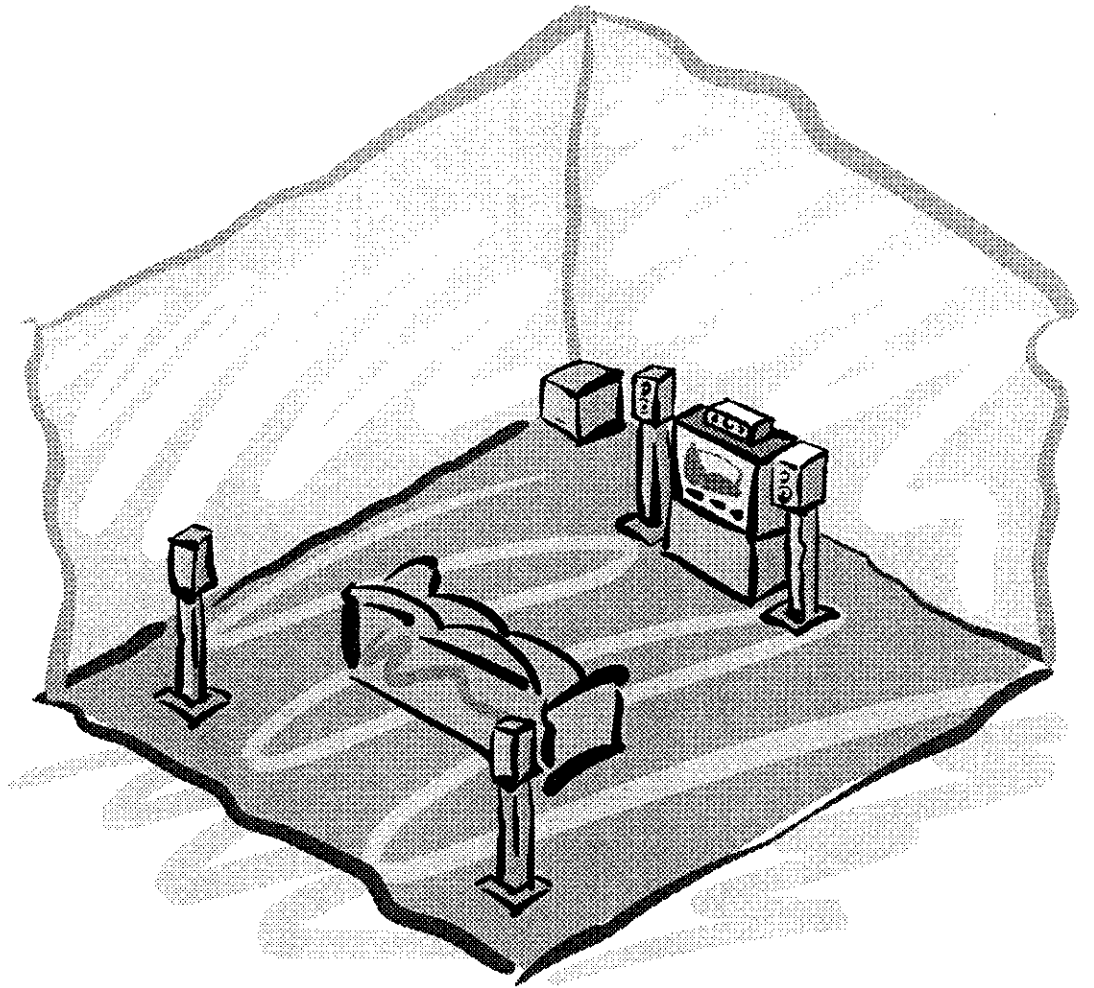


# CERWIN-VEGA!®

O P E R A T I O N M A N U A L



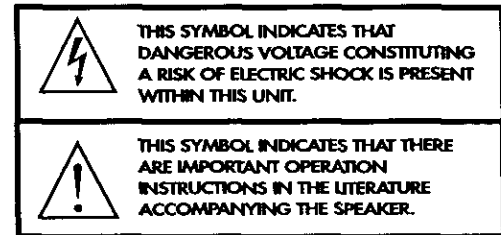
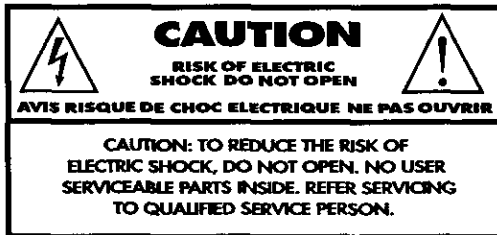
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**POWERED SUBWOOFERS**



SM-LW12  
SERVICE MANUAL

**WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS SPEAKER CABINET TO RAIN OR MOISTURE.**



## SAFETY INSTRUCTIONS

**Read Instructions** – Read all safety and operating instructions before operating the product.

**Retain Instructions** – Retain all safety and operating instructions for future reference.

**Read Warnings** – Read all warnings on the product and in the operating instructions.

**Follow Instructions** – Follow all operating and use instructions.

**Water and Moisture** – Do not use the product near water; for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

**Ventilation** – Do not place the product in a location or position that interferes with its proper ventilation. For example, do not set the product on a bed, sofa, rug, or similar surface that may block the heat sink; or place it in a built-in situation, such as a bookcase or cabinet that may impede the flow of air around the heat sink.

**Placement** – This product is designed for floor placement only. Do not place it on a cart or table. Do not place objects on top of the product, as they will vibrate off.

**Heat** – Place the product away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

**Power Sources** – Connect the product only to a power receptacle of the type described in the operating instructions or as marked on product.

**Grounding or Polarization** – Do not defeat the product's grounding or polarization feature.

**Power Cord Protection** – Route power-supply cords so that they are not likely to be walked on or pinched by items placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

**Cleaning** – Clean the product only with a dry cloth; do not use any liquids such as water or solvents.

**Power Lines** – Locate an outdoor antenna away from power lines.

**Non-Use Periods** – Unplug the product's power cord from the outlet when left unused for a long period of time.

**Object and Liquid Entry** – This apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus. Do not use the product near water; e.g., near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc. Use care so that objects do not fall, and liquids are not spilled into the enclosure through openings.

**Damage Requiring Service** – If the product requires service, use only qualified service personnel when:

- A. The power supply cord or the plug has been damaged; or
- B. Objects have fallen, or liquid has been spilled into the product; or
- C. The product has been exposed to rain; or
- D. The product does not appear to operate normally, or exhibits a marked change in performance; or
- E. The product has been dropped, or the enclosure damaged; or
- F. Fuse blows repeatedly.

**Servicing** – Do not attempt to service the product beyond what is described in the operating instructions. All other servicing should be referred to qualified service personnel.

In the event your Cerwin-Vega Subwoofer fails to operate properly, please contact the dealer where you purchased the unit. Or, for further assistance contact us at the addresses listed below.

The HT and LW powered subwoofers are CE compliant.

## CERWIN-VEGA'S LIMITED WARRANTY

### WELCOME TO THE FAMILY!

First off, you have great taste in loudspeakers. At Cerwin-Vega, deep bass and great highs are a way of life. Nice to know there are a few people out there who share our passion for music. You'll be glad to know that this is a family-owned company (has been since 1953). And we consider you to be the newest member of the family.

We hope your speakers give you years of enjoyment. Of course, in the event of a problem, make sure you familiarize yourself with this warranty. We like to think that while you're sitting in front of your speakers, we're standing behind them. And now a few choice words from our lawyer. (Hey, every family has one.)

### WHO'S COVERED BY THIS WARRANTY?

Cerwin-Vega's Limited Warranty on residential speakers extends only to the original purchaser as evidenced by the original Bill of Sale and only to the residential speakers purchased from authorized Cerwin-Vega dealers.

Ten words of advice: *Retain the original bill of sale in a safe place!*

### WHAT'S COVERED BY THIS WARRANTY?

Cerwin-Vega warrants that all new residential speakers shall be free from defects in material and workmanship, under normal and proper use. Cerwin-Vega agrees to repair or replace (at our option) all such defective parts at no charge for labor or materials.

### WHAT'S NOT COVERED BY THIS WARRANTY?

This Limited Warranty does not apply to defective equipment that: has been altered or repaired by other than factory approved procedures; has been subjected to negligence, misuse or accident; has been damaged by improper line voltage; had its serial number or any part of it altered, defaced, or removed; has been used for other than home entertainment purposes; or has been used in a way that is contrary to Cerwin-Vega's written instructions.

Except as provided by statute, this Limited Warranty does not cover losses, consequential or otherwise, resulting from the improper use of, or inability to operate, any Cerwin-Vega product.

### HOW LONG DOES THE WARRANTY EXTEND?

Cerwin-Vega's Limited Warranty extends for a period of five (5) years for all system speaker components and two (2) years for all associated electronics components, including amplifier and controller devices, from date of purchase as shown on the original Bill of Sale. If a defect exists within the warranty period, the warranty will not expire until the defect has been fixed.

The warranty period will also be extended if the warranty repairs have not been performed due to delays caused by circumstances beyond the control of the original purchaser, or if the warranty repairs did not remedy the defect and the original purchaser notifies Cerwin-Vega or the original dealer or an Authorized Cerwin-Vega Service Center of the failure of the repairs within 30 days after they were completed.

## INTRODUCTION

This manual covers operation information for all Powered Subwoofers in Cerwin-Vega's HT-S and LW series. Illustrations of control locations and hook-up wiring may differ in physical appearance and location than those shown on the actual product you own. However, the operation information is still the same.

### PRIOR TO INSTALLATION

Carefully unpack your subwoofer, saving the box and packing materials in case you ever need to transport, ship, or move your subwoofer. Before continuing with installation, please make sure the subwoofer is unplugged and the power switch is turned OFF.

### HOW DO YOU GET WARRANTY SERVICE?

In order to obtain warranty service, contact your original dealer or distributor, or an Authorized Cerwin-Vega Service Center. If, for some reason, you have trouble locating a service representative, contact Cerwin-Vega's Customer Service Department for assistance:

Cerwin-Vega!  
Customer Service Dept.  
555 East Easy Street  
Simi Valley, CA 93065

PHONE: 805-584-5300 or FAX: 805-526-3653

In some cases, the Customer Service Department can solve a service problem without any return of equipment, thereby avoiding transit delays.

### WHAT IF THE PRODUCT MUST BE RETURNED?

If the Customer Service Department determines that the equipment must be returned to Cerwin-Vega for service, a Return Authorization will be issued by mail, and the defective merchandise may be shipped directly to the above address freight prepaid, along with a copy of both the Return Authorization and the original Bill of Sale.

The product will be replaced or repaired (at our option) and returned to the original purchaser. Only the return postage will be paid by Cerwin-Vega. Cerwin-Vega will not be responsible for damage occurring in shipment from the original purchaser or due to improper packing materials. Remember to pack all equipment carefully and in the original carton if possible. Additional charges may be added if new packing materials are required for return shipment. **SAVE YOUR ORIGINAL PACKING MATERIALS!**

### WHAT ARE OTHER REMEDIES UNDER THE LAW?

The exercise of any of the provisions under the Limited Warranty does not affect the protections or remedies of the original purchaser under other laws. If you have additional questions about service, write or call the Customer Service Department. This Limited Warranty applies to all residential speakers, and supersedes all previous warranty statements. Cerwin-Vega reserves the right to make changes in product design and specifications at any time.

**EXCEPT AS PROVIDED HEREIN AND BY APPLICABLE LAW, CERWIN-VEGA MAKES NO ADDITIONAL REPRESENTATION OR WARRANTY OF ANY NATURE WHATSOEVER, EXPRESSED OR IMPLIED, AS TO THE EQUIPMENT, INCLUDING BUT NOT LIMITED TO, THE MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, DESIGN CONDITION OR WORKMANSHIP OF THE EQUIPMENT, OR THE QUALITY OF THE MATERIAL INCLUDED THEREIN, THIS LIMITED WARRANTY CONSTITUTES THE SOLE AND ENTIRE AGREEMENT BETWEEN CERWIN-VEGA AND THE ORIGINAL PURCHASER.**

**WARNING:** On LW-X models, severe damage may result from improperly selected voltage. Set voltage selection switch ① to the proper AC voltage, verify proper fuse rating (type and value) ② before attempting to connect this subwoofer to AC power.

### INSTALLATION

Please read the remaining pages to determine which installation procedure is best for your audio video system. For additional hook-up connections, you may want to refer to your A/V receiver, processor, or amplifier's manual. **NOTE:** Be sure to read and observe the "Safety Instructions" (see page 2) before starting the installation.

## CONTROL DESCRIPTIONS

**ATTENTION!** Each subwoofer has speaker-level and line-level input connections; choose only one option for hook-up. **DO NOT USE BOTH INPUT CONNECTIONS AT THE SAME TIME!**

The following (numbered) controls are located on the subwoofer's rear panel, as shown in Figures 1 and 2.

- ① **LINE-LEVEL INPUT:** Stereo line-level inputs to subwoofer. Use these RCA jacks to connect audio signals from line-level outputs from an A/V receiver/preamp/processor. (see figure 3 & 4, for hook-up)
- ② **SPEAKER-LEVEL INPUT:** Stereo speaker-level inputs to subwoofer. Use these terminals when line-level connections are not available from A/V receiver/preamp/processor. (see figure 5, for hook-up)
- ③ **VOLUME CONTROL:** Controls volume level of subwoofer. Use to balance the output of the subwoofer with the main speaker output.
- ④ **CROSSOVER FREQUENCY:** The crossover control allows you to adjust the upper limit of the subwoofer's frequency response from 40 to 120 Hz. The subwoofer's response will begin rolling off above the set frequency. Set the CROSSOVER FREQUENCY to the lower value listed in the main speaker manual.
- ⑤ **SPEAKER-LEVEL OUTPUT:** Audio loop of stereo high-level (SPEAKER-LEVEL) inputs. Use to loop (continue) signal to speaker connections to the left and right main speakers. (see figure 5, for hook-up)
- ⑥ **LINE-LEVEL OUTPUT (LW-10/12\*, HT-S10A/12A):** Use to loop the full-range line-level signal back to the receiver/preamplifier/amplifier for distribution to main speakers. Refer to the owner's manual provided with your receiver/preamplifier/amplifier. (see figure 4, for hook-up)
- ⑦ **LINE-LEVEL OUTPUT (HT-S15A & LW-15\*):** Use to loop signal back to the receiver/preamplifier/amplifier for distribution to the main speakers. Use the Line-Level Output if you wish to filter low frequencies out of the signal going to your main speakers. Refer to the owner's manual provided with your receiver/preamplifier/amplifier. (see figure 3, for hook-up)
- ⑧ **PHASE:** Compensates for having subwoofer and main speakers in different locations. Ideally, subwoofer sound should reach the listening position at the same time as sound from the main speakers. However, if the distance from the listening position to the subwoofer, and from the listening position to the main speakers differ, the sound from each will reach your ears at different times. The PHASE control delays the signal 180 degrees, so the subwoofer output will blend with that of the main speakers. Slide the PHASE switch to "180." At the listening position, listen to the midbass output. If it sounds weak, set PHASE back to "0."
- ⑨ **POWER LED:** Power indicator lamp. Glows green in "AUTO ON" mode if audio signal is present. Glows red in both "OFF" and "AUTO ON" modes if receiving AC power, and audio signal is not present after approximately 20 minutes.
- ⑩ **POWER:** Two-position power switch. In the "AUTO ON" mode, the subwoofer's amplifier is automatically activated if an audio signal is present and will automatically become inactive when there is no audio signal present after approximately 20 minutes. In the "OFF" mode, power is shut off to the amplifier.
- ⑪ **VOLTAGE SELECTION (LW-X Models only):** User-switchable voltage selection for use with 115 or 230 volt AC. **Attention: All subwoofer models come from the factory preset to 115 volts.** To select a different voltage, use a flat-head screwdriver to reposition the switch to the desired voltage. **WARNING: Severe damage may result from improperly selected voltage. Make sure you know the voltage requirement of the country you are in before attempting to connect this subwoofer to AC power. Observe proper fuse rating (type and value) ⑬ for selected voltage ⑪.**
- ⑫ **POWER CORD RECEPTACLE:** Connect IEC cord to this receptacle. If the cord supplied does not fit an available AC outlet, purchase the correct AC cord from your audio dealer or an electrical supply store.
- ⑬ **REPLACEABLE FUSE:** Protects system from overload, replace with fuse rating as indicated on amplifier panel at fuse location.

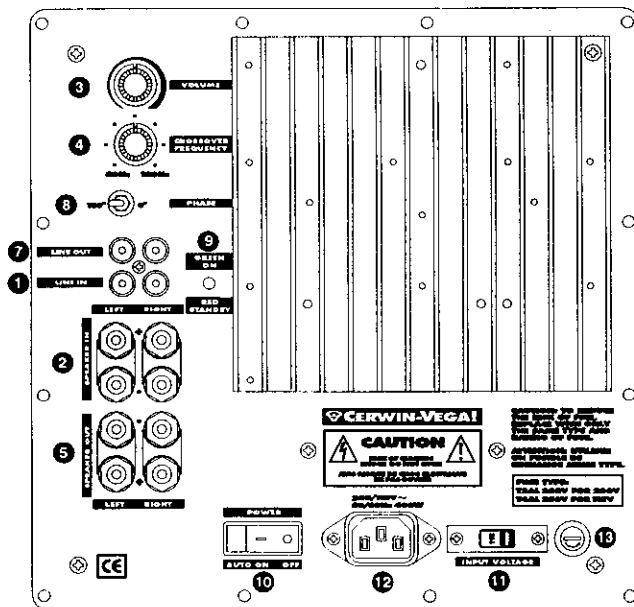


Figure 1. Connection panel for the HT-S15A and LW-15/15X.

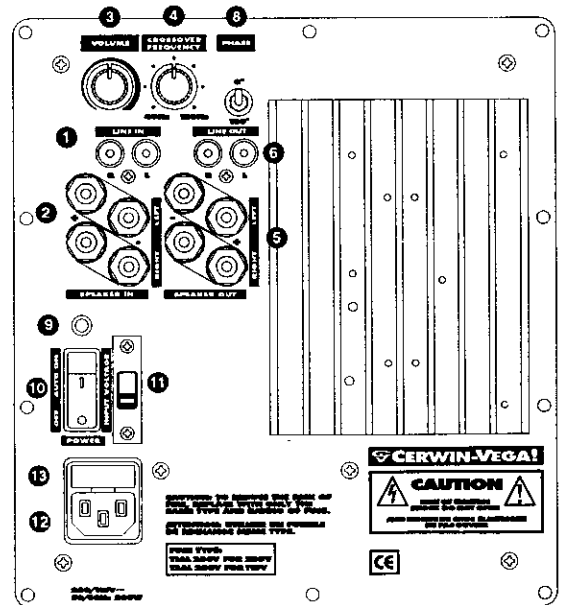


Figure 2. Connection panel for the HT-S10A, HT-S12A, LW-10/10X, and LW-12/12X.

# PLACEMENT

Cerwin-Vega Subwoofer Systems can be positioned anywhere on the room's floor. For best performance however, place the subwoofer near the same wall as your main speakers. Experiment to find the area of optimum performance.

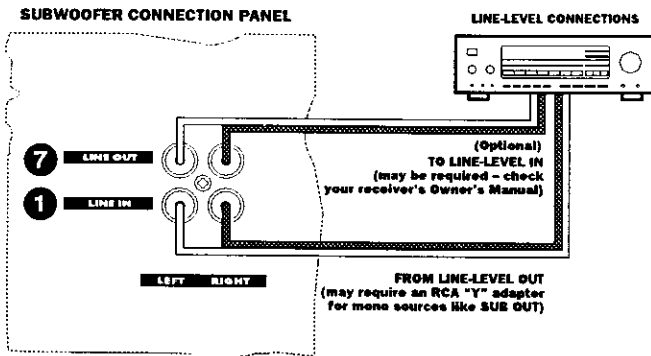
*NOTE: Usually the subwoofer will sound louder when it's placed next to a wall or in a corner.*

**ATTENTION!** Do not place the subwoofer too close to your television. Some televisions are especially sensitive to the magnetic field produced by the subwoofer. If your television produces distorted colors after installation, this can be corrected by moving the subwoofer further away from the television until normal color is returned.

**CAUTION!** Cerwin-Vega Subwoofers are intended for floor placement only! Do not place heavy objects of any type, (such as a television) on top of a Cerwin-Vega Subwoofer!

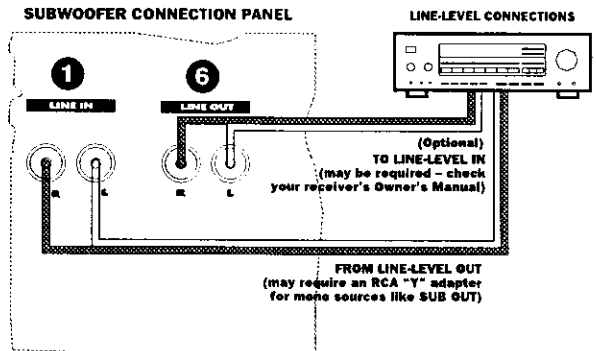
# CONNECTING YOUR SUBWOOFER

## LINE-LEVEL CONNECTIONS



Line-Level Connections for the HT-S15A and LW-15/15X

Figure 3.



Line-Level Connections for the HT-S10A, HT-S12A, LW-10/10X and LW-12/12X.

Figure 4.

Figure 3 & 4. Connecting left and right line-level outputs of an A/V receiver to left and right line-level inputs of the Cerwin-Vega subwoofer. Remember to maintain left to left, right to right, (+) to (+) and (-) to (-) connections.

## SPEAKER-LEVEL CONNECTIONS

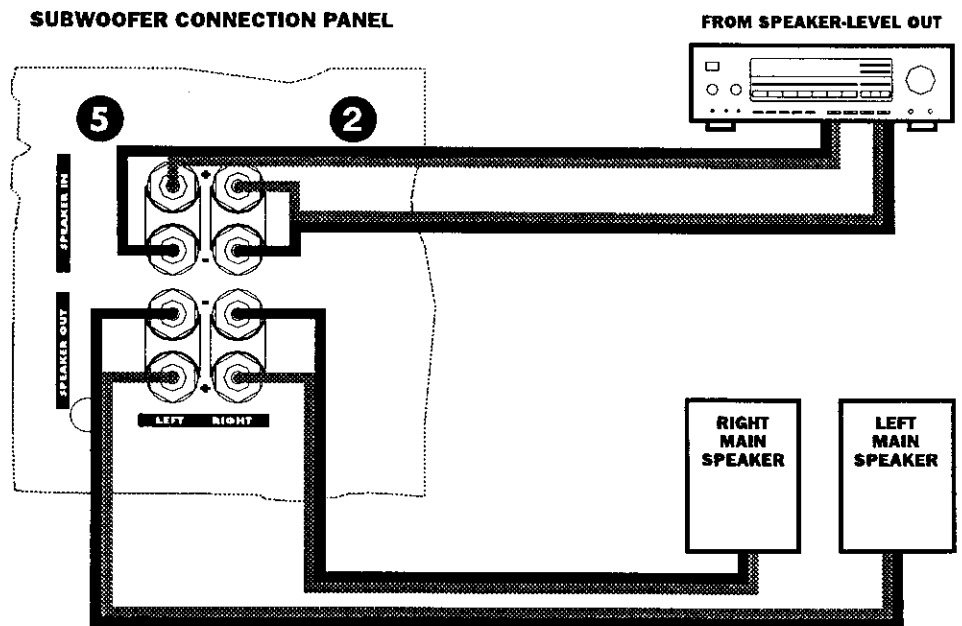


Figure 5. Connect left and right speaker-level outputs of an A/V receiver to left and right speaker-level inputs of the subwoofer. Then connect left and right speaker-level outputs of the subwoofer, with the main left and right speakers of your system. Remember to maintain left to left, right to right, (+) to (+) and (-) to (-) connections.

# TROUBLESHOOTING

<b>SYMPTOMS</b>	<b>CAUSES</b>	<b>SOLUTIONS</b>
Bass sounds distorted	Subwoofer amplifier is at maximum output Receiver tone controls are set too high	Lower subwoofer volume or receiver level control Set bass flat; use tone controls sparingly
Distortion with volume control near minimum	Defective receiver or preamplifier, or shorted speaker wires	Repair defective receiver, preamplifier or replace speaker wires
Distortion on music peaks or sound effects	Dynamic soundtrack (e.g., explosions)	Turn down volume control to lower overall range; use a more powerful receiver/amplifier
Buzz, hum, or crackle when connecting wires	Connecting wires with power on causes transient signal spikes	Connect wires only when system power is off
50/60 cycle hum when system is on	Residential grounding problem	Use a three-to-two prong AC adaptor (available at your audio dealer or local electronic supply).
No sound after listening at high levels	Amplifier's thermal protection has been temporarily activated	Lower subwoofer volume and allow amplifier to cool down; sound should resume automatically
Volume control is at maximum, yet sound is low	Both channels are not being driven	Use an RCA "Y" adapter to drive both channels

## SPECIFICATIONS: HT-S SERIES

### HT-S10A

FREQUENCY RESPONSE:	30 to 150 Hz
AMPLIFIER POWER OUTPUT:	100 Watts (RMS)
DRIVER DESIGN:	10" high efficiency woofer/diecast aluminum frame
CROSSOVER:	Continuously variable from 40 to 150 Hz @ 18 dB/octave
POLARITY SWITCH:	0° or 180° (user selectable)
SUBSONIC FILTER:	18 dB per octave below 30 Hz
VOLTAGE:	115 Vac
DIMENSIONS (H x W x D):	17" x 15" x 15" / 43.2 cm x 38.1 cm x 38.1 cm
UNPACKED WEIGHT:	55 lb (25.0 kg)
FINISH:	Black woodgrain vinyl

### HT-S12A

FREQUENCY RESPONSE:	28 to 150 Hz
AMPLIFIER POWER OUTPUT:	150 Watts (RMS)
DRIVER DESIGN:	12" high efficiency woofer/diecast aluminum frame
CROSSOVER:	Continuously variable from 40 to 150 Hz @ 18 dB/octave
POLARITY SWITCH:	0° or 180° (user selectable)
SUBSONIC FILTER:	18 dB per octave below 28 Hz
VOLTAGE:	115 Vac
DIMENSIONS (H x W x D):	19" x 17" x 17" / 48.3 cm x 43.2 cm x 43.2 cm
UNPACKED WEIGHT:	60 lb (27.3 kg)
FINISH:	Black woodgrain vinyl

### HT-S15A

FREQUENCY RESPONSE:	25 to 150 Hz
AMPLIFIER POWER OUTPUT:	200 Watts (RMS)
DRIVER DESIGN:	15" high efficiency woofer/diecast aluminum frame
CROSSOVER:	Continuously variable from 40 to 150 Hz @ 18 dB/octave
POLARITY SWITCH:	0° or 180° (user selectable)
SUBSONIC FILTER:	18 dB per octave below 25 Hz
VOLTAGE:	115 Vac
DIMENSIONS (H x W x D):	23.5" x 18.75" x 18.75" / 59.7 cm x 47.6 cm x 47.6 cm
UNPACKED WEIGHT:	72 lb (32.8 kg)
FINISH:	Black woodgrain vinyl

## SPECIFICATIONS: LW SERIES

### LW-10/10X

FREQUENCY RESPONSE:	32 Hz to 150 Hz
AMPLIFIER POWER OUTPUT:	100 Watts (RMS)
DRIVER DESIGN:	10" high efficiency woofer/diecast aluminum frame
CROSSOVER:	Continuously variable from 40 -150 Hz @ 18 dB/octave
POLARITY SWITCH:	0° or 180° (user selectable)
SUBSONIC FILTER:	18 dB per octave below 32 Hz
VOLTAGE:	115 Vac (LW-10), 115/230 Vac (LW-10X)
DIMENSIONS (H x W x D):	18.5" x 12" x 15.75" / 47 cm x 30.5 cm x 40 cm
UNPACKED WEIGHT:	55 lb (25.0 kg)
FINISH:	Black woodgrain vinyl

### LW-12/12X

FREQUENCY RESPONSE:	30 Hz to 150 Hz
AMPLIFIER POWER OUTPUT:	150 Watts (RMS)
DRIVER DESIGN:	12" high efficiency woofer/diecast aluminum frame
CROSSOVER:	Continuously variable from 40 -150 Hz @ 18 dB/octave
POLARITY SWITCH:	0° or 180° (user selectable)
SUBSONIC FILTER:	18 dB per octave below 30 Hz
VOLTAGE:	115 Vac (LW-12), 115/230 Vac (LW-12X)
DIMENSIONS (H x W x D):	19.5" x 14" x 17.3" / 49.5 cm x 35.6 cm x 44 cm
UNPACKED WEIGHT:	60 lb (27.3 kg)
FINISH:	Black woodgrain vinyl

### LW-15/15X

FREQUENCY RESPONSE:	27 Hz to 150 Hz
AMPLIFIER POWER OUTPUT:	200 Watts (RMS)
DRIVER DESIGN:	15" high efficiency woofer/diecast aluminum frame
CROSSOVER:	Continuously variable from 40 -150 Hz @ 18 dB/octave
POLARITY SWITCH:	0° or 180° (user selectable)
SUBSONIC FILTER:	18 dB per octave below 25 Hz
VOLTAGE:	115 Vac (LW-15), 115/230 Vac (LW-15X)
DIMENSIONS (H x W x D):	21" x 17" x 18" / 53.3 cm x 43.2 cm x 45.7 cm
UNPACKED WEIGHT:	72 lb (32.8 kg)
FINISH:	Black woodgrain vinyl