

# ***Compact Disc Player***

---

## **Operating Instructions**



*CDP-208ESD*

# WARNING

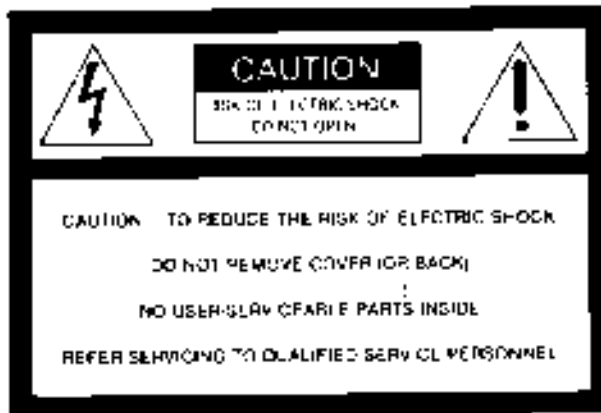
## Owner's Record

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to these numbers whenever you call upon your Suny dealer regarding this product.

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_

**To prevent fire or shock hazard, do not expose the unit to rain or moisture.**

**To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.**



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.

## CAUTION

The use of optical instruments with this product will increase eye hazard.

## INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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 the receiving antenna.

Relocate the equipment with respect to the receiver.

Move the equipment away from the receiver.

Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radiotelevision technician for additional suggestions. The user may find the following book of prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems"

This booklet is available from the U.S. Government Printing Office, Washington, DC 20402 Stock No. 004-000-00345-4.

## CAUTION:

TO PREVENT ELECTRIC SHOCK DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE

# Introducing This CD Player

## Enjoy listening in various playing modes

You can select the playing modes among the following:

- Continuous play (page 8) — The entire disc is played once.
- Single play (page 10) — One selection is played.
- Program play (page 13) — Selections are played in your desired order.
- Shuffle play (page 11) — Selections are played in a random order.
- Repeat play (page 12) — Selections or a portion are played repeatedly.

## Editing your own tapes

You can fade in or out the play when making your own tape recording.

- Fade in / Fade out (page 17)

### CUSTOM EDIT function

- You can confirm the total playing time while choosing the selections to be programmed.
  - Program edit (page 15)
- The player can program selections automatically to fit in a desired duration.
  - Time edit (page 16)
- You can stop the play, fading out at the time desired.
  - Time fade (page 17)

# Safety Precautions

Stop operation immediately if any liquid or solid object should fall into the cabinet. Unplug the unit and have it checked by qualified personnel.

Unplug the unit from the wall outlet if you will not use it for a long time. Disconnect the cord by grasping the plug. Never pull the cord itself.

The unit is not disconnected from the mains as long as it is plugged into the wall outlet, even if the unit itself has been turned off.

Do not disassemble the cabinet. The laser beam used in this unit is harmful to the eyes when uncovered. Refer servicing to qualified personnel only.

For detailed safety precautions, see the leaflet "IMPORTANT SAFEGUARDS".

If you have any questions or problems concerning your unit, please contact your nearest Sony dealer.

# Table of Contents

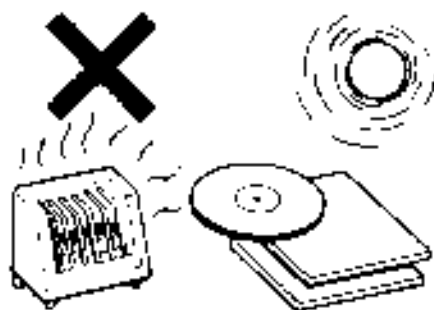
Introducing this CD player	3
Safety precautions	9
Installing the CD player	
Notes on installation	4
Preparing the remote commander	
Installing batteries	4
Connecting the CD player	
Notes on connection	5
Location of controls	6
Playing a disc	
Inserting a disc	7
Playing the entire disc	8
Locating a particular selection	9
Locating a particular point in a selection	9
Playing a single selection - Single play	10
Playing in a random order - Shuffle play	11
Playing repeatedly - Repeat play	
Repeating selections	12
Repeating a particular portion - A + B repeat	12
Playing in a designated order - Program play	13
Designating the playing order - Program edit	15
Designating the total playing time - Time edit	16
Tips on making your own tape recording	
Fading out at the desired time - Time fade	17
Fading in / Fading out	17
Inserting a blank space between selections - Auto space	17
Maintenance	
Cleaning your unit	18
Cleaning discs	18
Specifications	18
Troubleshooting guide	19

# Installing the CD Player

## Notes on Installation

- Place the unit in a location with adequate air circulation to prevent internal heat build up in the unit.
- Do not place the unit on a soft surface, such as a rug that would block the ventilation holes on the bottom.
- Do not install the unit:
  - near heat sources such as radiators or air ducts
  - in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.

### Not this way.



#### On moisture condensation

If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the unit. Should this occur, the player will not operate. In this case, remove the disc and leave the player turned on for about an hour until the moisture evaporates.

# Preparing the Remote Commander

## Installing Batteries

1



2



#### On battery life

- About half a year of normal operation can be expected when using the Sony SUM-3(NS) batteries
- When the batteries are run down, the remote commander will not operate the unit. In this case, replace both batteries with new ones.

#### Notes on the remote commander and remote control operation

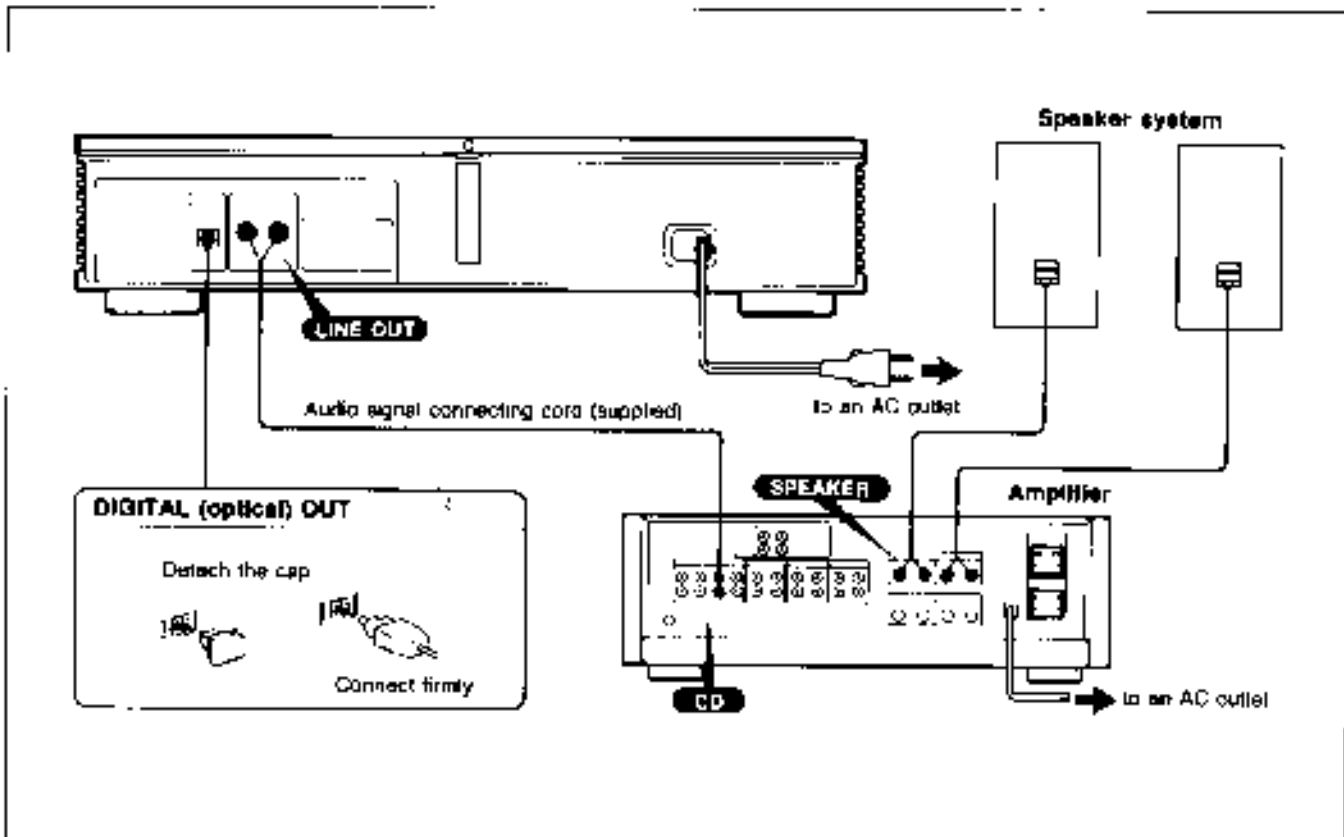
- Keep the commander away from extremely hot or humid places.
- Avoid dropping any foreign objects into the commander casing, particularly when replacing the batteries.
- Avoid exposing the remote sensor to direct sunlight or lighting apparatus. Such exposure can cause a malfunction.
- To avoid damage caused by battery leakage and corrosion, remove the batteries when the commander will not be used for a long time.

# Connecting the CD Player

You can connect the unit with analog or digital signal depending on your amplifier or D/A converter.

## Notes on Connection

- Turn off the power of each unit before making connections.
- Connect the AC power cord last.
- Be sure to insert the plugs firmly into the jacks. Loose connection may cause hum and noise.
- Leave a little slack in the connecting cord to allow for inadvertent shock or vibration.
- Cord plugs and jacks are color coded. Red plugs and jacks are for the right channel (R) and white ones for the left channel (L).



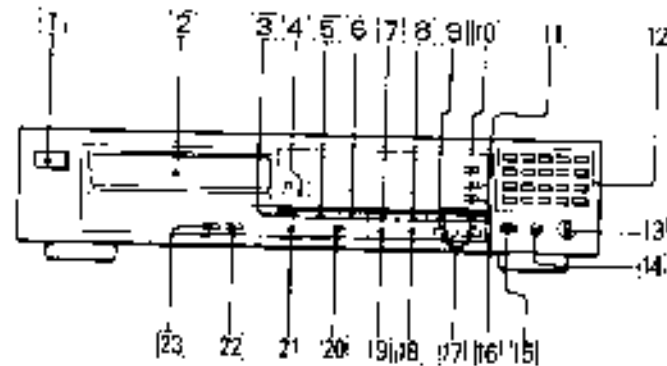
### Notes on DIGITAL (optical) OUT

Connect this jack to the digital signal input of a D/A converter or of an amplifier. Use optical digital signal connecting cords, POC-15 for connections.

# Location of Controls

## Front Panel

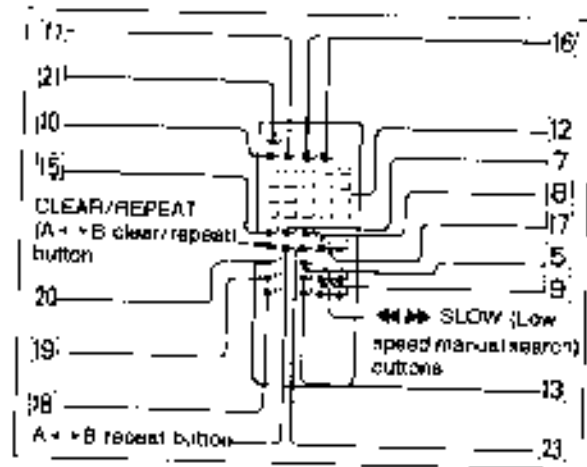
Refer to the pages indicated in ● for detail.



- 1. POWER switch ●
- 2. Disc compartment ●
- 3. REPEAT button ●
- 4. REMOTE sensor
- 5. FADER (FADE IN/FADE OUT) button ●
- 6. EDIT/TIME FADE button ●
- 7. CHECK (program check) button ●
- 8. CLEAR (program clear) button ●
- 9. ◀▶ (manual search) buttons ●
- 10. PROGRAM or PGM button ● ●
- 11. SHUFFLE button ●
- 12. Numeric buttons ● ●
- 13. LINE OUT/HEADPHONE VOL control ●
- 14. PHONES jack ●
- 15. > 20 (over 20) button ●
- 16. CONTINUE/SINGLE button ● ●
- 17. ◀▶ (AMS\*) buttons ●
- 18. ■ (stop) button ●
- 19. || (pause) button ●
- 20. ▶ (play) button ●
- 21. ▲ (open/close) button ●
- 22. AUTO SPACE button ●
- 23. TIME button ●

\*AMS is the abbreviation of Automate Music Sensor

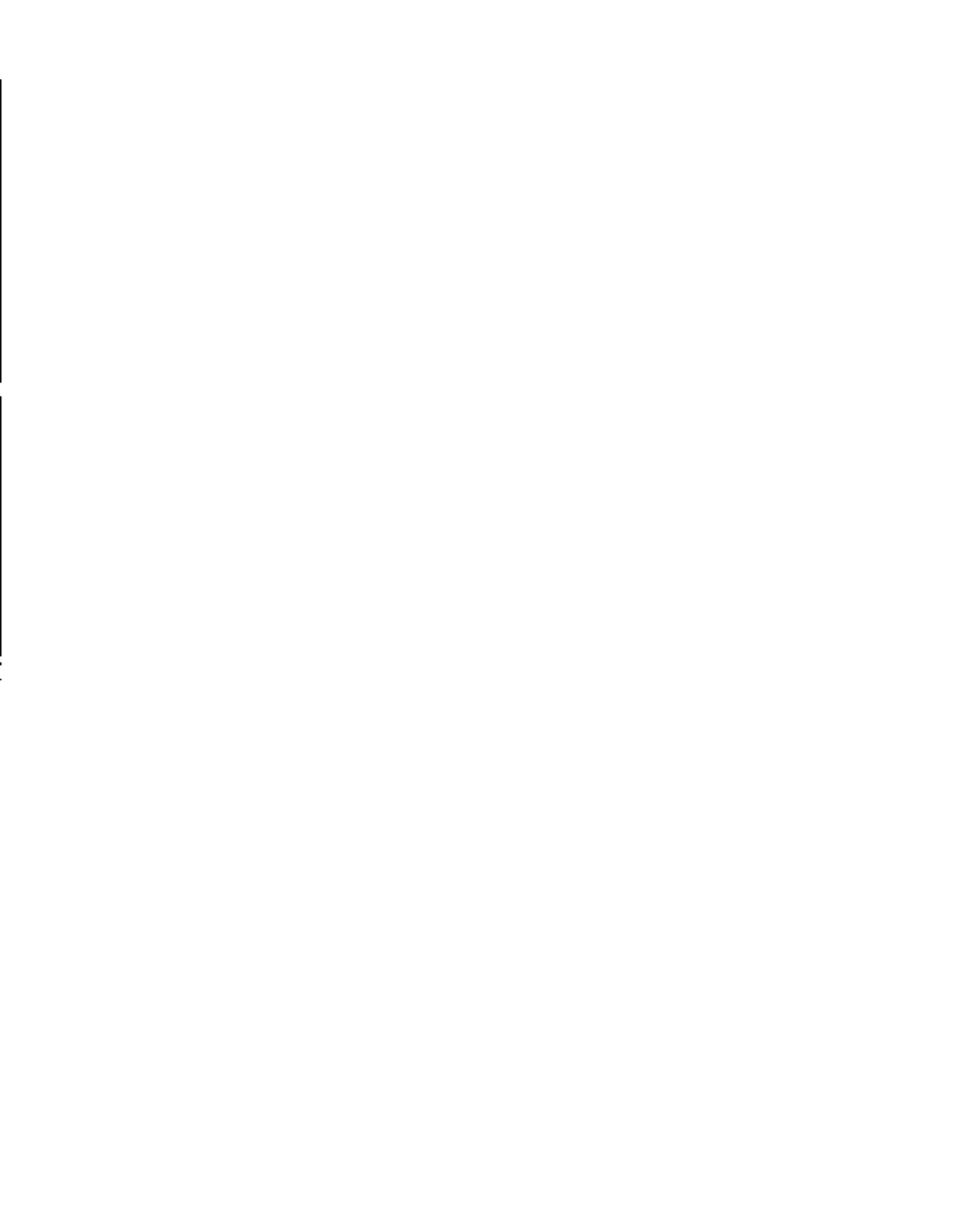
## Remote Commander



This indicates a function available only on the main unit.



This indicates a function available only on the remote commander.

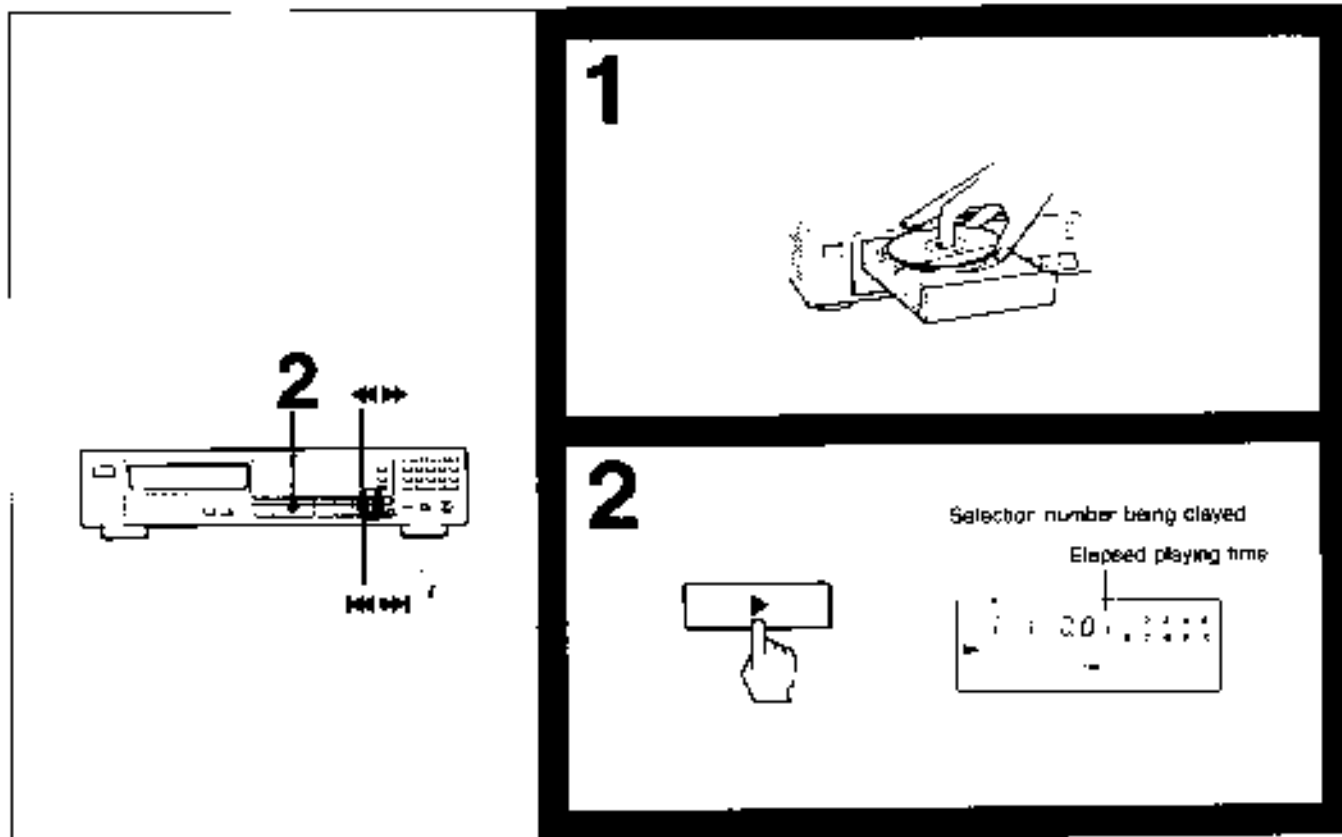


## Playing a Disc

### Playing the Entire Disc

#### Caution on adjusting volume

Do not turn up the volume while listening to a portion with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level portion is played.



**If you turn on the power with a disc in the compartment**  
Play begins automatically from the beginning of the disc.  
By connecting a commercially available timer, disc play can be started at any desired time.

**To play a 6 cm (2-1/2 inch) CD**  
Place it on the inner circle of the tray.  
If the disc is provided with an adaptor, first remove it.  
Do not put a normal CD (12 cm or 5 inch) on the top of a 3-inch CD.

#### To listen with the headphones

Connect the headphones and control the volume with the LINE OUT control or the LINE OUT VOLUME buttons on the remote commander.

#### What is this indication?

no d i s c

This indication appears when there's no disc on the disc table.



## Locating a Particular Selection

You can locate the beginning of a desired selection during play or pause.

### To locate sequentially

To locate the beginning of the current or preceding selection

Press **⏮** as many times as required.  
Keep **⏮** pressed to skip selections.

### To locate the beginning of a succeeding selection

Press **⏭** as many times as required.  
Keep **⏭** pressed to skip selections.

### To locate directly

Press one of the numeric buttons **1** to **20** to enter the desired selection number.

If a selection number is greater than 20, use the **[>20]** and **1** to **10** buttons

**[10]** functions as the figure 0.

Eg.

To play from selection No.22

Press **[>20]** **2** **2**

To play from selection No.30

Press **[>20]** **3** **10**

## Locating a Particular Point in a Selection

You can locate a particular point in the disc during play.

### To search quickly while monitoring the sound

#### To go ahead at high speed

Keep **⏭** pressed during play and release at the desired point.

#### To go back at high speed

Keep **⏮** pressed during play and release at the desired point.

### To search quickly by observing the display

Press **⏮**, then keep **⏮** or **⏭** pressed. The search speed will increase, but there will be no sound. Find the desired point by observing the display.

Press **⏮** again at the desired point.



### To search slowly while monitoring the sound

Press **⏮** **SLOW** during play and release at the desired point.

#### Notes on handling discs

To keep the disc clean, handle the disc by its edge.  
Do not touch the surface.



This way

Do not stick paper or tape on the disc.



Not this way

Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as there can be a considerable rise in the temperature.

After playing, store the disc in its case.

#### When **⏮** is displayed

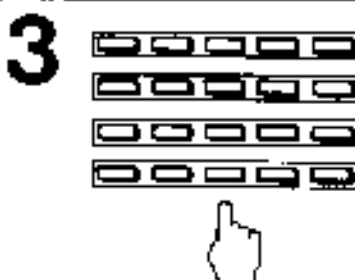
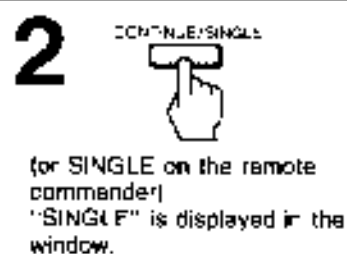
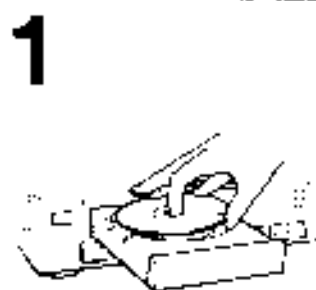
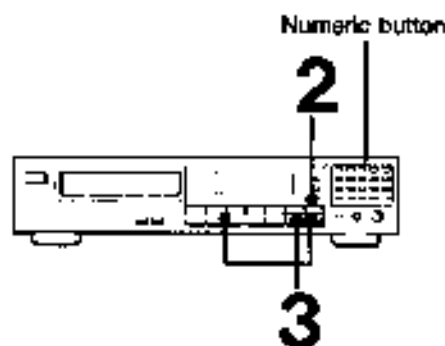
If you continuously press **⏭** at the end of the disc, **⏮** appears in the window. Press **⏮** or **⏭** to return to normal indication.

If you continuously press **⏮** at the beginning of the disc, play begins automatically from the first selection.

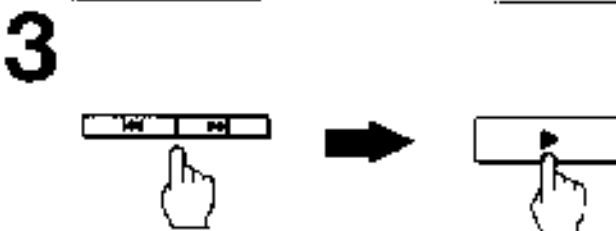
## Playing a Disc

### Playing a Single Selection – Single Play

You can play just one selection and then stop instead of playing the entire disc.



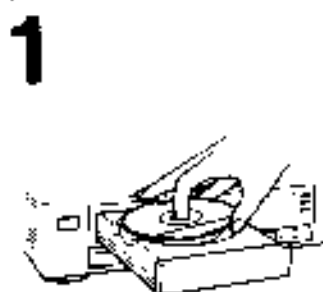
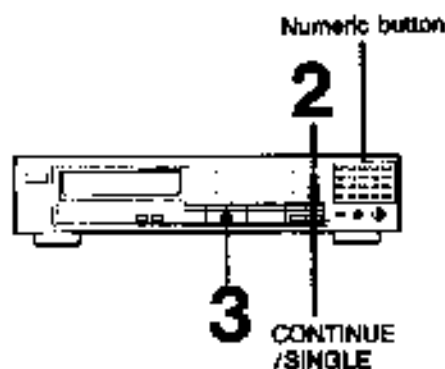
(numeric button on the remote commander)  
Play stops when the chosen selection ends.



To cancel single play  
Press CONTINUE/SINGLE again.

# Playing in a Random Order—Shuffle

You can have the selections played in a random order. The unit will play all the selections, or just the selections you desire.



**To stop playing**  
Press ■.

**To cancel shuffle play**  
Press CONTINUE/SINGLE (or CONTINUE on the remote commander) and return to the normal playing mode.

**To play only the desired selections in a random order**

## — Delete Shuffle Play

Delete the undesired selections before or during play.

**To delete a selection,** press the numeric button for that selection. "OFF" will be displayed in the window. You cannot delete a selection which is being played. To choose a selection number over 20, see page 9.

**To put back a selection which you have deleted,** press the numeric button for that selection. "On" will be displayed in the window.

## When delete shuffle play ends

The unit returns to the shuffle play mode for all selections.

**To check the remaining time of the selection being played**  
Press TIME once; once more to return to the initial display. The total remaining time will not be displayed.

**What is this indication?**



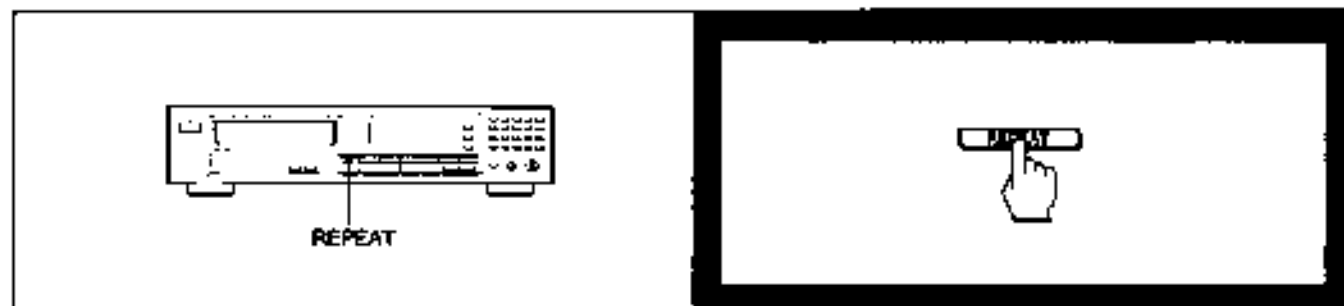
This indication appears while the player is "shuffling" the selections.

# Playing Repeatedly—Repeat Play

You can choose between two different repeat play modes. One repeats selections in the current play mode, the other repeats any particular portion you like.

## Repeating Selections

Press REPEAT, before or during play.

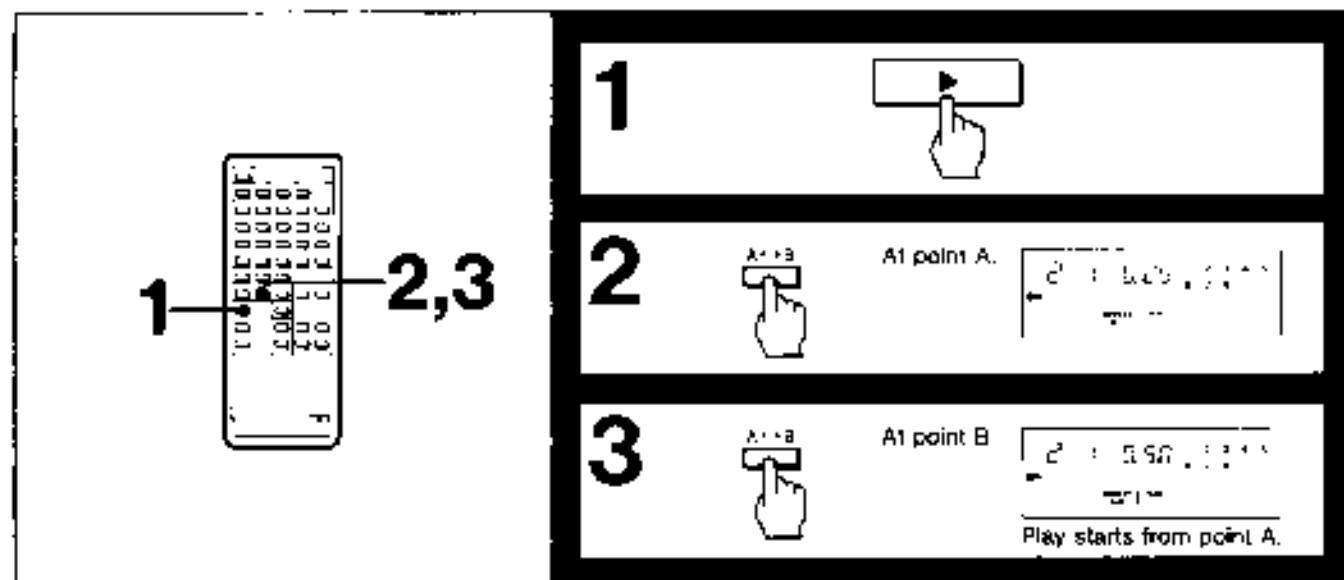


**To cancel repeat play**  
Press REPEAT again.

## Repeating a Particular Portion — A <-> B Repeat



You can repeat a portion on the disc by designating the starting point (A) and the ending point (B).



**To cancel A <-> B repeat**  
Press CLEAR/REPEAT (or REPEAT on the player).

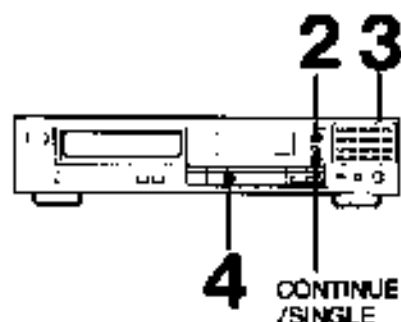
**Going back to point A from any point on the disc**  
Simply press **A**. When point A is stored, you can go back there in any play mode. You need not designate point B.

**If you designate repeat play during delete shuffle play**  
When the selections you choose end, repeat play of all the selections will start.

**When you designate A <-> B repeat during shuffle or program play**  
You cannot designate point A and B in two different selections.

# Playing in a Desired Order –Program Play

You can make a program by designating up to 20 selections in the order you want them to be played. The unit will play the disc according to your program.



1

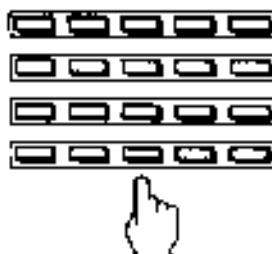


2



3

Press selection number in desired order. \*



Current selection

Order



4



\*To choose a selection number over 20, see page 9.

#### To stop playing

Press ■.

You can play the same program repeatedly as long as you do not cancel program play or erase the program.

#### To cancel program play

Press CONTINUE/SINGLE (or CONTINUE on the remote commander) and return to the normal playing mode. The program will be erased.

#### To erase the entire program

Press ■ once during stop; twice during play. The program is also erased, when you turn off the unit.

#### To make a program for editing a tape

You can insert & pause in your program. Use this function to make a program for both sides of the tape at one time.

- 1 Program the selections for side A.
- 2 Press H. "P" will be displayed and the total playing time will be reset to "00:00".
- 3 Program the selections for side B.  
When you start playing, the selections for side A will be played and then the unit will pause. Set the tape to the beginning of side B, then press H. The selections for side B will be played.

## Program Play

### To check your program

Press CHECK. The first selection in the program will be displayed.

Each time you press CHECK, the next selection in the program will be displayed. The last selection will be indicated with the display "End".

To return to the initial display, press CHECK once more.

### To change your program

You can make the following changes before starting play.

**To erase the last selection,** press CLEAR.

Each time you press CLEAR, the last selection in the program will be erased.

**To add a selection to the end of the program,** just press the numeric button for that selection. You can add a selection also during play or pause.

**To delete a selection,** press CHECK repeatedly until the undesired selection is displayed. Then press CLEAR.

**To change the order,** press ■ during stop to erase the program. Then repeat the programming procedure from the beginning.

### To adjust the blank spaces between selections

In a program, if you do not change the order of selections, the spaces between those selections remain the same as on the disc. Otherwise, the spaces are shortened to 1 second. You can make all the blank spaces 3 seconds long. See "Auto space" page 17 for details.

---

If "----" is displayed instead of the actual time  
— you have programmed a selection number over 20  
— the total time has exceeded 100 minutes.

#### To check the remaining time

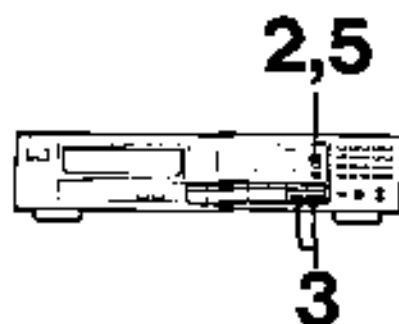
Press TIME once to see the remaining time of the selection being played; twice to see the total remaining time; once more to return to the initial display.

If you have inserted a pause, the display shows the remaining number of selections and time until the pause.

If you have programmed a selection number over 20, "----" is displayed instead of the actual time.

# Designating the Playing Order –Program Edit

You can make a program by designating up to 20 selections in the order you want them to be played. At the same time, you can adjust the total playing time of the program. The unit will play the disc according to your program. This function is convenient for editing tapes.



1

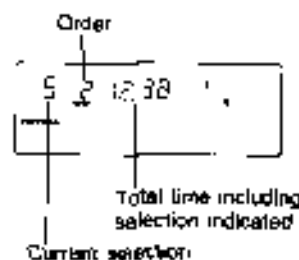
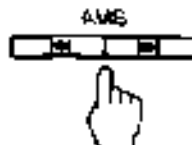


2



3

Choose selection and check the time.



4

If satisfactory, go to next step.  
If not, repeat step 3 and choose another selection.

5

Store selection.



6

Repeat steps 3 to 5.

## To play the program

Press **▶**.

## To stop playing

Press **■**.

You can play the same program repeatedly as long as you do not cancel program play or erase the program.

## To cancel program play

Press **CONTINUE/SINGLE** (or **CONTINUE** on the remote commander) and return to the normal playing mode.

The program will be erased.

## To erase the entire program

Press **■** once during stop; twice during play.

The program is also erased, when you turn off the unit.

## To make a program for editing a tape

You can insert a pause in your program. Use this function to make a program for both sides of the tape at one time. See page 13 for details.

## To check or change your program

See page 14.

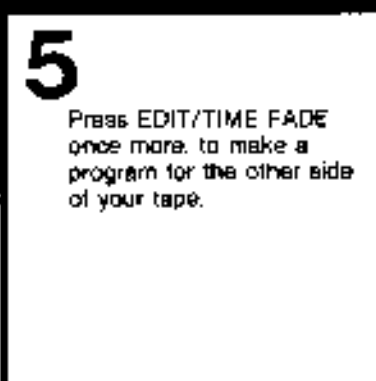
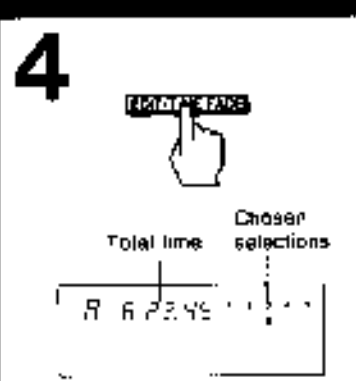
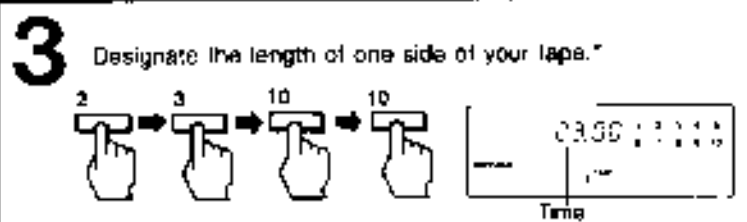
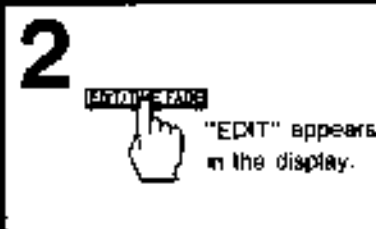
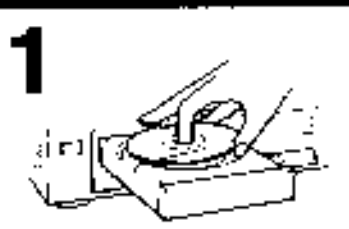
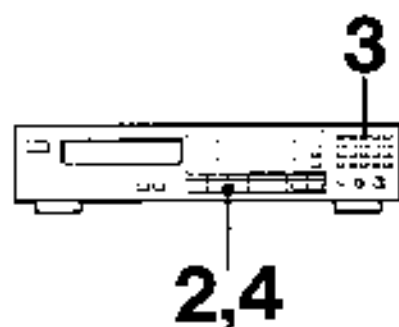
## To adjust the blank spaces between selections

In a program, if you do not change the order of selections, the spaces between those selections remain the same as on the disc. Otherwise, the spaces are shortened to 1 second.

You can make all the blank spaces 3 seconds long. See page 17 for details.

# Designating the Total Playing Time –Time Edit

You can designate a time and the unit will make 2 different programs of selections each fitting within that period. Use this function, by designating the length of your tape, for editing both sides of a tape.



\*Press  $\boxed{0}$  for "0".

You need not press buttons for seconds, unless required.

Press  $\lll$  for seconds, if required.

For commercial tapes (46 - 54 - 60 - and 90 minute tapes),  $\lll$  /  $\lll$  are useful.

Each time you press  $\lll$  or  $\lll$ , the play duration for one side of the tape is displayed as follows.

$\lll$  : 23 - 27 - 30 - 45 (min.)

$\lll$  : 45 - 30 - 27 - 23 (min.)

### To play the program

Press  $\lll$ .

The selections for side A will be played and then the unit will pause. Set the tape to the beginning of side B, then press  $\lll$ . The selections for side B will be played.

### To stop playing

Press  $\blacksquare$ .

You can play the same program repeatedly as long as you do not cancel time edit or erase the program.

### To cancel time edit

Press CONTINUE/SINGLE (or CONTINUE on the remote commander) and return to the normal playing mode. The program will be erased.

### To erase the entire program

Press  $\blacksquare$  once during stop; twice during play. The program is also erased, when you turn off the unit.

### To include desired selections in the program

- 1 Make your own program of the desired selections. See page 13 for instructions.
- 2 Follow the procedure above. Just designate the length of your tape; you need not subtract the length of your program. The unit will place your selections at the beginning of its program, and add other selections to fit the remaining time.

### To check the program

See page 14.

If your disc has more than 20 selections. Selections over number 20 cannot be programmed with the time edit function; use the programming procedure on page 13.

If any selections remain unprogrammed. To make a further program, repeat step 5.

### To designate a different time for each side.

Execute steps 1 to 4, then press  $\lll$ . "EDIT" disappears from the window. Execute step 2 to 4 for the other side.



# Tips on Making Your Own Tape Recording

The following functions are convenient for making your own tape recordings.

## Fading Out at the Desired Time – Time Fade



You can have the play fade out at the end by designating the play duration. You can use this function in any play mode.

- 1 Press EDIT/TIME FADE twice during stop. "TIME FADE" is displayed in the window.
- 2 Set the desired play duration, using the ◀ / ▶ and ⏮ / ⏭ buttons or numeric buttons.  
e.g. To set to 27 minutes, press [2] [7] [10] [10]. You need not press buttons for seconds, unless required.
- 3 To start play, press ▶.  
Play starts to fade out 5 seconds before the time set, and the unit enters the pause mode.

If you want to start the play fading in

- 1 Press II.  
The unit enters the pause mode.
- 2 Press EDIT/TIME FADE once. "TIME FADE" is displayed.
- 3 Set the desired play duration, following the step 2 above.
- 4 To start play, press FADER.

**To resume play after fading out**

Press II or FADER. (Pressing FADER starts the play fading in.)

**To cancel time fade**

Press ■ or ▲.

Time fade is also cancelled when

- ◀ / ▶ or ⏮ / ⏭ is pressed during play
- Other play mode buttons are pressed.

## Fading in/Fading out

You can have the play fade in and fade out for 5 seconds.

**To end the play fading out**

Press FADER when you want to start fading out. "FADE" flashes in the window, and play fades out for 5 seconds and enters the pause mode.

**To restart the play fading in**

Press FADER.

"FADE" flashes in the window, and play fades in for 5 seconds.

**Note:**

Fade in/Fade out and Time fade cannot be operated when the DIGITAL (optical) OUT is used for connections.

## Inserting a Blank Space between Selections – Auto Space



You can insert a 3-second blank space between each selection. The blank space enables you to locate selections when using a tape deck with the automatic selection search function.

Before starting play, press AUTO SPACE so that "AUTO SPACE" is displayed in the window.

A blank space of approx. 3 seconds will be inserted between each selection.

**To cancel the auto space function**

Press AUTO SPACE so that "AUTO SPACE" disappears from the window.

**To display the time remaining until the time set**

Press TIME base in the shuffle play mode. However, the time remaining until the fade-out time is not displayed.

# Maintenance

## Cleaning Your Unit

Clean the cabinet, panel and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

## Cleaning Discs

When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center out.



Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for analog discs.

# Specifications

## Compact disc player

System	Compact disc digital audio system
Laser	Semiconductor laser ( $\lambda = 780 \text{ nm}$ ) Emission duration: continuous
Laser output	Max. $44.6 \mu\text{W}$ * This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.
Frequency response	20 Hz - 20,000 Hz ( $\pm 0.3 \text{ dB}$ )
Signal-to-noise ratio	More than 102 dB
Dynamic range	More than 95 dB
Harmonic distortion	Less than 0.003% (1 kHz)
Channel separation	More than 98 dB (1 kHz)

## Outputs

LINE OUT (Variable phono jacks)	Output level max. 2 V (at 50 kilohms) Load impedance over 10 kilohms
DIGITAL OUT (OPTICAL) (optical output connector)	Wave length 660 nm Output level 18 dBm
HEADPHONES (stereo phono jack)	Output level max. 15 mW Load impedance 32 ohms

## General

Power requirements	120 V AC 60Hz
Power consumption	12W
Dimensions (approx.) (w/h/d)	430 x 100 x 275 mm (17 x 4 x 10 7/8 inches) including projecting parts and controls
Weight (approx., net)	4.1 kg (9 lbs 1 oz)

## Supplied accessories

Audio signal connecting cord	1 (2 phono plugs - 2 phono plugs)
Remote commander	1
Sony SUM-3 (NS) batteries	2

## Remote commander

Remote control system	Infrared control
Power requirements	5 V DC with two size AA (R6) batteries
Dimensions	87 x 20 x 175 mm (w/h/d) 3 3/8 x 1 3/16 x 7 inches
Weight	135 g (5 oz) including batteries

Design and specifications subject to change without notice.

# Troubleshooting Guide

Before going through the check list below, first refer back to the connections and operating procedures.

Should any problem persist after you have made these checks, consult your nearest Sony service facility.

Symptom	Cause	Remedy
The disc compartment does not close.	The disc is not placed correctly	Place the disc correctly on the disc tray.
Play does not start.	Dirty disc.	Clean the disc.
	The disc is inserted upside down	Insert the disc with the printed side up.
	II is engaged.	Press II again to release it
Sound is not heard.	Moisture condensation.	Leave the player turned on for approx 1 hour.
	Loose connection.	Insert the plug firmly.
Play does not begin from the first selection.	Connection is incorrect.	Check the connection referring to "Connecting the CD player".
	The player is in the PROGRAM or SHUFFLE mode.	Press CONTINUE to change the mode to normal.
Play begins only by turning on the power.	A disc is in the tray.	—
Level of the recorded sound has not been fixed even though the recording level was preset on the tape deck.	The LINE OUT control is turned while recording.	Do not turn the LINE OUT control while recording
The remote commander does not operate the unit.	The batteries are run down	Replace both batteries.
	The remote commander is not pointed at the remote sensor.	Point the remote commander at the sensor.
	There is an obstacle between the remote commander and the unit.	Remove the obstacle.
Any operation is not possible.	The remote commander is too far from the unit.	Move closer.
	The internal control program may not run.	Turn off the power and turn it on again.