owner's manual

Quality. Uncompromised

ROTEL®

RD-855

STEREO CASSETTE TAPE DECK

ENGLISH 1
DEUTSCH 5
FRANCAIS 8

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 rear panel.

SAFETY INSTRUCTIONS

1. **Read Instructions** — All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions** — The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** — All warnings on the appliance and in the operating instructions should be adhered to.
4. **Follow Instructions** — All operating and other instructions should be followed.
5. **Water and Moisture** — The appliance should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
6. **Carts and Stands** — The appliance should be used only with a cart or stand that is recommended by the manufacturer.
7. **Wall or Ceiling Mounting** — The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. **Ventilation** — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. **Heat** — The appliance should be situated away from heat sources such as radiators, stoves, or other appliances that produce heat.
10. **Power Sources** — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. **Power-Cord Protection** — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
12. **Cleaning** — The appliance should be cleaned only as recommended by the manufacturer.
13. **Nonuse Periods** — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
14. **Object and Liquid Entry** — Care should be taken so that objects do not fall into and liquids not spilled into the inside of the appliance.
15. **Damage Requiring Service** — The appliance should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled into the appliance; or
    C. The appliance has been exposed to rain; or
    D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
    E. The appliance has been dropped, or the cabinet damaged.
16. **Servicing** — The user should not attempt to service the appliance beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.
17. **Grounding or Polarization** — The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK)
NO USER-SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

The lighting flash with arrowhead symbol, within an equilateral triangle, is intended to alart the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

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 colour BROWN or RED.

CAUTION:

To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

ENGLISH

STEREO CASSETTE TAPE DECK RD-855

INTRODUCTION

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

Rotel audio products are desgned 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.

INSTALLATION

Be sure to place the unit in a level and flat place where it is free from humidity, vibration, high temperature and not to place the unit in a highly enclosed place such as near a wall or on a bookshelf. A poor ventilation will cause undesirable effects to the unit.

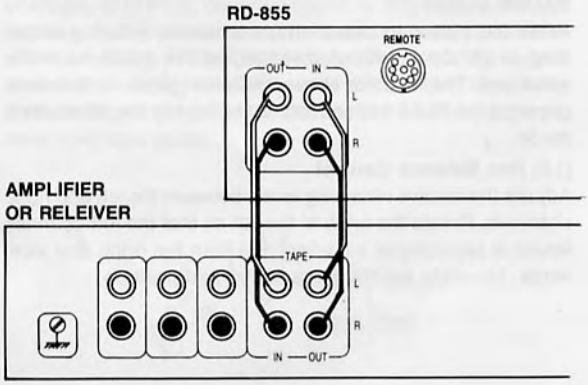
POWER SUPPLY CONNECTION

For power the unit requires the normal house electrical current (AC). You may simply plug the unit into a wall outlet, or into your amplifier's (or receiver's) convenience AC outlet.

CAUTION: Do not apply power without first making sure the proper connections are completed. If you live in U.K. and your unit comes with 2-core cord without a plug, be sure to read the exclusive caution for U.K.

CONNECTION TO INTEGRATED AMPLIFIER OR RECEIVER

Using the two accompanying pairs of RCA pin cords, connect INPUT and OUTPUT terminals on the back of deck with TAPE MONITOR terminals of the amplifier or receiver. Make sure INPUT terminals are connected to OUT terminals, and OUTPUT terminals to IN terminals. Be sure to match L (left) and R (right) terminals of the components. To make correct connections, use cords with white plugs for left channel connections, and cords with red plugs for right channel connections.



AUTOMATIC SHUTOFF SYSTEM

When either end of tape is reached in play, record, fast-forward, or rewind mode, the motor and transport mechanism will automatically shut off, disengaging the present mode. Note, however, that it is still necessary to turn off the entire unit by pressing the power switch to off.

AUTOMATIC TAPE SELECTION SYSTEM

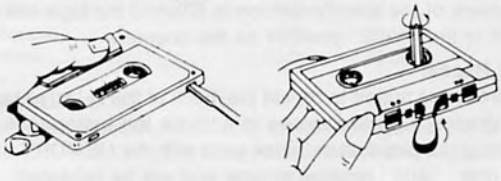
The RD-855 is equipped with an automatic tape selector system which eliminates manual tape selector buttons. When a tape is inserted, the correct equalization and biasing in accordance to the tape type will be automatically done. It should be noted that the manual bias control is also available on the front panel for fine-tuning if necessary.

CASSETTE TAPES

- To prevent possible trouble with the transport mechanism, use of large size cassette tapes, such as C-120, is not recommended.
- Handle cassette tapes with care. Keep them away from heat, circulating dust, or a magnetic field (e.g. on the TV set).
- Each cassette tape has safety tabs on its back edge to prevent accidental re-recording.

The tabs are provided for both sides of cassette tape. You cannot record on the side whose tab has been removed. The tab can be removed with a screwdriver, etc. If you wish to record on the side with no tab, place a piece of adhesive tape, etc. over the opening where the tab has been, then you can record.

- A loosened tape may cause trouble in playback or recording. Check the tape before loading it into the deck. If it is slack, insert a pencil or the like into either of cassette's hubs, and rotate it carefully until the slack is taken up.



SWITCH AND CONTROLS

(1) Power Button

This button turns on the unit. When it is turned on, the cassette compartment is illuminated. Press the button a second time to turn off the power.

(2) Eject Button

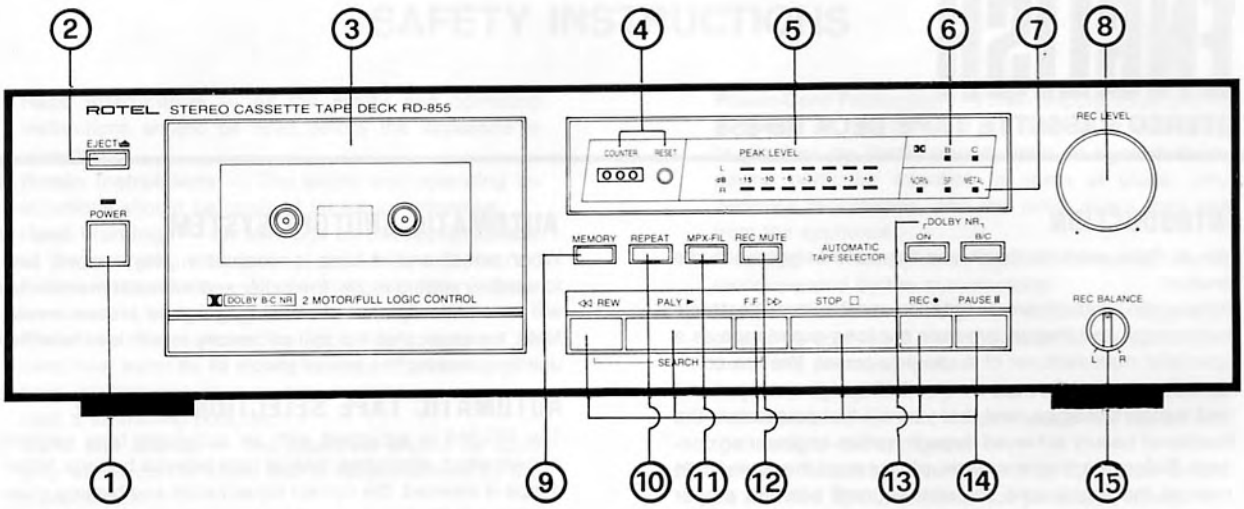
Press this button to open the cassette door when loading or unloading the cassette tape. To load the cassette tape, gently insert the cassette into the cassette holder, exposed tape side down, and the label for the side to be recorded or played back facing you. To close the cassette door, push it in lightly.

(3) Cassette Door

Cassette tape is loaded into the cassette door. Press the EJECT button to open the door.

(4) 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". This counter is convenient in finding the beginning of a specific section of the tape or checking the amount of the remaining tape on the cassette.



(5) Peak Level Indicator
Give instantaneous display of recording or playback level for both left and right chamels respectively. Each bank of 7 LEDs directly shows. levels from −15dB to +6dB.

(6) Dolby NR B/C Indicator
Either of these indicators will light up when Dolby NR switch is activated on and in accordance with whether Dolby type switch is set at Dolby B or Dolby C.

(7) Tape Indicators
When a tape is inserted and the cassette door closed, an indicator will light up automatically to indicate the tape type. NORMAL for normal tape ; SPECIAL for Chrome tape or 70μs /150% type tape; METAL for metal tape.

(8) Recording Level Control
Used to adjust the recording level of incoming signals from line source.

(9) Counter Memory
Depress it and the unit memorizes "000" position on the tape counter, in this state, If you press the REW button after playback of the specific section is finished the tape will rewind to the "000" position on the counter.

(10) Repeat
Depress this button to repeat playback of the selected tape automatically. Please ensure to activate the button before pushing the play button. when used with the MEMORY button only "000" position to tape end will be repeated.

(11) MPX Filter Button
Depress this button when recording stereo FM broadcasts. FM stereo broadcasting system uses a 19kHz pilot signal which may adversely affect the sound quality in some case. When the MPX filter button is depressed to ON, the MPX filter is activated to eliminate the 19kHz pilot signal , and clean stereo FM recording is achieved.

(12) REC MUTE Button
When this button is pressed during recording, no signal is recorded while tape travel continues, creating a blank section on your tape. Use this button to avoid recording unnecessary parts of the source or to insert no-signal sections when dubbing or aditing.

(13) Dolby NR Button and Dolby B-C Type NR Selector
Depress the Dolby NR button when you wish to record or play back through the built-in Dolby noise reduction circuit. Immediately above this button is a switch for selecting Dolby B-type or C-type noise reduction. Select B-type by setting switch in released position, and C-type by setting switch in depressed position.

(14) Cassette Controls

REW Button
For rapid tape rewind, depress this button.

PLAY Button
Depress this button to start the cassette for play back of recorded tape.
The LED provided on the button will be illuminated.
If the button is depressed simultaneously with the fast forward button, the beginning of the program next to the present program being played will be seeked automatically. In reverse, if the play button is depressed simultaneously with the rewind, the beginning of the present program being played will be seeked automatically.

F.FWD Button
Depress this button to advance the tape rapidly forward.

STOP Button
Depress this button to stop the tape in any mode: record, playback, rewind or fast-forward. This button will release any transport button currently engaged.

REC Button
To record, depress this and PLAY button. The deck is now in the recording mode, and the tape should be winding. The LED provided on the button glows during recording.

PAUSE Button
Press this button to stop the tape temporarily during recording or playback without disengaging the mode currently employed. The indicator above the button glows. In this state pressing the PLAY button restarts the tape in the interrupted mode.

(15) Rec Balance Control
Adjusts the relative recording levels between the left and right channels. Rotate the knob to the left so that the left channel sound is recorded at a louder level than the right, and vice versa. Normally set the knob at the mid-position.

The rear panel of the unit is provided with a DIN socket for connecting the Rotel RTC-850 tuner-preamplifier which allows wireless-remote control of the unit.

OPERATION

• Be certain that power connection and connection with amplifier are properly made.

• When recording, be sure the safety tabs on the cassette tape are not removed.

• When recording from line sources, choose the desired program (tuner, turntable, etc.) on your amplifier.

Recording

1. When you wish to record through Dolby B- or C-type NR circuit, depress the Dolby NR button, and then set the B-C type selector button to the desired position.
2. Turn on the deck Power switch.
3. Press REC and PAUSE button and the unit is put into REC PAUSE state.
4. Adjust the recording level for left and right channels with Recording Level control so that the level indicator readings do not exceed 0dB position frequently, and when they do, only very briefly
5. After adjusting recording level, press the PLAY button again to put the unit into recording mode and to start the tape.
6. Carefully watch the meter indication during recording as well. PAUSE button may be used to temporarily halt recording.
7. Press STOP button when recording is finished.

Playback

1. Set the Dolby NR button in depressed position when you play back a tape recorded with Dolby NR.
Release the button when you play back a tape not recorded with Dolby NR.
When you play back a tape recorded with Dolby NR, also set the Dolby B-C type selector button according to whether Dolby NR, B or C, is used.
2. Turn on the power switch on your amplifier, keeping its volume control set to minimum.
3. Turn on the Power switch on the deck.
4. Press PLAY button and playback will begin. Raise the volume to the desired level.
5. To momentarily halt playback, press the PAUSE button. When you wish to end playback, press the STOP button.

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: Be sure to turn off the unit before you attempt demagnetizing.

VOLTAGE SELECTION

Not available for U.K., Canada and Scandinavia
The unit is a variable voltage equipment that can run on 120V, 220V or 240V power supply. Your unit should already be preset at the proper voltage for use in your area. However, if you move to an area where the power supply voltage is different, consult your dealer.

SPECIFICATIONS

Heads: Rec/Play	Hard Permalloy
Erase	Ferrite core
Track	4-track/2-channel
Tape Speed	4.8cm/sec.
Motor	Electronic DC Governor
Wow and Flutter	0.2% (DIN) 0.06% (WRMS)
Distortion (REC/PB, 400 Hz)	1.0% (METAL)
Frequency Response(−20 dB)	Normal, LH 30 to 15,000 Hz ±3dB
	Special 30 to 16,000 Hz ±3dB
	Metal 30 to 17,000 Hz ±3dB
Signal-to-Noise Ratio (WTD. 0dB = 770 mV, Chromium)	Dolby NR In: 64 dB (B type)
	72 dB (C type)
	Dolby NR out: 55dB
Input Sensitivity/Impedance	LINE 50 mV/33 kohms
Output Level/Impedance: LINE	770 mV/1.5 kohm)
Fast Wind Time (C-60)	90 seconds

Tape Selector	BIAS	EQUALIZER
Normal, LH	100%	120 μs
Special	150%	70 μs
Metal	220%	70 μs

MISCELLANEOUS

Power Requirement	120V/60 Hz, 220V/50 Hz, or 120, 220, 240V/50-60 Hz (depending on destinations)
Power Consumption	30 watts.
Dimensions (Overall)	444(W) × 115(H) × 325(H) m/m 17-15/32" × 4-17/32" × 12-13/16"
Weight (net)	5.6kg/12.32lbs.

• Specifications and design subject to possible modification without notice.

• Dolby and the double-D symbol are trade marks of Dolby Laboratories Licensing Corporation.
Noise reduction system manufactured under license from Dolby Laboratories Licensing Corporation.