

**KRELL**

*The Leader in Audio Engineering*

**KAV-300i**  
**REMOTE CONTROL**  
**INTEGRATED AMPLIFIER**

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**OWNER'S REFERENCE**

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**KAV-300i**  
**Remote Control**  
**Integrated Amplifier**

v 00.0

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

This product is manufactured in the United States of America. Krell® is a registered trademark of Krell Industries, Inc., and is restricted for use by Krell Industries, Inc., its subsidiaries, and authorized agents. Theater Throughput™ is a trademark of Krell Industries, Inc. All other trademarks and tradenames are registered to their respective companies.

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## **INTRODUCTION**

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Thank you for your purchase of the KRELL KAV-300i integrated amplifier. Components bearing the name KRELL have always represented the premier performers in their product categories. The KAV-300i integrated amplifier continues this unbroken streak of trailblazers. We are also proud to announce that the KAV-300i has received the *European Imaging and Sound Association (EISA) 1996-1997 European High-End Audio Product of the Year* award.

The KAV-300i uses proven KRELL circuits built with the same resistors, output devices, etc., as in all KRELL products. Envisioned from the beginning as a united preamplifier/amplifier, the KAV-300i pairs a remote controlled preamplifier to a robust 150 watt per channel power amplifier. From input to output, the KAV-300i uses discrete, fully complementary circuitry. All circuits up to the driver stage operate in pure Class A. The KAV-300i employs a wide bandwidth design with very low negative feedback for sonic accuracy throughout the frequency spectrum.

To obtain the best performance from your KAV-300i, careful attention should be paid to its placement, installation, and operation. A thorough understanding of these details will help insure satisfactory operation and a long life for the KAV-300i and related system components.

This Owner's Reference is divided into several sections, each designed to perform a different function. As you read through the Owner's Reference you will become better acquainted with the features and functions that make the KAV-300i an outstanding performer and a superb value. A Question and Answer section is included where answers to common questions are provided. Should you have any questions or suggestions please feel free to contact your authorized dealer or the KRELL staff for assistance.

In the unlikely event that your KAV-300i should require service, you will be pleased to know that it is backed by a comprehensive Customer Satisfaction policy and one of the most advanced service facilities in the industry. For detailed information on the terms and conditions of service, please consult your warranty registration card, your KRELL Dealer or Distributor.

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## **UNPACKING AND ASSEMBLY**

1. After opening the box, the KAV-300i and the following items will now be visible:

- 1 KAV-300i remote control
- 1 T-10 Torx wrench
- 1 AC power cord
- 1 Owner's Reference
- 1 Warranty card

*NOTE: If any of these items are not included please contact your authorized dealer immediately for assistance.*

*NOTE: Save all packing materials. If you must ship your KAV-300i in the future, repack the unit in its original packing to prevent damage in transit.*

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## **BASIC INSTALLATION**

1. Place the unit on a firm level surface free from dirt or moisture. The KAV-300i is not particularly hum sensitive, therefore other components can be placed on or around the KAV-300i.

*NOTE: While the KAV-300i has a superb power supply and does not require a dedicated circuit, we strongly advise against any connections through extension cords or multiple AC adapters. High quality 15 amp line conditioners or grounded AC strips are acceptable.*

## **INPUT AND OUTPUT CONNECTIONS**

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*CAUTIONS: When making connections to this or any other component, make sure all components are OFF. Make sure all cable terminations are of the highest quality, free from frayed ends, shorts, or cold solder joints. The wiring to and from the KAV-300i, and all components in general, should be arranged in a neat, organized manner. Specifically, AC wires should be separated from audio cables. This practice prevents hum or other noise from being introduced into the system.*

1. Connect the speaker cables to the integrated amplifier's output terminals.

The KAV-300i utilizes standard binding posts for each amplifier channel. These connectors accept bare wire, banana plugs, pins, or spade lugs. The red terminal is used for the positive connection and the black terminal is used for the negative connection.

2. Connect the left and right outputs of your source components to the inputs on the KAV-300i.

The KAV-300i is equipped with three single-ended inputs (S1, S2, and S3/proc), one tape monitor loop, and one balanced input (B1). The S1 and S2 inputs are standard single-ended inputs while S3/proc has a user-configurable option. The S3/proc is set as a standard input from the factory. The S3/proc input can be set for use as a surround processor throughput. This option will be discussed on page 6 in Optional Configurations.

*NOTE: When connecting inputs to the KAV-300i, remember that the balanced connection will have 6dB more gain than the single-ended connections. When level matching is critical in your installation, keep this specification in mind.*

3. Plug the AC cord into the receptacle on the back of the KAV-300i. Plug the remaining end into the AC wall receptacle. The red Stand-by LED will illuminate.

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## **BASIC OPERATION**

The KAV-300*i* provides basic input selection and volume control operation from the front panel. The remote control includes additional preamplifier functions as well as KRELL CD transport and amplifier controls (see Remote Control page 8 for more information).

### **BASIC OPERATION**

1. Engage the power switch on the KAV-300*i* either manually or via the remote control.

The KAV-300*i* power supply incorporates a slow start protection circuit that prevents excessive current from reaching the audio circuitry upon initial turn on. After pressing the power switch, the red Stand-by LED will turn off and the blue Power LED will illuminate. There is a short delay, followed by an audible click. This click is the protection circuitry disengaging. The amplifier is now ready for operation.

2. Choose a listening source and select that input either manually or via the remote control.
3. Start play of the source.
4. Set volume to a comfortable listening level.
5. When changing sources, lower the volume to the off position or mute the output (see MUTE on page 6). This insures that the next source played will not damage your system with a high output transient.

### **BALANCE (REMOTE CONTROL ONLY)**

**Balance** ◀ shifts balance to the left in one dB increments.

**Balance** ▶ shifts balance to the right in one dB increments.

When either Balance control is depressed, the Balance LED will illuminate and the volume control LEDs convert to a Balance control indicator. The center LED will always remain dimly illuminated indicating the center balance position. As balance is adjusted either left or right, another more brightly lit LED illuminates to indicate the now modified balance setting. After 5 seconds of inactivity or a volume adjustment, the LEDs revert back to volume control indicators. If the Balance has been set to an off-center position, the Balance LED will remain lit after the adjustment period. If returned to a centered Balanced position, the Balanced LED will extinguish after the adjustment period.

## **BASIC OPERATION**

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### **MUTE**

**Front panel:** To mute, press the active source's input button.

**Remote control:** Press the mute button.

### **UNMUTE**

**Front panel:** Press the active source's input button again. If the source is changed while the KAV-300i is muted, press the new source's input button a second time to unmute the KAV-300i.

**Remote control:** Press the mute button.

## **OPTIONAL CONFIGURATIONS**

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**S3/proc:** For simplified integration of an A/V surround sound processor, the S3/proc input can be set to operate as a unity gain stage. In this Theater Throughput mode, when the S3/proc input is selected, the KAV-300i's volume and balance controls are disabled. Volume control is transferred from the KAV-300i to the A/V surround sound processor connected to the S3/proc input. The left and right channel volume settings are now independent of the KAV-300i's volume control and the overall system level is determined by the A/V surround sound processor exclusively.

*NOTE: The factory default position sets the S3/Proc input as a standard input.*

To enable this option, it is necessary to remove the top cover of the KAV-300i.

1. Unplug the KAV-300i from the AC outlet.
2. Remove the KAV-300i top cover screws with the supplied T-10 Torx wrench. Lift the cover from the KAV-300i.



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## OPTIONAL CONFIGURATIONS

3. Find the section labeled Input Configure located behind the faceplate directly in back of the KRELL Audio Video logo. The factory default setting is shown in figure 1. Remove the jumper from the **S-3** side and place it on the side labeled **proc** as in figure 2.
4. Place the top cover back on the KAV-300i and insert the cover screws.
5. Plug the KAV-300i back into the AC outlet.

Figure 1.

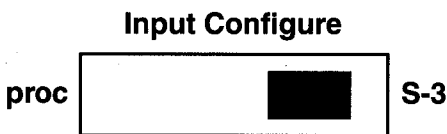
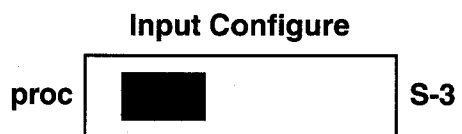


Figure 2.



### PREAMP OUTPUT

The KAV-300i is equipped with a pair of single-ended preamplifier outputs. This allows the KAV-300i to act as a preamplifier when used with a separate amplifier.

*NOTE: The speaker outputs on the KAV-300i remain active at all times.*

## REMOTE CONTROL

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*NOTE: When a function button on the remote control is pressed, the blue pilot LED will flash on the KAV-300i. When the button is released the flashing stops.*

### PREAMPLIFIER FUNCTIONS

<b>LEVEL ▲</b>	Raises volume
<b>LEVEL ▼</b>	Lowers volume
<b>B-1</b>	Selects B-1 input
<b>S-1</b>	Selects S-1 input
<b>S-2</b>	Selects S-2 input
<b>S-3</b>	Selects S-3/Proc input
<b>TAPE</b>	Engages tape monitor
<b>MUTE</b>	No signal output when LED is illuminated.
<b>BALANCE ◀</b>	Shifts balance to the left in 1dB increments. "L" position mutes the right channel.
<b>BALANCE ▶</b>	Shifts balance to the right in 1dB increments. "R" position mutes the left channel.

### CD FUNCTIONS

<b>▶ (PLAY)</b>	Starts CD playback on KRELL CD transports.
<b>   (PAUSE)</b>	Temporarily suspends playback of current track. Second press of the Pause button resumes play.
<b>◀ (TRACK PREV)</b>	Selects and begins playing the track previous to the current track.
<b>▶ (TRACK NEXT)</b>	Selects and begins playing the track after the current track.

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## **AMPLIFIER FUNCTIONS**

<b>PWR</b>	Turns KRELL Remote Control Power amplifiers On or Off.
<b>MTR</b>	Turns KRELL S-Series amplifiers' bias level meters On or Off and cycles through KRELL Audio Standard meter functions.

*NOTE: The B2, Phase, and GAIN buttons are not functional with the KAV-300i.*

## **BATTERY INSTALLATION AND REMOVAL**

*NOTE: Batteries should be replaced when functions from the remote control become intermittent. The KAV-300i remote uses two AA size batteries.*

1. Remove the back plate to expose the battery storage compartment.
2. Remove the old batteries and install new ones following the battery position diagram on the plastic battery receptacle.
3. Re-install the back plate.
4. Check to make sure the remote control is functioning properly.

If you have questions about the remote control operation contact the KRELL staff for assistance.

## **REAR PANEL DESCRIPTION**

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### **INPUTS**

Four single-ended inputs via RCA connectors

**S-1**

**S-2**

**S-3/proc**

**Tape**

One balanced input via XLR connectors (**B1**)

XLR input pin configuration:

Pin 1	Shield (ground)
Pin 2	Non-inverting (hot)
Pin 3	Inverting

### **OUTPUTS**

Speaker outputs via five way binding posts

One tape output via single-ended RCA outputs

One preamplifier output via single-ended RCA outputs

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## QUESTIONS AND ANSWERS

Q. When I turn up the volume on the KAV-300i a loud hum is present from the loudspeakers; what could it be?

A. Hum can be caused by several different disturbances. Check to make sure all of the cables into and out of the KAV-300i are sound and making proper contact. Make sure there are no power supplies or hum inducing components on top or directly below the KAV-300i.

You could also be experiencing a ground loop in the system. Put a 3 prong to 2 prong AC adapter (cheater plug) on the KAV-300i. This should eliminate the hum. If the hum persists, you may need to repeat this procedure on additional components in the system. Please contact your dealer or equipment manufacturer before lifting the ground on any component. Remember to always keep one major component grounded. If these suggestions do not lead to a solution, please consult your dealer or KRELL.

Q. When I select the B1 input on the KAV-300i, one channel seems to have less gain than the other. Is something wrong with the preamplifier?

A. More than likely there is not a problem with the KAV-300i. The balanced input or output internal cable terminations could be incorrect. Locate the channel of the system that appears to have less gain. Switch that channel's input cables. If the problem now appears in the other channel, it is a defective cable. If the problem remains in the original channel, check the KAV-300i output cables using the same procedure. If it is not cable or source related, call your dealer or KRELL.

Check to make sure the Balance LED is not illuminated. If the Balance LED is illuminated, correct the balance by pressing the balance control buttons on the remote control until only the center balance LED is illuminated. (See BALANCE on page 5).

Q. When I use my surround processor, where should I set the volume on the KAV-300i?

A. When using the KAV-300i's Theater Throughput capability, the system volume control is performed by the surround sound processor. This eliminates the need to predetermine a proper volume setting for the KAV-300i as the KAV-300i's level control is not active in this mode (See Optional Configurations page 6 for more information).

## **WARRANTY**

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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.

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

## **RETURN AUTHORIZATION PROCEDURE**

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:

[www.krellonline.com](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](mailto:service@krellonline.com)

**WEBSITE** [www.krellonline.com](http://www.krellonline.com)

**To return this 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 of or damage to this product during shipment to the Krell factory and prepay all shipping charges. Please see the Warranty page in this manual, concerning liability for shipping damage and shipping charges.

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

### **IMPORTANT**

*Use the original packaging to ensure safe transit of this product to the dealer, distributor, or factory. Krell may, at its discretion, return this product in new packaging and bill the owner for such packaging if the product received by Krell was boxed in non-standard 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 this product is returned.*

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

**KAV-300i**

PRODUCT

SERIAL NUMBER

## **SPECIFICATIONS**

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### **POWER/CHANNEL:**

**8 ohms**      **4ohms**  
150 watts      300 watts

### **FREQUENCY RESPONSE:**

1 Hz to 100 KHz, +0dB, -3dB

### **SIGNAL TO NOISE:**

-95 dB; "A" weighted

### **DISTORTION:**

<0.06% THD @ 1KHz  
<0.3% THD @ 20KHz

### **GAIN:**

36.1 dB

### **INPUT VOLTAGE TO OVERLOAD:**

9Vrms

### **INPUT IMPEDANCE:**

210 Kohms

### **OUTPUT IMPEDANCE:**

0.16 Ohm

### **POWER CONSUMPTION:**

50 watts @ idle

### **TRANSFORMER:**

400 VA

### **INPUTS:**

1 balanced, 3 single-ended

### **OUTPUTS:**

1 pair speaker outputs via five way binding posts  
1 single-ended preamplifier output

### **THEATER THROUGHPUT:**

1 single-ended and switchable

### **TAPE LOOP:**

1 single-ended

### **DIMENSIONS:**

#### **Unit:**

19.0" Wide	47.5 cm Wide
15.5" Deep	38.75 cm Deep
3.7" High	9.25 cm High

### **WEIGHT:**

#### **Shipping**

33 lbs.      14.9 kg

#### **Unit only**

25 lbs.      11.4 kg

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