OPERATING INSTRUCTIONS



CDC-690T

Multiple Compact Disc Player







Introduction

UNPACKING

AND

Congratulations on Your Purchase!

Your new high fidelity Compact Disc Player is designed to deliver maximum enjoyment and years of trouble free service. Please take a few moments to read this manual thoroughly. It will explain the features and operation of your unit and help ensure a trouble free installation.

Please unpack your unit carefully. We recommend that you save the carton and packing material. They will be helpful if you ever need to move your unit and may be required if you ever need to return it for service. Your unit is designed to be placed in a horizontal position and it is important to allow at least two inches of space behind your unit for adequate ventilation and cabling convenience.

To avoid damage, never place the unit near radiators, in front of heating vents, in direct sunlight, in excessively humid, dusty locations or near sources of strong magnetic fields. Connect your complementary components as illustrated in the following section.



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.



This symbol is intended to alert 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.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

CLASS1 LASER PRODUCT

CAUTION

Invisible laser radiation when the unit is open. Do not stare into beam.

CAUTION: USE OF ANY CONTROLS, ADJUSTMENTS, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

FOR U.S.A.

■FCC INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

READ THIS BEFORE OPERATING

FOR U.S.A. AND CANADA120 V

FOR YOUR SAFETY

Units shipped to the U.S.A. and Canada are designed for operation on 120 V AC only.

Safety precaution with use of a polarized AC plug. However, some products may be supplied with a nonpolarized plug.

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, fully insert.

ATTENTION: Pour eviter les choc electriques, introduire la lame la plug large de la borne correspondante de la prise et poussre jusqu'au fond.

FOR EUROPE AND AUSTRALIA230 V/240 V

FOR YOUR SAFETY

Units shipped to Australia are designed for operation on 240 V AC only.

To ensure safe operation, the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring. Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth.

Improper extension cords are a major cause of fatalities. The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician.

PAN-EUROPEAN UNIFIED VOLTAGE

All units are suitable for use on supplies 230-240 V AC.

FOR OTHER COUNTRIES...... 115 V/230 V

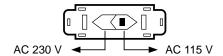
FOR YOUR SAFETY

Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

AC VOLTAGE SELECTION

This unit operates on 115-230 V AC. The AC voltage selector switch on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

AC voltage selector switch



Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

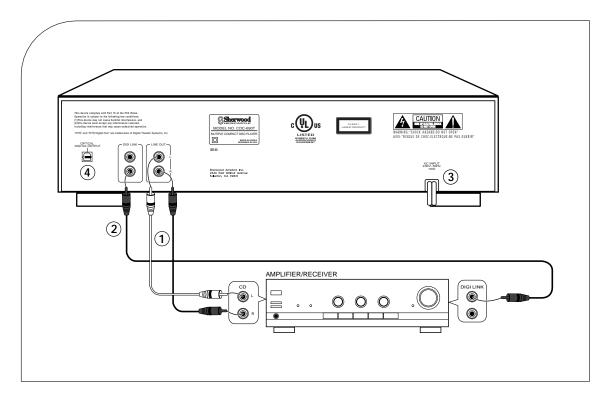
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Rear Panel Connections

- Do not plug the AC input cord into the AC outlet when plugging and unplugging connection cords.
- Be sure to connect the white plugs to the L(Left) and the red plugs to the R(Right) jacks when making connections with the supplied cords.
- Refer to the connecting diagram in the operating instructions of AMPLIFIER/RECEIVER.



① OUTPUT JACKS

Connect these jacks to the CD(or AUX) input jacks of your amplifier or receiver.

② DIGI LINK JACKS

Connect this jack to the DIGI LINK jack of Sherwood amplifier or receiver bearing the DIGI LINK III or II mark to control this unit remotely by DIGI LINK system.

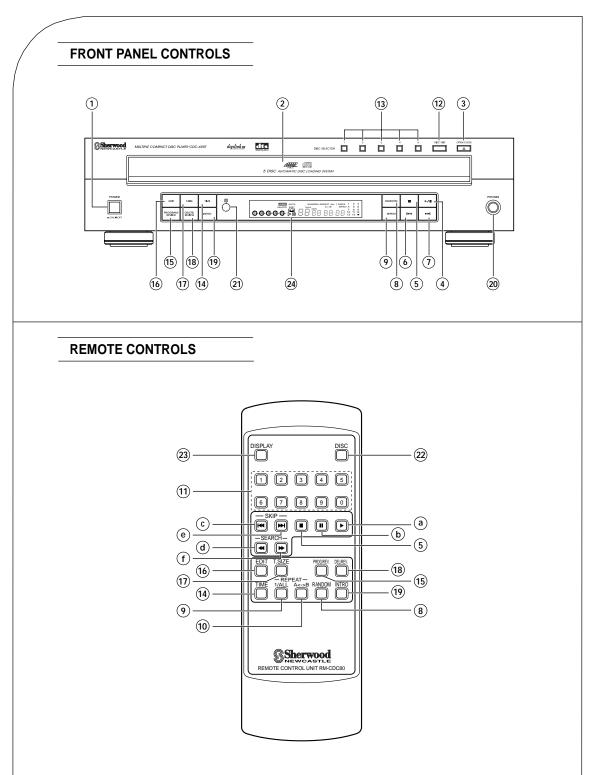
3 AC INPUT CORD

Plug this cord into a wall AC outlet or the switched AC outlet of amplifier or receiver.

4 OPTICAL DIGITAL OUTPUT

- Connect this jack to the OPTICAL DIGITAL INPUT jack of amplifier or receiver to enjoy live digital sound.
- You can record digital sound by connecting the OPTICAL DIGITAL INPUT jack of MD recorder to this jack.
- When making the OPTICAL DIGITAL connection, do it after removing the cap. Insert the cap when not using the OPTICAL DIGITAL jack.
- All of the commercially-available optical fiber cords cannot be used for audio equipment.
 If there is an optical fiber cord which cannot be connected to your audio equipments, consult your dealer or nearest service organization.

Front Panel & Remote Controls



① POWER SWITCH

Press this switch to turn the power on and press again to turn the power off.

For system operation, plug the AC input cord into the switched AC outlet on amplifier or receiver, keep the POWER switch ON and control power ON/OFF with the power operation on the amplifier or receiver.

2 DISC TRAY

Load a compact disc on the disc tray.

③ OPEN/CLOSE BUTTON(▲)

Press this button to open or close the disc tray.

(4) PLAY/PAUSE BUTTON (►/II)

- (a) Press this button to start play in the stop or pause mode.
- (b) Press this button to interrupt play temporarily and press again to restart play.

⑤ STOP/CLEAR BUTTON (■)

Press this button to stop play, clear the programmed selections or recover the deleted selections.

⑥ BACKWARD SKIP/SEARCH BUTTON(I◄◄ /◄◄)

- © Press this button to replay from the beginning of the current track or return to a previous track.
- ② Press and hold down this button search for a specific passage in fast backward.

① FORWARD SKIP/SEARCH BUTTON(▶►1/▶►)

- Press this button to play from the beginning of a next track.
- Press and hold down this button to search for a specific passage in fast forward.

(8) RANDOM PLAY BUTTON

Press this button to play tracks on CDs in random sequence.

9 REPEAT 1/ALL BUTTON

Press this button to play a track, a disc or all discs repeatedly.

(10) REPEAT A<->B BUTTON

Press this button to play a specific passage repeatedly.

(f) NUMERIC BUTTONS

Press the corresponding button when selecting tracks or discs for play, programming or deleting, then the selected is played, programmed or deleted directly without the use of the PLAY, PROGRAM/REVIEW or DELETE/REVIEW button.

 When selecting a two digit number, the second digit should be pressed within 2 seconds after the first digit has been pressed.

(12) DISC SKIP BUTTON

For loading or unloading discs, press this button to rotate clockwise to the next disc position.

(3) DISC SELECTOR BUTTONS

Use these buttons to select the disc to be played.

(14) TIME BUTTON

Press this button to display the elapsed or remaining playing time of the current track or remaining playing time of the disc.

(15) PROGRAM/REVIEW BUTTON

Press this button to program your favorite tracks, disc or review the programmed selections.

(6) EDIT BUTTON

Press this button to edit the tracks to be recorded onto the tape.

(17) TAPE SIZE BUTTON

Use this button to select the tape length.

(18) DELETE/REVIEW BUTTON

Press this button to delete the undesired tracks, discs or review the deleted selections.

19 INTROSCAN BUTTON

Press this button to play the first 10 seconds of each track on CDs.

M HEADPHONE JACK

Stereo headphones can be plugged into this jack for private listening.

@ REMOTE SENSOR

This receives the signals from the remote control.

22 DISC BUTTON

When selecting a disc with this button, press this first and then the desired disc number $(1\sim5)$ on the numeric buttons within 2 seconds.

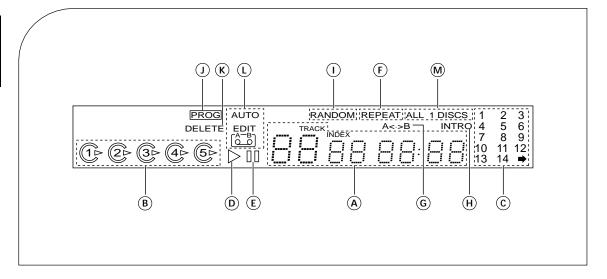
23 DISPLAY BUTTON

Press this button to change the brightness of the display.

24 FLUORESCENT DISPLAY

For details, refer to the next page.

■FLUORESCENT DISPLAY



- (A) TRACK No. and TIME DISPLAY
- ® DISC No. DISPLAY
- © MUSIC CALENDAR DISPLAY
- **(D)** PLAY INDICATOR
- **(E)** PAUSE INDICATOR
- **F** REPEAT INDICATOR
- ⑥ REPEAT A<⋅>B INDICATOR

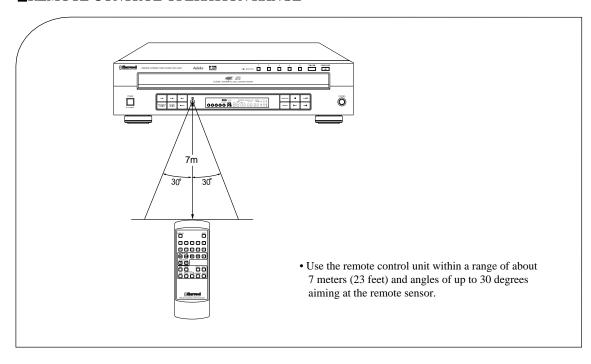
- (H) INTROSCAN INDICATOR
- (i) RANDOM PLAY INDICATOR
- (J) PROGRAM INDICATOR
- **(K)** DELETE INDICATOR
- (EDIT DISPLAY
- M INDICATORS FOR REPEAT, INTRO SCAN AND RANDOM PLAY MODE

*DIGI LINK SYSTEM REMOTE CONTROL

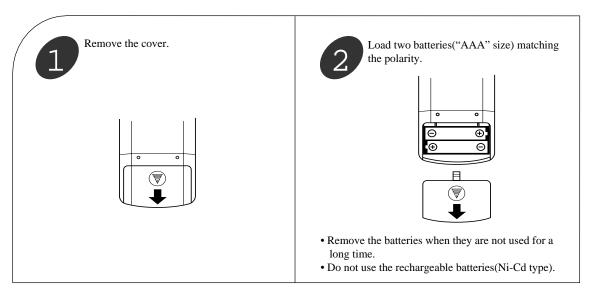
This unit can be remotely controlled with Sherwood DIGI LINK III amplifier or receiver.

- For available functions, refer to the operating instructions of the Sherwood compatible amplifier or receiver.
- To listen to CDs by DIGI LINK system, first make DIGI LINK connection between this unit and the Sherwood compatible amplifier or receiver.

■REMOTE CONTROL OPERATION RANGE



■LOADING BATTERIES



Before Operation

• Only compact discs bearing this mark can be reproduced.



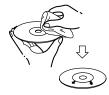
• In handling a disc, hold it carefully with the edges.



 Do not stick paper or write anything on the printed surface.



 Fingermarks and dust on the recorded surface should be carefully wiped off with soft cloth.
 Wipe straight from the inside to the outside of the disc.



• Always keep the discs in their cases after use to protect them from dust and scratches.



Do not use a cracked, deformed, or repaired disc.
 These discs are easily broken and may cause serious personal injury and apparatus malfunction.

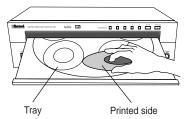






■ Notes

- Do not expose discs to direct sunlight, high humidity or high temperature for a long time.
- When loading or unloading a disc in the disc tray, always place it with the printed side up.



 The DTS logo on the front means that the CD encoded with the DTS signal can be heard in DTS mode when this digital out is connected to the digital input of the amplifier with the DTS decoder, etc..



• "DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.

Operations

PLAYING CDs



Turn the power on.



• Each time the POWER switch is pressed, this unit is turned on or off.



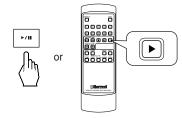
Load the disc(s) and close the disc tray.



- "→" indicator lights up when the number of tracks is more than 14.
- For loading discs on other trays each, press the DISC SKIP button.
- 8cm(3 inches) CDs can be loaded on the inside circle of the tray, too.
- ■Note
 Do not open or close the tray by force.
 Doing so may damage it.



Start play.



- "▶" indicator lights up.
- The unit plays from the first track on the 1st disc to the last track on the 5th disc.



To interrupt play temporarily.



or



- "II" indicator lights up.
- Press this button again to restart play.

5

To stop play.



or



Music calendar

Music calendar

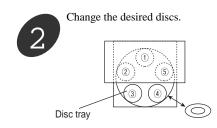
For a state of the state

CHANGING DISCS DURING



Open the disc tray.





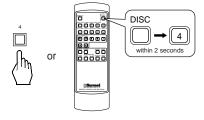
- During playing the disc ①, the discs ③ and ④ can be changed.
- After changing the discs, press the OPEN/CLOSE button to close the disc tray.
- When changing the disc ② or ⑤, press the "DISC SKIP" button and rotate the disc tray.

SKIP AND SEARCH PLAY

Selecting a disc

 Press the corresponding button to start play from the desired disc.

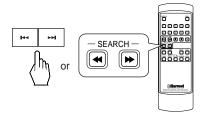
Example) When selecting the disc 4.



• The first track of selected disc will be played.

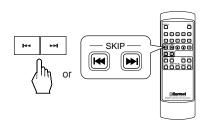
Searching for a passage during play

 Press and hold down these buttons until the desired passage is reached.



Selecting a track during play

 Press the button momentarily and repeatedly until the desired track is selected.



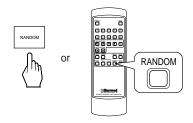
• When using the NUMERIC buttons on the remote control.

Example) When selecting "9": 9

When selecting "22": $2 \longrightarrow 2$

PLAYING TRACKS IN RANDOM SEQUENCE

1 disc random play



- "RANDOM" indicator lights up.
- The unit automatically selects and plays tracks on the current disc in random sequence.
- Each time this button is pressed, the random play mode changes as follows:

 \rightarrow RANDOM 1 DISC \rightarrow RANDOM ALL DISCS \rightarrow OFF

All discs random play

- In the 1 disc random play mode, press "RANDOM" button again.
- The unit automatically selects a disc among five discs and a track on that disc in random sequence and plays it.
- After that track has been played, the unit continues to select another disc and a track on that disc in random sequence and plays it.
- Press again to cancel the random play.

PLAYING THE FIRST 10 SECONDS OF EACH TRACK

1 disc introscan play



- "INTRO" indicator lights up.
- The unit plays the first 10 seconds of each track from the current disc to the 5th disc.
- Each time this button is pressed, the introscan play mode changes as follows:

→INTRO 1 DISC →INTRO ALL DISCS →OFF -

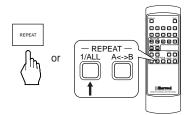
All discs introscan play

- In the 1 disc introscan play mode, press "INTRO" button again.
- The unit plays the first 10 seconds of each first track from the current disc to the last disc.
- Press again to cancel the introscan play.

REPEAT PLAY

Repeating a single track during play

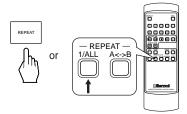
• Press this button after selecting the desired track.



- Each time this button is pressed, the repeat mode changes as follows:
- \rightarrow REPEAT 1 \rightarrow REPEAT 1 DISC \rightarrow REPEAT ALL DISCS \rightarrow OFF

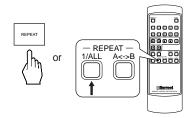
Repeating a disc during play

• After selecting the desired disc, press again in the 1 track repeat mode.



Repeating all discs during play

• Press again in the 1disc repeat mode.

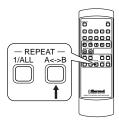


• Press again to cancel the repeat play.

Repeating a specific passage during play



At the beginning of the desired passage, press this button.



 \bullet "REPEAT" indicator lights up and "A< \bullet >" indicator is flickering.

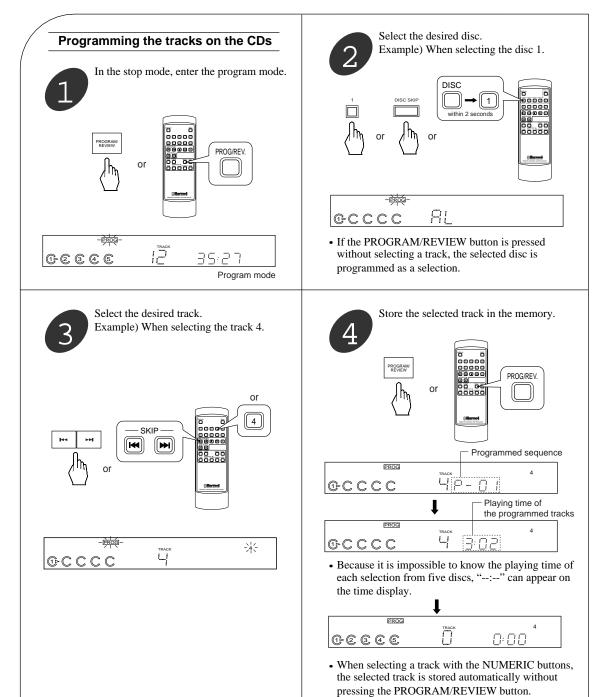


At the end of the desired passage, press this button again, then "B" indicator lights up and the desired passage is played repeatedly.

• Press again to cancel the repeat play.

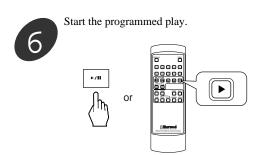
PLAYING TRACKS IN ANY SEQUENCE

- Up to 32 selections can be programmed to play in any desired sequence.
- The track number greater than 99 can not be memorized.





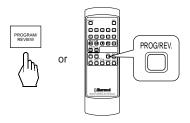
Repeat the above steps 2, 3 and 4 until the desired program is completed.



- During the programmed play, when you want normal play without clearing your programmed selections, select the desired disc with the DISC SELECTOR or DISC SKIP button or the desired track on the current disc with the NUMERIC buttons, then normal play will start from that disc or that track.
- To return to the program mode(meaning "PROG" lights up in the stop mode), press the PROGRAM/REVIEW button in the stop mode.

Checking the programmed selections

• Each time the PROGRAM/REVIEW button is pressed in the program mode (meaning "PROG" lights up in the stop mode), the programmed selections will appear in the programmed sequence.



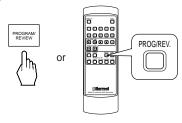
Rectifying any wrong programmed selection

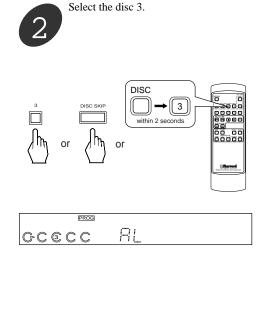
• Example) When the track 3, 5 and 7 of the disc 1 are programmed and you want to store the track 7 of the disc 3 instead of the track 5 of the disc 1.

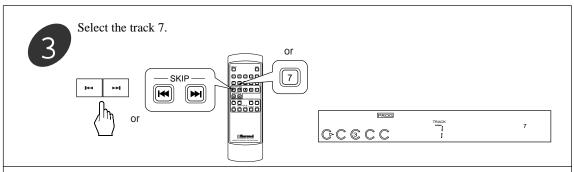


©-CCCC

Find the track 5 of the disc 1.

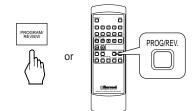


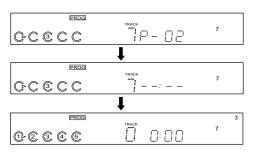




4

Store the selected track in the memory.



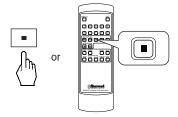


 When selecting a track with the NUMERIC buttons, the selected track is stored automatically without the PROGRAM/REVIEW button.

Clearing the programmed selections

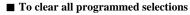
■ To clear one by one

• Each time this button is pressed in the program mode, the programmed selections are cleared one by one in the opposite sequence.

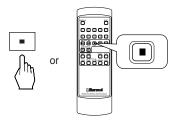


■ To clear a specific selection

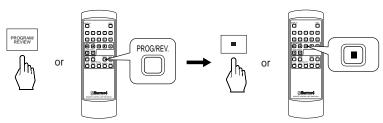
• Find the desired selection and clear it in the program mode.



• Press this button for more than 4 seconds in the program mode.



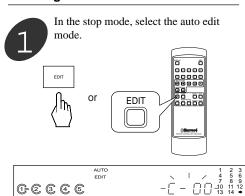
• Opening the disc tray clears all programmed selections, too.



EDITING FOR RECORDING

- Up to 30 tracks for auto edit or 32 tracks for manual edit can be edited according to the tape length.
- It is possible only on the current disc.

Making auto edit



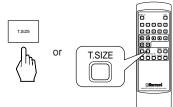
 Each time this button is pressed, the edit mode changes as follows:

$$\rightarrow$$
 AUTO EDIT \rightarrow (MANUAL) EDIT \rightarrow OFF

 In the edit mode, the auto space function, leaving a 4 second blank space between the tracks, is automatically activated for the automatic music search function on the Sherwood DIGI-LINK III cassette deck.

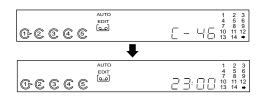


Select the desired tape length.
Example) When the tape length is 46 minutes.



• Each time this button is pressed, the tape length changes as follows:

$$_{|}\rightarrow$$
C-46 \rightarrow C-54 \rightarrow C-60 \rightarrow C-74 \rightarrow C-90 \rightarrow C120 $^{-}$



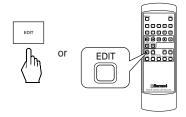
 You can select the tape length at your option with the NUMERIC buttons on the remote control.
 Example) When the tape length of each side is 23 minutes.

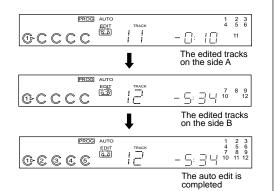
$$2 \rightarrow 3 \rightarrow 0 \rightarrow 0$$



3

Press the EDIT button to automatically edit the tracks to be recorded.

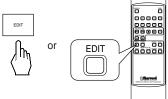








In the stop mode, select the manual edit mode.



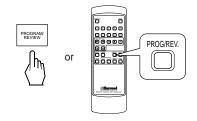


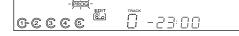
2

Select the tape length as you do in "Making auto edit" procedure.



Press the PROGRAM/REVIEW button to manually edit the tracks to be recorded.







Edit the tracks for the side A repeating steps 3 and 4 in "PLAYING TRACKS IN ANY SEQUENCE (PROGRAMMED PLAY)" procedure on page 15.

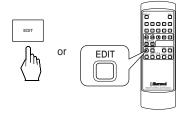


■ Notes

- During manual edit, if the "-" indicator in the time display disappears and "→" flickers, it means that the total time of the edited tracks exceeds the tape length. So you should edit again.
- When a track with a number greater than 30 is edited, the time display may show "---:-".



Press the EDIT button to start editing for the side B.





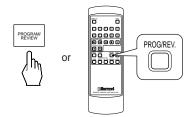


Do the above step 4 to edit the tracks for the side B.

- If the PLAY button is pressed after editing the tracks, play starts from the first track of the side A for recording.
- If all tracks of the side A have been played, press the PLAY button to start play from the first track of the side B for recording.
- When this unit is connected to Sherwood compatible cassette deck controlled remotely by DIGI-LINK III system, if using the CD synchro record function on the cassette deck, recording a CD is easier. (Refer to the operating instructions of the cassette deck).

Checking the edited tracks

• In the edit mode, check as you do the programmed tracks. (refer to "Checking the programmed selections" on page 16)



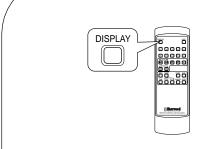
Clearing all edited tracks

• In the edit mode, press the STOP/CLEAR button for more than 4 seconds or open the tray.



• In the manual edit mode only, you can clear or rectify the edited tracks as you do in "Rectifying any wrong programmed selection" or "Cleaning the programmed selections" on page 16 and 17.

SELECTING A BRIGHTNESS OF



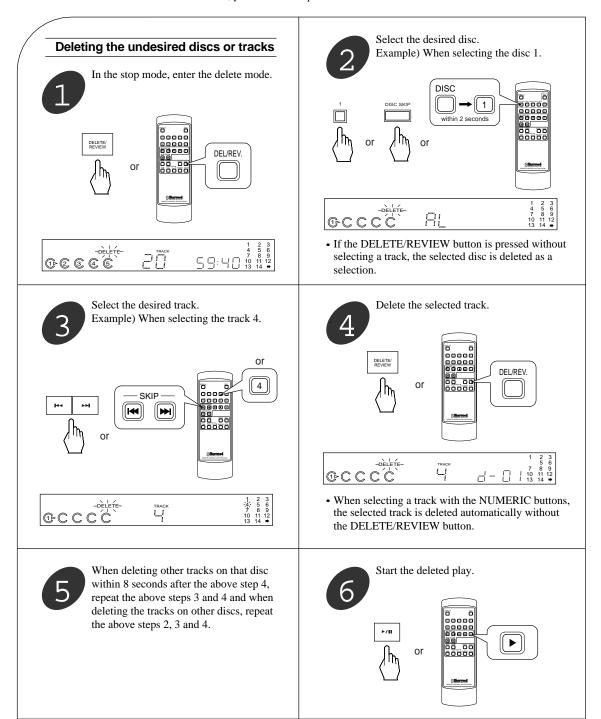
 Each time this button is pressed, the brightness of the display changes as follows;

$$\rightarrow$$
 ON \rightarrow DIM \rightarrow OFF

• In the display OFF mode, pressing any button will restore the display ON mode.

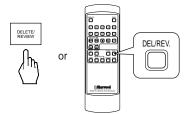
DELETED PLAY

• When there are the undesired discs or tracks, you can delete up to 32 selections.



Checking the deleted selections

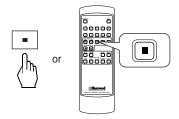
• Each time the DELETE/REVIEW button is pressed in the delete mode (meaning "DELETE" lights up in the stop mode), the deleted selections will appear in the deleted sequence.



Recovering the deleted selections

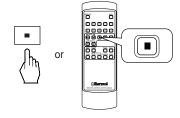
■ To recover one by one

 Each time this button is pressed in the delete mode, the deleted selections are recovered one by one in the opposite sequence.



■ To recover all deleted selections

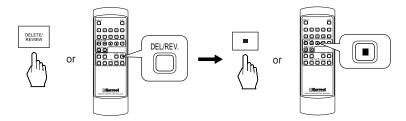
• Press this button for more than 4 seconds in the delete mode.



• Opening the disc tray recovers all deleted selections, too.

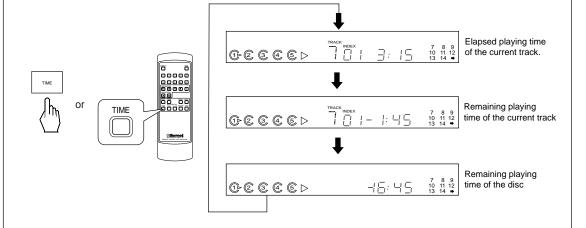
■ To recover a specific selection

 Find the desired track and recover it in the delete mode.



SELECTING A TIME DISPLAY

• Each time this button is pressed during play, time display changes as follows:



- During random or programmed play, etc., the remaining playing time of the disc may show "- -- : --".
- When a track of which number is greater than 30 is programmed, edited or being played, the time display may show "---:-".

USING THE HEADPHONES

• For private listening, insert a plug of the headphone into "PHONES" jack.



Troubleshooting Guide

If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or our service organization.

PROBLEM	POSSIBLE CAUSE	REMEDY
No power	 The AC input cord is disconnected. The POWER switch is not pressed correctly. 	Connect the cord securely. Press the POWER button to ON.
No play	The disc is loaded upside down. Dirty disc. Defective or deeply scratched disc.	Reload the disc with the printed side up. Clean the disc. Load another disc.
No sound	 Incorrect connections. Incorrect operation of the amplifier. The "II" indicator lights up. 	Make connections correctly. Operate the amplifier correctly. Press the PLAY or PAUSE button to cancel the pause mode.
Poor or distorted sound	The unit is connected to the PHONO input jacks of the amplifier. Poor connections.	Make connections correctly. Check the connections and connect all cords securely.
Sound skips	Defective or deeply scratched disc. This unit is placed on a surface that is subject to vibration or physical shock.	Play another disc. Place this unit on a stable surface.
Programming or deleting does not perform.	 The disc is dirty or badly scratched. The programming or deleting procedure is not correct. The number of the programmed selections is 32. 	Try again with a scratch-free disc.Try again.Check the number of the programmed selections.
"Error" is displayed.	Incorrect operation.	Press the OPEN/CLOSE button to open and close the disc tray or press the POWER switch to turn the power off and on.

Specifications_

■ SYSTEM	
■ TYPICAL AUDIO PERFORMANCES	
Number of channels	
• Frequency response, 20~20,000 Hz	<u>±</u> 0.5 dB
Signal to noise ratio, A Wtd	
Dynamic range	
Total harmonic distortion, 1 kHz	
Wow and flutter	
Audio output level	
Digital output	
Optical, wavelength 660 nm	-15~-20 dBm
■ OPTICAL READOUT SYSTEM	
• Laser	
• Wavelength	
Numerical aperture	
■ SIGNAL FORMAT	
Sampling Frequency	
• D/A Conversion	
Oversampling	
■ GENERAL	
Power supply	120 V. 60 Hz
Power consumption	
• Dimensions $(W \times H \times D)$	
• Weight (NET)	
	8 \

Note: Design and specifications are subject to change without notice for improvements.



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