

KRC-2 Remote Controlled Preamplifier



be KRC-2 solidifies Krell's
leading position in the evolution of
preamplifier design. In the spirit of the
KRC, its predecessor, the KRC-2 unites
Krell sonic quality with the virtues of
remote control operation. A singular
combination of original and refined
Krell technologies assist the KRC-2 in
establishing a new performance

standard for preamplifiers in its class.



LED level indicators operate in two modes. In the bargraph mode LEDs are illuminated to the point where level is set. Single LEDs indicate where level is set in the point-of-reference mode.

New Preamplifier Capabilities

The logistical brain of the KRC-2 is an HC-11 micro controller. This highly flexible device enables the KRC-2 to accomplish far more than a conventional preamplifier. Primary functions are interpretation of all front panel and remote switching commands, and operation of the level control system. Its sophistication enables level to be adjusted with a high-resolution 14 bit system in 160 discrete steps. Excess processing capacity is held in reserve for a future remote multi-room system and an external audio/video switching network.

A New Method To Control Level

The most unique feature of the KRC-2 is its volume control system. The volume potentiometer has been replaced by a digitally controlled complex of electronic relays and R2R resistor networks. Elimination of the pot simplifies the signal path, affording a substantial sonic benefit over all but the finest potentiometers. The sound stage is rendered more transparent and three dimensional, while transient attacks are immediate, particularly at high frequencies.

For manual volume adjustments, a continuous rotation optical encoder is operated from the front panel Level control. The encoder only registers changes in its position, as the Level knob is operated. It does not have steps like a traditional potentiometer. For this reason it is independent of volume adjustments made from the remote control. To explain further: if the Level is set manually and changed by remote, the Level knob will not change



position, even though the volume has changed. Further manual volume adjustments will be made from the volume setting previously made by remote. LEDs surrounding the control indicate level changes and settings, whether made manually or by remote.

This system allows creation of a custom logarithmic level taper perfectly suited for audio. Adjustments in the lower ranges are in small increments, eliminating the extreme sensitivity found in many pots. Larger increments are used in the 10 - 2 o'clock area, where most critical listening is done. Smaller increments complete the level adjustment range.

Present and Future Functions

The KRC-2 has an array of input and output connections sufficient for most systems. Balanced and single-ended operation are addressed, allowing the formats to be mixed at the inputs and outputs. A single-ended tape loop provides an additional input separate from the input section.

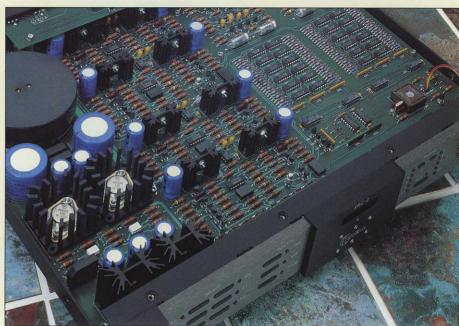
In addition to input selection and balance control, absolute phase and output gain can be switched from both the remote and front panel. A convenient mute function is also provided.

For systems employing an LP turntable, a DC power supply output is provided for the Krell KPE external phono section. This high-performance phono section allows input for moving magnet and moving coil cartridges, and has switchable input impedance adjustments. The lowest output moving coils can be used with the KPE due to its exceptionally low noise.

Built into the KRC-2 are provisions for future switching and remote control functions. Krell is developing a multi-room remote system that will make high end audio performance available for systems previously limited to conventional equipment. Also in planning are external video and audio switching networks that will address home theatre applications.

Most importantly

The KRC-2's primary requirement of sonic accuracy has not been lost in the development of its exceptional flexibility. Traditional Krell design concepts



An internal view demonstrates the efficient layout and construction of the KRC-2. All hand wiring and extraneous labor has been eliminated. Such techniques contribute to Krell's position as the pre-eminent value in high performance audio.

abound, evolved and shaped for the KRC-2. All gain and power supply regulation stages are discrete, complimentary and operate in pure, high-bias Class A mode. All audio circuits are completely direct-coupled, eliminating the sonic anomolies of capacitors. The signal path is balanced from input to output, mantaining absolute integrity of the source input. The power supply has extraordinary headroom, feeding all audio sections from stiff, multi-stage regulators. Overall construction bears the distinctive Krell aesthetic of rugged beauty.





The KRC-2 rear panel connections can accommodate sophisticated systems with a mixture of balanced and single-ended components. A DC output is available for the Krell KPE external phono section. Further, connections to access an optional multi-room remote control system and an external audio/video switching network are standard.

FINALLY...

The technology and capabilities of the KRC-2 are formidable. They are useless, however, if the the listening experience is not enhanced. In this respect the KRC-2 excels. The KRC-2 delivers the emotional power of music with a visceral impact, rich midrange, glistening high frequencies and lifesized presentation. Transform the way you listen and the listening itself...the Krell KRC-2.

SPECIFICATIONS, KRC-2

Frequency 20 Hz - 20 KHz: $\pm 0.02 \text{ dB}$ Response 0.2 Hz - 400 KHz: +0.0, -3 dB

Signal to < -95dB, unweighted

Noise

THD < 0.002%, 20Hz - 20KHz

Functions

Source Selection; Tape Monitor; High/Low Gain; Absolute Phase; Balance; Level Control

Inputs

Two balanced (can be used single-ended) Four single-ended

One tape return

Outputs

One balanced Main output (can be used single-ended)

One single-ended Main output One buffered Tape output

Other Rear Panel Connections

1 DC output for KPE external phono section

2 Remote send/receive connectors for multi-room systems

1 Multi-pin connector for control of an external audio/video switching system

Dimensions

19" Wide; 2.5" High; 14.5" Deep

Weight

Unit only 20.lbs Packed 26.lbs

Specifications, KPE

THD, MM < .01% MC < .03%

Input Sensitivity, MM 30mV Input Sensitivity, MC 1.2 mV

S/N, MM - 95 dBS/N, MC - 80 dB

RIAA error $20Hz - 20KHz < \pm .1 dB$

Input Overload, MC 4.8 mV

Dimensions

8.375" Wide; 2.5" High; 6.375" Deep

Warranty, KRC-2 and KPE

Five years, limited and transferable

Krell Industries Inc. reserves the right to change this products features and specifications without notice.

