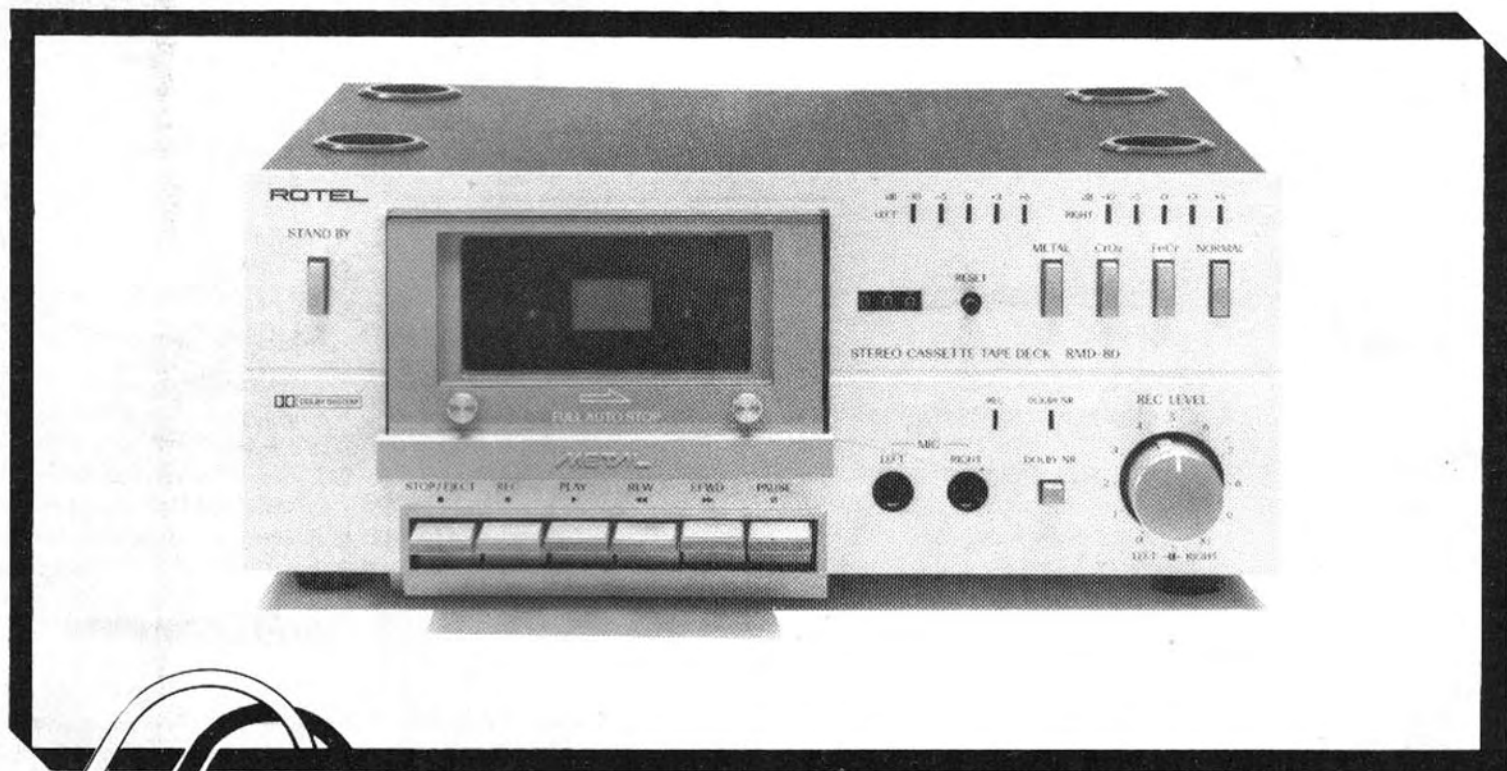


OWNER'S MANUAL

Quality. Uncompromised.

ROTEL®



MICRO COMPONENT 80 SYSTEM
STEREO CASSETTE DECK

RMD-80

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

Write your **SERIAL NUMBER** here.
The number is located near the name plate on the unit's rear panel.

THE ROTEL CO., LTD.

1-36-8 Ohokayama, Meguro-ku, Tokyo, Japan

INTRODUCTION

We at Rotel want to thank you for purchasing our audio product.

Rotel audio products are designed to use the latest electronic technology, and they incorporate our long experience as a specialist manufacturer of audio equipment. We are confident that you will find satisfaction in the high quality sound and top performance, and that you will find pleasure in the functional beauty achieved through human-engineering concept. Before starting operation, please read this instruction manual thoroughly and acquaint yourself with the proper mode of using the unit and all its connections.

We hope you will enjoy top-notch performance for many years to come.

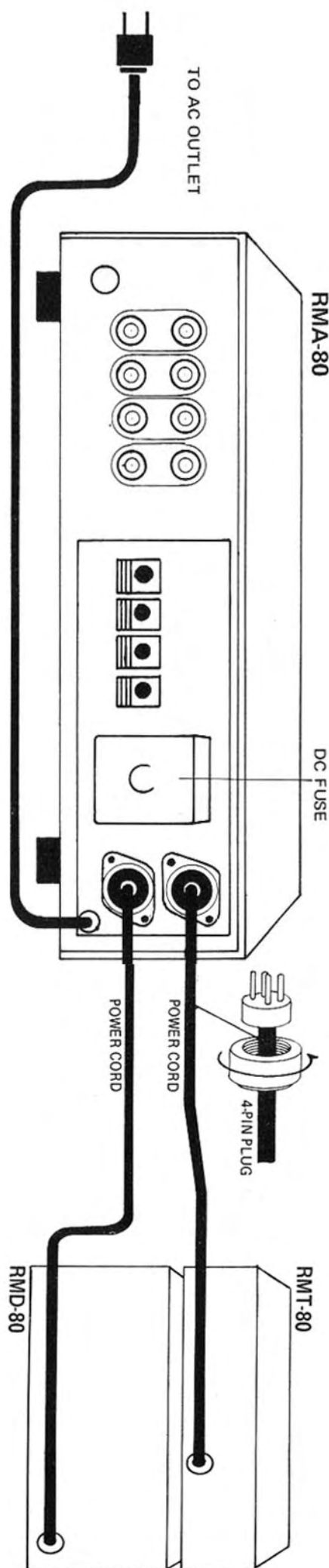
PRECAUTIONS AND POWER SUPPLY

For maximum safety carefully follow the instructions below:

1. Power Supply

In the Micro Component 80 System, the power supply section of the integrated amplifier RMA-80 feeds the necessary power to the AM/FM tuner RMT-80 and the cassette deck RMD-80.

- To supply power to the amplifier RMA-80, connect the AC power cord of the unit into a household wall outlet. Do not attempt to plug the cord into an outlet for power equipment, a convenience outlet on other audio component, or any other outlet of different rating. To prevent possible shock noise or damage to the speakers, always be sure to connect or disconnect the AC power cord only after turning



off the power switch on the unit.

- The RMT-80 and RMD-80 can be powered only through the power supply connectors on the rear panel of the RMA-80. Insert the 4-pin plugs extending from the rear panel of the RMT-80 and RMD-80 all the way into the power supply connectors of the RMA-80, thus insuring a perfect connection. Never attempt to insert the 4-pin plugs into a wall outlet or other power source that may damage the units. Also, do not attempt to insert any other plug into the power supply connector of RMA-80.

2. Installation

The unit must be placed in a level, flat and well-ventilated location free from humidity, vibrations, dust, and high temperatures and not exposed to direct sunlight. Improper placement conditions may have undesirable effects to the units.

3. Do not open the cabinet

To avoid possible electric shock or damage to the component, never open the cabinet. If some object falls inside the cabinet by mistake, turn off the power, disconnect the wall plug, and consult a qualified electrician or your dealer.

4. Turn the volume control to minimum

An excess of current in the lower frequency range may cause damage to the speakers when lowering the tonearm of your turntable onto a record. Set the volume control of RMA-80 to minimum before lowering the stylus onto a record. Always keep the volume at minimum whenever the power switch is turned on.

5. When moving the components

When transporting the units, remove the AC plug from the wall outlet and disconnect all cords on the rear panel to prevent wire breakage and short circuit.

6. If the unit gets wet or foreign matter enters

Should water or any foreign matter enter the cabinet, immediately disconnect the AC cord, and consult your dealer or a qualified electrician.

7. Retain the owner's manual

Keep the owner's manual near the component, and write down the serial number (found on the rear panel) on the cover.

EXCLUSIVE NOTE FOR U.K.

If your unit comes with a 2-core cable without a plug, make certain live and neutral leads are connected to the proper terminals. Check that the terminals are screwed down firmly and no loose strands of wire are present.

IMPORTANT: The wires in this mains lead are coloured in accordance with the following code:

BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows.

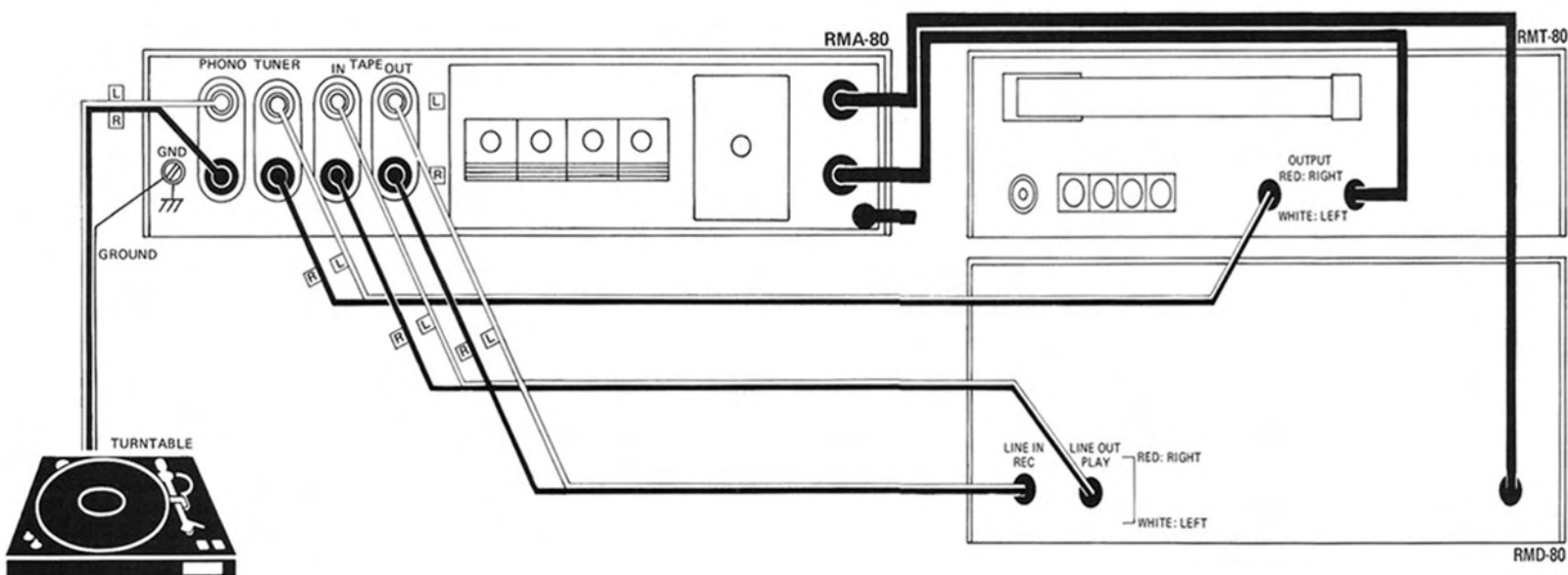
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLUE or BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured BROWN or RED.

CONNECTING MICRO COMPONENT 80 SYSTEM

Make connections as directed by the illustration.

1. Turntable

Connect the RCA pin cords extending from your turntable to the PHONO terminals on the rear panel of RMA-80, correctly matching L and R terminals of the components. Connect grounding wire of the turntable to GND terminal on the RMA-80 rear panel.



2. AM/FM tuner RMT-80

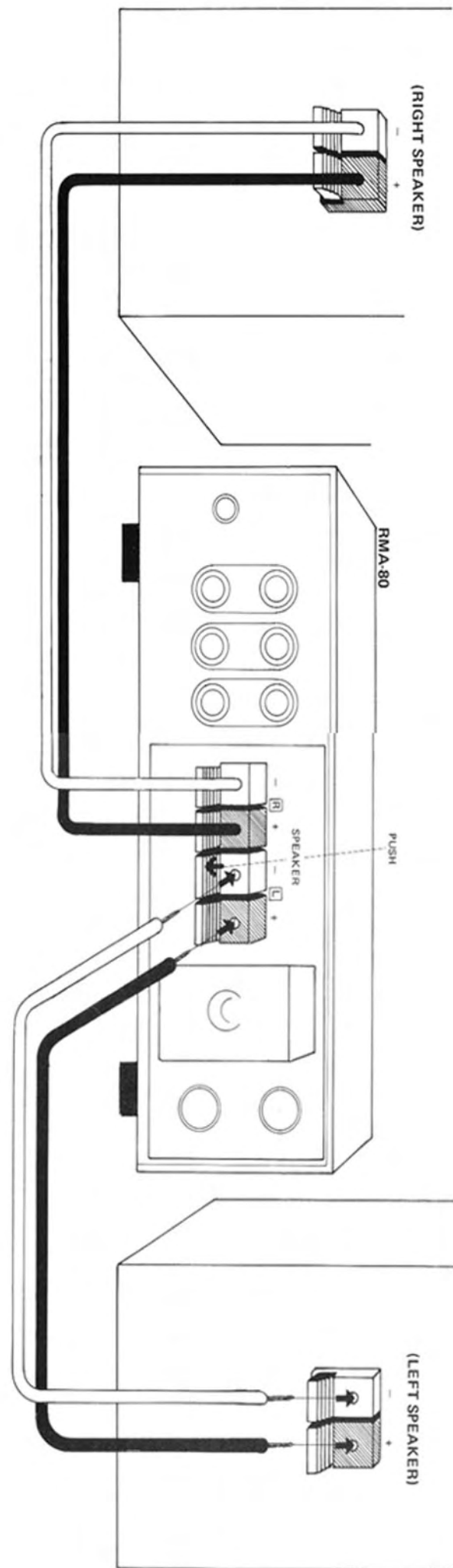
Connect the RCA pin cords extending from the tuner to TUNER terminals on the rear panel of RMA-80, correctly matching L and R terminals of the units.

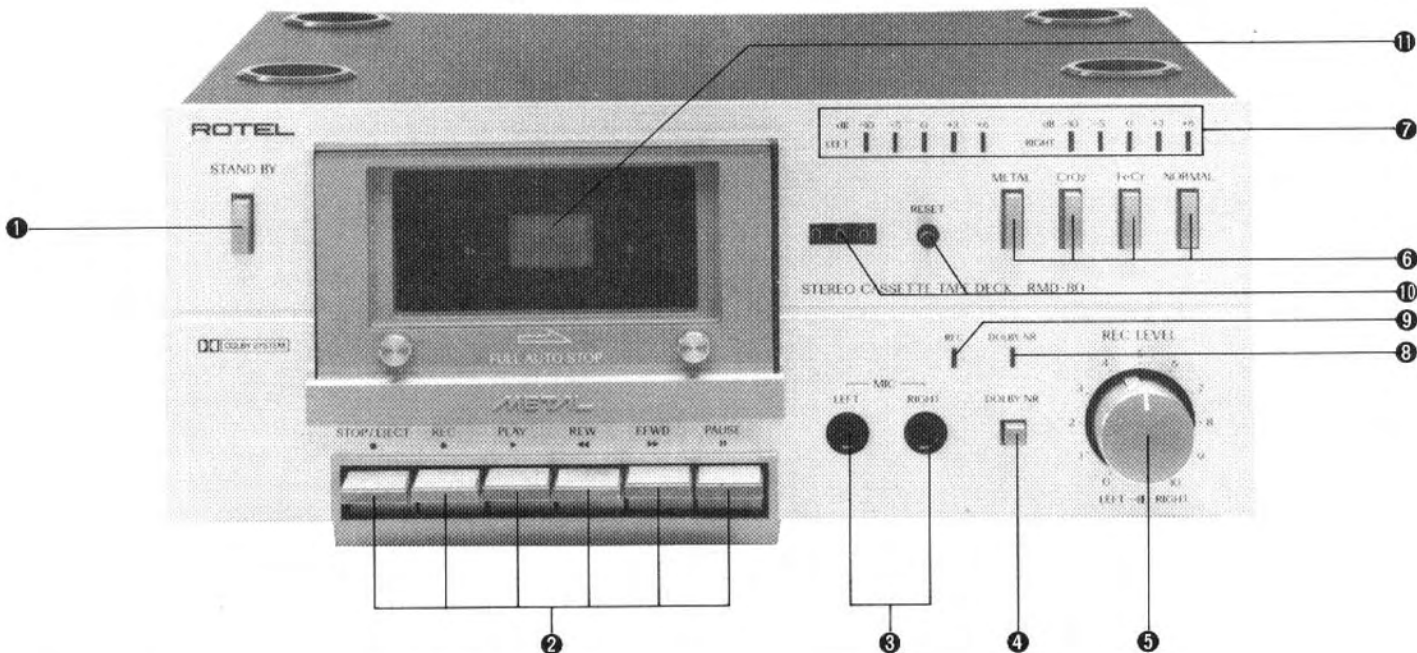
3. Cassette deck RMD-80

Connect RMD-80 RCA pin cords extending from LINE IN and LINE OUT, to TAPE terminals on the rear panel of RMA-80. LINE IN cords from the deck should be connected to TAPE OUT terminals of the amplifier; and LINE OUT cords to TAPE IN terminals. Be sure to correctly match L and R terminals of the units.

4. Speakers

Speaker terminals of RMA-80 are push-insert type. Connect the leads from the left-hand speaker to L-terminals, and the leads from the right-hand speaker to R-terminals, correctly matching (+) and (-) terminals of the components.





SWITCHES AND CONTROLS FOR RMD-80

(1) Standby Button

Depress this button to supply power from RMA-80 to the deck. When it is turned on, the cassette compartment is illuminated. Releasing the button will turn off the unit and the illumination goes off.

(2) Cassette Mechanism Controls

STOP/EJECT Buttons (■)

This button is used to disengage the recording, playback, fast-forward, or rewind mode. After stopping the tape, release the button, then press all the way down to open the cassette door for removal of cassette tape. Also use this button when inserting the cassette.

REC Button (●)

Used to put the deck in the recording mode. To record, simultaneously depress this button and PLAY button.

PLAY Button (▶)

Used to play back prerecorded tape. When depressed, the deck is put in the play mode and the tape starts. Depress the same button simultaneously with the REC button when going into the recording mode. The button will disengage automatically when the end of the tape is reached in either playback or recording mode, to protect the tape and the cassette mechanism.

REW Button (◀◀)

Depress this button to rapidly rewind the tape. Rewind will stop automatically when the end of the tape is reached, to protect the tape and the mechanism.

F.FWD Button (▶▶)

Depress this button to rapidly advance the tape. Fast-forward will stop automatically at the end of the tape, to protect the tape and the mechanism.

PAUSE Button (||)

Depress this button to temporarily halt tape travel when in recording or playback mode. Unlike the STOP/EJECT button, this button will not disengage either recording or playback mode currently engaged. It is convenient when performing recording level adjustment or when you wish to stop or start the tape quickly and smoothly. Pressing the button a second time will restart the tape, returning to the interrupted mode.

Note: Do not use PAUSE button when in rewind or fast-forward.

(3) Microphone Jack

When making live recording with stereo microphones, insert the microphone plugs into microphone jacks. Make sure the right-hand microphone is plugged into the right channel jack, and the left-hand microphone into the left channel jack.

Note: Be sure to unplug the microphones when recording from other sources.

(4) Dolby NR Switch

Depress this button to activate the built-in Dolby NR circuit provided for high-frequency range noise reduction. Use the button when you wish to record or play back through the Dolby NR circuit.

(5) Recording Level Control

This is used in recording. It controls the recording level of incoming signals from tuner, turntable or microphones. Separate control of left and right channel is possible.

(6) Tape Selector

Tape selector is used to select the appropriate recording/playback characteristics of the tape, according to type of tape used. Use the METAL button for metal tape, the CrO₂ button for chromium dioxide tape, the Fe-Cr button for ferrichrome tape, and the NORMAL button for normal tape. Selecting the proper button will allow optimal recording or playback for the specific type of tape. See "Tape Selector Setting Guide" for more details.

(7) Level Indicator

Gives instantaneous display of recording or playback level for both left and right channels. Each row of 5 LEDs directly shows levels from -10dB to +6dB.

(8) Dolby NR Indicator

Glow when Dolby NR switch is activated.

(9) Recording Indicator

This indicator glows to indicate that recording is in process when REC and PLAY buttons are depressed.

(10) Tape Counter and Reset Button

The three-digit tape counter indicates the amount of tape travel. Push the reset button to set the counter to "000." The counter is convenient in finding the beginning of a specific section of the tape or checking the amount of tape remaining on a cassette.

(11) Tape Holder

Cassette tape is loaded into the tape holder.

TAPE SELECTOR SETTING GUIDE

| TAPE SELECTOR POSITION | MANUFACTURER (BRAND) | KIND OF TAPE |
|------------------------|-----------------------|--------------|
| NORMAL | TDK | D |
| | | AD |
| | | OD |
| | FUJI FILM | RANGE-2 |
| | | RANGE-4 |
| | | RANGE-6 |
| | SONY | AHF |
| | | BHF |
| | | CHF |
| | MAXELL | UD |
| XLI | | |
| SCOTCH | CRYSTAL MASTER 120 | |
| BASF | SLH LH | |

| TAPE SELECTOR POSITION | MANUFACTURER (BRAND) | KIND OF TAPE |
|------------------------|----------------------|--------------|
| FeCr | SONY | DUAD |
| | BASF | FCR |
| CrO ₂ | TDK | SA |
| | FUJI FILM | RANGE-4X |
| | MAXELL | XL II |
| | SCOTCH | MASTER 70 |
| | BASF | SCR |
| | SONY | JHF |
| METAL | TDK | MA |
| | FUJI FILM | SUPER RANGE |
| | SONY | METALLIC |
| | SCOTCH | METAFINE |
| | MAXELL | MX |

AUTOMATIC SHUTOFF SYSTEM

To protect the RMD-80's motor and drive mechanism against unnecessary wear, an automatic shutoff device has been built into the machine. When the supply hub stops for any reason the motor and drive mechanism will automatically shutoff after a short period of time (usually about 5 seconds). The machine is also automatically shutoff at the end of tape (PLAY, REC/PLAY, FAST FORWARD and REWIND modes), disengaging all locked buttons.

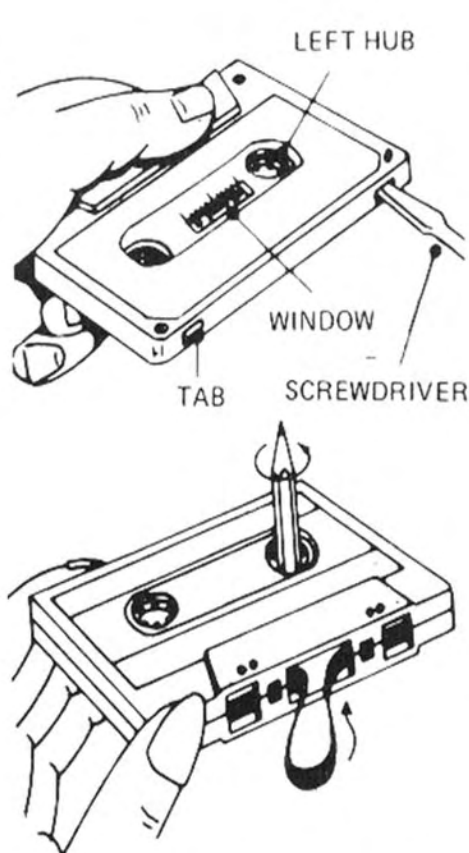
Note: Since this device will not affect the electronic circuits of the machine it will still be necessary to turn off the entire unit by pushing the standby switch.

CASSETTE TAPES

High-performance tapes ranging from normal to metal types are suitable for this component. In addition, tape, tension and capstan tolerance for this unit have been carefully adjusted to the specific tape thickness of C30, C60 and C90 cassettes. For this reason, the use of C120 cassettes is not recommended. As cleanness and precision are necessary for accurate sound reproduction, cassettes should always be handled with care, and kept away from dust and magnetic influences which might cause sound distortion.

Cassette tapes are provided with a safety feature which prevents against accidental erasure of previously recorded material. This feature consists of two small tabs located on both sides at the rear of the cassette housing. After a recording has been made, these tabs are removed, leaving two small, square openings which prevent further recording on that tape. (You will notice that these tabs are absent on any pre-recorded tapes you may have.) If you wish to guard against erasure on a recording you have made on a blank cassette, it is necessary to remove one or both of these tabs as follows:

1. If both sides have been recorded, insert a thin bladed screwdriver in the opening around each



tab and gently pry the tab off. Be sure the tab falls free from the cassette.

2. If one side only has been recorded, place the cassette on a table just as it has been removed from the recorder, with the side recorded facing up and the exposed tape area facing you. You should then remove the tab in the left-hand corner to prevent erasure of that side of the tape.

If you later wish to record over a previously recorded tape, simply place a piece of adhesive tape over the opening. This will allow you to make a new recording. Removal of the tape after recording will again insure against accidental erasure.

The cassette tape, when wound loosely on either hub, is likely to jam around the capstan and pinch roller during recording or playback. Therefore, if the tape is loose, insert a pencil into the more tightly wound hub, and turn it with the pencil until the slack is taken up. Always be sure to check that the tape is wound tightly before inserting a cassette in your deck.

OPERATING MICRO COMPONENT 80 SYSTEM

Before Operation

- Check to see that the power cord is connected correctly.
- Check to see that all audio components are correctly connected.

A. Playing the turntable

1. Depress PHONO button of the function selector on RMA-80.
2. Depress POWER button on RMA-80.
3. Start playing the turntable, according to the instructions provided with the turntable.
4. Raise the volume on RMA-80 to the desired level.

B. Operating AM/FM tuner RMT-80

1. Depress TUNER button of the function selector on RMA-80.
2. Turn on POWER switch of RMA-80 and STANDBY button of RMT-80.
3. On model RMT-80, depress AM button to receive AM broadcast, and FM button to receive FM. On Model RMT-80L, AM broadcast is received in either MW or LW mode. When the AM/FM selector button on the left is in released position, the unit is in the AM mode. Leave the MW/LW button on the right released to receive MW broadcast, and depress it to receive LW broadcast. When the AM/FM button is depressed, the unit receives FM broadcast irrespective of the position of MW/LW button. Tune in to the desired station by turning the tuning knob.
4. Raise the volume on RMA-80 to the desired level.

C. Operating cassette deck RMD-80

1. Depress TAPE button of the function selector on RMA-80.
2. Turn on POWER switch of RMA-80 and STANDBY button of RMD-80.
3. Set the tape selector and Dolby NR switch on the deck according to the type of tape to be used.
4. Load the cassette tape, and depress PLAY button on the deck.
5. Raise the volume on RMA-80 to the desired level.

D. Recording from tuner or turntable

The Function Selector buttons on RMA-80 are used in selecting the signal source for recording. The signal of the selected source will appear at TAPE OUT terminal on the rear panel of RMA-80. Use

PHONO button to record signal from the turntable; and TUNER button to record signal from the tuner.

1. Play the desired source: tuner or turntable. (See sections A and B.)
2. Select the appropriate Tape Selector button on RMD-80 according to the type of tape used. Depress Dolby NR switch if you wish to record through Dolby NR circuit.
3. Turn on the POWER switch on RMD-80.
4. Load the cassette tape. Depress PAUSE button.
5. Then depress REC and PLAY buttons simultaneously. Now the deck is in "stand-by" condition, ready to start recording.
6. Adjust the recording level by turning the REC LEVEL control clockwise so that the level indicator reading does not exceed 0dB position frequently, or only very briefly. (See figure.)
7. Press the PAUSE button to start the tape, and recording will begin.

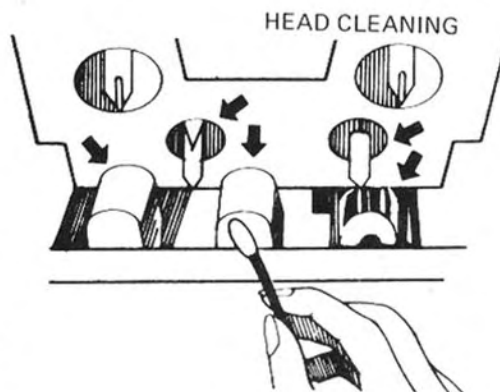
- To make live recording using microphones, plug microphones into the microphone (MIC) jacks on the front panel of RMD-80, and then follow steps 2 through 7 above.

- When recording from tuner or turntable, tone, balance and volume controls and loudness button on RMA-80 may be used as desired; manipulating those controls and button will have no effect on the recording signal.

- Before recording, be certain that the safety tabs on the cassette tape are not broken.

HEAD CLEANING

The most frequent cause of failure to record in one or both channels, or of weak, distorted sound, is dirty tape heads and capstan. So, be sure to clean the heads, capstan, pinch roller and tape guides as often as possible using a "Q" tip dipped in ordinary rubbing alcohol or commercial liquid tape head cleaner. Thoroughly wipe the surface of the heads, capstan, roller and tape guide.



HEAD DEMAGNETIZING

The tape heads, capstan and tape guides gradually become magnetized with use, which will eventually affect the sound quality of your tapes. Demagnetizing should follow cleaning, but need not take place as often as cleaning, once after every 20 to 30 hours of use should suffice.

A demagnetizer may be purchased at a moderate cost from any dealer carrying tape recording accessories. Follow the instruction supplied with the demagnetizer.

Caution: Push the power switch off before you attempt demagnetizing.

SPECIFICATIONS:

| | |
|--------------------------------------|-------------------------------------------------------------|
| Heads | High B permalloy laminated (REC/PB) Ferrite Core (ERASE) |
| Track | 4-track/2-channel |
| Tape Speed | 4.8cm/sec. |
| Motor | Electronic DC governor |
| Wow and Flutter | .015% (DIN) .005% (WRMS) |
| Distortion (REC/PB, 400Hz) | .06% (METAL) |
| Frequency Response | |
| Normal, LH | .30 to 14,000Hz±3dB |
| Chromium | .30 to 15,000Hz±3dB |
| FeCr | .30 to 16,000Hz±3dB |
| Metal | .30 to 17,000Hz±3dB |
| Signal-to-Noise Ratio | |
| (Chromium) | Dolby NR in: 64dB Dolby NR out: 55dB |
| Input Sensitivity/Impedance | |
| MIC | .03mV/10 kohms |
| LINE | .25mV/47 kohms |
| Output Level | .580mV/1 kohms |
| Fast Wind Time (C-60) | .90 seconds |
| Tape Selector | BIAS EQUALIZER |
| Normal, LH | .100% 120µS |
| Chromium | .150% 70µS |
| FeCr | .110% 70µS |
| Metal | .200% 70µS |

MISCELLANEOUS

| | |
|--------------------------------|-----------------------------------------------------------------------------------------------|
| Power Requirement | Power supplied from the amplifier RMA-80 (see instructions for power supply connection) |
| Dimensions (overall) | .279 (W) x 120 (H) x 206 (D)mm 11" (W) x 4-23/32" (H) x 8-1/8" (D) |
| Weight (net) | .32kg 7.0 lbs. |

Specifications and design subject to possible modification without notice.
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Noise reduction system manufactured under license from Dolby Laboratories.



REC LEVEL CONTROL

(RMD-80)