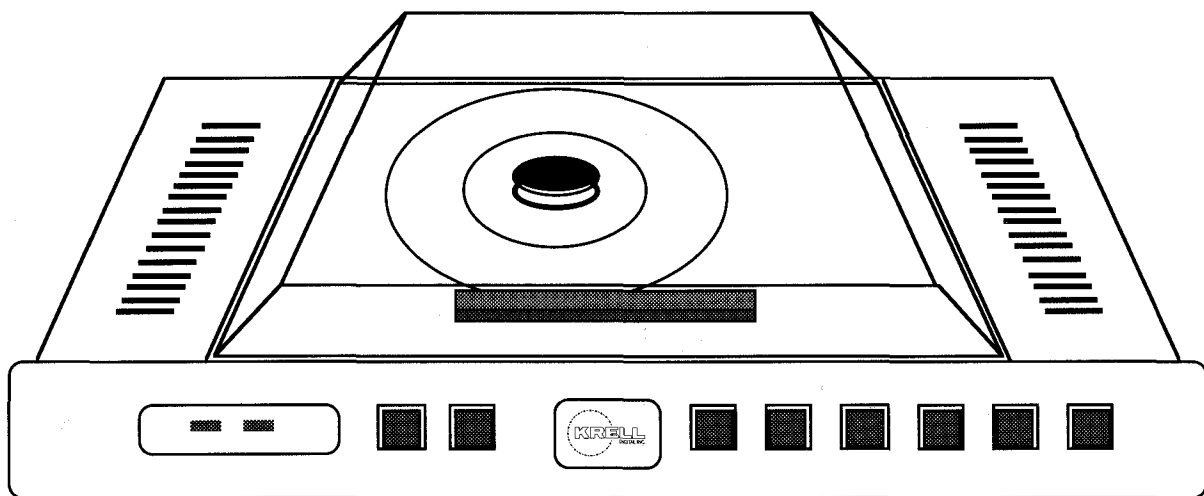


# **KRELL MD-2**



## **COMPACT DISC TURNTABLE**

### **OWNER'S REFERENCE**

## **A. INTRODUCTION**

Welcome to the Krell family of audio components. You have joined a select group of discriminating listeners who enjoy the finest in music reproduction.

Krell Digital (KDI) is dedicated to the development of technologically advanced components for the reproduction of digitally recorded music. These designs continue the Krell tradition of uncompromising performance through leading-edge technology.

This Owner's Reference is divided into several sections, each designed to perform a different function. A Question and Answer section is also 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 MD-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 or your authorized KRELL Distributor.

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## **C. UNPACKING AND ASSEMBLY**

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

- 1 Dust Cover encased in a protective sleeve
- 1 CD Stabilizer
- 1 AC power cord
- 1 MD-2 RC Remote Control
- 3 AAA Batteries for MD-2RC
- 1 Packet containing the Owners Reference and warranty card

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

2. Remove the layer of foam containing these items and set it aside for later use. Carefully remove the MD-2 transport from its box and remove the protective plastic wrap.

Note: Save all packing materials. If you must ship your MD-2 in the future repack the unit in its original packaging to prevent transit damage. If the unit is returned to KRELL for service please send the cover and the remote control unit.

**Caution:** If your MD-2 has the custom lucite cover do not remove it from its protective sleeve at this time! This cover is extremely delicate and can be permanently scarred if mishandled. Please follow the instructions provided in this Reference for safe installation.

3. Remove the transport screws from the bottom of the unit. Their locations are marked with stickers on the bottom of the chassis.

NOTE: Later production models have a protective plastic hub that secures the transport from the top of the unit during shipping instead of transport screws. Carefully remove the black plastic hub by turning it counterclock-

4. Remove the voltage identification sticker from the back of the unit. You are now ready to install the dust cover.

**CAUTION: FAILURE TO REMOVE TRANSPORT SCREWS BEFORE OPERATION COULD RESULT IN DAMAGE TO THE TRANSPORT.**

**CAUTION: FAILURE TO REMOVE THE PROTECTIVE HUB BEFORE THE UNIT IS PLUGGED INTO THE AC RECEPTACLE OR BEFORE OPERATION COULD RESULT IN DAMAGE TO THE TRANSPORT.**

## **D. DUST COVER INSTALLATION**

### **1. Standard Version Smoked Dust Cover:**

Remove the dust cover, in its protective sleeve, from the shipping foam. To prevent scratching leave the protective sleeve on the dust cover until the cover mounting is complete. There are two pairs of screws with washer-type receptacles attached to the back panel of the unit for mounting the dust cover. Center the hinge pins on the dust cover over the two pairs of screws. Carefully slide the hinges into the slots formed by the washers. Push the cover down evenly on both sides until it is fully seated. Finally, remove the protective sleeve.

### **2. Custom Version Clear Lucite Dust Cover:**

Remove the dust cover from the protective foam and its protective sleeve. There are two pairs of screws with washer-type hinge receptacles on the back of the unit. Remove the four screws from the unit and take off the black hinge receptacles. Carefully place the lucite dust cover such that the circular milled-out portion is centered over the transport. Align the slots in the cover's hinge blocks with the holes in the back of the chassis. Thread the four screws into the chassis through the hinge blocks. Tighten down lightly and adjust the cover so it is centered on the unit. Once the cover is aligned tighten down the supporting screws.

**NOTE:** The clear lucite cover must be lowered manually, as it is very heavy and does not have a damping mechanism.

## **E. BASIC INSTALLATION AND CONNECTIONS**

1. Place the unit on a clean level surface away from excessive heat, moisture or light. Ideally, the MD-2 should be placed on the top of an audio component cabinet or other "open air" rigid platform.
2. The MD-2 may be placed in a cabinet. It will require 17.0 inches of vertical clearance between the bottom and top shelves for proper operation of the cover.
3. If space is limited the MD-2 can be operated without its dust cover. Six inches vertical clearance is adequate to allow convenient access to the disc transport area.
4. The location of the unit should be within 2 meters of the digital signal processor. If longer distance is required, we recommend using a fibre optic data link as it is more suited to long distance runs.
5. Connect the AC power cord to the back of the unit. Once the power cord is secured, plug the cord into an AC outlet.

When the MD-2 is connected to the AC outlet you will hear a soft clicking sound and the display on the front will show two illuminated dashes. This puts the unit in a standby condition.

**NOTE:** While the MD-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 grounded AC strips are acceptable.

6. Connect the Digital Output from the MD-2 to a Krell Digital Processor or other compatible digital-to-analog audio processor. The MD-2 is compatible with both industry standard Fibre Optic or Coaxial cable connectors.

Care should be taken in selecting the type of cable used to link the MD-2 to your processor. If coaxial cable is to be used it should be 75ohm, non-capacitive, with a bandwidth in excess of 10 MHz to prevent dropout errors.

**CAUTION:** The MD-2 is a CD Transport only. It is not designed to connect directly to any preamp or analog signal processor.

## **F. TRANSPORT OPERATION**

1. Turn the CD transport On by pressing the POWER button. Select a disc and place it on the spindle, label side up. Put the disc stabilizer on the center of the CD so it fits securely on the drive spindle.

### **CAUTIONS:**

a. Never operate the CD transport without the disc stabilizer. This can result in damage to the transport or your valuable compact discs.

b. Never place the disc stabilizer where the cover may accidentally close on it and be damaged.

c. Do not use any disc stabilizing tool besides the KDI CD Stabilizer. This device has been specially machined to precisely match the CD transport. Failure to heed this warning may cause damage to the laser transport.

2. The functions of the front panel buttons that control the transport are described below.

DISPLAY	Changes between track designation and elapsed time
POWER	Turns unit ON or OFF
STOP	Stops the disc from playing
PLAY	Starts the disc playing at track 1; will also restart play of the current track
<	Reverse track select
>	Forward track select
<<	Fast reverse scan
>>	Fast forward scan

## **G. REMOTE CONTROL**

1. The operating functions of the Remote Control are described below:

PAUSE	Temporarily stops the music at a specific point; Pressing again resumes play from the same point.
STOP	Stops the disc from playing
PLAY	Starts the disc playing at track 1; will also restart play of the current track
<	Reverse track select
>	Forward track select
< <	Fast reverse scan
> >	Fast forward scan

2. Battery installation:

Remove the two hex head screws from the bottom portion of the remote control's front plate. Remove the small top plate to expose the battery storage compartment. Refer to the polarity drawing while inserting the batteries. Replace the top plate and insert the two hex head screws.

## **H. CARE AND CLEANING**

**CAUTION:** Please read this section carefully to prevent damage through improper cleaning methods or materials.

1. Due to the exposed nature of the laser transport assembly on the MD-2 extra care should be taken to insure that it is not accidentally contaminated with fingerprints, cleaning liquids, etc. During day-to-day use the laser will not become dirty or contaminated any faster than an enclosed transport. However, the laser should be cleaned at least twice annually to remove residue from smoke and airborne oils.

To clean the laser lens: place a drop of CD cleaning fluid on a clean, lint free cloth and gently wipe the lens clean.

### Cautions:

a. Do not oil the laser transport! This mechanism is completely self-contained and does not require customer maintenance.

b. Do not touch any part of the exposed laser and servo system with your hands. This could accidentally damage the drive unit.

2. To remove finger marks and small scratches from the dust cover we recommend a light hand glaze which is specifically designed for plastics and painted surfaces. At Krell we use a product from 3M called "Imperial Hand Glaze". Its part number is 05990. Follow the manufacturer's directions.

3. Should deeper scratches need to be removed we recommend a light or medium-duty plastic polish such as "Plastic Polish #2". Follow the manufacturer's directions and use the light 3M type glaze to remove any swirl marks. These cleaning products may be found in quality automotive body or detailing shops.

## I. QUESTIONS AND ANSWERS

Q. My analog-to-digital processor will accommodate either fibre optic or coaxial digital inputs. Which output should I use on the MD-2?

A. While a high quality coaxial will perform quite well, we recommend glass fibre optic cable due to its ability to completely isolate the grounding planes between the transport and processor, and its resistance to RF interference.

Q. I have installed the MD-2 but the disc will not turn when I press PLAY. What should I do?

A. Check to see if you removed the transport screws from the bottom of the unit as stated in the UNPACKING AND ASSEMBLY section of this manual.

Caution: Should this not be the cause of your difficulty do not attempt any repair of this unit. Contact your authorized Krell Dealer/Distributor or the factory.



Q. Do you recommend I leave the MD-2 ON at all times?

A. Yes. These circuits are most accurate and stable when left to idle while not in use. In fact, discrete parts age faster when cycled ON and OFF. The MD-2 will sound better and last longer if left ON.

**NOTE:** You should disconnect the AC cord from the wall outlet before any electrical storms or if you plan to be away from your home for prolonged periods of time.

Q. Will the MD-2 play if the dust cover is fully raised?

A. Certainly. The unit will function perfectly even with the dust cover removed.

Q. Due to the exposed nature of the laser assembly is there a possibility of damage through laser radiation?

A. No. There is an optical sensor under the CD when it is positioned on the transport hub. This allows the MD-2 to prohibit the laser from turning on when it is not covered with a CD.

Q. I own many CD's which have CD Rings on them. Am I able to use these discs with the MD-2?

A. Yes, the MD-2 will accept discs with "CD Rings". Due to their very low mass they will not damage the MD-2's transport. While we can neither affirm or deny the benefits derived from the use of CD Rings, we do not feel that any type of disc equilibrium device is required with the MD-2 when properly used with our CD Stabilizer

**Caution:** We strongly advise against the use of any type of additional disc stabilizer. These items add too much mass to the laser servo system and may burn out the drive.

Q. Do you recommend the use of "Cones" or other damping feet with the MD-2?

A. Due to the extraordinary rigidity of our machining and internal damping we do not feel that the MD-2 requires additional mass coupling or isolation. If you wish to use an after-market isolation device you may do so without fear of damaging the MD-2. Any device which affixes permanently to the chassis or requires a breach of the external chassis will void the warranty.

Q. Can I use both sets of COAXIAL outputs at the same time?

A. Yes, the MD-2 can drive two different digital to analog converters.

Q. Will the MD-2 play CD singles?

A. Yes, the MD-2 will play CD singles.

## **J. SPECIFICATIONS**

### **TRANSPORT**

Philips CDM-1 MK 11 with Hall effect motor, swing-arm design in a unicast frame.

### **LASER**

Single Beam with glass lens

### **OUTPUT**

Digital only in industry standard formats

1 FIBRE OPTIC via standard interface

2 COAXIAL via RCA connectors

### **REMOTE CONTROL**

Wireless infrared

### **DIMENSIONS**

19" wide, 12.5" deep

6" high, cover closed

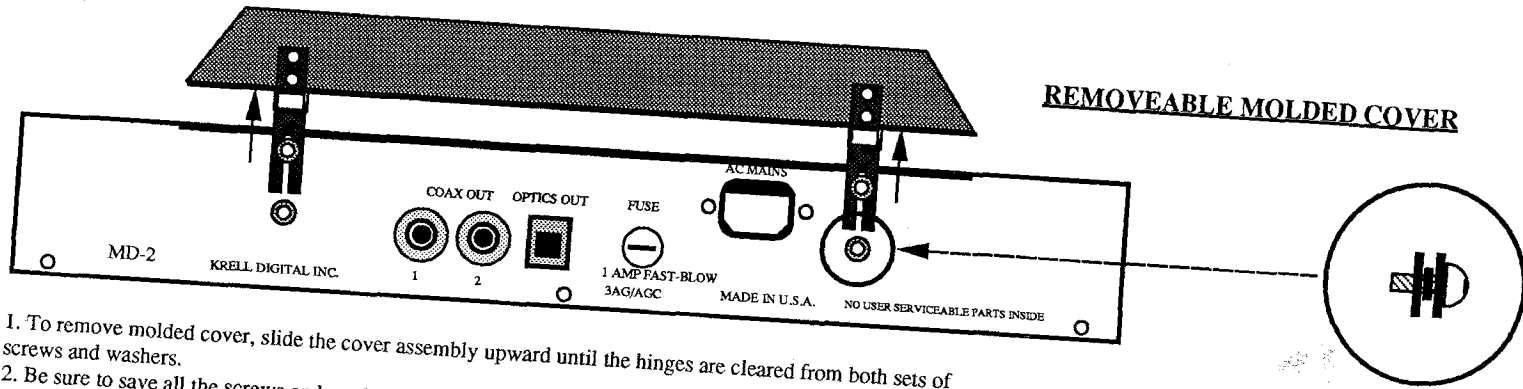
15" high with cover open

### **WEIGHT**

23 pounds, unit only

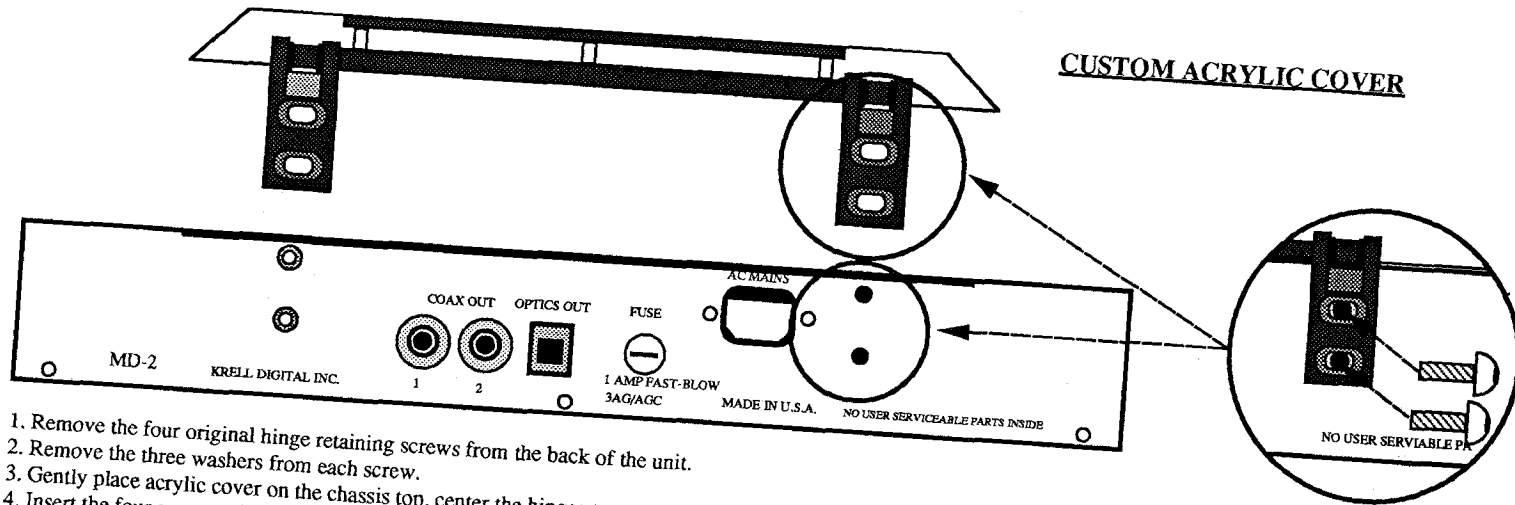
28 pounds, shipping weight

# INSTALLATION OF THE CUSTOM ACRYLIC TOPCOVER FOR MD-2



1. To remove molded cover, slide the cover assembly upward until the hinges are cleared from both sets of screws and washers.
2. Be sure to save all the screws and washers after disassembly.

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1. Remove the four original hinge retaining screws from the back of the unit.
2. Remove the three washers from each screw.
3. Gently place acrylic cover on the chassis top, center the hinges to match the holes in the chassis.
4. Insert the four screws without washers into the hinge and fasten loosely.
5. Center the cover with the chassis and secure hinge block screws.

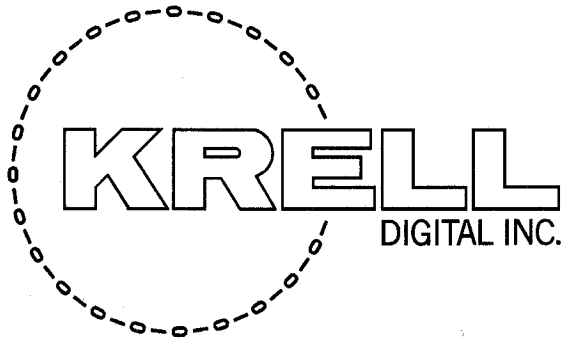
MARCH 1, 1991

## **K. WARRANTY AND SERVICE INFORMATION**

There are no user-serviceable parts inside the MD-2. The MD-2 has a limited warranty of three years parts and labor on transport-related parts, five years parts and labor on electronic parts. 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 **only** 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.

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.



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