



Reference KPE
Standard KPE
Phono Preamplifiers

Instructions for Use

Owner's Reference

Reference KPE
Standard KPE
Phono Preamplifiers
v 02.1

**CONTACT
INFORMATION**

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

WARNINGS

The preamplifier 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 preamplifier and the space underneath the preamplifier must be unobstructed at all times during operation. Do not place flammable material above or beneath the preamplifier.

Before making connections to the preamplifier, ensure that the power is off and other components are in mute or stand-by mode. Make sure all cable terminations are of the highest quality, free from frayed ends, short circuits, or cold solder joints.

THERE ARE NO USER SERVICEABLE PARTS INSIDE THE PREAMPLIFIER

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

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. All other trademarks and tradenames are registered to their respective companies.

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Introduction

Thank you for your purchase of a Krell KPE external phono amplifier. The Reference KPE and the Standard KPE are high performance phono amplifiers designed to work with any moving coil cartridge. This owner's manual discusses the features and functions of the KPE along with critical installation information.

In the unlikely event that your KPE 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 refer to the Warranty and Return Authorization Procedure sections of this reference, the Warranty Registration Card, or contact your authorized Krell dealer or distributor.

Definition of Terms

Following are the definitions of key terms used in your owner's reference manual:

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 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.

OPERATION

Off

When the KPE is not connected to AC power and the blue LED on the front panel is not illuminated, the component is off.

Operational Mode

The component is in the operational mode and is ready to play music as soon as AC power is supplied to the KPE. The blue LED on the front panel is illuminated when the component is in the operational mode.

Note

*The Reference KPE and the Standard KPE need to be set for the loading specification of your cartridge before they are operational. In addition, the Standard KPE needs to be set for either moving magnet or moving coil cartridge operation. See **Operating the Reference KPE** on page 8, or **Operating the Standard KPE** on page 10.*

Unpacking

REFERENCE KPE

Open the box and remove the top layer of protective foam. The following items are visible:

- 1 Reference KPE phono amplifier
- 1 DC power connecting cable
- 1 T15 Torx wrench
- 1 warranty card

If ordered with the optional power supply the following items will also be included:

- 1 Reference KPE power supply
- 1 AC power cord

Remove the plastic covering from the Reference KPE, DC power cable and, if included, from the power supply.

STANDARD KPE

Open the box and remove the top layer of protective foam. The following items are visible:

- 1 KPE phono amplifier
- 1 DC power connecting cable
- 1 T15 Torx wrench
- 1 warranty card

If ordered with the optional power supply the following items will also be included:

- 1 KPE power supply
- 1 AC power cord

Remove the plastic covering from the Standard KPE, DC power cable and, if included, from the power supply.

Notes

If any of these items are not included in the box, please contact your authorized dealer or distributor immediately for assistance.

Save all packing materials. If you ship your KPE in the future, repack the unit in its original packaging to prevent shipping damage.

Placement

Place the KPE on a firm level surface away from excessive dirt or moisture.

The KPE is sensitive to induced hum from power supplies or motors. It should be located at least one foot away from other components such as turntables, tape recorders, and power supplies. The KPE is supplied with an extra long DC power cable. This enables the user to employ short interconnect cables from the turntable to the KPE and a longer run of interconnect cables from the KPE to the preamplifier.

AC POWER GUIDELINES

The KPE 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 can be used if they are grounded and meet or exceed the unit's power supply rating of 100 VA.

Connecting the KPE to your System

The KPE can obtain power from the DC output of the Krell KBL, the Krell KRC-2, the Krell KCT, or from the optional power supply.

INSTALLATION WITH THE KBL, KRC-2, or KCT

1. Unplug the KBL, KRC-2, or KCT from the AC wall socket.
2. Connect the supplied DC power cable to the DC output receptacle on the KBL, KRC-2, or KCT.
3. Connect the other end of the DC cable to the DC input on the KPE.

IMPORTANT

Do not plug the power supply into the AC wall socket until completing steps 1-5 below.

INSTALLATION WITH OPTIONAL EXTERNAL POWER SUPPLY

1. Connect the supplied DC power cable to the DC output.
2. Connect the other one of the DC power cable to the DC input receptacle on the KPE.
3. Connect the output of your turntable to the input of the KPE.
4. Connect the output of the KPE to a line level input on your pre-amplifier.
5. Plug the KBL, KRC-2, or KCT to the external KPE power supply into the AC wall socket. The blue LED on the KPE will now be illuminated.

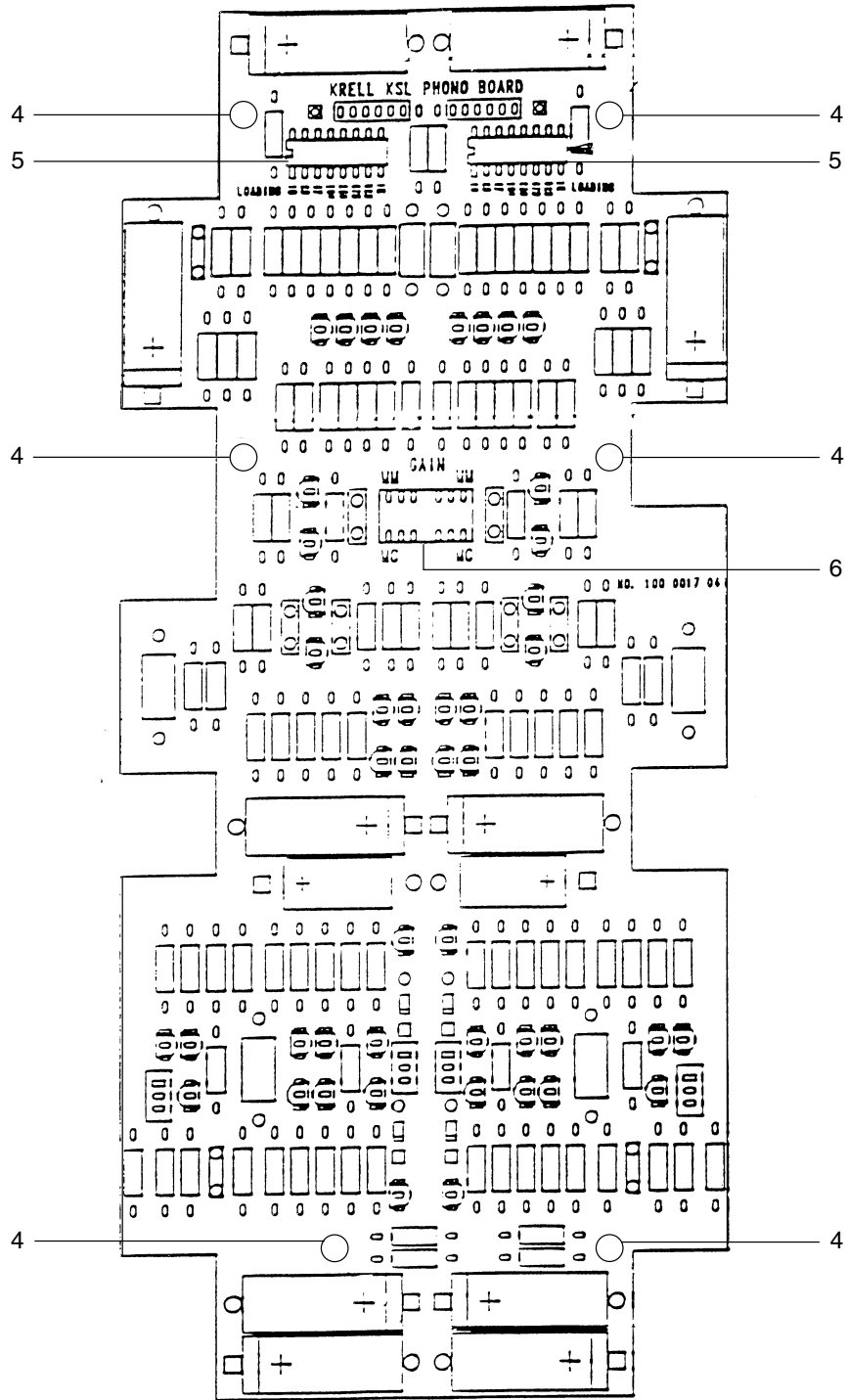
Notes

Allow the Reference KPE to warm up for one minute after the initial turn on, before selecting the phono input on your preamplifier.

All audio connections on the Reference KPE and the Standard KPE are single-ended, via RCA connectors.

Figure 2 Standard KPE Phono Board

- 4 Mounting Hole
- 5 Loading Switch
- 6 MMMC (Moving Coil Moving Magnet) Switch Bank



Operating the Reference KPE

The Reference KPE is designed to only work with a moving coil phono cartridge. The Reference KPE comes factory set with a 70 dB gain and a 100 Ohm load impedance setting.

If it is necessary to change the gain or cartridge loading, follow these steps:

1. Remove the four topcover screws with the supplied Torx wrench.
2. Carefully lift the cover from the Reference KPE. The two switch settings for gain are located towards the middle of the board and are labeled GAIN. The switch settings for loading are located towards the back of the board and are labeled LOADING.

IMPORTANT

Always put your preamplifier in the mute or stand-by position before changing gain or loading settings on the Reference KPE. Maintain the mute or stand-by state for one minute after changing any settings, to allow circuits to settle.

GAIN SETTINGS

3. To alter gain from the 70 dB factory setting, set one rocker switch from each bank to the CLOSED (on) position to obtain the desired setting:

Switch 1 = 58 dB gain

Switch 2 = 64 dB gain

Switch 3 = 70 dB gain

Switch 4 = 76 dB gain

Note

Each switch bank is labeled OPEN on one side. When a rocker switch on the switch bank is depressed toward the side labeled OPEN, the switch is OPEN, or off. When a rocker switch is depressed away from the side labeled OPEN, the switch is CLOSED, or on.

LOAD SETTINGS

4. To alter loading from the 100 Ohm factory setting, set one loading switch from each bank to the CLOSED (on) position to obtain the desired setting. The loading switches are situated on the left and right of the circuit board.

The loading switches are labeled as follows:

- | | | |
|---|------|------------|
| 1 | 10 | Ohms |
| 2 | 25 | Ohms |
| 3 | 47 | Ohms |
| 4 | 100 | Ohms |
| 5 | 249 | Ohms |
| 6 | 475 | Ohms |
| 7 | 825 | Ohms |
| 8 | 1000 | Ohms (1 K) |

Note

Experiment with different types of loading until you find the one that sounds best. Always have one switch CLOSED (on) for both channels.

5. Place the topcover back on the Reference KPE and replace the topcover screws.

Operating the Standard KPE

The Standard KPE is designed to use either a moving coil or moving magnet phono cartridge. The Standard KPE comes factory set in the high-gain, moving coil position with a 100 Ohm load impedance setting.

IMPORTANT

Always put your preamplifier in the mute or stand-by position before changing gain or loading settings on the Standard KPE.

If it is necessary to change the gain or cartridge loading, follow these steps:

1. Remove the four topcover screws with the supplied Allen wrench.
2. Carefully lift the cover from the Standard KPE. You will notice three switches on the main circuit board. The two switches located at the back of the circuit board labeled **LOADING** are for cartridge loading. The switch bank in the middle of the circuit board labeled **MM** (moving magnet) and **MC** (moving coil) is for phono gain.
3. Select the type of phono cartridge you are going to use.
4. Use the **C2** and **C4** (**MC**) positions on the **MMMC** switch bank. Depress the rocker switch in the direction of the label.
or
Use the **C1** and **C3** (**MM**) positions on the **MMMC** switch bank. Depress the rocker switch in the direction of the label.
5. Select the phono cartridge loading that is closest to your cartridge requirements for both channels. Depress the loading switch which corresponds to the load setting desired.

LOW-OUTPUT MOVING COIL CARTRIDGES

HIGH-OUTPUT MOVING COIL CARTRIDGES OR MOVING MAGNET CARTRIDGES

LOAD SETTINGS

6. To alter loading from the 100 Ohm factory setting, set one loading switch from each loading switch bank to the CLOSED (on) position to obtain the desired setting. The loading switch banks are situated on the left and right of the circuit board.

7. The loading switches are labeled as follows:

1	10	Ohms
2	25	Ohms
3	47	Ohms
4	100	Ohms
5	249	Ohms
6	475	Ohms
7	825	Ohms
8	1000	Ohms (1 K)
All open	47000	Ohms (47 K)

Notes

Each switch bank is labeled OPEN on one side. When a rocker switch on the switch bank is depressed toward the side labeled OPEN, the switch is OPEN, or off. When a rocker switch is depressed away from the side labeled OPEN, the switch is CLOSED, or on.

If the manufacturer does not supply a loading value, use 100 Ohms (switch 4) on both channels.

Experiment with different types of loading until you find the one that sounds best. Always have one switch CLOSED (on) for both channels.

8. Place the topcover back on the Standard KPE and replace the topcover screws.

Warranty

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

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 the original retail purchase, as noted on the bill of sale or receipted invoice from an authorized Krell dealer or distributor. Previously owned equipment, when re-purchased from an authorized Krell dealer or distributor, has the balance of the original warranty, based on the original date of manufacture.

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.

Return Authorization Procedure

HOW TO EXPEDITE SERVICE

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:

<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
WEB SITE	http://www.krellonline.com

HOW TO RETURN A PRODUCT

To return a 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 or damage to the product during shipment to the Krell factory and ensure all freight (shipping) charges are prepaid.

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

IMPORTANT

Use the original packaging to ensure the safe transit of the product to the factory, dealer, or distributor. Krell may, at its discretion, return a product in new packaging and bill the owner for such packaging if the product received by Krell was boxed in nonstandard packaging or if the original packaging was so damaged that it was unuseable. If Krell determines that new packaging is required, the owner will be notified before the product is returned.

HOW TO PURCHASE ADDITIONAL PACKING

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

SERIAL NUMBER

Your KPE product serial number is: _____

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Reference KPE Standard KPE

Phono Preamplifiers

v 02.1

Specifications

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

Reference KPE

FREQUENCY RESPONSE

20 Hz–20 kHz +/-0.1 dB

SIGNAL TO NOISE RATIO

“A” WEIGHTED w/ 0.5 mv input

-80 dB

GAIN

58-76 dB in 6 dB increments

INPUT IMPEDANCE

Adjustable from 10 Ohms
to 1 K Ohms

POWER SUPPLY

Optional

DIMENSIONS

KPE

7.1w x 2.4h x 12d in.
18w x 6.1h x 30.5d cm

POWER SUPPLY

8.3w x 2.5h x 6.5d in.
21.1w x 6.4h x 16.5d cm

WEIGHT

WITHOUT POWER SUPPLY

Shipped 12 lb., 5.5 kg

Standard KPE

FREQUENCY RESPONSE

20 Hz–20 kHz +/-0.1 dB

SIGNAL TO NOISE RATIO

“A” WEIGHTED w/ 0.5 mv input

MC: -71 dB

MM: -89 dB

GAIN

MC: 64.5 dB

MM: 36.5 dB

INPUT IMPEDANCE

Adjustable from 10 Ohms
to 47 K Ohms

POWER SUPPLY

Optional

DIMENSIONS

KPE

7.1w x 2.4h x 12d in.
18w x 6.1h x 30.5d cm

POWER SUPPLY

8.3w x 2.5h x 6.5d in.
21.1w x 6.4h x 16.5d cm

WEIGHT

WITHOUT POWER SUPPLY

Shipped 12 lb., 5.5 kg