

# Fitness Entertainment Solutions

## FM Transmitter Manual and User Guide ARG-OM-006-2014 – Rev B



Updated: 1/5/2017

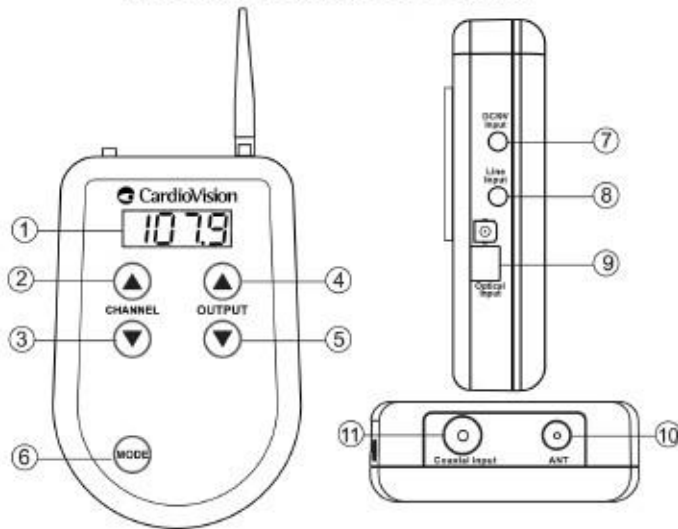
**Unpacking the box** – Inside the box of your new transmitter you will find the following items.

1. The FM Radio transmitter housing
2. A rubber ducky antenna (ARG-AN5)
3. The user manual(ARG-OM006)
4. The 9VDC power supply (ARG-PS008)
5. A “tune to” sign to place on the tv. (ARG-CS001 and ARG-CS002)
6. A wall mounting kit for the transmitter.
7. Two analog audio cables (ARG-CA023 and ARG-CA024)

**Optional Accessories:**

1. 6’ Digital Coaxial Cable (ARG-CA016)
2. 6’ Digital Optical Cable (ARG-CA017)
3. Right Angle Digital Optical adaptor (ARG-CA30)
4. Digital audio to analog audio converter (ARG-DD1)

**FM Radio Transmitter Diagram**



- |                        |                   |
|------------------------|-------------------|
| 1. Display             | 7. DC/9V Input    |
| 2. Channel Up Button   | 8. Line Input     |
| 3. Channel Down Button | 9. Optical Input  |
| 4. Output Up Button    | 10. Antenna (ant) |
| 5. Output Down Button  | 11. Coaxial Input |
| 6. Mode Button         |                   |

**FM Radio Transmitter Input Displays**



**INSTALLATION INSTRUCTIONS:**

**Mounting the Transmitter** - The ARG FM transmitter is a universal unit designed to be compatible with most makes and models of televisions or audio devices. The transmitter can be mounted anywhere within the range of the length of cable being used for the audio connection including on the TV/audio device. If mounting the transmitter on a device, make sure not to cover ventilation grates or interfere with the functionality of the equipment. The transmitter is designed with slots on the back that hook onto the included mounting bracket. For your convenience, screws with wall anchors and hook-and-loop fasteners are provided to attach the mounting bracket to a variety of surfaces.

**Attaching the Antenna** – Place the rubber antenna into the receptacle marked “ANT” on the top of the transmitter (Diagram #12) and tighten the screw until it seats into place. The antenna can be set to any angle or rotated 360 degrees to fit into available space.

**Powering the Unit** - Plug one end of the 9VDC power supply (included with the unit) into a 110V power outlet. Plug the other end into the terminal on the side of the transmitter marked “DC/9V Input” (#8 on the diagram). When both ends of the cord are plugged in, the transmitter will turn on.

**Connecting the Transmitter to an Audio Source** - The transmitter has three types of audio input options. The type of cable used to connect the transmitter to the TV or other audio source will depend on the type of audio output terminals equipping the signal source device. You **MUST** set the transmitter to read the chosen input source. Connection options are:

Analog Stereo Line Input (Diagram #9) – This input source allows connection to the audio device with either the RCA analog audio output jacks or a headphone mini-jack/3.5mm stereo audio output jack. **IMPORTANT:** *Make sure to connect terminals on TV/audio device marked as audio OUTPUTS. Both audio input and audio output connections can be made using these types of connectors/cables. Many newer televisions DON'T have audio OUTPUT connections of this type and CANNOT be connected to the transmitter using this method.* If connecting to the RCA audio output jacks, use a cable (included) with stereo RCA jacks (usually one red and one white or black) on one end and a 3.5mm stereo mini-jack on the other. If connecting to a headphone jack or 3.5mm stereo mini-jack, use a cable that has 3.5mm stereo plugs on both ends (conversion cable included). Connect the male/female RCA jacks to each other. The 3.5mm stereo plugs on either end of the combined cables will allow connection to TV/audio device. After the connection has been made to TV/audio device, plug the other end of the cable into the port on the transmitter marked "Line Input" (Diagram #9). **NOTE: Do Not connect the transmitter to an amplified audio source. The transmitter is manufactured with sensitive components that are designed to work with line-level voltages Only.** *Connecting the transmitter to an amplified audio source will damage the unit and void the warranty.*

Digital Optical Input (Diagram #10) – Use this input selection if TV/audio device has a digital optical audio output or S/PDIF or TOSLINK jack. This connection allows for the highest quality audio transmission and is the preferred method if available. This connection requires the use of a fiber-optic or TOSLINK cable made specifically for this type of connection. (This cable is available to purchase from ARG, #ARG-CA017 or from any local electronics retailer.) One end of the cable is inserted into the jack marked "Optical Audio Output", "S/PDIF" or similar description on the TV/audio device. Insert the other end of the cable into the port on the transmitter marked with "Optical Input" and the symbol that looks like this: XXXXX (Diagram #10). Make sure the ends of the cable are securely connected to the ports on both ends. These plugs will usually "click" into place when properly inserted. (NOTE: these cables are usually shipped with clear plastic protective end covers which need to be removed before connecting the cable.)

Digital Coaxial Input (Diagram #11) – The output terminal for this connection looks like a standard RCA-type jack and will be orange. A cable specifically designed to transmit digital audio signals is needed. (This cable is available to purchase from ARG, #ARG-CA016 or from any local electronics retailer.) **DO NOT** use a standard RCA cable since it will not have the proper shielding and may cause interference with other electronic devices located in close proximity to the cable. Plug one end of the cable into the orange terminal on the TV/audio device labeled "Digital Audio Output" or similar. The other end plugs into the white RCA jack on the top of the transmitter marked "Coaxial Input".

**Note – DO NOT connect more than one audio source to the transmitter at a time. Connecting multiple cables can cause permanent damage to the unit.**

**Setting the Audio Input Source** - Set the input source on the transmitter to correspond to the chosen input connection. This allows the transmitter to determine the type of audio signal to "read" and where to find it. Failure to set the input source to match the connection will result in poor or no audio being sent from the transmitter. The input setting is displayed on the input indicator (Diagram #14) by the number of decimals showing in the display. Set the input source on the transmitter by pressing the "MODE" button (Diagram #6) in the lower left corner of the unit. Each time the "MODE" button is pressed, the transmitter will toggle between the three input sources: Analog line (no decimal lit); Digital coaxial (1 decimal lit); or Optical Digital (2 decimals lit).

**Confirming Signal Acquisition** – When properly connected to the TV/audio source (assuming the output for that device has been set correctly) and the corresponding input source has been selected; the transmitter will detect the audio signal. Make sure the transmitter is receiving and has detected a usable audio signal from the TV/audio source as displayed in the LCD window (Diagram #1). If the digits are steadily lit (NOT flashing), the transmitter is receiving and has detected a good audio signal from the device. If the digits are flashing, the transmitter has detected either a weak signal or no audio signal at all. If weak/no signal, check connections; check the input setting on the transmitter; and check to make sure the TV/audio device is generating a usable signal. If the device is not sending a good signal, check to see if the volume level on the TV/audio source is adjusted too low. The level should be set to approximately

75% of the maximum. Turn up the volume, then turn off the speakers on the device by changing the setting through the on-screen menus (see owner's manual for instructions.) If the problem persists, contact the technical service department for TV/audio device or ARG for assistance.

**Setting the Broadcast Frequency** – The ARG FM transmitter can be set to output on any FM band frequency from 87.5 Mhz to 108.0 Mhz. The “Channel Up” and “Channel Down” buttons move the frequency up and down in 0.1 increments. ARG recommends setting your transmitter to a frequency that is not being occupied by any FM radio stations in your area and is not adjacent to any FM radio stations to avoid interference. After you have set your frequency, the transmitter will remember this frequency until it is manually changed.

#### **OTHER FUNCTIONS:**

**Changing the Output Level** - This setting controls the loudness or volume level of the transmitter's audio signal. Use as an auxiliary volume control if the TV/Audio device has a **fixed** audio output that is either too high or too low. The output level setting is displayed as two large numbers on the left side of the display, ranging from zero to 15. Lower the output level by pressing the “OUTPUT DOWN” arrow (#6) and increase by pressing the “OUTPUT UP” arrow (#7). *(Note: The factory output level is “08”. If the level is too low it will be difficult to hear the sound; if set too high, the sound will be distorted and hard to understand.)* This setting is also useful for evening out the volumes of different televisions in a multiple device system as TV channels are broadcast at different volume levels.



**Audio Resource Group**  
*Improving Communication Through Sound Technology*

## 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.

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# Repairs and Returns

If you are having trouble 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.