



OWNER'S MANUAL

L800_{LC} AND L800_{RC}
SDA FLOOR-STANDING LOUDSPEAKER



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Expect Great Sound - The Legend Legacy

Thank you for choosing the Polk Legend Series of loudspeakers. With sound that virtually transports the listener to the scene of the recorded performance, the Legend Series offers great Polk sound housed in bold, American design. Listen to music with crisp, lifelike detail and natural reproduction of complex low-frequency instruments — even during extended listening at performance levels. Dive into your music collection and bring the live show home, or amplify your home theater entertainment. With its American modern styling, each speaker in the Legend Series features gorgeous curves and aggressive accents that elevate the décor of your room. Pure and simple, the Polk Legend Series is engineered and designed with your entertainment in mind.

Having built a reputation as the makers of great sound for more than 40 years, Polk Audio takes pride in superior sound and build quality, which features many patented and award-winning audio innovations. For Polk, building audio products isn't just a job — it's a passion to deliver great sound that's accessible for everyone!

Patented SDA Pro Surround Technology

Polk Patented SDA Pro (Stereo Dimensional Array) surround technology creates an expansive soundstage and detailed stereo image, while delivering a natural multi-dimensional sound experience. A wide, detailed soundstage is accomplished by revealing the original recorded signal. By positioning additional drivers to deliver a precisely derived interaural crosstalk cancellation signal to your ears, SDA Pro enables you to hear the sonic image just as the recording captured it. Individual instruments appear across a wide stage, as if the performance were in front of you at that very moment. In addition to processing two channel audio, it also integrates with 5.1 surround sound and is compatible with modern decoding technologies.

HOW SDA PRO (STEREO DIMENSIONAL ARRAY) WORKS

The original recorded left and right stereo signals are intended for the left and right ears, respectively. With conventional stereo speakers, sound from the left and right channel cross paths and are heard by the opposite ear (**Figure 1**). This is called Interaural Crosstalk (IAC). IAC distorts the imaging process, causing a narrow, shallow sound field (**Figure 2**). SDA Pro technology employs an acoustically inverted “dimensional” signal to cancel IAC, without impacting the original recorded signal (**Figure 3**). The result is that only the correct, original recorded signal reaches each ear, and the full width and depth of the sound stage is accurately reproduced (**Figure 4**).

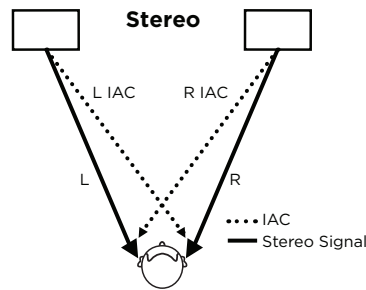


Figure 1. Conventional Speakers

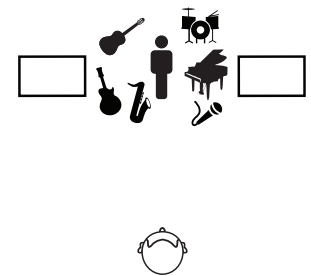


Figure 2. Compressed Sound Stage due to Undesired Signals

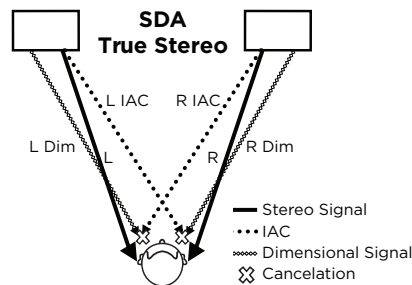


Figure 3. Polk TRUE STEREO SDA

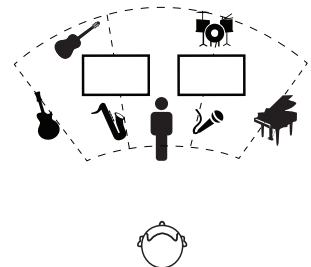


Figure 4. Accurate Reproduction of the Full Sound Stage by the SDA Loudspeakers

SDA HEAD SHADOW AND ANGLED BAFFLES

Legend L800 SDA Pro speakers feature new developments in Polk-patented SDA technology.

Head Shadow – When the IAC passes across the listeners face, it is modified in the same manner as light trying to go around an obstacle. This is known as the “head shadow.” Polk L800 speakers feature sophisticated dimensional HS (head shadow) crossover to more precisely match and cancel out IAC noise, creating precise, immersive and expansive imaging.

Angled Baffles – Angled baffles in the L800 allow the main stereo speaker arrays to point directly at the primary listening area, providing the best natural dispersion of the stereo signal.

Technical Assistance or Service

If anything is missing or damaged, or if your speaker fails to operate, notify Polk Audio Customer Service immediately at +1 800-377-7655. If you experience difficulty after following the directions to connect your speakers outlined in this manual, 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 at 800-377-7655 or via email at 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:

- Limit prolonged exposure to volume levels that exceed 85 decibels (dB). For more about safe volume levels, take a look at 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 more information, please contact the retailer where you purchased this product or the Polk Importer/Distributor in your country. More information is also available at www.polkaudio.com or by contacting Polk Audio at 1 Viper Way, Vista, California, 92081, USA. Phone: 1-800-377-7655.

This symbol on our electrical products or their packaging indicates that it is prohibited in Europe to discard the product in question as domestic waste. In order to ensure that you dispose of the products correctly, please dispose of the products according to local laws and regulations on the disposal of electrical and electronic equipment. In doing so you are contributing to the retention of natural resources and to the promotion of environmental protection by the treatment and disposal of electronic waste.



Safety Instructions



CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.




The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings.
Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over. 
11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

NOTES ON USE

WARNINGS

- Avoid high temperatures. Allow for sufficient heat dispersion when installed in a rack.
- Keep the unit free from moisture, water, and dust.
- Do not obstruct the ventilation holes.
- Do not let foreign objects into the unit.
- Do not let insecticides, benzene, and thinner come in contact with the unit.
- Never disassemble or modify the unit in any way.
- Ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths or curtains.
- Naked flame sources such as lighted candles should not be placed on the unit.
- Do not expose the unit to dripping or splashing fluids.
- Do not place objects filled with liquids, such as vases, on the unit.

A NOTE ABOUT RECYCLING:

This product's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with the local recycling regulations. When discarding the unit, comply with local rules or regulations.



EU Declaration of Conformity

Hereby, [Sound United, LLC] declares that our product is in compliance with following EU/EC Directives. The full text of the EU declaration of conformity is available at the following internet address:

<EU/EC Directives>

RoHS: 2011/65/EU, and amendment directive (EU) 2015/863

"EU declaration of conformity URL:

<https://www.polkaudio.com/declarations-of-conformity>"

Sound United, LLC

1 Viper Way Vista, CA 92081 USA

EU contact : Sound United Europe, A division of D&M Europe

B.V. Beemdstraat 11, 5653 MA Eindhoven, The Netherlands

What's in the Box

Each box contains:

1. Loudspeaker
2. Owner's Manual
3. Registration Card
4. Magnetic grilles
5. 15' SDA Pro interconnect cable
6. Allen wrench
7. Dust cloth

How to Connect Your System

To get the best sound quality, it's important to wire your speakers correctly.

SDA Pro Interconnect

Locate the interconnect cables packed with both the right and left speaker. Each cable is 15' long, but they can be connected together for a length of 30', if needed. Walk around to the back of one speaker and locate the SDA Pro Interconnect socket on the input plate. Align the plug properly with the socket and push gently but firmly into place until it is fully seated in the socket. To remove the plug, grasp it by the molded body (not by the cable) and pull gently outward (**Figure 5**). Walk across to other to the other speaker and connect the other end of the interconnect cable in the same manner.

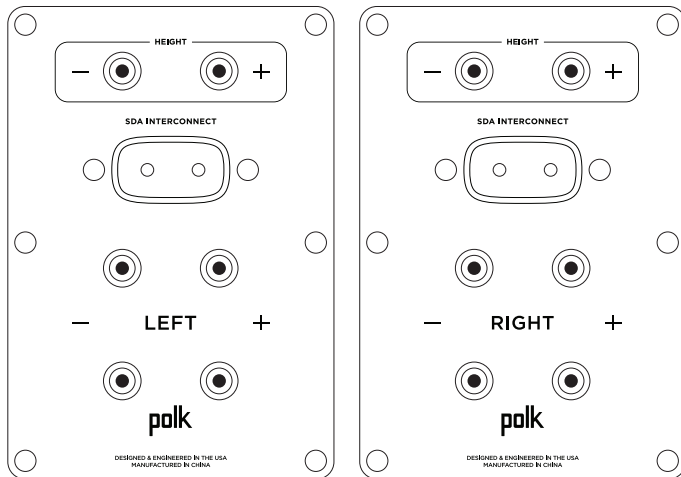
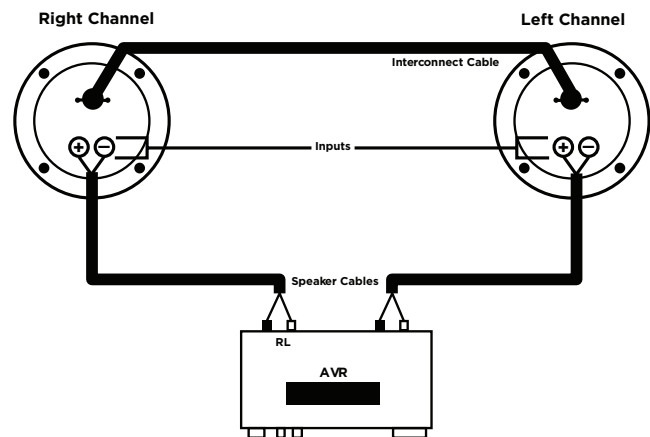


Figure 5

Amplifier/Receiver Connections

Locate the amplifier outputs, marked red and black. Red corresponds to + (positive) and black corresponds to - (negative). Using recommend speaker cable, connect the left channel amplifier outputs to the left speaker, making certain to connect the red or + output to the red terminal on the speaker. Connect the black or - amplifier output to the black terminal on the same speaker. Using recommended speaker cable, connect the right channel amplifier outputs to the right speaker in the same way.



This Wiring Diagram Is Applicable To Use With A Receiver, An Integrated Amplifier Or A Power Amplifier.

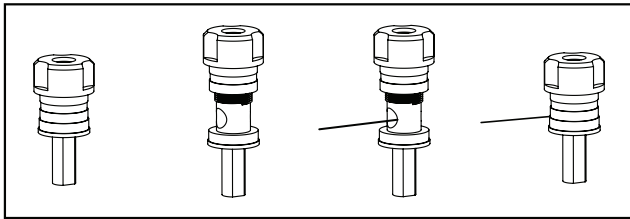
These recommendations are for all connections from the amplifier/receiver to each speaker:

Runs	Gauge
Lengths up to 25' (5 m)	16 or better
Lengths greater than 25' (5 m) but less than 50' (15 m)	14
Lengths greater than 50' (15 m) but less than 75' (25 m)	12
Lengths greater than 75' (25 m)	10



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

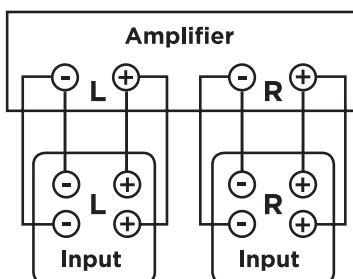
You have several options when choosing connectors for your speaker wires, and it's really a matter of personal preference. Three of the more commonly used are banana plugs, spade lugs and bare wire. If you know where you want to locate your speakers and plan to set up your system and leave them there, then bare wire will work fine. Just make sure there are not stray strands of wire that could come into contact with each other. 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.

Basic Floor-Standing Speaker Hookup

Make sure that the red (+) and black (-) connectors on your amplifier or receiver connect to the red (+) and black (-) connectors on your speakers. If your speakers sound "thin," with little bass and little or no center image, odds are that one of the speaker wires is connected backwards. Double check all connections.

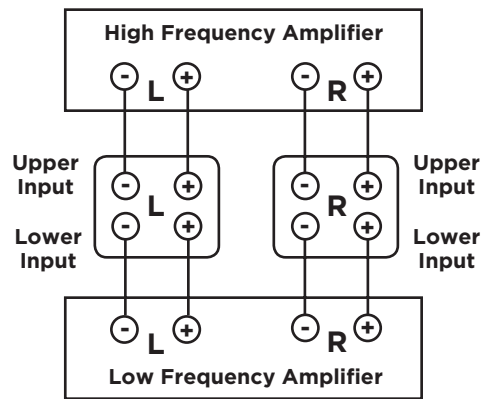
Bi-Wiring

Bi-wiring can provide noticeable improvements in the overall transparency of your loudspeakers. After removing the jumpers, run separate speaker wires to the low and high frequency inputs 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). Connect the other ends of both wire sets to the same amplifier inputs. See amplifier/AV receiver user manual for configuration instructions.



Bi-Amping

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. See amplifier/AV receiver user manual for configuration instructions.



Legend Series SDA Pro Speaker Positioning

Placement of Legend Series SDA Pro loudspeakers is much like a standard stereo setup, except for the following differences:

- No "toe-in" of the loudspeakers is required. They should be parallel to the plane of the listener's ears
- The speakers will be closer together than usual. A 60° included angle is standard for regular stereo, where 30-40° is typically better for SDA reproduction

Experimentation with speaker-to-speaker and listener-to-speaker distance is necessary to find the best combination for a listener and the listening space. A recommended 6-8' speaker-to-speaker placement and 10'-12' speaker-to-listener placement is a good place to start. Find the combination where apparent stage width, timbral accuracy and direct-to-reflected ratio is the best. Keep side wall reflections as far away as possible, or absorbed if necessary, for maximum performance. Follow the below directions to ensure optimal sound performance.

1. Place both speakers along the same wall facing straight forward. DO NOT ANGLE SPEAKERS INWARD OR OUTWARD. The design of the SDA loudspeakers requires that they be parallel to a common wall and to each other.

2. There are several distances to consider when placing your speakers:

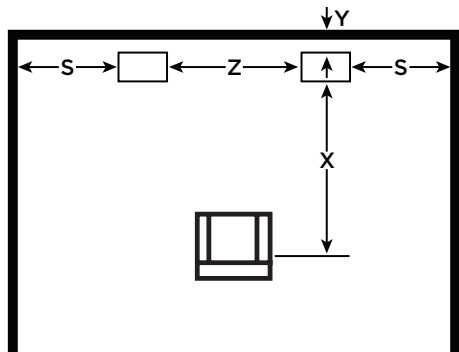
- X = Listener distance from speaker
- Y = Speaker distance from rear wall
- Z = Speaker distance from each other
- S = Speaker distance from side wall

*By decreasing distance "Y" you will increase bass response. By increasing that distance you will experience less bass. Your speakers will generally sound best when placed close to the back wall. Also, the front baffles should be at least 2" forward of any obstructions, such as cabinets.

*Distance "Z" should be at least 4', while 6' to 8' is optimum in most listening rooms. In a "live" room (lots of hard surfaces, not too many curtains, cushions or sound absorbing materials), SDA speakers often sound best placed close together. Remember, experiment!

*Distance "X" should be greater than or equal to distance "Z."

*Distance "S" should be AT LEAST 3'. Placement closer to sidewalls will interfere with three-dimensional imaging. "If you can absorb the sidewall reflection, closer placements the wall may be possible.



Rubber Feet and Adjustable Floor Spikes

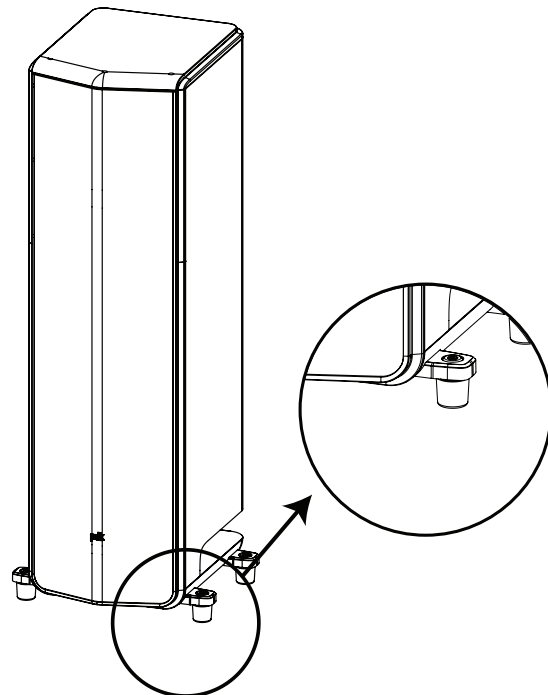
Rubber feet come installed on the spike. In order to expose the spike, simply pull the rubber feet off.

Adjusting the Floor Spikes

The floor spikes can be adjusted from the top of the Legend SDA Pro floor-standing loudspeakers and require an Allen wrench.

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 included Allen wrench to adjust the spike height. Turn clockwise to lower the spike and counterclockwise to raise it.
4. As the spike contacts the floor, it will become more difficult to turn. At that point the speaker should be stabilized.





System Diagnostics

If you encounter an issue when setting up your SDA Pro loudspeakers, follow these steps to troubleshoot and make corrections as needed.

1. Start with facing speakers the directly forward and equidistant from the wall.
2. Place a chair in the listening area centered between the speakers.
3. To check for Absolute Phase, disconnect the (-) black wires from your loudspeaker, leaving the (+) red wires connected. Switch your amplifier to MONO operation or play MONO source music. Rotate the balance control back and forth until you find the lowest sound level. If this occurs near the 12 o'clock position, your speakers are correctly in Absolute Phase. If there is no sound at all, both speakers are out of Absolute Phase and you will need to reverse the connections at either the speakers or the amplifier so that red (+) on the speaker corresponds the red (+) on the amplifier, and so on. If the lowest sound level is heard with the balance control fully to the left, the right speaker is out of phase. If the lowest sound level is heard with the balance control fully to the right, the left speaker is out of phase. Reverse the speaker connections at either the amplifier or the out of phase speaker.
4. Reconnect the (-) black wires to your speakers. Return the amplifier to STEREO operation, making certain that your recording is in STEREO, and sit in the chair to listen for a few minutes. You should hear sound that appears to come from an area outside the two speakers, as well as sound that appears to come from between the speakers. By manipulating the balance control, you should be able to move the apparent sound source from far outside the left speaker to far outside the right speaker.

Caring for Your Legend Loudspeakers Enclosure Finish

Your Legend enclosures 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.

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

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

Baffle Smudges

Dust baffles with the included dust cloth or any other 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.

Dusting the Baffle

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

Legend Series Specifications

Type	SDA Pro Floor Standing
Tweeter	1" Ring Radiator (x2)
Midrange	5.25" (x2)
Woofers	10" (x2)
Frequency Response (-3dB limits)	32-38000Hz
Overall Frequency Response	24-50000Hz
Steady State Recommended Amplifier Power	25-300W
2.83V Sensitivity	87dB SPL
Impedance	4Ω (2.8Ω min.)

Crossover

Tweeter/Midrange Crossover Frequency	2800Hz
Midrange/Midbass Crossover Frequency	370Hz
Tweeter High Pass Slope (acoustic)	24dB/oct.
Midrange Low Pass Slope (acoustic)	24dB/oct.
Midrange High Pass Slope (acoustic)	24dB/oct.
Woofers Low Pass Slope (acoustic)	24dB/oct.

Midrange Enclosure Type	sealed
Woofers Enclosure Type	Power Port
Dimensions W x H x D (Inches and Metric) (greatest overall depth, grille)	17.94x48.60x17.38in 455.6x1234.5x 441.4mm
Product Weight (each) (Pd and Kilos)	118 lb 53.5 kg
Shipping Weight (Pd and Kilos)	151 lb 68.5 kg

Limited 5-Year 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.

polk.

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