

KRC-2 OWNER'S REFERENCE

## A. INTRODUCTION

Thank you for your purchase of the KRELL KRC-2 remote control preamplifier. The KRC-2 combines the latest evolutions in preamplifier technology with a radical approach to remote control circuitry. The KRC-2 is part of a new generation of KRELL products where convenience is united with exceptional sonic quality.

To obtain the best performance from your KRC-2, careful attention should be paid to its placement, installation and operation. A thorough understanding of these details will help insure satisfactory operation and long life for the KRC-2 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 KRC-2 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 KRC-2 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 authorized KRELL Dealer or Distributor.

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# C. UNPACKING AND ASSEMBLY

1. Open the box and remove the top layer of foam. The KRC-2 and following items will now be visible:

1	KRC-2 remote control
1	Warranty card
1	AC power cord
1	Owner's Reference

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

3. Remove the plastic bag from the preamplifier and remote control.

NOTE: Save all packing materials. If you must ship your KRC-2 in the future, repack the unit with the remote control in its original packaging to prevent transit damage.

# D. BASIC INSTALLATION AND OPERATION

- 1. Place the unit on a firm level surface free from excessive dirt or moisture. The KRC-2 is not particularly hum sensitive, therefore other components can be placed on or around the KRC-2.
- 2. If you are using the separate KPE phono stage with the KRC-2, the following connections apply:

NOTE: If you are not using the KPE proceed to step 3.

- a. Unplug the KRC-2 from the wall AC receptacle.
- b. Locate the 9 pin DC power connector labeled KPE POWER.
- c. Connect the KPE with the DC power cable supplied with the phono stage, to the KPE POWER input on the KRC-2.
- d. Plug the KRC-2 into the wall AC receptacle. The Pilot LED on the KPE should illuminate along with the KRC-2. The input select will default to the mute position. Should the KPE pilot LED not illuminate, unplug the KRC-2 from the wall AC receptacle and check all of your connections. Should you have difficulty powering the KRC-2 and the KPE together please contact Krell for assistance.
- 3. If you are not using the KPE, plug the AC cord into the receptacle on the back of the unit. Plug the remaining end into the wall AC receptacle. The pilot LED will illuminate, and the KRC-2 will default to the Mute position.

NOTE: While the KRC-2 has superb regulation and does not require a dedicated AC circuit, we strongly advise against any connections through extension cords or multiple AC adaptors. High quality 15 amp line conditioners or grounded AC strips are acceptable.

NOTE: The KRC-2 provides two special remote connectors on the backpanel. These are provided for future room remote and remote slave formats. Please consult the KRELL staff for assistance on these developments.

# E. INPUT AND OUTPUT CONNECTIONS

CAUTION: When making connections to this component or any other, make sure the power amplifier is OFF.

CAUTION: Make sure all cable terminations are of the highest quality, free from frayed ends, shorts or cold solder joints.

1. Connect the left and right outputs of your source components to the inputs on the KRC-2. The KRC-2 is equipped with 4 single-ended inputs, 2 balanced capable inputs, a single ended tape input and tape output.

The single-ended and balanced inputs are labeled S-1 through S-4, B-1 and B-2 respectively, to allow customization in the set-up of your system. There is no difference between the four single-ended inputs, or between the two balanced inputs.

2. Connect the output of the KRC-2 to the input of your power amplifier. The KRC-2 has both Balanced outputs via standard XLR type connectors and single-ended outputs via standard RCA type connectors.

The pin assignment for the XLR connectors is:

pin 1 = shield (ground)

pin 2 = non-inverting input (hot)

pin 3 = inverting input

NOTE: The RCA center conductor for each channel is wired in parallel with pin 2, the non-inverted output. Only one of these outputs should be connected to a single stereo amplifier.

NOTE: When connecting inputs or outputs to the KRC, remember the balanced connections will have 6dB of gain more than the single-ended connections. When level matching is critical in your install, keep this specification in mind.

# CONNECTIONS

#### **REAR PANEL DESCRIPTION**

#### **INPUTS**

Four single-ended inputs via standard RCA connectors

S1 S2 S3 S4

Two balanced inputs via standard XLR connectors

B1 B2

**TAPE** 

Tape input via standard RCA connectors

TAPE OUTPUT

Record via RCA connectors

**MAIN OUTPUTS** 

Single-ended RCA output connectors Balanced XLR output connectors

XLR input and output pin configuration

pin 1 Ground (shield)pin 2 0 degrees (non-inverting)pin 3 180 degrees (inverting)

# F. BASIC PREAMPLIFIER OPERATION

The KRC-2 has the flexibility of a remote controlled device but does not require special attention in order to perform simple functions. The KRC-2 will function much like other Krell preamplifiers. The unit can be operated from the front panel controls or via the remote control. All functions available on the front panel can also be accomplished from the KRC-2 remote control. This gives you the ability to sit in your favorite listening position and control all preamplifier functions.

#### Notes on the Volume Control:

The level control on the KRC-2 is quite unique in that the output level is indicated by illuminated LEDs around the outside of the level control, not by the physical position of the level control. When you change level with the remote control, the position of the level control knob does not change. When you increase the volume manually or by remote control, indicator LEDs will illuminate clockwise. When you decrease the volume, indicator LEDs illuminate counter clockwise. When the level is fully off, no indicator LEDs will be illuminated. This is because level is electrically regulated with out the use of a potentiometer.

The level indicator display for the KRC-2 can be switched between a bar graph mode and a single LED mode. In the bar graph mode all LEDs are illuminated to the point where level is set. In the single LED mode only one LED is illuminated at the level setting. To change from bar graph mode to single LED mode, press and hold the MUTE button for approximately 3 seconds. Level will now be indicated with a single LED. Hold the MUTE button in again for 3 seconds to change the display back to the bar graph mode. The display can only be changed via the front panel.

NOTE: When changing the volume display, do not select the mute position before trying to change the display. When you are changing the volume display and holding in the mute button, the mute LED will not illuminate.

#### **Basic Operation:**

- 1. Press the Mute button briefly on the KRC-2.
- 2. Turn the volume control fully counterclockwise to the Off position, no LED's illuminated.
- 3. Turn the power amplifier On.
- 4. Choose a listening source and select that input by pushing the corresponding input button on the KRC-2.
- 5. Start play of the source.
- 6. Slowly turn the volume control clockwise until you reach a comfortable listening level.
- 7. When changing sources, return to the Mute position and or lower the volume. This insures that the next source you play will not be potentially damaging to your system with a high output transient.
- 8. Enjoy

#### FRONT PANEL DESCRIPTION

#### INPUT SELECTION

S2 selects S S3 selects S B1 selects B	1 input 2 input 3 input 1 input 2 input
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#### **FUNCTIONS**

selects Tape input and allows monitoring of Tape return. **TAPE** 

**PHASE** Inverts absolute polarity of the main output

LED illuminates when phase is reversed 180 degrees when

**GAIN** 

Low 6 dB High 12 dB LED illuminates in high position

**MUTE** No signal output when LED is On

BALANCE < Left channel attenuation in 1 dB

increments and OFF

Right channel attenuation in 1dB increments and OFF BALANCE >

Custom electronic volume control **VOLUME** 

(See notes in section F)

## **G. REMOTE CONTROL**

- 1. When a function button on the remote control is pressed, the blue pilot LED will flash on the KRC-2. When the button is released the flashing stops.
- 2. The functions of the remote control are described

UP arrow DOWN arrow	volume higher volume lower	
\$1 \$2 \$3 \$4 B1 B2	selects S1 input selects S2 input selects S3 input selects S4 input selects B1 input selects B2 input	
TAPE	selects Tape input and allows tape monitoring	
PHASE	0 or 180 degrees LED illuminates when the phase is reversed 180 degrees	
GAIN	Low 6 dB High 12 dB LED illuminates in high position	
MUTE	No signal output with LED on	
BALANCE <	Left channel attenuation in 1 dB increments and OFF	
BALANCE >	Right channel attenuation in 1 dB increments and OFF	

#### **BATTERY INSTALLATION**

NOTE: Batteries should be replaced when the KRC-2 functions from the remote control are not readily accessible.

- 1. Remove the four hex head screws from the bottom portion of the remote control's front plate.

  2. Remove the back plate to expose the battery storage
- compartment.
- 3. Insert batteries (Refer to the polarity drawing while inserting the batteries)
- 4. Replace the back plate and insert the four hex head screws.

## **H. QUESTIONS AND ANSWERS**

- Q. When I turn up the volume on the KRC-2 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 in and out of the KRC-2 are sound and making proper contact. Make sure there are no power supplies or hum inducing components on top of or directly below the KRC-2. You also could be experiencing a ground loop in the system. A ground loop can be caused when several components with different ground potentials are in the system. Ground loops can often be easily corrected. Consult your dealer or KRELL for system grounding considerations.
- Q. Can the KRC-2 be used to control more than one system?
- A. Yes, the KRC-2 has both single ended and balanced outputs that can be used simultaneously to control two seperate systems.
- Q. When I select the B1 input on the KRC-2 one channel seems to have less gain than the other. Is something wrong with the preamp?
- A. More than likely there is not a problem with the KRC-2. The balanced input or output internal cable terminations could be incorrect. Switch the suspect cable to the other channel and vice versa to determine whether a cable is defective. If the problem switches to the other channel, it is a defective cable. If the problem does not move to the other channel and remains the same after cables have been switched, check the wiring at the input of the KRC-2 with the same process. If it is not cable or source related call your dealer or KRELL. Check to make sure there are no LED's illuminated in the Balance control section of the front panel. If there are, correct the balance by pushing the balance control section are illuminated.

- Q. Why do I have to turn up the volume so high to get music at a normal listening level?
- A. If your system does not seem to have enough gain over all, you are probably not utilizing the balanced input or output capabilities of the KRC-2. For every balanced termination on the KRC-2 you increase the gain by 6dB. If you still have to increase the gain too far, make sure the KRC-2 is in the HIGH gain position.
- Q. I came home one evening and the pilot LED in the KRC-2 was not illuminated. What should I do?
- A. Unplug the KRC-2 from the wall AC receptacle and check the fuse in the rear panel. If there is a break in the wire inside the fuse, replace it. If there is no break in the fuse, do not try turning on the preamplifier or replacing the fuse. Call your dealer or KRELL. If the new fuse lets the unit turn on when you plug it in, then fails shortly afterward, call KRELL Industries. If the fuse solves the problem, carry on listening as usual.
- Q. When I push the function buttons on the KRC-2 remote control the preamp does not respond. What should I do?
- A. Check or change the batteries in the remote control. The remote control will not operate the preamplifier in other rooms not in the remote control's trajectory. Make sure you have a direct path from the remote control to the preamp front.

# **I. SPECIFICATIONS**

#### **GAIN**

6dB or 12dB

#### **SIGNAL-TO-NOISE**

< -95 dB unweighted

#### **THD**

1K < 0.02%

20K < 0.02%

#### **INPUT IMPEDANCE**

47,000 ohms(47K)

#### **OUTPUT IMPEDANCE**

10 ohms

#### **OUTPUT VOLTAGE**

16 volts R.M.S.

#### **DIMENSIONS**

19.0" WIDE 14.5" DEEP 2.75" HIGH with feet

### WEIGHT

Unit only packed 20 pounds 26 pounds

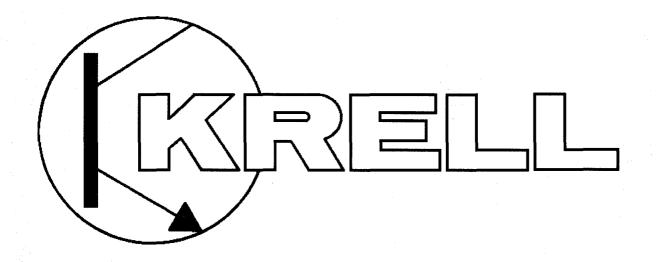
# J. WARRANTY AND SERVICE INFORMATION

There are no user-serviceable parts inside the KRC-2 The KRC-2 has a limited warranty of five years parts and labor. Return freight is included in the warranty. The warranty period begins on the date of purchase and is activated with the return of the enclosed Warranty Card and a copy of the Sales receipt. Please return the warranty card immediately after successful installation and operation are completed.

The warranty for Krell products is valid <u>only</u> in the country to which they were originally shipped and at the factory. If you think there are problems with your unit, please contact your dealer, distributor or the factory immediately.

The operating voltage of this unit is determined by the factory and can only be changed by an authorized KRELL distributor or the KRELL factory. Any unauthorized voltage conversion will void the warranty. Should the operating voltage of your KRC-2 require changing, contact KRELL Industries.

Please do not return any unit to KRELL for repair without first calling to discuss the problem and to obtain a Return Authorization number. Freight to the factory or distributor is your responsibility. Return freight to you will be paid by the factory or distributor. Any unauthorized disassembly, updates or modifications performed to the unit will void the warranty.



## KRELL INDUSTRIES

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