

Thoebe II

USER MANUAL



**WARNING: DO NOT INSERT OR REMOVE ANY PLUGS INTO THE PHONO INPUTS WHILE THE POWER IS ON.
SEVERE DAMAGE MAY OCCUR.**

What's Included

- Thoebe II preamplifier
- User Manual
- Detachable power cable
- Remote control (optional)

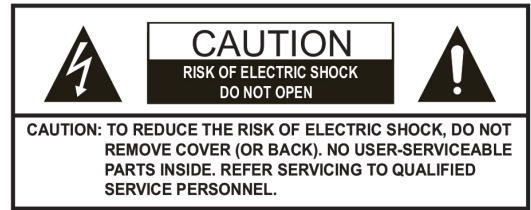
With optional phonostage:

- One (1) pair RCA shorting plugs

Important Safeguards

- All the safety and operating instructions should be read before this product is operated.
- The safety and operating instructions should be retained for future reference.
- All warnings on the appliance and in the operating instructions should be adhered to.
- Follow all instructions.
- The appliance should not be used near water or moisture – for example, in a wet basement or near a swimming pool, and the like.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way such as the power cord or plug is damaged. Other damage may occur if liquid or objects have been dropped or spilled into the apparatus. Dropping the apparatus, exposure to rain, and excessive moisture may cause additional damage.
- Keep the unit in a well ventilated environment. Ensure at least 4" clearance around top and sides.
- CAUTION: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
- WARNING: To reduce the risk of electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on apparatus.
- WARNING: The mains plug/appliance coupler is used as disconnect device, the disconnect device shall remain readily operable.

- The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated “dangerous voltage” within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- **WARNING:** The terminals marked with symbol of “+/-” may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the use of ready made insulated leads or cords.
- Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.
- Keep your packaging! It is custom made for your unit and will effectively protect it for possible future use.
- Be sure to register your product. It is very important to complete the warranty registration form located on our website. Complete and submit the form within 30 days of purchase to activate your warranty.



FCC Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

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Introduction

SST proudly presents the Thoebe II preamplifier. Fitted with the refinements and features one expects of a modern-day preamp, the Thoebe II will deliver all of your music with style and beauty at an attractive price.

Impressive standard features include a highly transparent volume control, bass and treble tone controls, high/low gain settings and a world-class headphone amplifier. Additionally, the Thoebe II can be configured with available add-on options like a reference-level DAC and/or phonostage. The Thoebe II is about ultimate control and flexibility—the perfect preamplifier for any music source.

Deriving its lineage from its award-winning mother, the Ambrosia 2000 Second Edition preamplifier, but boasting more than a few unique features in its own right, the Thoebe II is destined to be a classic in its own time. Invite the Thoebe II into your listening room and find out quickly what kind of “guest” has arrived—one that won’t be leaving anytime soon!

We hope you enjoy your new Thoebe II.

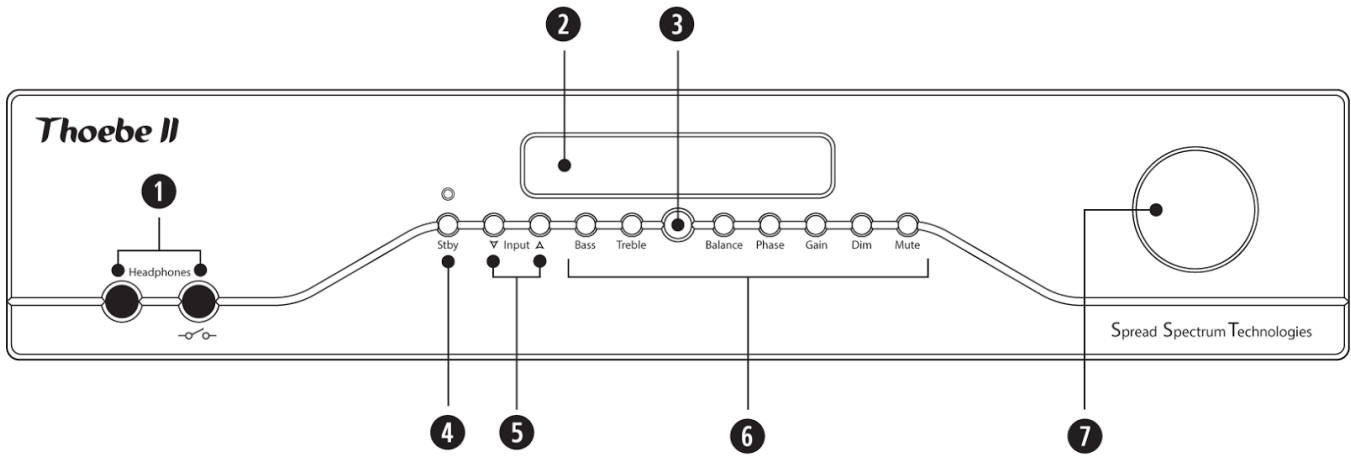
Noteworthy Features

The Thoebe II is a revolutionary preamplifier in many ways. Below are some highlights.

- Built-in DAC*
 - ESS Sabre (9018) 32-bit DAC chip
 - Asynchronous, galvanically isolated USB input supports up to 32-bit 384kHz PCM and DSD 256
- Built-in phonostage*
 - Moving magnet or high-output moving coil discrete Class A design and newly developed RIAA optimized topology
- Powerful and transparent built-in Class A headphone amplifier
- Remarkably transparent and innovative resistive-ladder type volume control, unique to the Thoebe II
- Digitally-controlled, highly-advanced dual mono bass/treble controls
- High/low gain setting
- Phase control
- Balance control
- Large, easy-to-read, dimmable LED display
- Internal USB connection for any future software updates
- Solid aluminum, custom remote control*
- Heavy gauge steel case and thick anodized aluminum faceplate

*Available options. Contact your SST dealer or SST directly about adding these options if your Thoebe II is not equipped with them.

Front Panel Overview and Usage



- 1. Headphone outputs**
1/4" headphone outputs. The right output is a "switched" output: while in use, the Thoebe II will mute the line output to the connected amplifier.
- 2. Main display**
- 3. Remote control IR sensor**
- 4. "Stby": Standby**
Provided the Thoebe II is plugged in, use this button to power on the Thoebe II or to put it in standby mode (indicated by red LED).
- 5. Input select buttons**
Push up or down to select your desired input option. Depending on installed options, these could include digital inputs (COAX, TOS, USB) and/or phonostage (PHNO). The latter replaces the RCA 4 input if installed. See "Connections" section for details.
- 6. Tone and function controls**
See "Tone and Function Controls", next page.
- 7. Volume/control knob**
Use to increase/decrease volume in normal operation and also in conjunction with Bass, Treble and Balance adjustments (see "Tone and Function Controls", next page).

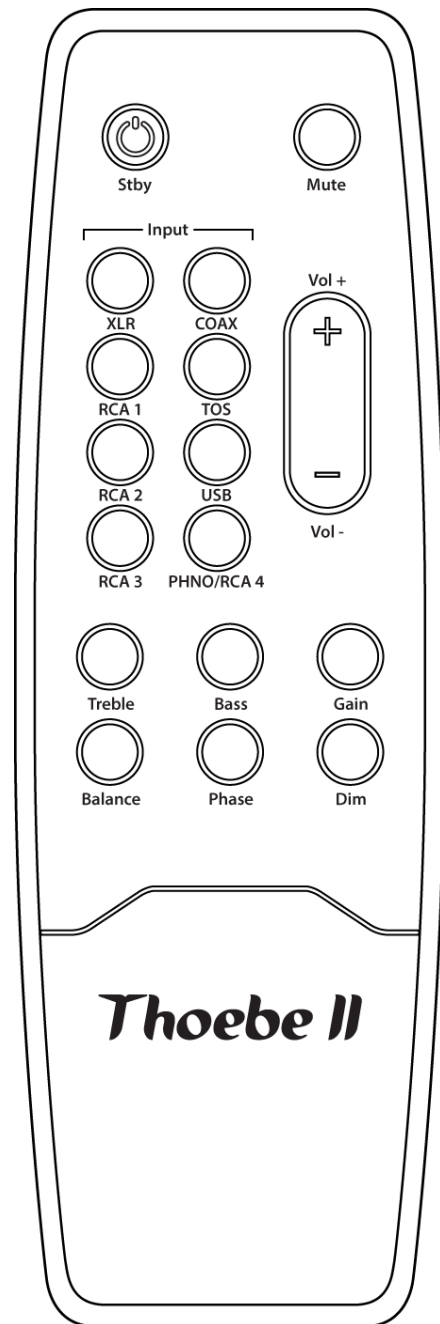
Tone and Function Controls

Bass	-5 to +5 (in 1 db increments. Adjust with volume/control knob or remote)
Treble	-5 to +5 (in 1 db increments. Adjust with volume/control knob or remote)
Balance	+10 L to +10 R (in 1 db increments. Adjust with volume/control knob or remote). An arrow symbol (“<” or “>”) on either side indicates which channel is being adjusted
Phase	0°, 180° (Toggle using Phase button)
Gain	Low, High (Toggle using Gain button). Low gain: 11db, High gain: 17db
Dim	Dims the main display. On/Medium/Low/Off. (Toggle using Dim button)
Mute	Mutes or unmutes the volume. (Toggle using Mute button)

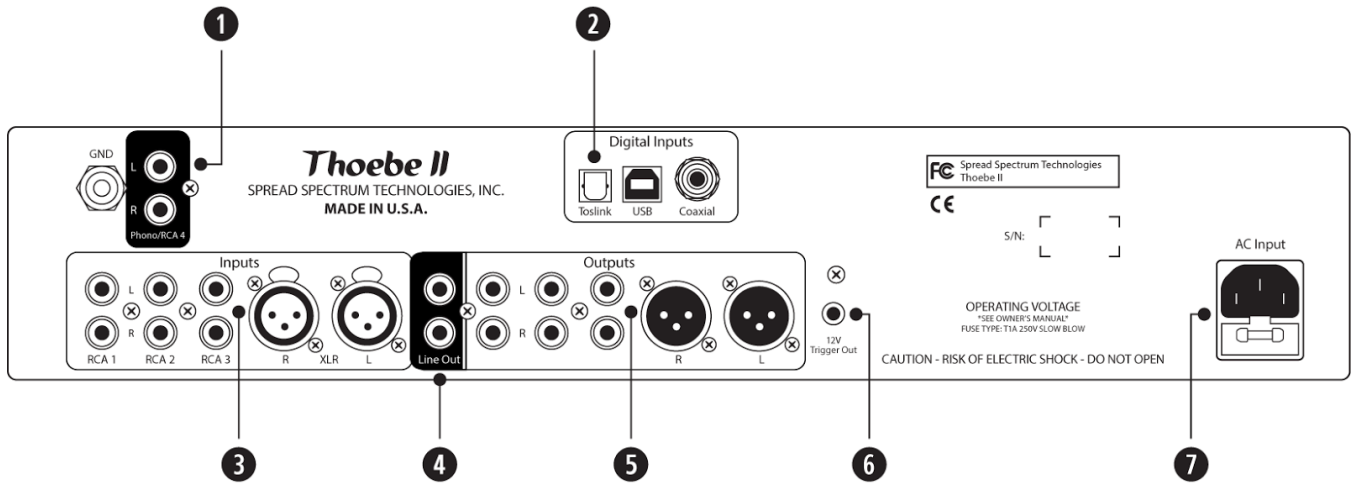
Remote Control (optional)

While the Thoebe II is fully controllable via the front panel, the optional, deluxe remote control offers refinement and convenience. The solid aluminum remote can access and utilize all functions of the Thoebe II in the same way as the front panel controls. Use the Volume +/- rocker as you would the Volume/control knob to fine tune Bass, Treble and Balance settings.

Contact your SST dealer or SST directly to obtain the remote control.



Connections



1. Phono (optional) or RCA 4 Inputs

Phonostage with grounding post (GND) for turntable. If no phonostage is installed, they can be used as normal RCA inputs. **NOTE: when not in use, insert the supplied shorting plugs into the phono inputs. Ensure the Thoebe II is turned off before inserting or removing the shorting plugs!**

2. DAC Digital Inputs (optional)*

Toslink, USB and Coax inputs for optional internal DAC. Note: DSD playback is only capable via USB input.

3. Inputs

Three pair unbalanced, one pair balanced analog inputs.

4. Line Out

Fixed level output. Use caution when connecting a device to this output as the volume will be at maximum level (not attenuated).

5. Outputs

Three pair unbalanced, one pair balanced analog outputs.

6. 12 V Trigger Out

Connect with a 12 V DC trigger-enabled power amp to allow turning both Thoebe II and amp on or off with only the Thoebe II.

7. AC Input

Be sure to observe proper voltage for your AC cable. Should the fuse need to be replaced, replace with T6.3A H 5x20mm 250w slow blow fuse.

*Windows users will need to install a driver for the DAC, available for download at www.sst.audio/downloads. Mac and Linux platforms do not require a driver.

USB Input Configuration (for optional DAC module)

The USB interface for the optional DAC module is driverless for Mac and Linux. For Windows, the included driver disk has standard drivers as well as ASIO® drivers. All users (Mac, Linux, PC) will need to configure the DAC as the output device for their computer. Please see step 6 below.

Windows Setup

When using the DAC with a Windows machine via USB you MUST install the drivers before connecting the DAC. Do not connect the DAC with a USB cable until the drivers are completely installed. The included ASIO® drivers are not required for audio playback but can be beneficial in some configurations. If you do choose to install the ASIO® drivers, be sure to install them after the standard driver installation is complete. (ASIO® is a registered trademark of Steinberg Media Technologies GmbH.)

1. Insert the included CD into the disk drive of your computer (driver also available for download at sst.audio)
2. Locate and open folder that shows the contents of the CD
3. Double click the correct file to initiate the install.
4. Once the install process has begun, follow the on-screen instructions. The install wizard will prompt you when the process is complete.
5. Connect the DAC to your computer with a USB cable, power the DAC on, and select the USB input. You may be prompted by an install wizard that additional installation steps are required. Follow the on-screen instructions. The install wizard will prompt you when the process is complete.

Configuring the DAC as the Audio Output Device

6. It is now necessary to select the SST USB interface as the default output device for your system. The device name will vary depending on version you are using.
 - a. **Mac**
Locate and open the Audio MIDI Setup: Go to Finder > Applications > Utilities > Audio MIDI Setup. Select the SST/Thoebe DAC as the default output device and apply the setting.
 - b. **Windows**
Locate the Audio output device (Manage Audio Devices) selection which is found in the control panel located in the startup menu. You will need to set the default output device to the SST interface. This setting will be part of the OS and not the media player.

Please note: Additional output configuration and device selection may be required in your music media player.

The last step is easy—enjoy your music!

Specifications

Inputs	Phono: 42dB Line (balanced and unbalanced): 11dB low gain, 17dB high gain
Tone Controls	± 5dB nominal Turnover points: Bass 100Hz; Treble 10kHz nominal
Maximum Output	10V RMS unbalanced 10V RMS balanced
Output Impedance	50Ω RCA 80Ω XLR
Input Impedance	Unbalanced: 96kΩ Balanced: 18kΩ
Headphone Output	1Ω, 388mW (300Ω)
Noise (Awt)	MM: 70μV (22μV with 400-20kHz filter) Line: 10μV unbalanced and balanced (vol @ 0)
THD (Awt, 20Hz-20kHz)	.006% max inputs to main outputs @ 1V RMS output
Frequency Response	Phono: ± 1.2dB max deviation (5mV in, RIAA Equalized, 20Hz-20kHz) Line: 20Hz-20kHz, ± 0.25dB max deviation
Dimensions	14 ⁵ / ₈ " L x 17 ¹ / ₂ " W x 4 ¹ / ₈ " H
Weight	Without phonostage: 25 lbs. With phonostage: 28 lbs.

Warranty Coverage

Spread Spectrum Technologies' warranty obligations are limited to the terms set forth below:

Spread Spectrum Technologies, as defined below, warrants this Spread Spectrum Technologies-branded hardware product against defects in workmanship under normal use for a period of FIVE (5) YEARS from the date of retail purchase by the original end user purchaser ("Warranty Period"). If the product has been transferred from the original owner to a second hand owner it has a ONE (1) YEAR warranty, valid from the original date of purchase by the original owner. **If a hardware defect arises and a valid claim is received within the Warranty Period, at its option, Spread Spectrum Technologies will either (1) repair the hardware defect at no charge for labor (the price of parts is not included), using new or refurbished replacement parts, or (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product.** Spread Spectrum Technologies may opt that you replace the defective parts with new or refurbished user-installable parts that Spread Spectrum Technologies provides in fulfillment of its warranty obligation. A replacement product or part, including a user-installable part that has been installed in accordance with instructions provided by Spread Spectrum Technologies, assumes the remaining warranty of the original product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes Spread Spectrum Technologies's property. Parts provided by Spread Spectrum Technologies in fulfillment of its warranty obligation must be used in products for which warranty service is claimed. When a refund is given, the product for which the refund is provided must be returned to Spread Spectrum Technologies and becomes Spread Spectrum Technologies's property. **Any shipping charges are the responsibility of the owner.**

EXCLUSIONS AND LIMITATIONS

Spread Spectrum Technologies does not warrant that the operation of the product will be uninterrupted or error-free. Spread Spectrum Technologies is not responsible for damage arising from failure to follow instructions relating to the product's use. This warranty does not apply: (a) to damage caused by use with non-Spread Spectrum Technologies products; (b) to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes; (c) to damage caused by operating the product outside the permitted or intended uses described by Spread Spectrum Technologies; (d) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Spread Spectrum Technologies or a Spread Spectrum Technologies Authorized Service Provider; (e) to a product or part that has been modified to significantly alter functionality or capability without the written permission of Spread Spectrum Technologies; (f) if any Spread Spectrum Technologies serial number has been removed or defaced.

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, STATUTORY, EXPRESS OR IMPLIED. AS PERMITTED BY APPLICABLE LAW, Spread Spectrum Technologies SPECIFICALLY DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES, INCLUDING, AND WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS. IF Spread Spectrum Technologies CANNOT LAWFULLY DISCLAIM STATUTORY OR IMPLIED WARRANTIES THEN TO THE EXTENT PERMITTED BY LAW, ALL SUCH WARRANTIES SHALL BE LIMITED IN DURATION TO THE DURATION OF THIS EXPRESS WARRANTY AND TO REPAIR OR REPLACEMENT SERVICE AS DETERMINED BY Spread Spectrum Technologies IN ITS SOLE DISCRETION EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW, Spread Spectrum Technologies IS NOT RESPONSIBLE FOR

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Obtaining Warranty Service

Please access and review the resources referred to in the documentation accompanying this hardware product before requesting warranty service. If the product is still not functioning properly after making use of these resources, please contact the Spread Spectrum Technologies representatives or, if applicable, an Authorized Service Provider/dealer using the information provided on the Spread Spectrum Technologies website. A Spread Spectrum Technologies representative or an Authorized Service Provider will help determine whether your product requires service, and if it does will inform you how Spread Spectrum Technologies will provide it. Spread Spectrum Technologies or its Authorized Service Providers will provide warranty service on products that are tendered or presented for service during the Warranty Period, as permitted by law. Spread Spectrum Technologies is not responsible for freight charges to or from our facility for warranty repairs. In accordance with applicable law, Spread Spectrum Technologies may require that you furnish proof of purchase details and/or comply with registration requirements before receiving warranty service. For more details on this and other matters on obtaining warranty service contact your dealer. Recovery and reinstallation of system and application software and user data are not covered under this Limited Warranty.

Service

In the unlikely event there is a problem with your Spread Spectrum Technologies component, please contact your dealer, distributor, or Spread Spectrum Technologies to discuss the problem before you return the component to our manufacturing facility for repair. Products shipped to the factory will be refused and returned freight collect if not accompanied by a Spread Spectrum Technologies Service Department issued return authorization number (RA Number). Return authorization numbers must be prominently displayed on the outside of the box and an accompanying letter describing the problem and re-listing the RA number must be inside the box to qualify for service.

To contact the Spread Spectrum Technologies Service Department:

Telephone: 1-805-466-9973

Fax: 1-805-462-8962

Email: support@sst.audio

Website: <http://www.sst.audio>

Once service has been approved, please follow the following procedure:

1. Fill out the Service Request form located on our website and be sure to document all details.

2. If service is approved we will issue a Return Authorization Number (R/A number) from the Spread Spectrum Technologies Service Department. Be sure to confirm the current shipping address.
3. Insure and accept all liability for loss or damage to the product during shipment to the SST facility and ensure all freight (shipping) charges are prepaid.

The product may also be hand delivered to the California facility if arrangements with the Service Department have been made in advance. Proof of purchase from an authorized Spread Spectrum Technologies dealer, distributor or agent will be required for warranty validation at the time of hand delivery. Use the original packaging to ensure safe transit of the product to the factory, dealer, or distributor. Spread Spectrum Technologies may, at its discretion, return a product in new packaging and bill the owner for such packaging if the product received by Spread Spectrum Technologies was boxed in non standard packaging or if the original packaging was damaged to the point it was unusable. If Spread Spectrum Technologies determines that new packaging is required, the owner will be notified before the product is returned. To purchase additional packaging, please contact your authorized Spread Spectrum Technologies dealer, distributor, or the Spread Spectrum Technologies Service Department for assistance. If you did not purchase the product directly from us and require service please contact your dealer or distributors' service department for information regarding service.

If you feel your authorized dealer or distributor is either unwilling or unable to service your Spread Spectrum Technologies products, please contact our service department by emailing support@sst.audio or calling by phone to discuss and resolve the situation.



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