



KBL High-Level Preamplifier KPA Phono Preamplifier





KPA front panel

The KPA (Krell Phono Amplifier) and the KBL (Krell Balanced Line) preamplifiers distinguish themselves by continuing the Company's ten-year commitment to manufacture uncompromised audio products. The KPA and KBL are designed as companion units, but neither is surpassed as a separate component in other applications. Both products are wholly unique in sonic performance, innovative functions and system flexibility. They can be used in several combinations to achieve varying amounts of balanced and dual-mono operation. Each redefines excellence for its specific purpose and has been conceived with the present and future of audio in mind. They adhere to the most fundamental KRELL design criteria: superb sonic quality, useful functions, unsurpassed construction and appearance, and reliability.



KPA rear panel

KPA FEATURES

The KPA is an extremely flexible, high-resolution phono cartridge preamplifier. Front panel switching provides complete control over the unit's functions. There are inputs for two cartridges and a switch to select 36dB or 66dB of gain for moving magnet or moving coil cartridges. A 9-step switch provides adjustment for cartridge loading from 10 ohms to 47.5k ohms. Two 11-step switches allow trimming of low and high frequency RIAA equalization to compensate for specific cartridges, record or stylus wear, or personal taste. This equalization is done in broadband fashion to minimize phase shift. Also on the front panel is a switch to program the unit for stereo/single-ended or mono/balanced operation. Low power LEDs indicate MM gain, power on, balanced operation, and non-standard RIAA settings. The rear panel has two pairs of RCA connectors for inputs, one pair for single-ended output, and one XLR connector for a balanced output when two KPA are used.

Resolution of the RIAA equalization is extremely accurate and entirely passive. Maximum deviation of .1 dB from 20Hz to 20kHz is achieved with the use of discrete, complementary, direct-coupled circuits and 1% tolerance parts. Switches with fixed value components are used rather than variable pots for the front panel controls to minimize noise.

Power for the KPA is typically provided from the supply of a companion KBL. It can also be used with a dedicated supply. Within the KPA are discrete tracking regulators for each channel.

As with the KBL, high-voltage, direct-coupled circuitry enables the KPA to always operate in its most accurate regions. Open-loop phase, amplitude, and transient performance have all been optimized by using three separate, low-feedback gain stages, each complementary to one another. The output stages in the KPA are capable of driving any practical cable length. This allows the turntable(s) to be isolated from other system components without any loss of sonic quality.

KBL FEATURES

Form follows function. The function of the KBL is to provide incomparable sound from a line-level preamplifier with comprehensive switching flexibility for unbalanced and balanced operation. The form the KBL takes is Krell! The front panel is a combination of beauty and business. The Select switch has a 12 O'clock mute position and choices of two balanced inputs, B-1 & B-2, and four single-ended inputs, S-1 through S-4. Inputs S-1 and B-2 are also

available for tape recorder or processor returns via the Monitor switch. The 11-detent Symmetry switch serves as a balance control when using one KBL; it becomes a single-channel phase adjustment when two KBLs are configured for dual-mono. The wire-wound Level control has a very smooth taper and is made to Krell's exacting specifications. A push button switch selects either 3dB or 9dB overall gain to compensate for different system efficiencies. A second push button switch reverses the absolute phase of both channels when using one KBL; when two KBL are used in dual-mono it changes the phase of one channel relative to the other. LEDs indicate high gain, phase reversal and, during dual-mono operation, level imbalances between the non-inverted and inverted outputs.

The rear panel supports the input flexibility. There are two sets of Main Outputs: balanced via XLR connectors and single-ended via RCA connectors. There are two Record Outputs on RCA connectors that receive the output of the Select switch.

The external power supply system of the KBL operates at very high voltages when judged by conventional standards. The DC output to the preamp is double-regulated to reduce noise to a minimum. Within the preamp two independent tracking regulators maintain voltage stability under all conditions.

Due to its high voltage design, the KBL exhibits exceptional phase integrity and infinitesimal distortion throughout the audio range by never exiting from true Class A operation. All circuits are direct-coupled. Each output section in the preamplifier is actually a small Class A power amplifier, capable of swinging 50 volts peak-to-peak. The use of high-power devices allows the KBL to deliver large amounts of current. As a result, the unit can drive virtually any length of cable or load without signal degradation.

BALANCED LINE OPERATION

Balanced line operation has long been standard in professional audio equipment. There are two significant advantages: first, there is a 6dB increase in gain without an increase in noise; second, there is a decrease in overall system noise due to common-mode rejection of stray AC and RF fields. The sonic implications of well implemented balanced operation are dramatic, allowing the music to become more vivid and alive.

The KBL and KPA provide for balanced operation in unique ways. A single KBL has both balanced and single-ended inputs and outputs.



KBL front panel

With two KBL all inputs and outputs are balanced. Likewise, a single KPA is all single-ended: two are fully balanced. Finally, the change of either unit from stereo to mono can be done by the owner. Descriptions of the different possibilities are on the rear page.

The KBL and KPA address all the major issues in selecting preamplification. Their sonic and build quality are unequalled. Their flexibility and programmable functions free them from obsolescence and allow for building a system over time. All KRELL products carry a five year parts and labor warranty - all KRELL product owners receive premium service for the life of their unit. This combination of attributes make the KPA and KBL the new standard for phono and line preamplification.



KBL rear panel

POSSIBLE COMBINATIONS OF THE KPA AND KBL



2 Balanced inputs, 1 Balanced output
4 Single-ended inputs, 1 Single-ended output
Single-ended phono



2 Balanced inputs, 1 Balanced output
4 Single-ended inputs, 1 Single-ended output
Fully balanced phono



All inputs and outputs are balanced



All high level inputs and outputs are balanced
Single-ended phono



All phono and high level inputs and outputs are balanced

KPA

Signal to Noise Ratio: 85dB "A" weighted
Phono Input Impedance: Adjustable from 5 ohms to 47,000 ohms
RIAA tracking: Less than .1dB deviation from 20Hz to 20kHz
Phono Overload: 300mV @ 1kHz
Frequency Response: From .5Hz to 250kHz
Gain: 36 dB or 66dB

KBL

Signal to Noise Ratio: 100dB "A" weighted
Input Impedance: 10,000 ohms
Output Impedance: .5 ohm
Frequency Response: .1Hz to 250kHz
Voltage Swing: 50 volts peak-to-peak
Gain: 3 or 9 dB
Pure D.C. Coupled
Warranty: 5 years, limited and transferable
Dimensions: Both Preamps: 2.25"H x 19"W x 12"D
Power Supply: 2.5"H x 9"W x 12"D

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