KRELL
THE LEADER IN AUDIO ENGINEERING

Instructions for Use

Owner's Reference

KAV–280cd
Front Loading Compact Disc Player
Instructions for Use
v 01.0

CONTACT
INFORMATION

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$C\boldsymbol{\epsilon}$

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

WARNINGS

Do not place the compact disc player where it could be exposed to dripping or splashing.

Do not remove or bypass the ground pin on the end of the AC cord. This may cause radio frequency interference (RFI) to be introduced into your playback system.

The ventilation grids on the top and bottom of the KAV–280cd must be unobstructed at all times during operation. Do not place flammable material on top of or beneath the component.

Turn off all systems' power before connecting the KAV–280cd to any component. 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 ANY KRELL PRODUCT.

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

Contents

Illustrations

Introduction

Thank you for your purchase of the Krell KAV–280cd Front Loading Compact Disc Player. The KAV–280cd features a precision disc transport mechanism and high performance analog circuitry that provide Krell sound quality at an exceptional value.

The KAV–280cd output circuitry features four digital-to-analog converters providing fully balanced operation from DACs to output. The DSP digital filter provides 8x oversampling. Krell Class A direct coupled circuitry means that the KAV–280cd delivers the most accurate music signal into your system. The wireless infrared remote control as well as the remote control connection options on the back panel allow you to integrate the KAV–280cd into whole house systems.

This owner's reference manual contains important information on placement, installation, and operation of the KAV–280cd. Please read this information carefully. A thorough understanding of these details will help ensure satisfactory operation and long life for your KAV–280cd and related system components.

READ THIS FIRST

Do not press the power button or power key until initialization is complete.

When you plug the AC power cord into the wall socket, the red stand-by LED illuminates. After a 30-second delay, the init LED (12) illuminates, indicating that the initializing is complete. You can now switch to the operational mode.

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 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.

OPERATION

Off
When the AC power cord is unplugged from the AC power source, the component is off.

Stand-by Mode
When the KAV–280cd is connected to AC power, the red stand-by LED illuminates. This indicates that the component is in 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.

Operational Mode
When the power button on the front panel or pwr 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.

TECHNOLOGY

Krell Current Mode
A proprietary Krell circuit topology in which the audio gain stages of a component operate in the current rather than the voltage domain. This unique technology provides the component with exceptional speed and a wide bandwidth.

Unpacking

Follow these steps to safely unpack your compact disc player:

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

    1   KAV–280cd
    1   IEC connector (AC power) cord
    1   12 VDC (12 V trigger) cable
    1   KAV–280cd remote control
    1   CR2025 lithium battery
    1   packet containing the owner's reference manual and the warranty registration card

2. Grasp the underside of the foam end-caps that encase the compact disc player and lift it straight out of the shipping box.

3. Place the compact disc player in a safe location and remove the protective plastic wrapping.

Notes

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

*Save all packing materials. If you ship your compact disc player in the future, repack the unit in its original packaging to prevent transit damage. See **Return Authorization Procedure,** on page 19, for more information.*

Placement

Before you install the KAV–280cd into your system, review the following guidelines to choose the location for the KAV–280cd. This will facilitate a clean, trouble-free installation. The KAV–280cd does not require any type of special rack or cabinet for installation. For the dimensions of the KAV–280cd, see *Specifications,* on the back cover.

Place the KAV–280cd on a firm, level surface, away from excessive heat, humidity, or moisture. The KAV–280cd requires at least two inches (5 cm) of clearance on each side and at least two inches (5 cm) of clearance above and below the component to provide adequate ventilation. Installations inside cabinetry may need extra ventilation.

Do not place the KAV–280cd near hum sensitive components such as preamplifier phono stages or turntables. Although the KAV–280cd is well shielded, placing it near these components could create interference and cause hum.

Note

The KAV–280cd incorporates an advanced suspension system and does not require additional mass coupling or isolation. You may experiment with feet or cones as long as they are not permanently affixed to the unit. Any unauthorized modifications to the unit or electronics will void the warranty.

IMPORTANT

Do not attach enhancement accessories such as rings, mats, or dampers to individual compact discs. These accessories may interfere with the compact disc transport, resulting in erratic playback and/or poor sound.

AC Power Guidelines

The KAV–280cd 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 unit's power supply rating of 100 VA.

Figure 1 The KAV–280cd Front Panel
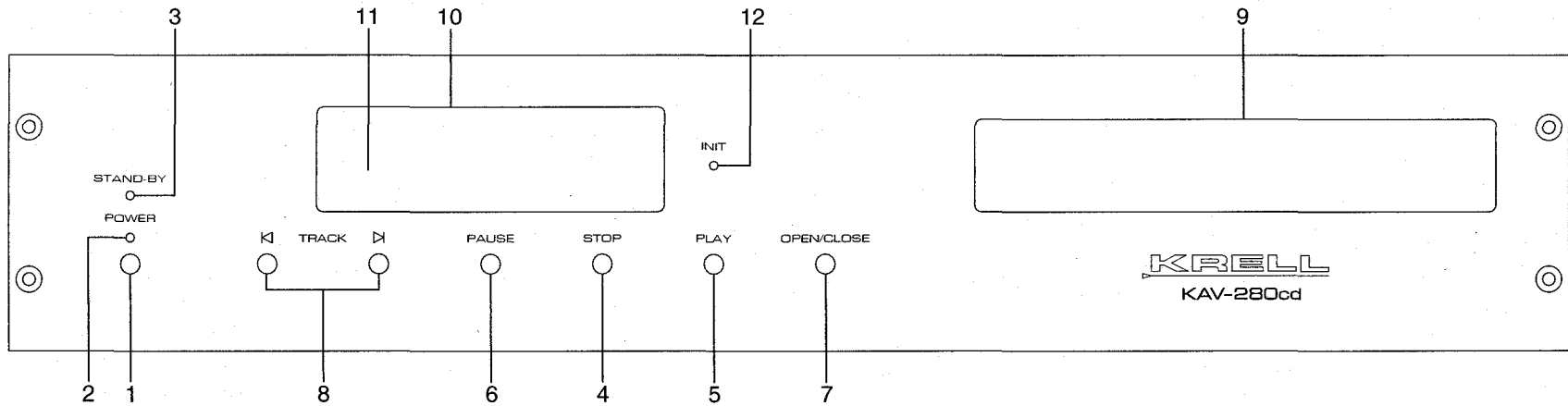
Power
1 Power Button
2 Power LED
3 Stand-by LED

**Compact Disc
Transport Functions**
4 Stop Button
5 Play Button
6 Pause Button
7 Open/Close Button
8 Track Back and
   Forward Buttons
9 Compact Disc
   Transport

Display
10 Front Panel Display
11 Infrared Sensor
12 Init LED

Front Panel Description

See Figure 1 on page 5

POWER

1 Power Button
Use this button to switch the KAV–280cd between the stand-by and the operational modes.

2 Power LED
The blue power LED illuminates when the KAV–280cd is in the operational mode. The power LED also flashes when any remote control key is pressed.

3 Stand-by LED
The red stand-by LED illuminates when the KAV–280cd is plugged into a standard AC wall receptacle, indicating that the compact disc player is in the stand-by mode and ready to be switched to the operational mode.

COMPACT DISC TRANSPORT FUNCTIONS

4 Stop Button
Use this button to stop compact disc playback.

5 Play Button
Use this button to start playback from the beginning of the compact disc. For more information, see *How to Play a Compact Disc,* on page 15.

6 Pause Button
Use this button to temporarily suspend playback of the compact disc track. To resume playback at the point pause was engaged, press the pause button again.

7 Open/Close Button
Use this button to open and close the compact disc transport.

8 Track Back and Forward Buttons
Use the track back button to select the track that precedes the current track; use the track forward button to select the track that follows the current track.

9 Compact Disc Transport
The compact disc transport holds the compact disc.

DISPLAY

10 Front Panel Display
The front panel display shows the track number of the currently play-ing compact disc as well as programming status.
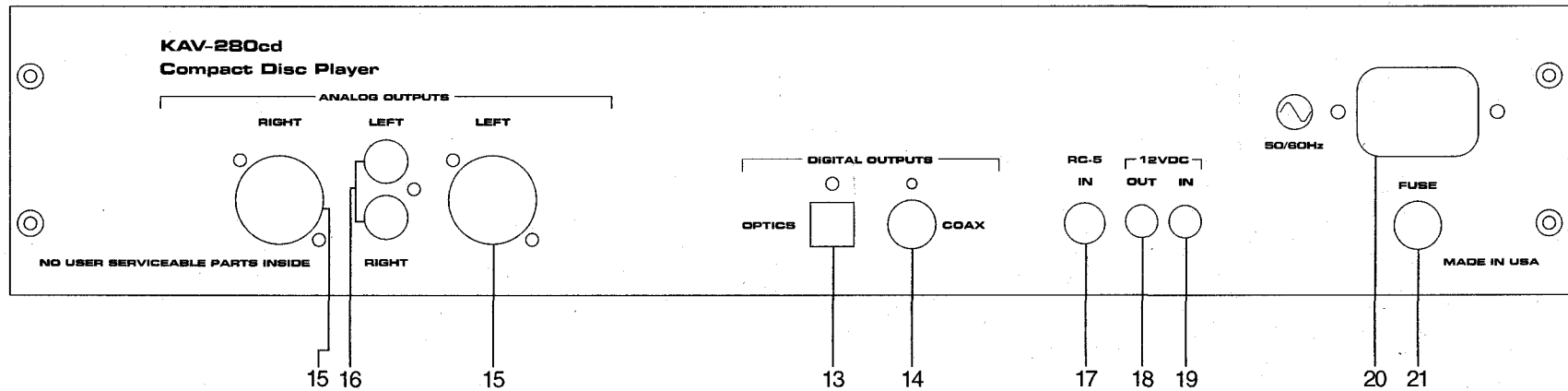
11 Infrared Sensor
The infrared sensor (inside the front panel display) receives com-mands from the KAV–280cd remote control. For proper remote con-trol operation, make sure the infrared sensor is clear of any obstruc-tions.

12 Init LED
The red Init LED illuminates while the KAV–280cd is initializing. When the Init LED turns off, the KAV–280cd is ready for operation.

Figure 2 The KAV–280cd Back Panel

KAV-280cd
Compact Disc Player

ANALOG OUTPUTS
RIGHT   LEFT   LEFT

NO USER SERVICEABLE PARTS INSIDE   RIGHT

DIGITAL OUTPUTS   RC-5   12VDC
                     IN   OUT   IN

OPTICS   COAX

50/60Hz

FUSE

MADE IN USA

15 16   15   13   14   17   18   19   20 21

Digital Outputs
13 Optics Digital Output
14 Coax(ial) Digital Output

Analog Outputs
15 Left and Right Balanced
    Analog Outputs
16 Left and Right Single-ended
    Analog Outputs

Remote Connections
17 RC-5 In
18 12 VDC Out
19 12 VDC In

Power
20 IEC Connector
21 Line Fuse

Back Panel Description

See Figure 2 on page 8

DIGITAL OUTPUTS

13 Optics Digital Output

The KAV–280cd is equipped with an EIAJ fiber optic digital output with a TosLink connector.

14 Coax(ial) Digital Output

The KAV–280cd is equipped with an S/PDIF coaxial digital output with an RCA connector.

ANALOG OUTPUTS

15 Left and Right Balanced Analog Outputs

The KAV–280cd is equipped with one pair of balanced analog outputs with XLR connectors.

16 Left and Right Single-Ended Analog Outputs

The KAV–280cd is equipped with one pair of single-ended analog outputs with RCA connectors.

REMOTE CONNECTIONS

17 RC-5 In

The KAV–280cd is equipped with an RC-5 input that makes custom installation easy and secure by accepting baseband RC-5 input commands from hardwired remote controllers.

18 12 VDC Out

The KAV–280cd is equipped with an output that sends 12 VDC (12 V trigger) power on/off signals to other Krell components and other devices that incorporate a 12 V trigger. This allows you to turn other components on or off, or to and from stand-by, from the KAV–280cd. When the KAV–280cd is switched between stand-by and the operational mode, it sends a signal from the 12 VDC Out that will switch other components, allowing whole systems or parts of systems to be easily coordinated.

Notes

When the component is in the operational mode, the 12 VDC Out provides 12 V of DC output. When the component is in the stand-by mode or off, the DC output is 0 V.

The 12 VDC output current is limited to 30 mA.

19 12 VDC In
The KAV–280cd is equipped with an input that receives 12 VDC
(12 V trigger) power on/off signals from other Krell components
and other devices that incorporate a 12 V trigger. This allows you to
turn the KAV–280cd on or off, or to and from stand-by, from other
components.

Note

*Consult the owner's reference of the components used in a custom installa-
tion to take full advantage of the remote capability of the KAV–280cd.*

POWER

20 IEC Connector
The connector is for use with the provided IEC standard 15 amp
power cord.

21 Line Fuse
The 50/60 Hz line fuse.

Note

Replace fuses only with the fuse value specified below:

100-120 VAC   0.6A Slow Blow
200-240 VAC   0.3A Slow Blow
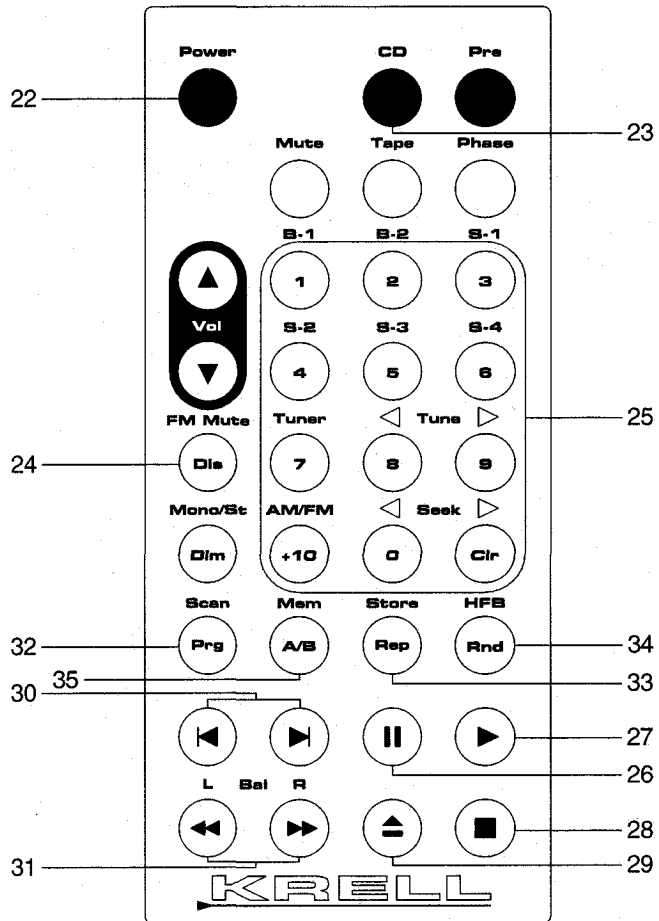
Figure 3 The KAV-280cd
Remote Control

Power
22 Power Key

Compact Disc Transport Functions
23 CD Key
24 Dis (Display) Key
25 Direct Track Access Keypad
26 Pause Key
27 Play Key
28 Stop Key
29 Open Key
30 Track Back and Forward Keys
31 Search Back and Forward Keys

Special Play Functions
32 Prg (Program) Key
33 Rep (Repeat) Key
34 Rnd (Random) Key
35 A/B Key

Note

Remote control keys not listed above do not function with the KAV-280cd. Keys not used with the KAV-280cd may be used with other Krell components. Consult your owner's reference manual for those components to take advantage of their full remote control capabilities.

Remote Control Description

Battery Installation and Removal

The KAV–280cd remote control uses one CR2025 lithium battery, which is included with the shipment.

To open the battery compartment on the back of the remote control:

1. Place the remote face down on the table.
2. Use your thumbnail or a small jeweler's or eyeglass screwdriver to move the small tab toward the center of the remote, while using your index fingernail or screwdriver to pull down gently on the slot to the right of the tab. The battery compartment will slide out.
3. Place the battery, plus side up, in the battery tray.
4. Slide battery compartment back into the remote until you hear a click.

The remote control is ready for operation.

Notes

Do not use a knife or other sharp objects to open the battery compartment; they will scratch the remote control finish.

Replace batteries when remote control function becomes intermittent.

Remove batteries if the remote control is not used for a long period of time. Battery leakage can damage the remote control.

Remote Control Functions

The KAV–280cd remote control provides power, compact disc transport, and compact disc programming functions. A description of the remote control keys that are used with the KAV–280cd follows.

POWER

22 Power Key
Use this key to switch between stand-by and operational modes.

COMPACT DISC TRANSPORT FUNCTIONS

23 CD Key
Use this key to activate the compact disc and power functions on the KAV–280cd remote control.

24 Dis (Display) Key
Use this key to cycle the front panel display between the elapsed time on the current track, the elapsed time on the entire compact disc, and the remaining time on the entire compact disc. See also *How to Program a Track Sequence,* on page 16.

25 Direct Track Access Keypad
Use the direct track access keypad to select a compact disc track. If tracks consist of two digits, the numbers must be pressed within eight seconds of each other. See also *How to Program a Track Sequence,* on page 16.

Note

The +10 key is not functional on the KAV–280cd.

**COMPACT
DISC
TRANSPORT
FUNCTIONS**
continued

26 Pause Key
Use this key to temporarily suspend playback of the current compact disc track. To resume playback, press the pause key again.

27 Play Key
Use this key to start playback from the beginning of the compact disc. For more information, see *How to Play a Compact Disc,* on page 15.

28 Stop Key
Use this key to stop compact disc playback.

29 Open Key
Use this key to open and close the compact disc transport.

30 Track Back and Forward Keys
Use the track back key to select the track that precedes the current track; use the track forward key to select the track that follows the current track.

31 Search Back and Forward Keys
Press and hold these keys to scroll backward or forward through the current track.

**SPECIAL
PLAY
FUNCTIONS**

32 Prg (Program) Key
Use this key to access the track programming mode. Track programming lets you select up to twenty tracks you want to hear in the order you want to hear them. See *How to Program a Track Sequence,* on page 16.

33 Rep (Repeat) Key
Press this key once to repeat the entire compact disc. The front panel display shows REPEAT. Press twice to repeat the current track. The front panel display shows REPEAT 1. To cancel this function, press the repeat key again.

34 Rnd (Random) Key
Press this key once to enable the KAV–280cd to select and play tracks in a random sequence. The front panel display (10) shows SHUFFLE while this function is active.

35 A/B
Use this key to create a loop between two pre-determined points within a single track or sequential tracks. To create an A/B loop, start play of a track. When you hear the part that you want as the beginning of the loop, press A/B to insert the start position. Press A/B again to insert the finish position. A/B will automatically begin and continue indefinitely. To delete the A/B program, press A/B again or press the stop key (15).

Connecting the KAV–280cd
to Your System

**USING BALANCED
CONNECTIONS**

Krell recommends using balanced interconnect cables. Balanced interconnect cables not only can minimize sonic loss but are also immune to induced noise, especially with installations using long cables. Balanced connections have 6 dB more gain than single-ended connections. When level matching is critical, keep this gain value in mind.

**Connection
Steps**

Follow these steps to connect the KAV–280cd to your system.

1. Make sure all power sources and components are off before connecting inputs and outputs.

2. Neatly organize the wiring between the KAV–280cd and all system components. Separate AC wires from audio cables to prevent hum or other unwanted noises from being introduced into the system.

3. Connect the interconnect cables from your preamplifier to the KAV–280cd balanced or single-ended analog outputs on the back panel. The balanced outputs use three-pin XLR connectors; the single-ended outputs use RCA connectors. Maintain the correct left/right orientation of these outputs.

    or

    Connect the KAV–280cd digital coaxial output or optics output to the input of your preamp/processor.

4. Plug the AC power cord into the IEC power connector on the back panel, then plug the AC power cord into the wall socket. The red stand-by LED on the front panel illuminates.

IMPORTANT

Do not press the power button or power key until initialization is complete.

When you plug the AC power cord into the wall socket, the red stand-by LED illuminates. After a 30-second delay, the init LED (12) illuminates, indicating that initializing is complete. You can now switch to the operational mode.

Operating Your KAV-280cd

This section provides information about operating the KAV-280cd.

Power On

With the KAV-280cd initialized and in the stand-by mode, use the power button or key to switch the component to the operational mode. The blue power LED illuminates. The compact disc transport is active.

How to Play a Compact Disc

1. Press the open/close button or open key to open the compact disc transport.

2. Place the compact disc on the transport.

3. Press the open/close button or open key again to close the compact disc transport.

4. Press the play button or key to begin playback from the first track.

5. Press the stop button or key to end compact disc playback.

Notes

Adjust the volume level through your system volume control.

*See **Front Panel Description,** on page 6, and **How to Program a Track Sequence,** on page 16, for more information on compact disc play options.*

How to Program
a Track Sequence

This short-term programming lets you store a maximum of twenty tracks in a program sequence.

1. Use the direct track access keypad or the track forward and back keys to select a track.

2. Press the program key to store the selected track. The front panel display shows PROGRAM 1 for the programmed track and the total track length.

3. Use the direct track access keypad or the track forward and back keys to select the next track. The front panel display flashes PRO-GRAM until you press the program key. The front panel display shows 2 and the total program time.

4. Repeat this procedure for each of the tracks you wish to store. A maximum of twenty tracks can be programmed in sequence.

5. Press the play key to begin playback of the tracks in the program sequence.

Note

Track forward, track back, and repeat function normally within a programmed sequence.

How to Change a Programmed Track Sequence

1. While the compact disc is playing, press the stop key.

2. Press the program key. The front panel display cycles through the programmed track numbers once.

Note

You can select a track anytime during the cycle, or after the front panel display has stopped cycling.

TO ADD TRACKS TO THE PROGRAM

To add or delete tracks, first stop compact disc playback and press the program key, as noted above. Then follow the steps below to add or delete tracks:

Press the track number you wish to add on the direct track access keypad, then press the program key. The newly programmed track is placed at the end of the existing track sequence.

TO DELETE TRACKS FROM THE PROGRAM

1. Press the track number you wish to delete on the direct track access keypad. The front panel display shows the track number, P and flashes PROGRAM.

2. Press the program key to delete the selected track number.

How to Clear a Programmed Track Sequence

1. While the compact disc is stopped, press the stop key.

2. Press the power key. This places the KAV–280cd in the stand-by mode and erases the programmed sequence.

Note

You can also clear the programmed sequence by opening and closing the compact disc transport.

Warranty

This Krell product has a limited warranty of five years for parts and labor on circuitry and three years for parts and labor on all mechanical components. 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 have 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 unusable. 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 KAV–280cd product serial number is:_____

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KAV-280cd
Front Loading
Compact Disc Player
v 01.0

Specifications

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

FREQUENCY RESPONSE
20 Hz–20 kHz
+0.0,-0.5 dB

SIGNAL-TO-NOISE RATIO
"A" weighted
103 dB

TOTAL HARMONIC DISTORTION (THD)
20 Hz–20 kHz
-82 dB THD

POWER CONSUMPTION
45 W

TRANSPORT
A drawer loading, mechanically isolated drive mechanism featuring a linear drive laser assembly

DIGITAL-TO-ANALOG CONVERTERS
4 Burr-Brown PCM-1704 24-bit devices

ANALOG AUDIO OUTPUTS
1 pair balanced
via XLR connectors

1 pair single-ended
via RCA connectors

DIGITAL AUDIO OUTPUT
1 S/PDIF via RCA connector

1 EIAJ optical via a TosLink connector

REMOTE CONTROL
1 wireless infrared

1 RC-5 via a DC power connector

1 12 VDC input (12 V trigger) via a 3.4 mm mini plug

1 12 VDC output (12 V trigger) via a 3.4 mm mini plug

DIMENSIONS
17.25w x 3.5h x 16.5d in.

43.8w x 8.9h x 41.9d cm

WEIGHT
Shipped
24 lb., 10.9 kg

Unit only
13.5 lb., 6.1 kg