

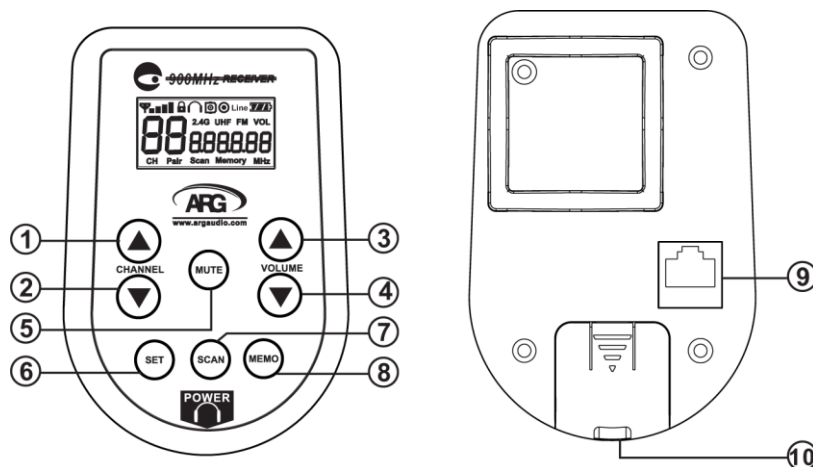
Fitness Entertainment Solutions

900 MHz Analog Receiver Manual and User Guide ARG-OM-012 Rev B



CONTROL FUNCTIONS:

The buttons on the receiver perform the functions as detailed below:



1. CHANNEL UP Button
2. CHANNEL DOWN Button
3. VOLUME UP Button
4. VOLUME DOWN Button
5. MUTE Button

6. SET Button
7. SCAN Button
8. MEMO Button
9. C-SAFE Port
10. Auto Power ON/OFF and 3.5 mm Stereo Audio Jack

MOUNTING INSTRUCTIONS:

The ARG 900MHz receiver is a universal unit designed to be compatible with most makes and models of cardio equipment. To mount the Receiver:

1. Determine the appropriate location to mount the receiver to the cardio equipment. Take note the range of motion of the components of machine and make sure the placement of the receiver and its cabling will not interfere with operation of the machine or any safety features.
2. Slide the cable ties through the appropriate holes in the mounting cleat on the underside of the receiver. (Top to bottom if you are mounting it to a horizontal bar or side to side if you are mounting to a vertical bar.)
3. Wrap and thread the cable ties around the bar on the cardio machine at the predetermined location. Pull the ties tightly around the bar so the receiver does not move or rotate. Be careful not to over-tighten the ties to avoid cracking the mounting cleat or case of the receiver. Trim off the excess ends of the cable ties.
4. Connect the power cable to the receiver. The receiver can be powered by either a CSAFE power outlet on the cardio machine or an A/C power converter that can be plugged into the wall/floor. (Power adapters and cables are not included and must be ordered separately.) If you are using a C-SAFE connection: connect one end of the Cat-5 cable to the C-SAFE port on the cardio machine. (Check with the equipment manufacturer to make sure the machine has this feature and for location of the outlet.) The other end of the cable connects to the RJ45 receptacle on the back of the receiver. If you are using an A/C power supply: locate a standard 110V outlet and plug the 12V A/C adapter side into the outlet and the RJ45 plug into the receptacle on the back of the receiver. Make sure to route the cord for either option appropriately to avoid interference with any of the functions or safety features of the cardio machine!

OPERATING INSTRUCTIONS:

POWER ON/OFF:

The receiver is powered on and off by inserting the headphone plug into the headphone jack. When you plug the headphones in, the receiver will turn on. When you unplug the headphones, the receiver will turn off after a few seconds.

SETTING UP AND PROGRAMMING THE CHANNELS:

The receiver has six “groups” of frequencies that are pre-programmed to channel numbers that correspond to the frequency/channel pairs used by the various entertainment/fitness equipment manufacturers. These “groups” allow you to directly interface with transmitters and receivers from other manufacturers. The “groups” match up to the manufacturers as follows:

Group 1 – ARG’s Custom Channels

Group 2 – User programmable w/auto-scanning feature

Group 3 – Compatible with Cardio Theater (XTV-9T) products

Group 4 – Compatible with Cardio Theater (XTV-9TM) products

Group 5 – Compatible with MYE/Fantaay/True products

Group 6 – Compatible with BVe/Broadcast Vision products

The receiver comes preset to Group 1, the ARG custom channel grouping. If you need to change the group/frequencies to be compatible with other manufacturer’s equipment, you can change the group number as follows:

1. Press and hold the “VOLUME UP” and “MEMO” buttons at the same time for about four seconds until the lock icon disappears and the small group number shows in the center of the display.
2. Using the “MUTE” button, choose the group number of the frequency/channel pairs you wish to use based on the list above.
3. The “CHANNEL UP” and “CHANNEL DOWN” buttons allow you to view the channels available in that specific group. Choose the channels you are using by pressing the “MEMO” button to enable/disable the channels in the group. The channels with the word “MEMORY” showing in the display are enabled and vice versa. For example: if you have three TV’s each one with its own transmitter, you would enable channels 1, 2, and 3.
4. Return to normal “user” mode by pressing and holding the “VOLUME UP” and “MEMO” buttons together for four seconds once again.

If you are going to select your own frequencies/channel pairs, you can do so by first using the previous process to set the receiver to “group 2”. Leave the receiver in the programming mode to set-up your own frequency/channel pairs that correspond to the frequencies you have set your transmitters to broadcast on. At this point you **MUST** have the receiver perform an “auto-scan” to determine what frequencies are being used by the devices in your facility. The receiver has to scan through all of the frequencies in the 900MHz bandwidth to “find” the frequencies that are in use at your location. Before going through the “auto-scan” procedure, make sure that **ALL** of the transmitters in your facility are: a) powered on, b) connected to a signal source, c) set to and broadcasting on your desired broadcast frequencies.

Now, perform the “auto-scan” function as follows:

1. Double check to make sure the receiver is in the “user” mode
2. Press and hold the MUTE and SCAN buttons for five seconds. This will put the receiver into “setting mode”
3. Start the auto-scan” process by pressing the “SCAN” button once. The receiver will now scan **ALL** the frequencies in the 900MHz bandwidth. (902MHZ to 928MHz) Every time the receiver detects a signal, it will store that frequency to a list of used frequencies that you will pair with channel numbers later. It takes about two minutes for the receiver to complete the auto-scan process.

When the auto-scan is complete, you are ready to assign preset channel numbers to the transmitter frequencies being broadcast. This process is similar to and done for the same reason you pre-set car radio stations as it allows for quick access to the channels you use without having to scan through the ones you don't. The large number on the left side of the display is the channel number. The smaller numbers on the right side of the display is the frequency the receiver is tuned to.

1. To pair a frequency to a channel number, choose the channel number by pressing the "CHANNEL UP" or "CHANNEL DOWN" button.
2. Scroll through the list of frequencies the receiver found in the auto-scan by pressing the "VOLUME UP" or "VOLUME DOWN" button until you see the frequency you want associated with that channel number.
3. When you have the desired channel number/frequency pair showing together in the display, press and hold the "MEMO" button until the word "Memory" flashes once on the screen. That channel number/frequency pair is now stored as a "preset" in the memory of the receiver.
4. Repeat this process as needed so all of the frequencies being used by the transmitters in your facility are assigned to a channel number and therefore are retained in the memory of the receiver.

For example, you have three TVs in your facility equipped with 900MHz transmitters; set to following frequencies: 902.250, 904.650, and 908.100.

1. To set the first channel number and frequency, select the channel number "01" with the "CHANNEL UP" or "CHANNEL DOWN" buttons.
2. Scroll through the list of found frequencies with the "VOLUME UP" or "VOLUME DOWN" buttons until you see "902.250".
3. With "01" and "902.250" showing on the display, press and hold the "MEMO" button until "Memory" flashes once on the screen. Channel number "01" is now paired to frequency "902.250" in the memory of the receiver. Now select channel number "02" and frequency "904.650" as above and press and hold the "MEMO" button until "Memory" flashes in the display.
4. Repeat the process for channel number "03" and Frequency "908.100".

When you have entered all of the frequencies being used at your facility, press and hold the "SCAN" and "MUTE" buttons together for 5 seconds to exit the setting mode. The "lock" icon will reappear and your receiver will now be in the normal operating mode.

Note: The receiver will only save up to 64 frequencies in the memory and will stop auto-scanning when it collects the 64th frequency in the found list. If the receiver does not find all of the frequencies your transmitters are broadcasting or if you are in an area with excessive noise or interference; you can adjust the scanning sensitivity of the receiver. To adjust the sensitivity, press the "SET" button while in the setting mode. Each time you press the button the sensitivity setting will advance by 1 class (16 total classes, 0 to F). The higher the number or letter, the less sensitive the scan will be. The factory setting is 4. After you change the sensitivity setting, re-scan the frequencies so the receiver can find those missed the first time. Reset the sensitivity and re-scan as necessary so the setting allows the receiver to find all of the frequencies your transmitters are using.

SQUELCH SETTING:

The squelch setting adjusts the threshold at which audio signals will pass-through to the headphones. If there is excessive low level noise (hiss or static) bleeding through into one of the channels, adjust the squelch control to block the audio signal that passes through the circuit to the headphones. The higher the number, the more noise the receiver will block. If the setting is too high, the receiver will start to block the desired portions of the audio signal as well. The ideal setting is to adjust the level so all of the desired audio is heard but with as little background noise as possible. To adjust the squelch setting: make sure the receiver is in the normal mode. Press and hold the "SET" button for 3 seconds. (The channel number will change to the squelch setting, ranging from 0 to 9; the factory default level is 3.) Press the "CHANNEL UP" or "CHANNEL DOWN" buttons to adjust. Press and hold the "SET" button again to return to the normal mode.

RESETTING THE RECEIVER:

The receiver is equipped with built-in, self-protection circuitry that will activate when receiving a variety of electrical or environmental circumstances. This may cause the unit to lock-up or behave in an undesirable fashion. If this occurs, you can reset the receiver by disconnecting it from its power source for one minute. This will restart the software and should return the unit to normal operation. If problems persist, please contact your dealer or ARG for further assistance.

HEADPHONE JACK REPLACEMENT:

Because it is subject to heavy use, it is normal for the contacts in the headphone jack assembly to wear out over time. The 900MHz receiver is equipped with a replaceable headphone jack module to address this wear without replacing the entire unit. Under ideal conditions, the headphone jack is rated to last roughly 6,000 plug insertions and removals (cycles). After 6,000 cycles, an icon that looks like headphones will flash in the display to alert that the headphone jack should be replaced. Every time the receiver is powered-up, the display will flash the number cycles the module has used under the letters "UHF". The headphone jack module can, in most cases, be changed without removing the receiver unit from the cardio machine.

1. To remove the worn jack, locate the "arrow" on the tab of the jack module located on the back side of the receiver toward the bottom.
2. Press on the "arrow" and slide the module in the direction of the "arrow".



3. To install the new module, guide the grooves of the jack module into the tabs of the receiver.
4. Push the module back into the receiver unit until it "clicks" into place.



5. Reset the cycle count to zero by pressing and holding the "SET" and "CHANNEL UP" buttons at the same time for 3 seconds or until the headphone icon stops flashing.

LIMITED WARRANTY

Audio Resource Group, Inc. warrants all new ARG products to be free from defects in materials and manufacture for the warranty periods set forth below. The warranty periods commence on the invoice dates of the original purchase. This warranty applies only against defects discovered within the warranty period and notification to ARG must be given within 30 days after the date of discovery of any nonconformity. Parts repaired or replaced under the terms of this warranty will be warranted for the remainder of the original warranty period only. Product that fails after the warranty period will be repaired or replaced at the current part and labor pricing after inspection by ARG and authorization from the customer. Audio Resource Group, Inc.'s obligations under this warranty are limited as set forth below:

ARG-CV-900AR	900 MHz Analog Receiver	Purchased Prior to 2014	1 Year
ARG-CV-900AR	900 MHz Analog Receiver	Purchased after 1/1/2014	2 Years

Warranty only applies to the original buyer. Warranty is void if products have been damaged due to accident, misuse, abuse, improper service, mechanical or electrical non-ARG, Inc. authorized modification. ARG, Inc. is not liable, without limitation to any person or entity, for any direct, incidental, consequential damages or medical expenses caused by any use, defect, failure or malfunction of the product. This warranty does not cover cosmetic damage of the product or if the serial number or model number affixed to the product has been removed, defaced, changed, altered or tampered with. This warranty does not cover installation or signal reception problems. The terms of the warranty are governed by the laws of the state of North Dakota, USA.

ARG will only accept returned products with prepaid shipping and a return authorization number. Contact ARG, Inc. at 888-468-4552 for a return authorization number or for additional information.

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