SONY®

Compact Disc Player

CDP-707ESD

Operating Instructions

Before operating the unit, please read this manual thoroughly
and retain it for future reference.

COMPACT
disc
DIGITAL AUDIO

Owner's Record

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

Model No. CDP-707ESD

Serial No. _____

WARNING

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

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.

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 radio/television technician for additional suggestions. The user may find the following booklet 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

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

Table of Contents

Note on the Transit Screw

Turn the unit upside down to turn the screw.

Label
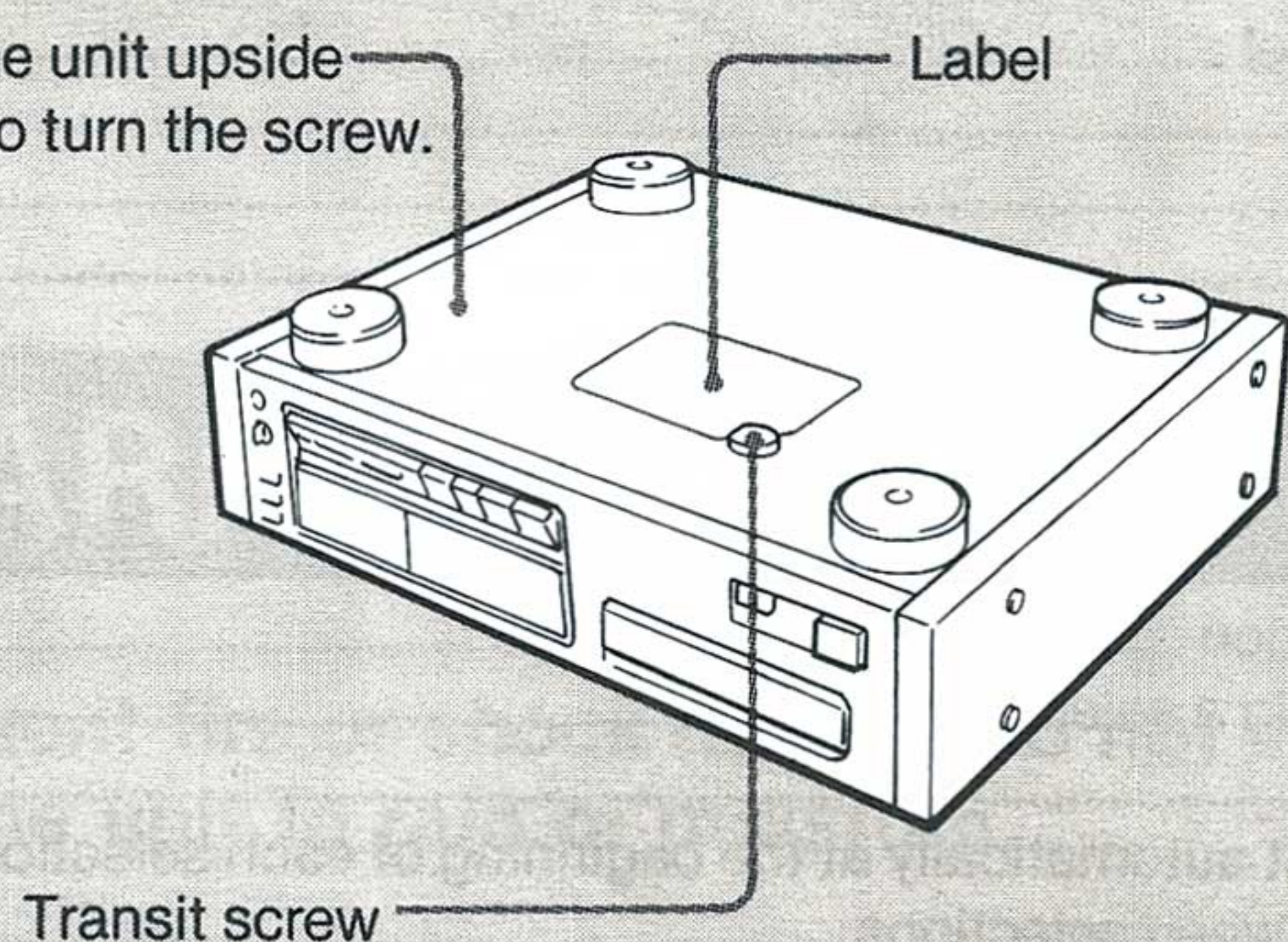
Transit screw

Before operating the CD player, be sure to turn the transit screw as described on the label on the bottom of the unit.

1 Remove the cap of the screw.

2 Turn the screw 180 degrees counterclockwise using the supplied screwdriver.

Do not turn the screw excessively, or the unit may be damaged.

When transporting the unit again, turn the transit screw in the reverse direction.

When You Use the CD Player for the First Time
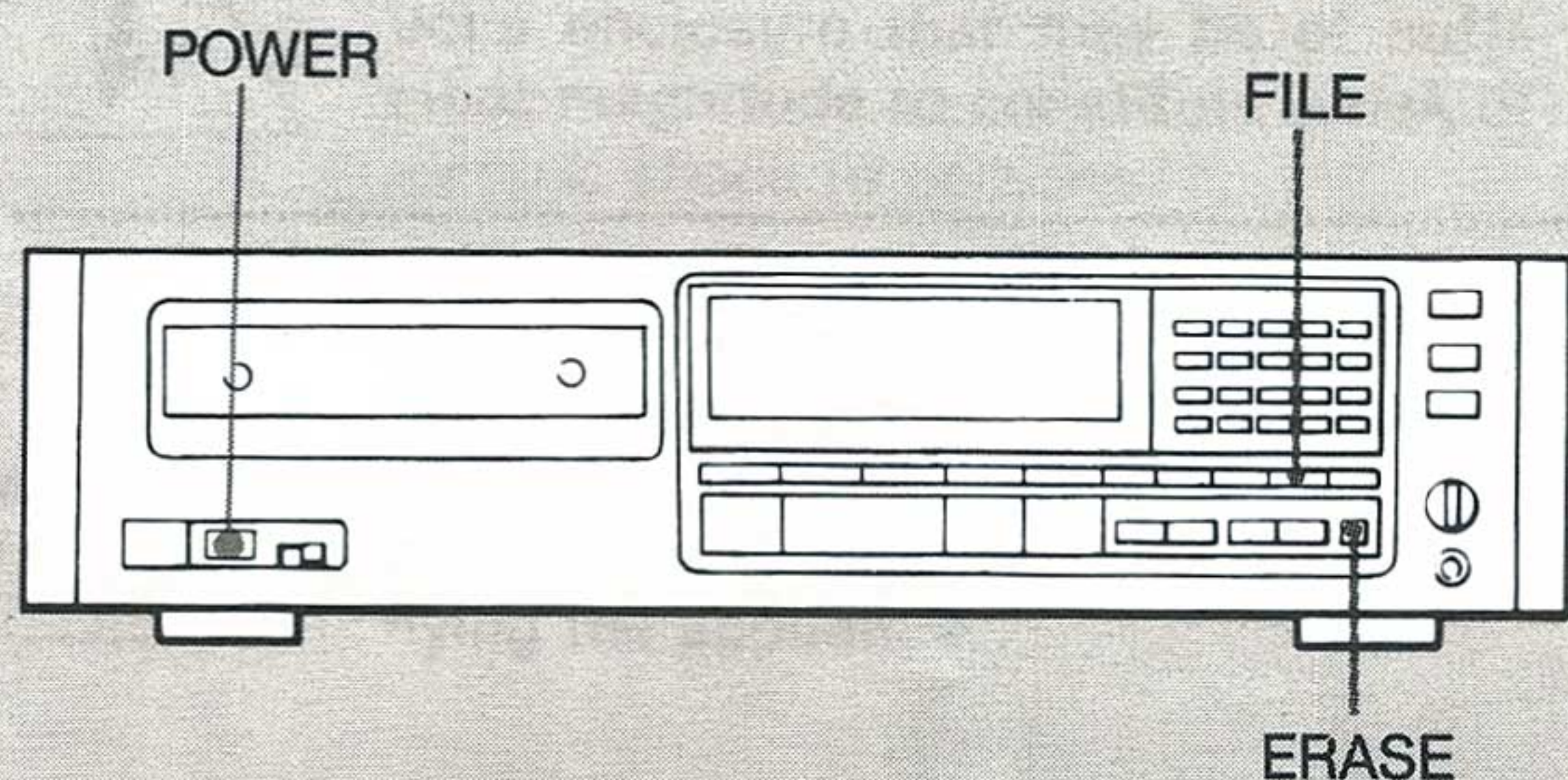
POWER

FILE

ERASE

Turn on the power by pressing POWER while keeping ERASE and FILE pressed.

This will clear the internal memory if you have been instructed how to use the custom file function at the shop you purchased the CD player. Thus the player returns the same status as it was manufactured at factory.

Features

Custom file function
- **Disc memo function** for writing a comment about a disc. (page 21)
- **Program bank function** for storing a programmed playing order. (page 23)
- **Custom index function** for assigning your own index point to any desired position on a disc. (page 24)

Program play
You can play up to 20 selections in the desired order. Pause can be also programmed. You can also confirm the total playing time while choosing the selection to be programmed.

Variety of playing modes
Single play (page 14), program play (page 15), shuffle play (page 18) and repeat play (page 19) as well as normal continuous play of a whole disc.

Large and easy-to-read window display
Shows the elapsed playing time, the remaining time of the selection being played, the remaining time of the whole disc or the remaining programmed selection numbers. The display contains a music calendar indicating all the numbers of the selections on the disc (up to 20).

Precautions

On safety
- Operate the unit only on 120 V AC, 60 Hz.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it will not be used for a long time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

On operation
When the unit is not used, turn the power off, to conserve energy and to extend the useful life of your unit.

Important

Since the CD system boasts a wide dynamic range, the peaks of high level inputs are recorded with high fidelity, and the noise level is very low.
Do not turn up the volume while listening to a portion with no audio signals or very low level inputs. If you do, the speakers may be damaged when a peak level portion is played.

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

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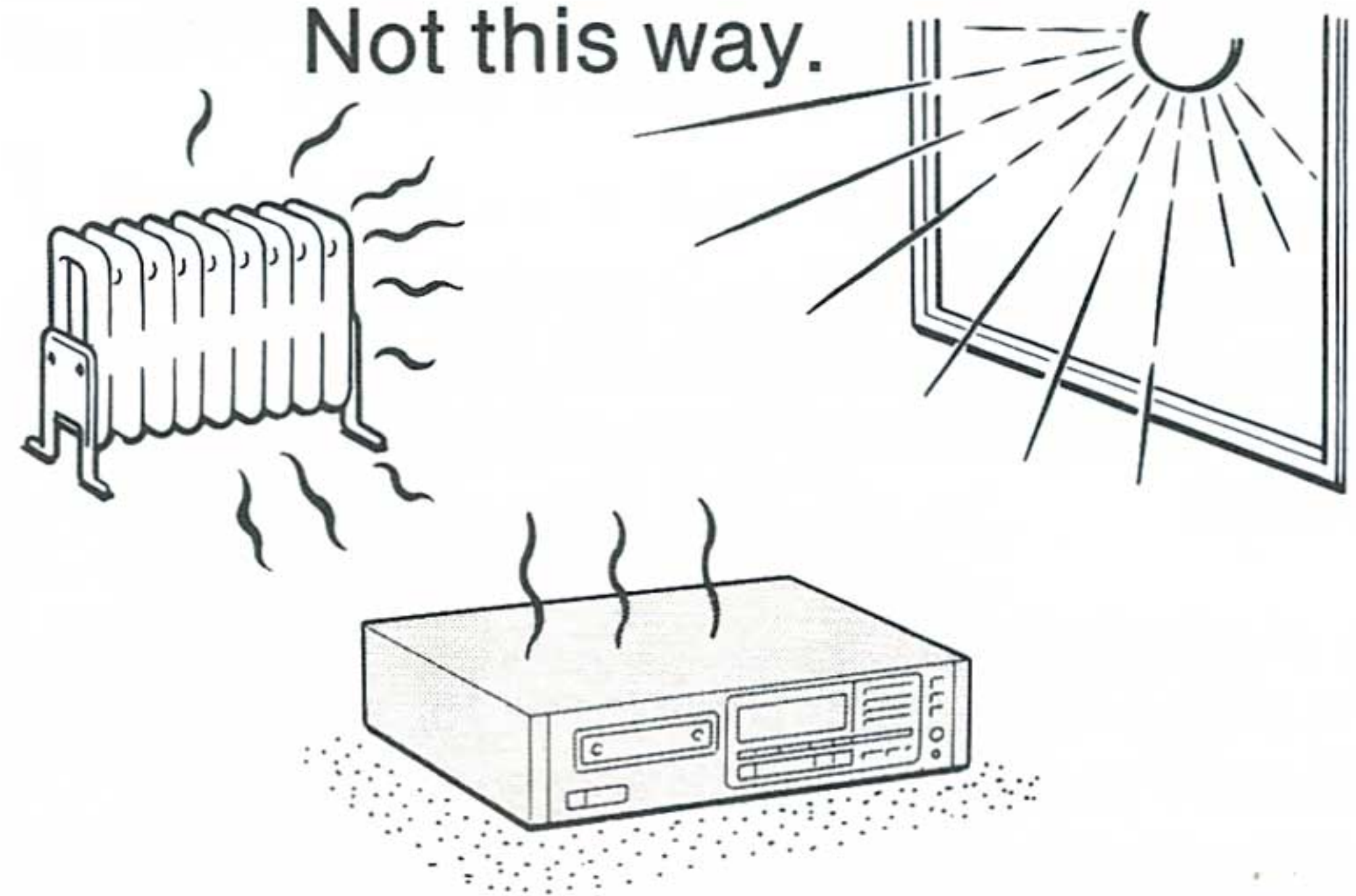
Installation

Notes on Installation

Place the unit in a location with adequate air circulation to prevent internal heat build-up in the unit.

This way.

Do not place the unit on a soft surface, such as a rug that would block the ventilation holes on the bottom.
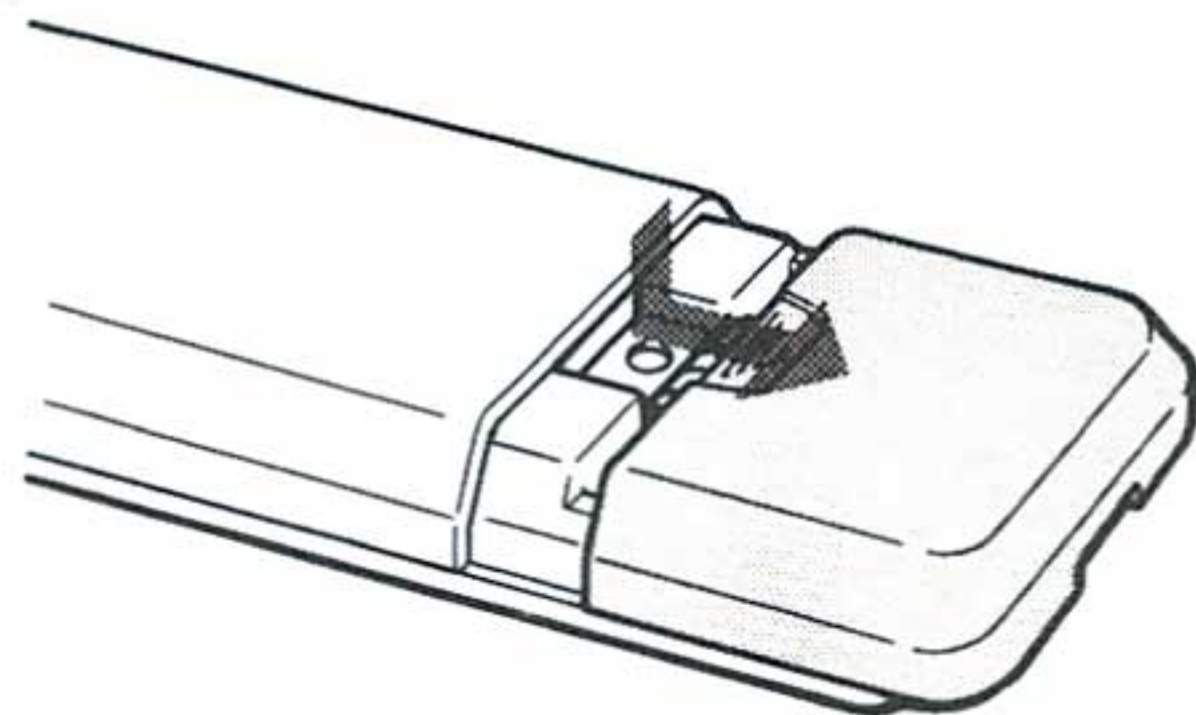
Not this way.

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.

Installing Batteries

Install the batteries in the supplied remote commander for remote control operation.

1

2

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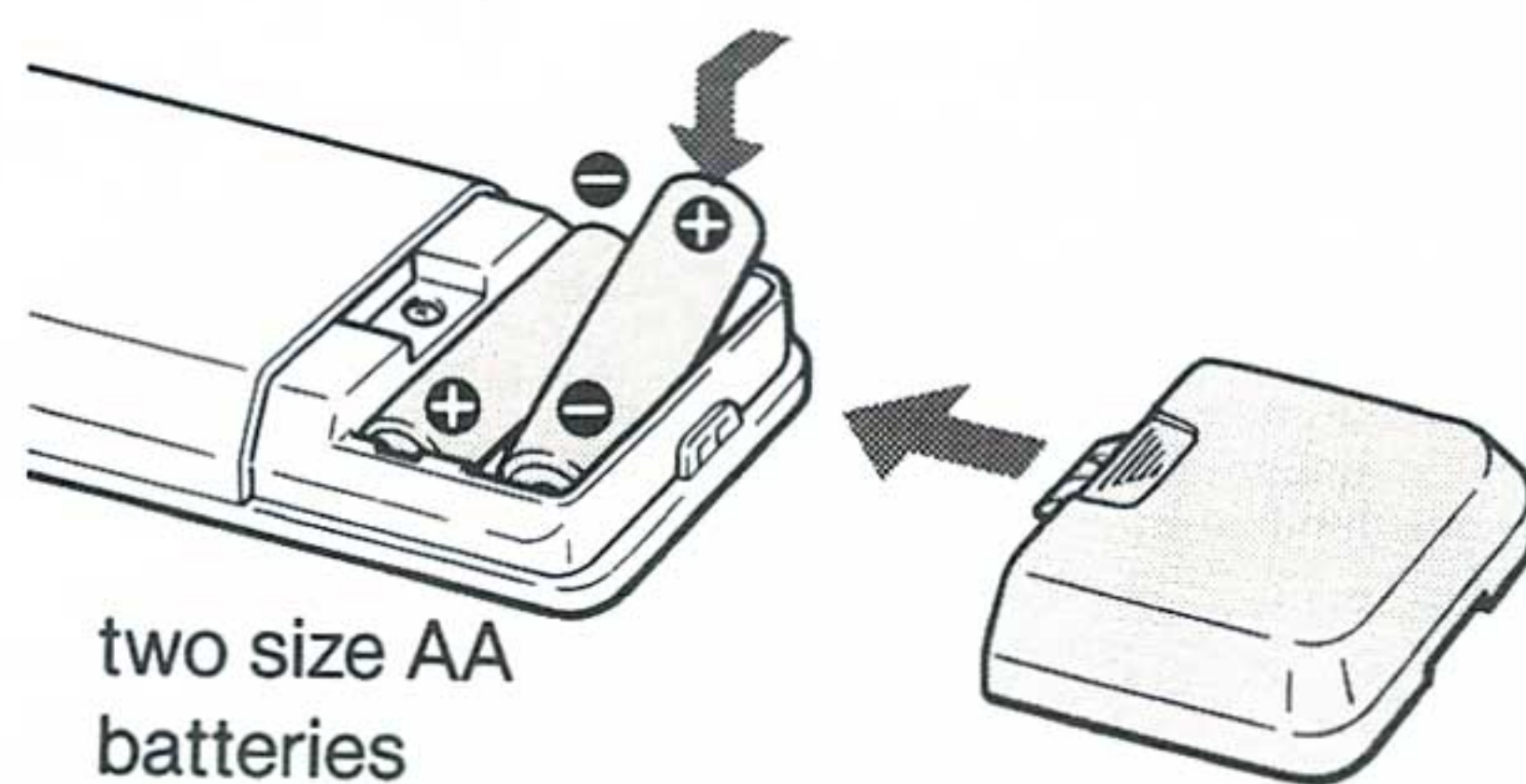
On moisture condensation
If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the unit.
Should this occur, the player will not operate. In this case, remove the disc and leave the player turned on for about an hour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

Do not throw away the carton and the packing material
It will be an ideal container when transporting the unit or shipping it for servicing.

To avoid damage caused by battery leakage and corrosion
When the commander will not be used for a long time, remove the batteries.

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.

Connections

Description on the Rear Panel

CD player

AC power cord

☐1 **LINE OUT (audio output) jacks**
FIXED: Output the signal at the fixed level.
VARIABLE: Output the signal at the level set by the LINE OUT/HEADPHONE LEVEL control (or LINE OUT VOLUME buttons on the remote commander).
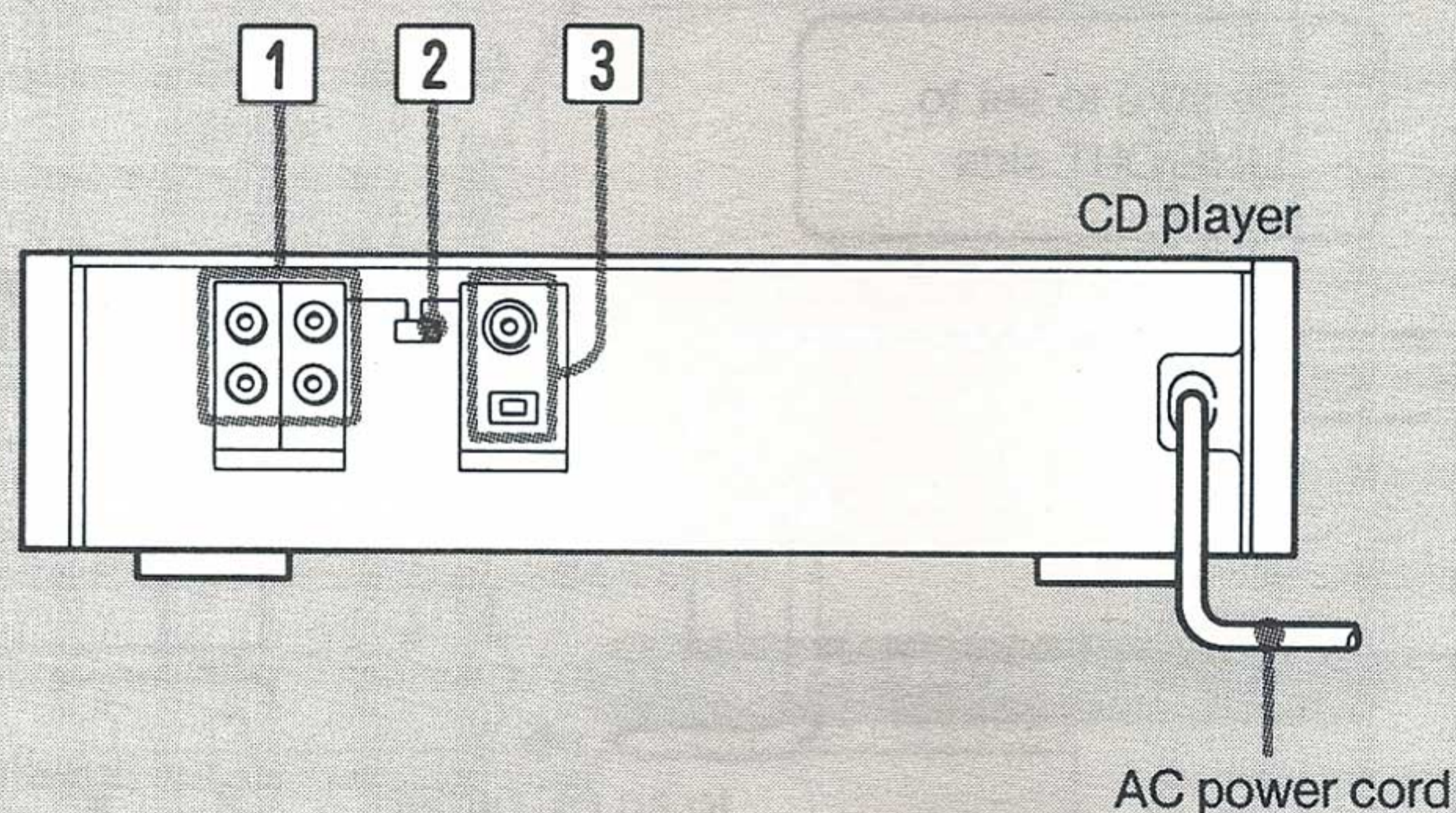
☐2 **OUTPUT SELECTOR**
Selects the output connectors to be used.
DIGITAL OUT: Digital signal is output through the DIGITAL OUT jacks. No signal is output through the LINE OUT jacks or the HEADPHONES jack.
LINE OUT: Audio signal is output through the LINE OUT jacks or the HEADPHONES jack. No signal is output through the DIGITAL OUT jacks. (Be sure to set to this position when you listen to the music through the headphones or the LINE OUT jacks.)

☐3 **DIGITAL OUT (digital audio output) jacks**
Output the digital audio signals.
COAXIAL: To be connected to a digital input jack of the amplifier or the D/A converter unit.
OPTICAL: To be connected to the amplifier having an optical digital input jack.

Note: If the LINE OUT/HEADPHONE LEVEL control is turned while recording through the VARIABLE LINE OUT jacks, the level of the recorded sound will be different from that set by the recording level controls of the tape deck.

Notes on Connection

• Turn off the amplifier before making connections.
• Be sure to insert the plugs firmly into the jacks. Loose connections may cause hum and noise.
• Leave a little slack in the connecting cord to allow for inadvertent shock or vibration.
• Connect the red plug of the supplied connecting cord to the right-channel jack (R) of the amplifier and the white plug to the left-channel jack (L). Otherwise, the right and left channels will be reversed.

Connection Diagram

Connecting the amplifier directly

LINE.OUT

Be sure to set to LINE OUT side.

CD player

CD/AUX

Amplifier

to an AC outlet

to an AC outlet

Audio signal connecting cord (supplied)
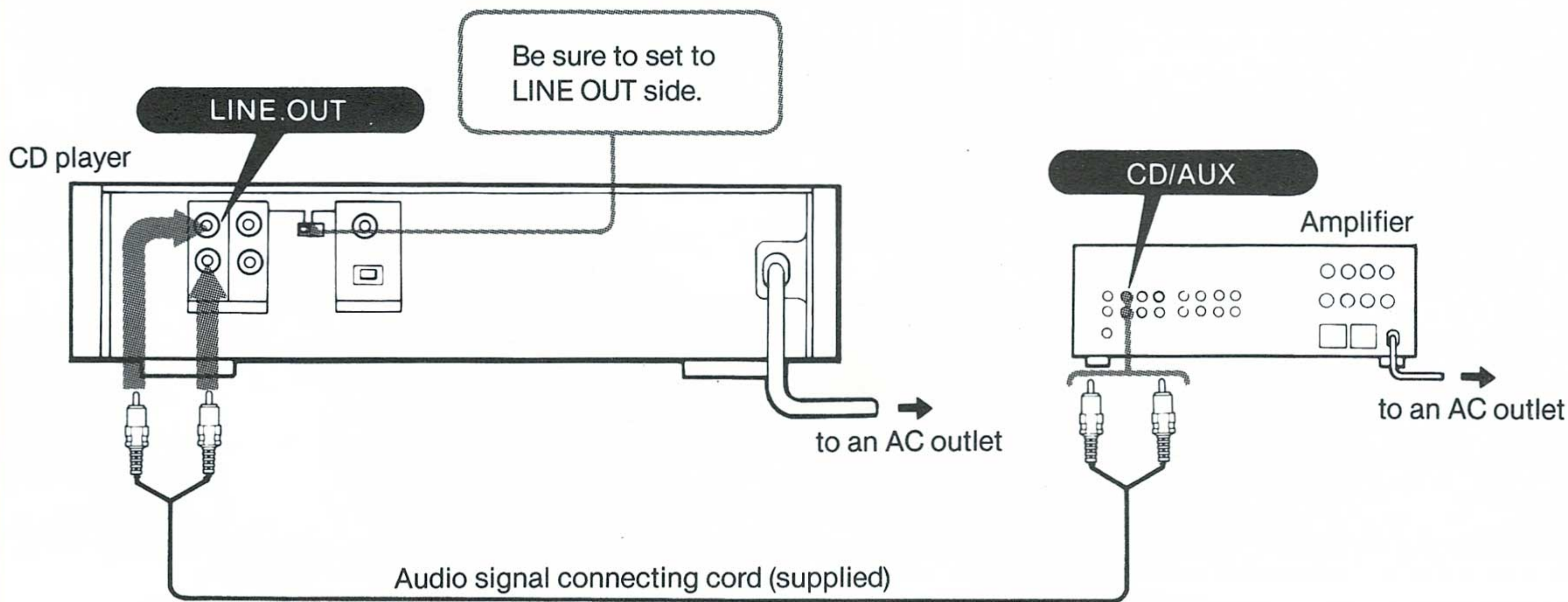
Connecting D/A converter unit and amplifier

Sony DAS-703ES D/A converter unit or other equivalent D/A converter using a digital audio interface can be connected to the DIGITAL OUT jack.

CD player

DIGITAL OUT

to an AC outlet

Be sure to set to DIGITAL OUT side. *

Digital connecting cord POC-15 (optional)

DIGITAL IN

LINE OUT

D/A converter unit

to an AC outlet

Audio signal connecting cord (supplied)

CD/AUX

Amplifier

to an AC outlet

to an AC outlet
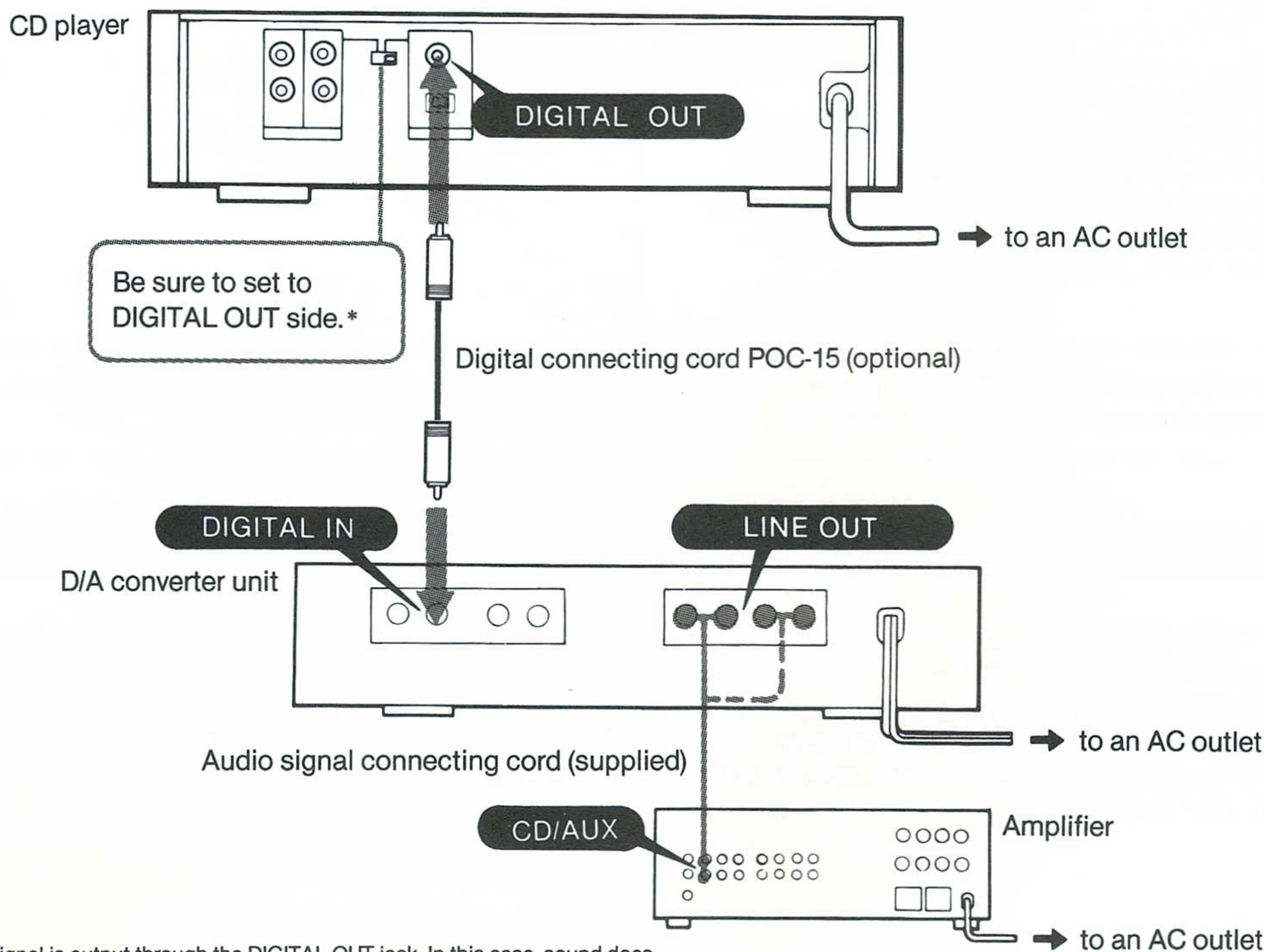
*Digital signal is output through the DIGITAL OUT jack. In this case, sound does not come through the LINE OUT jacks and the HEADPHONES jack.

8

Connecting an amplifier having an optical input connector

CD player

DIGITAL OUT (OPTICAL)

Be sure to set to DIGITAL OUT side.

→ to an AC outlet

Optical cable POC-15 (optional)

Amplifier

DIGITAL IN (OPTICAL)

→ to an AC outlet

9
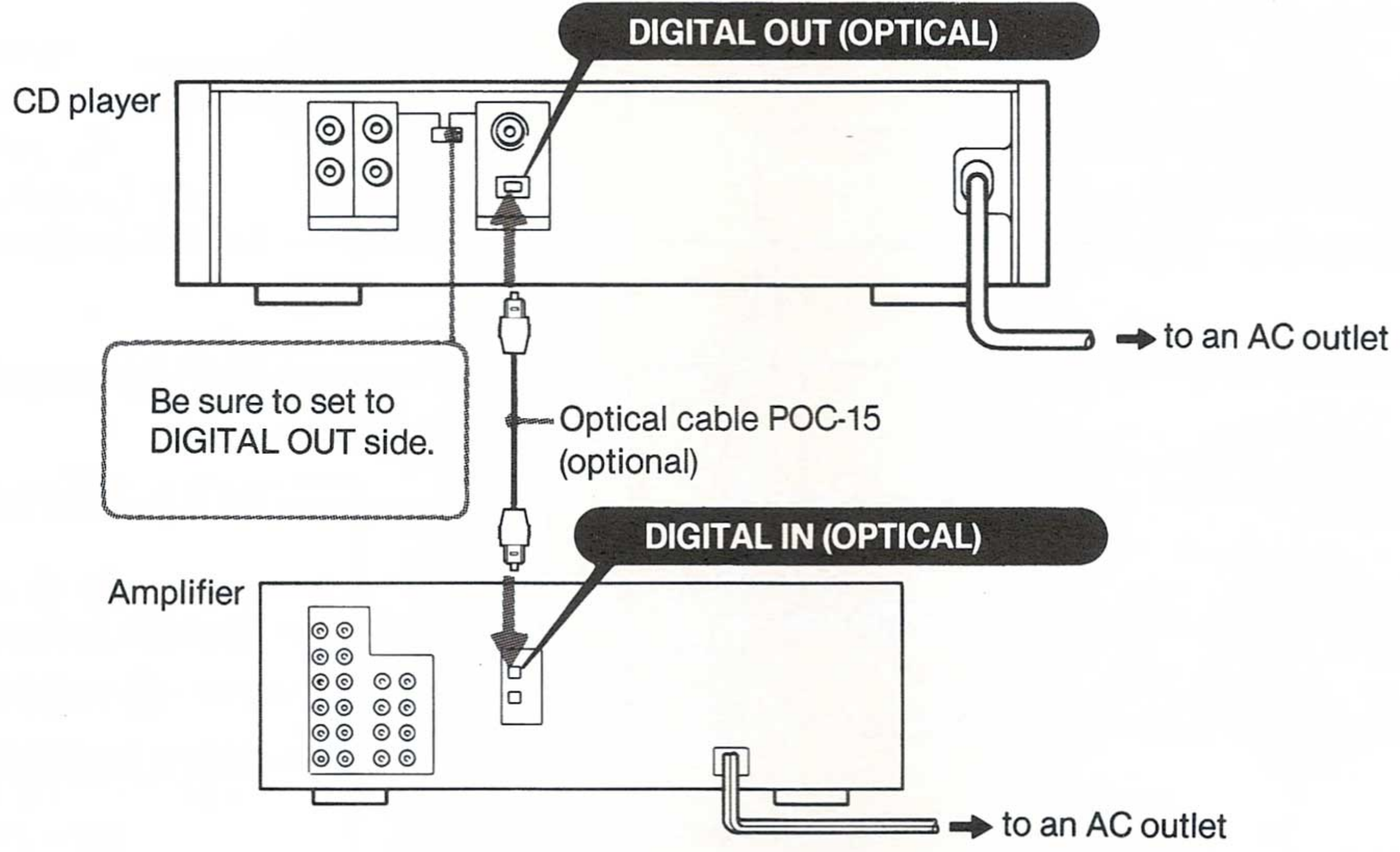
Location of Controls

Front Panel

Refer to the pages indicated in ● for details.

>20 (over 20) button ⑬ ——————————————————————— CHECK (program check) button ⑰

⬤ ➔ INDEX button ⑬ ——————————————————————— CLEAR (program clear) button ⑰

REPEAT button ⑲ ——————————————————————— FILE (custom file) button ㉑ ㉓ ㉔

A. SPACE/PAUSE (auto space/pause) button ⑭ ——————————————————————— Numeric buttons ⑬

DISPLAY button ⑫ ⑰ ——————————————————————— INDEX MODE button ㉕

Disc compartment ————————————

POWER switch ⑫ ————————————

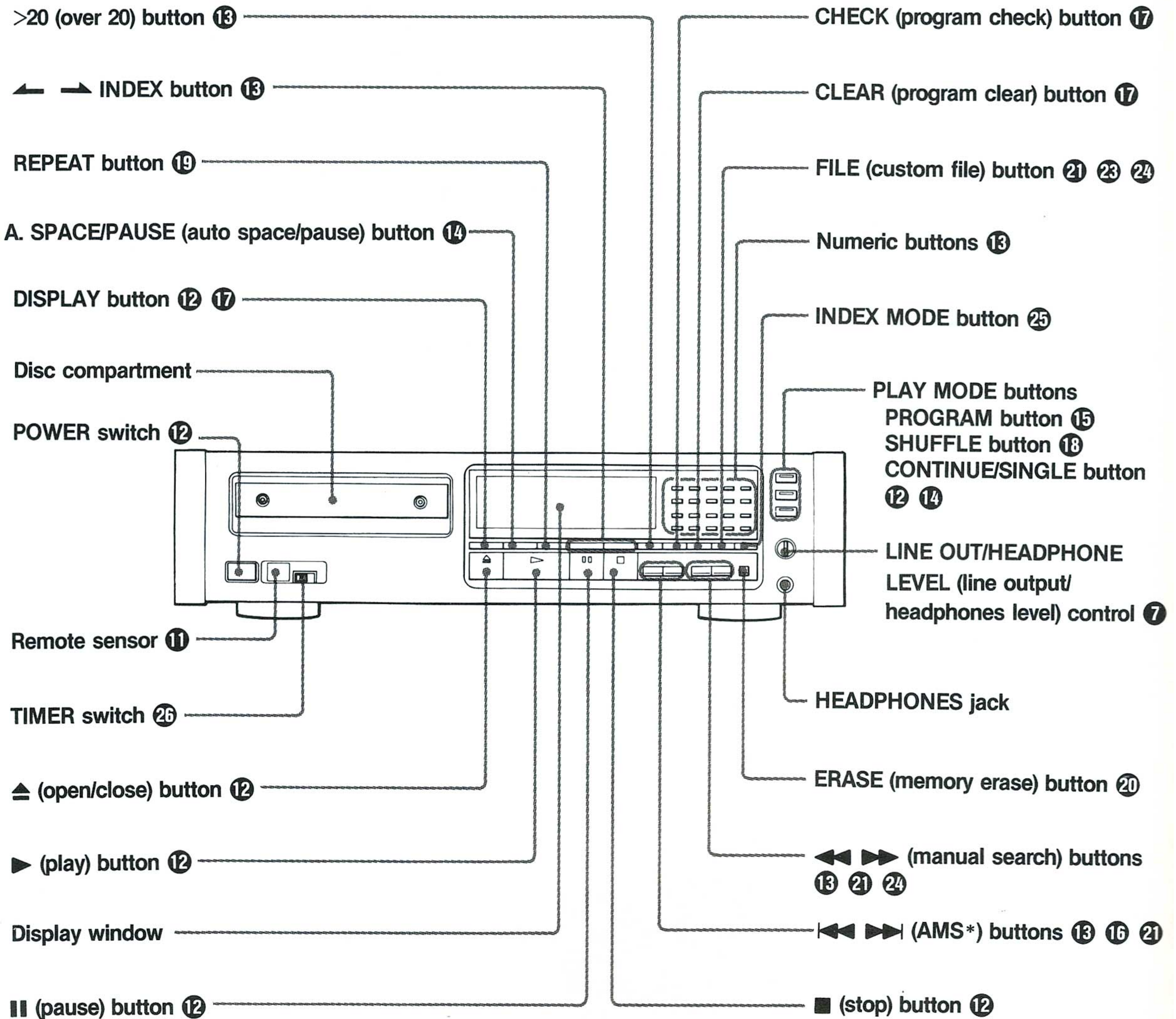PLAY MODE buttons
PROGRAM button ⑮
SHUFFLE button ⑱
CONTINUE/SINGLE button
⑫ ⑭

LINE OUT/HEADPHONE
LEVEL (line output/
headphones level) control ❼

Remote sensor ⑪ ————————————

TIMER switch ㉖ ————————————

HEADPHONES jack

⏏ (open/close) button ⑫ ————————————

ERASE (memory erase) button ⑳

► (play) button ⑫ ————————————

◄◄ ►► (manual search) buttons
⑬ ㉑ ㉔

Display window ————————————

I◄◄ ►►I (AMS*) buttons ⑬ ⑯ ㉑

II (pause) button ⑫ ————————————

■ (stop) button ⑫

* AMS is an abbreviation of Automatic Music Sensor.

10

PLAY MODE buttons
  PGM (program) button ⑮
  SHUFFLE button ⑱
  CONTINUE button ⑫ ⑭
  SINGLE button ⑭

▲ (open/close) button ⑫

>20 (over 20) button ⑬

DISPLAY button ⑫ ⑰

A ←→ B repeat button ⑲

CLEAR/REPEAT (A ←→ B repeat
clear/repeat) button ⑲

▶ (play) button ⑫

Ⅱ (pause) button ⑫

■ (stop) button ⑫

Numeric buttons ⑬

CLEAR (program clear) button ⑰

FILE (custom file) button ㉑ ㉓ ㉔

C. INDEX MODE (custom index mode)
button ㉕

|◀◀ ▶▶| AMS buttons ⑬

◢ ◣ INDEX buttons ⑬

◀◀ ▶▶ (manual search) buttons ⑬

◀◀ ▶▶ SLOW (low speed manual
search) buttons ⑬

LINE OUT VOLUME (line output/headphone
volume) buttons ❼

Remote Control Operation

Once the POWER switch is turned on, you can remotely control various functions of the player with the supplied remote commander.

Operations which is performed only with the remote commander
• Manual search at low speed
• A ←→ B repeat

Operations which cannot be performed with the remote commander
• Turning the power on and off
• Setting and releasing auto pause function
• Setting and releasing auto space function
• Checking the programmed selections
• Writing a comment about a disc (disc memo function)
• Clearing custom indexes
• Clearing all custom files
• Timer activated play

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.

• To avoid a malfunction, do not simultaneously depress two or more buttons.
• Avoid exposure of the remote sensor to direct sunlight or lighting apparatus. Such exposure can cause a malfunction.

Playing a Disc

Before playing a disc, turn on the amplifier and set the input selector to the CD player position.
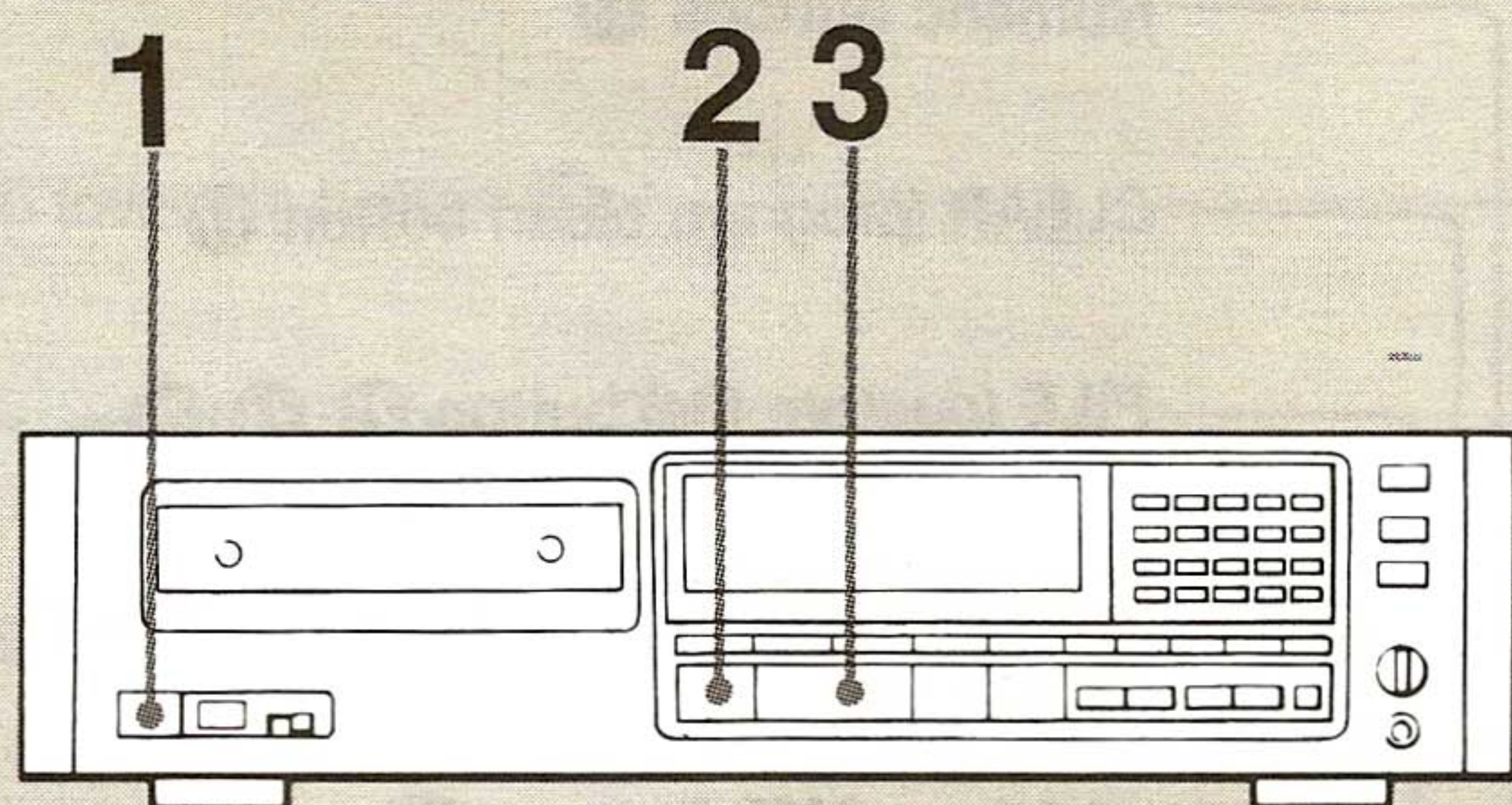
1 Depress POWER.
If "SINGLE" is displayed in the window, or if the lamp on the PROGRAM or SHUFFLE button is lit, press CONTINUE/SINGLE.

2 Press ▲ and put the disc
in the disc compartment with the label side up.

3 Press ►.
The compartment closes and play begins from the beginning of the disc.

Selection No. being played   Elapsed playing time   Music calendar
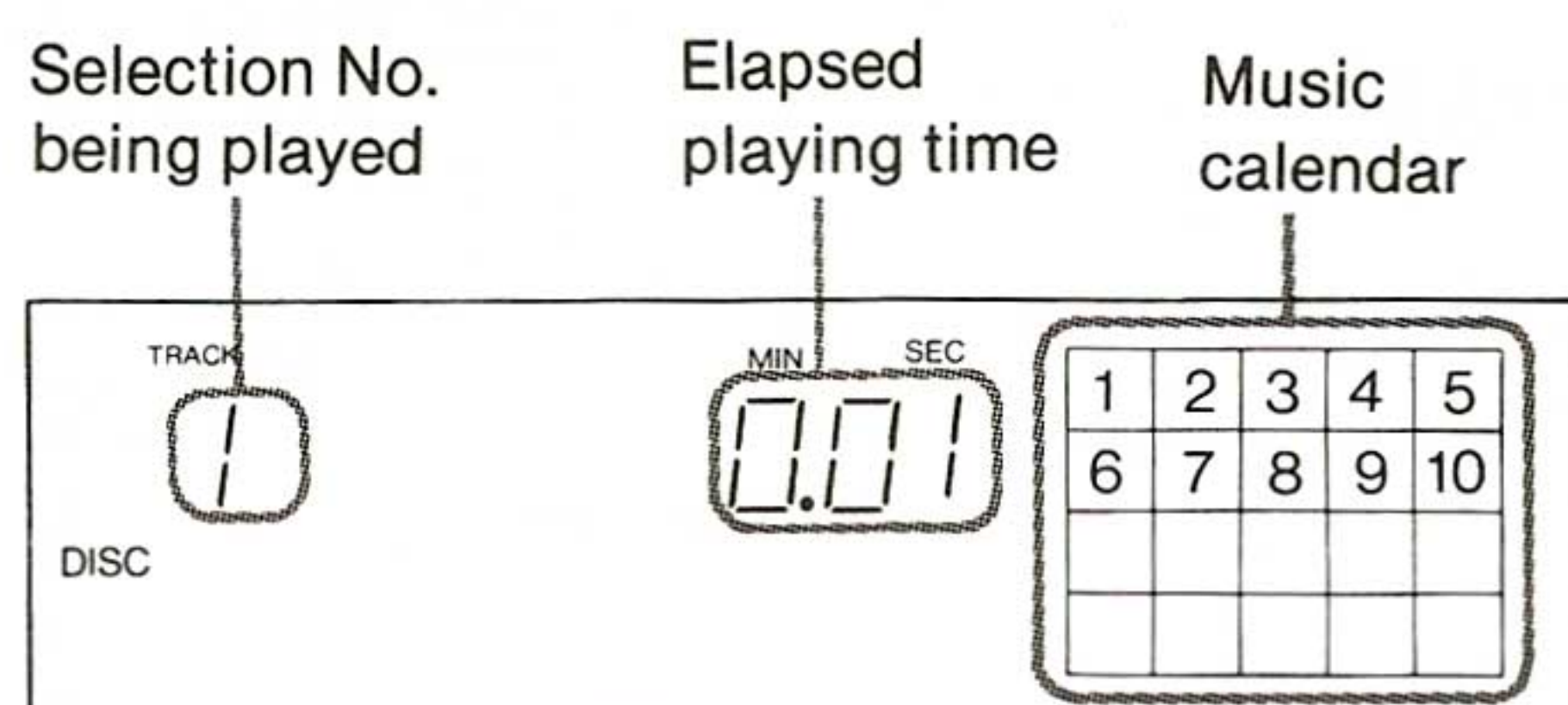
When a disc containing more than 20 selections is inserted, OVER20 appears.

Stopping play

To stop for a moment during play	Press ▐▐. To restart play, press ▐▐ again.
To stop play	Press ■.
To stop play and open the compartment	Press ▲. To close the compartment, press ▲ or the compartment itself.

To enter pause instead of starting play
Press ▐▐ instead of ►. The disc compartment closes and the player enters the pause mode at the beginning of the first selection. To start play, press ▐▐ again.

To display the remaining time of the current selection
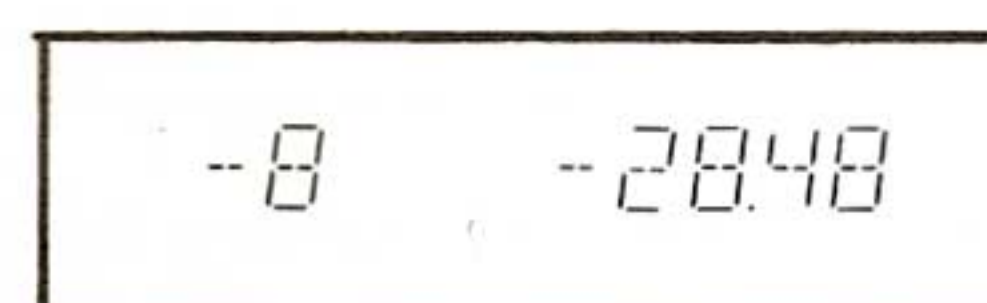Press DISPLAY once during play or pause.
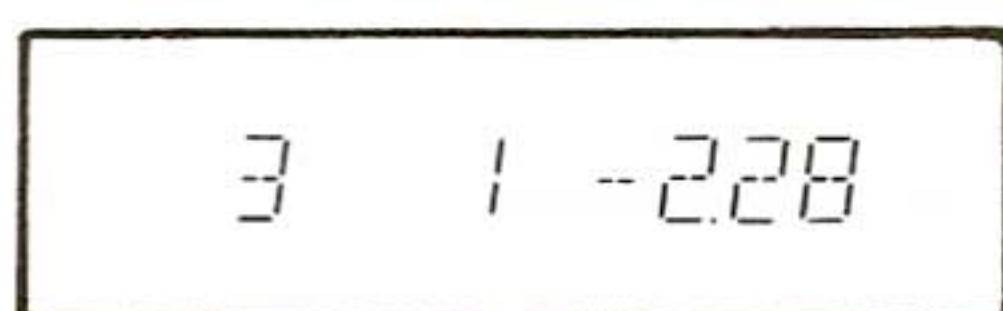
To return to the normal display, press DISPLAY twice, or three times if a disc memo* is memorized.
* See page 21.

To display the remaining number of selections and the remaining time of the disc
Press DISPLAY twice.

To return to the normal display, press DISPLAY once, or twice if a disc memo is memorized.

"EMPHASIS" indication appears when
The built-in de-emphasis circuit is turned on. If a disc recorded with the recording level of high frequencies raised is played, the circuit is turned on automatically and lowers the level of high frequencies. This improves the signal-to-noise ratio of high frequencies.

Locating a Particular Selection

Locating a selection in sequence (Automatic Music Sensor)
You can locate the beginning of a desired selection during play.

To locate the beginning of the selection being played	Press ◄◄ once.
To locate the beginning of the next selection	Press ►►| once.

Press continuously to locate previous selections or selections ahead.

Locating a selection directly
Press one of the numeric buttons (1 to 20) to enter the desired track number.

Locating a Particular Point in a Selection

Locating a point in sequence (Manual Search)
You can locate a particular point in a selection during play by monitoring the high-speed sound.

To go back at high speed	Keep ◄◄ pressed.
To go ahead at high speed	Keep ►► pressed.

Release the button at the desired point.

Locating at a lower speed
Press ◄◄/►► SLOW on the remote commander.

Locating an Index∗
This function is possible only with a disc on which index numbers are recorded.

Press ◄— or —► to locate the desired index number. The selected index number appears in the display window.

When locating a particular selection
If "SINGLE" is displayed in the window, or if the lamp on the PROGRAM or SHUFFLE button is lit, press CONTINUE/SINGLE.

To choose directly a selection whose number is greater than 20
Use the ⎡>20⎤ button and ⎡1⎤ to ⎡10⎤ buttons. ⎡10⎤ button functions as the figure 0.
Ex. To play from track No.32   Ex. To play from track No.30
Press ⎡>20⎤ → ⎡3⎤ → ⎡2⎤.   Press ⎡>20⎤ → ⎡3⎤ → ⎡10⎤

To locate at high speed
Press ◄◄ or ►► in the pause mode. The search speed increase by three times, but there is no sound. Find the desired point by observing the display.

If you continuously press ◄◄/►►
If you continuously press ►► at the end of the disc, "OVER" appears in the window. Press ◄◄ or ◄◄ to go back to normal indication.
If you continuously press ◄◄ at the beginning of the disc, play begins automatically from the first selection.

∗What is index?
The selections on some discs are divided into sections, such as the movements of a symphony. An index number is assigned to each section thus making it possible to find a particular section easily.

13

Playing a Single Selection—Single Play

You can play only one desired selection.

1 Press **CONTINUE/SINGLE** on the player (or SINGLE on the remote commander) to display "SINGLE" in the window.

2 Start playing the desired selection by pressing the numeric buttons, or by pressing ◄◄/►►◄ and then ►. Playing stops when the chosen selection ends.

To cancel single play
Press CONTINUE/SINGLE on the player (or CONTINUE on the remote commander) so that "SINGLE" disappears from the window.

To play only the first selection
Display "SINGLE" in the window, and press ►.

Stopping Play for a Moment Automatically at the Beginning of Each Selection—Auto Pause Function

Press **A. SPACE/PAUSE** so that "AUTO PAUSE" is displayed in the window.

To restart play
Press **ll**.

To cancel the auto pause function
Press A. SPACE/PAUSE once so that "AUTO PAUSE" disappears.

Inserting a Blank Space between Selections—Auto Space Function

A blank space of approx. 3 seconds can be inserted between selections.
If you record on a tape using this function, the automatic music sensor of the deck used to play back the tape will function correctly.

Press **A. SPACE/PAUSE** so that "AUTO SPACE" is displayed in the window.

To cancel the auto space function
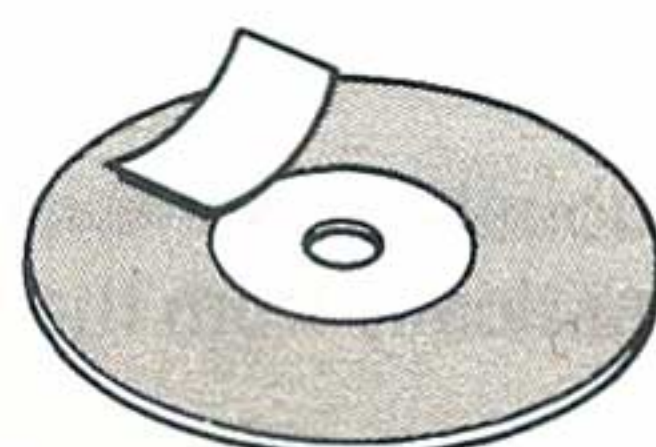Press A. SPACE/PAUSE twice so that "AUTO SPACE" disappears.

Notes on discs
Handle the disc by its edge, and to keep the disc clean, do not touch the surface.

Do not stick paper or tape.

This way

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 where there can be a considerable rise in the temperature.
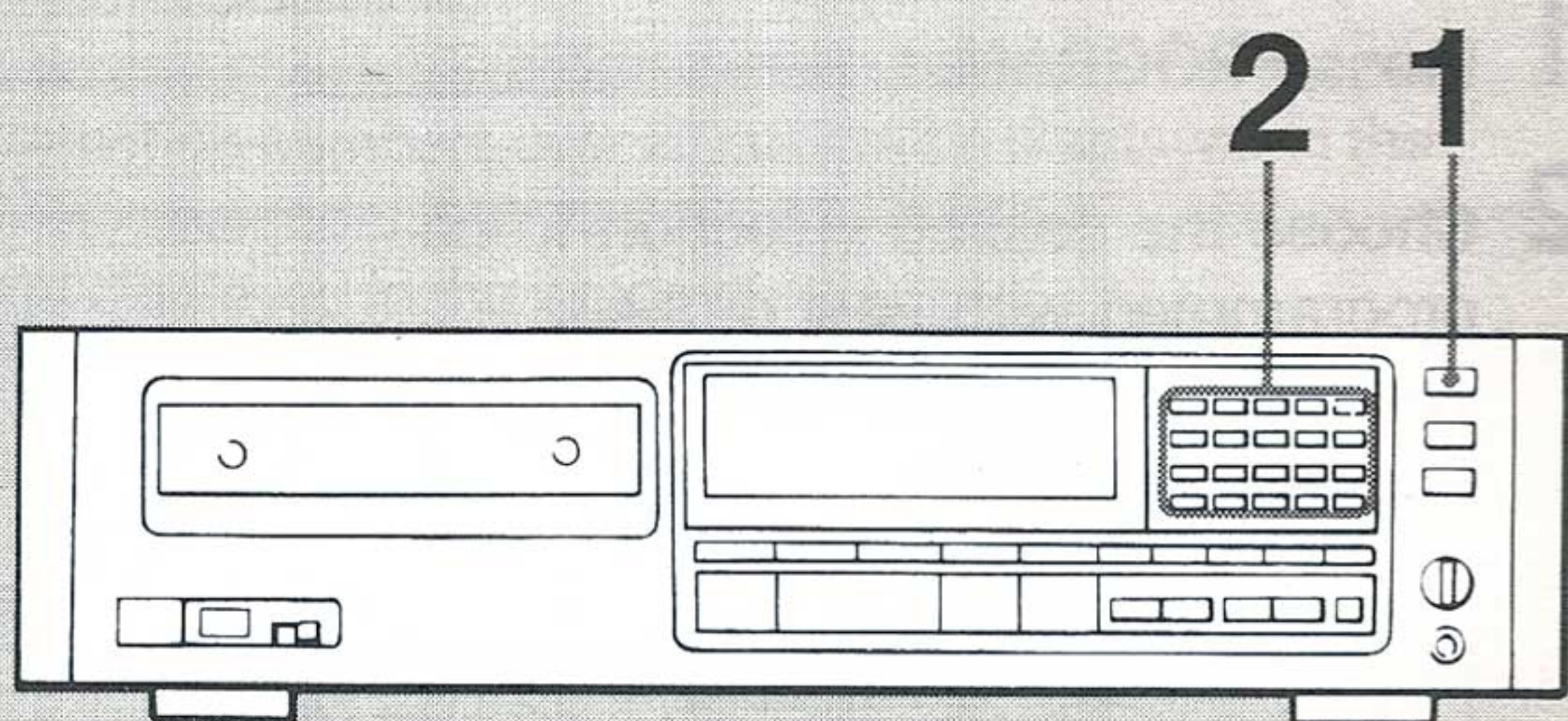
Note on 8cm CD singles
You can play an 8cm CD single on the inside circle of the tray. Do not put a normal CD (size of 12cm) over it.

Playing in the Desired Order—Program Play

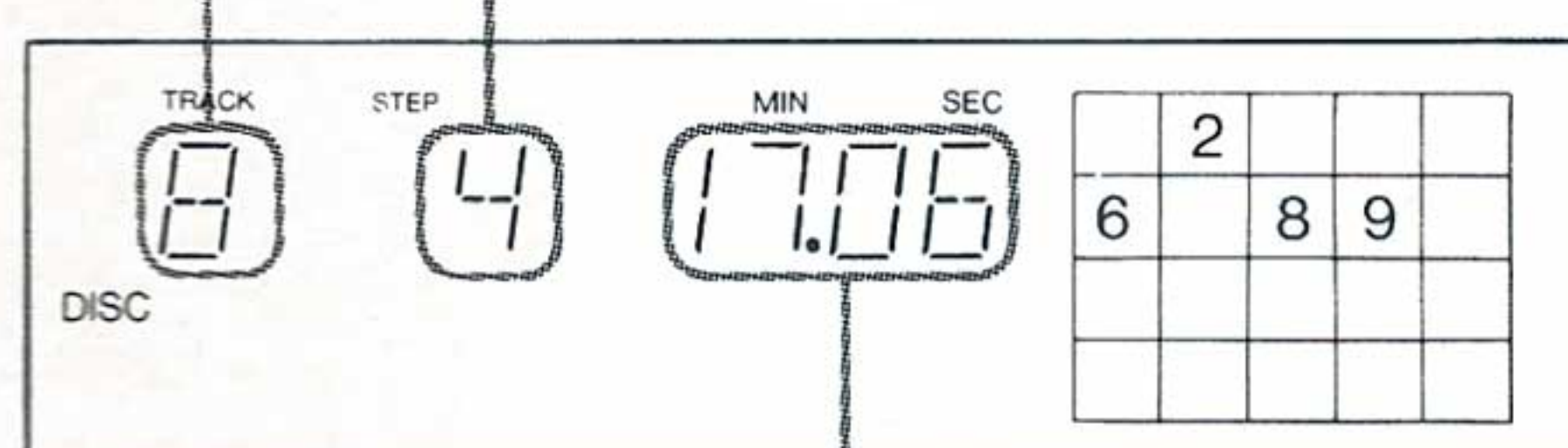You can play up to 20 selections in the desired order.

Programming Selections Directly

1 Press PROGRAM.

2 Press the **numeric buttons** for the desired selection in the order to be programmed.

Selection No.   Program No.

The total playing time

To play the programmed selections
Press ►.

Adding selections to a program during program play
Press the numeric buttons during play. You can add selections up to 20.
• Pause cannot be programmed during play. (See page 15.)

When each selection ends during program play
That selection number disappears from the display, but the program itself remains. If you press ►, you can play the same program again.

Note
If you press PROGRAM during the continuous play, single play or shuffle play (page 18), the selection currently being played is programmed as the first selection in the program.

Program is cleared in the following cases
• ■ is pressed twice during program play.
• CONTINUE/SINGLE, SHUFFLE or ▲ is pressed.

Space between selections during program play
There is a blank of 1 second between each programmed selection. However, when consecutive selections (e.g. 4th → 5th) are programmed, the space on the disc is inserted as it is.
To record program play on a tape, use the auto space function (page 14) so that a blank of 3 seconds is inserted between selections.

What is this indication?
"– – – –" indication appears on the display window instead of the numbers, if a selection numbered 21 or higher is programmed or the total playing time of the programmed selection exceeds 100 minutes.
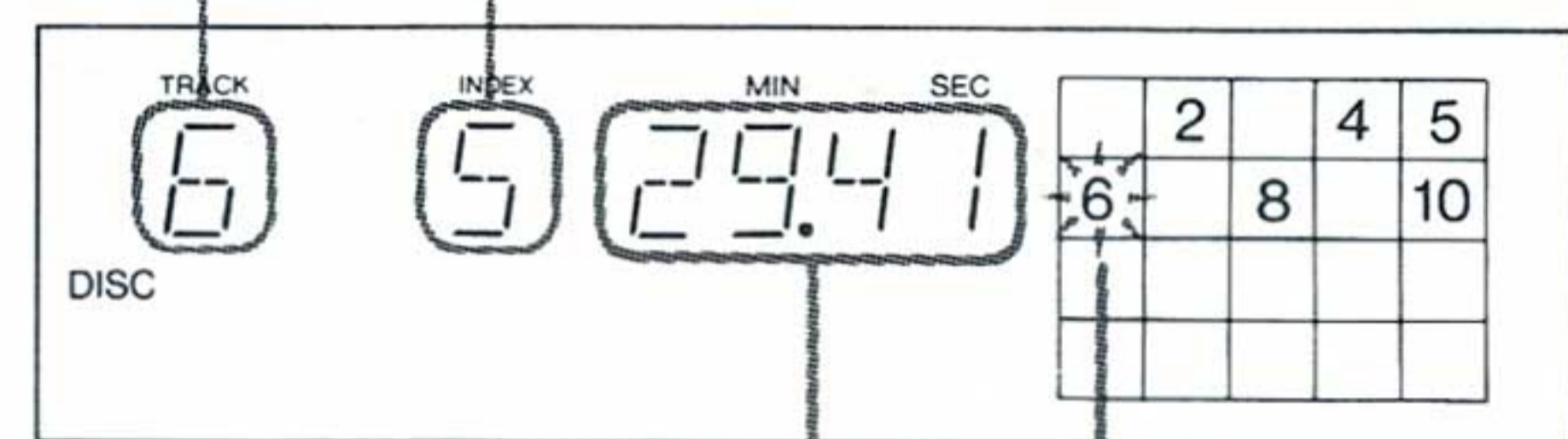
Programming Selections While Checking the Total Programming Time (Program Edit)

This function is useful for recording, as you can adjust the total playing time to the tape duration.

1,3

2
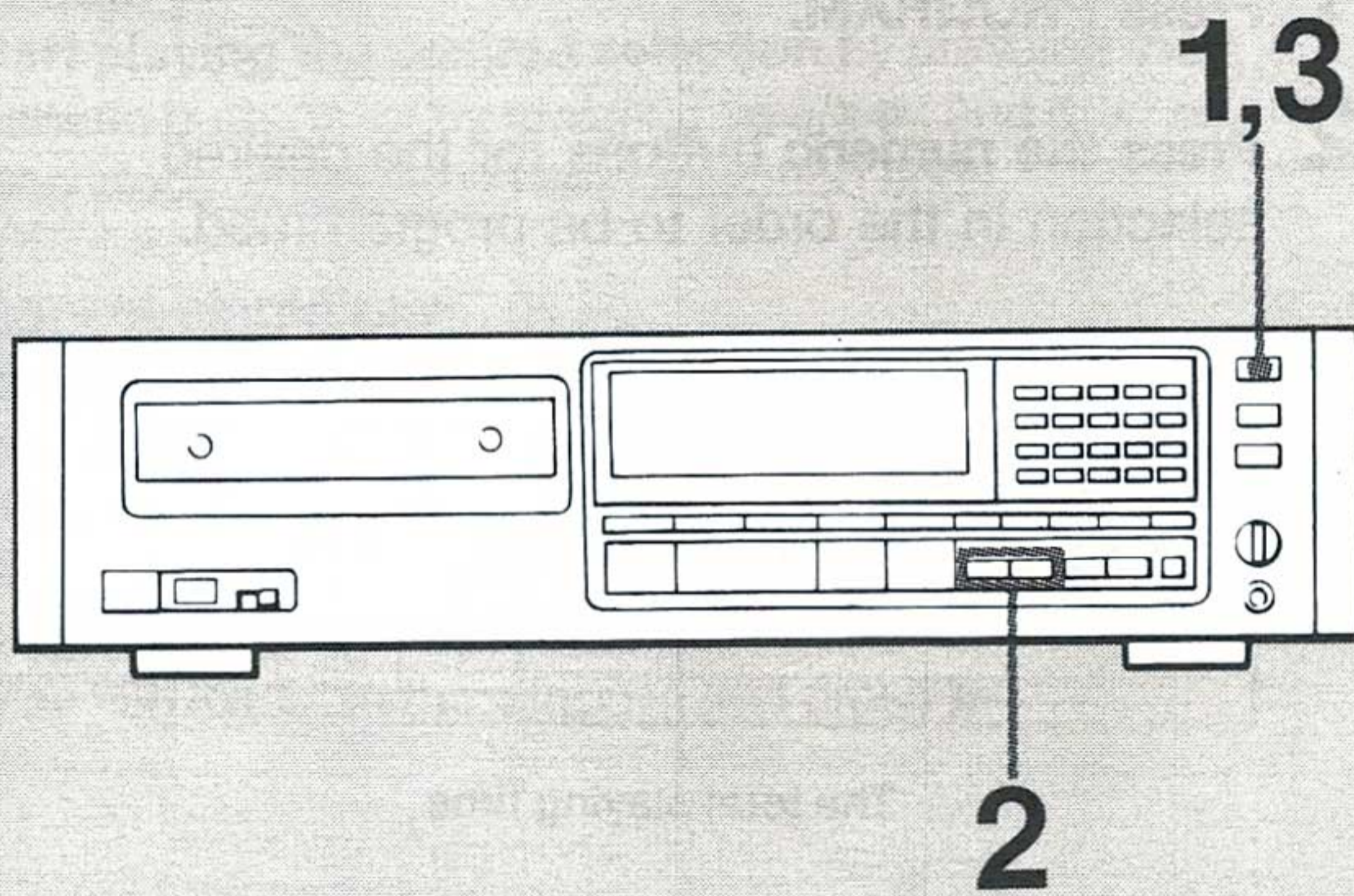
1 Press PROGRAM.

2 Choose the desired selection to be programmed with |◀◀ or ▶▶|.
The designated selection number blinks in the music calendar.

Selection No.   Program No.

The total playing time including the selection indicated.

Blinking

If the playing time of that selection is not appropriate, choose another selection.

3 Press PROGRAM.
The designated selection is programmed and the blinking number lights up steadily.

4 Repeat steps 2 and 3 to program additional selections in the desired order.

To play the programmed selections
Press ▶.

To program pause
During programming, press ❚❚ at the desired point between selections. When the program reaches it, the disc stops and stands by until you press ❚❚ agian.
This function is helpful when changing the tape during recording.
The total playing time will be reset to 0.00 when you press ❚❚.

P (pause) has been programmed.
Its turn is third.

Checking the Programmed Selections

(possible only on the main unit)
Press CHECK.
Each time you press CHECK, the selections are displayed in the order they are programmed. At the last selection, "END" is displayed.
- You can check the programmed selections during play.
- Selection numbers over 20 cannot be displayed in the music calendar, but track numbers and program numbers are displayed in the window.

Clearing the Programmed Selections

Clearing the whole program
Press ■ once during stop, or twice during play.
All the selections are cleared.

Clearing the last selections in the program
(operated only on the main unit)
Press CLEAR during stop.
The last selection is cleared each time CLEAR is pressed.

Clearing a specific selection
(possible only on the main unit)
1 **Press CHECK** repeatedly until the selection to be cleared is displayed.
2 **Press CLEAR** while the selection number is displayed.
   The selection is cleared from the program.
   You cannot clear the selection currently being played.

To display the remaining number of selections and time of the program
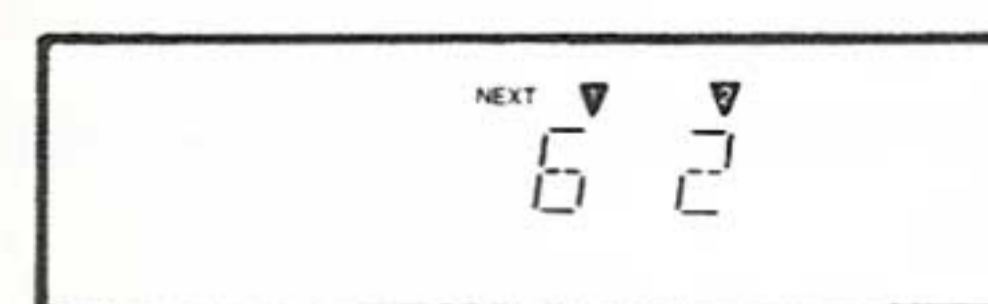Press DISPLAY twice.

```
  -6   -- 19.08
```
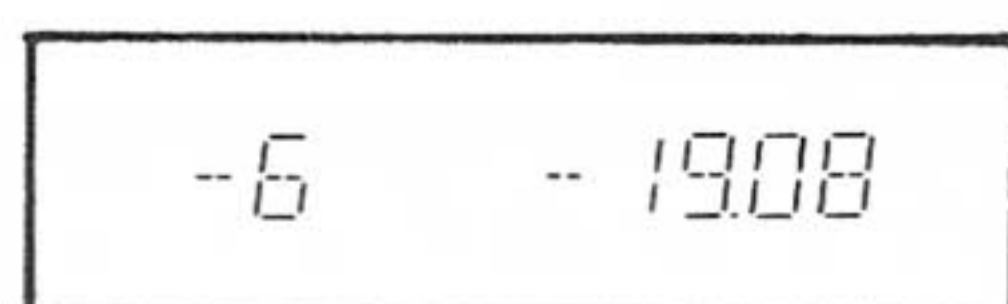
If pause is programmed, the remaining number of selections and time to the next programmed pause is displayed.

To return to the normal display, press DISPLAY twice, or three times (if a disc memo* is memorized).
* See page 21.

To display the next selection number and the succeeding selection number in the program
Press DISPLAY three times.
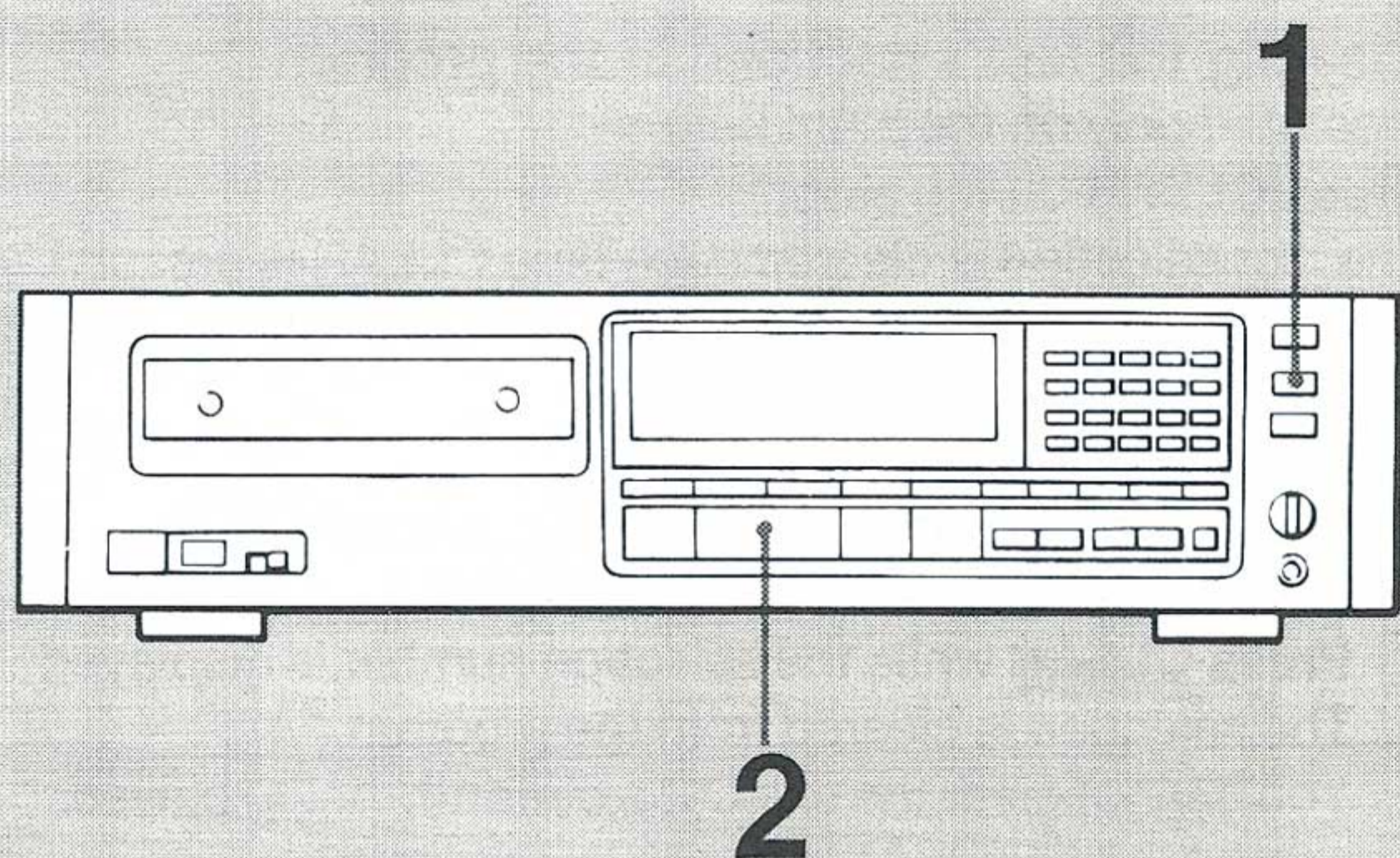
```
  NEXT ▼  ▼
   6   2
```

To return to the normal display, press DISPLAY once, or twice (if a disc memo is memorized).

Playing in a Random Order—Shuffle Play

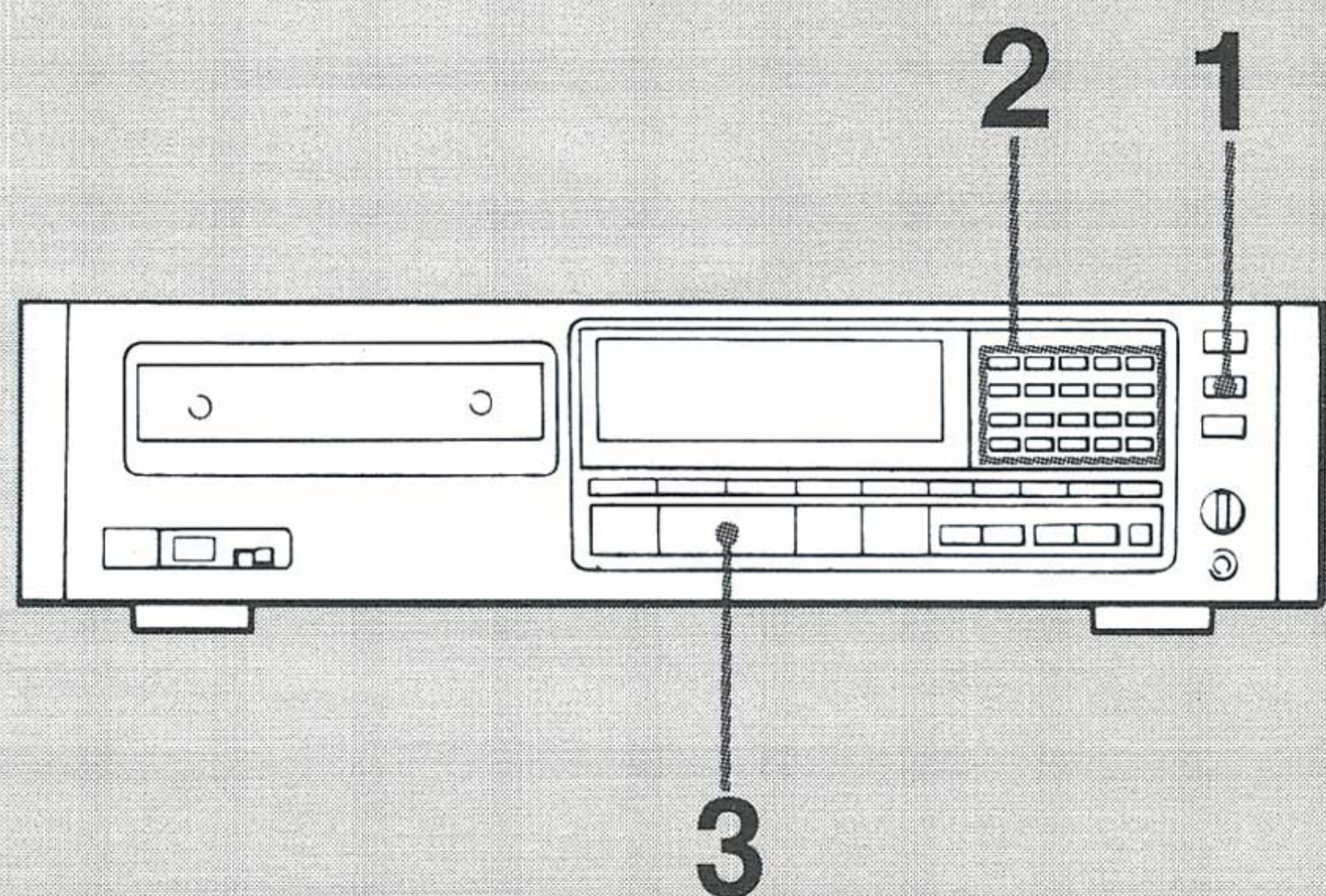You can play up to 99 selections in a random order.

Playing All the Selections in a Random Order

1 Press SHUFFLE.

2 Press ►.
Shuffle play begins.

To cancel shuffle play mode
Press CONTINUE/SINGLE (or CONTINUE on the remote commander).

Playing Only the Desired Selections in a Random Order—Delete Shuffle Play

1 Press SHUFFLE.

2 Press the numeric buttons of the undesired selections you wish to delete.
The selections disappear from the music calendar.

```
         9 OFF              1 2 3 4 5
                           6 7 8   10
DISC
```
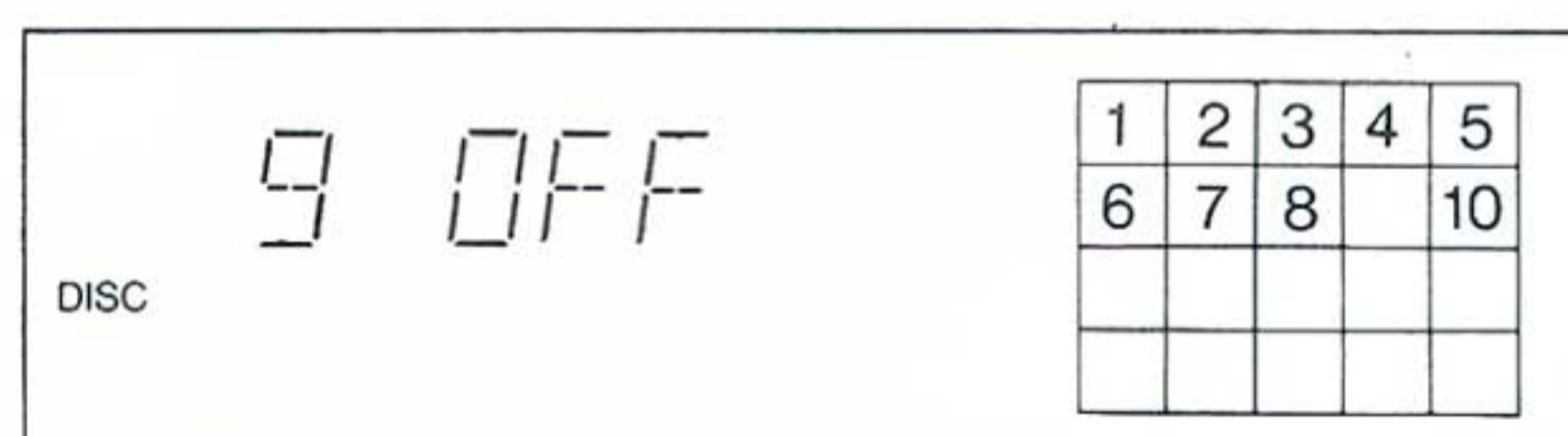
3 Press ►.

What is this indication?
This indication appears while the player is "shuffling" the selections.

If you press SHUFFLE during play
Shuffle play begins from the selection being played.

To record shuffle play
During shuffle play, a blank of one second is inserted between each selection.
To record shuffle play, use the auto space function (page 14) so that a blank of 3 seconds is inserted between selections.

When delete shuffle play ends
Delete shuffle play mode is released and the player stands by in the shuffle play mode for the whole disc.

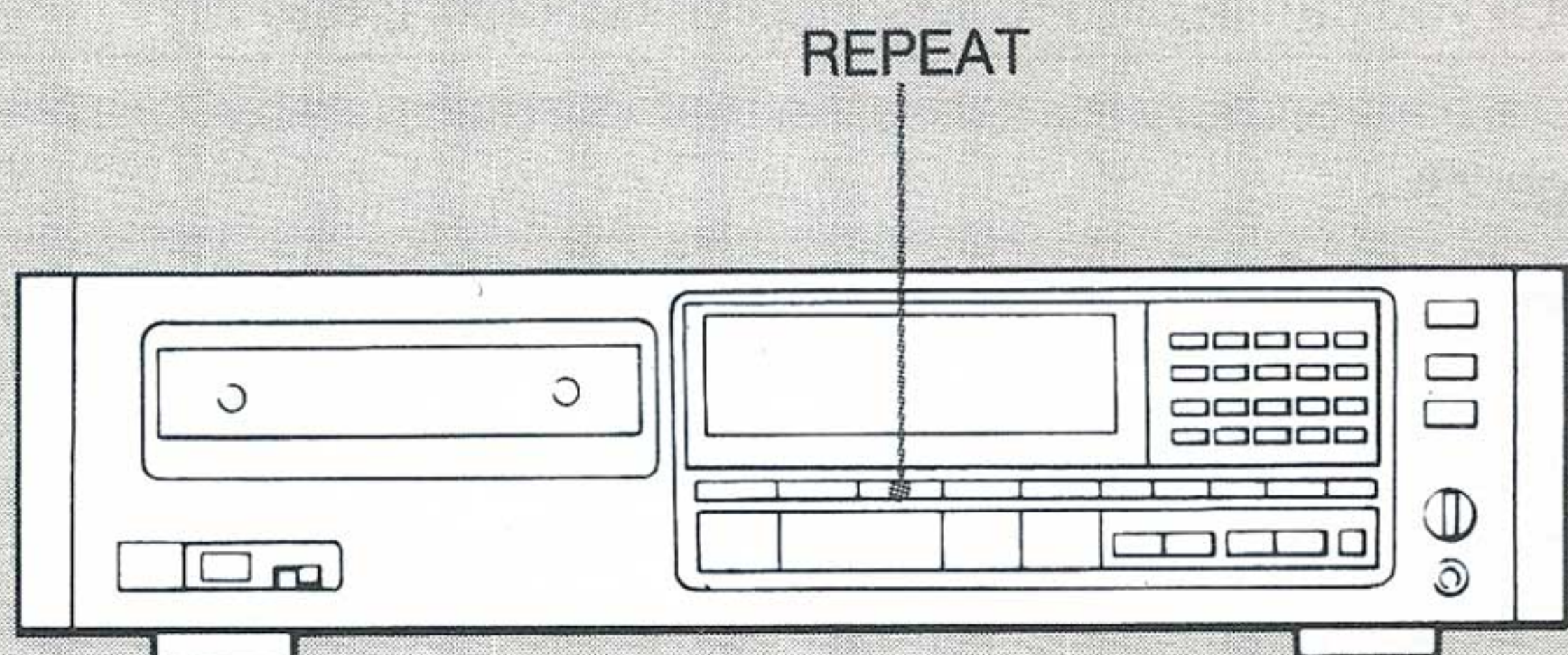**If you press the numeric buttons during shuffle play mode**
The selections of those numbers are also deleted, but the selection being played cannot be deleted.

To play a selection which has been deleted
Press the numeric button of that selection again.
The selection number and *ON* appear in the display.

Playing Repeatedly—Repeat Play

REPEAT

You can repeat the whole disc, a single selection, all the programmed selections, shuffle play, A ←→ B repeat play, or play between two custom indexes.

Press REPEAT during play or pause.
Repeat play begins according to the current play mode.

Play mode	Selections to be repeated
Continue	All the selections
Single	The selection being played
Program	Programmed selections in the programmed order
Shuffle	All the selections, reshuffled each time

For the A ←→ B repeat play, see the description below.
For the repeat play between two custom indexes, see page 25.

To cancel repeat play mode
Press REPEAT.

Repeating a Particular Portion (A ←→ B Repeat)

(Possible with the remote commander)
You can repeat any deaired portion on a disc.

1 Press A ←→ B at the starting point (A) of the repeat play.
"A SET" appears in the window.

2 Continue playing, or press ►► or ►►I to locate the desired ending point (B).
3 Press A ←→ B.
"A – B REP" appears in the window, and play begins from the point A.

To cancel A ←→ B repeat
Press CLEAR/REPEAT (or REPEAT on the player).

Going back to the point A from any point on the disc
1 Press A ←→ B at the starting point (A) during play.
2 Press ► when you desire to return to the registered point. Play begins again from the point A.

A ←→ B repeat and auto pause function
If the A ←→ B repeat play is activated while the auto pause function is turned on, the player enters the pause mode each time the point A is reached. Press II to resume play.

To go back to the point A during A ←→ B repeat play
Press ►.

If you press REPEAT during delete shuffle play
When the desired selections end, repeat play of all the selections starts.

19

On Custom Files

The CD player incorporates a memory in which you can store three types of informations called "custom files".

Three custom files you can store in memory

Disc memo	A comment of up to 10 letters, which you can assign to each individual disc. (page 21)
Program bank	A programmed playing order you store in memory for a disc, so that the disc can be played always in a fixed order. (page 23)
Custom index	Index point you can assign to anywhere you want on a disc. (page 24)

How many discs can be assigned custom files?
You can give custom files to up to 226 discs.
- A disc memo can be given to a disc which already has a program bank or custom indexes.
- A program bank and custom indexes cannot both be given to a disc at the same time.

Memory backup for the custom files
Custom files, once memorized, are retained in the compact disc palyer's memory for approximately 1 month without AC power supply.

What is this indication?

FULL
FULLO

This indication appears when FILE is pressed while no custom file can be memorized for the disc currently put in the player. To make a custom file for the disc, clear the custom file of another disc.

To clear all custom files of a disc at once
Put the disc in the player and press ERASE. The disc note and program bank (or the disc note and custom indexes) are all cleared.
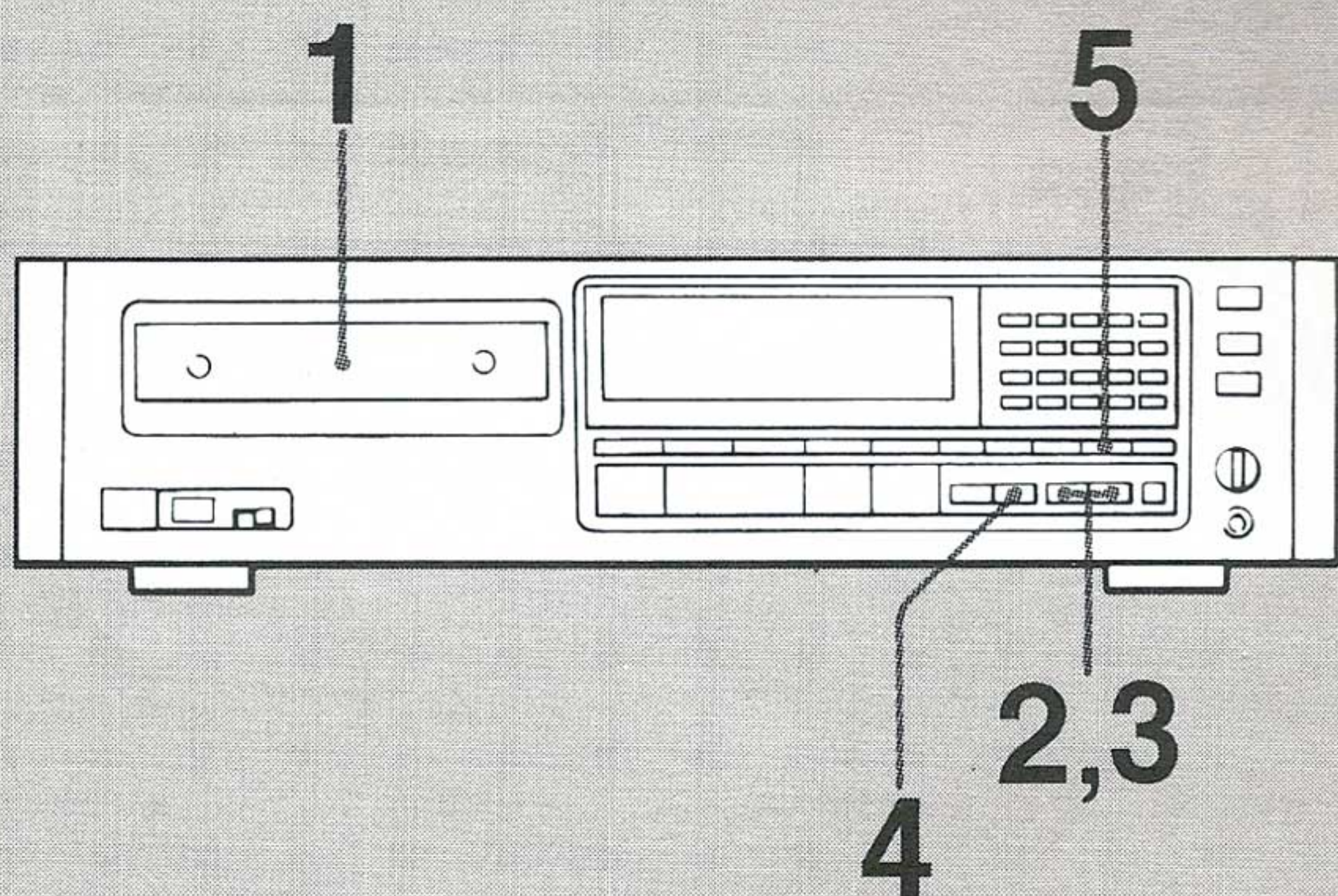
To clear custom files of all discs at once
Press POWER to turn on the player while keeping ERASE and FILE pressed.

Writing a Comment about a Disc
## —Disc Memo Function

Using the disc memo function, you can write a comment of up to 10 letters about a disc. The memo appears in the window every time you put the disc in the player.
You can write one disc memo to a disc.

1 **Put the disc in the disc compartment and press the disc compartment to close it.**
Make sure that the total number of selections and the total playing time is displayed. **Then proceed as follows in the stop mode.**

2 **Press ◄◄ or ►►.**
A blinking cursor (indicating where a letter will be written) appears.

3 **Press ◄◄ or ►► until the desired letter appears.**
Example: If ►► is pressed 6 times

```
MEMO
F _
DISC
```
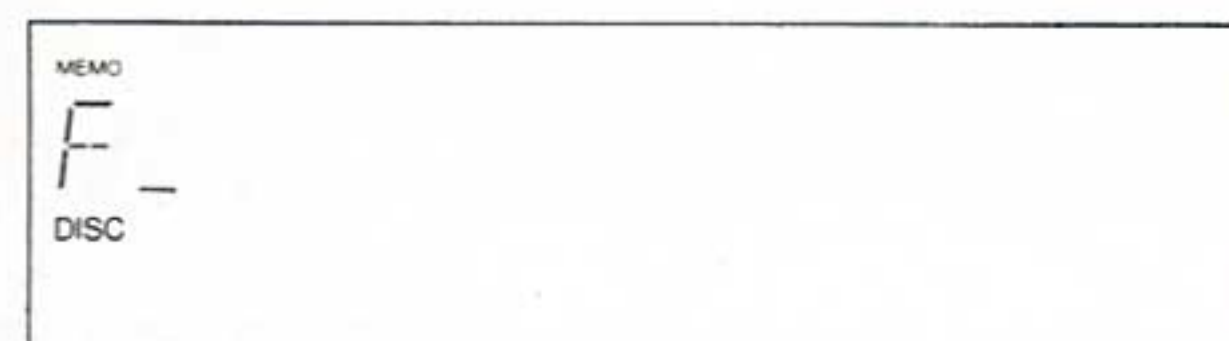
4 **Press ►►I to move the cursor to the next position, and select the desired letter.**

```
MEMO
FU _
DISC
```
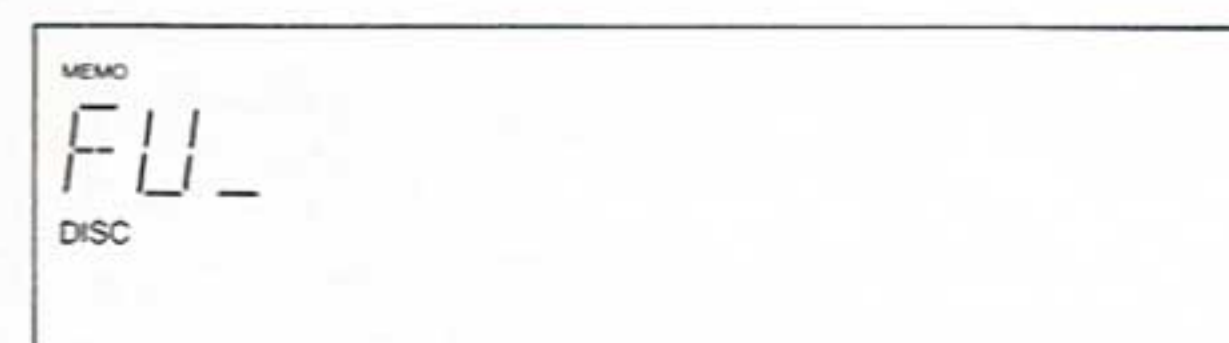
Repeat steps 3 and 4 to complete the memo.

5 **Press FILE.**
"FILE" appears in the window. After about 1 second, the memo you have written will be displayed.

Each time the disc is put in the compact disc player, the memo will be displayed.

Usable letters and symbols
For the disc memo, 46 letters and symbols and a space can be used. When the ◄◄/►► button is pressed for the first time, the space appears. Each time ►► is pressed, letters and symbols will appear in the following order.

```
(space) A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
⋈ ♀ ✳ ४ + / ı > < 9 8 7 6 5 4 3 2 1 0 —
```

Use ◄◄ to call up a previous character.

21

Writing a Comment about a Disc—Disc Memo Function

Clearing the Disc Memo

1 Put the disc whose memo you want to clear in the player.

2 Press ◄◄ or ►► on the player.
The ◄◄/►► button on the remote commander cannot be used.

3 Press CLEAR.

4 Press FILE.
"FILE CLR" is displayed in the window.

To rewrite letters or symbols
Before pressing FILE, move the cursor under the letter/symbol to be changed, and then select the desired letter/symbol using ◄◄/►►.

Where is the disc memo stored?
The disc memo is stored in the compact disc player's memory. When a disc is put in the player, the player identifies the disc by the total number of selections and the total playing time. If a disc memo has been made for that disc, the player retrieves the memo from its memory and displays it in the window. Therefore, as the disc memo is not located on the disc itself, **when the disc is put in another compact disc player, no memo will be displayed.**
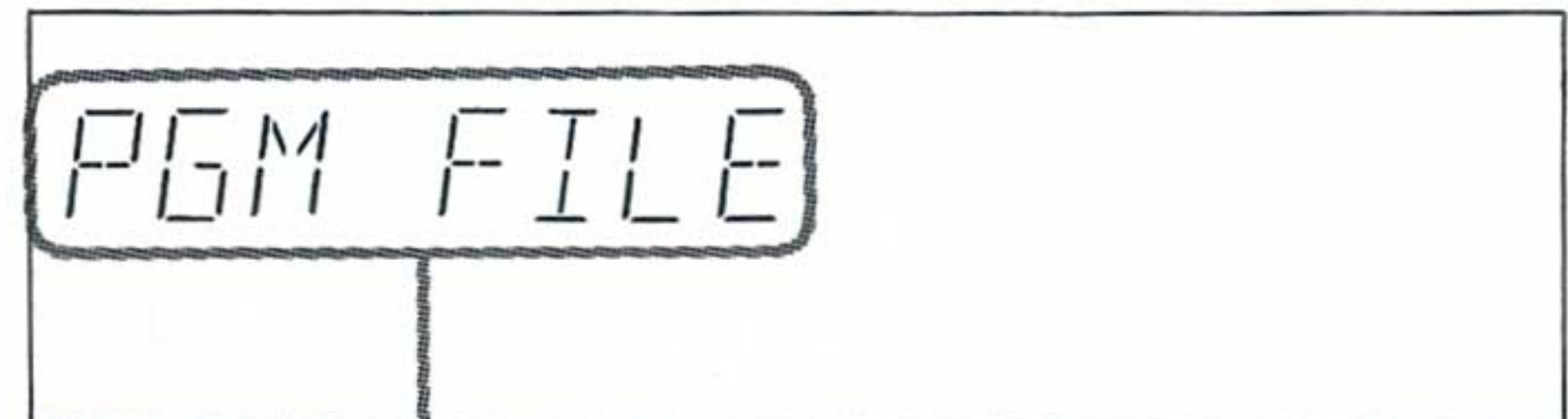
Keeping the Program in Memory
—Program Bank Function

Memorizing a Program

After programming selections, you can keep the program memorized, so that the disc is played always in the fixed order. The memorized program is called "program bank".
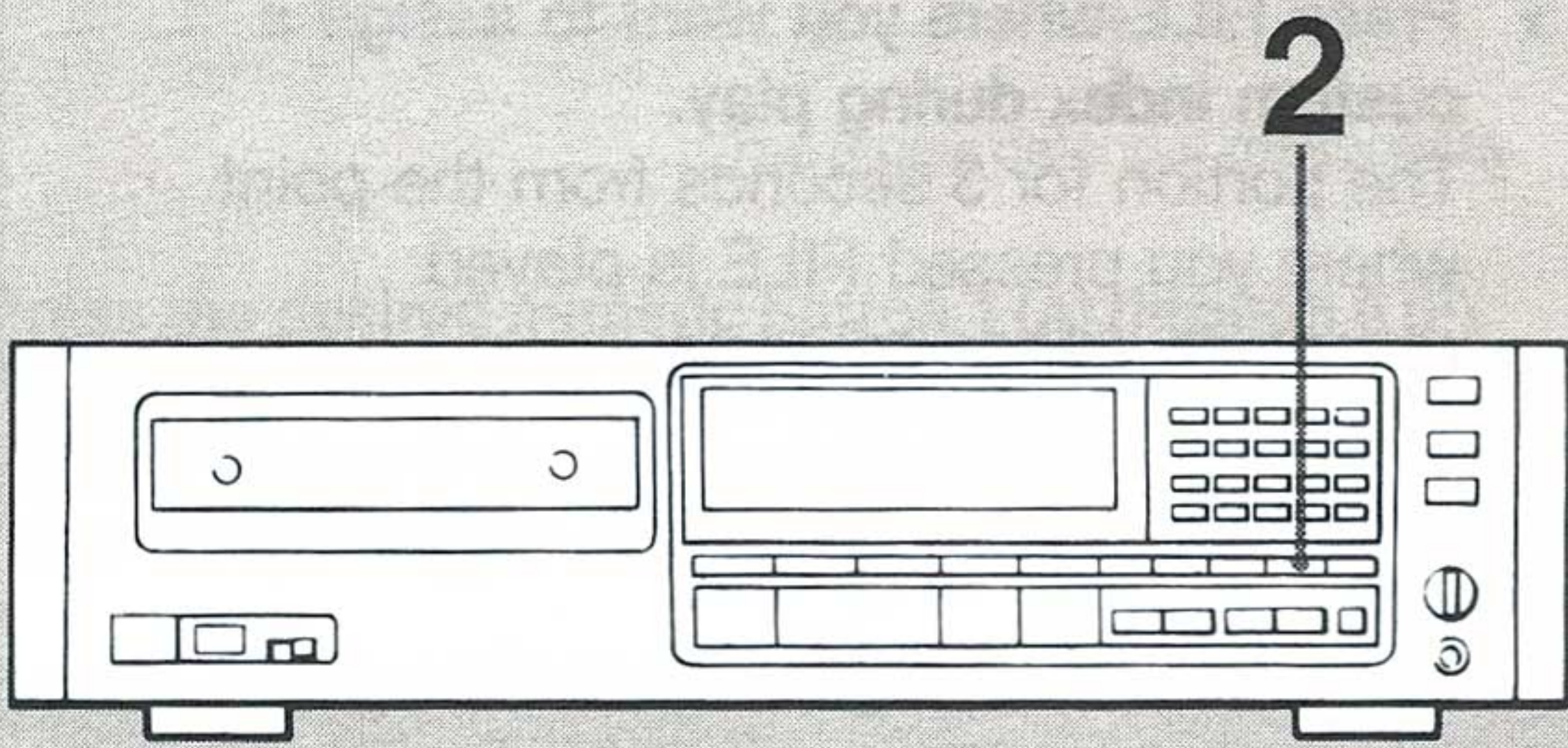
1 **Program the selections** as you want. (See page 15.)
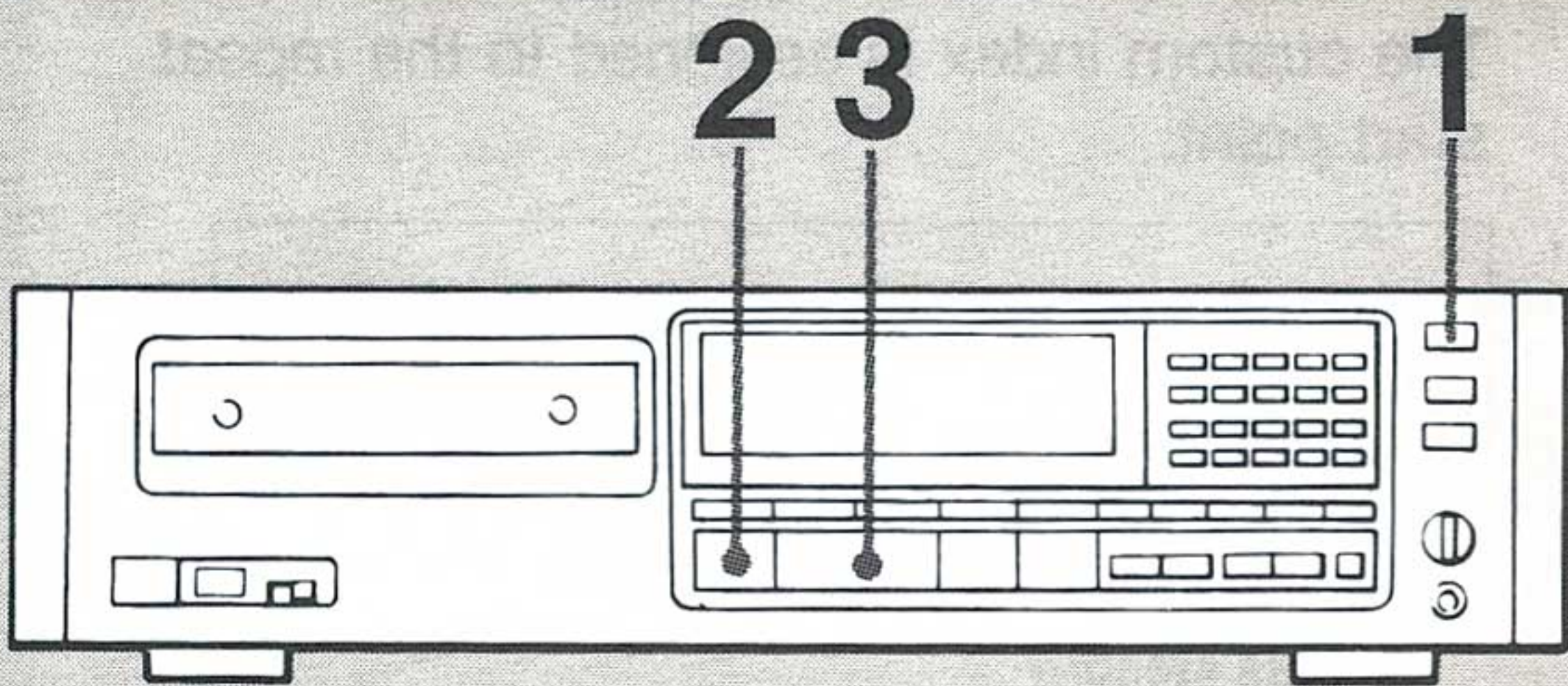
2 Press FILE.

PGM FILE

Disappears approx. one second later.

The program is memorized for the program bank.
Only one program bank can be made for a disc.

Playing the Disc Using the Program Bank

1 Press PROGRAM.

2 Press ▲ and put the disc in the disc compartment.

3 Press ▶.

Clearing the Program Bank

1 Put the disc whose program bank is to be cleared in the player.

2 Press ■ to clear the program.

3 Press FILE.
"PGM CLR" is displayed, and the program bank is cleared.

Where is the program bank memorized?
The program bank is memorized in the compact disc player's memory. Therefore, if a disc for which you made a program bank is used with another compact disc player, **play using the program bank is not possible.**

What is this indication?

IX FILED

This indication appears when the custom index (next page) has already been made for the disc. The program bank and the custom index cannot both be made for the same disc at the same time. To make the program bank, first clear the custom index.

To play a disc having a program bank in other modes
1 Set the player in the desired play mode.
2 Put the disc in the disc compartment.
3 Press ▶.
If you press ▲ to close the compartment after setting the player in the continuous play mode or the single play mode, program bank play mode will be entered.

To play the selections in another program without clearing the program bank
Program the selections as you want before putting the disc in the disc compartment, or after putting the disc in the player and pressing ■. The disc will be played in the newly programmed order. You can program even during the program bank play.

23

A custom index is a special index that can be assigned to any position you want on the disc. If you assign custom indexes to the positions on a disc, you can easily locate the positions during play, or enjoy repeat play between two adjacent custom indexes.

1,3

2
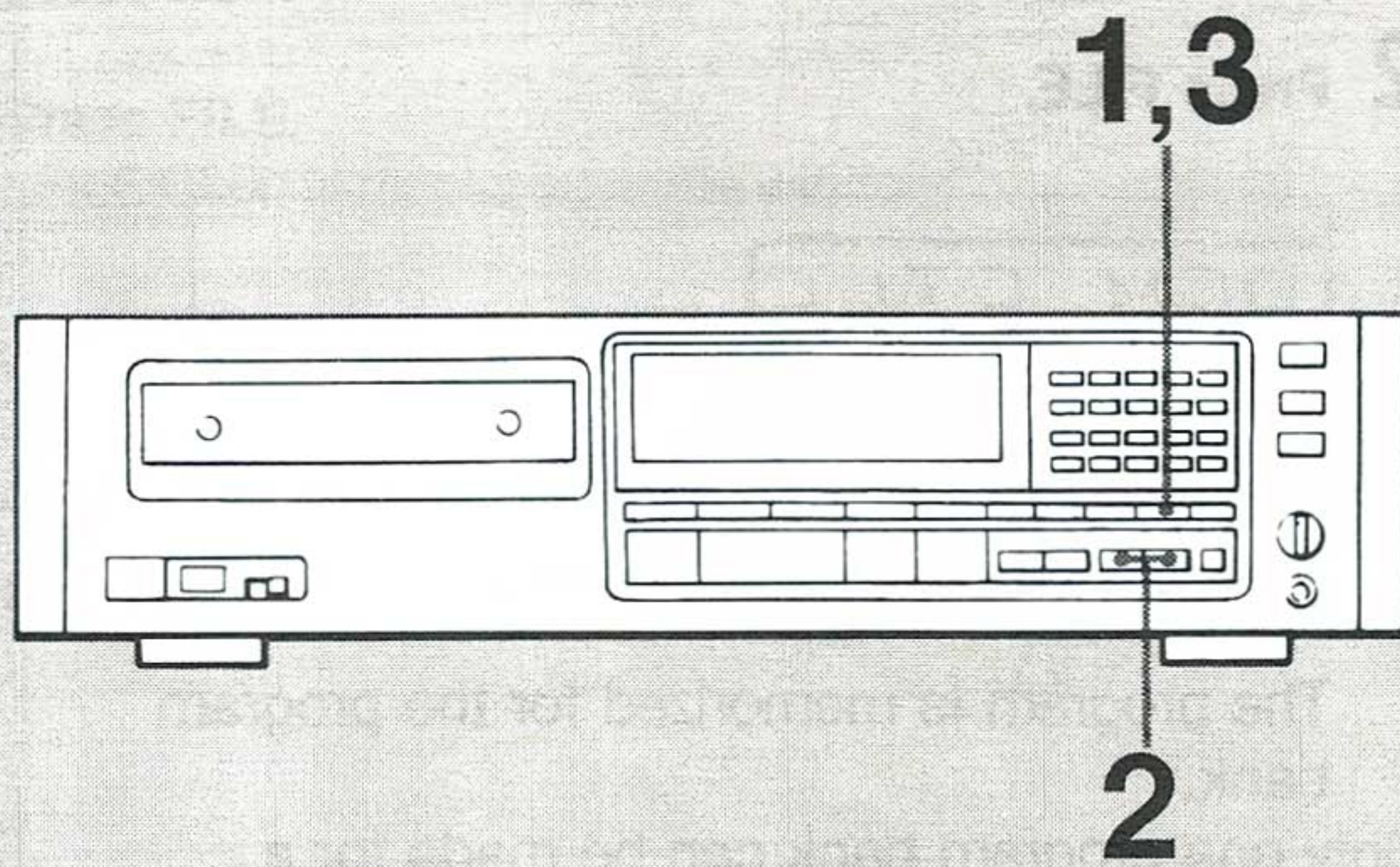
1 Press FILE where you want to assign a custom index during play.
The portion for 3 seconds from the point where you pressed FILE is played repeatedly (rehearsal play).

2 Adjust the repeat start point using ◄◄ or ►►.
Press ►► to shift the repeat start point forward and ◄◄ to shift it backward. Pressing ◄◄/►► 7 times shifts the point by approximately 1 second.

```
            ADJUST
DISC
            CUSTOM INDEX
            ▣
```

Blinks

3 Press FILE.
The custom index is assigned to the repeat start point.

```
DISC
                CUSTOM INDEX
                ▣
```

Lights steadily

How many custom indexes can be assigned?
Up to 6 custom indexes from A to F can be assigned to a disc.

What is this indication?

PG FILED This indication appears when a program bank has already been memorized for the disc. The program bank and the custom index cannot both be made for the same disc at the same time. To assign custom indexes, first clear the program bank.
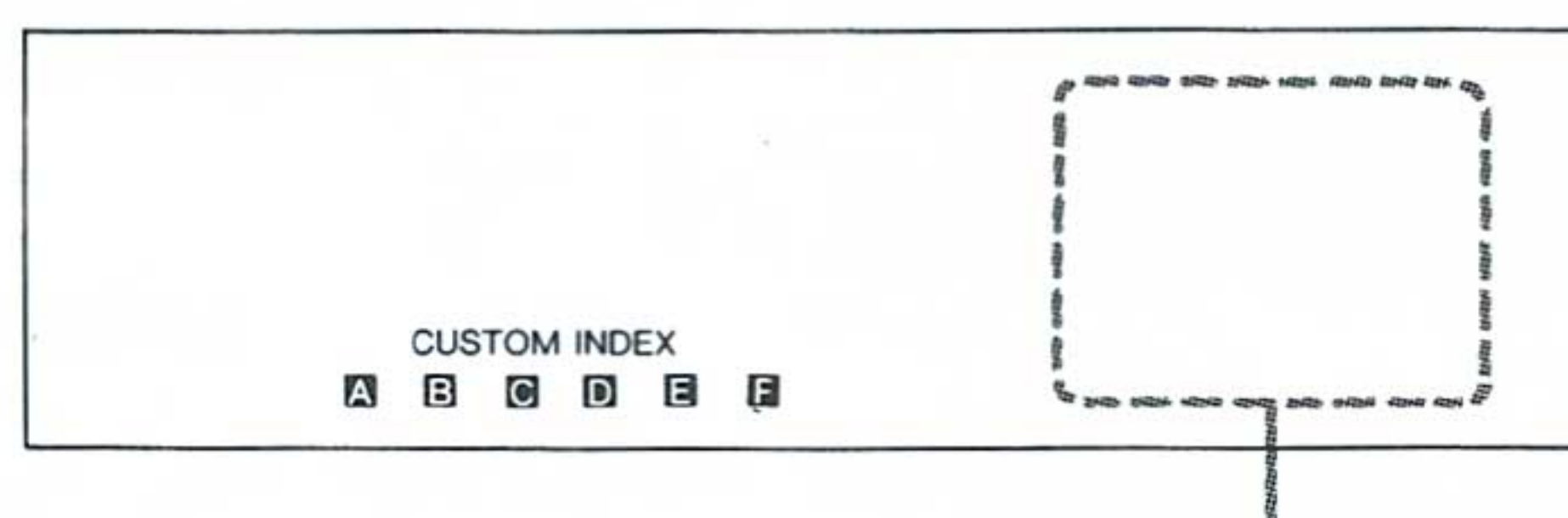
To release rehearsal play
Press CLEAR. Normal play is resumed.

Custom Index Function

Playing from the Desired Custom Index

1 Press INDEX MODE.

```
            ┌─────────────────────────────────┐
            │                    ┌ ─ ─ ─ ─ ┐   │
            │                    │         │   │
            │   CUSTOM INDEX     │         │   │
            │   Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ    └ ─ ─ ─ ─ ┘   │
            │                         │        │
            └─────────────────────────┼────────┘
                                      │
                     The music calendar disappears.
```

2 Press the desired numeric button 1 (A) through 6 (F).
Play begins from the designated custom index.
When a custom index position is passed, it disappears from the Ⓐ – Ⓕ display.

Clearing Custom Indexes

1 Press CHECK so that the letter of the custom index you want to clear blinks.

2 Press CLEAR.
Custom indexes succeeding the cleared index will be shifted ahead one position.

The custom indexes cannot be cleared during program play.

Repeating the Portion Between two Custom Indexes

During play using custom indexes, you can repeat the desired portion between any two adjacent custom indexes.

1 Press INDEX MODE twice so that "SINGLE" is displayed in the window.

2 Press one of the numeric buttons 1 (A) to 6 (F) for the starting point of the repeat play.

3 Press REPEAT.

The portion between the custom index designated as the starting point and the next custom index is played repeatedly.

To cancel repeat play between custom indexes
Press REPEAT.

If a new custom index is assigned to a position preceding another index
Previously existing indexes will be shifted as follows.
Example: If you assign a new index between B and C.

```
Ⓐ Ⓑ  Ⓒ              Ⓐ Ⓑ Ⓒ Ⓓ
      ↑
  A new index        The old index C becomes D.
```

If you press FILE in the pause mode
The rehearsal play is not made and the custom index is assigned immediately at the position where FILE is pressed.

To change the play mode during play using custom indexes
During play using custom indexes (in other words, while the music calendar is not displayed), the play mode switches from continuous play to single play and vice versa each time INDEX MODE is pressed.
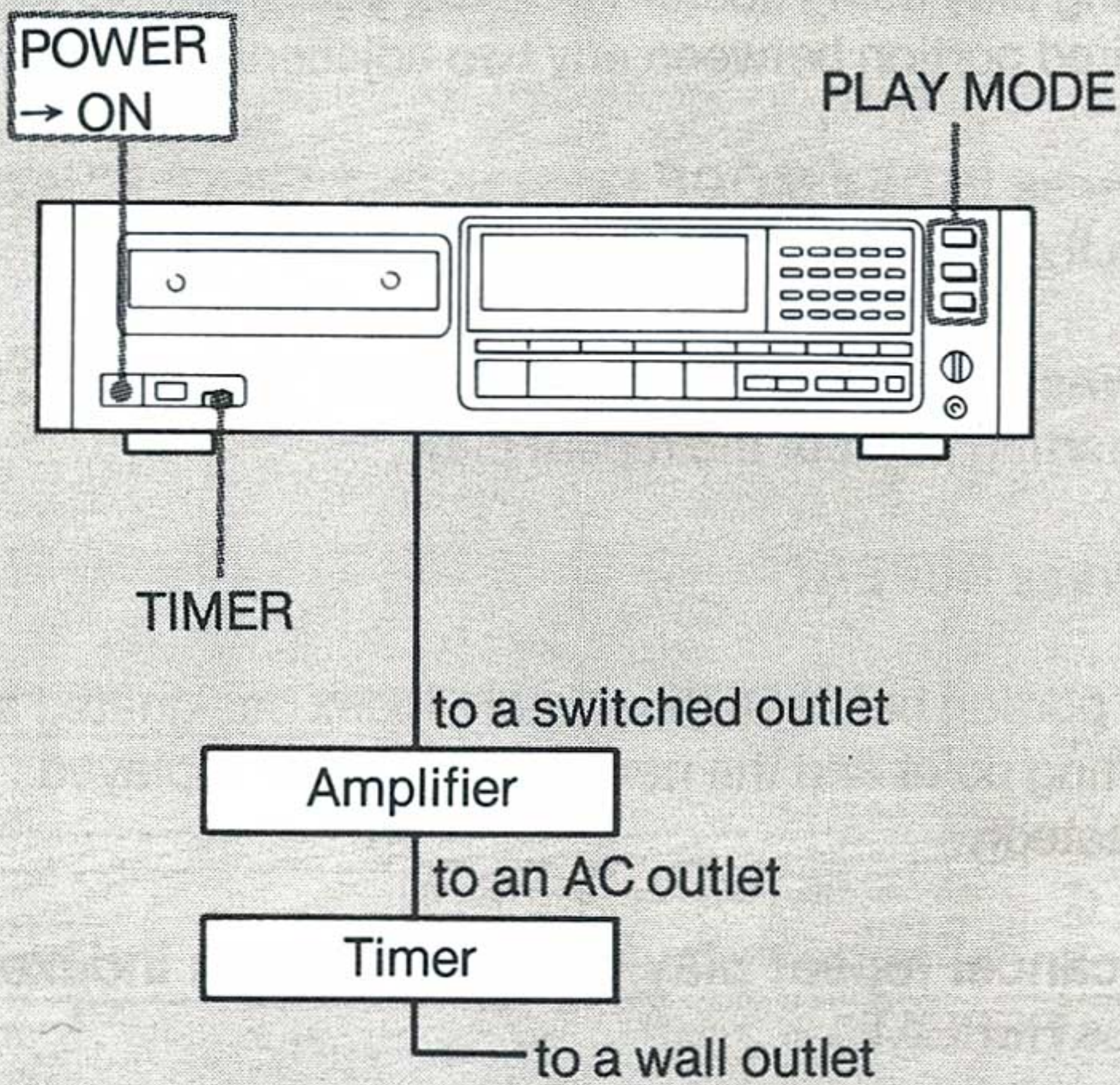
To release play using custom indexes
Press one of the PLAY MODE buttons (PROGRAM, SHUFFLE or CONTINUE/SINGLE). The music calendar appears.

Where are the custom indexes memorized?
The custom indexes are memorized in the compact disc player's memory. Therefore, if a disc for which custom indexes are assigned is played in other compact disc player, **play using the custom indexes cannot be done.**

25

Timer Activated Playing

By connecting a commercially available timer, disc play can be started at any desired time.

POWER
→ ON

PLAY MODE

TIMER

to a switched outlet

Amplifier

to an AC outlet

Timer

to a wall outlet

1 Put a disc in the player.

2 Choose the desired play mode using the PLAY MODE buttons.

3 Set the timer for the desired time.

4 Set TIMER to PLAY.

OFF   PLAY
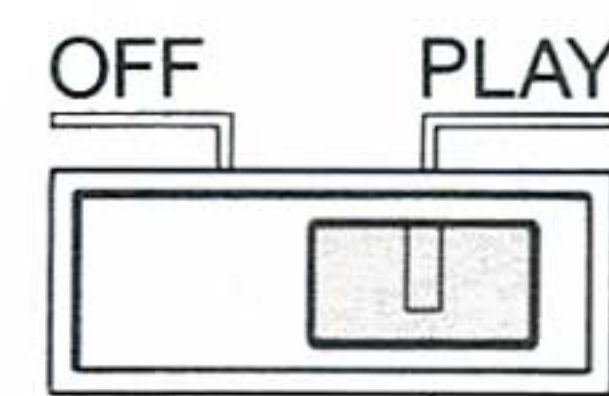
Play begins automatically at the time set.

When the timer activated play ends
Be sure to set TIMER to OFF.

To start program play using the timer
First make a program bank, and then prepare for timer activated playing.

If play using custom indexes is selected for the timer activated playing
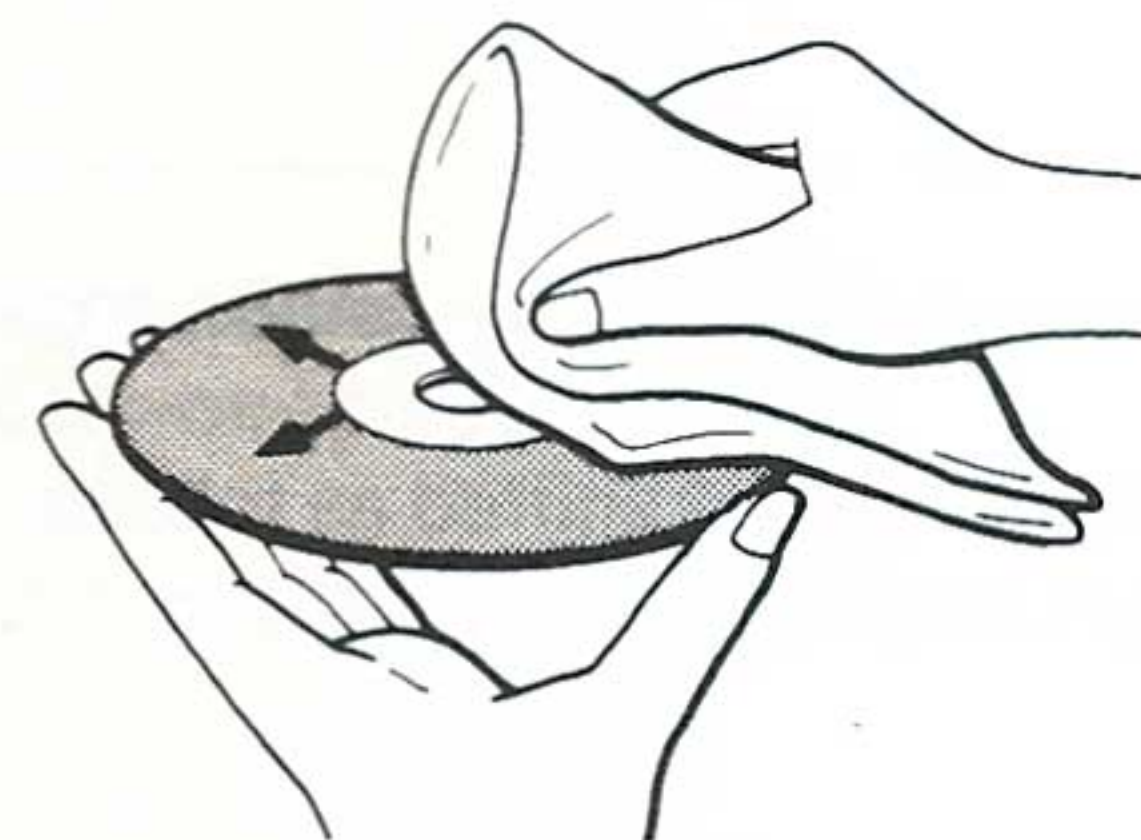Play begins from custom index A.

Maintenance

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

Cleaning discs
Before playing, clean the disc with the 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.

After playing, store the disc in its case.

26

Specifications

COMPACT DISC PLAYER

System	Compact disc digital audio system
Disc	Compact disc
Laser	Semiconductor laser (λ = 780 nm)
Laser output	Less than 44.6 μW *

    * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

Spindle speed	200 rpm to 500 rpm (CLV)
Scan velocity	1.2—1.4 m/sec.
Error correction	Sony Super Strategy Cross Interleave Reed Solomon Code
Number of channel	Two
D/A conversion	16-bit linear
Frequency response	2 — 20,000 Hz ±0.3 dB
Signal to noise ratio	More than 115 dB
Dynamic range	More than 100 dB
Harmonic distortion	Less than 0.0015% (1 kHz)
Channel separation	More than 110 dB (1kHz)
Wow and flutter	Below measurable limit
Output jacks	

LINE OUT (FIXED) (phono jacks)	Output level 2 V (at 50 kilohms) Load impedance over 10 kilohms Output impedance 200 ohms
LINE OUT (VARIABLE) (phono jacks)	Output level max. 2 V (at 50 kilohms) Load impedance over 50 kilohms Output impedance 200 ohms — 5.1 kilohms
DIGITAL OUT (COAXIAL) (phono jacks)	Output level 0.5 Vp-p (at 75 ohms) Load impedance 75 ohms
DIGITAL OUT (OPTICAL) (optical output connector)	Wave length 660 nm Output level — 18 dBm
HEADPHONES (stereo phone jack)	Output level max. 28 mW Load impedance 32 ohms

Disc

Track pitch	1.6 μm
Sampling frequency	44.1 kHz
Quantization	16 bit linear quantizing/channel
Modulation system	EFM
Transfer rate	2.03 Mbit/sec. (before modulation)

General

Power requirements	120V AC, 60 Hz
Power consumption	22 W
Dimensions	Approx. 470 × 125 × 375 mm (w/h/d) (18 5/8 × 5 × 14 5/8 inches)
Weight	Approx. 18 kg (39 lbs 11 oz), net

Supplied accessories

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

Remote commander

Remote control system	Infrared control
Power requirements	3V DC with two size AA (R6) batteries
Dimensions	Approx. 62 × 20 × 168.5 mm (w/h/d) (2 1/2 × 13/16 × 6 3/4 inches)
Weight	Approx. 130 g (4.6 oz) incl. batteries

Design and specifications subject to change without notice.

Optional accessory

Optical cable POC-15

Troubleshooting Guide

The following checks will assist in the correction of most problems which you may encounter with your unit. 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 when a disc is inserted and the ⏏ button is pressed.	The disc is not placed correctly.	Center the disc correctly in the disc compartment.
Play does not start.	Dirty disc	Clean the disc.
	The disc is inserted with the label surface downward.	Place the disc with the label surface up.
	The ❚❚ button is engaged.	Press the ❚❚ button again to release it.
	Moisture condensation	Wait for approx. one hour after turning on the unit then start play.
Sound is not heard.	Loose connection	Connect the cords firmly.
	The OUTPUT SELECTOR is set to the DIGITAL OUT side while using the LINE OUT jacks.	Set the OUTPUT SELECTOR to LINE OUT side.
	The LINE OUT/HEADPHONE LEVEL control is set to the minimum (0) while using the VARIABLE LINE OUT jacks.	Turn the LINE OUT/HEADPHONE LEVEL control clockwise.
Display window does not illuminate even when the power is turned on.	The AC power cord is disconnected.	Connect the AC power cord firmly.
Play begins when the POWER switch is turned on.	The TIMER switch is set to PLAY.	Set the TIMER switch to OFF.
Level of the recorded sound is different from that set on the tape recorder.	When the VARIABLE LINE OUT jacks are used, the LINE OUT/HEADPHONE LEVEL control is turned while recording.	Do not turn the LINE OUT/ HEADPHONE LEVEL control while recording.