

Talk & Listen Systems

900 MHz Digital Transmitter and Receiver Part #s – ARG-TX-900V-BP & ARG-RX- 900V-BP Manual and User Guide



Updated: 1/5/2017
User Guide Part: ARG-OM27-Rev D

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE PRODUCT 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. Avoid direct contact with liquids of any kind.
5. Clean only with dry cloth.
6. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
7. Do not place the device in direct sunlight.
8. Do not place, store or install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including powered amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug for products that use wall power sources. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect power cords from being walked on or pinched: especially at plugs, convenience receptacles, and the device's exit point.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug devices from wall outlets during lightning storms or when not in use for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing may be required when the apparatus has been damaged in any way or performs in an abnormal fashion. (Examples may include, but not be limited to: equipment has been dropped or suffered an impact, liquid has been spilled or objects have fallen into or on top of the unit, or the unit has been exposed to rain or moisture.)
14. The device should be protected from exposure to dripping or splashing: do not place objects filled with liquids, such as water bottles or drink containers directly near or on equipment.

HEARING SAFETY



CAUTION!

Many of ARG's products are designed to amplify sounds to a high volume level which could potentially cause hearing damage if used improperly. 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 earbuds) 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.



BATTERY SAFETY AND INSTRUCTIONS

RECYCLING INSTRUCTIONS

Please help ARG protect our environment by taking time to properly dispose of your used batteries. Do NOT throw into household trash: Please recycle by taking them to a local recycling collection center.

NON-RECHARGEABLE BATTERIES

In normal use, two AA 1.5V alkaline batteries will last about 40-50 hours in the TX900BP transmitter and approximately 50-60 hours in the RX900BP receiver. If the sound becomes distorted or weak, it is time to replace the batteries.

RECHARGEABLE BATTERIES

The TX900BP transmitter and RX900BP receiver can use 1.25V AA NiMH rechargeable batteries (ARG-BCRAA). After charging for 5-6 hours, these NiMH batteries are designed to operate a TX900BP transmitter for approximately 40-50 hours and a RX900BP receiver for 50-60 hours.

IMPORTANT RECHARGEABLE BATTERY INFORMATION

- Batteries **MUST BE CHARGED** for a complete cycle before the first use.
- Rechargeable batteries will normally need to be replaced after 1-2 years of use.
- Do not leave batteries installed for long periods of inactivity as they may leak. (Battery leakage is not covered by warranty)



CAUTION!

- **Do not attempt to recharge disposable batteries**, which may explode, release dangerous chemicals, cause burns or other serious harm to the user or product.
- Avoid shorting the batteries by placing plus and minus battery terminals together with metal objects. Battery damage and burns can result!
- Do not dispose of batteries in fire.
- Do not open batteries as they contain toxic chemicals.

SYSTEM OVERVIEW

The Talk & Listen® System is a portable, high-performance communication system designed to be used for many types of communication applications. It is composed of five principal components: transmitter, microphone, receiver, listening equipment (headphone, earphone, ear bud, etc.) and batteries.

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).

ARG's 900Mhz Talk & Listen® System showcases many new features including adjustable RF levels; user-friendly scroll-and-click commands; mono and stereo input; and durable, attractive housing.

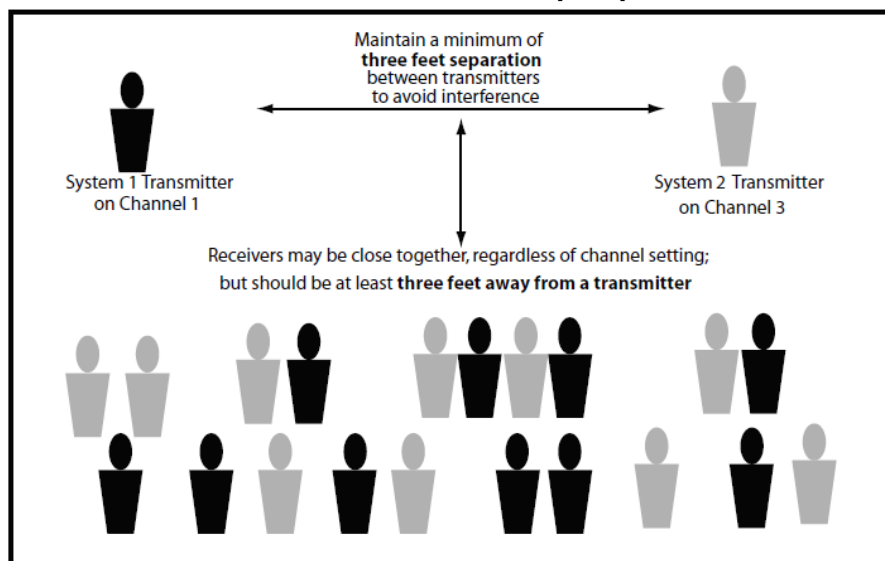
HINTS to Using the TALK & LISTEN® Wireless System

Maximum operating distance between the transmitter and receiver is 100m (LOS). The operating range will vary in different environments. In some locations, the signal may momentarily disappear. This is called a drop-out signal and is due to reflection and cancellation of the radio signal. Moving a few feet in any direction should restore the signal.

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.

Transmitter/Receiver Group Separation

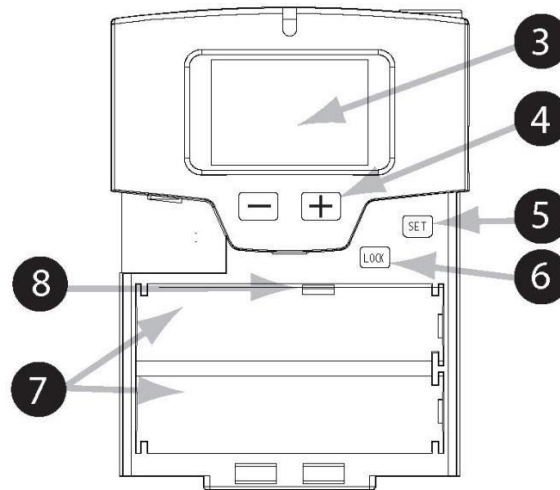
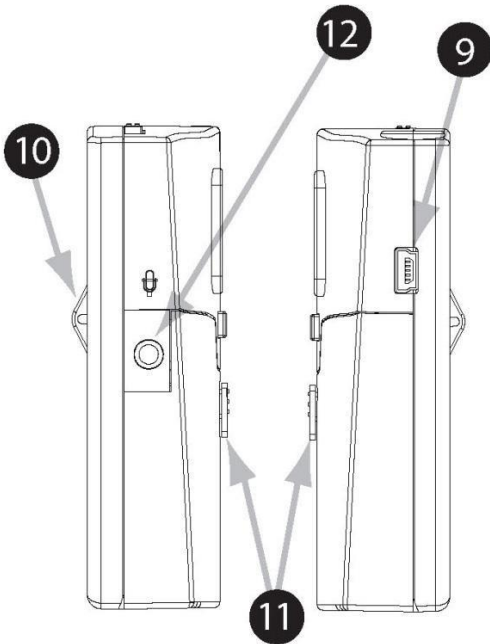
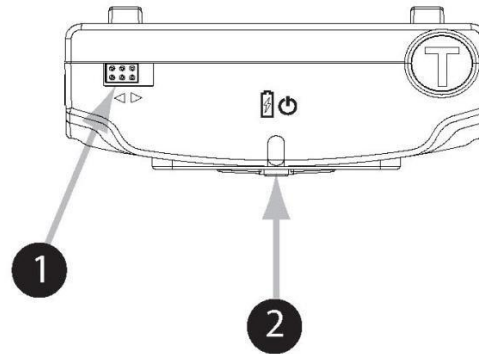


Operating Instructions: ARG-TX900 Transmitter

1. Before installing batteries, determine if they are carbon zinc, heavy duty, alkaline or rechargeable. Open the battery compartment door and locate the “ALK/NiMH” switch. If using carbon zinc, heavy duty or alkaline batteries slide the switch to the “ALK” position; if using NiMH rechargeable batteries; slide the switch to the “NiMH” position.
2. Install (2) AA style batteries by pressing them into place, observing the proper battery polarity. Incorrect insertion may cause both mechanical and electrical damage not covered by the limited lifetime warranty. Units will not work if the batteries are incorrectly installed.
3. Plug the microphone into the 3.5mm audio input jack located on the left side of the transmitter housing. Do not bunch up the cord, wrap it tightly around your body or wrap it around the transmitter. Use only Talk & Listen® approved microphones; substitutions can greatly affect the overall performance therefore causing poor audio quality.
4. Turn the power switch on top of the Transmitter to “ON”. The LCD backlight will turn on and remain on until the power is turned off. The LED will turn orange indicating the power is on; red flashing indicates the battery is charging and solid red indicates the batteries are fully charged.
5. Confirm that the channel number on the transmitter matches the number on the receiver(s). To adjust the channel number, open the battery compartment door and locate the “LOCK” button; press and hold it for three seconds to unlock the transmitter. The “LOCK” icon on the LCD display will disappear once the unit is unlocked. Use the “-“ button on the front panel to scroll through the channels and choose the appropriate channel. When completed, press and hold the “LOCK” button for three seconds to relock the transmitter, the “LOCK” icon will reappear on the display. Close the battery compartment door. The channel numbers range from 1-12 and are located on the left side of the LCD display.
6. To temporarily silence the transmitter during use, press and hold the “-“ button until the “signal strength meter” on the LCD display disappears: this indicates the audio has been muted. Repeat the process to restore the audio signal and the “signal strength meter” on the LCD display reappears.
7. **Low Pass Filter:** To adjust, open the battery compartment door and locate the “LOCK” button, press and hold it for three seconds to unlock the transmitter. The “LOCK” icon on the LCD display will disappear once the unit is unlocked; locate the “+” button under the LCD display and press to adjust the low pass filter setting. When completed, press and hold the “LOCK” button for three seconds to relock the transmitter, the “LOCK” icon will reappear on the display, close the battery compartment door. The low pass filter settings range from 1-8; increasing the filter setting decreases unwanted high frequencies while maintaining an acceptable audio range. The display number will go blank after you scroll past “8” which indicates the low pass filter is turned completely off. The number located on the right side of the LCD display is the low pass filter setting. The factory setting is “2”.
8. **RF Level Adjustment:** To adjust, make sure the transmitter is turned off; open the battery door, press and hold the “SET” button and simultaneously turn the transmitter ON to enter into the RF Level Programming mode. To adjust this setting use the “+” and “-“ buttons to cycle through the settings. There are 4 individual RF level settings. The signal meter icon on the LCD display is used to indicate the current programmed RF level. Settings are +3dBm (1 signal bar); +6dBm (2 signal bars); +9dBm (3 signal bars); and +13dBm (4 signal bars-the highest RF Level Setting). Press the “SET” button to scroll through and select the RF level setting. When finished, close the battery door and turn the transmitter OFF to exit programming mode. The factory setting is 4 signal bars; the highest setting.
9. When finished using Transmitter, make sure to power off.

TRANSMITTER PRODUCT FEATURES

- 1 Power ON/OFF Switch
- 2 ON/Low/Charging Indicator LED
- 3 Liquid Crystal Display (LCD)
- 4 Channel/Volume +/- Buttons
- 5 Set Button
- 6 Lock/Unlock Button
- 7 Battery Compartment
- 8 ALK/NiMH Selector Switch
- 9 USB Power/Charging Port
- 10 Belt Clip
- 11 Battery Door Latch
- 12 3.5mm Audio Input Jack

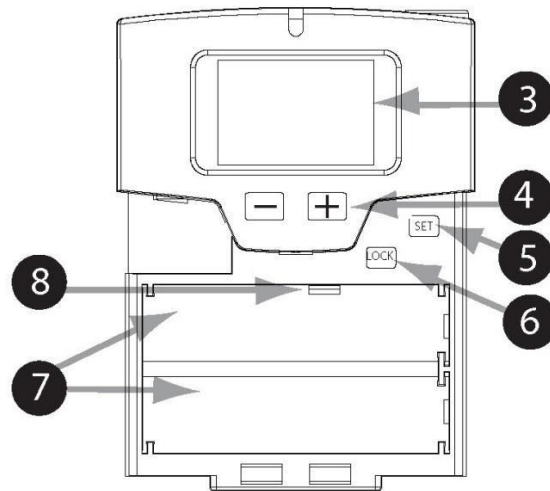
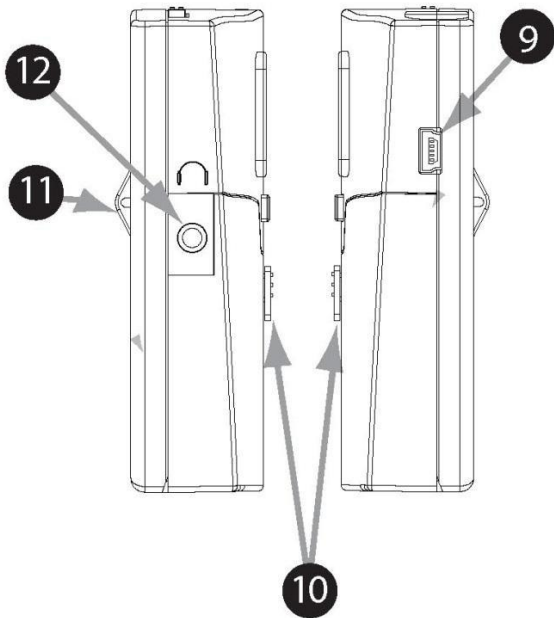
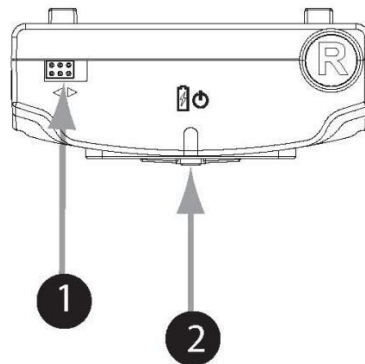


Operating Instructions: ARG-RX900 Receiver

1. Before installing batteries, determine if they are carbon zinc, heavy duty, alkaline or rechargeable. Open the battery compartment door and locate the "ALK/NiMH" switch, if using carbon zinc, heavy duty or alkaline batteries slide the switch to the "ALK" position. If using NiMH rechargeable batteries, slide the switch to the "NiMH" position.
2. Install (2) AA style batteries by pressing them into place, observing the proper battery polarity. Incorrect insertion may cause both mechanical and electrical damage not covered by the limited lifetime warranty. Units will not work if the batteries are incorrectly installed.
3. Plug the headphone/earphone into the 3.5mm audio output jack located on the left side of the receiver housing. Do not bunch up the cord, wrap it tightly around your body or wrap it around the receiver housing. Use only Talk & Listen® approved headphones/earphones, substitutions can greatly affect the overall performance and cause poor audio quality.
4. Turn the power switch on top of the Receiver to "ON". The LCD backlight will turn on and remain on until the power is turned off. The LED will turn orange indicating the power is on; red flashing indicates the battery is charging and solid red indicates the batteries are fully charged.
5. Channel number: confirm that the channel number on the receiver(s) match the channel number on the transmitter(s). To adjust the channel number, open the battery compartment door, locate the "LOCK" button, press and hold it for three seconds to unlock the transmitter. The "LOCK" icon on the LCD display will disappear once the unit is unlocked. Use the "+" and "-" buttons on the front panel to scroll through the channels and select the appropriate channel. When completed, press and hold the "LOCK" button for three seconds to relock the transmitter, the "LOCK" icon will reappear on the display. Close the battery compartment door. The channel numbers range from 1-12 and are located on the left side of the LCD display.
6. Volume Control: To adjust, use the "+" and "-" buttons on the front panel to adjust the volume level from 0-16 (0 being the lowest setting and 16 the highest setting). The numbers located on the far right side of the LCD display indicate the volume level setting.
7. When finished using the receiver, slide the "ON/OFF" switch to the "OFF" position.

RECEIVER PRODUCT FEATURES

- 1 Power ON/OFF Switch
- 2 ON/Low/Charging Indicator LED
- 3 Liquid Crystal Display (LCD)
- 4 Channel/Volume/Squelch +/- Buttons
- 5 Set Button
- 6 Lock/Unlock Button
- 7 Battery Compartment
- 8 ALK/NiMH Selector Switch
- 9 USB Power/Charging Port
- 10 Battery Door Latch
- 11 Belt Clip
- 12 3.5mm Headphone Jack



FCC Compliance

The ARG-TX900BP is authorized by rule under the Low Power Radio Service (47 C.F.R. part 95) and must not cause harmful interference to TV reception or United States Navy SPASUR installations. You do not need an FCC license to operate this transmitter. This transmitter may only be used to provide: auditory assistance to persons with disabilities, persons who require language translation, or persons in educational settings; healthcare services to the ill; law enforcement tracking services under agreement with a law enforcement agency; or automated maritime telecommunications systems (AMTS) network control communications. Two-way voice communications and all other types of uses not mentioned above are expressly prohibited.

Operation is subject to the following two conditions:

- 1) this device may not cause interference
- 2) this 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 batteries are fresh or completely charged and that the “plus” and “minus” terminals are correctly placed.
3. If the rechargeable batteries will only work for a short period of time (less than 1 hour) even after they have been fully charged; they must be regenerated. Turn the transmitter(s) on until the batteries are completely dead, and then fully charge again. This should restore normal battery life. Rechargeable batteries will gradually lose their capacity over time and should be replaced every 1 to 2 years.
4. Make sure the microphone is plugged into the TX900BP transmitter and the earphone/headphone is plugged in the RX900BP receiver.
5. Move the transmitter and receiver closer together as you may be out of range. When using the system indoors, it is normal for the signal to momentarily disappear in certain locations. This is called a “drop-out”. Moving a few feet in any direction may restore the signal.
6. When using two or more transmitters simultaneously do not use adjacent channels if possible, for example: if you have a 3-channel system and 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.
7. 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.
8. If you are still experiencing difficulties, call ARG 888-468-4552.

OPERATING FREQUENCIES

Channel	Frequency	Channel	Frequency
CH 1	904.000 MHz	CH 7	916.000 MHz
CH 2	906.000 MHz	CH 8	918.000 MHz
CH 3	908.000 MHz	CH 9	920.000 MHz
CH 4	910.000 MHz	CH 10	922.000 MHz
CH 5	912.000 MHz	CH 11	924.000 MHz
CH 6	914.000 MHz	CH 12	926.000 MHz

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, CHR24) 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 warranted for 2 years. Power Supplies are warranted 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 or 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.