



S-275
Stereo Power Amplifier

Instructions for Use

Owner's Reference

Introduction

Thank you for your purchase of the Krell S-275 Stereo Power Amplifier. This configurable power amplifier has a discrete signal path from input to output and employs a wide bandwidth design with low negative feedback for sonic accuracy throughout the frequency spectrum. All circuits up to the driver stage are balanced and pure Class A.

Krell's new surface mount technology (SMT) means that the S-275 is a power amplifier with big power—275 Watts per channel—that does not require big space. SMT allows individual circuit elements to be placed very closely together. This shortens signal paths and allows circuit elements to operate at the same temperature, resulting in more accurate signal transfer and enhanced reliability.

The S-275 is a slim line design allowing two amplifiers to fit into a space normally occupied by one. For systems requiring higher power, the S-275 can be configured for monaural operation by setting a switch on the rear panel. Power output increases to 550 Watts into 8 Ohms. A 6 dB gain switch provides a channel balancing tool for systems using a combination of balanced and RCA style connections. This owner's reference contains important information on the placement, installation, and operation of the S-275. Please read this information carefully. A thorough understanding of these details will help ensure satisfactory operation and long life for your S-275 and related system components.

Definition of Terms

Following are the definitions of key terms used in your owner's reference manual.

CONFIGURATIONS

Monaural Operation

Monaural operation combines the output of the left and right channels to create a more powerful single channel. In the case of the S-275, the output increases to 550 Watts.

INPUT AND OUTPUT CONNECTIONS

Balanced

A symmetrical input or output circuit that has equal impedance from both input terminals to a common ground reference point. The industry standard for professional and sound recording installations, balanced connections have 6 dB more gain than single-ended connections and allow the use of long interconnect cables. Balanced connections are completely immune to induced noise from the system or the environment.

Single-ended

A two-wire input or output circuit. Use care when using single-ended connections as the ground connection is made last and broken first. Turn the system off prior to making or breaking single-ended connections. Single-ended connections are not recommended for connections requiring long cable runs.

OPERATION

Off

The component is off when the rear panel button is in the down position.

Stand-by Mode

A low power consumption status that keeps the audio circuits at idle. Move the rear panel breaker switch to the on position and the power status indicator illuminates in red. The component is now ready to be switched to the operational mode. Krell recommends leaving the component in the stand-by mode when it is not playing music.

Operational Mode

When the component is in stand-by mode, press the power button on the front panel and the power status indicator will change to blue. The component is in the operational mode and is ready to play music.

TECHNOLOGY

12VDC Trigger

The S-275 may be turned on remotely via a 12 volt trigger. Connect the 12V trigger output from a compatible device to the 12VDC trigger input. The S-275 will go from stand-by to operational mode when a 12 volts signal is applied. The S-275 will return to Stand-by when the 12 volt signal is removed. The S-275 can turn on other devices via 12 volt connection by connecting them to the 12VDC trigger output. When the S-275 enters operational mode, it will output 12VDC and remove it when returned to stand-by.

Input Selection

Put the input select switch in the position that matches the connection being used. Krell recommends the use of balanced/XLR whenever possible. In Mono mode, use the left channel connection.

Unpacking

Follow these steps to safely unpack the S-275:

1. Open the shipping box and remove the top layer of foam. The S-275 and the S-275 accessory kit containing the following items are visible:
 - 1 AC power cord
 - 1 packet containing the Quick Setup Guide and the warranty registration card
2. Grasp the underside of the amplifier and lift it straight out of the packing box.
3. Place the amplifier in a safe location and remove the protective plastic wrapping.

If any of these items are not included please contact your authorized Krell dealer.

Notes

Save all packing materials. If you must ship your S-275 in the future, repack the unit in its original packaging to prevent shipping damage.

Placement

Before you install the S-275 into your system, review the following guidelines to choose the location for the S-275. This will facilitate a clean, trouble-free installation. The S-275 does not require any type of special rack or cabinet for installation. For the dimensions of the S-275, see **Specifications**.

Place the S-275 on a firm, level surface, away from excessive heat, humidity, or moisture. The S-275 requires at least 1 inch (2.54 cm) of clearance on each side and at least two inches (5 cm) of clearance above the component to provide adequate ventilation. Installations inside cabinetry may need extra ventilation.

The S-275 is not hum-sensitive. Other components may be placed on or around the S-275 (make sure ventilation grids remain unobstructed).

Place the amplifier as close to the loudspeakers as possible and keep loudspeaker cable lengths to a minimum. Loudspeaker cable adds impedance to the load the amplifier must drive, regardless of the cable's gauge. All Krell amplifiers drive the lowest impedances with ease, but long loudspeaker cables reduce the maximum power that can be delivered to the loudspeakers.

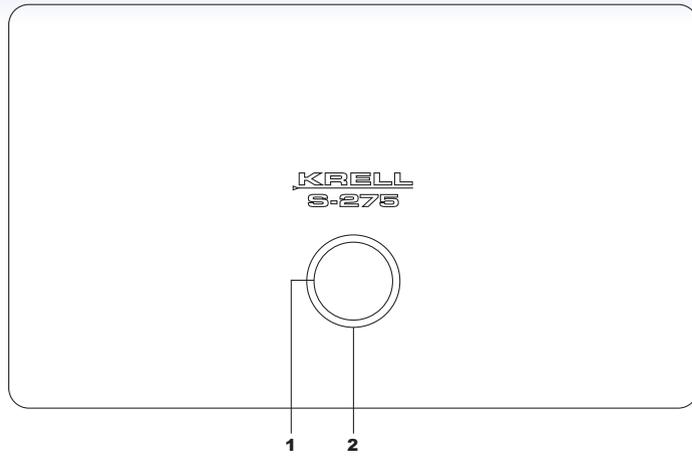
AC Power Guidelines

The S-275 has superb regulation and does not require a dedicated AC circuit. Avoid connections through extension cords or multiple AC adapters. High quality 15 amp grounded AC strips are acceptable. High quality AC line conditioners or filters may be used if they are grounded and meet or exceed the unit's maximum power consumption of 1900 Watts.

Power Cord

The S-275 should be operated with the power cord supplied and connected directly to the AC power outlet. Please contact your authorized Krell dealer, distributor, or Krell before using any devices designed to alter or stabilize the AC power for the S-275.

Figure 1 The S-275 Front Panel



Front Panel

- 1 Power Button
- 2 Power Indicator

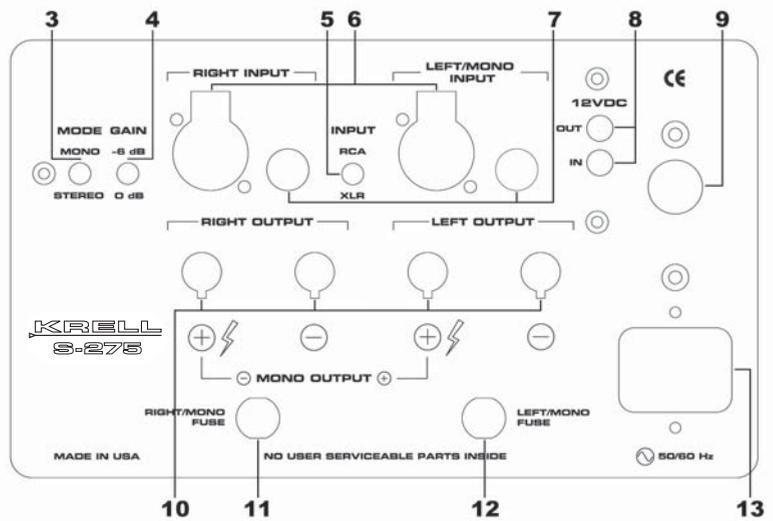
Rear Panel

- 3 Mono/Stereo Switch
- 4 Gain Switch
- 5 Input Switch
- 6 Left and Right Balanced Analog Inputs
- 7 Left and Right Single-ended Analog Inputs
- 8 12 VDC Trigger In/Out

Power

- 9 Main Power Switch
- 10 Speaker Connectors
- 11 Right/Mono Speaker Fuse
- 12 Left/Mono Speaker Fuse
- 13 IEC Connector

Figure 2 The S-275 rear panel



Front and Rear Panel Description

See Figures 1 and 2 on page 5

1 Power Button

Use this button to switch the S-275 between the stand-by and the operational modes.

2 Stand-by Indicator

The red stand-by indicator illuminates when the S-275 is plugged into a standard AC wall receptacle and the rear panel power button is pressed, indicating that the amplifier is in the stand-by mode and ready to be switched to the operational mode. The indicator turns blue when in operational mode

The S-275 back panel provides connections for all inputs and outputs, power on/off, and additional remote connections.

3 Mono/Stereo Switch

Set this switch to stereo when using the S-275 as a stereo power amplifier. Set this switch to mono when using the S-275 as a single monaural power amplifier.

4 Gain Switch

In stereo, the amplifier provides 19.8 dB of gain at 0dB setting and 25.8 dB of gain at +6 dB setting. In mono, the amplifier provides 25.8 dB and 31.8 dB of gain at the 0 dB and +6 dB settings, respectively.

5 Input Switch

Set this switch for the style of connection being used, balanced/XLR or single-ended/RCA.

6 Left and Right Balanced Analog Inputs

The S-275 is equipped with one pair of balanced inputs via XLR connectors. Use the left input when in mono mode

7 Left and Right Single-Ended Analog Inputs

The S-275 is equipped with one pair of single-ended inputs via RCA connectors. Use the left input when in mono mode.

Consult the owner's reference of the components used in a custom installation to take full advantage of the remote capability of the S-275.

14 Left and Right Loudspeaker Outputs

The S-275 is equipped with standard binding posts for each amplifier channel. These connectors accept bare wire, pins, banana

Front and Rear Panel Description, *continued*

8. 12 Volt Trigger Input/Output.

Out.The output sends 12 VDC (12 V trigger) to other Krell components and other devices that incorporate a 12 V trigger.

In.The input receives 12 VDC (12 V trigger) from other Krell components and other devices that incorporate a 12 V trigger.

The 12 VDC output current is limited to 30 ma.

9 AC Power Button

Use this button to change the S-275 from off to the stand-by mode.

10 Speaker Connections

The S-275 is equipped with standard binding posts for each amplifier channel. These connectors accept bare wire, pins, banana plugs, or spade lugs. Use the red terminal for the positive connection and the black terminal for the negative connection. When in monaural mode, use the left channel's red connection for positive and the right channel's red connection for negative.

11,12 Speaker Fuses

The speaker fuse protects the S-275 in case of overload or malfunction

13 IEC Connector

The connector is for use with the provided IEC standard 20 amp power cord.

Connecting the S-275 to Your System

USING BALANCED CONNECTIONS

Krell recommends using balanced interconnect cables. Balanced interconnect cables not only can minimize sonic loss but are also immune to induced noise, especially with installations using long cables. Balanced connections have 6 dB more gain than single-ended connections. When level matching is critical, keep this gain value in mind.

Connection Steps

Follow these steps to connect the S-275 to your system.

1. Make sure all power sources and components are off before connecting inputs and outputs.
2. Neatly organize the wiring between the S-275 and all system components. Separate AC wires from audio cables to prevent hum or other unwanted noises from being introduced into the system.
3. Connect the left and right loudspeaker cables to the amplifier's left and right loudspeaker output terminals for stereo operation or positive and negative for mono operation (10).

The S-275 is equipped with standard binding posts for each amplifier channel. These connectors accept bare wire, pins, banana plugs, or spade lugs. Use the red terminal for the positive connection and the black terminal for the negative connection. When in monaural mode, use the left channel's red connection for positive and the right channel's red connection for negative.

4. Connect the output(s) of your preamplifier/processor to the appropriate input(s) (6,7) on the S-275.

The S-275 is equipped with one pair of balanced inputs via XLR connectors and one pair of single ended inputs via RCA connectors. Set the input switch (5) to match the input connection. Use the left balanced or single ended input when in mono mode.

5. Plug the AC cord into the IEC connector (13) on the back panel of the S-275. Plug the remaining end into the AC wall receptacle. Press the Power Button on the rear panel. The red stand-by indicator (2) illuminates.

Operating Your S-275

The S-275 Amplifier is easy to operate. However, great care should be exercised when operating a system that includes the S-275, because of the amplifier's power output. Switching between active sources without muting the preamplifier output, or bumping/miscuing a device, can generate large transients at low frequencies. The S-275 may generate enough power with these transients to damage most loudspeakers. To avoid damage, be sure to switch all sources with the preamplifier level either muted or fully attenuated.

Krell amplifiers have large reserves of clean power and can safely drive loudspeakers to higher sound pressure levels than other amplifiers. However, use care when setting high playback levels and lower the volume level at any sign of loudspeaker distress.

When powering up any system, always turn amplifiers on last. When powering down, always turn amplifiers off first.

When the amplifier is in stand-by mode, with the red stand-by LED (2) illuminated, turn the amplifier on by pressing the power button on the front panel or the power key on the remote control (1). There is an audible click. The blue power LED (2) illuminates. The S-275 is now in the operational mode and ready to play music.

Questions and Answers

- Q. Should I leave my S-275 on at all times?
- A. Krell recommends leaving the amplifier in the stand-by mode, ready to play music. If you are not going to play music for a long time, you may turn off the rear panel power button.
- Q. When I turn on the amplifier there is a loud hum through the loudspeakers. What should I do?
- A. Check all cable terminations, making sure they have solid solder joints and are of sound construction.

With the amplifier off, remove the interconnect cables, then turn the amplifier on. If the hum disappears, turn the amplifier off and reinsert one of the interconnect cables. Turn the amplifier back on. If the hum reappears with one or both cables reinserted, there may be a defective cable. Have the interconnect cables checked before proceeding.

- If the interconnect cables are sound, you may be experiencing a ground loop. Please contact your authorized Krell dealer, distributor, or Krell for suggestions on how to solve this problem.

Warranty

To register your product for warranty benefits, please complete and return the Warranty Registration Card enclosed in the shipping box within 15 days of purchase. Thank you.

This Krell product has a limited warranty of five years for parts and labor on circuitry from date of purchase or six years from date of original shipment from the Krell factory. Should this product fail to perform at any time during the warranty, Krell will repair it at no cost to the owner, except as set forth in this warranty.

The warranty does not apply to damage caused by acts of God or nature.

The warranty on this page shall be in lieu of any other warranty, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. There are no warranties which exceed beyond those described in this document. If this product does not perform as warranted herein, the owner's sole remedy shall be repair. In no event will Krell be liable for incidental or consequential damages arising from purchase, use, or inability to use this product, even if Krell has been advised of the possibility of such damages.

Proof of purchase in the form of a bill of sale or receipted invoice substantiating that the unit is within the warranty period must be presented to obtain warranty service. The warranty begins on the date of retail purchase, as noted on the bill of sale or receipted invoice from an authorized Krell dealer or distributor.

The warranty for Krell products is valid only in the country to which they were originally shipped, through the authorized Krell distributor for that country, and at the factory. There may be restrictions on or changes to Krell's warranty because of regulations within a specific country. Please check with your distributor for a complete understanding of the warranty in your country.

If a unit is serviced by a distributor who did not import the unit, there may be a charge for service, even if the product is within the warranty period.

Freight to the factory is your responsibility. Return freight within the United States (U.S.A.) is included in the warranty. If you have purchased your Krell product outside the U.S.A. and wish to have it serviced at the factory, all freight and associated charges to the factory are your responsibility.

Krell will pay return freight to the U.S.A.-based freight forwarder of your choice. Freight and other charges to ship the unit from the freight forwarder to you are also your responsibility.

Krell is not responsible for any damage incurred in transit. Krell will file claims for damages as necessary for units damaged in transit to the factory. You are responsible for filing claims for shipping damages during the return shipment.

Krell does not supply replacement parts and/or products to the owner of the unit. Replacement parts and/or products will be furnished only to the distributor performing service on this unit on an exchange basis only; any parts and/or products returned to Krell for exchange become the property of Krell.

No expressed or implied warranty is made for any Krell product damaged by accident, abuse, misuse, natural or personal disaster, or unauthorized modification.

Any unauthorized voltage conversion, disassembly, component replacement, perforation of chassis, updates, or modifications performed to the unit will void the warranty.

The operating voltage of this unit is determined by the factory and can only be changed by an authorized Krell distributor or at the factory. The voltage for this product in the U.S.A. cannot be changed until six months from the original purchase date.

In the event that Krell receives a product for warranty service that has been modified in any way without Krell authorization, all warranties on that product will be void. The product will be returned to original factory layout specifications at the owner's expense before it is repaired. All repairs required after the product has been returned to original factory specifications will be charged to the customer, at current parts and labor rates.

All operational features, functions, and specifications and policies are subject to change

Return Authorization Procedure

HOW TO EXPEDITE SERVICE

If you believe there is a problem with your component, please contact your dealer, distributor, or the Krell factory to discuss the problem *before* you return the component for repair. To expedite service, you may wish to complete and e-mail the Service Request Form in the Service section of our website at:

<http://www.krellonline.com>

To contact the Krell Service Department:

TEL	203-799-9954 Monday-Friday, 9:00 am to 5:00 pm EST
FAX	203-799-9796
E-MAIL	service@krellonline.com
WEBSITE	http://www.krellonline.com

HOW TO RETURN A PRODUCT

To return a product to Krell, please follow this procedure so that we may serve you better:

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

The product may also be hand delivered if arrangements with the Service Department have been made in advance. Proof of purchase will be required for warranty validation at the time of hand delivery.

IMPORTANT

Use the original packaging to ensure the safe transit of the product to the factory, dealer, or distributor. Krell may, at its discretion, return a product in new packaging and bill the owner for such packaging if the product received by Krell was boxed in nonstandard packaging or if the original packaging was so damaged that it was unusable. If Krell determines that new packaging is required, the owner will be notified before the product is returned.

HOW TO PURCHASE ADDITIONAL PACKING

To purchase additional packaging, please contact your authorized Krell dealer, distributor, or the Krell Service Department for assistance.

Krell Industries, LLC.
45 Connair Road
Orange, CT 06477-3650 USA

TEL 203-799-9954, FAX 203-891-2028
E-MAIL krell@krellonline.com
WEB SITE www.krellonline.com

S-275

Stereo Amplifier

v 1.0

Specifications

All operational features, functions, specifications, and policies are subject to change without notification.

FREQUENCY RESPONSE

20 Hz–20 kHz

+0 dB, -0.08 dB - Stereo

+0 dB, -0.12 dB - Mono

SIGNAL-TO-NOISE RATIO

“A” weighted

115 dB

TOTAL HARMONIC DISTORTION (THD)

1 kHz <0.03%

20 kHz <0.20%

GAIN

Selectable, 25.8 or 19.8 dB - stereo

Selectable, 31.8 or 25.8 dB - mono

INPUT SENSITIVITY

Selectable, 2.4 V or 4.8 V - stereo

Selectable, 1.7 V or 3.4 V - mono

INPUT IMPEDANCE

20 kOhms single-ended

20 kOhms balanced

OUTPUT IMPEDANCE

<0.067 Ohms - stereo

<.15 Ohms - mono

POWER CONSUMPTION

Idle 80 W - stereo, 65 W mono

Max. 1,900 W

TRANSFORMER

1,650 VA

INPUTS

1 pair balanced via XLR connectors

1 pair single-ended
via RCA connectors

OUTPUTS

2 loudspeaker via 5-standard
binding posts

OUTPUT VOLTAGE

Peak to peak 133 V - stereo

Peak to Peak 188V mono

OUTPUT POWER

275/550 WPC 8/4 Ohms - stereo

550/1,100 WPC 8/4 Ohms - mono

REMOTE CONTROL

1 12 VDC trigger Output

1 12 VDC trigger Input