

SONY.

3-755-831-21(1)

Compact Disc Player

Operating Instructions

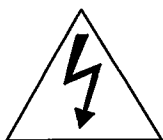
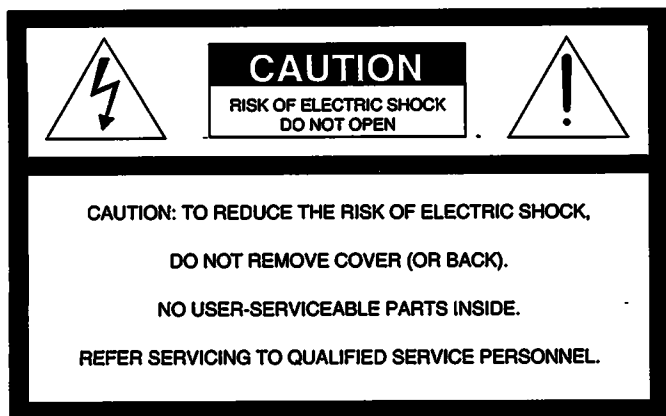


CDP-X707ES

Warning

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.

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

You are cautioned that any change or modifications not expressly approved in this manual could void your authority to operate this equipment.

Owner's Record

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

Model No. CDP-X707ES Serial No. _____

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Conventions



This indicates a function operated only from the remote commander.



This indicates a function operated only on the main unit.

Safety Precautions

Before operating the unit, please read the following precautions carefully.

Check the operating voltage of this unit before operation. Operate the unit only on 120 V AC, 60 Hz.

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 do 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 AC power source (mains) as long as it is connected to 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.

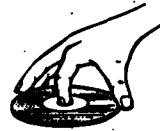
The AC power cord must be changed only at a qualified service shop.

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

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

Notes on handling discs

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc.



- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there may be a considerable rise in the temperature.
- After playing, store the disc in its case.

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.

Maintenance

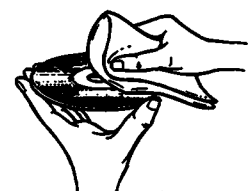
Cleaning Your Unit

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 benzene.

Cleaning Discs

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

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



Unpacking

Choosing a Good Location

- 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 might 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.

On moisture condensation

If the unit 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 unit will not operate. In this case, remove the disc and leave the unit turned on for about an hour until the moisture evaporates.

Checking the Supplied Accessories

Make sure that all supplied accessories are included with your unit. This manual and the following items must be included with your CDP-X707ES. If anything is missing, contact your Sony dealer.

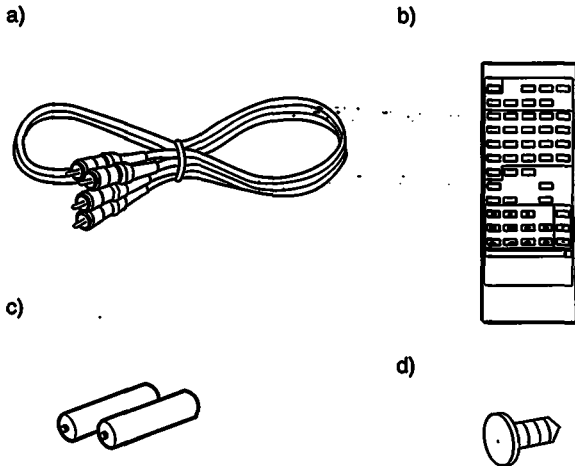
- a) Audio connecting cord (1)
- b) Remote commander (1)
- c) Sony batteries SUM-3 (NS) (2)
- d) Screws (M4) (8)

Do not throw away the carton and the packing material. They will come in handy when transporting the unit or shipping it for servicing.

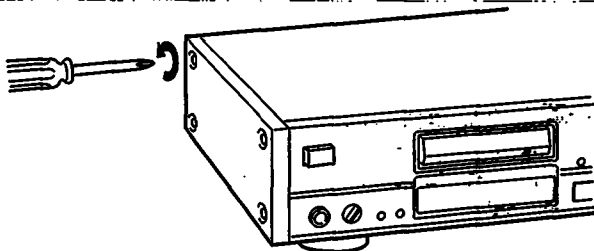
Detaching the Side Panels

After removing the screws, secure the cabinet with the supplied lock screws (M4 x 8). Do not use the longer screws. For safety purposes, be sure to first disconnect the AC power cord from the AC outlet.

A



B



Unpacking

Note on the Packing Material

Before playing the unit for the first time, be sure to remove the packing material (a) from the disc tray.

Do not throw away the packing material since you will need it when transporting the unit in the future.

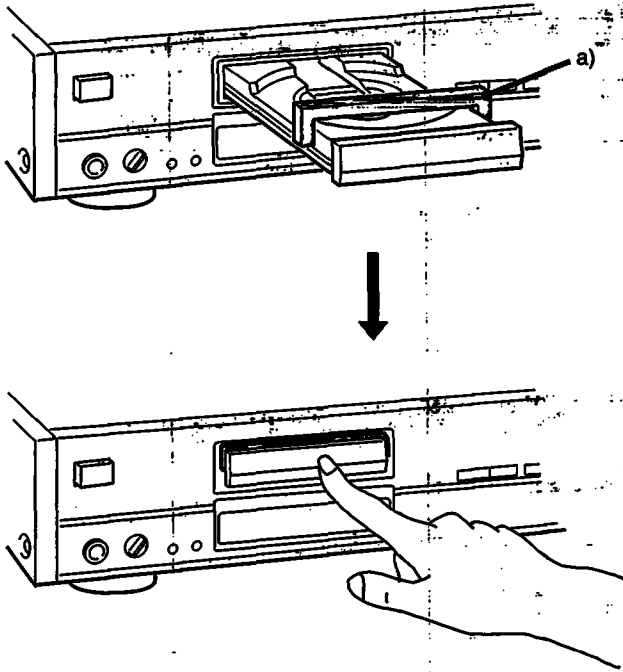
The material protects the optical block inside the unit from mechanical shock and vibration when transporting.

To attach the material before transporting

- 1 Turn the power on and wait for more than 5 seconds.
- 2 Press \blacktriangle OPEN/CLOSE to open the disc tray and turn the power off, leaving the tray open. (If a disc is on the tray, be sure to remove it.)
- 3 Attach the material to the disc tray, and close the tray slowly until it stops. The optical block is now locked.

To remove the material after transporting

- 1 Turn the power on.
- 2 Press \blacktriangle OPEN/CLOSE to open the tray and remove the material. The optical block is now unlocked.



Unpacking

Inserting Batteries Into the Remote Commander

You can control the unit with the supplied remote commander.

Insert two side AA (R6) batteries with the polarity correctly aligned.

1 Slide the cover to remove it.

2 Insert two side AA (R6) batteries correctly so that the ⊕ and ⊖ polarities match the polarity diagrams inside the battery compartment.

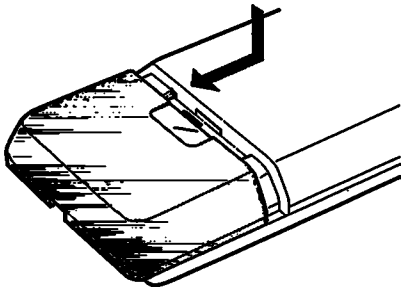
On battery life

- About half a year of normal operation can be expected when using 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.

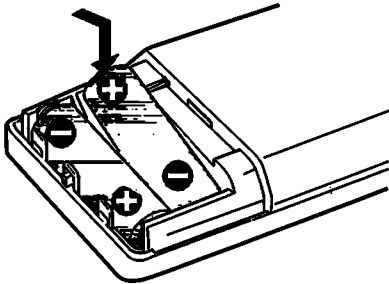
Notes on the remote commander and remote control operation

- 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 may 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.

1



2



Hooking Up the System

You can connect the unit with analog or digital signals depending on your amplifier or D/A converter. This unit has 2 types of analog output jacks and 2 types of digital output jacks.

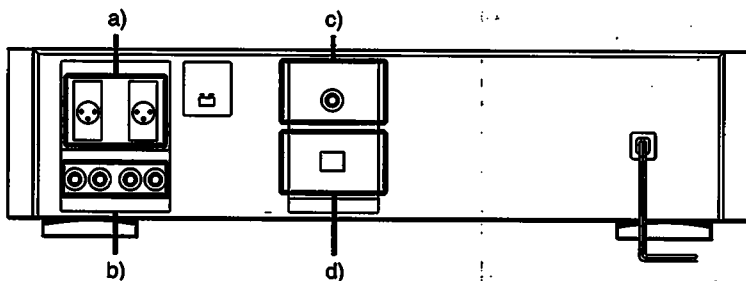
Notes on Connection

- 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 connections may cause hum and noise.
- Leave a little slack in the connecting cord to allow for inadvertent shock or vibration.
- The supplied audio cord plugs and jacks are color coded. Red plugs and jacks are for the right channel (R) and white ones are for the left channel (L).

Before Making Connections

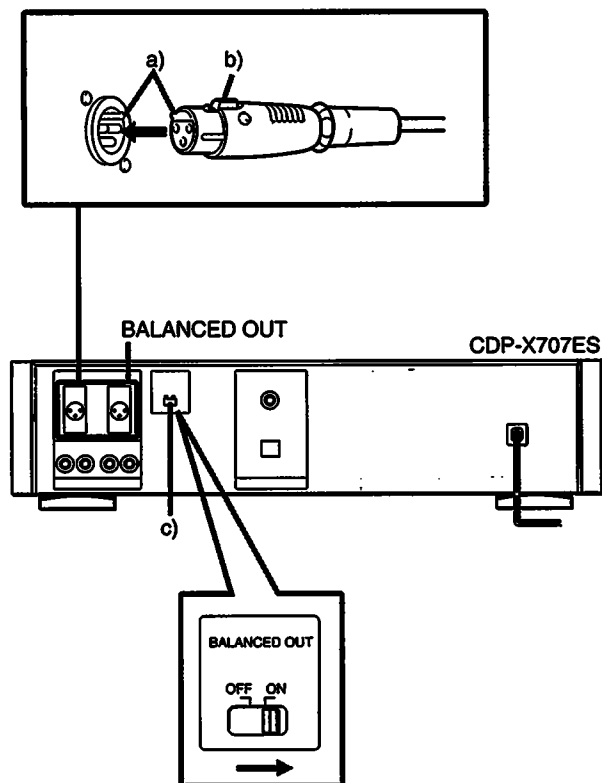
You can choose a connecting method according to your amplifier or D/A converter.

- When you make analog connections, you can choose the balanced output (a) or the line output (b).
- When you make digital connections, you can choose the coaxial output (c) or the optical output (d).



Hooking Up the System

A



Connecting to an Equipment with Analog Input

When using the BALANCED OUT jacks **A**

Since it is hardly affected by external noise, the balanced output connector is utilized by professionals in studios and the broadcasting stations. Connect the unit to an amplifier equipped with the balanced input jacks.

For the connection, use the cannon connectors XLR-3-32 or equivalent. Be sure to fit these positions (a)) and insert the connector firmly.

To detach the connector

Pull the connector out while pressing the lock button (b)).

Pin assignment

- 1: GND
- 2: COLD
- 3: HOT

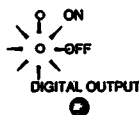


After making connections

Turn the power on.

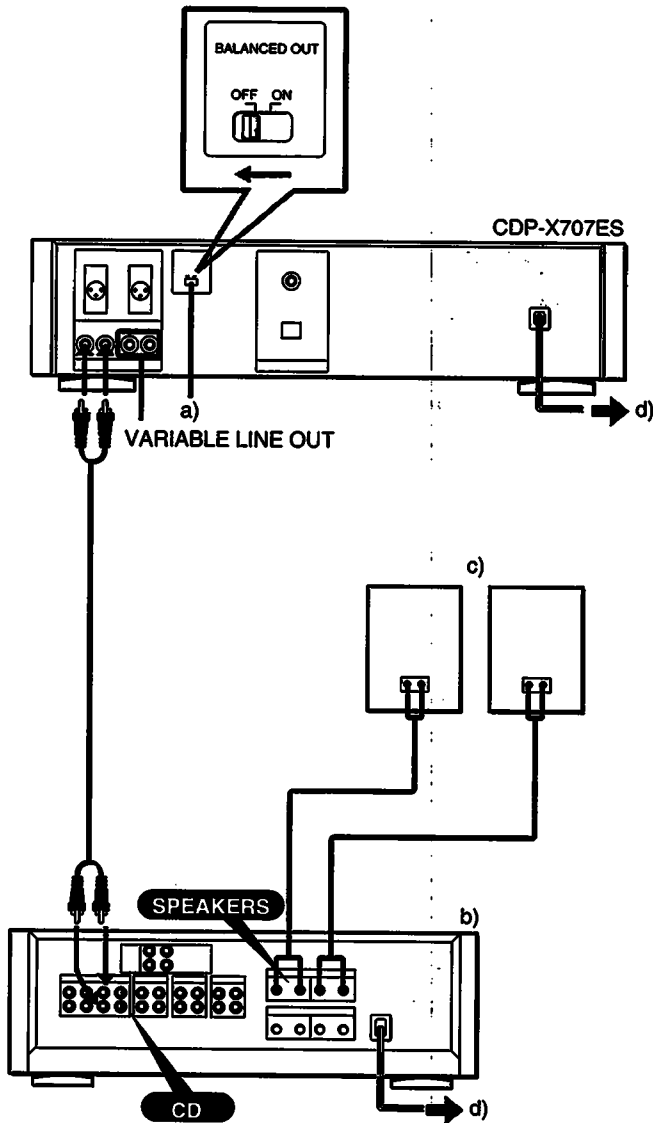
When you use the BALANCED OUT jacks, set the BALANCED OUT switch (c)) to ON and press DIGITAL OUTPUT so that the OFF indicator lights up. **B**

B



Hooking Up the System

A



When using the LINE OUT jacks **A**

You can use the line output jacks for normal analog connections. For the connection, use the supplied audio connecting cord. Connections should normally be made through the FIXED LINE OUT jacks.

- a) BALANCED OUT switch
- b) Amplifier
- c) Speakers
- d) to an AC outlet

Notes on the LINE OUT jacks

FIXED LINE OUT: The output level is fixed.

Normally use these jacks.

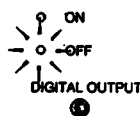
VARIABLE LINE OUT: The output level is adjusted with the LINE OUT/PHONE LEVEL control (or LINE OUT LEVEL +/- on the remote commander). If the LINE OUT/PHONE LEVEL control (or LINE OUT LEVEL +/- on the remote commander) is adjusted while recording, the recording level will change even though it is preset on the tape deck.

After making connections

Turn the power on.

When you use the LINE OUT jacks, set the BALANCED OUT switch to OFF and press DIGITAL OUTPUT so that the OFF indicator lights up. **B**

B



Hooking Up the System

Connecting to an Equipment with Digital Input

Since the music signal output through the digital output jacks retains digital form, you can avoid deterioration of the signal during transmission. Connect the unit to an amplifier equipped with digital input jacks or a D/A converter.

When using the DIGITAL OUT (COAXIAL) jack **A**

Connect this unit to the DIGITAL IN jack (of a D/A converter) with the digital connecting cord VMC-1ES (not supplied).

- a) D/A converter
- b) Amplifier
- c) to an AC outlet

When using the DIGITAL OUT (OPTICAL) jack **B**

Connect this unit to the DIGITAL IN jack (of an amplifier or a D/A converter) with the audio optical connecting cord POC-15 (not supplied).

- a) Amplifier
- b) to an AC outlet

To connect an audio optical connecting cord

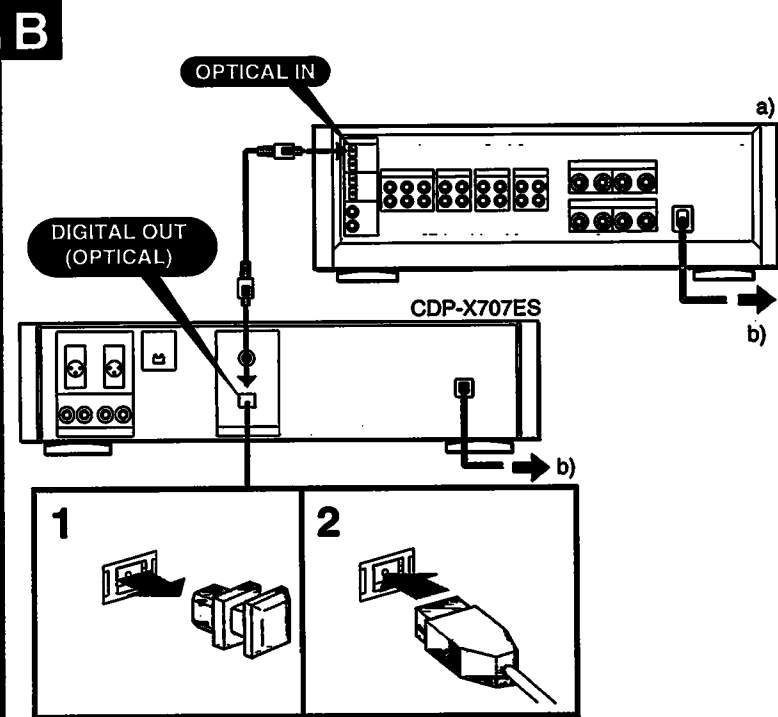
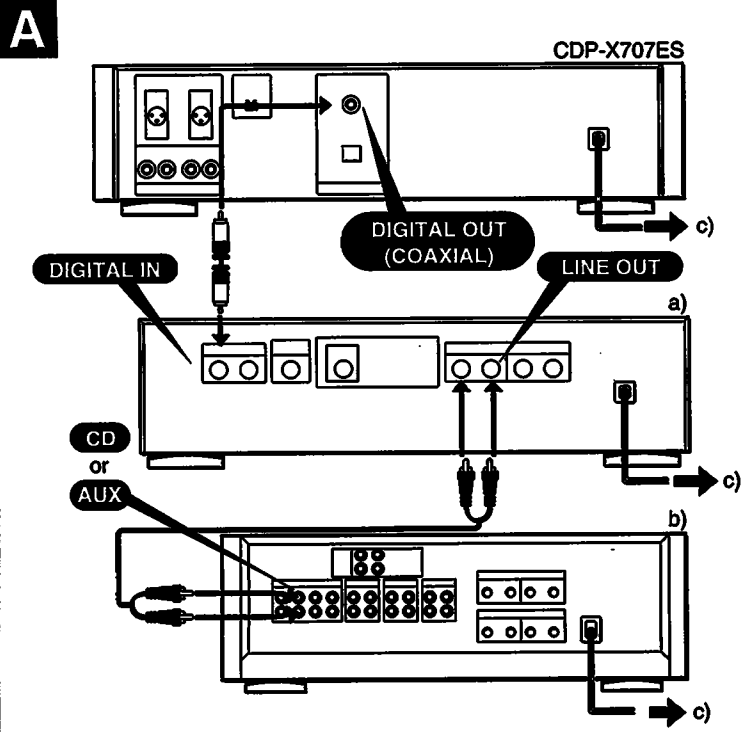
- 1 Remove the cap.
- 2 Plug in firmly.

After making connections **C**

Turn the power on. Press DIGITAL OUTPUT on the front panel so that the ON indicator lights up. Now the signals are output through the DIGITAL OUT jacks.

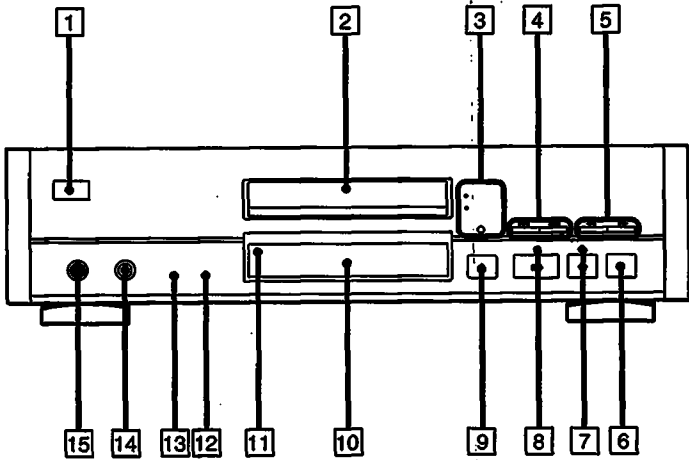
Notes when you use the DIGITAL OUT jacks

- You cannot use the fade-in/fade-out function.
- You cannot adjust the output level with the LINE OUT/PHONE LEVEL control (or LINE OUT LEVEL +/- on the remote commander).



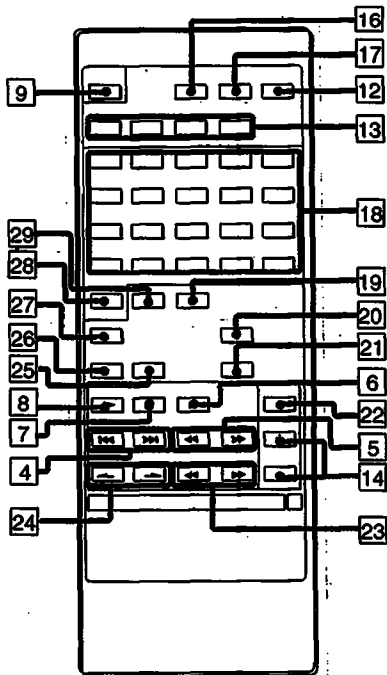
Identifying the Parts

Refer to the pages indicated in parentheses for details.



Front Panel/ Remote Commander

- 1 POWER switch (12)
- 2 Disc tray (12)
- 3 DIGITAL OUTPUT button and indicators (10)
- 4 ◀◀/▶▶ (AMS*) buttons (15)
- 5 ◀◀/▶▶ (manual search) buttons (16)
- 6 ■ (stop) button (12)
- 7 || (pause) button and indicator (12)
- 8 ▶ (play) button and indicator (12)
- 9 ▲ OPEN/CLOSE button (12)
- 10 Display
- 11 Remote sensor
- 12 DISPLAY MODE button (14)
- 13 PLAY MODE button
 - On the remote commander:
 - CONTINUE button (12)
 - SHUFFLE button (17)
 - PROGRAM button (20)
 - C.INDEX button (34)
- 14 LINE OUT/PHONE LEVEL control (13)
(LINE OUT LEVEL +/- buttons on the remote commander)
- 15 PHONES jack (13)
- 16 PEAK SEARCH button (27)
- 17 FILE RECALL button (31, 33)
- 18 Numeric buttons (15)
- 19 CLEAR button (19)
- 20 FILE (custom file) button (29, 30, 32, 34)
- 21 ERASE button (31, 33, 36)
- 22 FADER button (24)
- 23 ◀◀/▶▶ SLOW buttons (16)
- 24 —/— INDEX buttons (16)
- 25 A-B button (23)
- 26 REPEAT button (22)
- 27 TIME button (14)
- 28 >20 button (15)
- 29 CHECK button (21)



* AMS is the abbreviation of Automatic Music Sensor.

Playing a Disc

In continuous play mode, you can play from the first selection or a desired selection on your disc.

Before playing a disc, turn on the amplifier and set the input selector to the CD player position.

Playing the Entire Disc – Continuous Play

1 Press POWER.
The display window lights up. If "CONTINUE" does not appear, press CONTINUE on the remote commander. When using PLAY MODE on the main unit, press it until "CONTINUE" appears.

2 Press ▲ OPEN/CLOSE.
The disc tray comes out.

3 Place the disc with the printed side up on the tray.

4 Press ►.
The disc tray closes to start the first selection.

The display shows:

- Selection number
- Index number (The custom index number is displayed instead of the normal index number in custom index play mode.)
- Elapsed playing time
- Music calendar

To stop play

To stop for a moment during play, press II.

To resume play, press ► or II again.

To stop play, press ■.

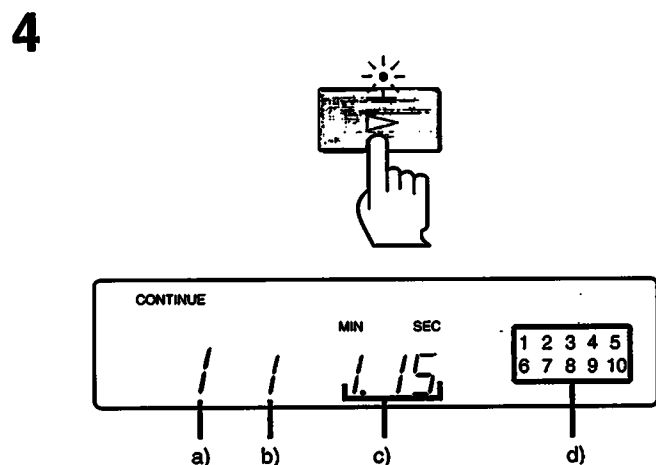
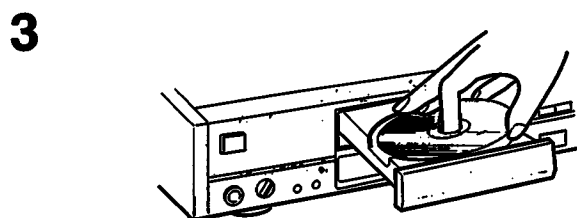
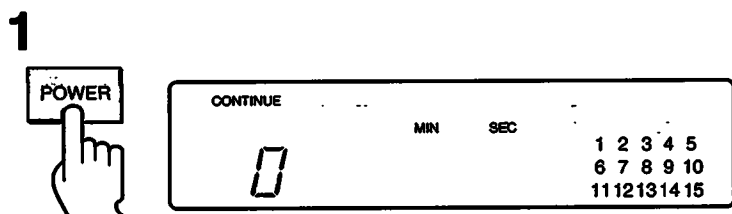
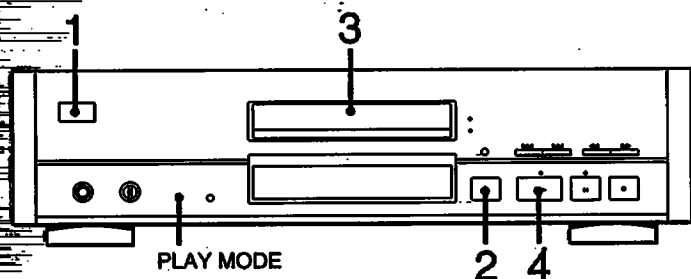
To stop play and open the tray, press ▲ OPEN/CLOSE.

To play an 8cm (3-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 standard size CD (12cm/5-inch) upon an 8 cm CD.

Notes

- When you use the DIGITAL OUT jacks for connections, press DIGITAL OUTPUT so that the ON indicator lights up. (See page 10.)
- When you use the BALANCED OUT jacks for connection, set the BALANCED OUT switch to ON. (See page 8.)



Playing a Disc

If you turn on the power with a disc in the tray Play begins automatically according to the play mode when you turn off the unit. You can also play a program by making a program bank (see page 30). By using a commercially available timer, disc play can be started at any desired time.

Adjusting the Volume

When you use the VARIABLE LINE OUT jacks for connections

You can adjust the volume with the LINE OUT/PHONE LEVEL control (or LINE OUT LEVEL +/- on the remote commander).

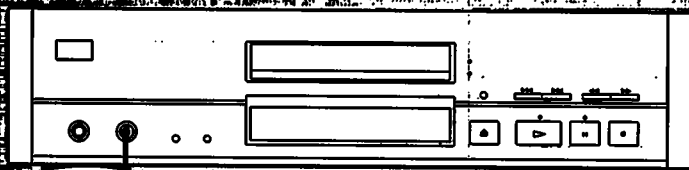
- To increase the volume, turn the LINE OUT/PHONE LEVEL control clockwise (or press LINE OUT LEVEL + on the remote commander).
- To decrease it, turn the LINE OUT/PHONE LEVEL control counterclockwise (or press LINE OUT LEVEL - on the remote commander).

(You cannot adjust the volume when you use the FIXED LINE OUT, BALANCED OUT, or DIGITAL OUT jacks for connections.)

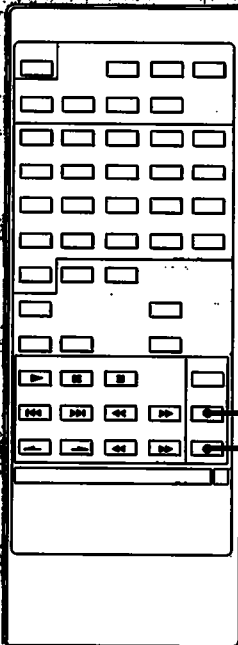
When listening with headphones

Connect a pair of headphones to the PHONES jack.

You can adjust the volume with the LINE OUT/PHONE LEVEL control (or LINE OUT LEVEL +/- on the remote commander).



LINE OUT/PHONE LEVEL



LINE OUT LEVEL +/-

Playing a Disc

Information Display

To check the total number of selections and total playing time **A**
 When you press \triangle OPEN/CLOSE to close the tray, or press TIME in stop mode, the display shows you the following information:
 a) Total number of selections
 b) Total playing time
 c) Music calendar

If a disc contains more than 15 selections
 "▶" appears next to 15 on the music calendar.

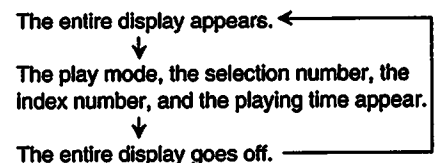
To check the remaining playing time **B**

Each time you press TIME during play, the display changes to give you the following information:

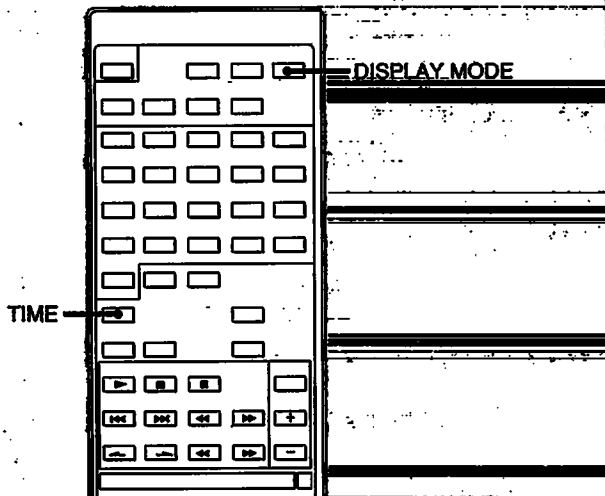
- a) Elapsed playing time
- b) Remaining time in a selection
 If the current selection number is over 24, "--. --" appears.
- c) Remaining number of selections and total remaining time of the disc
 However, "--. --" appears instead of the actual time in the following cases.
 - If a disc with more than 24 selections is being played in shuffle play or delete play mode.
 - If any one selection, the number of which is greater than 24, has been programmed.

Note
 The time display mode selected with TIME will not change until the power is turned off.

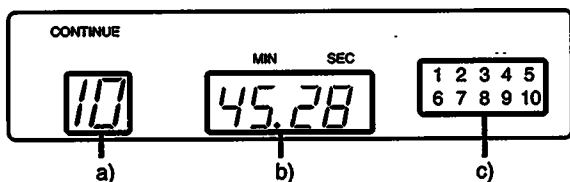
To change the information display
 Each time you press DISPLAY MODE during play, the display changes to give you the following information.



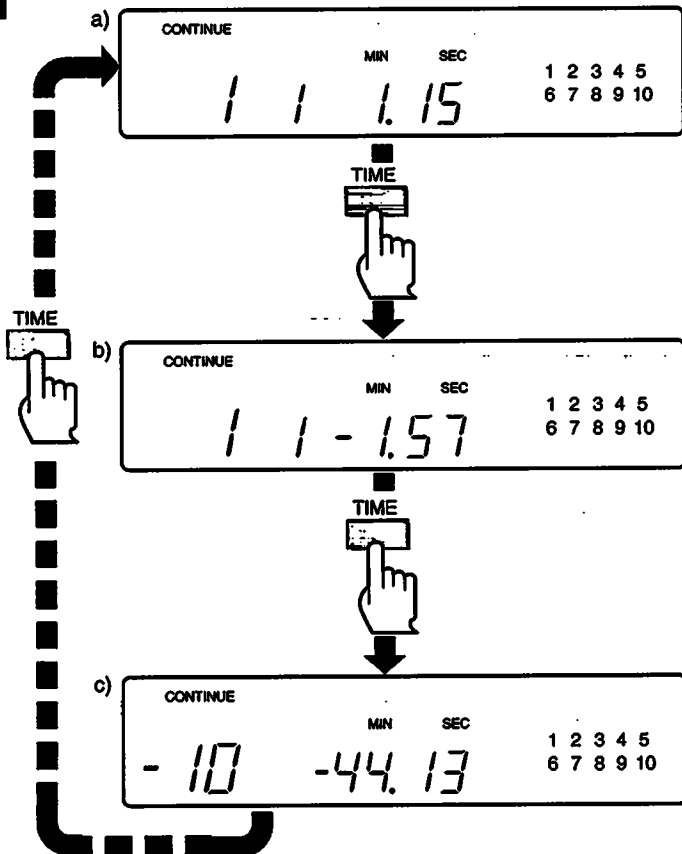
Even if all the information is not displayed, the current status appears for about 1 second when you proceed with any operations.



A



B



Playing a Disc

To adjust the brightness of the display – DIMMER function

Press DISPLAY MODE while holding down PLAY MODE.

You can adjust the brightness of the display in three levels. The level you select is kept in memory even if you turn off the unit so that you do not have to adjust it again. After adjusting the brightness, be sure to select the desired play mode with PLAY MODE.

Locating a Particular Selection

You can locate the beginning of a desired selection in two ways.

a) To locate sequentially

To locate the beginning of the current or preceding selection

- Press **I◀◀** as many times as required.
- Keep **I◀◀** pressed to skip selections.

To locate the beginning of a succeeding selection

- Press **▶▶I** as many times as required.
- Keep **▶▶I** pressed to skip selections.

b) 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.

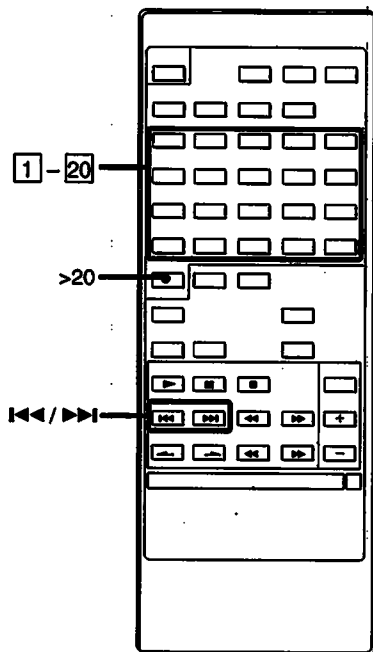
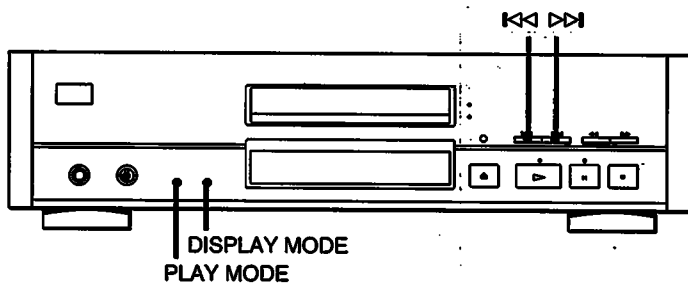
10 functions as the figure 0.

e.g. To play from selection No.22

Press **>20** and **2 2**

e.g. To play from selection No.30

Press **>20** and **3 10**




Playing a Disc


Locating a Particular Point in a Selection

You can also locate a particular point on the disc during play in four ways.

- a) **To search quickly while monitoring the sound**
Forward locating at high speed
Keep ►► pressed during play and release it at the desired point.
Reverse locating at high speed
Keep ◄◄ pressed during play and release it at the desired point.

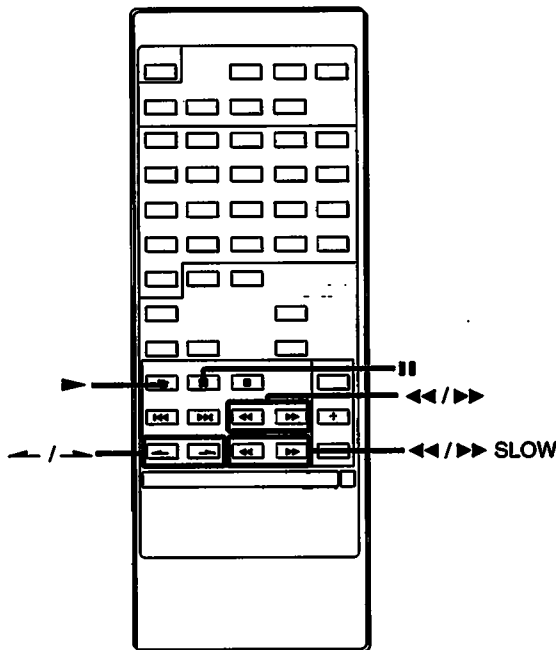
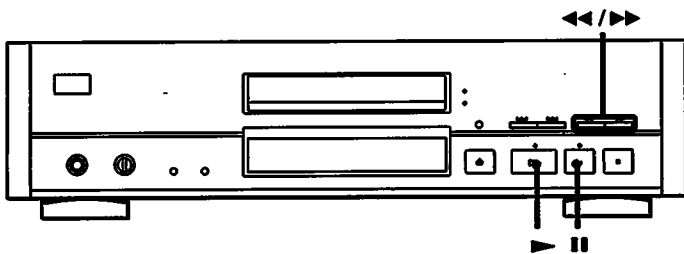
- b) **To search using an index*** 
You can use this function only with discs on which index numbers are recorded. Press ◄ or ► to locate the desired index number. The selected index number appears.

- c) **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 ► or || again at the desired point.

- d) **To search slowly while monitoring the sound** 
Press ◄◄/►► SLOW during play and release it at the desired point.

When "rr" is displayed
If you continuously press ►► over the last selection, "rr" appears in the display. Press ◄◄ or |◄◄ to return to normal indication.

* **What is an index?**
It is a number assigned to a section in a selection (for example, a movement in a symphony) for you to locate the desired section easily.



Playing in a Random Order

You can play the selections in a random order.
The unit will play all the selections or just the selections you prefer.

Shuffle Play

The unit plays all the selections in a random order.

1 Press SHUFFLE.
"SHUFFLE" appears in the display.
When using PLAY MODE on the main unit, press it repeatedly until "SHUFFLE" appears.

2 Press ►.
Shuffle play starts.

To cancel shuffle play
Press CONTINUE and the unit enters continuous play mode.

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.

To start shuffle play immediately from the current selection
Press SHUFFLE during play and shuffle play begins from the current selection.

What is this indication?



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

Playing in a Random Order

Delete Shuffle Play



When you delete the unwanted selections, the unit plays just the selections you prefer in shuffle play mode.

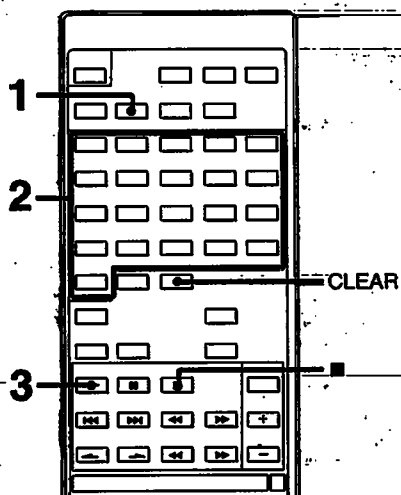
- 1 Press SHUFFLE.**
"SHUFFLE" appears in the display.
- 2 Press the numeric buttons of your unwanted selections.**
Pressed numbers go off from the display after "OFF" is indicated for a while.
- 3 Press ►.**
Delete shuffle play starts.

To delete a selection during play
Press the numeric button for that selection. "OFF" appears in the display. You can also delete a selection being played by pressing CLEAR.

To restore a selection which you have deleted
Press the numeric button for that selection. "on" appears in the display.

To restore all the selections you have deleted
Press ■ in stop mode.

If you use the delete bank function
You can have the unit memorize the deleted selections for each disc. (See page 32.)



1

SHUFFLE



2



3



Playing Only Desired Selections



You can delete unwanted selections and play the remaining selections in continuous play mode.

Delete Play

- 1 Press **SHUFFLE**.
"SHUFFLE" appears in the display.
- 2 Press numeric buttons to delete unwanted selections.
Pressed numbers go off from the display after "OFF" is indicated for a while.

To restore a deleted selection while "SHUFFLE" is illuminated, press the numeric button for that selection. "on" appears in the display.

To choose a selection number over 20, see page 15.

- 3 Press **CONTINUE**.
"SHUFFLE" goes off from the display and "CONTINUE" appears.

Note

You cannot use **PLAY MODE** on the main unit in this step.

- 4 Press **▶**.
Only the remaining selections are played in the numerical order of the disc.

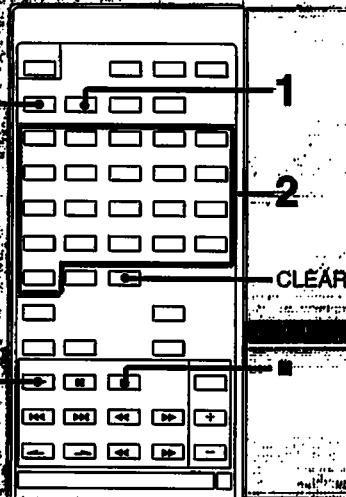
To delete a selection during play
Press **CLEAR** while an unwanted selection is being played. The next selection is played.

To restore all the selections you have deleted
Press **■** in stop mode.

When delete play ends
Selections, except deleted ones, will be restored.

If you press SHUFFLE during delete play
Selections will be played in delete shuffle play mode.

If you use the delete bank function
You can have the unit memorize the deleted selections for each disc. (See page 32.)

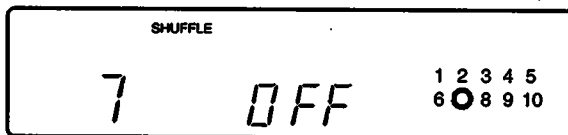


1

SHUFFLE

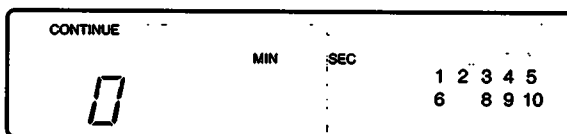


2



3

CONTINUE



4



Playing in a Desired Order

You can make a program by designating up to 24 selections in a desired order. The unit will play the disc according to your program. Concerning the method for recording a program, see page 25.

Program Play

1 Press PROGRAM.
"PROGRAM" appears in the display. When using PLAY MODE on the main unit, press it repeatedly until "PROGRAM" appears.

2 Press the numeric buttons of the desired selections in the desired order.

To select a selection number over 20, see page 15.

- The display shows:
- a) Last programmed selection
 - b) The order to be played
 - c) The total playing time
 - d) Programmed selection numbers

If you make a mistake in your selections
Each time you press CLEAR, the last selection chosen is deleted.

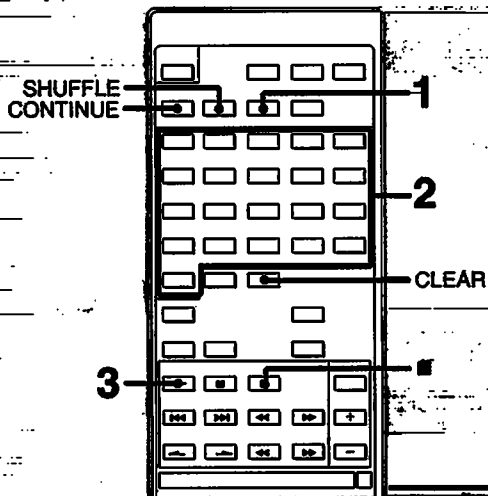
3 Press ►.
Program play starts.

To stop play
Press ■.
When you press ►, you can play the same program repeatedly.

To cancel program play
Press CONTINUE or SHUFFLE and the unit enters continuous or shuffle play mode respectively. The program will be erased.

If you press PROGRAM during play
You can make a program. The selection being played will be the first one in the program.

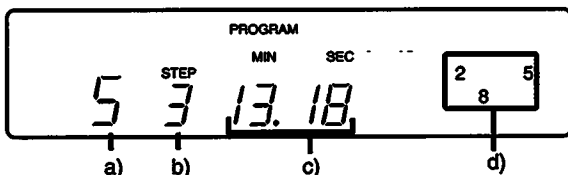
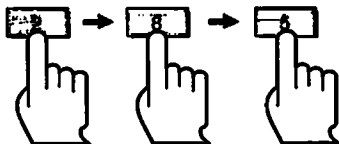
If "---" is displayed instead of the total playing time
- You have programmed a selection number over 24.
- The total time has exceeded 100 minutes.



1



2



3



Playing in a Desired Order

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. After the last selection, "End" will be indicated and the display will soon return to the initial status.

Changing 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 erase the entire program, press ■ once in stop mode; twice during play. The program is also erased when you turn off the unit or you press ▲ OPEN/CLOSE.

To add a selection to the end of the program, simply 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 unwanted selection is displayed. Then press CLEAR.

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

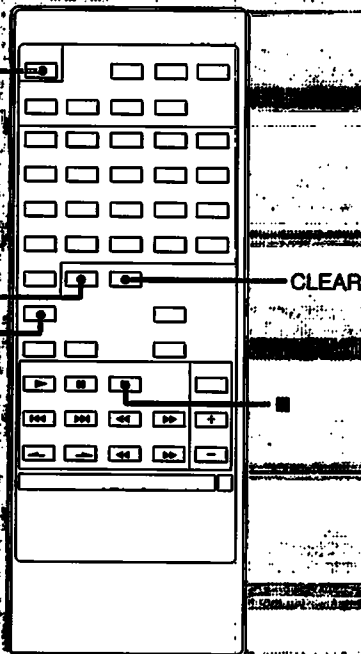
To check the remaining time Press TIME once to see the remaining time of the selection being played; twice to see the total remaining time; once more to return to the initial display.

About the blank spaces between selections

The blank spaces between selections are automatically set to 1 second. However, if you program continuous selections on a disc (for example, when you program selections 4 and 5 continuously), the blank space remains as it is on the disc.

If you use the program bank function

You can have the unit memorize the programmed selections for each disc. (See page 30.)

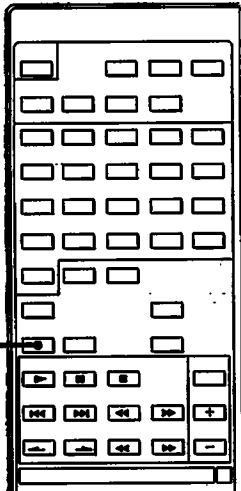


Playing Repeatedly



You can repeat all the selections in the current play mode or any given selection in continuous or delete play mode. You can also repeat a particular portion in a selection. This is useful for learning foreign languages or lyric lines.

REPEAT



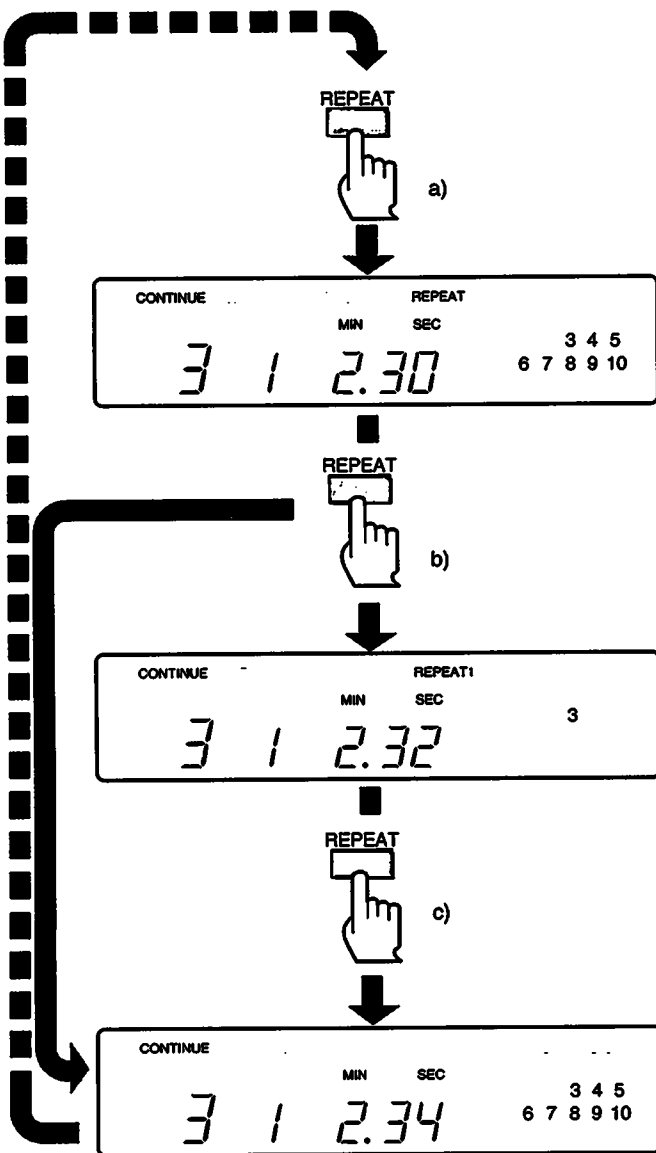
Repeating Selections – Repeat Play

To repeat all selections a)
Press REPEAT once. "REPEAT" appears in the display.
The unit will repeat in the current play mode.

Play mode	Selections to be repeated
Continuous play	All the selections
Program play	All the programmed selections in the same order
Shuffle play	All the selections that the unit reshuffles
Delete shuffle play	All the remaining selections that the unit reshuffles
Delete play	All the remaining selections
Custom index play	Between the specified custom indexes

To repeat the current playing selection b)
(only during continuous or delete play)
Press REPEAT during repeat play. "REPEAT1" appears in the display.

To cancel repeat play c)
Press REPEAT again.
In continuous or delete play mode, "REPEAT1" goes off.
In any other play mode, "REPEAT" goes off.



Playing Repeatedly



Repeating a Particular Portion – A-B Repeat

- 1 Press ►.
- 2 Press A-B at the starting point (point A) of the portion to be repeated. "REPEAT A-" flashes in the display and the unit memorizes the point A.
- 3 Press A-B again when you reach the ending point (point B) by either continuing play or pressing ►►. "REPEAT A-B" appears. The unit memorizes the point B and immediately returns to the point A to repeat the specified portion.

To set a new starting point

Press A-B during A-B repeat play. The ending point B becomes the new starting point A and the play continues. To designate the new ending point B, press A-B again at the desired point. The unit memorizes the new A-B repeat portion. You can advance the portion by repeating the above operation.

To cancel the A-B repeat

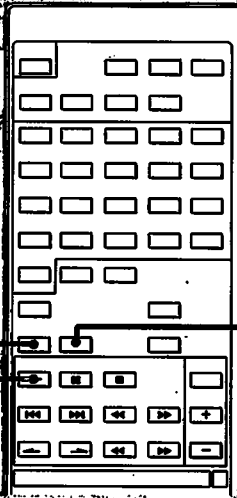
Press REPEAT.

To return to the same point from anywhere in the selection

Press A-B to designate the desired point A. (You do not have to designate the point B). You can return to the point A from anywhere in the selection simply by pressing ►►.

Note

You cannot designate the points A and B over two different selections.

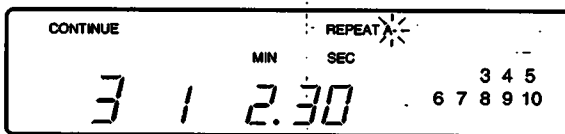


1



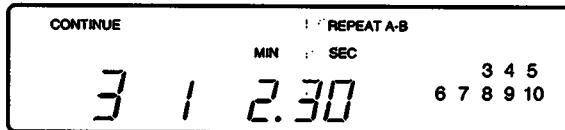
2

A ↔ B

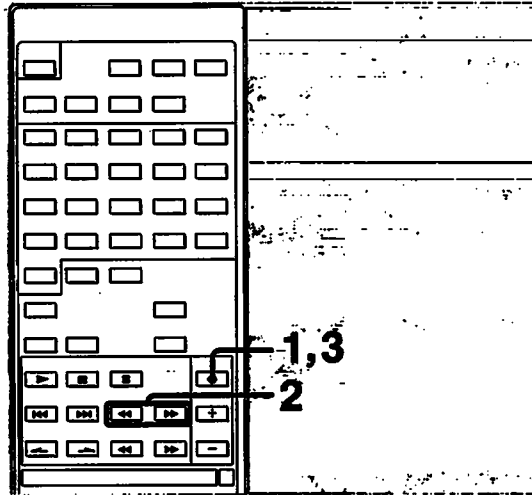


3

A ↔ B



Fade-In/ Fade-Out



You can have the play fade in or out from 2 to 10 seconds.

Fade-in/fade-out effect cannot be obtained when the DIGITAL OUT jack is used for connections.

To end play fading out

Press FADER when you want to start fading out.

The indicator above **II** on the main unit flashes, and play fades out and the unit enters pause mode.

To restart play fading in

Press FADER in pause mode. The indicator above **II** on the main unit flashes, and play fades in.

To designate the fading duration

1 Press FADER in stop mode.

2 Designate the fading duration within the range of 2 to 10 seconds by pressing **◀◀** or **▶▶**.

3 Press FADER again.

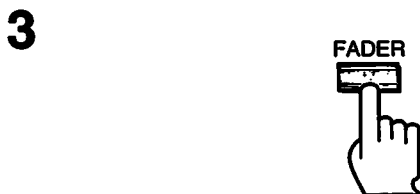
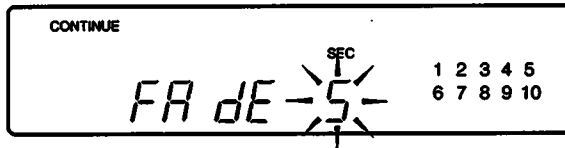
If no designation is made, fading will last for 5 seconds.

Note

Whenever the unit is turned off, fading time is reset to 5 seconds.

When you use the custom file function

The last designated fading time remains for the discs with custom files.



Recording a Program

You can make a program by designating up to 24 selections in a desired order. At the same time, you can adjust the total playing time of the program so that you can make the program fit the length of a tape when recording.

Programming and Recording

1 Press PROGRAM.

"PROGRAM" appears in the display. When using PLAY MODE on the main unit, press it repeatedly until "PROGRAM" appears.

2-A

Press the numeric buttons of the desired selections in the desired order.

To select a selection number over 20, see page 15.

The display shows:

- Last programmed selection
- The order to be played
- The total playing time
- Programmed selection numbers

If you make a mistake in your selections

Each time you press CLEAR, the last selection chosen is deleted.

2-B

To find selections which fit in the remaining time

- Press |◀◀ or ▶▶| to change a selection and check the time.

– Program edit

If satisfactory, go to the next step. If not, choose another selection.

- Press PROGRAM or PLAY MODE on the main unit.

The selection is stored.

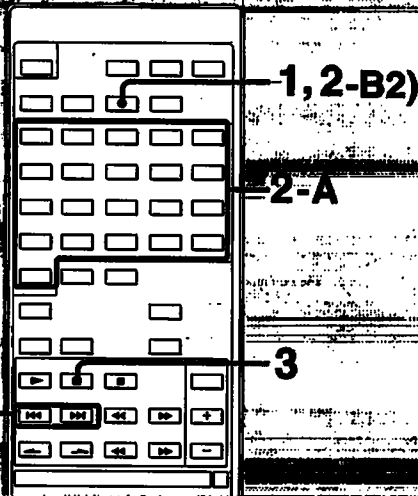
3 Press II to make a program for side B.

"P" appears in the display and the playing time is reset to 0.

A pause is also counted as a selection.

4 Program selections for side B by repeating step 2-A or 2-B.

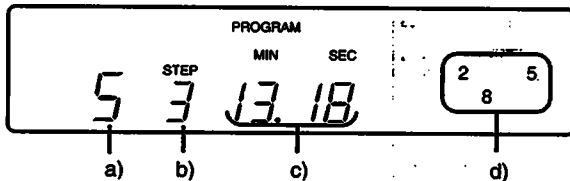
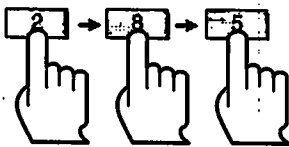
(continued)



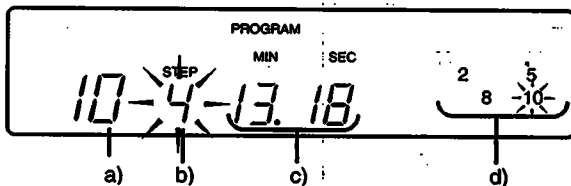
1



2-A



2-B 1)



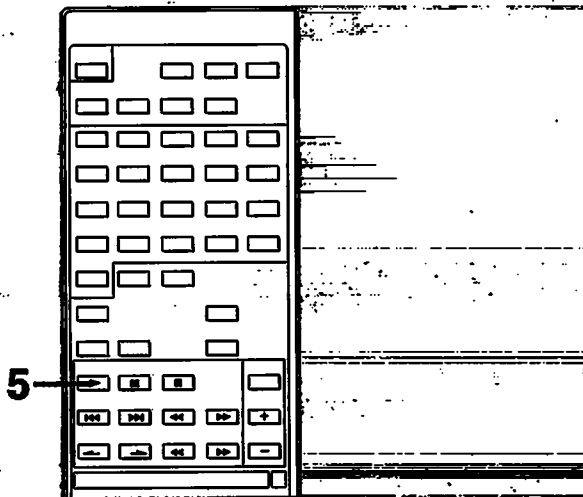
2)



3



Recording a Program



5 Start recording on the cassette deck and press ►.

The selections for side A starts playing. It is better to start recording on the cassette deck first to transport the leader tape before pressing ► on this unit.

To play the selections for side B
When the selections for side A are played, the unit enters pause mode. Reverse the tape, then press ► or II.

To check your program
See page 21.

To change your program
See page 21.

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 time until the pause.

The blank spaces between selections

The blank spaces between selections are automatically set to 1 second. However, if you program continuous selections on a disc (for example, when you program selections 4 and 5 continuously), the blank space remains as it is on the disc.

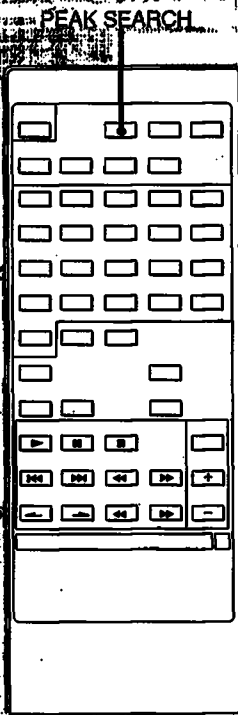
The program is erased in the following cases

- when you turn off the power
- when you change the play mode

5



Locating the Portion with the Highest Level – Peak Search



You can locate the portion with the highest input level of the disc to adjust the recording level.

Before starting play, press PEAK SEARCH. "PEAK" flashes in the display as the peak search begins functioning.

Upon completing the search, the unit starts repeating the portion with the peak volume so that you can adjust the recording level.

In delete play, delete shuffle play, and program play modes, the peak search function is carried out only on the chosen selections.

To cancel the peak search

- Press ■. "PEAK" goes off from the display.
- Press ► to start play from the first selection.
- Press || to put the unit into pause mode at the beginning of the first selection.

Note on peak search

The unit scans input levels of the whole disc and determines the peak (maximum input level) among them. The peak determined with this function is sometimes slightly different from the real one. In addition, portions determined as a peak vary each time this function is carried out on the same disc. The difference between the determined and the real peak is however, negligible and will not prevent you from adjusting the recording level.

Custom Files

You can store three types of information called "custom files" for each disc using the memory function of this unit.

About the Custom Files

Program bank

You can store a desired order of the selections to be played for each disc, so that you can always play the selections in that order.

Delete bank

You can retain unwanted selections in memory, so that you can always play only the desired selections.

Custom index

You can assign up to ten index points anywhere you want on a disc.

Indications in the display **A**

- a) "BANK" lights up when the program bank or the delete bank is memorized.
- b) "INDEX" lights up when the custom index is memorized.

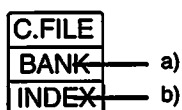
Custom file last mode memory

When you remove a disc containing custom files from this unit, the last play mode and the fade time for that disc are stored in the memory. When you insert the disc again, the memorized condition is recalled. However, if you press ► while the disc tray is open, the current play mode takes the priority over the memorized play mode.

Where are custom files memorized?

Custom files are memorized not on the disc but in the unit's memory. Therefore, you cannot use custom files on other CD players. Custom files are retained for approximately 1 month without AC power supply.

A



Keeping a Program in Memory – Program Bank

You can program selections and store them in the memory, so that you can always play the selections in the programmed order. The memorized program is called a "program bank".

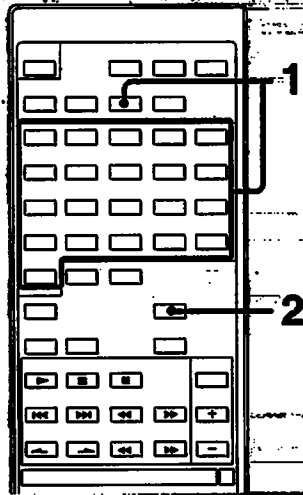
Memorizing a Program

You can store one program bank for one disc.

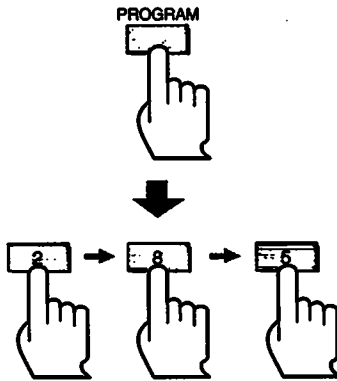
- 1** Make a program as you wish. (See page 20).
- 2** Press FILE.
"P-FILE" appears and "BANK" lights up in the display. The program is memorized.

To change the program bank
Make a new program and press FILE.

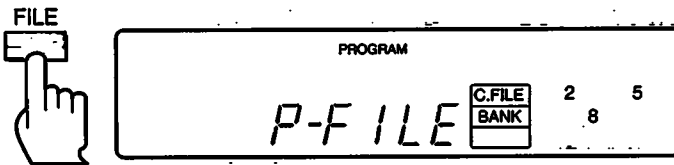
Note
You cannot assign a program bank and a delete bank simultaneously to one disc.



1



2



Keeping a Program in Memory – Program Bank

Playing a Disc using the Program Bank

Before inserting a disc **A**

- 1 Press **PROGRAM**.
"PROGRAM" appears.
When using **PLAY MODE** on the main unit, press it until "PROGRAM" appears.
- 2 Insert a disc containing a program bank in the tray.
- 3 Press **▶**.

When the disc is in the tray **B**

- 1 Press **FILE RECALL** in stop mode.
"PROGRAM" appears and the program bank is recalled.
- 2 Press **▶**.

To play the selections in another programmed order without clearing the program bank

Insert a disc in the tray, press **PROGRAM**, make a program as you wish, and press **▶**. You can play the selections in the newly programmed order.

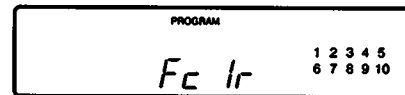
In this case, the memorized program bank is not cleared. (You can recall the program bank by pressing **FILE RECALL**.)

To play a disc containing a program bank in other play modes

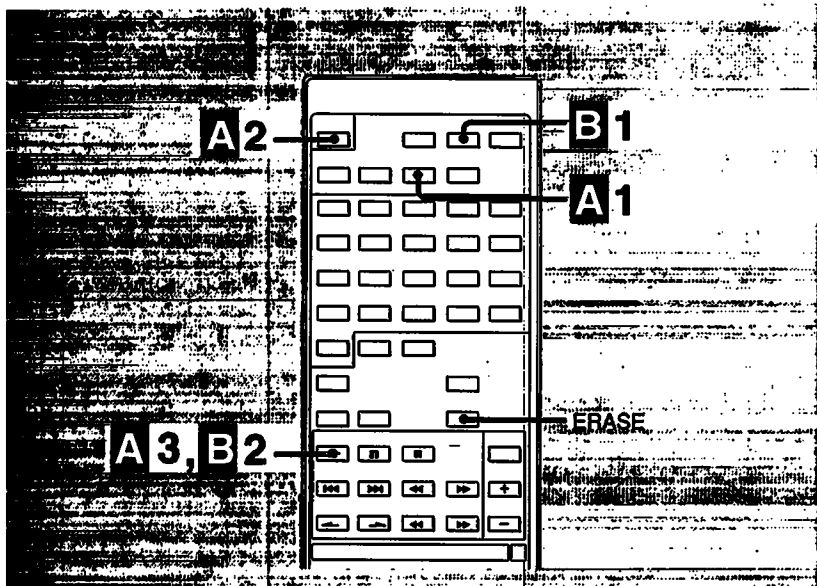
Insert a disc in the tray, set the unit to the desired play mode, and press **▶**.

Clearing the Program Bank

- 1 Insert the disc whose program bank is to be cleared in the tray.
- 2 Press **FILE RECALL**.
- 3 Press **ERASE**.



"FcIr" appears and "BANK" goes off from the display. The program bank is cleared.

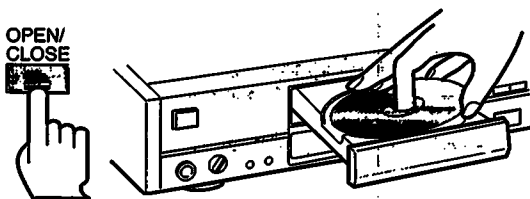


A

1



2



3



B

1



2



Keeping Your Unwanted Selections in Memory – Delete Bank

You can delete your unwanted selections and store them in the memory, so that you can always play only your desired selections. The group of memorized unwanted selections is called a "delete bank".

Memorizing Unwanted Selections

You can store one delete bank for one disc.

1 Delete the unwanted selections. (See page 19).

2 Press FILE.

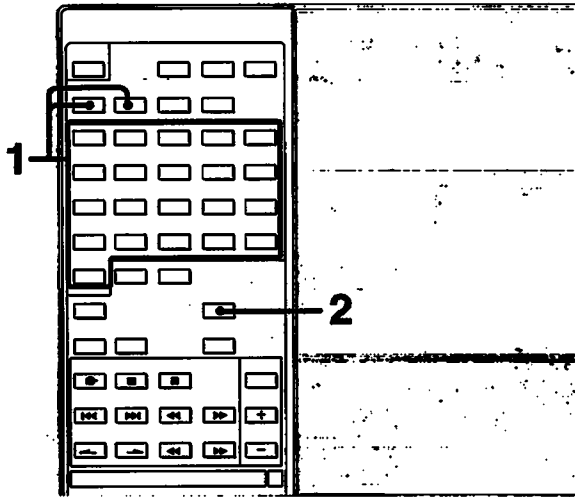
"d-FILE" appears and "BANK" lights up in the display. The deleted selections are memorized.

To change the delete bank

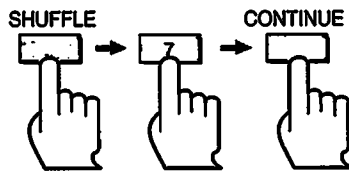
Select the unwanted selections again and press FILE.

Notes on the delete bank

- You cannot assign a delete bank and a program bank simultaneously to one disc.
- A delete bank can memorize up to 99 selections. However, you cannot store a delete bank if no selections are deleted at all.



1



2

FILE



CONTINUE

d-FILE

C.FILE	1	2	3	4	5
BANK	6	8	9	10	

Keeping Your Unwanted Selections in Memory – Delete Bank

Playing a Disc using the Delete Bank

Before inserting a disc **A**

- 1 Press **CONTINUE** or **SHUFFLE**. "CONTINUE" or "SHUFFLE" appears. When using **PLAY MODE** on the main unit, press it until "CONTINUE" or "SHUFFLE" appears.
- 2 Insert a disc containing a delete bank in the tray.
- 3 Press **▶**.

When the disc is in the tray **B**

- 1 Press **CONTINUE** or **SHUFFLE**.
- 2 Press **FILE RECALL** in stop mode.
- 3 Press **▶**.

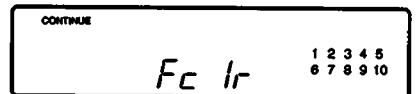
To play other selections without clearing the delete bank

Insert a disc in the tray, press **■**, delete the unwanted selections again, and press **▶**. You can play the disc skipping newly deleted selections.

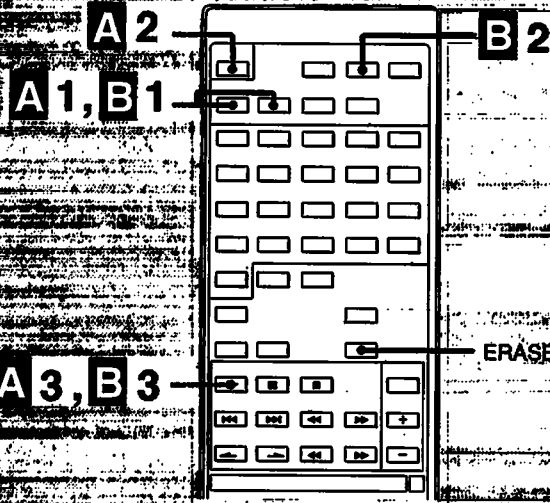
In this case, the memorized delete bank is not cleared. (You can recall the delete bank by pressing **FILE RECALL**.)

Clearing the Delete Bank

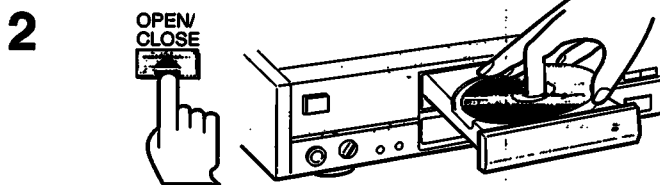
- 1 Insert the disc whose delete bank is to be cleared in the tray.
- 2 Press **FILE RECALL**.
- 3 Press **ERASE**.



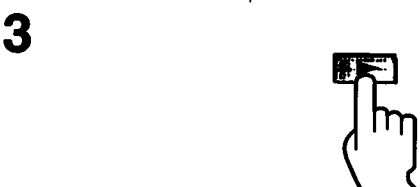
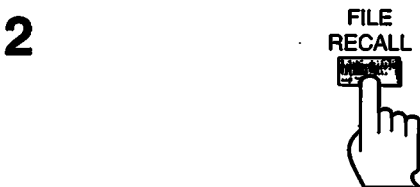
"Fcl" appears and "BANK" goes off from the display. The delete bank is cleared.



A CONTINUE or SHUFFLE



B CONTINUE or SHUFFLE



Indexing a Disc – Custom Index

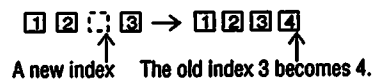
You can assign up to 10 special indexes, which are called "custom indexes", anywhere you want on a disc. You can easily locate the custom index during play, or enjoy repeat play between two adjacent custom indexes.

Assigning Indexes to a Disc

- 1** Press C.INDEX during play. "CUSTOM INDEX" appears in the display. When using PLAY MODE on the main unit, press it until "CUSTOM INDEX" appears. The music calendar goes off from the display.
- 2** Press FILE at the point you want to assign a custom index. The unit repeats the portion for 3 seconds from the point where you press FILE. (This is called a "rehearsal play".)
- 3** Press ◀◀ or ▶▶ to adjust the starting point of the rehearsal play. "Adj" appears. Press ▶▶ to move the starting point forward, and ◀◀ to move it backward. Pressing ◀◀ or ▶▶ 7 times moves the point by approximately 1 second.
- 4** Press FILE. "FILE" appears and "INDEX" lights up in the display. The custom index is stored in memory. You can assign up to 10 custom indexes by repeating steps 2 to 4.

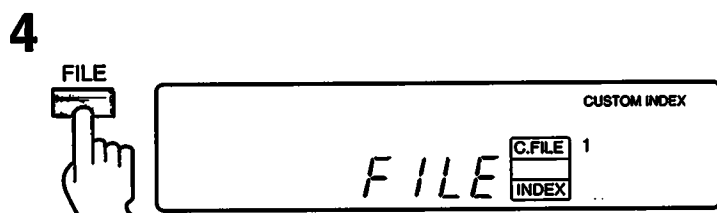
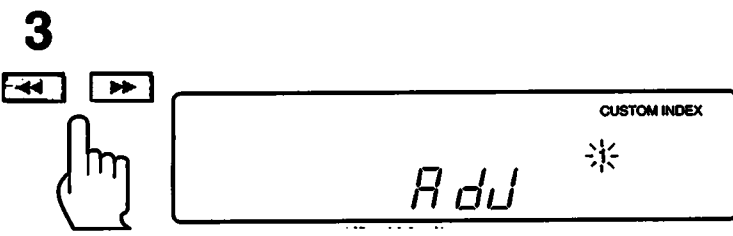
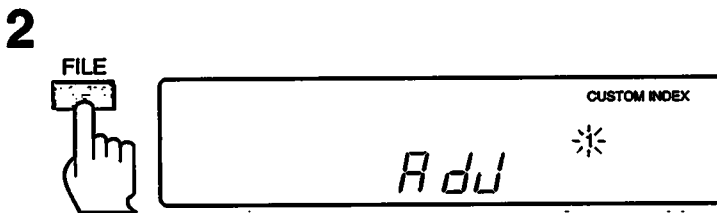
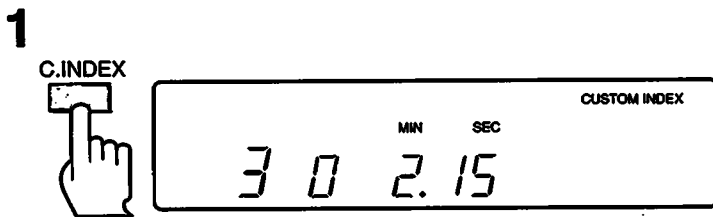
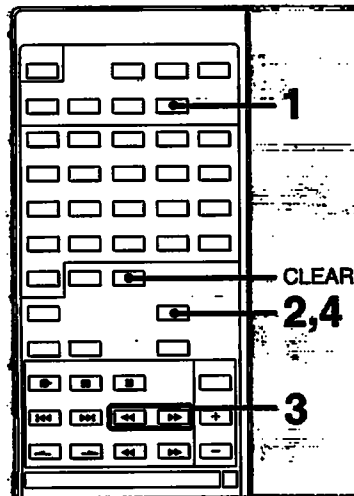
To release the rehearsal play
Press CLEAR to resume normal play.

If a new index is assigned to a position preceding another one
Already existing indexes are shifted as follows:
For example: when assigning a new index between 2 and 3



During custom index play
You cannot use the normal index search function.

If you press FILE in stop mode
The custom index is assigned immediately at the point you press FILE without the rehearsal play.



Indexing a Disc – Custom Index

Playing from the Desired Custom Index

There are three ways to play from the desired custom index.

a) To play from an index to the end of the disc

1 Press C.INDEX.

"CUSTOM INDEX" appears in the display.

2 Select the desired custom index by pressing the desired numeric button (1 through 10).

Play starts from the selected custom index. The number of the custom index goes off from the display when the unit finishes playing that index.

b) To play from an index to the next index

1 Press C.INDEX twice.

"CUSTOM INDEX SINGLE" appears in the display.

2 Select the desired custom index by pressing the desired numeric button (1 through 10).

Play starts from the selected custom index and stops at the beginning of the next index.

c) To access an index during play

1 Press C.INDEX.

"CUSTOM INDEX" appears in the display.

2 Press ← or →.

→: Goes to the next index.

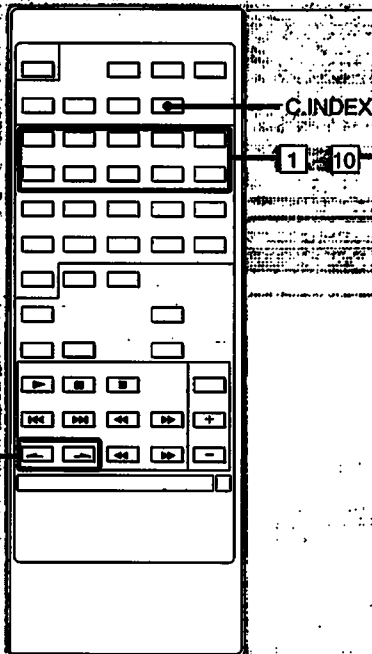
←: Returns to the preceding index.
(To go further back, use the numeric buttons.)

To release play using custom indexes

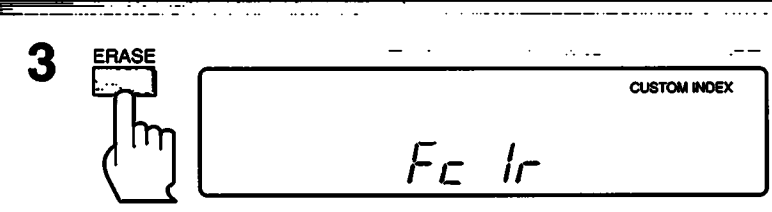
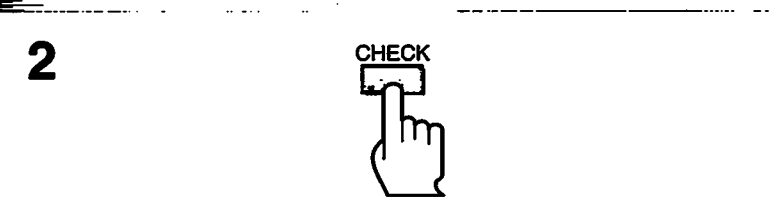
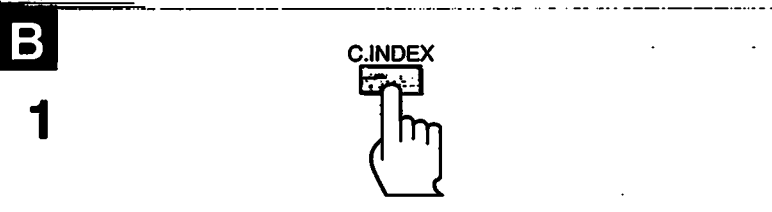
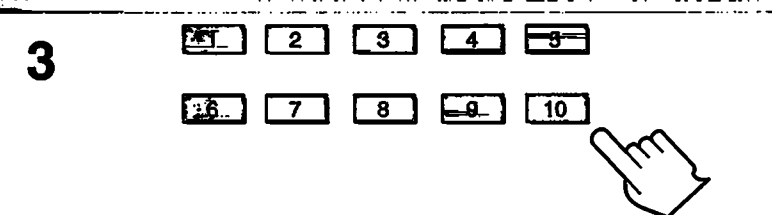
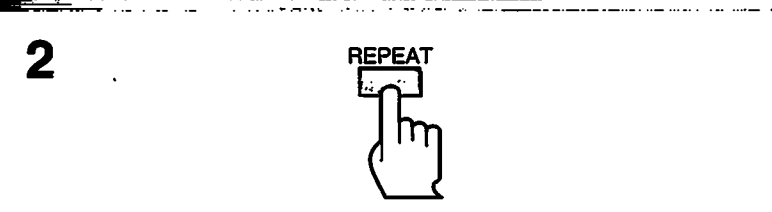
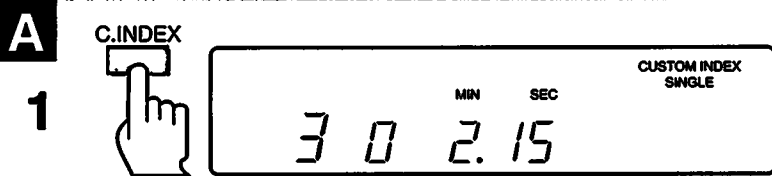
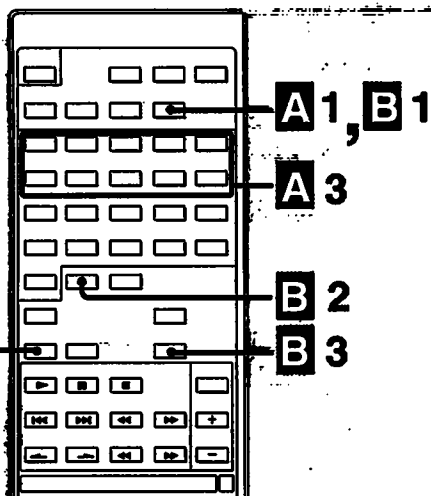
Press CONTINUE, SHUFFLE, or PROGRAM. The unit enters the selected play mode and the music calendar appears in the display.

Recommended application of custom indexes

The selection numbers on discs of symphonies or concertos are sometimes not useful for locating their movements. In this case, you can assign a custom index to each movement so that you can locate it easily. When you want to play only one movement, you can use custom index single play.



Indexing a Disc – Custom Index



Repeating between the Custom Indexes **A**

You can play repeatedly between adjacent custom indexes.

- 1 Press C.INDEX twice. "CUSTOM INDEX SINGLE" appears in the display. When using PLAY MODE on the main unit, press it until "CUSTOM INDEX SINGLE" appears.
- 2 Press REPEAT. "REPEAT" appears in the display.
- 3 Select the desired custom index by pressing the desired numeric button (1 through 10). The unit repeats the portion between the selected index and the next index.

To cancel the repeat play
Press REPEAT again. "REPEAT" goes off from the display and the play stops at the beginning of the next index.

Clearing Custom Indexes **B**

- 1 Press C.INDEX. "CUSTOM INDEX" appears in the display.
- 2 Press CHECK. Each time you press CHECK, an index number flashes. Press CHECK repeatedly until the index number you want to erase flashes.
- 3 Press ERASE while index number is flashing. "Fc1r" appears in the display. The selected index number is cleared and the succeeding index numbers move up one.

Specifications

Compact disc player

Laser	Semiconductor laser
Wavelength	780 – 790 nm
Frequency response	2 Hz to 20 kHz ± 0.3 dB
Signal-to-noise ratio	More than 119 dB
Dynamic range	More than 100 dB
Harmonic distortion	Less than 0.0015%
Channel separation	More than 110 dB

Outputs

LINE OUT (FIXED)	Output level 2 V (at 50 kilohms) Load impedance over 10 kilohms
LINE OUT (VARIABLE)	Output level max. 2 V (at 50 kilohms) Load impedance over 50 kilohms
BALANCED OUT (FIXED)	Output level 2 V (at 50 kilohms) Load impedance over 600 ohms
DIGITAL OUT (COAXIAL)	Output level 0.5 Vp-p (at 75 ohms) Load impedance 75 ohms
DIGITAL OUT (OPTICAL)	Wave length 660 nm Output level -18 dBm
PHONES (stereo phone jack)	Output level max. 100 mW Load impedance 32 ohms

General

Power requirements	120 V AC, 60 Hz
Power consumption	38 W
Dimensions (approx., including projections)	470 x 125 x 375 mm (w/h/d) (18 ⁵ / ₈ x 5 x 14 ⁷ / ₈ inches)
Mass (approx.)	16.5 kg (36 lbs 7 oz)

Remote commander

Remote control system	Infrared control
Power requirements	3 V DC with two size AA (R6) batteries
Dimensions (approx., including projections)	62 x 18 x 175 mm (w/h/d) (2 ¹ / ₂ x ²³ / ₃₂ x 7 inches)
Mass (approx.)	135 g (5 oz)

Supplied accessories

Audio cord	(1) (2 phono plugs – 2 phono plugs)
Remote commander	(1)
Sony SUM-3 (NS) batteries	(2)
Screws	(8)

Optional accessories

Audio optical connecting cord POC-15
Digital connecting cord VMC-1ES

Design and specifications are 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 tray 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 ► or II again to release it.
Sound is not heard.	Moisture condensation.	Leave the unit turned on for approximately one hour.
	Loose connection.	Insert the plug firmly.
	Connection is incorrect.	Check the connection referring to "Hooking Up the System".
	The LINE OUT/PHONE LEVEL control (or LINE OUT LEVEL +/- on the remote commander) is set to the minimum.	Turn the control clockwise, or press LINE OUT LEVEL + on the remote commander.
Play does not begin from the first selection.	The BALANCED OUT jacks are used for connections, but the BALANCED OUT switch is set to OFF.	Set the BALANCED OUT switch to ON.
	The unit is in the program, shuffle, or custom index mode.	Press CONTINUE.
Level of the recorded sound has not been fixed even though the recording level was preset on the tape deck.	When the VARIABLE LINE OUT jacks are used, the LINE OUT/PHONE LEVEL control (or LINE OUT LEVEL +/- on the remote commander) is turned (or pressed) while recording.	Do not turn the LINE OUT /PHONE LEVEL control (or press LINE OUT LEVEL +/-) 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.
	The remote commander is too far from the unit.	Move closer.