

owner's manual

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FCC Information

- 1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!: This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Vocopro may void your authority, granted by the FCC, to use this product.
- 2. IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable(s) supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the U.S.A.
- 3. NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurances that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the owner's manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "Off" and "On", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Use power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter(s).

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300-ohm ribbon lead, change the lead-in to coaxial type cable.

If these corrective measures do not produce satisfactory results, please contact your local retailer authorized to distribute Vocopro products. If you can not locate the appropriate retailer, please contact Vocopro, 1728 Curtiss Court, La Verne, CA 91750.

CAUTION

The apparatus is not disconnected from the AC power source so long as it is connected to the wall outlet, even if the apparatus itself is turned off. To fully insure that the apparatus is indeed fully void if residual power, leave unit disconnected from the AC outlet for at least fifteen seconds.

DECLARATION OF CONFORMITY

We of VocoPro 1728 Curtiss Ct. La Verne, CA 91750 declare under our sole responsibility that the following products, Model: AIR-NET Name: Wireless Audio Transmitter were tested and found to comply 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.

CAUTION:

READ THIS BEFORE OPERATING YOUR UNIT

- To ensure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.
- Install your unit in a cool, dry, clean place away from windows, heat sources, and too much vibration, dust, moisture or cold. Avoid sources of hum (transformers, v motors). To prevent fire or electrical shock, do not expose to rain and water.
- 3. Do not operate the unit upside-down.
- 4. Never open the cabinet. If a foreign object drops into the set, contact your dealer.
- Place the unit in a location with adequate air circulation. Do not interfere with its proper ventilation; this will cause the internal temperature to rise and may result in a failure.
- 6. Do not use force on switches, knobs or cords. When moving the unit, first turn the unit off. Then gently disconnect the power plug and the cords connecting to other equipment. Never pull the cord itself.
- 7. Do not attempt to clean the unit with chemical solvents: this might damage the finish. Use a clean, dry cloth.
- 8. Be sure to read the "Troubleshooting" section on common operating errors before concluding that your unit is faulty.
- 9. This unit consumes a fair amount of power even when the power switch is turned off. We recommend that you unplug the power cord from the wall outlet if the unit is not going to be used for a long time. This will save electricity and help prevent fire hazards. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- To prevent lightning damage, pull out the power cord and remove the antenna cable during an electrical storm.
- 11. The general digital signals may interfere with other equipment such as tuners or receivers. Move the system farther away from such equipment if interference is observed.

NOTE:

Please check the copyright laws in your country before recording from records, compact discs, radio, etc. Recording of copyrighted material may infringe copyright laws.

Voltage Selector (General Model Only)

Be sure to position the voltage selector to match the voltage of your local power lines before installing the unit.

110V

Listening for a Lifetime

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. VocoPro and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to a higher volume of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

- Set the dial and leave it there.
- Pay attention to the different levels in various recordings.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Some common decibel ranges:

Level	Example
30 40	Quiet library, Soft whispers Living room, Refrigerator, Bedroom away from traffic
50	Light traffic, Normal Conversation
60	Air Conditioner at 20 ft., Sewing machine
70	Vacuum cleaner, Hair dryer, Noisy Restaurant
80	Average city traffic, Garbage disposals, Alarm clock at 2 ft.

The following noises can be dangerous under constant exposure:

Level	Example
90	Subway, Motorcycle, Truck traffic, Lawn Mower
100	Garbage truck, Chainsaw, Pneumatics drill
120	Rock band concert in front of speakers
140	Gunshot blast, Jet plane
180	Rocket launching pad

-Information courtesy of the Deafness Research Foundation

Safety Instructions



CAUTION RISK OF SHOCK



CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Only refer servicing to qualified service personnel.

Explanation of Graphical Symbols



The lightning flash & arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of danger.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and servicing instructions.

WARNING

To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.

- Read Instructions All the safety and operating instructions should be read before the appliance is operated.
- **2. Retain Instructions** The safety and operating instructions should be retained for future reference.
- **3. Heed Warnings** All warnings on the appliance and in the operating instructions should be adhered to.
- Follow Instructions All operating and use instructions should be followed.
- Attachments Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- **6. Water and Moisture** Do not use this unit near water. For example, near a bathtub or in a wet basement and the like.
- Carts and Stands The appliance should be used only with a cart or stand that is recommended by the manufacturer.
- **7 A.** An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause an overturn.

- 8. Ventilation The appliance should be situated so its location does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation slots.
- 9. Heat The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- 10. Power Sources The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- **11. Grounding or Polarization** Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.
- 12. Power-Cord Protection Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- 13. Cleaning Unplug this unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- **14. Power lines** An outdoor antenna should be located away from power lines.
- **15. Nonuse Periods** The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- **16. Object and Liquid Entry** Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- **17. Damage Requiring Service** The appliance should be serviced by qualified service personnel when:
- A. The power supply cord or plug has been damaged; or
- B. Objects have fallen into the appliance: or
- C. The appliance has been exposed to rain; or
- D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
- E. The appliance has been dropped, or the enclosure damaged.
- 18. Servicing The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Note:

To CATV system installer's (U.S.A.): This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected as close to the point of cable entry as practical.

Welcome

Thank you for purchasing the **AIR-NET** from VocoPro, the singer's ultimate choice. With years of experience in the music entertainment business, VocoPro is a leading manufacturer of Karaoke equipment, and has been providing patrons of bars, churches, schools, clubs and individual consumers the opportunity to sound like a star with full-scale club models, in-home systems and mobile units. All our products offer solid performance and sound reliability, and to further strengthen our commitment to customer satisfaction, we have customer service and technical support professionals ready to assist you with your needs. We have provided some contact information for you below.

VocoPro

1728 Curtiss Court La Verne, CA 91750 **Toll Free: 800-678-5348**

TEL: 909-593-8893 FAX: 909-593-8890

VocoPro Company E-mail Directory

Customer Service & General Information info@vocopro.com

Tech Support

techsupport@vocopro.com

Remember Our Website

Be sure to visit the VocoPro website www.vocopro.com for the latest information on new products, packages and promos. And while you're there don't forget to check out our Club VocoPro for Karaoke news and events, chat rooms, club directories and even a Service directory!

We look forward to hearing you sound like a PRO, with VocoPro, the singer's ultimate choice.

FOR YOUR RECORDS

Please record the model number and serial number below, for easy reference, in case of loss or theft. These numbers are located on the rear panel of the unit. Space is also provided for other relevant information.

Nodel Number	
erial Number	
Pate of Purchase	
lace of Purchase	

Features & Specifications

The AIR-NET 2.4GHz Wireless Audio System from VocoPro is the perfect solution to complicated cable connections. Connect the receiver units to powered speakers and transmit digital audio from the AIR-NET unit.

The included right and left receiver units provide stereo connectivity and CD quality sound, additional receivers can be purchased to expand your system beyond two speakers. Each receiver will automatically switch to the channel you set, providing you instant results when finding the best signal. The 2.4 GHz signal provides fuller bandwidth and covers a larger spectrum than traditional VHF and UHF alternatives.

The AIR-NET makes setup a breeze, letting you focus on the show.

- Approximately 150 ft. Range (Line of Sight)
- Transmitter is One Rack-Unit for Convenient Integration with Your System
- RCA, 1/4" and XLR Connectors Included for Speaker Compatibility
- Digital Audio with 48K Sampling Rate and 16-Bit Resolution
- Input Your Source to the Transmitter with RCA or XLR
- Body-Pack Type Receivers can use Power Adapter or Batteries

Specifications:

Work Voltage 3.6–6V DC 2.5–3.6V DC Work Current Max 120mA Max 40mA Operation Temperature -15–65°C -15–65°C

RF IC Frequency 2400—2524MHz 2400—2524MHz

RF IC Channel to Choose 125CH 125CH

MODULATION GFSK

Data Rate 2Mbps 2Mbps

Practical Module Frequency Range 2400—2483MHz 2400—2483MHz

Practical Module Working Channel 8CH (A Mode) 20CH (B Mode) 8CH (A Mode) 20CH (B Mode)

Module Channel Space 4MHz 4MHz TX Power 0—18dBm RX Sensitivity -90dBm

RF Range 100-150M (tested with TX power 18dbm in an open field)

Dynamic Range90dBChannel Separation70dBInput Level1.0VrmsInput Impedance10k Ohm

Input Interface Selection of inputs of microphones and stereo frequency

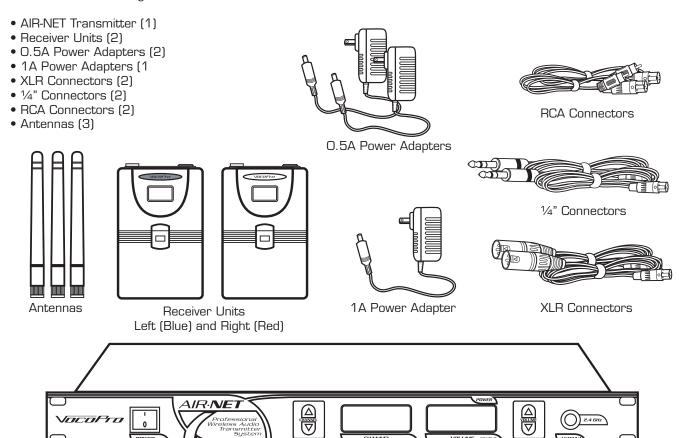
Output Impedance 1k Ohm
Output/Input Gain 1:1

Frequency Response 20–20000Hz (-3dB)

Latency <0.5ms
Sampling Ratio 64kHz 16 bit

Getting Started

Thank you for purchasing the AIR-NET. Take a few moments to look through this manual. Before setting up, please make sure the following accessories are included.



AIR-NET Transmitter

Returns and Warranty

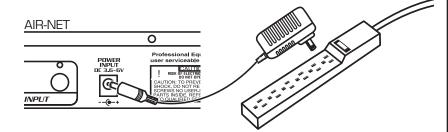
In the unlikely event that the AIR-NET would need to be shipped for repair, it is recommended that you keep all the product packaging and receipt. For detailed warranty information, please visit www.vocopro.com/warranty_extended. html. To find a VocoPro Authorized Service Center near you, please visit www.vocopro.com/servicecenter.html

Getting Connected

Connecting the POWER ADAPTER to the transmitter

What you will need:

- Included 1A Power Adapter (Look for specification on sticker)
- AIR-NET Transmitter
- Connect the power adapter to the power input plug on the back of the AIR-NET transmitter.
- 2. Connect the power adapter to a surge protector or available power outlet.



Receiver Battery or Power Adapter Operation

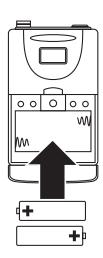
Using Batteries

What you will need:

- Four AA batteries
- AIR-NET Receivers
- 1. Open the battery compartment.
- 2. Insert two AA batteries into each receiver according to the diagram.





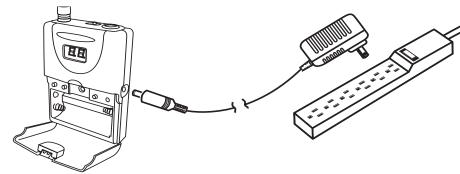


OR

Using Power Adapters

What you will need:

- 0.5A Power Adapters (Look for specification on sticker)
- AIR-NET Receivers
- Connect the power adapter to the power input plug on the AIR-NET receiver.
- 2. Connect the power adapter to a wall outlet.
- 3. Repeat for other and additional receivers.



Note: The AIR-NET system does NOT charge batteries.

Getting Connected cont.

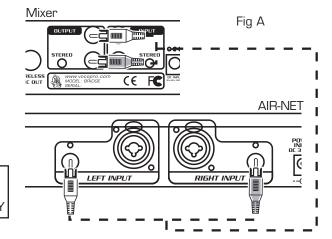
Connecting the AIR-NET TRANSMITTER

What you will need:

- AIR-NET Transmitter Unit
- Audio Source
- 1. Refer to page 9 for instructions on connecting to power.
- 2. Connect the source (DVD Player, Mixer) to the AIR-NET transmitter according to the diagram. (Fig A).



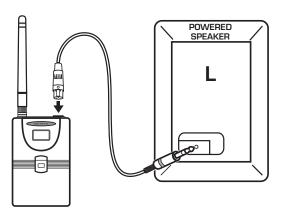
WARNING: DO NOT CONNECT AMPLIFIER/SPEAKER OUTPUTS TO THE AIR-NET TRANSMITTER AS IT WILL DAMAGE THE PRODUCT AND VOID YOUR WARRANTY

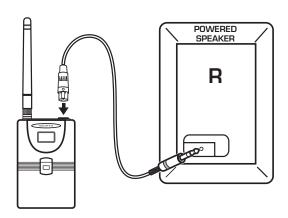


Connecting the AIR-NET RECEIVERS

What you will need:

- Each Receiver Unit
- XLR or 1/4" Adapters
- Powered Speakers
- 1. Connect each receiver unit to your powered speakers with the ¼" (Fig. B), or XLR adapters (Fig C). Connect the LEFT (BLUE) and RIGHT (RED) to the corresponding speaker.

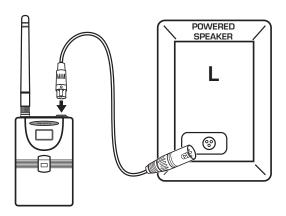


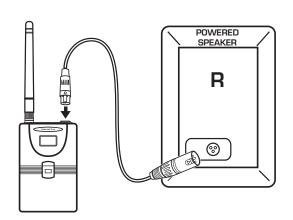


OR



Fig B





Getting Connected cont.

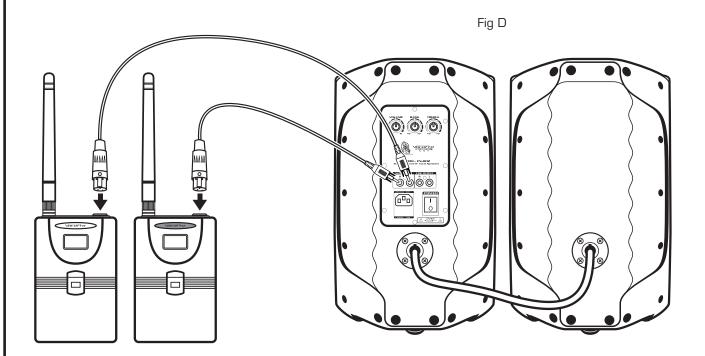
Connecting the AIR-NET RECEIVERS continued

Some stereo speaker pairs may have left and right inputs on one speaker. Connect both receivers to these inputs.

What you will need:

- AIR-NET Transmitter Unit
- Each Receiver Unit
- RCA Adapters
- Powered Speakers
- 1. Connect the source (DVD Player, Mixer) to the AIR-NET transmitter (Fig A).
- 2. Connect each receiver unit to your powered speakers with the RCA adapters. Connect the LEFT receiver (BLUE) to the LEFT (WHITE) input. Connect the RIGHT receiver (RED) to the RIGHT (RED) input. (Fig D)
- 3. Power ON the AIR-NET transmitter unit and each receiver.
- 4. Begin your source playback and select a channel that has the best audio quality.

 Change the channel on the transmitter unit and the receiver units will change automatically.



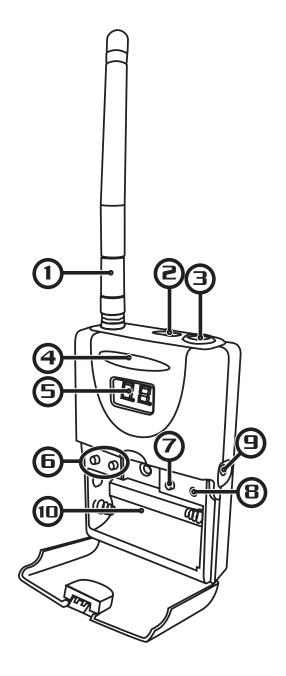
Descriptions & Functions

RECEIVER

- ANTENNA Connect an included ANTENNA to the connector by inserting the center pin and turning clockwise to fasten.
- 2. POWER Move the switch to the ON or OFF position to control the unit's power.
- **3. OUTPUT** Connect the RCA or XLR cable adapter from this output to your input device (Speakers, Stereo System etc.)
- COLOR CODE This will indicate if the receiver is for the left or right powered speaker.

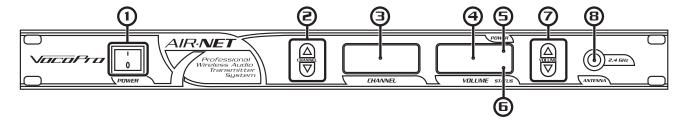
BLUE: LEFT RED: RIGHT

- **5. CHANNEL DISPLAY** View selected channel. The AIR-NET supports 20 broadcast channels.
- **6. VOLUME CONTROL** Use the VOL button to decrease the output volume or VOL + to increase the output volume.
- 7. CHANNEL SELECTOR This button is for use with re-syncing the AIR-NET transmitter and reciever system if they should be disconnected. Avoid using this button unless directed by a VocoPro technician.
- **8. STATUS INDICATOR** This LED will illuminate to indicate that the receiver unit is paired with the AIR-NET transmitter.
- POWER CONNECTOR Connect the included power adapter to this input to power your receiver from a wall outlet.
- BATTERY COMPARTMENT Power the receiver with two AA batteries.



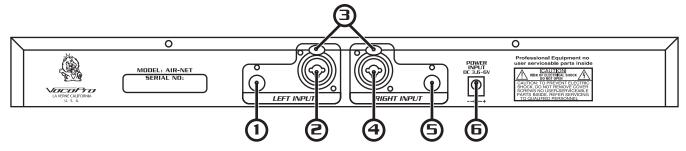
Descriptions cont.

Front Panel



- 1. POWER Set the switch to "I" to power the unit ON or "O" to turn the power OFF.
- 2. CHANNEL SELECTOR Use the ARROW UP or ARROW DOWN to select a new channel. The AIR-NET has 20 available broadcast channels. The receiver units will automatically detect and switch to the new channel you choose.
- 3. CHANNEL DISPLAY View the channel you have selected with the CHANNEL SELECTOR buttons.
- 4. VOLUME DISPLAY View the volume level that you have selected via the VOLUME CONTROL.
- 5. POWER INDICATOR This LED illuminates when the AIR-NET is powered on.
- 6. STATUS INDICATOR This LED remains illuminated when the AIR-NET is ready to broadcast.
- 7. VOLUME CONTROL Use the ARROW UP to increase the volume or ARROW DOWN to decrease the volume. The maximum volume level is 31.
- 8. ANTENNA Connect an included ANTENNA to the connector by inserting the center pin and turning clockwise to fasten.

Rear Panel



- 1. L INPUT (RCA) Connect the left stereo output from your device (DVD Player, Mixer, etc.) to this connector with an RCA cable.
- 2. L INPUT (1/4" / XLR) Connect the left stereo output (pre-out) from your device (Mixer etc.) to this connector with an XLR or 1/4" cable.

WARNING: DO NOT CONNECT AMPLIFIER/SPEAKER OUTPUTS TO THE AIR-NET TRANSMITTER AS IT WILL DAMAGE THE PRODUCT AND VOID YOUR WARRANTY

- 3. CABLE RELEASE BUTTONS Release the connected XLR cables by pressing the button in while pulling the cable out.
- 4. R INPUT (1/4" / XLR) Connect the right stereo output (pre-out) from your device (Mixer, etc.) to this connector with an XLR or 1/4" cable.

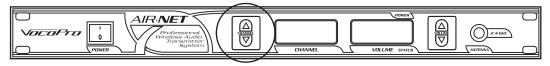
WARNING: DO NOT CONNECT AMPLIFIER/SPEAKER OUTPUTS TO THE AIR-NET TRANSMITTER AS IT WILL DAMAGE THE PRODUCT AND VOID YOUR WARRANTY

- 5. R INPUT (RCA) Connect the right stereo output from your device (DVD Player, Mixer, etc.) to this connector with an RCA cable.
- 6. DC POWER INPUT Connect the included power adapter to this input to power your transmitter.

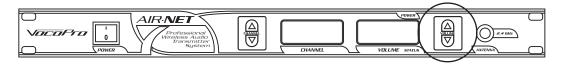
Operating the AIR-NET

See page 10 for instructions on connecting the AIR-NET system. Once you are connected, follow these guidelines to operate your AIR-NET successfully.

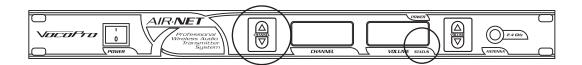
- Power ON the AIR-NET TRANSMITTER and each RECEIVER.
- Begin your source playback and select a channel that has the best audio quality. Change the channel on the transmitter unit and the receiver units will change automatically.



• Use the VOLUME CONTROL on either the TRANSMITTER or RECEIVERS to adjust the sound output level. For best performance and to avoid distortion, use a lower volume setting on the transmitter. If more volume is needed, maximize volume on the receivers.



• If there is static, or the signal becomes weak, change the broadcast channel with the CHANNEL SELECTOR buttons to find a better channel. The STATUS INDICATOR LED may blink when a signal is distorted or weak, suggesting a channel adjustment is needed.



Troubleshooting

The audio has static

- Set the AIR-NET to a new channel with the channel selection button.
- Adjust the distance of the AIR-NET transmitter in relation to the receiver units.

The audio is distorted (cuts out)

• Use a lower volume setting on the transmitter.

If more volume is needed, increase the volume on the receivers.

There is no sound

- Make sure everything is connected firmly and properly.
- Make sure there are no defective cables.
- Make sure all of your components are turned on.
- Make sure all of the components (mixer, player) are set to the proper inputs.
- Make sure there are fresh batteries in the receiver units.

The transmitter can't connect to the receiver channel

• Contact VocoPro tech support for assistance on re-syncing your AIR-NET system.

The receivers do not automatically update to the transmitter's selected channel

• Contact VocoPro tech support for assistance on re-syncing your AIR-NET system.



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