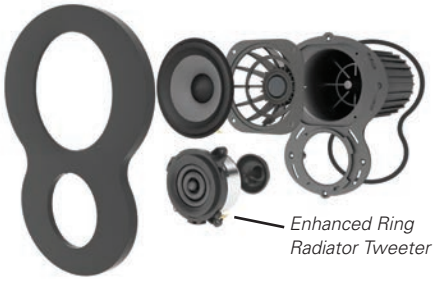
LSiM Series: Serious Sound, Serious Fun

The new LSiM Series of high performance loudspeakers is a complete reimagining of the Polk Audio mission of making superior audio accessible to everyone. Even though these loudspeakers straddle the cutting edge of today's technologies, and feature Polk-designed-from-the-ground-up components as well as massively braced sculpted natural wood and laquer enclosures, they remain surprisingly affordable. Ultra-high performance for today's most demanding media is within reach.

Whether you enjoy music on vinyl, CD, digital files via PC or MP3, or movies on DVD or BluRay,® the performance of the new LSiM Series will transport you. Experience dynamic musical tonality, coherent detail and natural low frequency reproduction, even at lifelike volume levels. Build a home theater or stereo system with new LSiM Series components and experience timbre-matched sonics and immersive spatial ambiance, with realistic accuracy and linearity, even at movie theater volume levels.

Technology & Features


Enhanced Ring Radiator Tweeter

- **Dynamic Sonic Engine (Driver & Tweeter)**—The heart of the new LSiM Series is a unique enclosure-within-the-enclosure, the Dynamic Sonic Engine, that houses the mid-range driver and the Ring Radiator tweeter. Molded into one rigid piece, the DSE enclosure tapers to a "turbine" that reduces back-wave reflections. The engine is comprised of a 3 1/4" Extended Linear Motion mid-range driver and a 1" Ring Radiator tweeter. The engine has been designed to handle the critical mid-range (200 Hz and 2 kHz), and the mid-range driver has an improved mass to magnet ratio that improves transient response. Overall, the engine delivers timbre-matching, improved high frequency dispersion and greater horizontal off-axis response.
- **Enhanced Ring Radiator Tweeter**—This tweeter, with output to 40 kHz, was a vital element in the success of the original LSi Series, yet our engineers were able to make some nuanced improvements in the design. First, they reshaped the tweeter's bullet-shaped phase plug, allowing it to move farther out of the baffle, improving dispersion and eliminating horn-loading. Next, they opened up the tweeter's faceplate, then redesigned the tweeter's diaphragm roll to make it more efficient and further improve dispersion. Finally, they gave their new Ring Radiator tweeter its own tuned enclosure in the exclusive Dynamic Sonic Engine. This new Ring Radiator boasts higher power handling, extended dynamic range, improved dispersion and extended top-end response.

- **Cassini Oval Subwoofer Drivers**—Oval shapes increase surface area deeper, more musical low frequency response, while allowing for a narrower baffle design. Overhung voice coil designs allow larger excursions and higher power handling. Bass is deep, and blending is smooth.
- **Super Cell Aerated Polypropylene Cone Material**—Aerated Polypropylene (APP) is a mineral-filled polypropylene material that's been "puffed up" with injected air to form a honey-comb structure. Our original APP cone approaches the ideal balance of lightweight stiffness with high damping, along with good resistance to moisture, UV and temperature extremes. In Super Cell APP, the "puffed cells" are larger, for a thicker cone material that actually has less mass than the original APP material. Super Cell APP has larger cells for lighter weight and more inherent damping, plus uncompromised stiffness for unsurpassed transient response and resonance suppression.

- **Butyl Rubber Surrounds**—Durable, soft, injection-molded butyl rubber surrounds are tuned to absorb and suppress unwanted cone resonances. Our new rubber material is impervious to UV, extreme temps and humidity for a lifetime of smooth, reliable sound.
- **Extended Linear Motion Voice Coils**—Allowing lots of movement in a limited space, ELM Voice Coils power the LSiM mid-range and mid-woofer drivers to extend their higher-frequency response with much less impedance. (LSiM subwoofers use overhung coils, which allow the larger excursions and greater power handling necessary for big subwoofer performance.)

- **Cast Aluminum Baskets**—These lightweight, splayed-strut design baskets provide a rigid structure for precise alignment of the speaker's active parts, for flat response and low distortion, with no mechanical resonances or ringing. The open design provides ample venting for unobstructed linear movement.

- **Orth Crossovers**—Proprietary engineering, designed and patented by Polk Audio to maintain a lower order crossover design and increase power handling. Orth crossovers feature mylar and polypropylene capacitors for sparkling highs and air core inductors for superior transparency. Notch filters and sophisticated Zobel circuits smooth the impedance curve of the system for more efficiency and better high frequency response.
- **The LSiM Enclosure**—The enclosure is an integral part of the sound design of the new LSiM Series. All LSiM cabinets are made of 1" MDF on the sides, 3/4" MDF on the backs and bottoms, with wide-radius baffles of robust 1 1/4" MDF. Substantial internal bracing, each driver was its own separate non-parallel chamber, increases efficiency and banishes internal resonances and standing waves for high power handling and incredible smoothness. Wide-radius baffles, along with zero-diffraction magnetic grilles, help stabilize imaging for a very wide, well-defined soundstage.

- **Zero-Diffraction Magnetic Grilles**—Super thin 1mm, zero-diffraction grilles have no measureable effect on the speaker's response. Completely unobtrusive, stylishly sheer, these grilles lock in place magnetically.
- **PowerPort® Bass Venting**—Air moving out of a bass port creates turbulence, which can result in boomy distortion and "port noise," especially at high volume. This distortion can cause bass output losses up to 3 dB, wasting lots of amp power. PowerPorts' unique shape promotes "laminar" airflow even in short tube ports by mimicking the properties of longer, flared port openings. No turbulence means no wasted power, which means more efficient bass response.

Adjusting Floor Spike with Supplied Hex (Allen) Wrench

LSiM Rubber Foot & Floor Spike

- **Dual Metal Gold-Plated 5-Way Binding Posts**—For the most professional, secure connections.
- **Rubber Damping Trim**—ensures a seamless fit and finish, with no visible screws.
- **Innovative Hex-Head Floor Spikes**—Level your towers without having to tip them.

LSiM Series | Information Sheet

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/Woofer	6 1/2" super cell aerated polypropylene	5 1/4" super cell aerated polypropylene	6 1/2" super cell aerated polypropylene
Subwoofers	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/Woofer 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
Woofer 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
Woofer 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 (each)	114.7 lbs (52 kg)	86.4 lbs (39.2 kg)	32.5 lbs (14.75 kg)

LSiM Series | Information Sheet

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.