wi Pro AudioMatrix power source's flexible design boasts an internal rechargeable battery for 6-8 hours of battery operation.

Add a standard USB AA battery adapter for up to 20 hours of extended use. No need to power down the system to charge or replace the batteries.

There's also an AC power adapter for continuous operation. You can even use USB bus power to charge and operate your Wi Pro AudioMatrix. Enjoy true freedom from power concerns.

- **All Accessories Included!**

This combination of portability, simplified setup and all required accessories, including mounting kits and high quality cables, lets you set up quickly and easily!



TRANSMITTER FEATURES

Transmitter Front Panel

- ① **Antenna:** Detachable High Performance Antenna
- ② **Antenna Port:** Place the antenna in a vertical position for best wireless transmission results. If the wireless signal quality is poor, change the position of the antennas.
- ③ **Power ON/OFF:** Press and hold the Power button for 2 seconds to turn the transmitter ON or OFF.
- ④ **Channel Select:** Adjusts the frequency band range. Press the up or down buttons to select a channel.
- ⑤ **Battery LED:** Displays the status of three functions, Full Battery, Low Battery and Charging.
- ⑥ **Status LED:** The LED will turn RED when the wireless signal is lost and GREEN when the wireless signal is established.
- ⑦ **Monitor Display:** Displays the status of three functions. Channel Number, Volume Level and Mute Status.
- ⑧ **Volume Control:** Rotate the dial clockwise for volume up and counter clockwise for volume down. Press and hold the dial for 1.5 seconds to mute or un-mute the audio transmission.

TRANSMITTER FEATURES

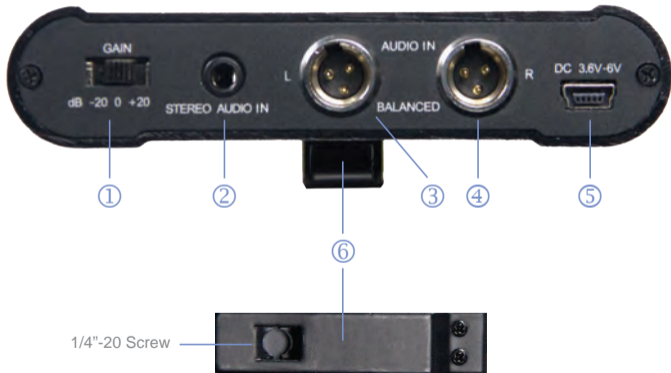


TRANSMITTER FEATURES

Transmitter Rear Panel

- ① Gain Select:** Selectable gain levels -20 dB, 0 dB and +20 dB
- ② Stereo Input:** 1/8" TRS stereo input port
Connect this input to your MIC, Guitar, Keyboard, Computer, Tablet or Phone audio output
Connect this input to the 1/8" TRS stereo output port on the Receiver for Relay Mode
Wireless Range Expansion
- ③ Left Channel:** Left channel audio input port (Mini XLR Balanced)
Connect this XLR input to the input of your mixer
- ④ Right Channel:** Right channel audio input port (Mini XLR Balanced)
Connect this XLR input to the input of your mixer
- ⑤ Power Input:** 5V DC, 500 mA (USB Bus Power)
Connect the included 5V DC, 500 mA power supply here
- ⑥ Belt Clip:** Metal Belt Clip & 1/4"-20 Screw
Connect this port to the supplied mounting accessories for table top setups
or speaker and stands setups

TRANSMITTER FEATURES



RECEIVER FEATURES

Receiver Front Panel

- 1 Antenna:** Detachable High Performance Antenna
- 2 Antenna Port:** Place the antenna in a vertical position for best wireless transmission results. If the wireless signal quality is poor, change the position of the antennas.
- 3 Power ON/OFF:** Press and hold the Power button for 2 seconds to turn the transmitter ON or OFF.
- 4 Channel Select:** Adjusts the frequency band range. Press the up or down buttons to select a channel.
- 5 Battery LED:** Displays the status of three functions. Full Battery, Low Battery and Charging.
- 6 Status LED:** The LED will turn RED when the wireless signal is lost and GREEN when the wireless signal is established.
- 7 Monitor Display:** Displays the status of three functions. Channel Number, Volume Level and Mute Status.
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RECEIVER FEATURES

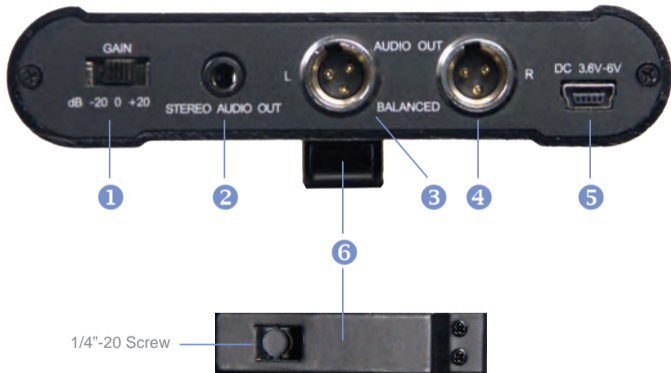


RECEIVER FEATURES

Receiver Rear Panel

- 1 Gain Select:** Selectable gain levels -20 dB, 0 dB and +20 dB
- 2 Stereo Output:** 1/8" TRS stereo output port
Connect this output to your powered speaker, headphone or in-ear monitor
Connect this output to the 1/8" TRS stereo input port on the Transmitter for Relay Mode
Wireless Range Expansion
- 3 Left Channel:** Left channel audio output port (Mini XLR Balanced)
Connect this XLR output to the input of your speaker
- 4 Right Channel:** Right channel audio output port (Mini XLR Balanced)
Connect this XLR output to the input of your speaker
- 5 Power Input:** 5V DC, 500 mA (USB Bus Power)
Connect the included 5V DC, 500 mA power supply here
- 6 Belt Clip:** Metal Belt Clip & 1/4"-20 Screw
Connect this port to the supplied mounting accessories for table-top setups
or speaker and stands setups

RECEIVER FEATURES



SYSTEM SPECIFICATIONS

Wi Pro AudioMatrix Technical Specifications

System Specifications

Transmission Format:	2.4 GHz, 16-bit, 48kHz Digital Wireless
Frequency Response:	15Hz to 20kHz
Frequency Selection:	Auto and Manual Select
S/N Ratio:	More than 96 dB (A-weighted) for stereo line-in mode
Distortion:	0.12 % THD
Audio Multicast:	One Transmitter to 50 Receivers
Latency:	2~4ms
Wireless Range:	Up to 250 Feet (Range may be dependent on line of sight and may vary due to local conditions)
Power Input::	5V DC, 500 mA (USB Bus Power)
Rechargeable Battery Life:	6~8 hours
Power Input:	5V DC, 500 mA
Mounting:	Metal Belt Clip & 1/4"-20 Screw
Enclosure:	Aluminum

Transmitter Specifications

Audio Controls:	Volume Up/Down & Mute
Channel Selection:	Auto & Manual Up/Down
Connectors:	1/8" TRS Stereo, Mini XLR Balanced (Left), Mini XLR Balanced (Right)
Max Input Level:	2.8V RMS
Input Impedance:	1 M ohm
Selectable Gain Levels:	-20 dB, 0 dB and +20 dB
Size & Weight:	2.7" x 0.8" x 3.8", 0.13lb

Receiver Specifications

Audio Controls:	Volume Up/Down & Mute
Channel Selection:	Auto & Manual Up/Down
Connectors:	1/8" TRS Stereo, Mini XLR Balanced (Left), Mini XLR Balanced (Right)
Max Output Level:	2V RMS
Input Impedance:	<10 ohm
Selectable Gain Levels:	-20 dB, 0 dB and +20 dB
Size & Weight:	2.7" x 0.8" x 3.8", 0.13lb

CHARGING

Charging The System

Before using your new Wi Pro AudioMatrix™ digital wireless system, you need to fully charge the batteries for approximately 2 hours.

1. Plug the AC Charger into a power socket.
2. Connect the USB power cable to the USB port on the AC charger.
3. Connect one of the two mini USB connectors to the Transmitter or the Receiver USB power port.
4. The Battery LED will turn to solid Red ON.
5. When charging is complete the Red LED will turn OFF.

The system power source's flexible design boasts 4 power options:

- 6–8 hours internal rechargeable battery use.
- 13 hours with USB AA battery adapter or USB Power Bank.
- Continuous use with AC power adapter.
- Continuous use with USB port bus power.



CHARGING



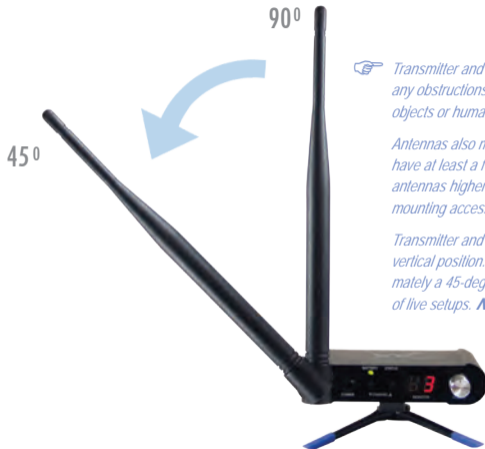
ANTENNA SETUP


Antenna Connection & Orientation

1. Locate the detachable high performance antenna that comes with the system.
2. Make sure that the Transmitter and/or the Receiver power is OFF.
3. Gently position the antenna's connector over the Transmitter's or the Receiver's antenna port and fasten the antenna until it is snug and secure.
4. The Receiver's antenna should be oriented in the same plane as the Transmitter's antenna. For best wireless transmission results place the antennas in a vertical position. If the wireless signal quality is poor, change the position of the antennas.



ANTENNA SETUP



 *Transmitter and Receiver antennas should be positioned clear of any obstructions, including walls, metal surfaces, large free standing objects or human bodies, which can absorb RF.*

Antennas also must not touch or cross other receiving antennas and have at least a few inches of clearance. We recommend placing the antennas higher than crowd level by 3 to 5 feet using the supplied mounting accessories.

*Transmitter and Receiver antennas are generally placed in the vertical position. Additionally, antennas also can be placed at approximately a 45-degree angle from vertical to accommodate the dynamics of live setups. **Never orient the antennas horizontally!***

TRIPOD STANDS SETUP

Tripod Folding Stand Setup

The system is equipped with mini folding tripod stands with solid metal legs that fold together and fan out when used for tabletop and speaker top setups.

1. Locate the included folding mini tripod stands.
2. Make sure that the Transmitter and the Receiver are turned OFF.
3. Align the small screw-head on the mini folding tripod with the underside belt clip 1/4'-20 screw mount of the Transmitter or Receiver.
4. Gently screw the folding mini tripod stand into the Transmitter or Receiver belt clip 1/4'-20 screw mount until they are snugly joined.
5. Rotate the mini folding tripod stand right leg in a clockwise circular motion to fanout the mini tripod legs.



TRIPOD STANDS SETUP

6. Place the Transmitter Next to the Mixer.
7. Place the Receiver on top of the speaker.




ROLL BAR BRACKETS SETUP

Roll Bar Mounting Brackets Setup

The system is equipped with Roll Bar Zip-Tie Style Universal Mounting Brackets for secure Receivers' speakers setup and Transmitter MIC stand setup.

1. Locate the included Roll Bar Zip-Tie Style Universal Mounting Brackets.
2. Attach the Zip-Tie Style Universal Mounting Brackets to the speaker's roll bar handle by wrapping the rubber strap around the roll bar handle.
3. Loop the rubber strap into the bracket hook.
4. Pull firmly on the strap for a secure fit.

 Alternatively the Roll Bar Zip-Tie Style Universal Mounting Bracket can be attached to a MIC stand to mount and raise the Transmitter above the crowd and away from any possible RF interfering gear for unobstructed line of sight RF communication.



ROLL BAR BRACKETS SETUP

5. Make sure that the Transmitter and the Receiver are turned OFF.
6. Align the small screw-head on the universal mounting bracket with the underside belt clip 1/4'-20 screw mount of the Transmitter or Receiver.
7. Gently screw the universal mounting brackets to the Transmitter or Receiver belt clip 1/4'-20 screw mount until they are snugly joined.



SINGLE CHANNEL SETUP

Single Channel Transmitter Setup

Users can wirelessly send a Mono audio signal through the Transmitter to up to 50 Receivers.

1. Locate the included Mini XLR to Female XLR Cables.
2. Make sure that the Transmitter and the Receiver are turned OFF.
3. Insert the mini XLR end of the cable into the Transmitter Mini XLR Left audio channel input port.
4. Insert the full size XLR end of the cable to your mixer's main Left output port.
5. Keep all mixer volume and transmitter Trim controls at their minimum settings.

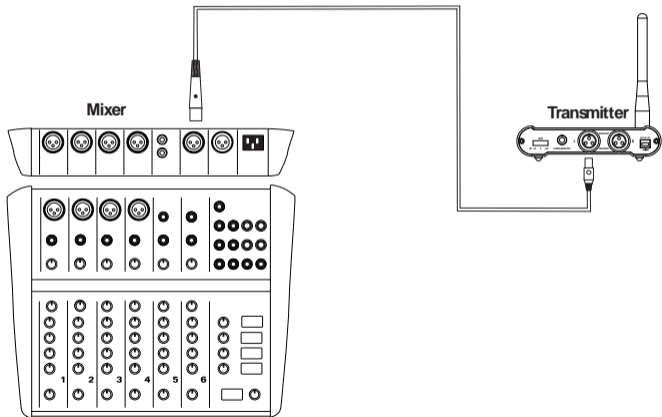


Single Channel Receiver(s) Setup

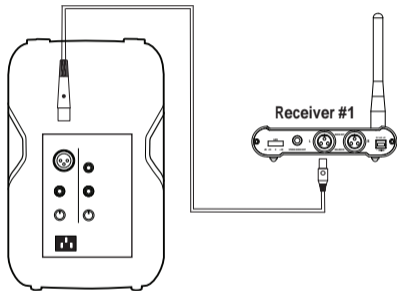
6. Locate the included Mini XLR to Male XLR Cables.
7. Insert the mini XLR end of the cable into the Receiver(s) Mini XLR Left audio channel input port.
8. Insert the full size XLR end of the cable to your loudspeaker audio input port.
9. Repeat steps 6 to 8 for the second Receiver.
10. Power up the Transmitter and Receiver(s).
11. The Receivers will automatically Seek-and-Link to the Transmitter and set themselves to the Transmitter channel.
12. Adjust the output level on your mixer, and adjust the Trim controls on the transmitter and the receivers to hear the audio signal.



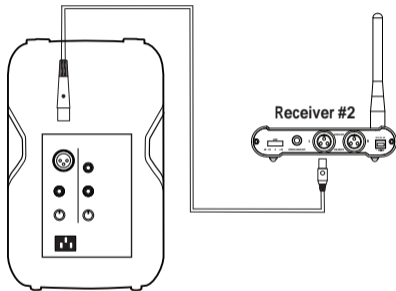
SINGLE CHANNEL DIAGRAM



SINGLE CHANNEL DIAGRAM



**LEFT MONO
Powered Speaker**



**LEFT MONO
Powered Speaker**

DUAL CHANNEL SETUP

Dual Channel Transmitter Setup

Users can wirelessly send stereo or two independent audio signals through the Transmitter to up to 50 Receivers.

1. Locate the included Mini XLR to Female XLR Stereo Cables.
2. Make sure that the Transmitter and the Receiver are turned OFF.
3. Insert the mini XLR ends of the cables into the Transmitter Mini XLR Left and Right channels audio input ports.
4. Insert the full size XLR end of the cable into your mixer's main output ports.
5. Keep all mixer volume and transmitter Trim controls at their minimum settings.

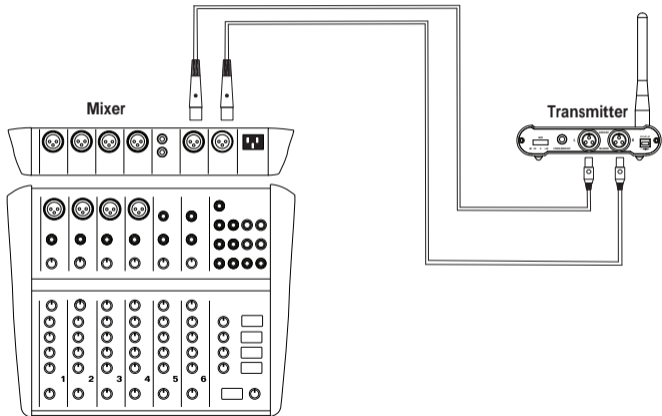


Left & Right Channel Receivers Setup

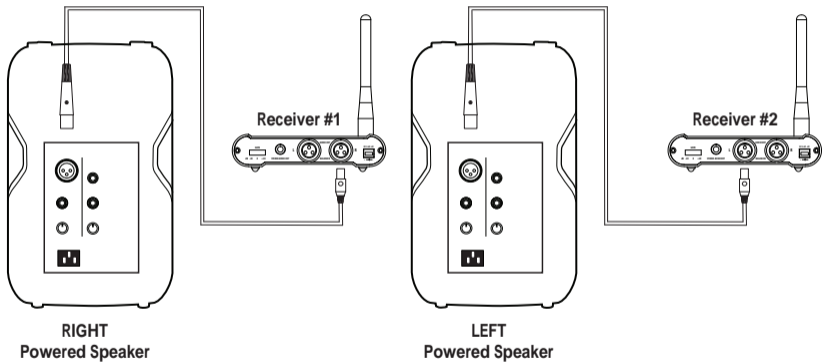
6. Locate the included Mini XLR to Male XLR Cables.
7. Insert the mini XLR end of the cable into the Receiver's Mini XLR Left audio channel input port.
8. Insert the full size XLR end of the cable to your loudspeaker audio input port.
9. Repeat steps 6 to 8 for the second Receiver Right audio channel input port.
10. Power up the Transmitter and Receivers.
11. The Receivers will automatically Seek-and-Link to the Transmitter and set themselves to the Transmitter channel.
12. Adjust the output level on your mixer, and adjust the Trim controls on the transmitter and the receivers to hear the audio signal.



DUAL CHANNEL DIAGRAM



DUAL CHANNEL DIAGRAM



DUAL CHANNEL SETUP

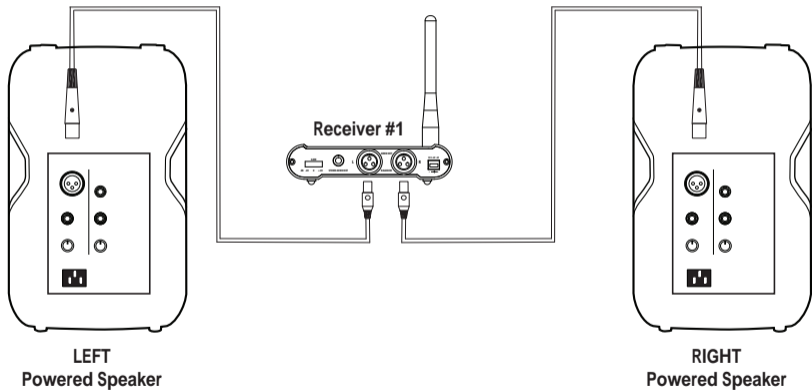
Dual Channel Receiver(s) Setup

Users can configure each Receiver to wirelessly drive two loudspeakers simultaneously.

1. Locate the included Mini XLR to Male XLR Cables.
2. Insert the mini XLR end of the cable into the Receiver's Mini XLR Left audio channel input port.
3. Insert the full size XLR end of the cable to your loudspeaker audio input port.
4. Insert the mini XLR end of the cable into the Receiver's Mini XLR Right audio channel input port.
5. Insert the full size XLR end of the cable into your second loud speaker audio input port.
9. Repeat steps 3 to 5 for the second Receiver.
6. Power up the Transmitter and Receivers.



DUAL CHANNEL SETUP

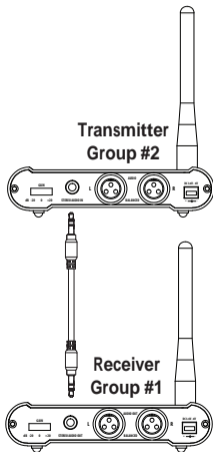


RELAY MODE SETUP

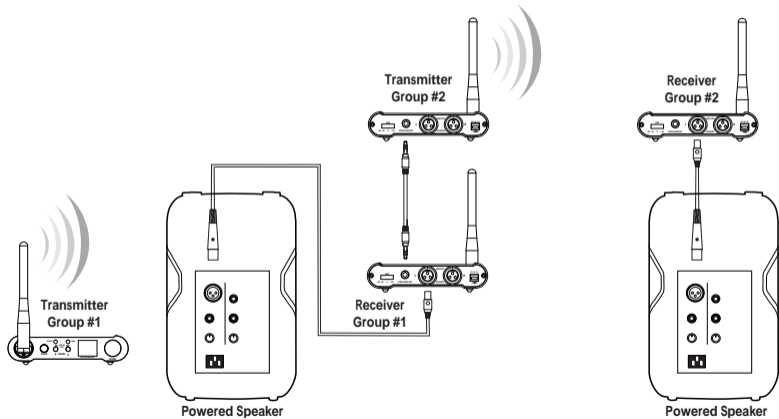
Relay Receiver to Transmitter Mode Setup

Users can implement a RELAY configuration to extend the wireless distance coverage or allow the wireless coverage to go around barriers.

1. Locate the included 1/8" to 1/8" Stereo Cable.
2. Identify the last Receiver linked to Transmitter #1 group.
3. Make sure that Transmitter #2 is turned OFF.
4. Insert the 1/8" end of the cable into the Transmitter #2 1/8" Stereo Audio IN port.
5. Insert the 1/8" end of the cable into the 1/8" Stereo Audio OUT port of the last Receiver in group #1.
6. Power up the Transmitter #2 and set the channel to a different number from Transmitter #1.
7. Power up the Receivers for group #2 and set the channel to match Transmitter #2 channel.



RELAY MODE DIAGRAM



Regulatory Compliance Information

FEDERAL COMMUNICATIONS 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:

- 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.

CAUTION:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the 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.

RF Exposure Warning

The equipment complies with FCC RF exposure limits set forth for an uncontrolled environment.
The equipment must not be co-located or operating in conjunction with any other antenna or transmitter.

Disposal and Recycling Information

Correct Disposal

This symbol indicates that your product must be disposed of properly according to the local laws and regulations. When your product reaches its end of life, contact the retailer where the product was purchased or your local authorities to learn about recycling options. This product should not be mixed with other commercial waste for disposal.



PRODUCT WARRANTY

Product Warranty Terms

Wi Digital Systems warrants that the Wi Pro AudioMatrix is free from material defects and faulty workmanship for a period of twelve (12) months from the date of purchase. Wi Digital Systems will repair or replace, at its option, any Product that breaches this warranty during said period. This warranty does not cover and is void with respect to (1) Products which have been improperly installed, repaired, modified or altered; (2) Products which have been subject to abuse, misuse, physical damage, exposure to fire, water or excessive moisture or dampness; (3) Products on which the serial number has been removed, altered, or rendered illegible; (4) Products that are operated outside the limits of the technical specifications of the product.

Repair and/or replacement of the Wi Digital Systems product will be performed through Wi Digital Systems Return Material Authorization (RMA) procedure. The customer is required to contact Wi Digital Systems at www.widigitalsystems.com to obtain the approval and procedure for returning any product under warranty.

IN NO EVENT SHALL Wi DIGITAL SYSTEMS BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, DIRECT, INDIRECT, SPECIAL OR PUNITIVE DAMAGES WHICH ARISE IN ANY WAY OUT OF THE MANUFACTURE, SALE OR USE OF ITS PRODUCTS OR SERVICES. In the event that a court of competent jurisdiction determines that Wi Digital Systems is in breach of any warranty, the amount of recoverable damages shall be limited to the cost of the replacement of any Product found to be defective or nonconforming.

Out of Warranty

Should your Wi Pro AudioMatrix not function properly after the warranty period has expired, please contact Wi Digital Systems Customer Care at www.customercare@widigitalsystems.com

Limitations of Liability

Wi Digital Systems expressly assumes no responsibility for any error, omission, interruption, deletion, defect, delay in operation or transmission, communications failure, theft or destruction or unauthorized access to, or alteration of, any use of the Wi Pro AudioMatrix product. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL WI DIGITAL SYSTEMS OR ITS SUPPLIERS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR: LOSS OF PROFITS OR REVENUES, LOSS OF CONFIDENTIAL OR OTHER INFORMATION, BUSINESS INTERRUPTION, PERSONAL INJURY, DEATH, LOSS OF PRIVACY, CORRUPTION OR LOSS OF DATA, FAILURES TO TRANSMIT OR RECEIVE AUDIO OR ANY OTHER PECUNIARY LOSS WHATSOEVER ARISING OUT OF OR IN ANY WAY RELATED TO THE USE OF OR INABILITY TO USE THE DEVICE OR THE SUPPORT SERVICES OR OTHERWISE IN CONNECTION WITH ANY PROVISION OF THIS AGREEMENT, EVEN IF WI DIGITAL SYSTEMS OR ANY SUPPLIER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.



The Sound of Digital Wireless Innovation

www.widigitalsystems.com

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