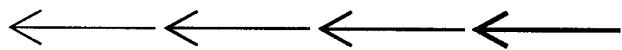




## **900 MHz WIRELESS SPEAKERS**



**Owner's Manual**

## WARNING

To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

## CAUTION

TO PREVENT ELECTRONIC SHOCK, DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE PLUG CAN BE FULLY INSERTED WITHOUT EXPOSING ANY PARTS OF THE BLADES.



The lightening flash with arrowhead symbol within an equilateral triangle is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.

### CAUTION

RISK OF ELECTRIC SHOCK.  
DO NOT OPEN.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.



The exclamation point within an equilateral triangle is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.

## IMPORTANT

Since the CD circuitry may cause interference to other radio tuners nearby, switch this unit off when not in use or move it away from the affected radio tuner.

This device complies 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 undesirable operation.

NOTE: This equipment has been tested and found to comply within the limits pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# IMPORTANT SAFETY INSTRUCTIONS

## Read before operating equipment

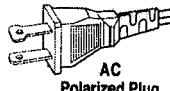
This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. **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 Warning** - All warnings on the product and in the operating instructions should be adhered to.
4. **Follow Instruction** - All operating and use instructions should be followed.
5. **Cleaning** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

**Exception:** A product that is meant for uninterrupted service and that for some specific reason, such as the possibility of the loss of an authorization code for a CATV converter, is not intended to be unplugged by the user for cleaning or any other purpose, may exclude the reference to unplugging the product in the cleaning description otherwise required in 131.8(5).

6. **Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. **Water and Moisture** - Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
8. **Accessories** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
9. **A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surface may cause the product and cart combination to overturn.**
10. **Ventilation** - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
11. **Power Sources** - The product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
12. **Grounding or Polarization** - This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

**Alternative Warnings** - This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.



13. 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.
14. Protective Attachment Plug -The product is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
15. Lightning - For added protection for this product during a lighting storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
16. Power Lines - An outside antenna system should be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
17. Overloading - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
18. Object and Liquid Entry - Never push objects of any kind into product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
19. Servicing - Do not attempt to service the product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
20. Damage Requiring Service - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - a. When the power-supply cord or the plug is damaged,
  - b. If liquid has been spilled, or objects have fallen into the product,
  - c. If the product has been exposed to rain or water,
  - d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation,
  - e. If the product has been dropped, or damaged in any way, and
  - f. When the product exhibits a distinct change in performance - this indicates a need for service.
21. Replacement Parts - When replacement parts are required, be sure the service technician has replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
22. Safety Check - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
23. Heat - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

## INTRODUCTION

Congratulations on the purchase of your new Wireless Stereo Speaker System. This system uses the latest 900 MHz High Frequency Radio Signal that can easily travel through walls, floor, ceilings or partitions to allow the finest stereo sound reproduction.

You can use your speakers almost anywhere in and around your home or for outdoor activities, just place them in the location of your choice. There is no need to worry about cable connection between the transmitter and speakers. It is totally wireless!

Simply adjust the Volume and Tone Controls of the speakers to your favorite levels, sit back and enjoy music sound programs from your Compact Disc, TV, Hi-fi Systems or Portable CD Player or Cassette Radio.

## A NOTE TO THE AUDIOPHILE

With any sound system, the quality of the music is only as good as the source. In today's recording industry, there is a great variation in both the quality and clarity of music sound tracks.

Although CDs are digital in format, many are still reproductions of original analog recordings. As a result, some recordings (even some CDs) have a fairly high noise level that when amplified produces undesirable background static or hiss. This type of static tends to be more noticeable in some easy-listening or classical music recordings, particularly those pieces that have relatively quiet passages and or prolonged orchestral pauses.

In order to combat this problem, the wireless speakers incorporates a state of the art filtering system that eliminates inherent background static without in any way compromising the dynamic range of the speakers.

The result of this technological breakthrough means that you, the listener, can enjoy dynamic static-free music in an unlimited number of indoor and outdoor settings without the need for wires to transmit the audio signal.

**NOTE: Your wireless speakers can be used outdoors. However, they are not weather proof and, therefore, should not be exposed to moisture, rain, etc.**

## SAFETY PRECAUTION

The following applies to AC Adapters:

To reduce the risk of fire or shock hazard, do not expose AC Adapters to rain or moisture. Do Not disassemble or remove cover – there are no user serviceable parts inside.

## BATTERY PRECAUTION

- 1) Use only the supplied AC adapter to charge the battery. Use of other adapters may damage the speaker circuitry and/or the rechargeable battery.
- 2) When carrying the speakers, exercise caution not to drop them or cause them to collide with other objects, as this may cause damage to the battery.
- 3) Periodically check the battery for any signs of irregularities in appearance. If there is any indication of damage to the battery case such as cracks, deformation or leakage, replace the battery with new one.

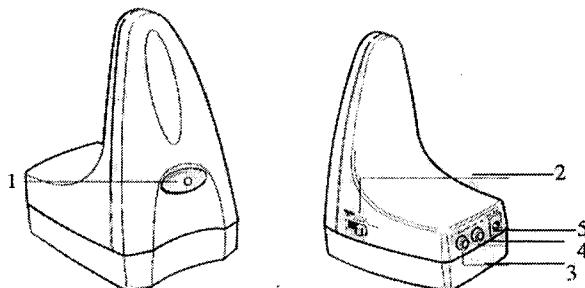
### WARNING!

- Do not attempt to disassemble or destroy the battery as it may cause leakage, burst, and could create acid spills resulting in possible burns and/or damage to immediate environment.
- Do not incinerate the battery in a fire nor heat battery as it may burst or generate a toxic gas if placed in contact with fire.
- Do not short the battery terminals.
- Battery is recyclable and must be disposed of properly according to local laws. Call RBRC at 1-800-822-8837.

## CONTROL LOCATIONS

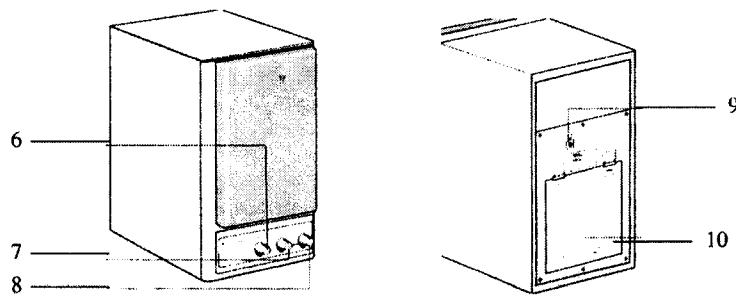
### TRANSMITTER

- 1) LED Indicator (Power ON)
- 2) Power OFF Switch and Channel Selector
- 3) AUDIO IN Jack (L) — Connect to Music Source
- 4) AUDIO IN Jack (R) — Connect to Music Source
- 5) DC Input Jack



### SPEAKER

- 6) Frequency Channel Selector
- 7) Bass Control Knob
- 8) Power OFF and Volume Control Knob
- 9) DC Input Jack
- 10) Battery Compartment

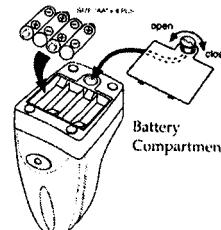


## SETTING UP THE TRANSMITTER

You need to properly set up the Transmitter to send a wireless signal to the speakers. There are two things you must do. First, provide power to the Transmitter, and second, connect the Transmitter to the Audio Source (Receive, CD/Radio/Cassette Portable Player, TV, etc.).

### (A) DC OPERATION

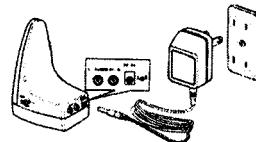
Your Transmitter is supplied with a Battery Compartment. Insert for (4) x AA Alkaline batteries (not supplied) in the battery slots as indicated, making sure (+) and (-) polarities are properly aligned. Attach the battery compartment cover to the bottom of the Transmitter unit. Be sure to secure the battery compartment cover to the bottom of the Transmitter with the locking screw.



### (B) AC OPERATION

Your system is supplied with one AC Adapter (9V DC 200Ma). Insert the end plug of the AC adapter into the DC Jack at the rear of the Transmitter, and plug the other end of the AC Adapter to a conveniently located electrical wall outlet.

It is recommended that the AC Adapter be used as often as possible, as this is the most economical power source!



### (C) CONNECTING TO YOUR AUDIO SOURCE

Connect one end of the supplied audio patch cord to the Transmitter's Left (white) and Right (red) AUDIO IN Jacks.

Then connect the other end of the patch cord to the audio source's Left (white) and Right (red) AUDIO OUT Jacks, such as from a Receiver, Boombox, Portable CD Player, etc. (The source output may be labeled as; LINE OUT, REC OUT, AUDIO OUT, etc.).

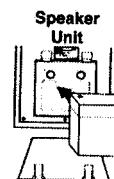


## SETTING UP THE SPEAKERS

### (A) BATTERY OPERATION

Open the battery cover located at the back of the Speaker unit. Insert the battery making sure the side with the contacts (located on the top edge) is inserted to make contact with the coil springs inside the compartment. Push the battery all the way in until you feel resistance from the coil springs inside the compartment. Replace the battery cover making certain the cover is secure prior to moving the Speaker.

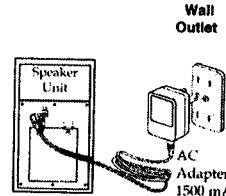
**NOTE:** Be sure the battery cover is secure – a falling battery could cause personal injury or damage to equipment.



### (B) AC OPERATION

Insert the power cord of the large sized AC Adapter (2 provided) into the DC IN Jack located at the back of each speaker unit.

Plug the other end of the AC Adapter into a conveniently located electrical wall outlet.



## **OPERATION**

- 1) Follow these steps to obtain maximum listening performance.
- 2) Make sure that the Transmitter and Speaker are set up according to the procedures given in the manual.
- 3) Turn on your Audio Source (Receiver, Portable CD/Radio/Cassette Player, TV, etc.).
- 4) Switch the Transmitter to a Frequency Channel (Channel 1, 2 or 3) that has no interference. Refer to below for Precision Frequency Lock-In Tuning.
- 5) Rotate the CHANNEL Knob on the front of the Speakers to select the same channel (Channel 1, 2 or 3) selected on the Transmitter.
- 6) Turn ON the power to each Speaker (Left and Right) by rotating the VOLUME Control Knob. A "click" will be heard and the Power ON Indicator (Red LED) will glow. When a Strong Transmission Signal is received from the Transmitter, the Red Indicator will turn green.
- 7) Adjust each Speaker's VOLUME and Bass Control Knobs to a comfortable listening level to meet your personal preference.

Be sure to turn off the Speakers and Transmitter when you are not using them.

## **CHANNEL SELECT**

900 MHz High Frequency Technology is widely applied to Mobile Phones, Cordless Telephones and many more devices to come. If your system receives interference from some of these devices, switch both the Transmitter and the Speakers, to another channel: 1, 2, or 3 appropriately. When the signal Indicator turns GREEN and good quality sound output can be heard, you have found the proper channel. The built in Phase Locked Loop (PLL) circuit will lock-in the transmitting and receiving frequency to prevent it from drifting. You do not have to fine tune your Speakers constantly in order to be tuned in for good sound reproduction.

## **ABOUT BATTERY OPERATION**

### **TRANSMITTER**

When the Transmitter is operated by fresh Alkaline batteries (four (4) AA cells, not included) the Transmitter will play for approximately 4-6 hours continuously. Once the battery power begins to decrease, you will hear static sound from the Speakers. This indicates that you have to replace the batteries. If left unattended, transmitter signal will be decreased until the Speaker NOISE MUTE function activates and shuts off all sound to the Speakers. To avoid this, whenever possible, power the transmitter with the supplied AC Adapter so that your playing hours will not be interrupted.

### **SPEAKERS**

When the speakers are powered using the supplied Battery Pack, the battery allows up to 10 hours of continuous play (actual playing time varies depending on Volume and Bass levels) without the need for AC power. These batteries may be recharged hundreds of times.

**WARNING:** When not using batteries for a long period of time, remove batteries to prevent leakage in the compartment.

## TROUBLESHOOTING

If you follow all the instructions in this manual, you should have no problems with your Wireless Speaker System. However, should you encounter any trouble making the system work, please read the TROUBLESHOOTING section carefully. Do not return them to your dealer immediately! Check and follow these guidelines – you probably can resolve the problem without much difficulty.

PROBLEMS	SOLUTIONS
No Sound	<p>Be sure that both Speakers and the Transmitter are properly powered either by the AC Adapter jacks being firmly plugged in OR by fresh Alkaline batteries in the transmitter.</p> <p>Be sure the Audio Source is turned ON and operating.</p>
Distorted Audio	<p>The Speakers are placed beyond the transmitter's effective range (Up to 200 Ft. depending on obstacles). You need to bring the Speakers closer to the Transmitter.</p> <p>The Transmitter is located too close to the screen of your TV set or Computer Monitor (The Screens' magnetic field can cause some interference to the Transmitter).</p> <p>Other 900 MHz transmissions are being picked up by the Speaker's receiver. (Likely from a nearby 900 MHz cordless telephone). To avoid such interference, change to another Frequency Channel (1, 2, or 3) on both Speakers and the Transmitter accordingly.</p> <p>The Batteries on your sound source are too low and should be replaced.</p>
Background Noise or Hiss	If you have reversed some of the operation procedures (as given on page 5, 1st paragraph Points 1 through 7) so that the Speakers are turned on first followed by the Transmitter and finally transmitting music from your sound source, some noticeable background noise hiss can be heard initially. This is normal. The noise is generated from by the Pilot Signal. When High Quality music is transmitted through the Transmitter, the Pilot Signal will cease and this background hiss will disappear.

## SPECIFICATIONS

TRANSMITTER	
Operating Frequency (3-Channels)	Right: 925.8, 926.6, 927.4MHz
	Left: 902.6, 903.4, 904.2MHz
	Channel 1 :L903.4 R926.6
	Channel 2:L902.6 R925.8
	Channel 3:L904.2 R927.4
Power Sources	a) AC Adapter (AC 120/60 Hz-DC 9V 200mA) Supplied for Transmitter.
	b) DC four (4) X AA 1.5V Alkaline Batteries (Not Included)
Transmitter Dimensions	3 1/4" x 6" x 4 3/8" (WHD)
RECEIVER/SPEAKER(S)	
Output Power	10 Watts RMS/Channel
Receiving Frequency	L: 891.9-893.5 R: 915.1 -91 6.7
Signal to Noise Ratio	60 dB
Channel Separation	60 dB
Distortion	Less than 2% THD
Operating Range	Up to 200 Feet
Speaker Elements	4.5" Woofer, 1" Tweeter
Phase Locked Loop (PLL)	Standard
Automatic Noise Mute Function	Standard
Power Sources	a) AC 120/60 Hz Adapter to DC 13V 1500mA (2 supplied).
	b) DC 12V/4.5 A/Hr. Battery (2 Included)
Speaker Dimensions	6 1/2" x 1 8 3/4" (WHD)
Weight: each Speaker with Battery inside	14 lbs

Features and/or specifications are subject to change for improvement without notice.