

900MHz

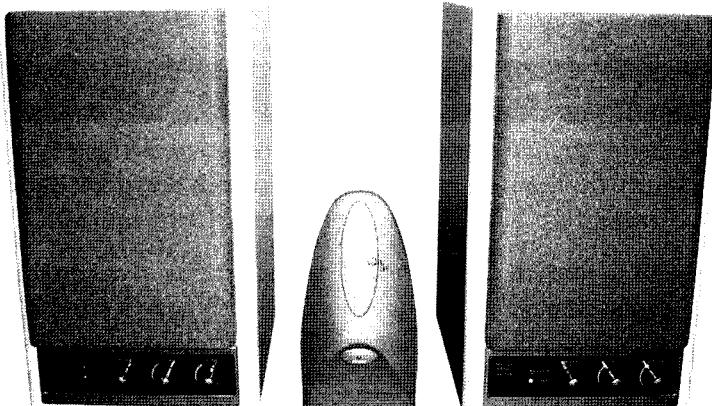
Wireless

S p e a k e r s

with 900 MHz Transmitter

PLL SYSTEM
NO NEED FOR TUNING

900
M H z



Freedom From Wires

listen **anywhere** in your home

INTRODUCTION

Congratulations on the purchase of your new WSP200 Wireless Stereo Speaker System. This System uses the latest 900 MHz High Frequency Radio Signal that can easily travel through walls, floors, 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 soundtracks.

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.

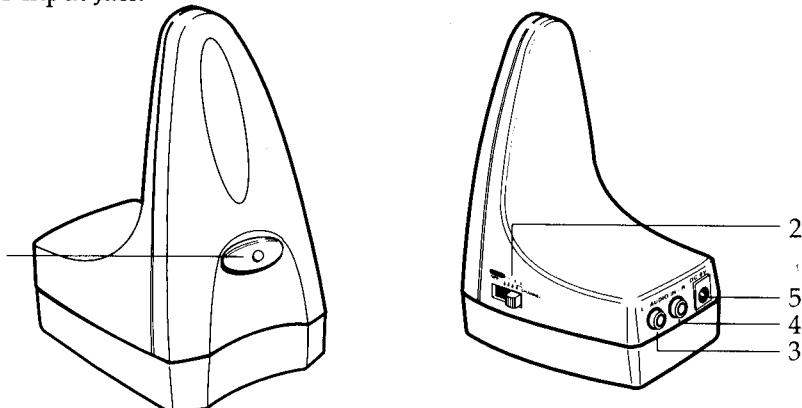
In order to combat this problem, the WSP200 incorporates a state of the art filtering system that eliminates inherent background static without, in any way, compromising the dynamic range of the Speakers.

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.

CONTROL LOCATIONS

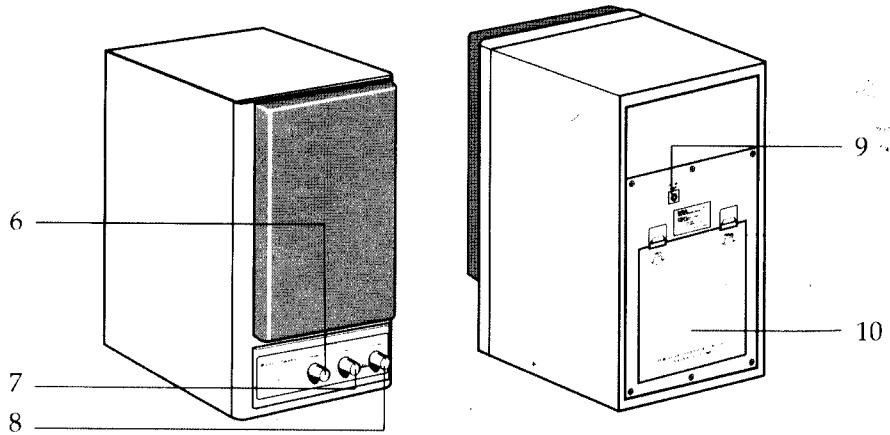
TRANSMITTER

- 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) Tone Control Knob
- 8) Power OFF and Volume Control Knob
- 9) DC Input Jack
- 10) Battery Compartment



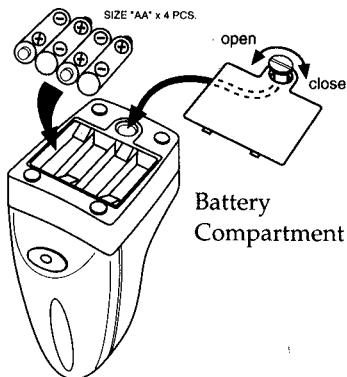
INSTALLING THE TRANSMITTER

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.

1) CONNECTING POWER

(A) DC OPERATION

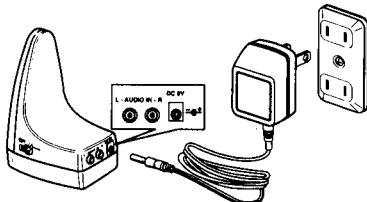
Your Transmitter is supplied with a Battery Compartment. Insert four (4) x AA Alkaline batteries (not supplied) to the battery slot as indicated. Attach the battery compartment cover to the bottom of the Transmitter unit. Be sure to secure the battery compartment cover to the bottom of the Transmitter via the locking mechanism.



(B) AC OPERATION

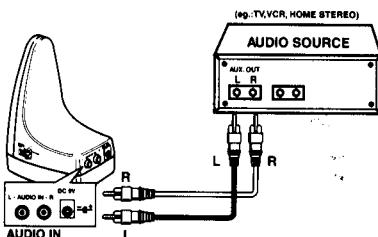
Your system is supplied with one 200 mA AC Adapter. Insert the plug of the AC adapter in to the DC Jack at the rear of the Transmitter, then plug the other end of the AC Adapter in to a conveniently located electrical wall outlet.

You are recommended to use the AC Adapter as often as possible, as this is still the most economical power source!



2) CONNECTING TO YOUR AUDIO SOURCE

- Connect one end of the supplied 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 Sources Left (WHITE) and Right (RED) **AUDIO OUT** Jacks.



INSTALLING A SPEAKER

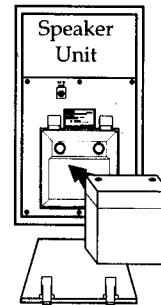
CONNECTING POWER

(A) DC OPERATION (with optional BP200SP)

Battery Pack sold on page 11)

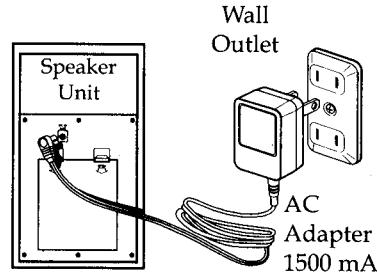
- Open the battery cover located at the back of the Speaker unit. Insert the battery making sure the side with the contacts (located on the top edge) is inserted to make contact with the coil springs inside the compartment. Push the battery all the way in until you feel resistance from the coil springs 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 1500 mA AC Adapter (provided) into the DC IN Jack located at the back of the Speaker unit.
- Plug the other end of the AC Adapter into a conveniently located electrical wall outlet.



OPERATION

Follow these steps to obtain maximum listening performance

- 1) Make sure that your Transmitter and Speakers are set up according to the procedures given in this manual.
- 2) Turn on your Audio Source.
- 3) Switch the Transmitter to a Frequency Channel (Channel 1, 2, or 3) that has no interference.

Refer to [Precision Frequency Lock-In Tuning](#) below for Precision Frequency Lock-In Tuning.

- 4) Rotate the CHANNEL Knob on the front of the Speakers to select the same channel (Channel 1, 2, or 3) selected on the Transmitter.
- 5) Turn ON each Speaker (Left and Right Speakers) by rotating the VOLUME Control Knob. A 'click' will be heard and the Power ON Indicator (Red) will glow, yet when a Strong Transmission Signal is received from the Transmitter, the Red Indicator will turn green.
- 6) Adjust each Speaker's VOLUME Control and Tone 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

The popular 900 MHZ High Frequency Technology is being widely applied to Mobile Phones, Cordless Telephones and many more items to come. If you receive interference from some of these devices, you might be able to reduce the interference by switching from one channel to another. There are altogether 3 channels in this system. Simply adjust the transmitting frequency from the Transmitter by switching to an appropriate channel, then rotate the Channel Knob of each Speaker to the same channel. 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.

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, you may use the supplied AC Adapter so that your playing hours will not be interrupted.

SPEAKERS

The Speakers may be powered using the optional Battery Pack. This long play battery allows up to 10 hours of continuous play without the need for AC power and 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. Always use fresh batteries for replacement.

FCC Compliance Statement (Part 15.19)

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 undesired operation.

Warning (Part 15. 21)

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

TROUBLESHOOTING

If you follow all the instructions in this manual, you should have no problems with your Wireless Speaker System. However, in case you can not make the system work, please read the TROUBLESHOOTING section carefully. Do not return to your dealer immediately! Check and follow these guides - you probably can resolve your problems without much difficulty.

PROBLEMS

No Sound

SOLUTIONS

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.

Be sure the Audio Source is turned ON and operating.

Distorted Audio

The Speakers are placed beyond the transmitter's effective range (Approximately 125 feet). You need to bring the Speakers closer to the Transmitter.

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).

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 a new Frequency Channel for the Speakers and the Transmitter.

The Batteries on your sound source are too low and should be replaced.

Check the Battery Levels of your Transmitter and Speakers. The batteries may be exhausted and need to be replaced or recharged (if using Battery for the speakers).

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. This is rather normal, as it is merely noise generated from 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	Left:925.8-927.4MHz Right:902.6-904.2MHz 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 b) DC four (4) x AA 1.5V Alkaline Batteries (Not Included)
Transmitter Dimensions	6" (H) x 3 1/4" (W) x 4 3/8" (D)

RECEIVER SPEAKER(S)

Output Power	8 Watts Rms /Per Channel
Receiving Frequency	L:891.9-893.5 R:915.1-916.7
Signal to Noise Ratio	55 dB
Channel Separation.	25 dB
Distortion	< 2%
Operating Range.	Up To 125 Feet
Speaker Elements	2" Tweeter, 5" Midrange range.
Phase Locked Loop (PLL)	Standard
Automatic Noise Mute Function	Standard
Speaker Dimensions	11" (H) x 6 1/2" (W) x 8 3/4" (D)
Weight (Transmitter & Receiver Speakers)	15.25 lbs

Specifications are typical; individual units may vary.

Specifications are subject to change for improvement without notice.