Self-Contained Series 100 Audio System with adjustable Loudspeaker Stand and Wireless Microphone (a Transport Bag is available as an option)

CONTENTS

Thank you for purchasing a Wenger Self-Contained Series 100 Audio System. This document serves as a quick start guide. Please contact Wenger Corporation Customer Service with any questions at 1-800-887-7145.

Note: The date of manufacture of this unit is contained in the six digit serial number. The first digit refers to the month (A for January, B for February, etc.) and the second digit refers to the last digit of the year (3 for 2003, 4 for 2004, etc.). Example — H30142 indicates a manufacture date of August of 2003.

SAFETY

Throughout this manual you will find **CAUTIONS** and **WARNINGS** which are defined as follows.

- **WARNING** means that failure to follow the instruction may result in serious injury or death.
- **CAUTION** means that failure to follow the instruction may result in serious injury or damage to property.

Note: Read all of these safety instructions before using the Series 100 Audio System.

Warning: Failure to comply with warnings and cautions in this section can result in damage to property or serious injury.

USAGE WARNINGS

Warning!   Do not remove the cover. No user-serviceable parts are behind the cover. Failure to observe this warning can result in electrical shock.

Warning!   Do not expose the Audio System to precipitation, wet conditions, or moisture. Failure to observe this warning can result in damage, fire, or electrical shock.

Warning!   Do not connect the power cord to a power source during wet or rainy conditions. Failure to observe this warning can result in electric shock.

Warning!   Never alter, modify, or use the Self-Contained Audio System in a way that does not comply with this manual. Failure to observe this warning can result in serious injury or damage to property.

Warning!   Avoid conditions that cause feedback. Feedback can damage the Audio System and cause serious injury (hearing)!

WARRANTY

Wenger Corporation will act as a contact and provide support for the Audio System. Call Wenger Corporation Customer Service with any questions or problems at 1-800-887-7145. While Wenger Corporation will coordinate customer service with the component manufacturer, the manufacturer of the Audio System component is responsible for that component warranty. There is a manufacturer's warranty card accompanying this manual. It is important to fill out this warranty card and register it with the manufacturer within 30 days after receipt of the system.

Save the shipping carton and packing materials. They are designed to ship the Audio System unit safely.

The warranty for each component is as follows:

Component	Warranty
Wenger Series 100 Sound System	3 Years

INTENDED USE
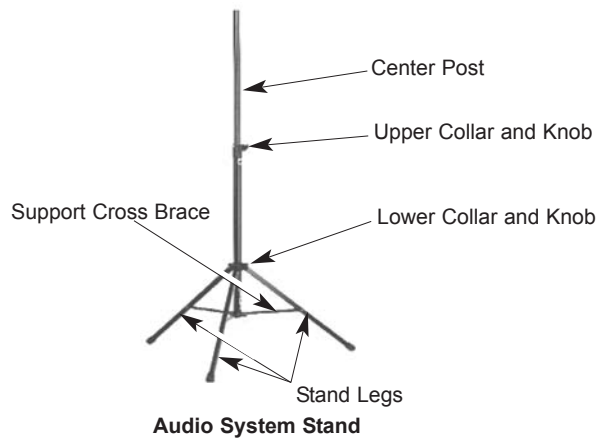
The Self-Contained Series 100 Audio System is intended for indoor and outdoor use in dry conditions with the following limitations.

- The system is ***not intended to be permanently installed*** in outdoor environments.
- Do not expose the Audio System to wet conditions or precipitation.
- Microphones are not intended to be used in wet conditions and must be protected from any precipitation.
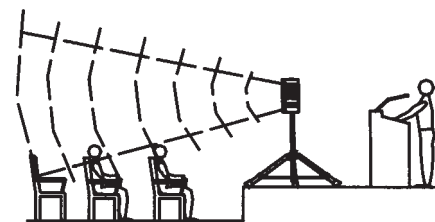
SYSTEM SETUP

STAND SETUP

1. Set up the Stand as follows:
   a. Loosen the Lower Collar Knob.
   b. Separate the Stand Legs until the Support Cross Braces are parallel with he floor.
   c. Tighten the Lower Collar Knob.
   d. Loosen the Upper Collar Knob, extend the Center Post to the desired height, and tighten the Upper Collar Knob.
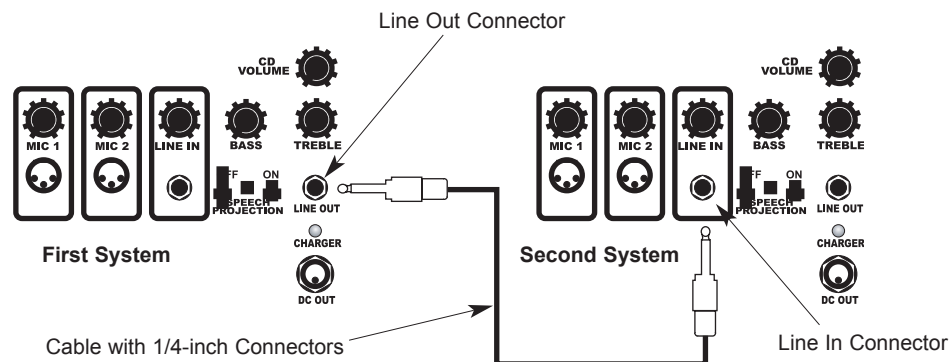   e. Place the Self-contained Audio System onto the Center Post.

Center Post

Upper Collar and Knob

Support Cross Brace

Lower Collar and Knob

Stand Legs

Audio System Stand

2. For best results, locate of the Self-contained Audio System and Stand as follows.
   a. Place the Audio System above the audience and higher than the tallest obstruction.
   b. Place the Audio System between the audience and the presenter, with the Loudspeaker facing the audience.
   c. *Never place the Loudspeaker behind the presenter.*
3. For single unit applications, place the Audio System and Stand where there is the least amount of pedestrian traffic.
4. For two unit applications, place each unit along aisles just off the centerline of the audience. Connect the systems together as shown in the diagram below.

Placement of Audio System Stand

   a. Connect the two Series 100 Audio Systems by connecting a cable from the **LINE OUT** on one Audio System to the **LINE IN** connector on the second Audio System.
   b. The second system must be powered from a 120 VAC source.
   c. Turn the **LINE IN** level control on the second system to maximum (fully clockwise) so that the volume on the second system will be controlled by the first system.

Note: There may be instances when the room or outside area has large exposed walls or patios that create multiple reflections of the original sound. In these situations, it may be necessary to change the direction of the sound system until the sound reflections have been reduce to an acceptable level.

Line Out Connector

CD VOLUME

MIC 1   MIC 2   LINE IN   BASS   TREBLE

FF   ON

SPEECH PROJECTION   LINE OUT

CHARGER

DC OUT

First System

CD VOLUME

MIC 1   MIC 2   LINE IN   BASS   TREBLE

FF   ON

SPEECH PROJECTION   LINE OUT

CHARGER

DC OUT

Second System

Cable with 1/4-inch Connectors

Line In Connector

BATTERIES

BATTERY CARE

1. Before the first use of the Audio System, fully charge the batteries.
2. Always recharge the batteries after each use, even if the system is operated briefly.
3. Never store the Audio System with partially or fully discharged batteries.
   a. ***Always store the Audio System with the batteries fully charged.***
   b. During extended periods of storage, connect the power cord to a 120 VAC power source. If this is not possible, charge the system for 24-hours at least once a month.

BATTERY LED INDICATOR

1. If the Audio System is operating and is not connected to a 120 VAC power source, the Battery LED will flash when the battery charge is low.
   a. An automatic protective circuit will turn the system off when the batteries approach a critical discharge level (about 15 to 30 minutes after reaching the pre-set discharge level).

CHARGER LED INDICATOR

1. The Charger LED Indicator ***turns on*** when the batteries are charging.
2. The Charger LED Indicator ***flashes*** when the batteries are fully charged.

CHARGING THE BATTERIES

The Audio System has an internal charging circuit that charges the batteries whenever the system is connected to a 120 VAC power source. To charge the Batteries, do as follows.

1. Place the Power Switch into the **OFF** position.
2. Connect the power cord to a 120 VAC power source.
3. The **CHARGER** LED will light.
4. When the batteries are fully charged, the **CHARGER** LED will flash.
5. Disconnect from the 120 VAC power source.

BATTERY PERFORMANCE

- Battery performance is dependent upon operating volume level, tone control settings, type of program usage, and if companion loudspeakers are used.
- The Audio System is furnished with a battery set that will provide up to eight hours of continuous operation when using only the microphone. Battery life is less when using the CD Player (either with or without the microphone).
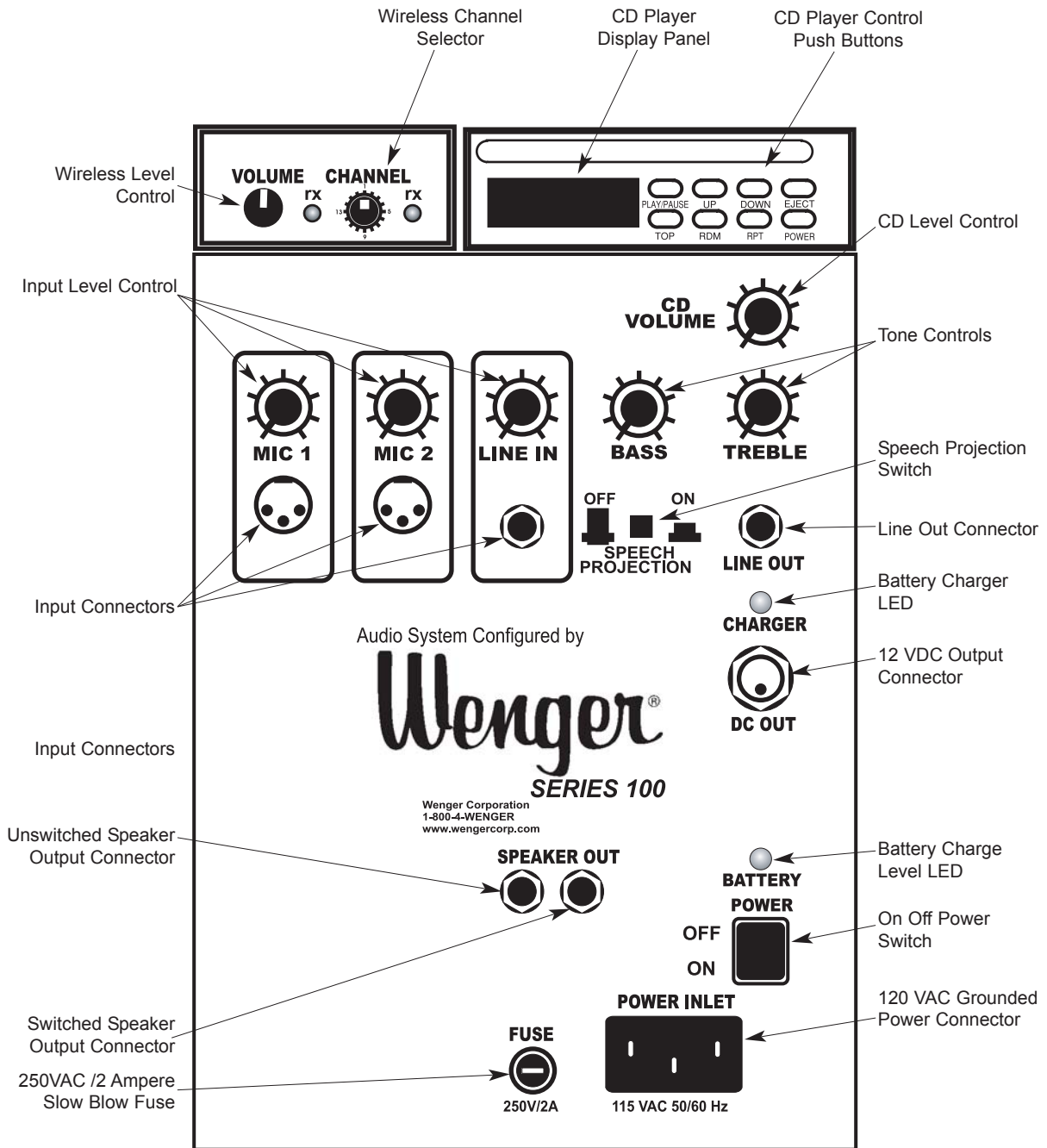
OPERATION

PANEL DESCRIPTION

Wireless Channel Selector

CD Player Display Panel

CD Player Control Push Buttons

Wireless Level Control

Input Level Control

CD Level Control

Tone Controls

Speech Projection Switch

Line Out Connector

Battery Charger LED

Input Connectors

Audio System Configured by

12 VDC Output Connector

Input Connectors

Wenger®

SERIES 100

Wenger Corporation
1-800-4-WENGER
www.wengercorp.com

Unswitched Speaker Output Connector

Battery Charge Level LED

On Off Power Switch

Switched Speaker Output Connector

120 VAC Grounded Power Connector

250VAC /2 Ampere Slow Blow Fuse

VOLUME CHANNEL rx rx

PLAY/PAUSE UP DOWN EJECT
TOP RDM RPT POWER

CD VOLUME

MIC 1 MIC 2 LINE IN BASS TREBLE

OFF ON
SPEECH PROJECTION LINE OUT

CHARGER

DC OUT

SPEAKER OUT

BATTERY
POWER
OFF
ON

FUSE
250V/2A

POWER INLET

115 VAC 50/60 Hz

Illustration is not to scale.

Note: All audio connections must be made with shielded cable to avoid hum, buzzing and radio interference.

MIC 1 MIC 2 . . . . Balanced XLR, low impedance connectors for use with balanced microphones. They are +12 VDC condenser microphone power to use with condenser type microphones.

OPERATION CONTINUED

PANEL DESCRIPTION CONTINUED

LINE IN . . . . Unbalanced, high impedance input connector for playback of CD Player, musical instruments, or other sound system or similar line-level signal sources. This input can be used with other inputs for a mixed output.

SPEECH PROJECTION . Maintained push button that allows customization of sound output as follows:

Speech Projection **OFF** (push button out): flat, full range frequency response for music or indoor voice applications.

Speech Projection **ON** (push button in): frequencies in the vocal range (800Hz to 12KHz) are boosted for added clarity and efficient sound projection. Use this setting for outdoor functions, large crowds and speech applications.

LINE OUT . . . . Unbalanced, mixed, Line-out connector to connect to another Audio System or other system. The output is post source level — any input volume level fluctuations will affect the output signal level.

DC OUTPUT . . . . 12 VDC, 300 milliampere (maximum) output connector to power auxiliary equipment such as an outboard wireless receiver, recorders, etc.

AUDIO SYSTEM OPERATION

1. Turn the **MIC 1**, **MIC 2**, **WIRELESS LEVEL**, **CD VOLUME**, and **LINE IN** level control knobs fully counterclockwise (lowest output).
2. Turn the **BASS** and **TREBLE** control knobs to the mid-point (12 o'clock position).
3. If necessary, connect microphones to the **MIC 1** and **MIC 2** connectors.
4. If necessary, connect an audio source to the **LINE IN** connector.
5. Make sure that the Wireless Microphone and the Wireless Receiver are set to the same channel (refer to the paragraph *Wireless Operation*).
6. Place the **POWER ON** rocker switch into the **ON** position.
7. Slowly adjust the Level Input control knobs to the desired volume (turning clockwise).
8. Adjust the **BASS** and **TREBLE** controls for the desired performance quality.
9. For outdoor speech applications, press the **SPEECH PROJECTION** push button. For standard applications (music and indoors), leave the **SPEECH PROJECTION** push button off (out position).

FEEDBACK

Warning!   Avoid conditions that cause feedback. Feedback can damage the Audio System and cause serious injury (hearing)!

Feedback is a shrill sound generated by a microphone picking up sound from a speaker and re-amplifying the sound. Once initiated, it is a self-sustaining phenomenon.

Specific Feedback causes are:

1. Microphones too close to loudspeakers or a microphone and a loudspeaker facing each other.
2. Volume level is set too high for the performance space.
3. Loudspeaker output is reflecting from hard surfaces to the microphone.

Avoid Feedback by doing the following:

1. Point microphones away from speakers.
2. Place speakers in between the microphone and the audience, each facing away from each other.
3. Reduce output levels when Feedback occurs.
4. Use sound dampening materials over hard surfaces such as curtains and sound dampening foam.
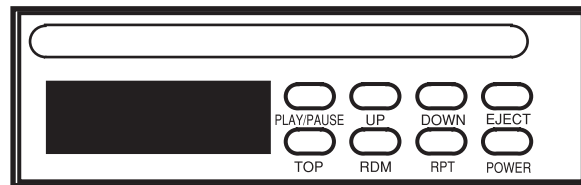
OPERATION CONTINUED

CD PLAYER PANEL OPERATION

The CD Player audio output feeds directly to the Audio System internal mixing bus combining the signal with other input signals.

Load a disc onto the CD Player by inserting it into the slot at the top of the CD Player with the disc label facing upward.

Caution: *To avoid noise at shut off, turn the CD Player off before turning off the main power switch.*

CD VOLUME . . . . .Located below the CD Player Panel. Turn the knob clockwise to increase signal output level.

CD Player Panel

POWER . . . . .Press the **POWER** push button to turn the CD Player on and off.

EJECT . . . . .Press the **EJECT** push button to eject the disc from the Player. If the disc is not removed, it re-enters the CD Player ten-seconds after pressing the **EJECT** push button.

PLAY/PAUSE . . . . . . .Press the **PLAY/PAUSE** push button to initiate playback of a disc. Pressing the **PLAY/PAUSE** push button when a disc is playing will pause the disc playback until the push button is pressed again.

UP . . . . .Press the **UP** push button to select the next disc track. Press and hold the **UP** push button to fast forward on the current track.

DOWN . . . . .Press the **DOWN** push button to select the previous disc track. Press and hold the **DOWN** push button to fast backward on the current track.

TOP . . . . .Press the **TOP** push button once to playback the disc first track.

RANDOM . . . . .Press the **RDM** push button to playback all tracks on the disc in a random order.

REPEAT . . . . .Press the **RPT** push button one time to repeat playback of the selected track continuously. **RPT** will appear on the display. Press the **RPT** push button a second time to stop continuous playback.

OPERATION CONTINUED
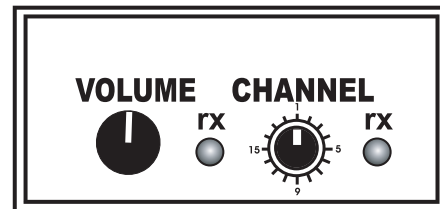
WIRELESS SYSTEM

Warning! Do not expose the equipment to moisture, rain, or mechanical shock (such as dropping onto a hard surface).

The Wireless System consists of a 16-channel Wireless Receiver and a 16-channel Wireless Microphone.

WIRELESS RECEIVER CHANNEL SELECTION

Before using the Wireless System, select a wireless frequency channel on the Wireless Receiver Panel.

1. Locate the receiver **CHANNEL** selector knob on the Series 100 Panel.
2. Turn the **CHANNEL** selector knob to one of the 16-channels.

Wireless Receive Panel

WIRELESS RECEIVER OPERATION

VOLUME . . . . .Wireless Receiver **VOLUME** control knob. Turn the knob clockwise to increase the signal level.

rx . . . . .LED illuminates when a wireless signal is transmitted and received.

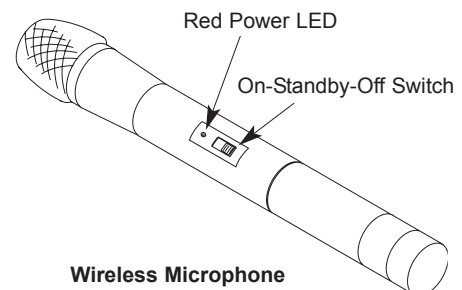**CHANNEL** . . . . .Selects one of the Wireless Receiver 16 frequency channels.

Note: Signal interference on the selected channel from other RF systems in the area may cause problems with the selected frequency channel. Change the selected channel on both the Receiver and Microphone if a problem develops with Wireless Microphone transmission.

WIRELESS MICROPHONE OPERATION

Warning! Do not expose the wireless microphone to moisture, rain, or mechanical shock (such as dropping onto a hard surface).

1. Make sure that the Wireless Microphone **CHANNEL SELECTOR** is set to the same Wireless Receiver frequency channel. Refer to *Wireless Receiver Channel Selection*.
2. Place the Wireless Microphone **ON-STANDBY-OFF POWER** Switch into the **ON** position.
   a. The Red Power On LED will flash.
   b. If the Red Power On LED illuminates continuously the Microphone Batteries have a low charge and should be replaced.
3. Place the Audio System Main Power Switch into the **ON** position.
4. Either of the two **rx** Indicator LED's on the Wireless Receiver illuminate when wireless signals are being transmitted and received.

Caution: Harmful feedback can occur when walking in front of a sound system or loudspeaker with a wireless microphone. Always point the microphone away from loudspeakers.
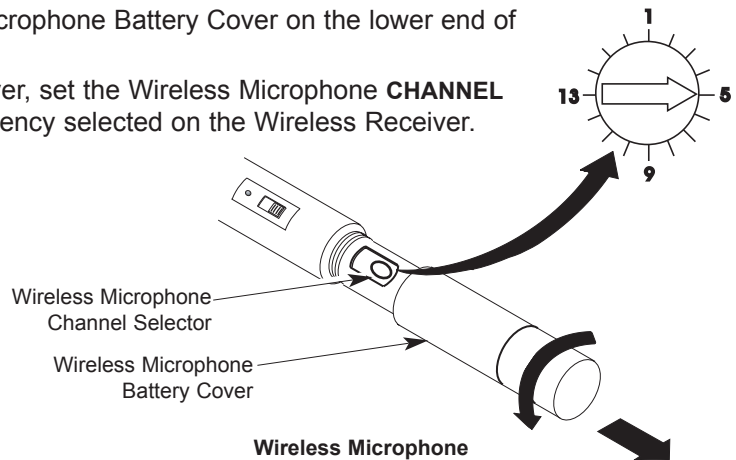

Red Power LED

On-Standby-Off Switch

Wireless Microphone
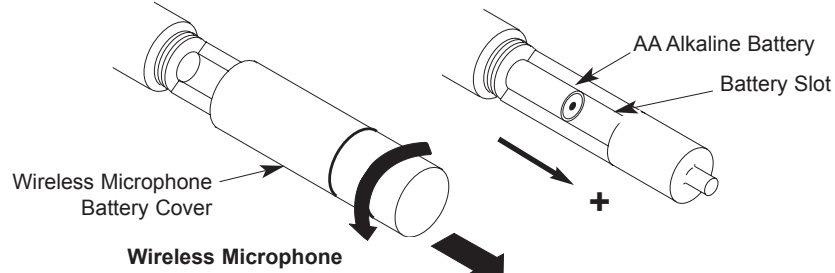
OPERATION CONTINUED

WIRELESS MICROPHONE CHANNEL SELECTION

1. Unscrew and remove the Wireless Microphone Battery Cover on the lower end of the Wireless Microphone.
2. Using a miniature electronic screwdriver, set the Wireless Microphone **CHANNEL SELECTOR** to the same channel frequency selected on the Wireless Receiver.
3. Replace the Battery Cover.

Wireless Microphone Channel Selector

Wireless Microphone Battery Cover

Wireless Microphone

WIRELESS MICROPHONE BATTERY REPLACEMENT

1. Unscrew and remove the Wireless Microphone Battery Cover on the lower end of the Wireless Microphone.
2. Place two AA Alkaline batteries onto the Battery Slot. The positive end of each battery must face the bottom of the microphone.
3. Replace the Battery Cover.

AA Alkaline Battery

Battery Slot

Wireless Microphone Battery Cover

Wireless Microphone

MAINTENANCE

AUDIO SYSTEM

1. Clean the exterior case with a clean cotton cloth and a mild detergent. Do not use harsh detergents or an abrasive.
2. Clean textured areas and controls with a dry bristle brush.

WIRELESS MICROPHONE

1. Clean the Wireless Microphone Windscreen as follows.
   a. Unscrew the wire-mesh cap counterclockwise and remove the wire-mesh cap from the Microphone body.
   b. Remove the windscreen (foam sheet) from the wire-mesh cap.
   c. Wash the windscreen in a mild detergent.
   d. As soon as the windscreen has dried, replace it in the wire-mesh cap and screw the wire-mesh cap onto the Microphone body clockwise.

TROUBLESHOOTING

Condition	Possible Cause
There is no sound (the Main Power LED is not illuminated	The Main Power Switch is in the off position.
	The batteries are discharged (LED flashes).
The Charge Indicator does not illuminate.	Blown Fuse
There is no sound and the Main Power LED illuminates.	There is no output from the signal source.
	An input cable is not plugged into the jack.
	The signal level control is low or set to off.
	A plug is inserted into a switched loudspeaker output but the cord is not connected to a loudspeaker.
Short battery life	There is a short circuit in an external cable or loudspeaker.
	Total external loudspeaker impedance is less than four ohms.
	Batteries are not fully charged.
	Batteries need replacement.
Distorted sound	There is a poor connection on an input cable.
	The input signal level is too high.
Excessive hum or noise	The input cable is not shielded.
	System is not using a balanced microphone.
Wireless System has no sound (the rx Indicator illuminates).	The Wireless Volume Control is set too low or off.
Wireless System has no sound (the rx Indicator does not illuminate).	The Main Power Switch is not turned on.
	The Wireless Microphone is not turned on.
	The Wireless MIcrophone batteries are discharged.
	The Wireless receiver and Wireless Microphone are set to different channels.