Wyred 4 Sound
OWNER’S MANUAL

STP-SE

Stereo Preamplifier

Get Wired, WYRED 4 SOUND
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Warranty Registration

**IMPORTANT**

Please take a moment to complete the warranty registration form located on our website. You MUST complete and submit this form within 30 days of purchase to activate your warranty.

Unpacking

The STP packaging contains:

1 - Owners Manual
1 - 6' AC Power Cable
1 - 6' DC Trigger Cable
1 - STP Stereo preamplifier
1 - Remote control
2 - AAA batteries

Carefully inspect your new preamplifier for any shipping damage. Please contact your dealer or Wyred 4 Sound directly if you notice any shipping damage or for anything you suspect is missing from your shipment. All packaging cartons will easily fold flat for convenient storage, and should be stored for future use should there be one.

Introduction

Wyred 4 Sound products are a perfect example of what is accomplished when practical engineering and knowledge are combined. All components are selected for the greatest possible functionality, durability, and most importantly, the quality. Wyred 4 Sounds’ excellence in engineering will provide you with first-class performance and years of satisfaction.

Wyred 4 Sound audio products are designed to bring you closer to the beauty of your music. Our goal is to bring the performance of the recording right into your home with as little change as possible. As you can identify, our drive is focused on the customer. We know what others have to offer, so you can be sure that our value will be substantially more than theirs to keep the American made products desirable. We greatly appreciate your purchase and expect your complete satisfaction. Wyred 4 Sound hopes that you will continue to grow with us as we continue to provide the quality and functionality that you can learn to depend on.
Design Features

There are so many particulars that make the STP superior to other preamps. The best possible preamp would be one that didn’t exist! We have created the closest anyone has ever come to that while still offering a fully functional preamp. For the cleanest sound, what goes in should come out, nothing less, nothing more. For this we’ve made our preamp passive and active at the same time. To keep the signal path clean as possible, the line stage is automatically switched in when needed, and left out when not. This offers the quietest operation for any level up to unity gain. Noise in the passive mode is <6uV, and <18uV in the active mode which is still incredibly good. And yes, this product is fully balanced input to output.

When we say passive, we mean as in no gain. We all know that all passive preamps have many issues regarding input and output impedances. These issues are massive because of the lack of drive current the preamp is able to produce. The result is a loose, floppy bottom end, and a constricted, dry top end. To solve this, we inserted our Ultra-transparent discrete buffer stages to address this issue, which proved to give us remarkable results.

Like any audio electronic product, everything starts with a power supply. This is the first stage that gives the STP unbelievably clean power. With a 25A Schottky bridge rectifier connected through 164,560+uF of capacitance in our proprietary TRR (Triple-Ripple-Reduction) power supply circuit, the STP preamp has more capacitance than some amplifiers! By the time power reserves supply the audio chain with power, there is no hint of noise left to buzz through your speakers. Of course we left 2 stages of filtering up to nothing but the best; the Nichicon Bi-polar MUSE audio grade capacitors do a fantastic job!

Our proprietary fully balanced dual FET unity gain buffers supply the meat behind the curtains. While being sonically transparent, our buffers keep the input and output impedance right where we want them and don’t allow for deviations like so many other passive preamps. Hand selected, matched and adjusted, each pair ensures minimal DC offset, and maximum linearity.

Every preamp has to have a volume control. This is also a HUGE part in why our unit differs. The easy route (practically everyone else takes) consists of putting audio in and out of a volume control chip. While being cost effective and easy to design, the audio is left at the mercy the chip. The best possible electrical connection that can be made and released on command is made by a switch. The best sounding switch is one that has the least resistance and can maintain at all frequencies, for this we chose to use relays. While much more expensive, slower and noisier when switching, they are far more sonically superior to any switcher chip on the market today.

The second part of our volume control is the resistors. That’s right, relays and resistors are the only components interacting with the audio signal. Like all our other products, we use Dale rn55d copper leaded precision resistors. Supplying exceedingly accurate channel to channel level matching (+/- 0.05db) and isolation (>106db), our discrete volume control is the most transparent and spaciously sounding attenuator we’ve heard. A maximum attenuation of 128db will quiet the loudest of sources, and as little as 0.5db steps allow for the finest control.
With 2 sets of balanced inputs/outputs, 3 sets of unbalanced inputs and 2 sets unbalanced outputs, connection possibilities are vast. Being fully balanced input to output; the phase going in comes out. When an unbalanced input is selected, an inversion circuit is connected to maintain balanced outputs and optimum versatility. Absolute phase and balance control are easily selected through the supplied remote for those out of phase recordings, and room adjustments to be made on the fly.

User interface is made easy with the VFD display and optical rotary encoder. Allowing input naming and HT Bypass input selection, the setup menu is easily accessed for customization. Several display dimming steps including “off” are available through the remote for stealth operation. Powering up the STP can be done several ways, by pushing in on the volume knob (power button), by pressing power on the remote, or by the remote DC trigger input when HT Bypass is selected in the setup menu. When an input is selected to be used as the HT input, the DC trigger can be activated by a surround processor to “power up” the unit, and automatically set the volume to unity gain. This allows for all volume controls to be made through the surround processor. When the processor is shut down, so is the STP and connected gear through the DC trigger output. When 2ch listening is desired, then manual operation can be executed from the front of the unit, or through the remote.

**Front panel operation**

The front of the STP offers several features, power on/off, input selection, volume control, muting, setup routine, and a display for user feedback. For phase, balance, and dim control, the remote must be used. To enter the setup mode, input up and down must be pressed in while the power is turned on by pushing in the volume knob. Once in the setup menu, input up/down is used to scroll through the settings, mute is used to select the setting for adjustment, and the volume knob is used to adjust the setting. For input naming, the volume control will be used to select the character, and the mute button to move to the next character position for adjustment. Once all settings are made (automatically saved once changed), the setup menu can be closed by pressing the power button (volume knob) again at any time.

**Powering your preamplifier**

When power is applied to the unit and the switch located on the rear is in the on position, the STP is ready to be powered up. If you would like to manually disconnect the power from the unit, the switch on the rear is where you would want to do so. To prevent power surges, we recommend using quality surge suppressor equipment. Turning the switch off on the rear of the unit will also protect against surges and spikes should some occur without proper protection.

**Dc trigger**

The STP stereo preamplifiers are equipped with a 12Vdc remote trigger input and two outputs. You can connect the 12V trigger output of your surround processor to the 12V trigger input on the preamplifier for an HT Bypass configuration when proper input is selected in the set-up menu. When the unit is activated by the remote trigger input, it will automatically connect the HT Bypass input and set the volume to unity gain (-0 db). When the unit is in standby via the remote trigger, the STP turns off. The trigger outputs are simply there to power
other devices such as power amps. When the STP is on, the trigger outputs go high (+12V), when off they go low (0V). If your unit locks up and doesn’t respond to anything, then chances are that the DC trigger input is applied, but not assigned in the setup menu.

**HT-bypass**

To properly set up the HT-Bypass feature you must complete the following. Make sure the unit is powered up, but in the off position. Press in and hold the input up and down buttons while simultaneously pressing the power button (volume knob). The display should come on in the setup menu. Press input up or down until you find a screen that says “HT Bypass”. Once “HT Bypass” is selected, push the MUTE button. This will select the HT Bypass mode, and allow for assignment. Now rotate the volume knob to turn HT Bypass on and select the input desired for this operation. ((NOTE: Make sure you select the correct input in the set-up. If the input is incorrect, and a signal is applied to that input when selected, the source will be playing VERY LOUD.)) Now press the power button again to exit the set-up menu.

You can access the selected HT Bypass input any time by pressing the HT button on the remote, by scrolling through the inputs on the front of the unit or on the remote, and also by using the remote trigger input. Using the remote trigger input will automatically configure the preamp for use with an HT system, and also power up connected amplifiers via the trigger outputs.

**Getting connected**

**CAUTION:** Disconnect the power cord or put the power switch in the off position before making any connections to your preamplifier to minimize the risk of possible amplifier, and loudspeaker damage. Power up your STP after all final connections have been made and checked.

The input and output connections you will find on the STP are made of nothing but the best. The RCA (unbalanced) jacks are made with high quality gold plated copper, and should be properly connected with interconnects of the same value. The Neutrik XLR (balanced) connectors are the finest balanced connector on the market, and are the best possible option for connecting your amplifier to your preamplifier. When more unbalanced inputs are needed, XLR to RCA adapters can be used. Please note that we don’t recommend using the balanced outputs when using adapters on the inputs and not on the outputs. You should only use the adapters when the unbalanced outputs are being used, and balanced outputs are connected with adapters. When using a balanced input with an adapter, and balanced outputs, only half the signal will be present on the outputs because the (-) phase on the input is shorted to ground through the adapter on the input of the preamp.

Using the new W4S power and interconnect cables would be a great way to ensure your system is closer to what we call “our reference”. We are now offering superior cables at an affordable rate that anyone can afford. For more information, please visit the web-site, or send an email to support@wyred4sound.com.
“Break-in” period

Your new preamplifier will deliver outstanding performance right out of the box. However, you should plan on improvements as it reaches its normal operating temperature and once all of the components have a chance to “settle in”. Our experience has shown that the STP has reached its’ potential after the initial 200 hours. One will find that the initial 100 hours, the unit will start to shed the initial “brightness” and somewhat harsh transitions. During the second 100 hours, the preamplifier will start to become more fluid, and smoother overall. Additional time is where the lesser of a change happens, and you will come to enjoy your new product for years to come. After the initial break in period, your unit will be ready to perform when powered on.

Troubleshooting

No sound?
If you have your input source and speakers connected, and you can’t get music to play, check the following:

1. Verify that the power cord is plugged in and that the outlet is powered up.
2. Check the front panel and make sure that the display lights up.
3. If the display is on and there still isn’t any sound, adjust the volume. You should here some mechanical noise of the relays clicking inside the unit. If you still don’t get sound when the volume is raised, make sure the proper input is selected.
4. If you can hear the preamplifier turn on and off, but there still isn’t any sound, make sure you are getting a signal to it.
5. Verify that the input is selecting the proper input for what you have connected.
6. If the input is in the proper position and still no sound, then try replacing the interconnects to verify the connection between the preamplifier and source.
7. Verify that the interconnects are conducting by replacing them on a different set from a connection that you know works.
8. Now that you have interconnects that you know work, try connecting the preamplifier to another source that you know has worked in the past.

If you are still experiencing problems after checking all possibilities and using the resources provided please contact your dealer or Wyred 4 Sound directly for further assistance.

Got hum?

Is there too much hum or hiss coming out of your speakers? If you put your ear right next to the tweeter of your speaker, you should barely be able to hear any hiss in normal conditions, depending on amps. If the noise is easily heard at a distance, try putting your source on mute, or pause. If this eliminates the noise, it’s inherent in the source. If the noise is still there when the preamplifier is muted, try disconnecting the inputs to the amplifier. If the noise is still there when the inputs are disconnected, and the inputs are shorted with shorting plugs, then your amplifier may need some servicing. If the noise is not there when the inputs are disconnected,
try putting a cheater plug (ground isolator) on one or all components in order to eliminate a ground loop issue. NOTE: We only recommend using a ground isolator for trouble shooting purposes, and should be removed after the problem has been found. Having the ground of any unit disconnected can potentially create a dangerous situation.

An easy way to locate a noisy component is to replicate the problem then start disconnecting components one at a time, starting with a source. Digital cable boxes and satellite receivers are notorious for making ground loop hum. This is normally caused by the potential difference on the input wire (shield side) for either of the boxes when referenced to ground. If this is the case in your system, the installation of an isolating transformer would be the easiest solution and are normally readily available at your local electronics parts store. A better solution is a power strip with grounded and surge protected F-connectors that you can pass a signal through.

Warranty coverage

Wyred 4 Sound’s warranty obligations are limited to the terms set forth below:

Wyred 4 Sound, as defined below, warrants this Wyred 4 Sound-branded hardware product against defects in materials and 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. The remote control is covered for warranty replacement in the first year.

If a hardware defect arises and a valid claim is received within the Warranty Period, at its option, Wyred 4 Sound will either (1) repair the hardware defect at no charge, 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. Wyred 4 Sound may option that you replace defective parts with new or refurbished user-installable parts that Wyred 4 Sound 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 Wyred 4 Sound, 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 Wyred 4 Sound’s property. Parts provided by Wyred 4 Sound 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 Wyred 4 Sound and becomes Wyred 4 Sound's property.

EXCLUSIONS AND LIMITATIONS

Wyred 4 Sound does not warrant that the operation of the product will be uninterrupted or error-free. Wyred 4 Sound 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-Wyred 4 Sound 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 Wyred 4 Sound; (d) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Wyred 4 Sound or a Wyred 4 Sound Authorized Service Provider; (e) to a product or part that has been modified to significantly alter functionality or capability without the written permission of Wyred 4 Sound; (f) if any Wyred 4 Sound 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

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support@wyred4sound.com
www.wyred4sound.com

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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 Wyred 4 Sound representatives or, if applicable, a Wyred 4 Sound Authorized Service Provider located using the information provided in the documentation. A Wyred 4 Sound representative or Wyred 4 Sound Authorized Service Provider will help determine whether your product requires service and, if it does, will inform you how Wyred 4 Sound will provide it. Wyred 4 Sound or its Wyred 4 Sound Authorized Service Providers will provide warranty service on products that are tendered or presented for service during the Warranty Period, as permitted by law. Wyred 4 Sound is not responsible for freight charges to our facility for warranty repairs. We will cover return freight charges (domestic only) if the unit is found to be faulty and still within the warranty coverage period. You will be responsible for delivery and return shipping and handling charges if the product cannot be serviced in the country it is in. In accordance with applicable law, Wyred 4 Sound may require that you furnish proof of purchase details and/or comply with registration requirements before receiving warranty service. Please refer to the accompanying documentation for more details on this and other matters on obtaining warranty service.

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 Wyred 4 Sound component, please contact your dealer, distributor, or Wyred 4 Sound to discuss the problem before you return the component to our manufacturing facilities for repair. Products shipped to the factory will be refused and returned freight collect if not accompanied by a Wyred 4 Sound 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 Wyred 4 Sound Service Department:

TELEPHONE 805-466-9973
HOURS M/F 8:00 am to 5:00 pm PST
FAX 805-462-8962
E-MAIL support@wyred4sound.com
WEBSITE http://www.wyred4sound.com

If you are located in the United States use the following procedure:

1. Fill out the Service form at the following address and be sure to document all details:
http://www.wyred4sound.com/Service.html
2. If service is approved we will issue a Return Authorization Number (R/A number) from the Wyred 4 Sound 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 W4S 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 Wyred 4 Sound dealer, distributor or agent will be required for warranty validation at the time of hand delivery. Use the original packaging to ensure the safe transit of the product to the factory, dealer, or distributor. Wyred 4 Sound may, at its discretion, return a product in new packaging and bill the owner for such packaging if the product received by Wyred 4 Sound was boxed in nonstandard packaging or if the original packaging was so damaged to the point it was unusable. If Wyred 4 Sound determines that new packaging is required, the owner will be notified before the product is returned. To purchase additional packaging, please contact your authorized Wyred 4 Sound dealer, distributor, or the Wyred 4 Sound Service Department for assistance.
Service procedure

If you are located outside of the United States use the following procedure:

1. Obtain a Return Authorization Number (R/A number) and shipping address from your dealer or distributor’s Service Department.
2. Insure and accept all liability for loss or damage to the product during shipment to the dealer or distributor’s Service Department and ensure all freight (shipping) charges are prepaid.

If you feel your authorized dealer or distributor is either unwilling or unable to service your Wyred 4 Sound products, please contact our service department at customersupport@wyred4sound.com or at the above contact numbers to discuss and resolve the situation.

Voltage changes to match your country’s voltage and frequency requirements to your Wyred 4 Sound product are possible only at the time of purchase. The STP series preamplifiers are set to a fixed voltage to match your country’s requirements and may not be easily changed.

Your Wyred 4 Sound product serial number is:


Your dealer or distributor information:


Your purchase information:
## STP Specifications

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<tr>
<th>Typical Distortion</th>
<th>THD+N (20-20kHz / 2V)</th>
<th>&lt;0.003% THD+N</th>
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<tr>
<td>Noise (A-weighted / VOL ≤ 63)</td>
<td>&lt; 6 µV</td>
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<td>Noise (A-weighted / VOL ≥ 64)</td>
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<td>Noise (20-20kHz / VOL ≤ 63)</td>
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<td>Noise (20-20kHz / VOL ≥ 64)</td>
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<tr>
<th>Frequency Response</th>
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<td>IMD</td>
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<td>Crosstalk (20-20kHz / VOL ≤ 63)</td>
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<td>Crosstalk (20-20kHz / VOL ≥ 64)</td>
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<td>Output Impedance (VOL ≤ 63)</td>
<td>113 Ω</td>
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<tr>
<td>Output Impedance (VOL ≥ 64)</td>
<td>78 Ω</td>
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<td>Input Impedance</td>
<td>60.4kΩ</td>
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<tr>
<td>Maximum Output Voltage</td>
<td>9V RMS</td>
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