

# T-30LSE

LIMITED EDITION SPEAKER



# OWNERS MANUAL

REDEFINING THE WAY YOU EXPERIENCE SOUND.™



*Limited*

*Edition*

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# Introduction

Congratulations on your purchase of an RBH T-30LSE loudspeaker! Your speaker is the result of many years of research and development dedicated to producing high quality products for home audio and audio/video systems.

This manual contains features, setup recommendations and specifications for the RBH T-30LSE high performance loudspeaker. We recommend you thoroughly read through the material contained in this manual before connecting your loudspeaker. This will ensure that you have an understanding of how to setup your speaker for optimum performance.

In 2006, celebrating thirty years in business and continuing RBH Sound's tradition of excellence in loudspeaker craftsmanship, we developed our highest performance freestanding tower speaker, the T-30LSE.

The T-30LSE is the result of combining the latest in loudspeaker technologies with over three decades of engineering expertise. At the forefront of the best-of-the-best freestanding loudspeakers, the T-30LSE is an audio enthusiast's dream come true.

Higher resolution and increased articulation are the end result of the T-30LSE's design. The T-30LSE's woofers

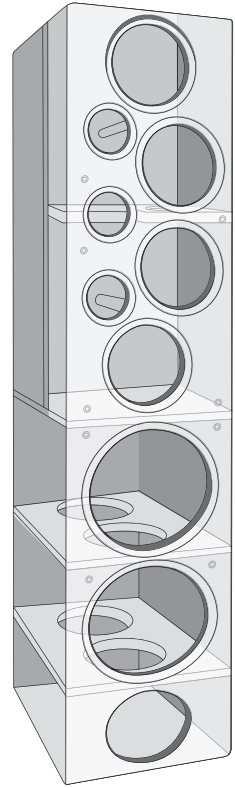
and tweeters are arranged in a dispersion averaging alignment which focuses the sound at the listening position for unbelievable imaging. Another benefit of this alignment is reduced sound reflections from other surfaces in the listening environment. These sonic attributes are not typically found in a speaker capable of delivering the sound pressure levels the T-30LSE can produce.

Imagine bass so strong, yet so balanced. Now, imagine this power coupled with acoustic detail and resolution so pure and so refined, you'll have to double-check to make sure the performance isn't live in your listening room.

The 3-way T-30LSE loudspeaker provides pristine audio clarity, producing extreme sound pressure levels, and is designed for high-end listening rooms and larger home theaters. The T-30LSE truly is a work of art. However, like a work of art, this speaker is limited to 100 pair, each pair personally signed by the man who founded RBH Sound 30 years ago, Roger B. Hassing.

# Enclosure

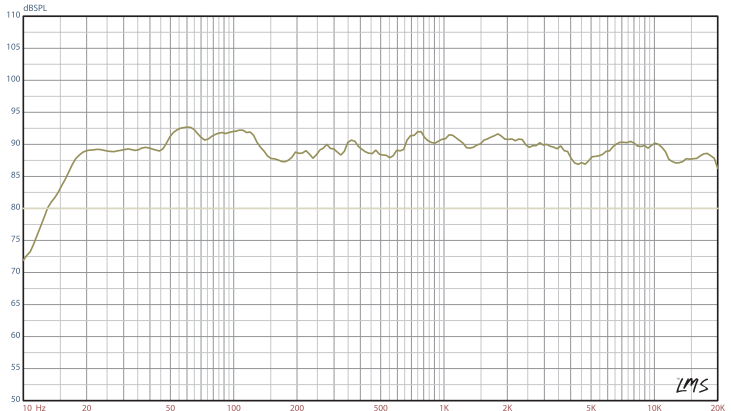
Cabinets are constructed of  $\frac{3}{4}$ -inch medium density fiber-board due to its inert properties. The thickness of the front baffles also prevents excess acoustic radiation. Sophisticated computer modeling and measurement techniques are used extensively in the RBH loudspeaker design process.



# Crossover

Steep acoustic slope crossovers are used to integrate the drivers. The use of steep crossover slopes allow high power handling, minimize driver interaction anomalies, and

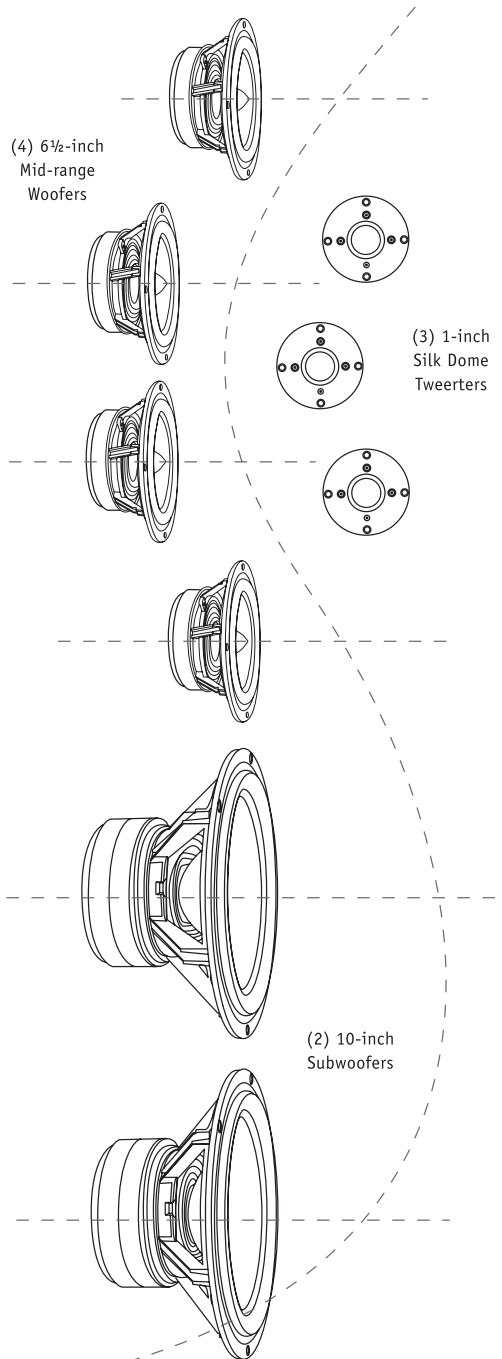
maximize the clarity with which each driver is able to produce its respective frequency band. Large oversized gold binding posts ensure a good electrical contact.

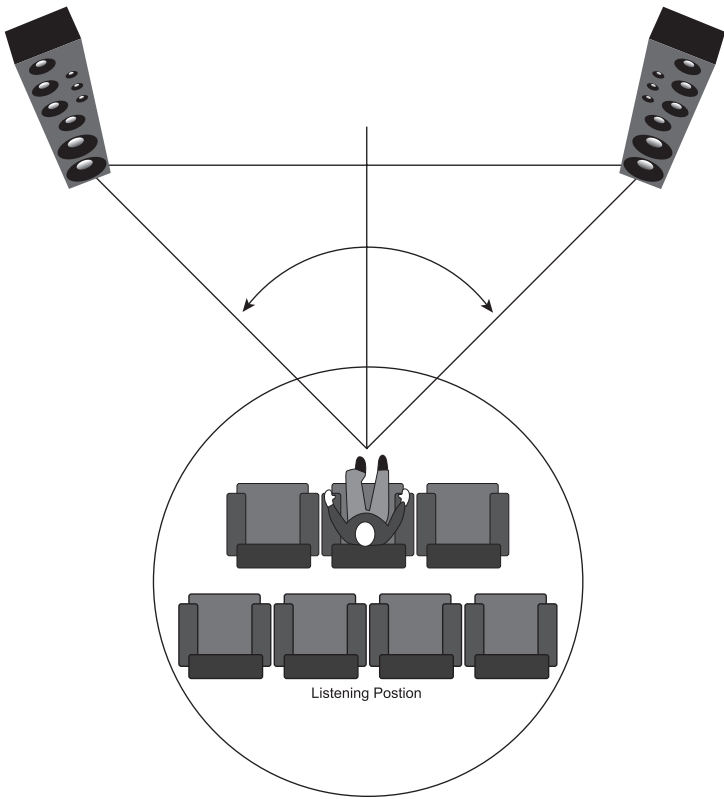


Frequency response graph of the T-30LSE

# Drive Units

The T-30LSE's mid-range and bass drive units are of the highest quality and feature proprietary cutting-edge aluminum cone technology. The two 10-inch long-throw subwoofers deliver plentiful amounts of low frequency information. Mid-bass through lower treble frequencies are accurately reproduced through four 6½-inch woofers offering extended dynamic range and lower distortion. Three 1-inch silk-dome high performance tweeters provide generous crystal clear high frequencies with unbelievable detail and accuracy. Working in harmony together, all drive units are governed by an extensive filter network to convey the sonic realism you'd expect from this reference-grade speaker.





## Speaker Positioning

In order to extract the best possible sound from your speaker system, it is important to determine where the speakers will sound the best in your listening room. Room reflections from the floor, ceiling and side walls influence the balance, imaging and overall sonic quality at the listening position. Experiment with the speaker placement to determine which location offer the best overall sound. It is

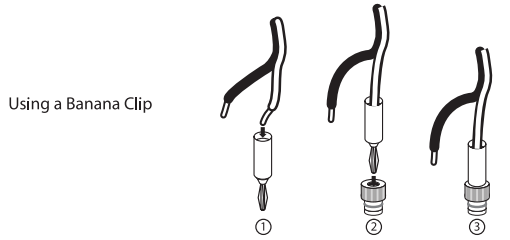
important that the T-30LSEs are positioned so the tweeters face toward the center of the listening position. If the tweeters are not placed properly, there will be a great reduction in imaging, sound staging and overall performance of the speaker system.



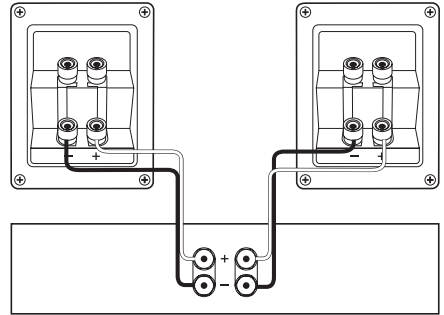
# Attaching Speaker Cables

When using a banana jack to attach speaker cables to the binding post terminals, insert the speaker cables into the banana jack. Next insert the banana jack into the hole provided in the top of the terminal. Repeat for the other speaker cable(s) as necessary.

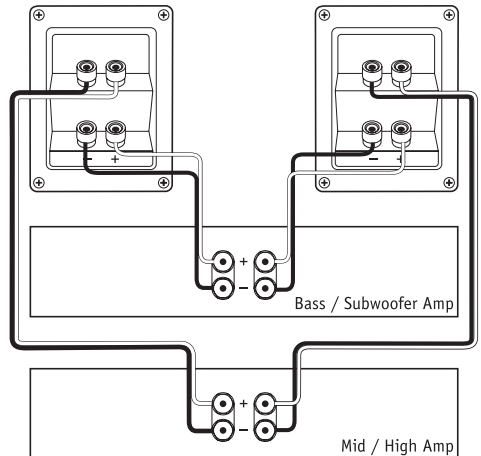
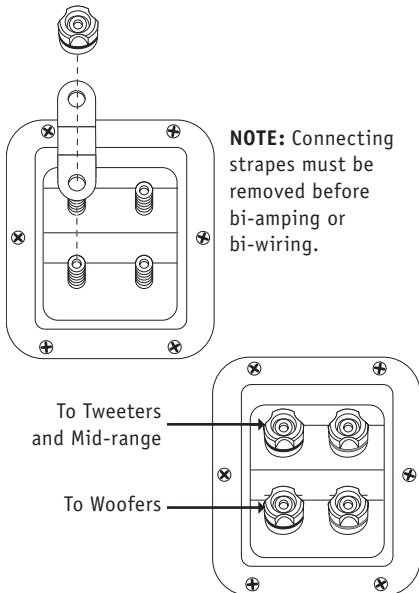
If not using a banana jack, simply loosen the binding nut to allow the hole in the side of the terminal to become exposed. Strip  $\frac{1}{4}$ -inch of the insulation from the end of the speaker cable and insert the exposed wire end into the now exposed hole in the side of the terminal. Tighten the binding nut by turning the nut clockwise until the speaker cable is secured. Repeat for the other speaker cable(s) as necessary.



## Attaching Speaker Cables



Standard Wiring Diagram



Bi-amplifying Wiring Diagram

# Setup Suggestions

As a general guide, use the room layout diagram shown below and follow the descriptions when setting up a home theater system. Some speakers shown in the room layout diagram may not be applicable to your individual system.

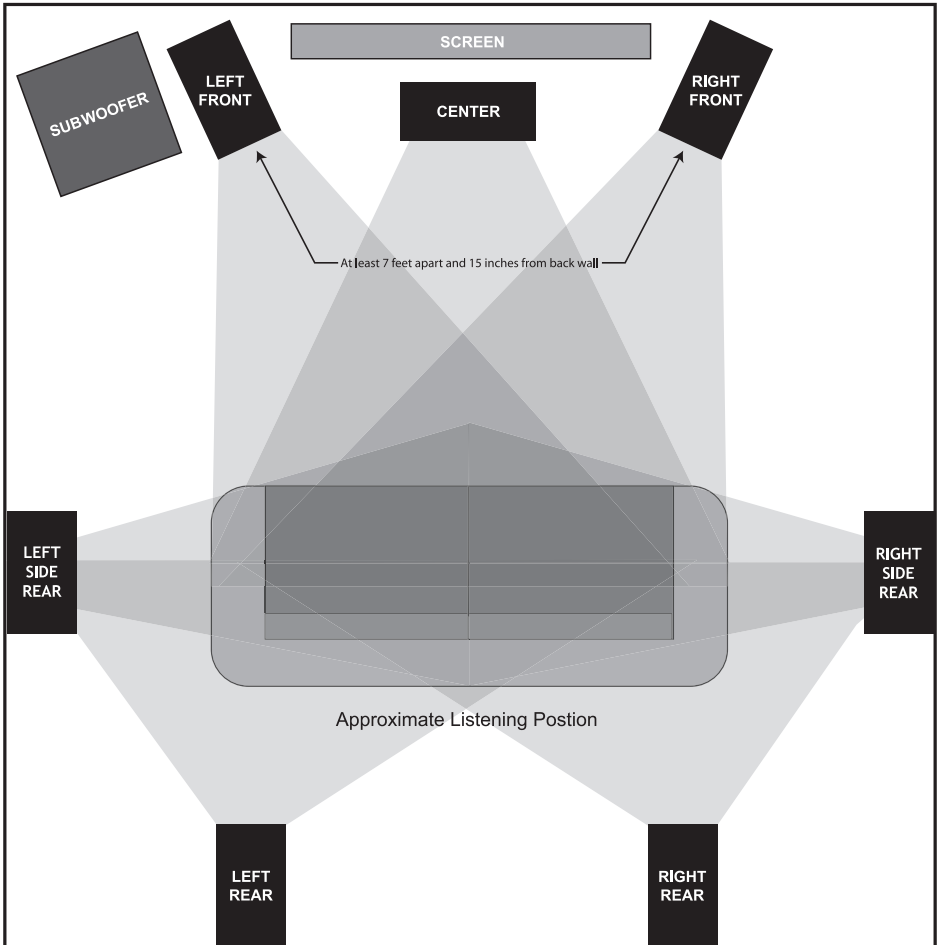
## Front Main Speakers

As a starting point, place your left and right front speakers at least 15 inches from the wall and 7-feet apart from each other. The distance from the listening

position to each speaker should be close to the distance that separates the two main speakers. Angling the speakers inward towards the listening position may give a more spacious and realistic sound stage.

## Center Channel Speaker

The Center Channel Speaker should be placed between both left and right main speakers. Often this positioning dictates placing the speaker either directly above or below a television monitor.



**NOTE:** There are several different surround formats available. Dolby Pro-Logic, Pro-Logic II, Dolby Digital and DTS generally have a 5 speaker plus subwoofer requirement. Dolby Digital EX and DTS ES add a center rear speaker. Dolby TrueHD and DTS Master Audio available only on Blu-ray disc, generally have a 7.1 requirement. Please consult your audio/video professional to determine which system is best for you and how many speakers you will require.

# Setup Suggestions (continued)

## Rear Surround Speakers

The Surround Speakers may be placed either above, behind or to the sides of the listening position. The listening position should be centered between the surround speakers. For best performance, you may want to experiment with angling the surround speakers either towards or away from the listening position.

## Subwoofer

Placement of the subwoofer will largely determine quality, quantity, and extension of the bass frequencies within your

listening room. Bass frequencies are reinforced by close room boundaries. Placing the subwoofer in a corner will make the subwoofer sound louder and boost the very lowest frequencies. Placing the subwoofer away from walls will provide the least reinforcement, making the bass sound subjectively thinner than if the woofer were close to a wall. Good results can usually be obtained by placing a subwoofer along a wall 1-3 feet from a corner. Experiment with subwoofer placement and the amplifier controls to achieve the proper bass balance.

# Break-in Period

Speakers are mechanical as well as electrical devices. Much in the same way automobile engines need break-in mileage before performing their best, audio speakers need to be broken in before their true sonic qualities become apparent. This is especially true of higher quality speakers, such as those you have purchased.

Plan on giving your speakers several hours of playing time to adequately break-in. As the speaker breaks in, the driver suspension will loosen up resulting in an increase in low frequency response, improved definition, clarity and detail.

# Care and Cleaning

To keep up the appearance and speaker maintenance of your speaker, lets start with the cabinet. Whether your cabinet boasts a real wood veneer, or a shiny black laminate finish it's still going to get dusty. You will definitely want to keep typical furniture polishes or sprays away from your speaker cabinet. Simply cleaning the cabinet with a soft cloth, perhaps lightly dampened by water should easily remove any dust. Wiping dust away from the grille, toward the back of the speaker is recommended.

Grilles attract dust, and if you bump your dusting cloth against the edge of grille, you're likely to see a dusty residue appear on the grille.

Grilles can get pretty dusty, part of their job is to protect your speaker's drivers, and if they're not capturing and holding dust, they're not doing their job. To clean the grille, carefully vacuum to remove the dust.

Avoid touching your drivers as much as possible but dust can certainly build up on drivers too. If your drivers have become seriously dusty, try using a clean dry soft bristle paintbrush to remove the dust by lightly brushing off the dust, or use a can of compressed air to blow the dust off.

# Specifications

Model Name/Number:	T-30LSE
Primary Use:	Freestanding Tower Speaker
Series:	Signature Reference Series
System Type:	3-way Sealed & Bass Reflex
Frequency Response:	18Hz — 20kHz ± 3dB
Sensitivity:	91dB (2.83 Volts @ 1 Meter)
Recommended Power:	150-700 Watts
Drive Units:	(2) 10" (254mm) Aluminum Cone Subwoofers (4) 6½" (165mm) Aluminum Cone Woofers (3) 1" (25mm) Silk Dome Tweeters
Crossover Frequency:	80Hz, 2200Hz
Crossover Slope:	Asymmetrical 6-18dB/Octave
Impedance:	4 Ohms
Color:	Custom Veneers Only*
Grille:	Black Cloth
Video Shielding:	No
Finished Dimensions:	15½" W x 60½" H x 18" D
Weight:	160 Lbs.
Warranty:	5 Years

\*Choose from 30 hardwood veneer finishes.

# Safety Instructions

When using your speaker, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury.

1. Read and understand all instructions in the user manual before operating the T-30LSE speaker.
2. Retain the user manual for future reference.
3. Follow all warnings and instructions in this manual and any marked on the T-30LSE speaker.
4. Never touch the drivers or push objects of any kind into the speaker through the grilles.
5. The speaker should be connected to a power supply compatible with speakers power consumption requirements.
6. Place speaker a safe distance from all heat sources such as radiators, stoves, or heaters.
7. Do not operate the speaker near water—for example, near a bathtub, kitchen sink or in a wet basement; or a swimming pool.
8. Speaker wires should be routed so they are not likely to be walked on or pinched by items placed upon or against them.
9. Any service or repair required must be performed by a qualified, RBH authorized dealer.

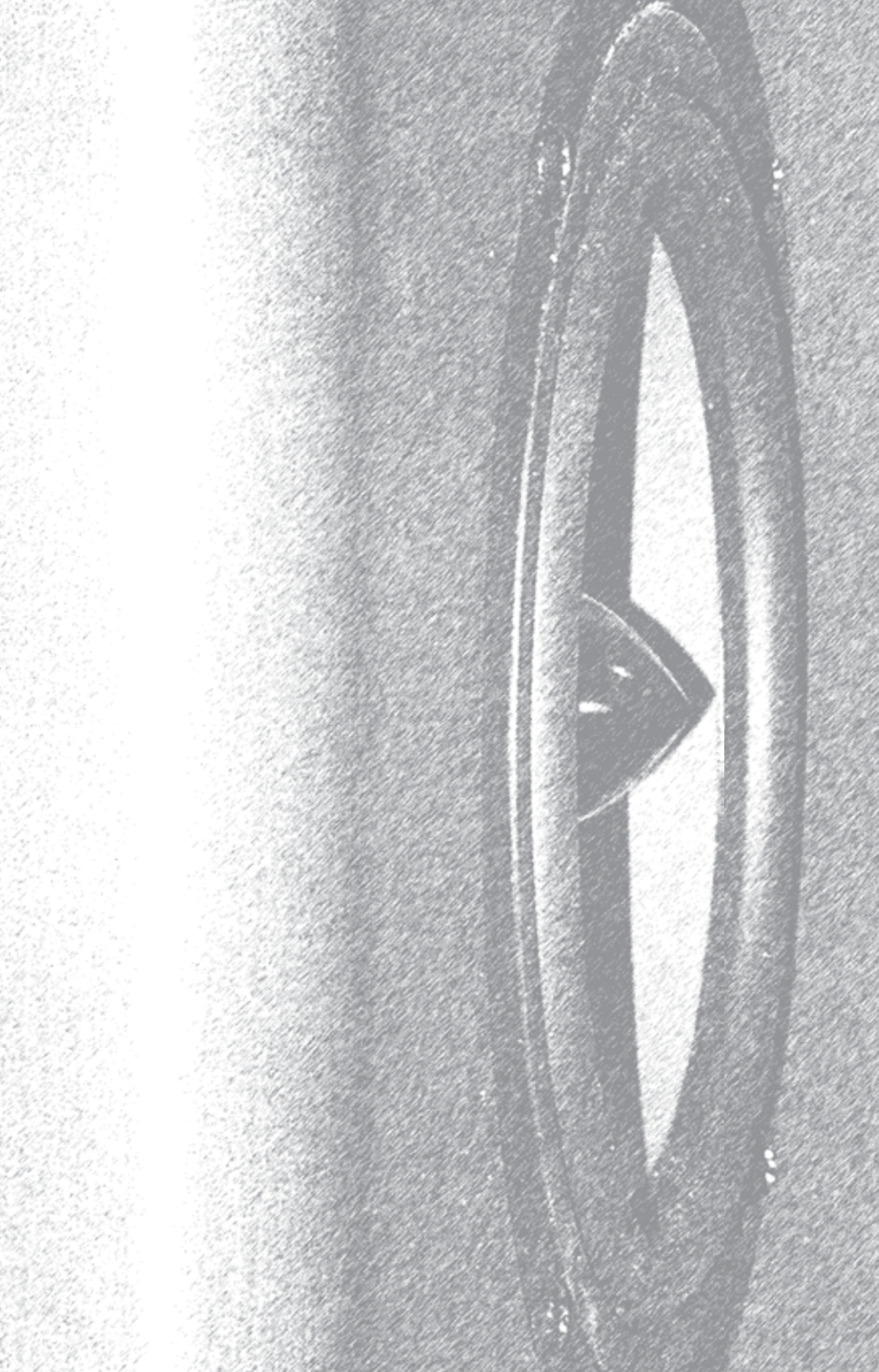
# Troubleshooting

Situation	Probable Cause	Solutions
No sound from speakers.	Speaker wire is not connected.	Make sure wire is properly connected at both the speaker and the amplifier observing the proper polarity.
	Speaker selector on amplifier is not on.	Activate the proper speaker selector or amplifier.
No sound from one speaker.	Balance control on receiver or preamp is not centered.	Place balance control in the center.
	Speaker wire not completely connected.	Check all connections at amplifier and speakers.
Only the woofer or midrange/tweeter is playing.	Bi-amp clips are not intact.	Make certain gold bi-amp clips are in place and tightened down.
Very little bass and/or imaging.	Speakers and/or subwoofers are wired out of phase.	Check entire system for proper polarity and make adjustments as necessary.

# Warranty

Your T-30LSE loudspeaker speaker is covered by a limited warranty against defects in materials and workmanship for a period of 5 years from the original date of purchase. This warranty is provided by the authorized RBH Sound dealer where the speaker was purchased. Warranty repair will be performed only when your purchase receipt is presented as proof of ownership and date of purchase. Defective parts will be repaired or replaced without charge by your dealer's store or the location designated by your dealer authorized to service RBH Sound products. Charges for unauthorized service and transportation cost are not reimbursable under this warranty. This warranty becomes

void if the product has been damaged by alteration, misuse or neglect. The warrantor assumes no liability for property damage or any other incidental or consequential damage whatsoever which may result from the failure of this product. Any and all warranties of merchantability and fitness implied by law are limited to the duration of this express warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.







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