

# Talk & Listen® Systems

# 72MHz Mini Transmitter and Receiver Part #s – ARG-TX72M & ARG-TX72R Manual and User Guide





User Guide Part # ARG-OM031 REVD Updated: 1/5/2017

#### IMPORTANT SAFETY INSTRUCTIONS

**CAUTION**: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE P RODUCT TO RAIN OR MOISTURE

Audio Resource Group products are engineered and manufactured with the highest priority on safety. However, improper use can result in electric shock and/or fire. To ensure your safety and prolong the service life of your equipment, please read the following precautions and all collateral materials carefully before using the product.

- 1. Read and keep these instructions.
- 2. Heed all warnings.
- 3. Follow all instructions.
- 4. Do not use this device near water. Do not place objects filled with liquids, such as water bottles or drink containers directly near or on equipment.
- 5. Protect power cords from being walked on or pinched: especially at plugs, convenience receptacles, and the device's exit point.
- 6. Only use attachments/accessories specified by the manufacturer.
- Unplug devices from wall outlets during lightning storms or when not in use for long periods of time.
- 8. Do not attempt to service the devices yourself. Please contact Audio Resource Group, Inc. directly for maintenance, repair, or replacements.

### HEARING SAFETY A CAUTION!

Many of ARG's products are designed to amplify sounds to a high volume level which could potentially cause hearing damage <u>if used improperly</u>. To protect your hearing and the hearing of others:

- 1. Set the volume level at the minimum setting, then place the listening accessory (headphones, earphones or ear buds) on your ears and finally adjust the volume to a comfortable level.
- 2. If feedback (a high-pitched squealing sound) occurs, immediately move the receiver away from the transmitter and reduce the volume level.
- 3. Do not allow children or other unauthorized persons access to this product.

#### RECHARGEABLE BATTERIES

The TX72M transmitter and RX72M receiver uses a lithium-ion rechargeable battery. Please use the single power adapter or multi-slot charging tray provided with the devices to charge the transmitters and receivers. Using smart charging circuitry, the transmitters and receivers will be fully charged in a maximum of 3 hours. Following a 3 hour charge, the batteries are designed to operate the TX72M transmitter for approximately 15 hours and a RX72M receiver for 40 hours. Batteries MUST BE CHARGED for a complete cycle before the first use.

To charge a single transmitter or receiver using the single power adapter, insert the charger plug into the 5V/DC Input on the bottom of the unit. To use the drop-in charging tray, plug in the power supply for the tray and insert each transmitter, receiver and charger into the tray, making sure that the 5V/DC Input plug of each unit securely fits the charging post in the tray. The LED will turn red indicating the unit is charging; the unit is fully charged when the red LED turns off.



SYSTEM OVERVIEW

The Audio Resource Group, Inc. 72MHz Mini Talk & Listen® System is a portable, high-performance communication system designed to be used for many types of communication applications. It is composed of four principal components: transmitter, microphone, receiver and listening equipment (headphone, earphone, ear bud).

The 72MHz Mini Talk & Listen® System incorporates a new smaller design that functions with existing 72Mhz systems.

The transmitter broadcasts a high-quality one-way audio signal to an unlimited number of receivers providing crystal clear FM quality audio to each listener. Much like a miniature radio station, the speaker uses a transmitter to broadcast a radio signal while the listeners use a receiver to hear the signal. The transmission range of this system is 100m LOS (Line of Site).

#### HINTS to Using the TALK & LISTEN® Wireless System

Maximum operating distance between the transmitter and receiver is 100m (LOS). The operating range will vary in different environments.

Getting transmitters too close to one another may cause signal interference, even when they are set to a different channel. Maintain at least **three feet of separation** between transmitters to avoid signal interference.

Receivers are not subject to interference when in close proximity to one another therefore listeners may sit close together whether on the same or different channels. If a receiver gets too close to a transmitter, interference may occur. Maintain three feet of separation between a transmitter and receiver to avoid interference.

#### **FCC Compliance**

These devices comply with part 15 of the FCC Rules. FCC regulations require the user to comply with the rules of transmitter operation. Any changes or modifications made by the user not expressly approved for compliance may result in the loss of privileges and authority to operate the equipment. Operation is subject to the following two conditions:

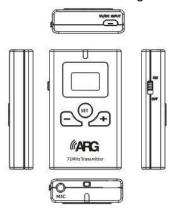
- 1) The device may not cause interference.
- 2) The device must accept any interference, including interference that may cause undesired operation of the device.

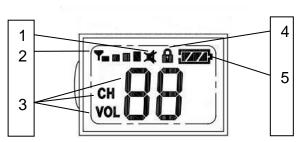
#### **TROUBLESHOOTING**

- 1. Read through the manual and user guide carefully to verify proper setup and installation of the transmitter and receiver(s).
- 2. Make sure the transmitter and receiver(s) are fully charged prior to use.
- 3. Make sure the microphone is plugged into the TX72M transmitter and the earphone/headphone is plugged in the RX72M receiver.
- 4. When using two or more transmitters simultaneously do not use adjacent channels if possible, for example: you want to use two transmitters simultaneously, set TRANSMITTER ONE to channel 1 and TRANSMITTER TWO to channel 3; leaving channel 2 as an unused channel. This creates more spacing between the channels and reduces the likelihood of interference.
- 5. If you are still hearing interference, turn the transmitter off and listen to a receiver. If you hear the interference with the transmitter off, you need to change to a clear channel.
- 6. If you are still experiencing difficulties, call ARG at (888) 468-4552.

#### **Operating Instructions: ARG-TX72M Mini Transmitter**

- 1. Plug the microphone into the 3.5mm audio input jack located on the top of the transmitter housing. Do not bunch up the cord, wrap it tightly around your body or wrap it around the transmitter. For maximum range, the cord should hang loosely from the microphone to the transmitter. Use only Talk & Listen® approved microphones; substitutions can greatly affect the overall performance therefore causing poor audio quality.
- 2. Turn the power switch of the Transmitter to "ON". The LCD will turn on and remain on until the power is turned off. The display will show the Volume Level for a second and then change to Channel Number. The LCD backlight will turn off after 5 seconds and will turn back on with the push of any button. The LED will turn green indicating the power is on; green flashing indicates low battery.
- 3. **To change channels on the Transmitter:** Start with the receiver in the "OFF" position press and hold the "+" and "-" buttons and turn the receiver to the "ON" position. Press the "+" and "-" buttons to scroll through the channel numbers (01 17). When done, turn the receiver to the "OFF" position to exit the programming mode. Confirm that the channel number on the transmitter matches the channel number on the receiver(s).
- 4. **To temporarily mute the transmitter:** Press and hold the "SET" button for two seconds until the Mute icon appears. To unmute the transmitter, press and hold the "SET" button for two seconds until the Mute icon disappears.
- 5. **To adjust the microphone volume:** In the "OFF" position, press and hold the "SET" button and turn the transmitter "ON". Use the SET button to scroll through the volume level (01 02), the transmitter will lock once the backlit screen goes off. **NOTE:** The volume level of the transmitter is factory set at 1. It is extremely unusual to need to adjust the transmitter's volume.
- 6. **To adjust the RF output strength:** in the "OFF" position, press and hold the "-" button and turn the transmitter "ON". Use the "+" and "-" buttons to adjust the RF output. There are three settings available. The first setting shows two signal strength bars and is 5dBm. The second setting shows three signal strength bars and is 10dBm. The third setting shows four signal strength bars and is 15dBm. Turn the transmitter to the "OFF" position to exit this setting.
- 7. When finished using Transmitter, slide the "ON/OFF" switch to the "OFF" position.

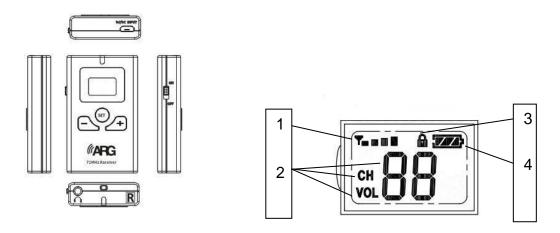




- 1. Mute Icon (when there is a mute icon on the display, the transmitter is muted; vice versa)
- 2. Signal Strength
- 3. Channel or Volume Icon and its value
- Lock Icon
- 5. Battery status (when the battery status is low, please charge the device soon)

#### **Operating Instructions: ARG-RX72M Mini Receiver**

- 1. Plug the headphone/earphone into the 3.5mm audio output jack located on the top of the receiver housing. Do not bunch up the cord, wrap it tightly around your body or wrap it around the receiver housing. For maximum range, the cord should hang loosely from the headphone/earphone to the receiver. Use only Talk & Listen® approved headphones/earphones, substitutions can greatly affect the overall performance and cause poor audio quality.
- 2. Turn the power switch of the Receiver to "ON". The LCD will turn on and remain on until the power is turned off. The display will show the Volume Level for a second and then change to the Channel Number. The LCD backlight will turn off after 5 seconds and will turn back on with the push of any button. The LED will turn green indicating the power is on; green flashing indicates low battery.
- 3. **Volume Control:** To adjust, use the "+" and "-" buttons on the front panel to adjust the volume level from 0-8 (0 being the lowest setting and 8 the highest setting). The number located on the LCD display indicates the volume level setting.
- 4. **To change channels on the receiver:** Start with the receiver in the "OFF" position press and hold the "+" and "-" buttons and turn the receiver to the "ON" position. Press the "+" and "-" buttons to scroll through the channel numbers (01 17). When done, turn the receiver to the "OFF" position to exit the programming mode. Confirm that the channel number on the receiver(s) matches the channel number on the transmitter.
- 5. To change the Squelch setting on the receiver: Start with the receiver in the "OFF" position press and hold the "SET" button and turn the receiver "ON". Use the "SET" button to scroll through the squelch setting numbers (01 09), the factory pre-set setting of "3" will work for most environments.
- 6. When finished using the Receiver, slide the "ON/OFF" switch to the "OFF" position.



- 1. Signal Strength
- 2. Channel or Volume Icon and its value
- 3. Lock Icon
- 4. Battery status (when the battery status is low, please charge the device soon)

#### **TECHNICAL SPECIFICATIONS**

Frequency Range: 72.1Mhz – 75.9Mhz Modulation: Wide Band FM< 75kHz peak Frequency Response: 200Hz – 13kHz

#### 72Mhz Transmitter

RF Output: 5dBm, 10dBm, 15dBm

Signal to noise ratio: 70dB Audio Input: 3.5mm Mono plug Power consumption 3.7V 40mAH

Operation time: 15 hours Charging time: 3 hours

Weight: 35g

#### 72Mhz Receiver

Antenna: Headphone cable Power consumption: 3.7V 15mAH

Operation time: 40 hours Charging time: 3 hours

Weight: 34g.

#### **OPERATING FREQUENCIES**

#### **Available Frequencies:**

72.1MHz (1) 72.5MHz (2) 72.9MHz (3) 75.7MHz (4) 74.7MHz (5) 75.3MHz (6) 75.9MHz (7) 72.2MHz (8) 72.3MHz (9) 72.4MHz (10) 72.6MHz (11) 72.7MHz (12) 72.8MHz (13) 75.4MHz (14) 75.5MHz (15) 75.6MHz (16) 75.8MHz (17)

# **Warranty Statement**

Audio Resource Group, Inc. (ARG) develops, designs and distributes only high quality products that will provide users with many years of trouble-free service. Some of the products we distribute are sold exclusively by ARG. The following Warranty Statement defines the warranty periods for each product line and model of equipment distributed by Audio Resource Group, Inc.

#### Talk and Listen™ Systems

ARG warrants the following transmitters and receivers (TX72BP, TX72M, TX900BP, TX900HH, TX900M, RX72BPS, RX72BPM, RX72BP, RX72M, RX900BP, RX900M) to be free from defects in workmanship and material under normal use and conditions for five years from date of purchase.

ARG warrants the following charging systems (CHGR12, CHRG24) to be free from defects in workmanship and material under normal use and conditions for two years from date of purchase. Rechargeable batteries in the TX72M, TX900M, RX72M, and RX900M are warrantied for 2 years. Power Supplies are warrantied for 90 days.

All other parts and accessories are warranted for 90 days from date of purchase.

#### VoiceAmp® Portable Amplifiers

ARG warrants the following VoiceAmp portable amplifiers (VA20WB, VA20T, and VA30SE) to be free from defects in workmanship and material under normal use and conditions for five years from date of purchase. Batteries for these listed products are warranted for two years from date of purchase.

All other parts and accessories are warranted for 90 days from date of purchase.

#### **Fitness and Cardio Entertainment Products**

ARG warrants the following transmitters (ARG-CV-FMT, ARG-CV-900T, ARG-900AT, and ARG-CV-2.4T) to be free from defects in workmanship and material under normal use and conditions for four years from date of purchase.

ARG warrants the following receivers (ARG-CV-FMR, ARG-CV-900R, ARG-900AR, ARG-CV-2.4R and ARG-2.4R) to be free from defects in workmanship and material under normal use and conditions for two years from date of purchase.

ARG warrants the following personal viewing screens and accessories (ARG-PVS15LED, ARG-PVS19LED, ARG-PVSC) to be free from defects in workmanship and material under normal use and conditions for two years from date of purchase.

All other parts and accessories are warranted for 90 days from date of purchase.

The Warranty is only available to the original end purchaser of the product and cannot be transferred. Warranty is void if damage occurred because of deliberate or accidental physical damage, neglect, misuse or if the product has been repaired or modified by anyone other than a factory authorized service technician. Warranty does not include normal wear and tear on the product or any other physical damage unless the damage was the result of a manufacturing defect. ARG is not liable for consequential damages due to any failure of equipment to perform as intended.

The above stated warranty is exclusive and replaces all other warranties express of implied, including those of merchantability and fitness for a particular purpose. ARG will not be held liable for any other damages or loss including incidental or consequential damages and loss of profit or revenues from whatever cause including breach of warranty or negligence.

The terms of the warranty are governed by the laws of the state of North Dakota. This warranty, prices, and the specifications of products are subject to change without notice.

Revised 1/4/2017

# **Repairs and Returns**

If you are experiencing difficulty with your system please review the Troubleshooting section of your manuals and user guides for tips and techniques to correct your issues. If you continue to experience problems with your equipment, please call Audio Resource Group, Inc. (ARG) toll-free Customer Service Assistance number at (888) 468-4552.

If it is necessary to return your system for service, you must first be issued a Return Authorization Number (RMA) by our Customer Service Technician prior to sending the system to ARG. All returns must be prepaid by the sender (no freight collect shipments will be accepted). Make sure to clearly mark the RMA number on the outside of the package and ship to:

#### Ship To:

Audio Resource Group, Inc. Attn: Repair Department 405 Main Ave W Unit 3A West Fargo, ND 58078

#### **Out-of-Warranty Repairs:**

We can service/repair most Out-of-Warranty products. These repairs will be charged in accordance with our Flat Rate Repair Schedule. Please contact your sales representative or customer service for a repair quotation under our Flat Rate Repair Schedule.

#### **Repair Quotes:**

In some cases, if your product is not listed on the Flat Rate Repair Schedule, we can provide you with a repair price based on an individual repair cost estimate.

#### **Warranty Repairs:**

The ARG warranty period begins from date of purchase. Warranty is only available to the original end purchaser of the product and cannot be transferred. We will, at our option, repair or replace any part or product found to be defective in workmanship or material under normal use and condition. Warranty is void if damage occurred because of deliberate or accidental physical damage, neglect, misuse or if the product has been repaired or modified by anyone other than a factory authorized service technician. Warranty does not include normal wear and tear on the product or any other physical damage unless the damage was the result of a manufacturing defect.

#### **Returns for Credit:**

Items returned for credit, in "like new" condition (unopened, or original packaging intact), will be issued a full credit (minus applicable shipping charges). Items returned for credit after 30 days are subject to a restocking fee. We are unable to issue credit for any items after 90 days from the date of purchase. Additional fees or partial credit may occur due to missing or damaged items.

#### Ship To:

Audio Resource Group, Inc. 405 Main Ave W Unit 3A West Fargo, ND 58078

Phone: (888) 468-4552 Fax: (888) 373-4819

repairs@argaudio.com

ARG Repairs and Return policies, programs, and pricing are subject to change without notice.