KAV–300r

Stereo Receiver

with Theater Throughput

Instructions for Use

Owner's Reference

KAV–300r

Stereo Receiver
with Theater Throughput

v 00.1

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CE

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

WARNINGS

The KAV–300r must be placed on a firm, level surface where it is not exposed to dripping or splashing.

The ventilation grids on the top of the KAV–300r must be unobstructed at all times during operation. Do not place flammable material on top of or beneath the component.

Do not remove or bypass the ground pin on the end of the AC power cord. This can cause radio frequency interference (RFI) to be introduced into your playback system. Operate the KAV–300r only with the power cord supplied.

Turn off all systems' power before connecting the KAV–300r to any component. Make sure all cable terminations are of the highest quality, free from frayed ends, short circuits, or cold solder joints.

Keep any outdoor antenna away from power lines.

IMPORTANT

If an outdoor antenna is connected to the receiver, be sure the antenna system is grounded to provide protection against voltage surges or build-up of static charges. Article 810 of the US National Electric Code (ANSI/NFPA 70) provides information about the proper grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for grounding electrodes. The antenna must be designed for the 88-108 MHz band.

THERE ARE NO USER SERVICEABLE PARTS INSIDE ANY KRELL PRODUCT.

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

P/N 303989

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Introduction

Thank you for your purchase of the Krell KAV–300r Stereo Receiver with Theater Throughput. The KAV–300r gives the audiophile an exceptional-sounding, two-channel music system in a convenient package that can stand alone or easily be integrated into a multi-component system. The tuner combines strong reception and quality sound with transparent functioning and can be operated through the front panel or the remote. Six programmable tuner presets allow instant selection of your favorite AM or FM stations. The FM mute and high frequency blend features also let you control background and between-station noise when selecting FM stations with weaker broadcast signals.

The Theater Throughput feature simplifies the integration of an audio/video surround sound processor into your system. The remote provides convenient operation of the KAV–300r and other Krell KAV components.

This owner's reference manual contains important information on placement, installation, and operation of the KAV–300r. Please read this information carefully. A thorough understanding of these details will help ensure satisfactory operation and long life for your KAV–300r 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.

Definition of Terms, continued

OPERATION

Off
When the power button on the front panel or the power key on the remote control is pressed and the blue power LED turns off, the component is off.

Operational Mode
When the power button on the front panel or the power key on the remote control is pressed and the blue power LED illuminates, the component is in the operational mode and ready to play music.

Stand-by Mode
A low power consumption status that keeps the audio and regulator circuits at idle. Krell recommends leaving the component in the stand-by mode when it is not playing music.

Unpacking

1. Open the box and remove the top layer of foam. You see these items:

   1 KAV–300r Stereo Receiver
   1 KAV–300r remote control
   1 AC power cord
   1 12 VDC (12 V trigger) cable
   1 AM loop antenna and base (base not attached)
   1 FM indoor dipole antenna
   1 matching transformer for the FM antenna
   2 AAA-size 1.5 V batteries
   1 trimmer adjustment tool
   1 owner's reference manual and warranty registration card

2. Carefully remove the unit and accessories from the box.

3. Remove the foam end caps and protective plastic wrap from the unit.

Notes
If any of the items listed above are not included, please contact your authorized Krell dealer, distributor, or Krell immedi-ately for assistance.

Save all packing materials. If you need to ship your KAV–300r in the future, repack the unit in its original packaging to prevent transit damage.

Placement

Before you integrate the KAV–300r into your system, review the following to properly place your component. This will facilitate a clean, trouble-free installation.

For installations inside cabinetry, extra ventilation may be necessary. The KAV–300r requires at least two inches (5 cm) of clearance on each side and at least two inches (5 cm) of clearance above to provide adequate ventilation. The KAV–300r does not require a special rack or cabinet for installation. For the dimensions of the KAV–300r, see ***Specifications,*** on the back cover.

The KAV–300r is not particularly hum-sensitive. Other components may be placed on or around the KAV–300r, as long as the ventilation grids remain unobstructed.

Note
Some televisions and fluorescent lights generate high levels of AM radiation, which can interfere with AM reception. Electro-magnetic radiation from some radio receiving and transmitting equipment (such as televisions, video recorders, digital equipment, and computers) can also cause noise and interference.

Place the KAV–300r as close to the speakers as possible. Run long balanced interconnect cables to the receiver and keep speaker cable lengths to a minimum. Speaker cable adds impedance to the load the amplifier must drive, regardless of the cable gauge.

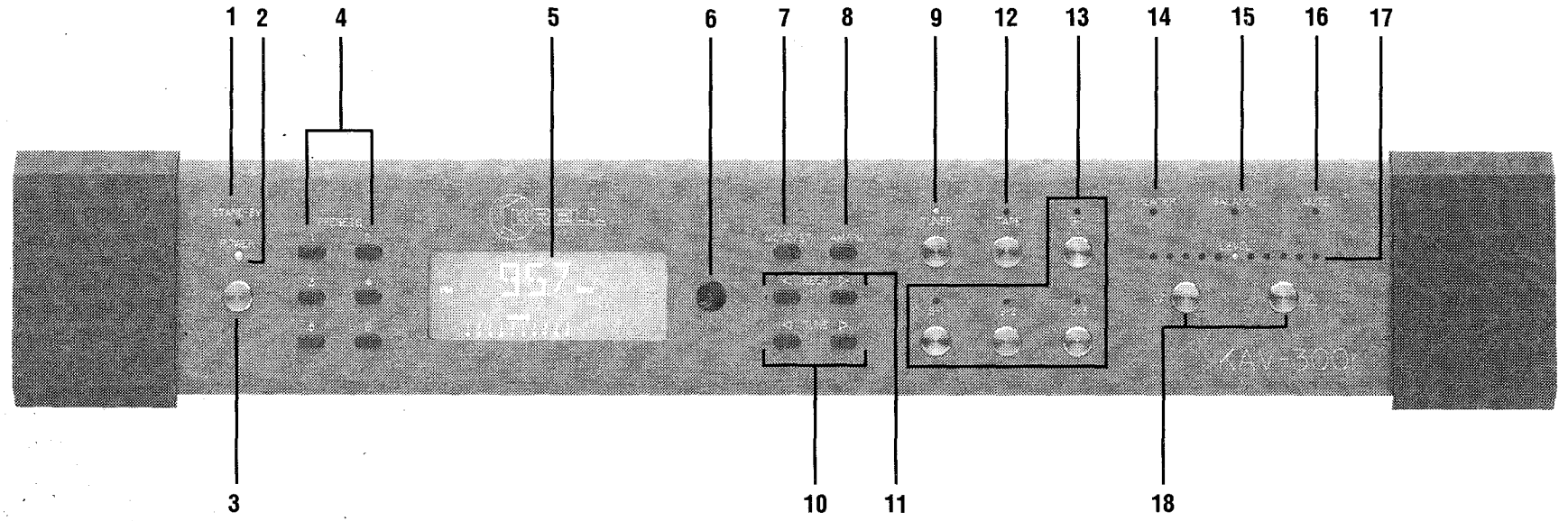
AC POWER GUIDELINES

The KAV–300r 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 component's power supply rating of 400 VA.

Power Cord

The KAV–300r 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–300r.

FIGURE 1 THE KAV-300r FRONT PANEL



Power Functions
1 Stand-by LED
2 Power LED
3 Power Button

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5 Tuner Display
6 Infrared Sensor
7 Mono/St Button
8 AM/FM Button
9 Tuner Button and LED
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12 Tape Button and LED

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16 Mute LED
17 Level LEDs

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18 Down/Up Buttons

Front Panel Description

See Figure 1 on page 4

The KAV–300r front panel provides on/off, tuner selection, input selection, and volume control. Additional functions are accessed using the remote control. See ***Remote Control Description,*** on page 11.

A description of front panel buttons and their functions follows.

Power Functions

1 Stand-by LED
The red stand-by LED illuminates when the KAV–300r is plugged into a standard AC wall receptacle, indicating that the receiver is ready to be switched on.

2 Power LED
The blue power LED illuminates when the KAV–300r is on.

3 Power Button
Use this button to turn the KAV–300r on and off and also to switch the 12 VDC (12 V trigger) output on and off.

Tuner Functions

4 Preset Buttons
The KAV–300r has six presets that can be used to save six AM and six FM station settings and recall programmed settings. The station frequency and assigned preset number appear in the tuner display. Presets are programmed through the front panel or remote control. See ***Programming Presets,*** on page 17.

5 Tuner Display
The tuner display shows the current station position as well as the status of other tuner functions.

6 Infrared Sensor
The infrared sensor receives commands from the KAV–300r remote control. For proper remote control operation, make sure the infrared sensor is clear of any obstructions.

7 Mono/St Button
Use this button to select mono mode (if, for example, the broadcast signal is weak or noisy). The tuner display window indicates MONO. A stereo broadcast automatically decodes in stereo as long as the signal is above the stereo switching threshold. Mono/Stereo switching in FM is automatic unless mono is selected.

8 AM/FM Button
Use this button to choose either AM or FM station frequency.

9 Tuner Button and LED
Use this button to activate the tuner. The red tuner LED above the button illuminates when the tuner is activated. The tuner button is also used to program presets. See ***Programming Presets,*** on page 17.

10 Tune Buttons
Use these buttons to move the tuner selection up or down in one-step increments.

11 Seek Buttons
Use these buttons to find the next available AM or FM station frequency.

Tape Input and Output Functions

12 Tape Button and LED
Use this button to select the tape input and output feature. For more information, see ***Tape Input and Output,*** on page 17. The red tape LED, located above the tape button, illuminates when the tape feature is activated.

Front Panel, *continued*

See Figure 1 on page 4

Analog Inputs

13 B-1, S-1, S-2, and S-3 Buttons and LEDs

Use these buttons to choose from one balanced XLR source (B-1), and three single-ended RCA sources (S-1, S-2, and S-3).The red LED above the selected input illuminates.

Processing Indicators

14 Theater LED

The red Theater Throughput LED illuminates when you select any of the inputs (S-1, S-2, S-3, or B-1) as a Theater Throughput source. See ***Optional Configurations,*** on page 18.

15 Balance LED

The red balance LEDs illuminate when you adjust the balance to the left or right channel. Balance adjustment is activated only through the remote control. See ***Balance Keys (47),*** on page 12.

16 Mute LED

The red mute LED illuminates when you press the mute key on the remote control. Mute interrupts the signal of the input you have selected. To unmute, press mute again.

17 Level LEDs

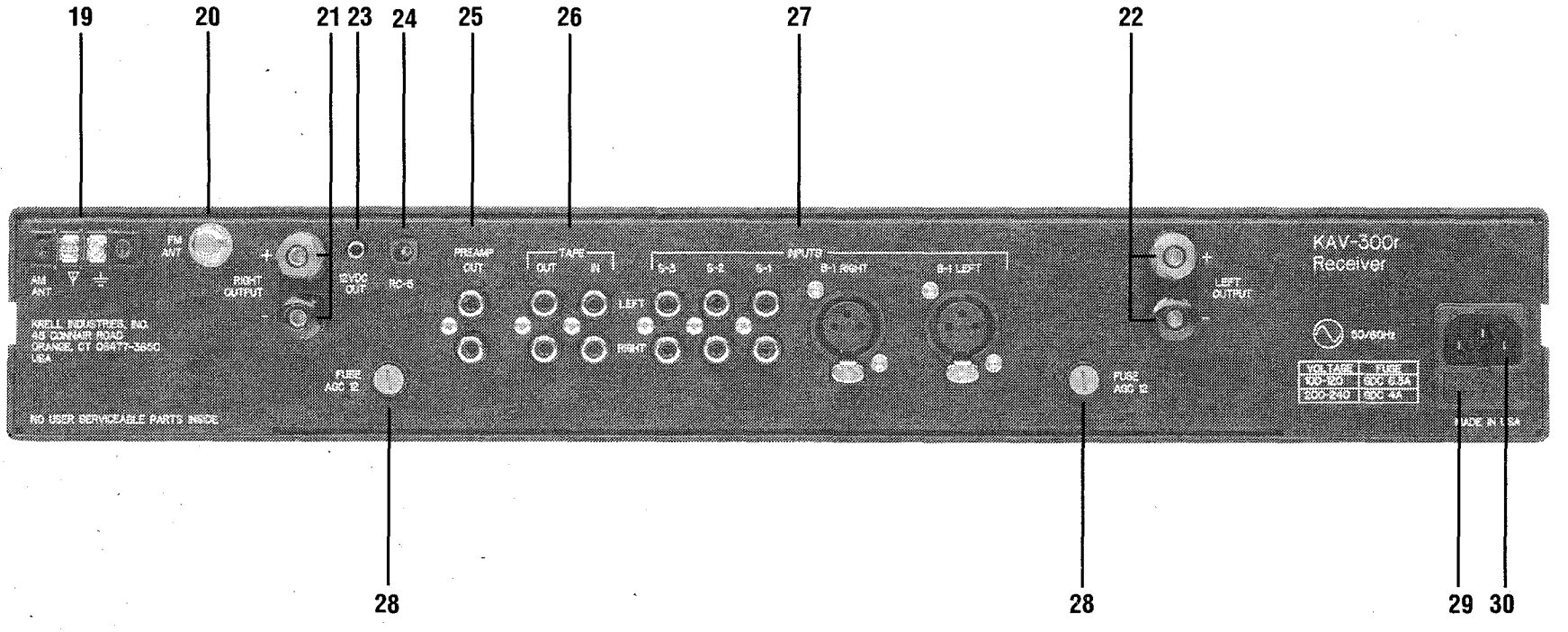
The red volume level LEDs illuminate to show the system output level.

Level Adjustments

18 Down/Up Buttons

Use these buttons to adjust the system output level (left button decreases volume; right button increases volume) and system balance levels.

FIGURE 2 THE KAV- 300r BACK PANEL



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23 12 VDC Out
24 RC-5

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29 Line Fuse

Power
30 IEC Power Receptacle

Back Panel Description

See Figure 2 on page 7

The back panel provides connections for AM and FM antennae, inputs and outputs, and power. A description of back panel components and their functions follows.

Antenna Connections

19 AM Ant
The KAV–300r is equipped with one AM loop antenna, which must be attached to the AM antenna screw terminal. See ***How to Install Antennae,*** on page 13.

20 FM Ant
The KAV–300r is equipped with one FM dipole antenna, which must be plugged in to the FM antenna coaxial connector. See ***Figure 4, Installing the FM Antenna,*** on page 14, and ***How to Install Antennae,*** on page 13.

Amplifier Channels

21 Right Output
22 Left Output
The KAV–300r is equipped with standard binding posts for each amplifier channel. These connectors accept bare wire, banana plugs, pins, or spade lugs. Use the red terminal for the positive connection and the black terminal for the negative connection.

Remote Controls

23 12 VDC Out
The 12 VDC (12 V trigger) output allows the KAV–300r to activate other Krell components and other devices that have a 12 Volt trigger input.

Notes
The 12 VDC output power is limited to 30 ma.

Refer to the owner's manual of every component used in a custom installation to take full advantage of the KAV–300r remote capability.

24 RC-5
The RC-5 input accepts baseband RC-5 input commands from hardwired remote controllers.

Analog Inputs and Outputs

25 Preamp Out
The KAV–300r is equipped with a pair of single-ended preamplifier outputs.

Note
The amplifier channel outputs are always active, even when the KAV–300r is only being used as a preamplifier.

26 Tape Out/In
The KAV–300r is equipped with one set of single-ended tape inputs and outputs via RCA connectors.

27 S-3, S-2, S-1, B-1 Inputs
The KAV–300r is equipped with three sets (left and right) of single-ended inputs via RCA connectors. The KAV–300r is also equipped with one set (left and right) of balanced inputs via XLR connectors.

Fuses

28 Fuse AGC 12
The AGC 12 fuses protect the KAV–300r against short circuits in speaker output.

29 Line Fuse
The 50/60 Hz line fuse protects the KAV–300r against short circuits from the AC power lines.

Back Panel Description, *continued*

See Figure 2 on page 7

Note

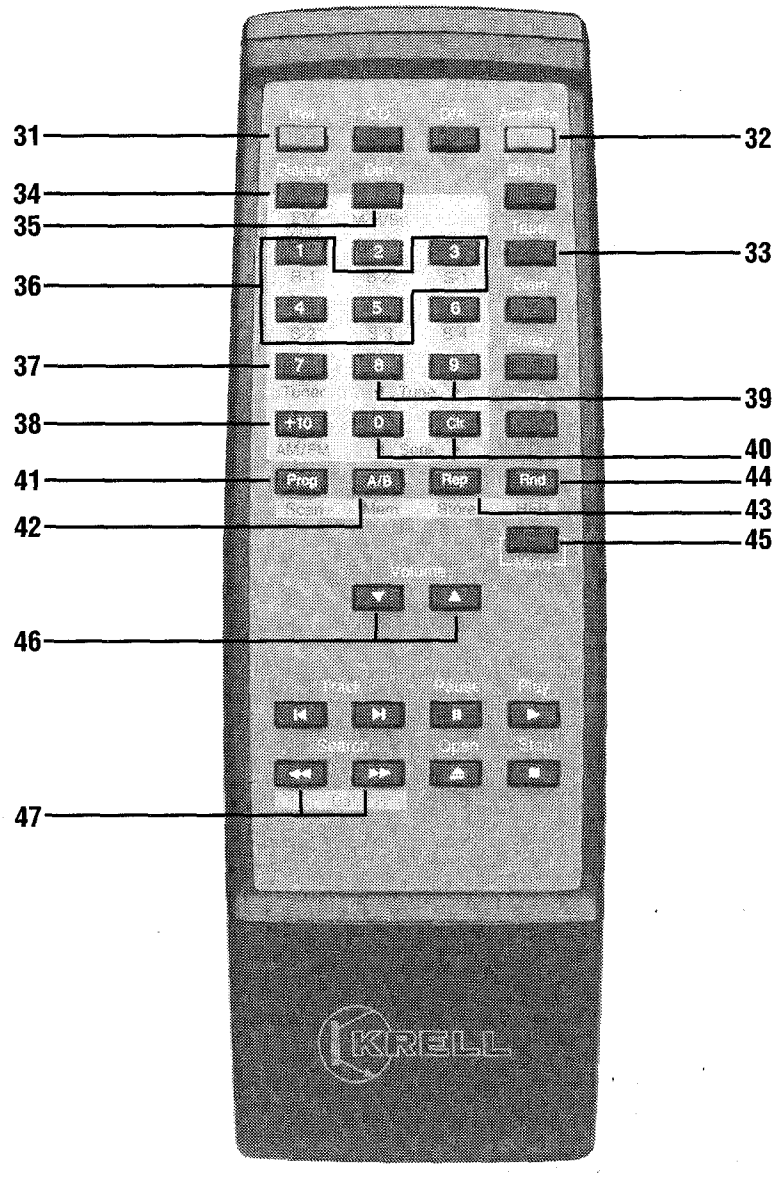
Fuses must be replaced with the fuse value specified on the KAV–300r back panel.

Power

30 IEC Power Receptacle

The KAV–300r is equipped with an IEC power receptacle for use with the AC power cord.

FIGURE 3 THE KAV–300r REMOTE CONTROL



Power Functions
31 Pwr Key
32 Amp/Pre Key

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33 Tape Key

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34 FM Mute Key
35 Mon/St Key
36 Analog Input Keys
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39 Tune Keys
40 Seek Keys
41 Prog/Scan Key

Advanced Functions
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44 Rnd/HFB Key
45 Mute Key
46 Volume Keys
47 Balance Keys

Note: *Some keys on the remote control do not function with the KAV–300r.*

Remote Control Description

See Figure 3 on page 10

The KAV–300r remote control provides power on/off, and basic and advanced tuner functions.

BATTERY INSTALLATION AND REMOVAL

The KAV–300r handheld remote control uses two AAA-size 1.5 Volt batteries. Batteries are included with the shipment.

To install the batteries in the handheld remote control:

1. Remove the backplate by sliding the cover down.
2. Install the batteries, following the battery position diagram on the plastic battery receptacle.
3. Replace the backplate.

The remote control is ready for operation.

Replace batteries when remote control function becomes intermittent. Remove batteries if the remote control is not to be used for a long period of time. Battery leakage can damage the remote control.

A description of the remote control keys and their functions follows.

Notes

When a remote control function key is pressed, the KAV–300r blue power LED flashes. When the key is released, the flashing stops.

The CD function keys (CD, track, pause, play, open, stop), and D/A, Dig In, Gain, Phase, and Intro keys are not functional for the KAV–300r.

Power Functions

31 Pwr Key

Use this key to turn the KAV–300r on and off.

32 Amp/Pre Key

Use this key to activate the KAV–300r remote control and access receiver commands.

Tape Input and Output

33 Tape Key

Use this key to compare the output signal of a three-head analog tape recorder to the output signal of an audio source, when making a recording. The red tape LED illuminates when the tape recorder is activated. The red tape LED does not illuminate when the audio source is activated. See ***Tape Input and Output,*** on page 17.

Tuner Functions

The keypad keys access FM mute and mono/stereo functions, analog input sources, and tuner functions. A description of these keys and their functions follows.

Note

Keypad numbers 1-6 are active only for programming and accessing tuner presets. See ***Programming Presets,*** *on page 17. Keypad numbers 7-9, 0, and +10 are not functional on the KAV–300r.*

34 FM Mute Key

Use this key to turn FM mute on and off. FM mute off allows you to hear FM stations with broadcast signals not strong enough for clear reception. To turn mute on, press the FM mute key. Mute on reduces the noise between station positions, for better monitoring of audio output as you tune.

Note

The tuner display indicates mute on; it does not indicate mute off.

Remote Control Description, *continued*

See Figure 3 on page 10

35 Mon/St Key
Use this key to select mono mode (if, for example, the signal is weak and noisy). The tuner display indicates MONO. A stereo broadcast is automatically decoded in stereo as long as the signal is above the stereo switching threshold. Mono/stereo switching in FM is automatic unless mono is selected.

36 Analog Input Keys
Use these keys to choose from one balanced XLR source (B-1) and three single-ended RCA sources (S-1, S-2, and S-3).

Note
B-2 and S-4 analog inputs are not functional on the KAV–300r.

37 Tuner Key
Use this key to select the tuner.

38 AM/FM Key
Use this key to select either AM or FM station frequency.

39 Tune Keys
Use these keys to move the tuner selection up or down in one-step increments.

40 Seek Keys
Use these keys to find the next available AM or FM station frequency.

41 Prog/Scan Key
Use this key to move the tuner selection to the next available AM or FM station frequency. The tuner pauses for five seconds, then moves to the next available station. To stop the tuner from moving to the next station, press the scan key again.

Advanced Functions

42 A/B/Mem Key
Use this key to access programmed presets. See ***Programming Presets,*** on page 17.

43 Rep/Store Key
Use this key to store a preset selection. See ***Programming Presets,*** on page 17.

44 Rnd/HFB Key
Use this key to reduce noise when an FM station with weak broadcast signal and high background noise is selected. Note that some high frequency stereo separation is reduced along with the background noise.

45 Mute Key
Use this key to interrupt the signal of the selected input. The red mute LED (16) on the front panel illuminates when you press the mute key.

46 Volume Keys
Use these keys to adjust the volume of the KAV–300r output (left key decreases volume; right key increases volume). The level LEDs on the front panel indicate the volume level.

47 Balance Keys
Use these keys to shift balance to the left or right in 1 dB increments. The "L" position mutes the right channel. The "R" position mutes the left channel.

When either balance key is pressed, the balance LED (15) illuminates and the volume level LEDs (17) convert to balance indicators. The center LED remains illuminated, indicating the center balance position. As balance is adjusted left or right, a second LED illuminates, indicating the modified balance setting.

If the balance has been set off-center, the balance LED remains illuminated after the adjustment. After five seconds of inactivity or a volume adjustment, the level LEDs revert to volume indicators.

Connecting the KAV–300r to Your System

To prevent the introduction of hum or other noise into the system, organize all wiring neatly between the KAV–300r and other system components and separate AC wires from audio cables.

The KAV–300r uses standard binding posts for each amplifier channel. These connectors accept bare wire, banana plugs, pins, or spade lugs. Use the red terminal for the positive connection and the black terminal for the negative connection.

1. Connect the speaker cables to the left (22) and right (21) amplifier channel output terminals located on the back panel.
2. Connect the left and right outputs of your source components to the analog inputs (27) on the KAV–300r.
3. Plug the AC power cord into the IEC power receptacle (30) on the KAV–300r back panel. Plug the remaining end into the AC wall receptacle. The red stand-by LED (1) on the front panel illuminates.

The KAV–300r is equipped with one set of balanced inputs (B-1) via XLR connectors, three sets of single-ended inputs (S-1, S-2, and S-3) via RCA connectors, and one tape input and output loop via RCA connectors. Any balanced or single-ended input may be configured for Theater Throughput. See ***Optional Configurations,*** on page 18.

Krell recommends using balanced interconnect cables. Balanced interconnect cables can minimize sonic loss and are immune to induced noise, especially for installations using long cables. The balanced connection has 6 dB more gain than single-ended connections. When level matching is critical, please keep this specification in mind.

Notes

All inputs and outputs are labeled on the back panel. Maintain the correct left/right orientation.

Single-ended preamplifier outputs can be used to simultaneously feed different systems.

HOW TO INSTALL ANTENNAE

FM Indoor Dipole Antenna

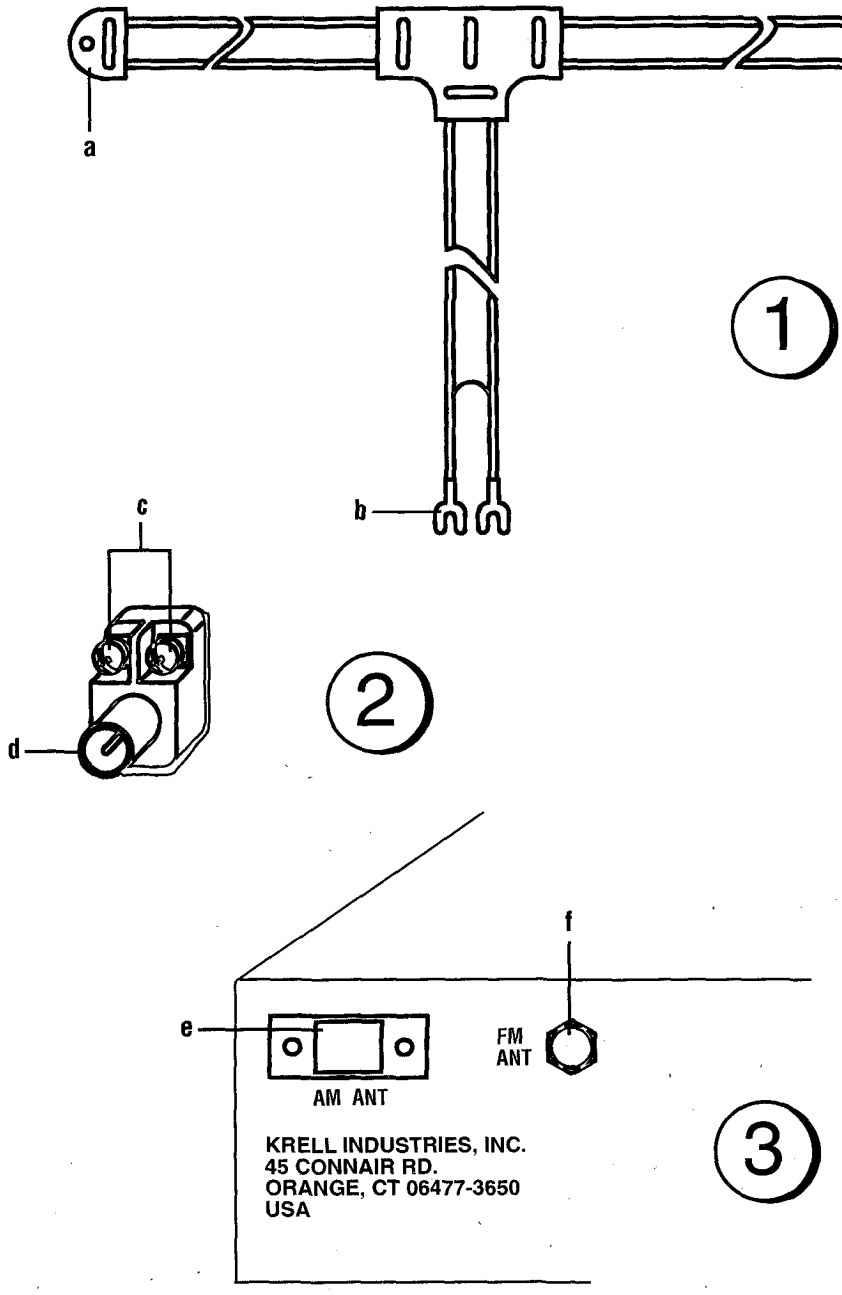
See Figure 4 on page 14

An FM indoor dipole antenna and matching transformer are included with the KAV–300r.

To connect the FM indoor dipole antenna:

1. Loosen the two screws on the matching transformer (c).
2. Insert the antenna spade lugs (b) between the screw heads and the screw bases (c).
3. Tighten screws to secure the spade lugs.
4. Plug the transformer's coaxial connector (d) into the FM Ant coaxial connector (f) on the back panel.
5. Stretch out the antenna wires and move the antenna around to find the best signal strength and clarity.
6. Attach the antenna to the wall or other preferred location, such as inside cabinetry. Small nails can be driven through the holes in the plastic caps, located at the end of the antenna wires, to secure the antenna.

FIGURE 4 INSTALLING THE FM ANTENNA



1 FM Indoor Dipole Antenna
2 Matching Transformer
3 Back Panel, KAV–300r

a End Cap
b Spade Lugs
c Screws
d Transformer Coaxial Connector
e AM Antenna Screw Terminal
f FM Antenna Coaxial Connector

Connecting the KAV–300r to your System, *continued*

HOW TO INSTALL ANTENNAE, *continued*

Notes

For optimum tuner reception and performance, use an outdoor FM antenna. The antenna needs to have good gain and directional characteristics, be mounted as high as possible away from any large metal objects, and point toward the transmitter.

When the outdoor antenna is installed, disconnect the FM indoor antenna.

AM Loop Antenna

An AM loop antenna is included with the KAV–300r.

Note
The AM loop antenna must be connected even when an outdoor antenna is installed because the AM loop antenna forms part of the AM tuning circuit.

To connect the AM loop antenna:

1. Loosen screws on the AM Antenna screw terminal (19) on the back panel.
2. Insert spade lugs between screw heads and screw bases.
3. Tighten screws to secure spade lugs.
4. Move the AM loop antenna around to find the best signal strength and clarity.
5. Use the antenna base provided to attach the AM loop antenna to a wall or other location, if desired. The base can be taped to a surface or screwed in (screw not provided).

For enhanced AM reception, you can connect a single connector wire (approximately 20 feet) to the pole marked AM ANT(19) on the back panel of the KAV–300r. Extend the wire to find the best signal strength and clarity.

Receiver Operation

The KAV–300r provides input and preset selection and volume control from the front panel. The remote control provides additional functions. Instructions for receiver operation follow.

POWER ON

1. Turn the receiver on by pressing the power button (3) on the front panel or pressing the pwr key (31) on the remote control.

   The KAV–300r power supply incorporates a slow start protection circuit that prevents excessive current from reaching the audio circuitry upon initial power on. After pressing the power button (3) or pwr key (31), the red stand-by LED (1) on the front panel extinguishes, and the blue power LED (2) and the tuner display (5) illuminate. There is a short delay, followed by an audible click. This click is the protection circuitry disengaging. The KAV–300r is now ready for operation.

2. Select a source device either from the front panel (13) or using the remote control (36). The source begins to play.

3. Set the volume to a comfortable listening level.

4. When changing sources, lower the volume to off (18), or mute the output (45). See ***Mute Key,*** on page 12. This ensures that the next source played does not damage your system with a high output transient.

TUNER FUNCTIONS

Selecting a Station

1. Press the AM/FM button (8) on the front panel or the AM/FM key (38) on the remote control to select the desired mode.

2. Select the desired station frequency. There are three ways to select a station:

   Tune—Use these buttons (10) or keys (39) to move the tuner selection up or down in one-step increments.

   Seek—Use these buttons (11) or keys (40) to find the next available AM or FM station frequency.

   Prog/Scan—Use this key (41) to move the tuner selection to the next available AM or FM frequency. The tuner pauses for five seconds, then moves to the next available station. To stop the tuner from moving to the next station, press the scan key again.

The selected station frequency appears in the tuner display (5) on the front panel.

Programming Presets

The KAV–300r has six presets that can be used to store six AM and six FM stations. To assign a station frequency to a preset:

1. Select the desired AM or FM station frequency to be stored, using tune, seek, or scan. The selected station frequency appears in the tuner display (5).
2. Press and hold the tuner button (9) on the front panel or rep/store key (43) on the remote control for three seconds. The blue power LED (2) starts blinking.
3. Press the desired preset button (4) on the front panel or desired keypad number (1-6) on the remote control. The blue power LED stops blinking, indicating the preset information is stored. The station frequency along with its assigned preset number appears in the tuner display.

To determine which station frequency is assigned to a preset, press any preset button on the front panel, or press the A/B/mem key (42) followed by the number on the keypad assigned to the preset. The station frequency that corresponds to the preset number appears in the tuner display.

Notes

When accessing programmed presets using the A/B/mem key (42), you must enter 01 for preset 1, 02 for preset 2, and so forth. The preset number does not appear in the tuner display.

Tape Input and Output

The KAV–300r has a discrete tape input and output. The tape output is used to send S-1, S-2, S-3, or B-1 to a recording device or processor. You can use the tape feature in two ways:

1. 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 input selector buttons (13) or keys (36). Press the tape button (12) or key (33) to switch between the tape recorder output (LED illuminated) and the input source (LED not illuminated).
2. Use the tape output to create a processor loop, when the KAV–300r is connected to a graphic equalizer or other ancillary equipment. To activate this function, connect the equipment to the KAV–300r tape outputs (26) as described in the equipment manufacturer's manual. Press the tape button or key to switch between the processor output (LED illuminated) and the input source (LED not illuminated).

Note

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

Optional Configurations

CONFIGURING THE KAV–300r FOR THEATER THROUGHPUT

To simplify the integration of an audio/video surround sound processor into your system, set any KAV–300r input (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–300r input for Theater Throughput, the KAV–300r volume and balance controls are transferred to the audio/video surround sound processor, for integrated volume and balance management and ease of operation. As long as the KAV–300r input is configured for Theater Throughput and connected to the audio/video surround sound processor's input configured for Theater Throughput, all KAV–300r volume and balance adjustments are made through the surround sound processor. When you disengage the KAV–300r input from Theater Throughput, the volume and balance controls revert to the KAV–300r.

How to Activate an Input for Theater Throughput

IMPORTANT

Always turn off the source component before you configure any input for Theater Throughput.

1. Turn on the KAV–300r power using the power button (3).
2. Press and hold the button for the input to be configured for Theater Throughput, for three seconds. The Theater Throughput LED (14) illuminates.
3. Use the corresponding input on the back panel to connect the KAV–300r to your audio/video surround sound processor.

IMPORTANT

Make sure that the source component is a surround sound processor. Other source components 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–300r for Theater Throughput.

How to Disengage an Input for Theater Throughput

1. Turn on the KAV–300r power using the power button (3).
2. Press and hold the button that corresponds to the input configured for Theater Throughput, for three seconds.
3. Theater Throughput is disengaged when the Theater Throughput LED (14) turns off.

PREAMPLIFIER OUTPUT

The KAV–300r is equipped with a pair of single-ended preamplifier outputs (25). These outputs allow the KAV–300r 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–300r is only being used as a preamplifier.

ADJUSTING CONTRAST AND BRIGHTNESS OF THE TUNER DISPLAY

The contrast and brightness of the tuner display (5) can be adjusted using the screws located on the underside of the KAV–300r unit. To increase tuner display contrast, turn the screw closest to the KAV–300r front edge clockwise. To increase tuner display brightness, turn the screw furthest from the front edge counterclockwise. Use the trimmer adjustment tool provided.

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 speakers. This often occurs when connecting new components into a system.

If a low frequency hum emanates from the speakers when you place the KAV–300r into the system, follow these simple troubleshooting steps before contacting your authorized Krell dealer, distributor, or Krell.

1. Check all input and output connections, making sure they are of sound construction. With the receiver off, remove the interconnect cables, then turn the receiver on. If the hum disappears, turn the receiver off and reinsert one of the interconnect cables. Turn the receiver back on. If the hum reappears with one or both interconnects inserted, there may be a defective cable. Have the interconnect cables checked before proceeding.
2. If the interconnects prove to be 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.

See ***Placement***, on page 3, for information about electromagnetic radiation that can cause noise and interference.

Questions and Answers

Q. When I turn up the volume on the KAV–300r, there is a loud hum from the loudspeakers; what could it be?

A. Hum can be caused by several different disturbances. Check to make sure all cables into and out of the KAV–300r are sound and making proper contact. Also make sure there are no power supplies or hum inducing components on top of or directly below the KAV–300r. Another possible source of hum could be a ground loop in the system. Please contact your authorized Krell dealer, distributor, or Krell for suggestions on solving this problem.

Q. When I select the B-1 input on the KAV–300r, one channel seems to have less gain than the other. Is something wrong with the preamplifier?

A. First check the balance LEDs. If the balance has been set off center, the red balance LEDs left or right of center remain illuminated after the adjustment. See ***Balance Keys (47),*** on page 12.

Next, check the input cables. 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, the cable is defective. If the problem remains in the original channel, check the KAV–300r output cables using the same procedure. If the difference in gain is not cable related, call your authorized Krell dealer, distributor, or Krell.

Q. When I use my surround sound processor, where should I set the volume on the KAV–300r?

A. The volume level control on the KAV–300r is not active in Theater Throughput mode. When using the KAV–300r Theater Throughput feature, system volume control is regulated by your surround sound processor. See ***Configuring the KAV–300r for Theater Throughput,*** on page 18.

Warranty

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 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.

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KAV–300r

Stereo Receiver

with Theater Throughput

v00.1

Specifications

Tuner

TOTAL STATION PRESETS

6 FM, 6 AM

FM Tuner Specifications

SIGNAL STRENGTH FOR 50 dB QUIETING
MONO/STEREO

15/28 dBf

TOTAL HARMONIC DISTORTION (THD)
MONO/STEREO

1 kHz and
100% Modulation 0.3, 0.5%

ANTENNA INPUT
UNBALANCED

300 Ohms

CHANNEL SEPARATION

1 kHz 36 dB

AM SUPPRESSION

55 dB

CAPTURE RATIO
WIDE

1.5

ALTERNATE CHANNEL SELECTIVITY
WIDE

60 dB

ADJACENT CHANNEL SELECTIVITY
WIDE

13 dB

FREQUENCY RESPONSE

15 Hz to 15 kHz +0 dB, -1.0 dB

AM Tuner Specifications

SIGNAL TO NOISE
MAXIMUM

50 dB

ANTENNA INPUT
UNBALANCED

75 Ohms

Integrated Amplifier

FREQUENCY RESPONSE

1 Hz to 100 kHz +0 dB, -3.0 dB

SIGNAL TO NOISE RATIO
"A" WEIGHTED

95 dB

GAIN

36.1 dB

INPUT IMPEDANCE

210 kOhms

OUTPUT POWER
EACH CHANNEL DRIVEN

8 Ohms 150 W

4 Ohms 300 W

POWER CONSUMPTION

Idle 50 W

Max. 600 W

INPUTS

1 pair balanced via XLR connectors
3 pair single-ended via RCA connectors

OUTPUTS

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

TAPE MONITOR

1 pair each single-ended inputs and outputs
via RCA connectors

REMOTE CONTROL

1 handheld wireless infrared

1 12 VDC Out (12 V trigger)
via a 3.5 mm mini connector

1 RC-5 remote control input
via a DC power connector

DIMENSIONS

19.0w x 3.7h x 14.7d in.

48.3w x 9.4h x 37.3d cm

WEIGHT

Shipping 35 lb., 15.9 kg

Unit only 27 lb., 12.3 kg

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