

LSiM
series manual

polkaudio®
the speaker specialists®



ENGLISH



Technical Assistance or Service

If anything is missing or damaged, or if your speaker fails to operate, notify Polk Audio Customer Service immediately at 800-377-7655. If, after following the hookup directions, you experience difficulty, please double-check all wire connections. Should you isolate the problem to the speaker, contact the authorized Polk Audio dealer where you made your purchase, or contact Polk Audio Customer Service 800-377-7655 (M-F, 9-5:30 EST, US & Canada only) or via email polkcs@polkaudio.com. Outside the US & Canada, call +1 410-358-3600.

WARNING: Listen Carefully

Polk Audio loudspeakers and subwoofers are capable of playing at extremely high volume levels, which could cause serious or permanent hearing damage. Polk Audio, Inc. accepts no liability for hearing loss, bodily injury or property damage resulting from the misuse of its products.

Keep these guidelines in mind and always use your own good judgment when controlling volume:

- You should limit prolonged exposure to volumes that exceed 85 decibels (dB). For more about safe volume levels, go to the Occupational Health and Safety Administration (OSHA) guidelines at <http://www.osha.gov/>.



Product Disposal

Certain international, national and/or local laws and/or regulations may apply regarding the disposal of this product. For further detailed information, please contact the retailer where you purchased this product or the Polk Audio Importer/Distributor in your country. A listing of Polk Audio Importer/Distributors can be found on the Polk Audio website www.polkaudio.com or by contacting Polk Audio at 5601 Metro Drive, Baltimore, Maryland 21215, USA—Phone: +1 410-358-3600.



Table of Contents

LSi Legacy	4
Performance Objectives of the LSiM Series	5
Take Inventory	6
Applications/Configurations	8
LSiM702F/x Surround Loudspeaker Placement	9
Hookups, Preparation & Options	10
Standard Hookup	11
Wire Recommendations	11
Rubber Feet & Adjustable Floor Spikes	12
Caring For Your LSiM Loudspeakers	13
Specifications	14
Warranty	16

Polk Audio History—A Passion For Sound

Polk Audio was founded in Baltimore in 1972 by Johns Hopkins University graduates Matthew Polk and George Klopfer. Today, Polk Audio is a leading international manufacturer of high quality home and automotive loudspeakers. Polk® products emphasize superior sound and build quality, and feature many patented and award-winning innovations. Polk Audio has built a reputation as “The Speaker Specialists®.” Polk products are sold throughout the USA, Canada and in over 50 countries around the world. Polk Audio’s mission has always been to build high quality, great sounding speakers at affordable prices. For the people of Polk Audio, building speakers is not just a job; it’s a passion.



SRT Series, circa 1995



LSi25, circa 2001

The LSi Legacy

First introduced in 2001, LSi represented Polk’s expression of a true high-performance loudspeaker that was also reasonably priced. LSi was created for the serious listener, those who really enjoy music and who enjoy intently listening to their audio system. LSi delivered a flatter frequency response with lower distortion and revealed more detail than comparably priced speakers. The series was also touted in the press for its tonal accuracy. LSi imaged very well, thanks in part to the quality of the tweeter and the wide dispersion of the small midbass drivers. The series’ performance has made LSi Polk’s flagship product for almost a decade. But after a decade, it was time to revisit LSi. The result is not so much an evolution of the current series as it is a re-engineering of the qualities that have made LSi a great series.

Performance Objectives of the LSiM Series

The performance objectives for the new LSiM Series predate the original LSi design and are, in fact, design principles Polk Audio first set down during development of its original Monitor loudspeakers.

Sound that virtually transports the listener to the scene of the recorded performance.

These ideals have been guiding principles for Polk Audio's best high-performance loudspeakers:

1. Pleasing tonality, even during extended listening at performance levels.
2. Crisp, lifelike impulses, transients and coherent detail without any unnatural ringing or decay.
3. Natural reproduction of complex low frequency instruments and special effects.
4. Uniform sonic representation within the listening area and immersive spatial impression.
5. Reproduce concert/theater levels while maintaining linearity and accuracy.
6. Compatibility with a wide array of electronics both past, present and future.
7. Work as promised for many years of enjoyment.



2011 LSiM Series



LSiM704c



LSiM706c



LSiM702FX®

Take Inventory

Inside each loudspeaker carton:

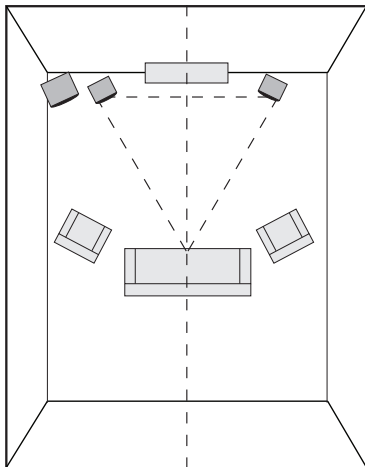
1. Either one LSiM Floorstanding Speaker or one Bookshelf Speaker or two F/X Surround Speakers or one Center Channel Speaker.
2. Zero Diffraction Magnetic Grille (one per speaker, packed separately except F/X Surround).
3. Literature Packet (Quick Start Guide, Letter and Owner's Manual on CD).
4. Floor Spike 5 mm Hex Key (floorstanding speakers only).
5. Adhesive-Backed Rubber Pads (4 for Bookshelf Speakers or 4 for Center Channel Speaker or 8 for F/S Surround Speakers).
6. Wall Mount Template (F/X surround speakers only).



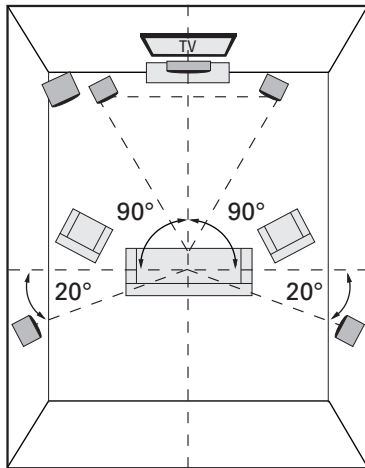
LSiM703

LSiM705

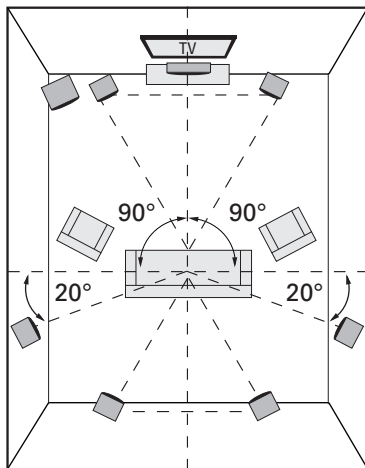
LSiM707



Stereo



5.1



7.1

Applications/Configurations

Floorstanding & Bookshelf Loudspeakers

To enjoy the most realistic stereo image and lifelike sound, place the speakers so that an equilateral triangle is created between the speakers and your favorite listening position. Angle the speakers toward the middle as necessary in order to support a more solid center image. And experiment with the distance between your speakers and both the back and side walls. You'll experience some bass boost with the speakers located close to walls.

The LSiM Series bookshelf loudspeakers were designed to provide excellent performance on a bookshelf or placed on a floor stand. For best results place LSiM bookshelf loudspeakers so the tweeter height is within 6" (15cm) of seated ear height. *When using speaker stands, select sturdy stands 30" - 36" (76.2 - 91.4cm) high.*

If you are using your LSiM Series bookshelf loudspeakers as rear channels in a home theater system, they should be placed on the rear or side walls, slightly above (and, on the side walls behind) the listening position. Angle them toward the listening area if possible.

Center Channel Loudspeaker

With today's modern flat panel TVs, the most popular placement, and our recommendation for your center channel speaker, is beneath your TV screen. You may also place your center channel above your TV should you choose. *LSiM center channel loudspeakers are very heavy, and we do not recommend wall mounting them, unless placed on a sturdy shelf.*

Note: If you have an older model television, you could experience a color shift or image distortion in your TV's screen. If that is the case, move the speaker away from your TV.

F/X Surround Loudspeakers

The LSiM Series surround loudspeakers must be wall-mounted, either on side walls or rear walls; they have built-in wall mounting keyhole slots. Mount the loudspeakers 6-8 feet off the floor. If you're setting up a 7.1 system, mount the Surround Back Left and Surround Back Right loudspeakers at the same height as the Surround Left and Surround Right loudspeakers.

Make sure the material on which you plan to mount the speakers (plaster, drywall, paneling, stone, etc.) can support the weight of the speakers (LSiM702F/X = approx 28.9 lbs/ 13.1 kg ea). Be aware of any electrical wiring or plumbing that may be behind your walls.

Note: The LSiM702F/X Surround Loudspeaker should be oriented so that its Dynamic Sonic Engine (3 1/4" mid-range and 1" Ring Radiator tweeter) points toward your listening area. Therefore, the F/X surround loudspeaker that would serve as the right surround on a sidewall will become the left surround on a rear wall.



LSiM702F/x Surround Loudspeaker Placement

Wall Distance Switch (located on baffle underneath the grille)

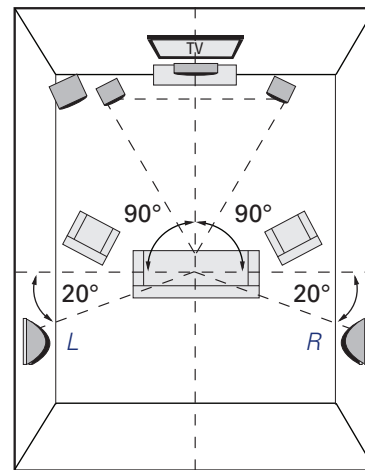
If position limitations demand that your LSiM702F/x loudspeakers be mounted closer than 2' (60cm) from side walls or ceiling, the proximity of the surface can result in a response "bump" between 50 and 200Hz. This can cause the loudspeakers to sound "boomy." The "Wall Distance" switch flattens response and eliminates "boominess" without sacrificing deep bass response for more lifelike sound. Set the switch accordingly, <2' (60 cm) or >2' (60 cm).

Wall Mounting LSiM702F/x

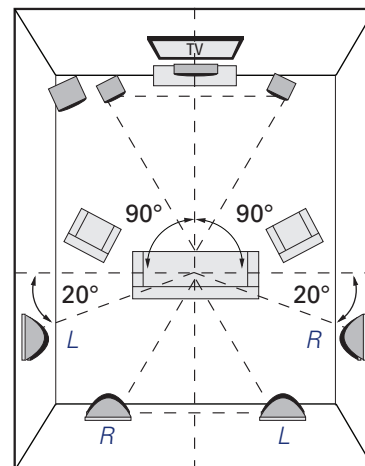
Prior to installation, hold the speaker in the chosen location, 6 to 8 feet off the floor, to make sure it safely clears obstacles such as ceiling, adjacent walls, corners, beams, lighting fixtures and door/window frames.

Using the keyhole slots in the bracket template (included), mark the installation location of the two keyhole slots with a pencil. Orient the template so that the small ends of the keyhole slots are facing "up."

1. If you are certain that there is a stud behind the wall surface, drive a screw (not included) capable of supporting the loudspeaker's weight through the wall and into the stud.
2. If there is no stud behind the wall at the chosen location, install a wall anchor (not included) capable of supporting the loudspeaker's weight into the wall by following the wall-anchor-manufacturer's instructions.
3. For masonry walls, use a masonry drill bit and #10 masonry anchor and screw (not included).
4. Tighten screws into stud or wall anchors, leaving screw heads protruding 1/4" (6mm).
5. Make all wire attachments now.
6. Line up the keyhole slots on the back of the speakers so that the screw heads pass through the large center hole of the slots.
7. Let the speaker slide straight down, allowing the screw head to slip behind the smaller end of the keyhole slot.
8. Tug gently on the speaker to make certain that the screws and bracket are properly aligned and that the wall anchors are secure.
9. If the bracket is not held snug against the wall by the screw heads, remove the speaker from the wall, drive the screws in a little further and then remount the speaker.



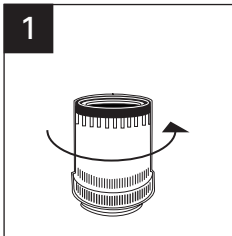
5.1



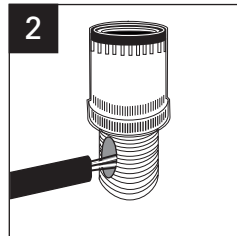
7.1



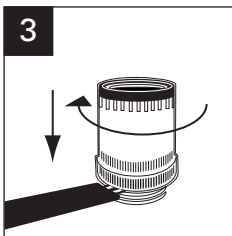
Input Plate



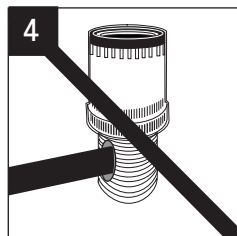
Loosen hex nut.



Insert speaker wire through hole.



Tighten hex nut.



Do not insert insulated section of speaker wire.

Hookups, Preparation & Options

Wire Preparation

Follow the hookup directions included with your receiver/ amplifier. Strip 1/2" (12.7mm) of insulation from each of the two conductors of the wire to expose the bare metal and twist each of the individual conductors into single unfrayed strands. Note that one of the terminals on the rear of each speaker is red (+) and the other is black (-). Make certain that you connect the wire from the positive (+) terminal of your amplifier or receiver to the red (+) terminal on your speaker and the wire from the negative (-) terminal of your amplifier or receiver to the black (-) terminal on your speaker. Most wire has some indicator (such as color-coding, ribbing or writing) on one of the two conductors to help you maintain consistency.

Binding Posts

To connect wire to the binding post, unscrew the binding post cap and insert the bare wire into the hole near the base of the binding post. Do not insert the insulated part of the wire into the hole as this will not give you a good connection. Tighten the binding post cap until it seats firmly with the wire, but do not over tighten.

Connectors

You have several options when choosing connectors for your speaker wires, and it's really a matter of personal preference. Three of the more commonly used are banana plugs, spade lugs and bare wire.

If you know where you want to locate your speakers and plan to set up your system and leave them there, then bare wire will work fine. Just make sure there are not stray strands of wire that could come into contact.

If you like to experiment with different speaker locations, spade lugs or banana plugs offer more convenient options when it comes to disconnecting and reconnecting wires.

Banana Plugs

LSiM binding posts have openings in the ends of their caps to accept individual banana plugs. The binding posts cannot accept dual banana plugs.



Standard Hookup

Bi-Wiring & Bi-Amping

If you decide to bi-wire or bi-amp, you **must remove** the jumpers between the terminal posts. Failure to do this could result in damage to your amplifier and loudspeakers. The binding post caps must be completely removed to remove the jumpers, which use ring terminals. There are color coded collars so you can identify which is (+) or (-) after you remove the caps.

Bi-Wiring (see Figure 1)

Bi-wiring can provide noticeable improvements in the overall transparency of your loudspeakers. Run separate speaker wires to the low and high frequency drivers from a single amplifier (the upper set of binding posts are for the high frequency drivers, the lower set of binding posts are for the low frequency drivers): after removing the jumpers, connect one set of speaker wires to the upper terminals on each speaker and one set of wires to the lower terminals. Connect the other ends of both wire sets to the same amplifier outputs.

Bi-Amping (see Figure 2)

Bi-amping allows you to use separate amplifiers for the high and low frequency sections of your loudspeaker for greater dynamic range and lower distortion. We recommend that your separate amplifiers have identical gain to preserve the speaker's voicing balance. After removing the jumpers, connect the speaker wires from the high frequency amplifier outputs to the upper set of terminal posts on each speaker. Follow the same procedure for connecting the low frequency amplifier outputs to the lower set of terminals. Remember to maintain correct wiring polarity (+ to +, - to -) in all connections.

Wire Recommendations

These recommendations are for all connections from the amplifier/receiver to each speaker:

Runs	Gauge
Lengths up to 25'	16 or better
Lengths greater than 25' but less than 50'	14
Lengths greater than 50' but less than 75'	12
Lengths greater than 75'	12

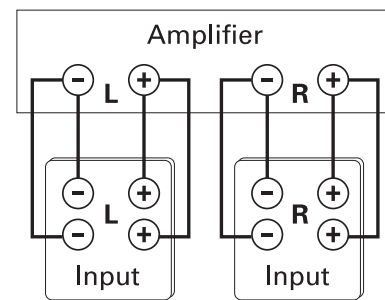


Figure 1: Bi-Wiring

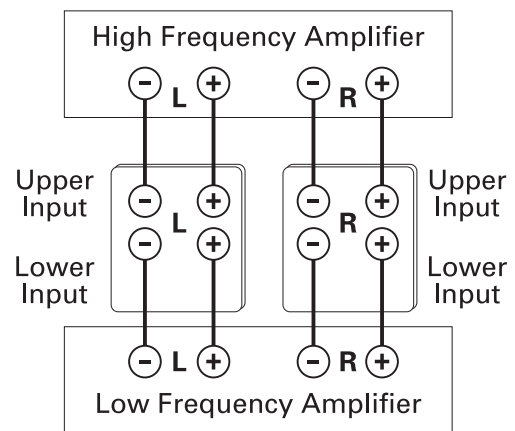


Figure 2: Bi-Amping



LSiM Rubber Foot



LSiM Floor Spike

Rubber Feet & Adjustable Floor Spikes

Rubber feet and adjustable floor spikes are included with your LSiM floorstanding loudspeakers to anchor and stabilize the speaker on any type of floor. However, you may wish to tilt the speaker backwards or forward a tiny bit in order to optimize your listening area. This is a subtle change you can experience that optimizes imaging in your setup.

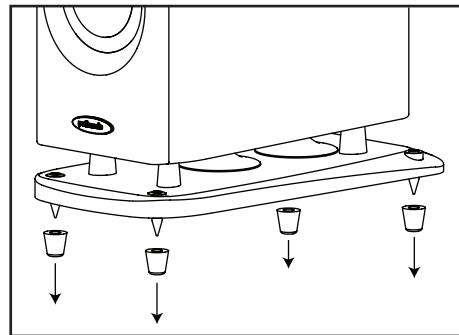
To Adjust The Floor Spikes

The floor spikes can be adjusted with the use of the supplied 5 mm hex (Allen) wrench. Most floorstanding speakers are adjustable only from below and require two hands. The LSiM floor spikes are adjustable from above.

Note: If the speaker is stable on the floor, no adjustment is necessary.

If the speaker is unstable, follow these steps:

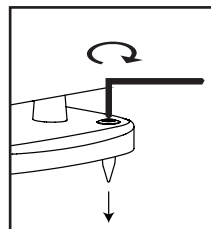
1. The speaker will be inclined to settle on three of the four spikes leaving one spike slightly off the floor.
2. Determine which spike needs to be adjusted.
3. Use the supplied hex wrench and turn it clockwise to lower the spike or counterclockwise to raise it.
4. The threaded portion of the spike is coated with a locking compound, so the spike may offer some resistance when you turn it.
5. As the spike contacts the floor, it will become more difficult to turn. At that point the speaker should be stabilized.



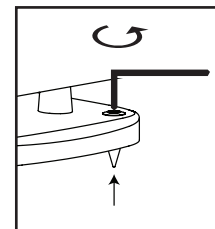
Removing Rubber Feet



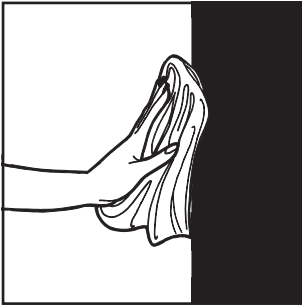
Adjusting Floor Spike with Supplied Hex (Allen) Wrench



Clockwise to raise



Counterclockwise to lower



Caring for Your LSiM Loudspeakers

Enclosure Finish

Your LSiM enclosures (except LSiM702F/x) are finished in real natural wood veneer. Clean these panels periodically with a soft cloth and furniture polish to remove dust and fingerprints. Never use harsh detergents and cleaning fluids.

Important Note: Do not use any petroleum based cleaners or solvents on the loudspeaker cabinets.

- Clean wood panels with furniture polish and a soft cloth.
- Do not use furniture polish on black gloss lacquer.
- Clean black lacquer veneer with a damp cloth.

Baffle Smudges

Dust baffles and F/X end caps with a dry or damp cloth. (A damp cloth is one that has been sprayed with a recommended cleaner, not one soaked with water.) We recommend you use a lint-free cloth; LSiM rubber trim rings have a slight texture to them and can collect fibers from a cloth that is not lint-free.

Dusting The Baffle

Use a can of compressed air for the grille and/or baffle to dust. Use a "computer keyboard" vacuum but only on the grille not the baffle.



Specifications	LSiM707	LSiM705	LSiM703
Type	tower	tower	bookshelf
Tweeter	1" (25mm) enhanced Ring Radiator	1" (25mm) enhanced Ring Radiator	1" (25mm) enhanced Ring Radiator
Midrange	3 1/4" super cell aerated polypropylene	3 1/4" super cell aerated polypropylene	3 1/4" super cell aerated polypropylene
Midbass	6 1/2" super cell aerated polypropylene	5 1/4" super cell aerated polypropylene	6 1/2" super cell aerated polypropylene
Woofers	6" x 9" Cassini oval, super cell aerated polypropylene	5" x 7" Cassini oval, super cell aerated polypropylene	n/a
Frequency Response (-3dB limits)	38 Hz - 30 kHz	42 Hz - 30 kHz	50 Hz - 30 kHz
Overall Frequency Response	20 Hz - 40 kHz	22 Hz - 40 kHz	36 Hz - 40 kHz
Steady State Recommended Amp Power	20 W - 300 W	20 W - 250 W	20 W - 200 W
2.83V Sensitivity	88 dB	88 dB	88 dB
Impedance	compatible w/ 8 Ohm outputs	compatible w/ 8 Ohm outputs	compatible w/ 8 Ohm outputs

Orth Crossover

Tweeter/Midrange Crossover Frequency	3.0 kHz	2.8 kHz	2.8 kHz
Midrange/Midbass Crossover Frequency	300 Hz	280 Hz	300 Hz
Midbass/Woofers Crossover Frequency	100 Hz	100 Hz	n/a
Tweeter High Pass Slope (acoustic)	18 dB/oct	18 dB/oct	18 dB/oct
Midrange Low Pass Slope (acoustic)	18 dB/oct	18 dB/oct	18 dB/oct
Midrange High Pass Slope (acoustic)	12 dB/oct	12 dB/oct	12 dB/oct
Midbass Low Pass Slope (acoustic)	12 dB/oct	12 dB/oct	6 dB/oct
Midbass High Pass Slope (acoustic)	6 dB/oct	12 dB/oct	n/a
Woofers Low Pass Slope (acoustic)	6 dB/oct	12 dB/oct	n/a

Midrange Enclosure Type	sealed	sealed	sealed
Midbass Enclosure Type	sealed	sealed	n/a
Woofers Enclosure Type	dual PowerPort®	dual PowerPort	PowerPort
Dimensions W x H x D (greatest overall depth, grille)	9 1/2" x 50 13/16" x 18 7/16" 24.1 cm x 129.1 cm x 46.8 cm	8 5/16" x 47" x 14 3/8" 21.1 cm x 119.4 cm x 36.5 cm	8 13/16" x 16 3/4" x 14 9/16" 22.4 cm x 42.5 cm x 37 cm
Base Dimensions	10 1/2" x 20 5/16" 26.7 cm x 51.6 cm	9 1/4" x 16 1/4" 23.5 cm x 41.3 cm	n/a
Product Weight (each)	99.2 lbs (45 kg)	78 lbs (35.4 kg)	29.6 lbs (13.4 kg)
Shipping Weight	114.7 lbs (52 kg)	86.4 lbs (39.2 kg)	32.5 lbs (14.75 kg)

Specifications	LSiM706c	LSiM704c	LSiM702F/X
Type	center channel	center channel	surround
Tweeter	1" (25mm) enhanced Ring Radiator	1" (25mm) enhanced Ring Radiator	1" (25mm) enhanced Ring Radiator
Midrange	3 1/4" super cell aerated polypropylene	3 1/4" super cell aerated polypropylene	3 1/4" super cell aerated polypropylene
Woofer	6 1/2" super cell aerated polypropylene	5 1/4" super cell aerated polypropylene	6 1/2" super cell aerated polypropylene
Frequency Response (-3dB limits)	50 Hz - 30 kHz	70 Hz - 30 kHz	55 Hz - 30 kHz
Overall Frequency Response	30 Hz - 40 kHz	40 Hz - 40 kHz	40 Hz - 40 kHz
Steady State Recommended Amp Power	20 W - 250 W	20 W - 200 W	20 W - 200 W
2.83V Sensitivity	88 dB	88 dB	88 dB
Impedance	compatible w/ 8 Ohm outputs	compatible w/ 8 Ohm outputs	compatible w/ 8 Ohm outputs
Orth Crossover			
Tweeter/Midrange Crossover Frequency	2.8 kHz	2.5 kHz	2.4 kHz
Midrange/Midbass Crossover Frequency	280 Hz	280 Hz	240 Hz
Tweeter High Pass Slope (acoustic)	18 dB/oct	18 dB/oct	18 dB/oct
Midrange Low Pass Slope (acoustic)	18 dB/oct	18 dB/oct	18 dB/oct
Midrange High Pass Slope (acoustic)	12 dB/oct	12 dB/oct	12 dB/oct
Midbass Low Pass Slope (acoustic)	6 dB/oct	12 dB/oct	12 dB/oct
Midrange Enclosure Type	sealed	sealed	sealed
Woofer Enclosure Type	dual PowerPort	dual PowerPort	PowerPort
Dimensions W x H x D (greatest overall depth, grille)	28 3/4" x 9" x 13 13/16" 73 cm x 22.9 cm x 35.1 cm	21 3/16" x 7 3/4" x 9 3/8" 53.8 cm x 19.7 cm x 23.8 cm	19 15/16" x 16 1/4" x 6 3/4" 50.6 cm x 41.3 cm x 17.1 cm
Product Weight (each)	42.3 lbs (19.2 kg)	27.8 lbs (12.6 kg)	28.9 lbs (13.1 kg)
Shipping Weight	46.3 lbs (21 kg)	29.1 lbs (13.2 kg)	62.1 lbs (28.18 kg)

Specifications, dimensions and features subject to change without notice. For more information call us at 1-800-377-7655 (USA and Canada). Outside of North America call +1 (410) 358-3600.

Limited Warranty

Polk Audio, Inc. warrants to the original purchaser only that this Polk Audio Loudspeaker Product (the "Product") will be free from defects in materials and workmanship for a period of five (5) years from the date of original retail purchase from a Polk Audio Authorized Dealer. However, this Warranty will automatically terminate prior to the expiration of the five (5) years if the original retail purchaser sells or otherwise transfers the Product to any other party. The original retail purchaser shall hereinafter be referred to as "you." To allow Polk Audio to offer the best possible warranty service, please fill out the Product Registration Card(s) and send it to the Factory, at the address provided on the Product Cards(s) within ten (10) days of the date of purchase.

Defective Products must be shipped, together with proof of purchase, prepaid insured to the Polk Audio Authorized Dealer from whom you purchased the Product, or to the Factory at 1 Viper Way, Vista, California 92081. Products must be shipped in the original shipping container or its equivalent; in any case the risk of loss or damage in transit is to be borne by you. If upon examination at the Factory or Polk Audio Authorized Dealer it is determined that the unit was defective in materials or workmanship at any time during this Warranty period, Polk Audio or the Polk Audio Authorized Dealer will, at its option, repair or replace this Product at no additional charge, except as set forth below. All replaced parts and Products become the property of Polk Audio. Products replaced or repaired under this warranty will be returned to you, within a reasonable time, freight prepaid.

This warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, cosmetic appearance of cabinetry not directly attributable to defect in materials or workmanship, or service, repair, or modification of the Product which has not been authorized or approved by Polk Audio. This warranty shall terminate if the Serial number on the Product has been removed, tampered with or defaced. This warranty is in lieu of all other expressed Warranties. If this Product is defective in materials or workmanship as warranted above, your sole remedy shall be repair or replacement as provided above. In no event will Polk Audio, Inc. be liable to you for any incidental or consequential damages arising out of the use or inability to use the Product, even if Polk Audio, Inc. or a Polk Audio Authorized Dealer has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply to you. All implied warranties on this Product are limited to the duration of this expressed Warranty. Some states do not allow limitation on how long an implied Warranty lasts, so the above limitations may not apply to you. This Warranty gives you specific legal rights, and you also may have other rights which vary from state to state.

This Warranty applies only to Products purchased in the United States of America, its possessions, and U.S. and NATO armed forces exchanges and audio clubs. The Warranty terms and conditions applicable to Products purchased in other countries are available from the Polk Audio Authorized Distributors in such countries.

polkaudio®

the speaker specialists®

POLK AUDIO, INC. • 5601 METRO DRIVE,
BALTIMORE, MD 21215 USA • 800.377.7655
FAX: 410.764.5266 • WWW.POLKAUDIO.COM

LSiM series manual

For recommended accessories (speaker stands,
brackets and exclusive Polk Audio logowear),
visit our webstore: <http://shop.polkaudio.com/>

HBP2356