

Instructions for Use



KAV-400xi
Remote Control Integrated Amplifier
Instructions for Use
v 03.0

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INFORMATION**

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This product complies with the EMC directive (89/336/EEC) and the low-voltage directive (73/23/EEC).

WARNINGS

Do not place the integrated amplifier where it could be exposed to dripping or splashing.

The ventilation grids on the top and bottom of the KAV-400xi must be unobstructed at all times during operation. Do not place flammable material on top of or beneath the component.

When making connections to this or any other component, make sure all components are off. Turn off all systems' power before connecting the KAV-400xi to any other component. Make sure all cable terminations are of the highest quality, free from frayed ends, short circuits, or cold solder joints.

THERE ARE NO USER-SERVICEABLE PARTS INSIDE ANY KRELL PRODUCT.

Please contact your authorized dealer, distributor, or Krell if you have any questions not addressed in this reference manual.

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Introduction

Thank you for your purchase of the Krell KAV–400xi Remote Control Integrated Amplifier. This fully integrated amplifier and pre-amplifier has a fully balanced 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 pure Class A.

Krell's new surface mount technology (SMT) means that the KAV–400xi is an integrated amplifier with big power—200 Watts per channel—that does not require big space. SMT allows individual circuit elements to be placed very close 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 KAV–400xi is easy to operate and integrate into your system. The remote control accesses all amplifier functions, and remote control connection options allow the KAV–400xi to be easily connected with other components. The Theater Throughput feature provides easy integration of the amplifier into a home theater system.

This owner's reference manual contains important information on the placement, installation, and operation of the KAV–400xi. Please read this information carefully. A thorough understanding of these details will help ensure satisfactory operation and long life for your KAV–400xi and related system components.

Definition of Terms

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

CONFIGURATIONS

Theater Throughput

Theater Throughput is a Krell configuration option that allows the signal from a surround preamp/processor to pass through a Krell preamplifier or integrated amplifier with no gain, for integrated volume and balance management of Krell home theater systems.

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 AC power cord is unplugged from the wall receptacle.

Stand-by Mode

A low power consumption status that keeps the audio circuits at idle. When you plug the AC power cord into the wall receptacle, the red stand-by LED illuminates. 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 the stand-by mode, and you press the power button on the front panel or the power key on the remote control, the blue power LED illuminates. The component is in the operational mode and is ready to play music.

TECHNOLOGY

Krell Current Mode

A proprietary Krell circuit topology in which the audio gain stages of a component operate in the current rather than voltage domain. This unique technology provides the component with exceptional speed and a wide bandwidth.

Unpacking

Follow these steps to safely unpack the KAV–400xi:

1. Open the shipping box and remove the top layer of foam. The KAV–400xi and the KAV–400xi accessory kit containing the following items are visible:
 - 1 AC power cord
 - 1 12 VDC (12 V trigger) cable
 - 2 spare loudspeaker fuses (AGC 8)
 - 1 KAV–400xi remote control
 - 1 CR2025 lithium battery
 - 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.

Notes

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

Save all packing materials. If you must ship your KAV–400xi in the future, repack the unit in its original packaging to prevent shipping damage.

Placement

Before you install the KAV–400xi into your system, review the following guidelines to choose the location for the KAV–400xi. This will facilitate a clean, trouble-free installation. The KAV–400xi does not require any type of special rack or cabinet for installation. For the dimensions of the KAV–400xi, see **Specifications**, on the back cover.

Place the KAV–400xi on a firm, level surface, away from excessive heat, humidity, or moisture. The KAV–400xi requires at least two inches (5 cm) of clearance on each side and at least two inches (5 cm) of clearance above and below the component to provide adequate ventilation. Installations inside cabinetry may need extra ventilation.

The KAV–400xi is not hum-sensitive. Other components may be placed on or around the KAV–400xi (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.

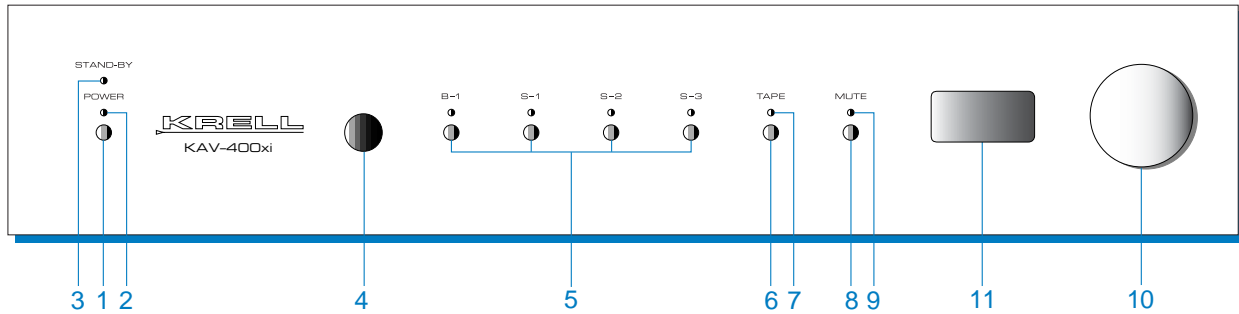
AC Power Guidelines

The KAV–400xi 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 1800 Watts.

Power Cord

The KAV–400xi should be operated only with the power cord supplied. Please contact your authorized Krell dealer, distributor, or Krell before using any devices designed to alter or stabilize the AC power for the KAV–400xi.

Figure 1 The KAV-400xi Front Panel



Power

- 1 Power Button
- 2 Power LED
- 3 Stand-by LED
- 4 Infrared Sensor
- 12 Pre Key (Remote)

Analog Devices

- 5 S-1, S-2, S-3, and B-1, Buttons, Keys and LEDs
- 6 Tape Button or Key
- 7 Tape LED

Mode Indicators

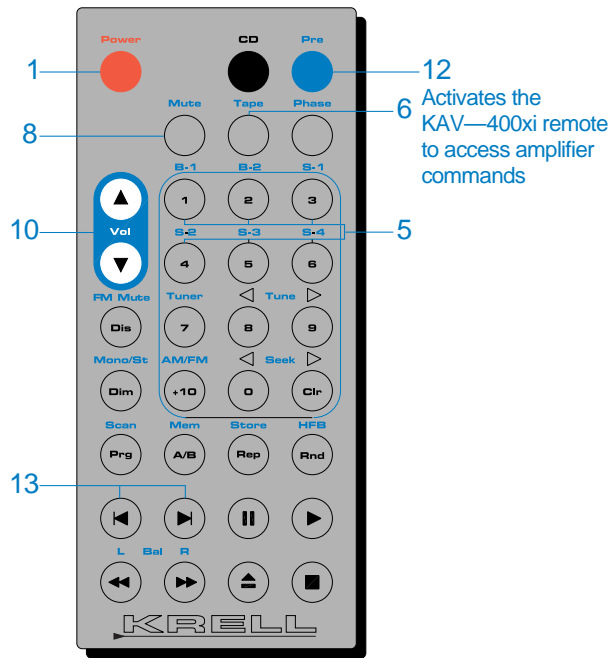
- 8 Mute Button or Key
- 9 Mute LED

Volume Adjustment

Functions

- 10 Level Knob / Level Keys
- 11 Front Panel Display
- 13 Bal (Balance) Keys (Remote)

Figure 2 The KAV-400xi Remote Control



Note

Remote control keys listed above function with the KAV-400xi. Other keys on this remote control may activate other Krell components. Consult the Krell reference manual for each model to review your component's full remote control capabilities.

Front Panel/Remote Control Description

See Figures 1 and 2 on page 6

Power, analog input selections, and volume control accessed via the front panel of the KAV–400xi are described in the illustration legend below. The front panel display shows volume and balance levels, and Theater Throughput status. Most front panel features can also be activated via the keys on the remote. Descriptions of special operational features of the remote control are outlined on pages 9-10:

POWER

1 Power Button or Key

Use this button to switch the KAV–400xi between the stand-by and the operational modes.

2 Power LED

The blue power LED illuminates when the KAV–400xi is in the operational mode. The power LED also flashes when any remote control key is pressed.

3 Stand-by LED

The red stand-by LED illuminates when the KAV–400xi is plugged into a standard AC wall receptacle, indicating that the amplifier is in the stand-by mode and ready to be switched to the operational mode.

4 Infrared Sensor

The infrared sensor receives commands from the KAV–400xi remote control. For proper remote control operation, make sure that nothing is obstructing the infrared sensor.

ANALOG SOURCE COMPONENTS

5 S-1, S-2, S-3, and B-1 Buttons, Keys, and LEDs

Use these buttons to select a balanced analog source component (B-1) via an XLR connector or a single-ended analog source component (S-1, S-2, or S-3) via single-ended RCA connectors. When the button or key is selected, the LED illuminates.

6 Tape Button or Key

Use this button to playback pre-recorded tapes. You may also use this button to compare the output signal of an analog tape recorder to an audio source. See *Tape Input and Output*, on page 16.

7 Tape LED

The red tape monitor LED illuminates when the tape monitor is activated. The LED does not illuminate when an audio source is activated.

MODE INDICATORS

8 Mute Button or Key

Use this button to interrupt the signal of the input you have selected. To unmute, press the mute button again.

9 Mute LED

The red mute LED illuminates when you press the mute button on the front panel or the mute key on the remote control (8).

VOLUME ADJUSTMENT FUNCTIONS

10 Level Knob / Level Keys

The level knob on the front panel or the level keys on the remote control adjust the amplifier output level. The output level is indicated numerically on the front panel display, with a range from 0-151.

11 Front Panel Display

The front panel display shows volume and balance levels and Theater Throughput status.

Remote Control Only

See Figure 2 on page 6

Battery Installation and Removal

The KAV–400xi remote control uses one CR2025 lithium battery, which is included with the shipment.

To open the battery compartment on the back of the remote control:

1. Place the remote face down on the table.
2. Use your thumbnail or a small jeweler's or eyeglass screwdriver to move the small switch toward the center of the remote, while using your index fingernail or screwdriver to pull down gently on the slot to the right of the switch. The battery compartment will slide out.

Note

Do not use a knife or other sharp objects to open the battery compartment; they will scratch the remote control finish.

3. Place the battery, positive side up, in the battery tray.
4. Slide battery compartment back into the remote until you hear a click.

The remote control is ready for operation.

Notes

Replace battery when remote control function becomes intermittent.

Remove battery if the remote control is not used for a long period of time. Battery leakage can damage the remote control.

Remote Control Only Functions

The KAV–400xi remote control accesses complete power amplifier and preamplifier functions. A description of the functions unique to the KAV–400xi follow:

POWER

12 Pre Key

Use this key to activate the KAV–400xi remote to access amplifier commands.

**VOLUME ADJUSTMENT
FUNCTION**

13 Bal (Balance) Keys

Use these keys to shift the balance to the left or the right channel. Balance level is indicated in the front panel display (11). To display balance, push any key on the remote.

The front panel display indicates:

-C-

when the system is balanced. If the system is not balanced, the front panel display indicates that the balance is right or left of center and by how much, on a scale of 1 (least out of balance) to 5 (most out of balance).

Example: A display of:

- - 3

means that the balance is moderately right of center. A display of:

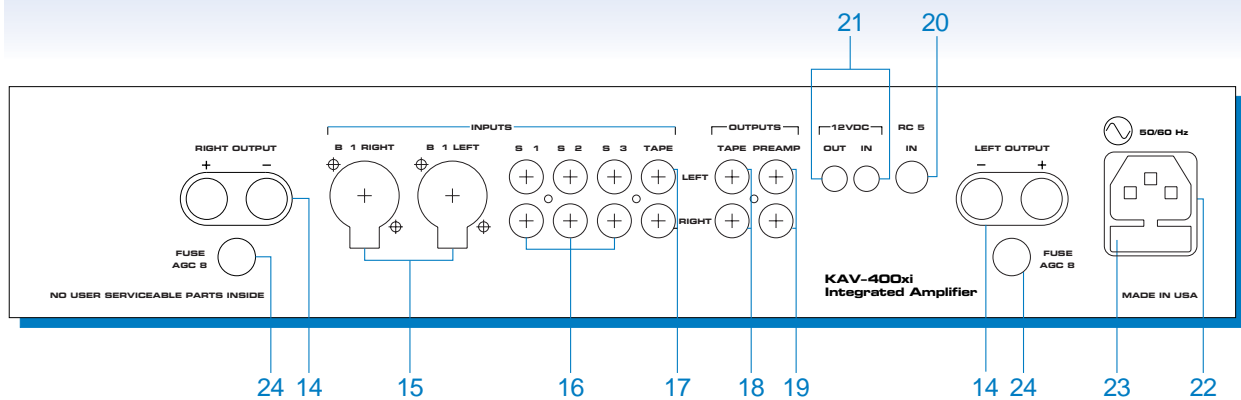
5 - -

means the balance is severely left of center.

Note

The remote control keys listed above function with the KAV-400xi. Other keys on this remote control may activate other Krell components, for example, compact disc players. Consult the Krell owner's reference manual for each component to review your component's full remote control capabilities.

Figure 3 The KAV-400xi Back Panel



Amplifier Channel

Outputs

- 14 Left and Right Loudspeaker Outputs

Analog Inputs

- 15 Left and Right Balanced Analog Inputs
- 16 Left and Right Single-ended Analog Inputs
- 17 Left and Right Tape Inputs

Analog Outputs

- 18 Left and Right Tape Outputs
- 19 Left and Right Preamp Outputs

Remote Connections

- 20 RC-5 In
- 21 12 VDC In/Out

Power

- 22 IEC Connector
- 23 Line Fuse
- 24 AGC 8 Left and Right Loudspeaker Fuses

Back Panel Description

See Figure 3 on page 11

The KAV–400xi back panel provides connections for all inputs and outputs, power on/off, and additional remote connections.

AMPLIFIER CHANNEL OUTPUTS

14 Left and Right Loudspeaker Outputs

The KAV–400xi is equipped with standard binding posts for each amplifier channel. These connectors accept bare wire, pins, or spade lugs. Use the red terminal for the positive connection and the black terminal for the negative connection.

ANALOG INPUTS

15 Left and Right Balanced Analog Inputs

The KAV–400xi is equipped with one pair of balanced (B-1) inputs via XLR connectors.

16 Left and Right Single-Ended Analog Inputs

The KAV–400xi is equipped with three pairs of single-ended (S-1, S-2, or S-3) inputs via RCA connectors.

17 Left and Right Tape Inputs

The KAV–400xi is equipped with a pair of single-ended tape inputs via RCA connectors.

ANALOG OUTPUTS

18 Left and Right Tape Outputs

The KAV–400xi is equipped with a pair of single-ended tape outputs via RCA connectors.

19 Left and Right Preamp Outputs

The KAV–400xi is equipped with a pair of single-ended pre-amplifier outputs.

REMOTE CONNECTIONS

20 RC-5 In

The KAV–400xi is equipped with an RC-5 input that makes custom installation easy and secure by accepting baseband RC-5 input commands from hardwired remote controllers.

21 12 VDC In/Out (12 V Trigger)

The 12 V Trigger allows you to turn the KAV–400xi on or off, or to and from stand-by, from other components.

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

Back Panel Description, continued

*Remote
Connections,
continued*

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

Notes

The 12 VDC output current is limited to 30 ma.

Consult the owner's reference of the components used in a custom installation to take full advantage of the remote capability of the KAV-400xi.

POWER

22 IEC Connector

The connector is for use with the provided IEC standard 15 amp power cord.

23 Line Fuse

The 50/60 Hz line fuse protects the KAV-400xi against short circuits from the external AC power.

24 AGC 8 Fuses

The AGC 8 fuses protect the KAV-400xi against short circuits in the loudspeaker output.

Note

Fuses must be replaced with the fuse value specified on the back panel.

Connecting the KAV–400xi 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 KAV–400xi 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 KAV–400xi 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 integrated amplifier's left and right loudspeaker output terminals (14).

The KAV–400xi uses standard binding posts for each amplifier channel. These connectors accept bare wire, pins, or spade lugs. Use the red terminal for the positive connection and the black terminal for the negative connection.

4. Connect the left and right outputs of your source components to the appropriate analog inputs (15, 16, 17) on the KAV–400xi.

The KAV–400xi is equipped with one balanced input (B-1), three single-ended inputs (S-1, S-2, or S-3), and one tape input. The B-1, S-1, S-2, and S-3 inputs can be configured for Theater Throughput. See **Optional Configurations**, on page 17 for information on configuring an input for Theater Throughput.

5. Use the preamp outputs (19) to connect to an additional power amplifier, for loudspeakers in another room.
6. Plug the AC cord into the IEC connector (22) on the back panel of the KAV–400xi. Plug the remaining end into the AC wall receptacle. The red stand-by LED (3) illuminates. There is no audible click or delay.

Pin assignments for the XLR connectors

- | | |
|-------|--------------------------|
| Pin 1 | Shield (ground) |
| Pin 2 | Non-inverting (hot) (0°) |
| Pin 3 | Inverting (cold) (180°) |

Operating Your KAV–400xi

This section provides information about operating the KAV–400xi. The KAV–400xi provides basic input selection and volume control operation from the front panel. The remote control includes additional preamplifier and volume functions as well as compact disc transport and amplifier controls. See **Remote Control Only**, on page 9, for more information.

After the KAV–400xi is connected to AC power and in the stand-by mode, use the power button or key (1) to switch the component to the operational mode. The blue power LED (2) illuminates.

Amplifier Operation

The KAV–400xi Remote Control Integrated Amplifier is easy to operate. However, great care should be exercised when operating a system that includes the KAV–400xi, 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 KAV–400xi 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. Do not change inputs to the amplifier while the amplifier is on.

Note

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.

ON/OFF AND STAND-BY OPERATION

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

1. When the amplifier is in stand-by mode, with the red stand-by LED (3) 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, and the red stand-by LED (3) turns off. The KAV–400xi is now in the operational mode.
2. With the amplifier in the mute position, or the volume control fully attenuated, select a source from the front panel or the remote control (5).

**ON/OFF AND STAND-BY
OPERATION, *continued***

3. Start playing the source.
4. Set the volume to a comfortable listening level using the level knob on the front panel or the level keys on the remote control (10).
5. To turn the amplifier off, press the power button on the front panel or the power key on the remote control (1). The red stand-by LED (3) illuminates.

It is now safe to turn off the rest of the system.

Tape Input and Output

The KAV-400xi has a discrete tape input and output. The tape output is used to send an input signal from S-1, S-2, S-3, or B-1 to a recording device or processor. You can use the tape feature in three ways:

1. Use the tape button on the front panel or the tape key on the remote (6) to playback pre-recorded tapes.
2. Use the tape input to compare the output signal of a three-head analog tape recorder to the output signal of an audio source, when making a recording. To activate this function, select an audio source for recording using either the S-1, S-2, S-3, or B-1 analog input buttons or keys (5). Press the tape button on the front panel or tape key on the remote on the to switch between the tape recorder output (red tape monitor LED [7] illuminated) and the input source (red tape monitor LED not illuminated).
3. Use the tape output to create a processor loop, when the KAV-400xi is connected to a graphic equalizer or other ancillary equipment. To activate this function, connect the equipment to the KAV-400xi tape outputs (18) as described in the equipment manufacturer's manual. Press the tape button on the front panel or tape key on the remote to switch between the processor output (red tape monitor LED [7] illuminated) and the input source (red tape monitor LED not illuminated).

Note

When changing sources, lower the volume to off or mute the output. This ensures that the next source played does not damage your system with a high output transient.

Optional Configurations

Configuring the KAV-400xi for Theater Throughput

To simplify the integration of an audio/video surround sound processor into your system, set any input on the KAV-400xi (S-1, S-2, S-3, or B-1) to operate as a unity gain stage. Krell calls this configuration Theater Throughput.

When you configure a KAV-400xi input for Theater Throughput, the KAV-400xi volume and balance controls are transferred to the audio/video surround sound processor, for integrated volume and balance management as well as ease of operation. As long as the KAV-400xi input is configured for Theater Throughput and connected to the audio/video surround sound processor's input configured for Theater Throughput, all KAV-400xi volume and balance adjustments are made through the surround sound processor. When you disengage the KAV-400xi input from Theater Throughput, the volume and balance controls revert to the KAV-400xi.

HOW TO ACTIVATE AN INPUT FOR THEATER THROUGHPUT

1. Turn on the KAV-400xi power.
2. Press and release the button on the front panel or the key on the remote (5) for the device you wish to configure for Theater Throughput. The LED illuminates.
3. Press the button or key again and hold it for four seconds. The front panel display (11) shows "thr."

IMPORTANT

Make sure the level on the source component is set to zero when configuring the KAV-400xi input set for Theater Throughput. Source components without level controls should not be connected to an input configured for Theater Throughput. Doing so can result in excessive and possibly damaging volume levels when the source is played. Always turn off the source component before you configure any input on the KAV-400xi for Theater Throughput.

HOW TO DISENGAGE AN INPUT FOR THEATER THROUGHPUT

1. Turn on the KAV-400xi power.
2. Press and release the button on the front panel or the key on the remote (5) for the device you wish to disengage from Theater Throughput. The LED illuminates.
3. Press the button or key again and hold it for four seconds. The phrase "thr" disappears from the front panel display (11), indicating that Theater Throughput is disengaged.

Preamplifier Output

The KAV-400xi is equipped with a pair of single-ended preamplifier outputs (19). These outputs enable the KAV-400xi to be used as a preamplifier when it is connected to a separate amplifier.

Note

The amplifier channel outputs are always active, even when the KAV-400xi is being used only as a preamplifier.

How to Troubleshoot System Noise

AC grounding becomes critical when connecting high performance audio components. When you mix and match audio components, each with its own ground potential, a low frequency hum may occur in one or both loudspeakers. This sometimes occurs when introducing a new component into a system.

If a low frequency hum emanates from the loudspeakers when you place the KAV-400xi amplifier into the system, follow these simple troubleshooting steps:

1. Check all cable terminations, making sure they have solid solder joints and are of sound construction.
2. 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.
3. 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.

Questions and Answers

- Q.** Should I leave my KAV–400xi 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 disconnect the amplifier from AC power supply.
- Q.** When I turn on the amplifier there is a loud hum through the loudspeakers. What should I do?
- A.** When a new component is introduced into a system, a low frequency hum may occur in one or both loudspeakers. Check all input and output connections, making sure they are of sound construction. See **How to Troubleshoot System Noise**, on page 19. If the interconnects and cables are sound, you may be experiencing a ground loop. This can often be easily eliminated. Please contact your authorized Krell dealer, distributor, or Krell for suggestions on how to solve this problem.
- Q.** When I use the KAV–400xi's Theater Throughput capability with my surround sound processor, where should I set the volume on the KAV–400xi?
- A.** You do not need to set the volume on the KAV–400xi because the amplifier's volume and balance controls are not active in the Theater Throughput mode. When using the KAV–400xi's Theater Throughput capability, the surround sound processor controls the system volume. See **Optional Configurations**, on page 17.

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. 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 without notification.

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, Inc.
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

KAV-400xi
Remote Control
Integrated Amplifier
v 03.0

Specifications

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

FREQUENCY RESPONSE

20 Hz–20 kHz

+0 dB, -0.07 dB

SIGNAL-TO-NOISE RATIO

“A” weighted

99 dB

TOTAL HARMONIC DISTORTION (THD)

20 Hz–20 kHz

1 kHz <0.04%

20 kHz <0.25%

GAIN

35.8 dB

INPUT SENSITIVITY

0.644 Vrms

INPUT IMPEDANCE

47 kOhms

OUTPUT IMPEDANCE

0.17 Ohms

POWER CONSUMPTION

Idle 20 W

Max. 1,800 W

TRANSFORMER

750 VA

INPUTS

All with Theater Throughput

1 pair balanced via XLR connectors

3 pair single-ended

via RCA connectors

OUTPUTS

2 loudspeaker via 5-standard binding posts

1 pair single-ended preamp via RCA connectors

TAPE INPUT AND OUTPUT

1 pair single-ended via RCA connectors

OUTPUT VOLTAGE

Peak to peak 138 V

OUTPUT POWER

8 Ohms 200 W

4 Ohms 400 W

REMOTE CONTROL

1 handheld wireless remote

1 12 VDC Out/In (12 V trigger)

1 RC-5 input via a DC power connector

DIMENSIONS

17.3w x 3.5h x 17d in.

50w x 8.9h x 43.2d cm

WEIGHT

Shipped

36.0 lb., 16.4 kg

Unit only

31.0 lb., 14.1 kg