

STI-v2 SERIES

STI-500 v2 & STI-1000 v2
STEREO INTEGRATED AMPLIFIER

USER MANUAL



Wyred 4 Sound

What's Included

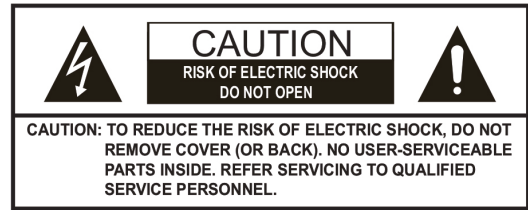
- User Manual
- 6' AC Power Cable
- 6' DC Trigger Cable
- Remote Control
- AAA Batteries (2)
- STI-500 v2 or STI-1000 v2 Stereo Integrated Amplifier

We strongly suggest keeping the original packaging in case of the need to ship your STI-v2 in the future.

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 uninsulated “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

Our product goal is simple: to deliver the beauty and realism of your music into your home with as little change as possible. We know what our competition has to offer, and you can be sure that we constantly strive to make the value of our products substantially more. We hope you enjoy your new Wyred 4 Sound product for years to come, and that you consider us in the future as we continue to provide exceptional and innovative audio components to music lovers worldwide. All Wyred 4 Sound products are proudly designed and hand-assembled in California.

Design Features

There are many reasons why the STI-v2 series integrated amplifiers are better than the competition. To start with, the volume control in the STI-v2 is a true-resistive ladder type that offers truer linearity and superior sonic quality. The line-stage within the integrated doubles as an unbalanced to balanced converter which provides a balanced signal from unbalanced inputs.

A loop in/out feature is also on hand with the STI-v2 integrated amplifiers. In the setup menu, you can select the loop feature to insert a digital crossover or similar devices into the audio path. When the loop feature is activated, Input 5 becomes loop in, and the AUX out becomes loop out.

With a set of balanced inputs, 4 sets of unbalanced inputs and a set of unbalanced outputs, connection possibilities are vast. Absolute phase and balance control are easily managed via the included full-function remote.

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. Powering up the STI-v2 can be done by pushing in on the volume knob, by pressing power on the remote, and by the remote DC trigger in when HT Bypass is selecting 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 STI-v2. When 2-ch 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 STI-v2 offers several features, power on/off, input selection, volume control, muting, setup routine, and 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 simultaneously with 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 is used to select the character and the mute button to move to the next character position for adjustment. Once all settings are made (they are automatically saved once changed), the setup menu can be closed by pressing and holding the power button (volume knob) at any time.

Setup Menu / Instructions

To enter the setup menu proceed with the following steps:

1. Make sure the unit is plugged in, power switch on rear is on, and the unit is off.
2. Push and hold in the Input up and down buttons while pressing the power button (knob) once.
3. Release all the buttons when the setup screen shows up on the display.
4. Use the input up and down buttons to navigate the menu function.
5. Use the mute button to select and enter the menu function.
6. Use the volume knob to change the setting with-in the menu function.

(You can press the input buttons to save the settings and move to another function)

7. Once all settings have been made, press the power button again (knob) to set and store your selections.

When selecting the HT Bypass input, make sure that the proper input is selected which is connected to your HT processor. When the trigger is applied after this setting is made, the unit will automatically select that input, set the volume to -0db, and turn on other connected equipment via the DC trigger output.

When the Loop out feature is used, Aux out becomes the loop out which will feed the connected components input, and Input 5 will become the loop in which will come from the output of the connected component. Please note: the loop in connectors are directly connected to the internal amplifiers as if the unit was a standalone amp with 27db of gain. The loop out is controlled by the volume control, but the loop in is not. Make sure you have all connections made properly to ensure no damage is made to your equipment.

Powering Your STI-v2

When power is applied to the STI-v2 and the switch located on the rear is in the on position, the STI-v2 will turn on. If you would like to manually turn the amplifier on and off, this switch is where you would want to do so. Leaving your amplifier on all the time will not hurt it, shorten the lifespan, or degrade the future sound. The STI-v2 series amplifiers make zero noise internally and to connected gear. The unit shouldn't be in any way noticeable of its operation other than the display status on the front panel. 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 STI-v2 series stereo amplifiers are equipped with a 12VDC remote trigger input and output. You can connect the 12V trigger output of your processor or source to the 12V trigger input on the amplifier for an easy remote power up and HT configuration every time. When the unit is in standby via the remote trigger, the amplifier is powered up, but disabled. The current draw in standby mode is less than 10W per channel, and shouldn't measure too much on your electricity bill. The trigger input will work from 5-25V, so there shouldn't be any issue with the voltage tolerance on source equipments outputs rated for 12V. You can also connect the trigger output to additional amplifiers or equipment to be turned on and off with the STI-v2 amplifier.

Getting Connected

⚠ **CAUTION:** Disconnect the power cord or power the unit off with the back switch before making any connections to minimize the risk of electric shock and possible loudspeaker damage. Power your amplifier on after all final connections have been made. **NOTE:** This is a balanced amplifier and you should **NEVER** connect either output to a ground point! Doing so may cause damage to your amplifier and/or connected gear and void warranty repair.

The binding posts that you will find on the STI-v2 series are made of nothing but the best. Each binding post is made of highly ductile “OFC” copper alloy. Both clamping nuts are built out of one piece, and offers excellent grip. All metallic surfaces offer a 24-carat gold-plating, and are non magnetic surfaces. The binding post will accept 4mm banana plugs, spades of 6 and 8mm, and crimped cable ends up to 10 AWG. The easiest connection is made with banana plugs, but be sure that you use the highest quality that you can find. Make sure that the banana plugs fit snugly into the terminals. Some inexpensive banana plugs can cause a highly resistive connection which can result in a noticeably higher distortion output to the connected speakers.

The RCA (unbalanced) jack is 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 sources.

Using Wyred 4 Sound power and interconnect cables would be a great way to ensure your system is closer to what we call “our reference”. We offer superior cables at an affordable price. For more information, please visit our website or send an email to support@wyred4sound.com.

“Break-in” Period

Your new STI-v2 series amplifier 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 amplifier has reached its’ potential after the initial 300 hours. You will find that the initial 100 hours, the amplifier will start to shed the initial “brightness” and somewhat harsh transitions. During the second 100 hours, the amplifier will start to become more fluid, and smoother overall. The remaining 100 hours is where the lesser of the change happens, and you might still notice improvements over time.

After the initial break in period, your amplifier will be ready to perform within minutes of powering it 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 blue light is on.
3. If the front panel is blue and there still isn’t any sound, put your ear next to the tweeter of your speaker and have someone turn your amplifier off then on again at the rear switch. You should barely hear a click when the amplifier is turned on and off
4. If you can hear the amplifier 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 selector 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 amplifier 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 amplifier 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 from the amplifier in normal conditions. 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 or preamplifier. If your source doesn't disconnect the outputs when muted, and the noise still exists while 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 troubleshooting 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.

Amplifier Faults

When the amplifier faults, there will be no indication other than the lack of music. The STI-v2 series amplifiers are very robust and can handle the heaviest of loads. Under normal circumstances, there shouldn't be any issues with faulting. If you suspect a problem, check the outputs and speaker connections to make sure they aren't shorted to each other or ground. If the amplifier faults while playing music loud, you may need a bigger amplifier for your taste or system. Contact your dealer or Wyred 4 Sound for other options you can explore.

Warranty Coverage

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. 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) unauthorized removal of cover (f) 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 WRITTEN, STATUTORY, EXPRESS OR IMPLIED. AS PERMITTED BY APPLICABLE LAW, WYRED 4 SOUND 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 WYRED 4 SOUND 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 WYRED 4 SOUND IN ITS SOLE DISCRETION EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW, WYRED 4 SOUND IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF, DAMAGE TO OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, ANY COSTS OF RECOVERING, PROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED OR USED WITH WYRED 4 SOUND PRODUCTS AND ANY

FAILURE TO MAINTAIN THE CONFIDENTIALITY OF DATA STORED ON THE PRODUCT. THE FOREGOING LIMITATION SHALL NOT APPLY TO DEATH OR PERSONAL INJURY CLAIMS. WYRED 4 SOUND DISCLAIMS ANY REPRESENTATION THAT IT WILL BE ABLE TO REPAIR ANY PRODUCT UNDER THIS WARRANTY.

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 your Wyred 4 Sound representative. 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.

Service

In the event there is a problem with your Wyred 4 Sound component, first contact your dealer, distributor, or Wyred 4 Sound directly to discuss the issue 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).

Wyred 4 Sound

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Email: support@wyred4sound.com

Website: wyred4sound.com

Office hours: Mon - Thurs: 7am - 4:30pm. Fri: 7am - 11am, PST

Service procedure

1. Contact your dealer or Wyred 4 Sound to discuss the issue(s)
2. If repair is deemed necessary, fill out the online Service form at wyred4sound.com/support/service-request
3. After the form is received, Wyred 4 Sound Service Department will email you an RA number and instructions.
4. Write the RA number on the outside box. Insure and accept all liability for loss or damage to the product during shipment to the Wyred 4 Sound factory 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 of the original packaging to ensure the safe transit of the product is strongly recommended. To purchase additional packaging if needed, please contact your authorized Wyred 4 Sound dealer, distributor, or the Wyred 4 Sound Service Department for assistance.

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 STI-v2 amplifier is set to a fixed voltage to match your country's requirements and may not be easily changed. Should voltage change be required, contact Wyred 4 Sound.

Specifications

Parameter	STI-500 v2	STI-1000 v2
Typical THD+N 8Ω (10W out)	0.001%	0.001%
Power Output 8Ω @ 0.2% THD+N	250w	460w
Power Output 8Ω @ 1.0% THD+N	277w	480w
Power Output 4Ω @ 0.2% THD+N	430w	725w
Power Output 4Ω @ 1.0% THD+N	460w	775w
Output Idle Noise (A Wt.)	<125μV	<215μV
Frequency Response 20Hz–20kHz (8Ω @ 10W)	± 0.1db	± 0.15db
Lower Bandwidth	1.5Hz all loads	1.5Hz all loads
Dynamic Range (A wt.)	111db	108db
Gain	42db	42db
Sensitivity	0.55V	0.75V
Output Impedance	0.005Ω	0.005Ω
Output Impedance (Pre Out)	100Ω	100Ω
Balanced Input Impedance	60.4Ωk	60.4Ωk
Unbalanced Input Impedance	60.4Ωk	60.4Ωk
Min Load	3Ω	4Ω
Dampening Factor (100Hz 8Ω)	2000	2000
Max Output Current	35A	40A
Channel Tracking	< ± 0.050db	< ± 0.050db
Crosstalk (20Hz–20kHz)	> 77db	> 85db
Idle Power Consumption	25w	35w

Your Notes



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