

Compact Disc Player



CDP-C40 CDP-C50

Operating Instructions

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



CDP-C50

Difference between the CDP-C40 and the CDP-C50

This manual covers the CDP-C40 and the CDP-C50. Their performance and operation are identical except that for the CDP-C40, a remote commander is not supplied and a headphones jack, a phone level control, and a timer switch are not provided. The illustrations used in this manual are of the CDP-C50.

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.

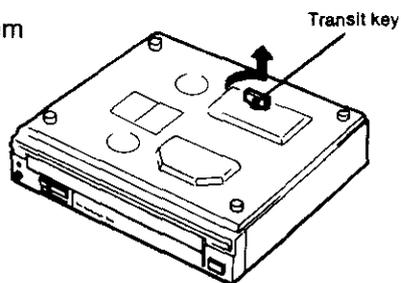
Do not turn up the volume while listening to a portion with no audio signals or very low level inputs. If you do, the speakers may be damaged when a peak level portion is played.

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

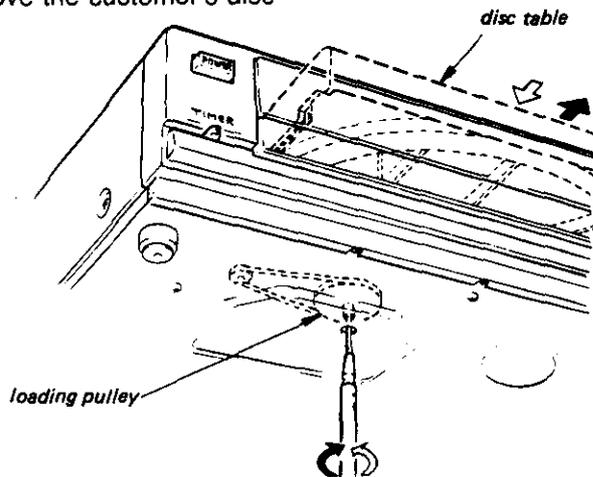
If you have any questions or problems concerning your unit, please contact your nearest Sony dealer.

PICKING UP THE UNIT FOR SHOP REPAIR

- Lock the optical system



- Remove the customer's disc



The white transit key on the bottom exterior of the unit protects the optical system against shock during transportation. Before operating the CD player, be sure to remove the key by following the instructions on the label, and store it in a safe place.

When transporting the unit, replace the key in its original hole and lock it in place.

After being certain the customer's disc is unrelated to the problem be sure to remove it and leave it with the customer.

If the CD player is inoperative the disc can be removed manually as shown in the illustration.

Features

The compact disc player is equipped with 5 disc trays which allow you to choose from a large number and wide variety of selections.

Any disc at any time

can be played using the DISC SELECT buttons.

Multiple functions include:

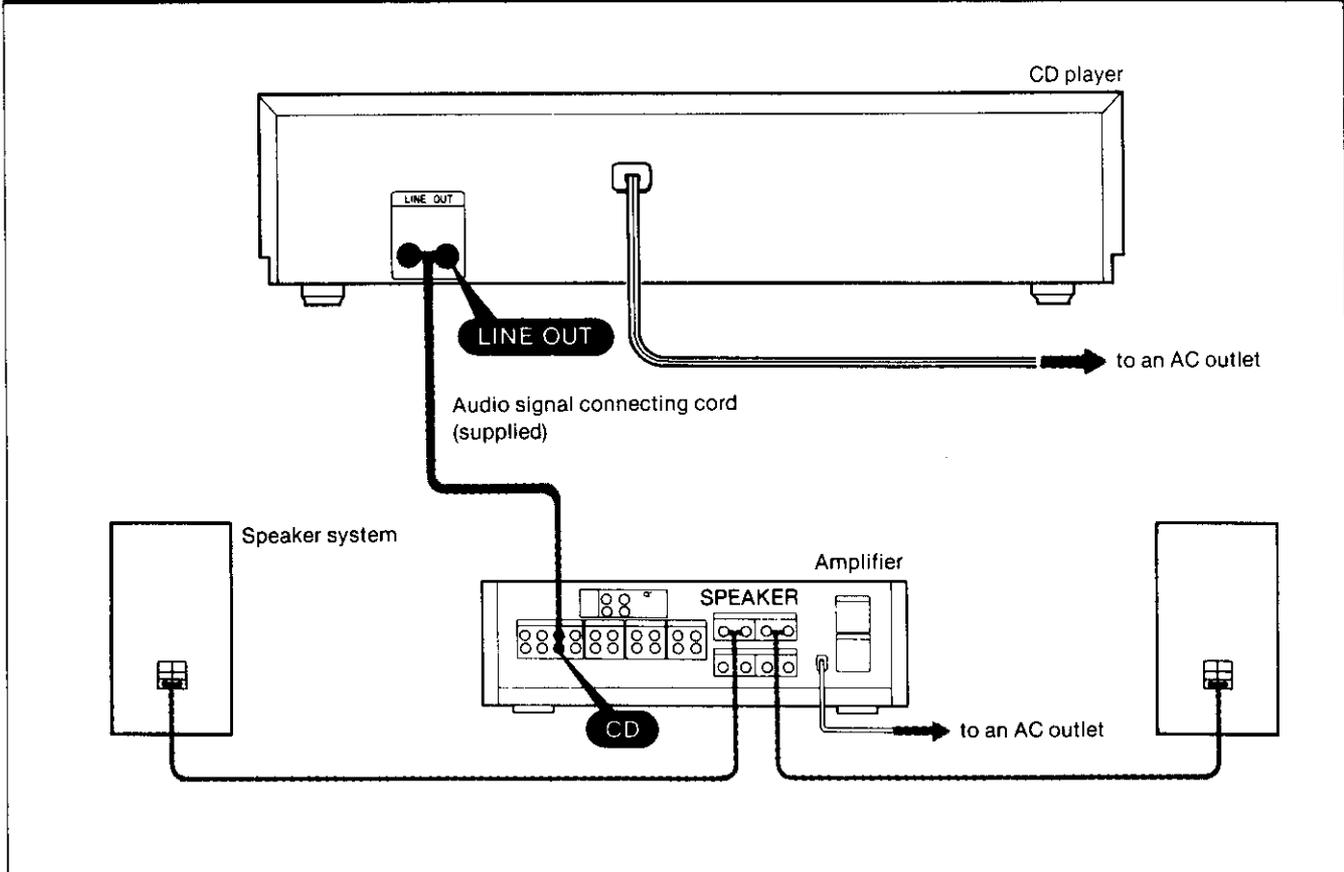
- PROGRAM play which allows you to play up to 32 selections on any disc in any desired order.
- SHUFFLE play for playing selections in random order.
- REPEAT play for playing a single selection, a single disc, or all the discs again.

Connections

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.

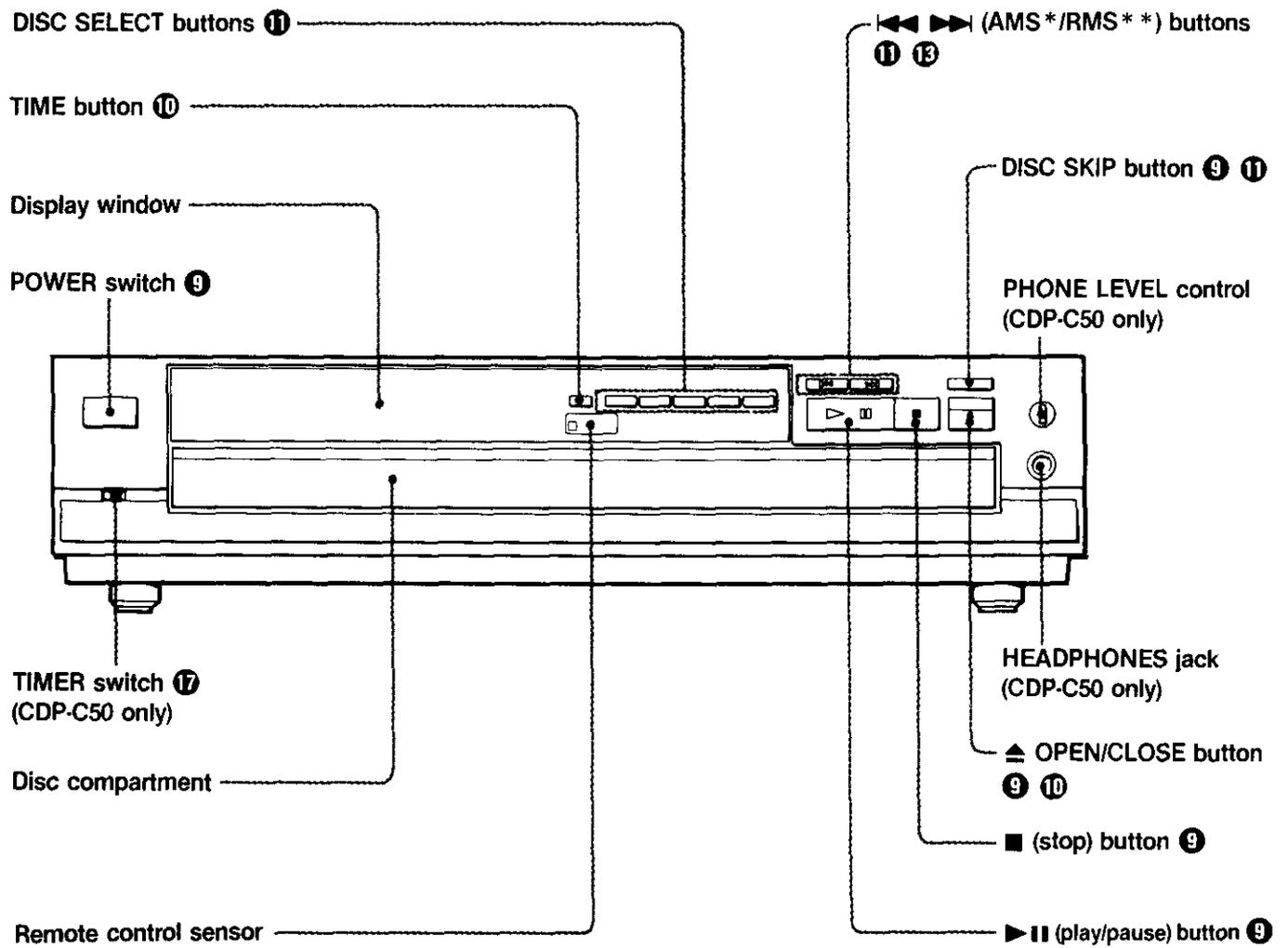
Connection Diagram



Control Identification

Refer to the pages indicated in ● for details.

Front Panel

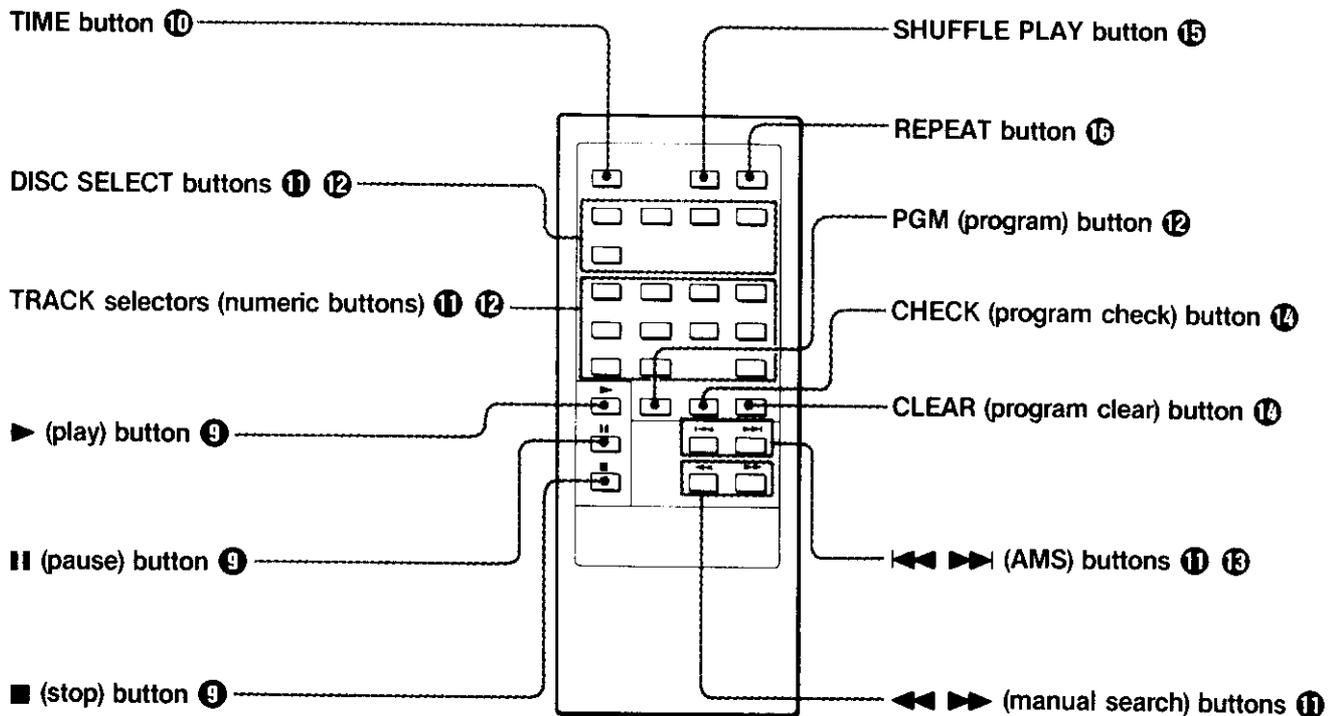


*AMS is the abbreviation of Automatic Music Sensor.

**RMS is the abbreviation of Random Music Sensor.

Control Identification

Remote Commander (CDP-C50 only)



Remote Control Operation

Once the power switch is turned on, you can remotely control various functions of the player from a distance. Use the remote commander supplied with the CDP-C50. For the CDP-C40, use the one supplied with the Sony stereo systems.

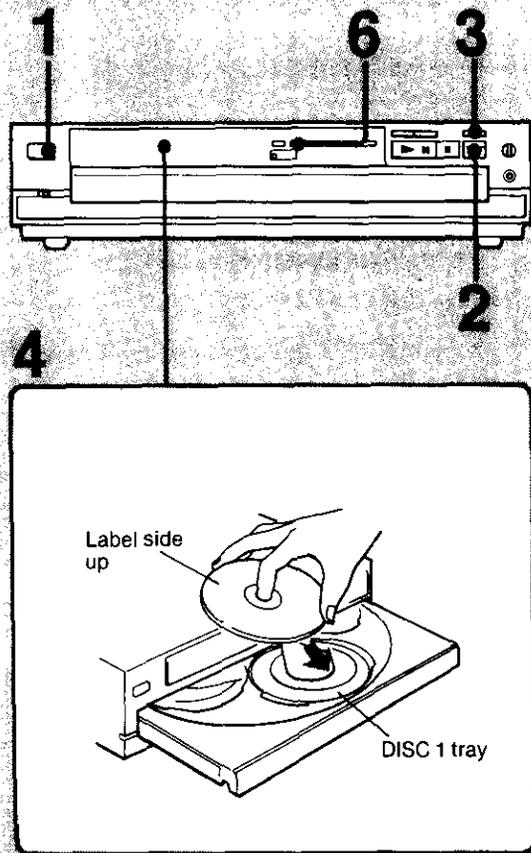
Operations controlled or not controlled by the remote commander

Operation	CDP-C50	CDP-C40
Music selection using the numeric buttons	OK	NO
Direct disc selection	OK	NO
Skipping discs	NO	OK
Manual search	OK	NO
Program play	OK	OK
Checking the programmed selections	OK	NO
Shuffle play	OK	OK
Repeat play	OK	OK
Turning the power on and off	NO	NO
Opening the disc compartment	NO	NO

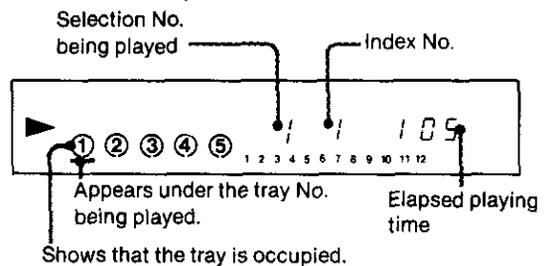
Notes on the remote commander and remote control operation

- 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 control sensor to direct sunlight or lighting apparatus. Such exposure can cause a malfunction.

Disc Playing



- 1** Depress **POWER**.
- 2** Press **▲**.
The compartment will open.
- 3** Press **DISC SKIP** so that the Disc 1 tray rotates into the front position.
- 4** Put the disc in the **DISC 1** tray with the label side up.
- 5** To play more than one disc, repeat steps 3 and 4 to put additional discs in the order you want.
- 6** Press **DISC SELECT 1**.
The compartment will close and play will begin from the first selection on the disc in the DISC 1 tray.



Stopping play

To pause during play	Press ▶ (or on the remote commander). 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.

If the circle around a tray number blinks
The disc in that tray is upside down, dirty, or has flaws.

Place an empty tray in the front position, and put the disc in it
If you insert the disc into a tray other than the one in the front, the unit may not be able to find the disc. Be sure to use DISC SKIP to rotate to the next empty tray.

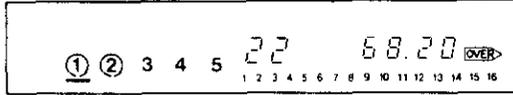
Note on 8 cm CD singles
You can play an 8 cm CD single on the inside circle of the tray. Do not put a normal CD (size of 12 cm) over it.

Disc Playing

Displaying Informations on the Time

To display the total number of selections

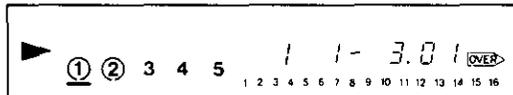
If you press  or the compartment itself to close the compartment, the total number of selections and the total playing time are displayed for a few seconds.



When a disc containing more than 16 selections is inserted, **OVER** (meaning: "over 16 selections") appears.

To display the time remaining in a selection

Press TIME once during play or pause.



To return to the normal display, press TIME three times.

To display the amount of time elapsed on the disc

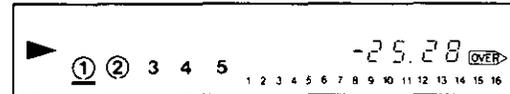
Press TIME twice.



To return to the normal display, press TIME twice.

To display the remaining time of the disc

Press TIME three times.



To return to the normal display, press TIME once.

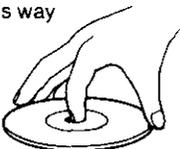
Notes on discs

Handle the disc by its edge.

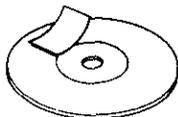
To keep the disc clean, do not touch the surface.

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.

Selecting a Desired Disc

By using the DISC SELECT buttons or the DISC SKIP button during play, you can locate the beginning of any disc.

To select a particular disc	Press the corresponding DISC SELECT button.
To move to the disc tray next to the current one	Press DISC SKIP.

Locating a Particular Selection

Locating a selection in sequence (Automatic Music Sensor)

You can locate the beginning of a selection on the disc being played.

To locate the beginning of the selection being played	Press ◀◀ once.
To locate the beginning of the next selection.	Press ▶▶ once.

Continue to press until the selection you wanted has been located.

Locating a selection directly

(possible only when using the remote commander of the CDP-C50)

Press the numeric buttons (1 to 10) to enter the desired track number.

To choose directly a selection whose number is greater than 10
(possible only when using the remote commander of the CDP-C50)
Use the [+10] button and [1] to [10] buttons.

Ex. To play from track No. 32 Ex. To play from track No. 30
1 Press [+10] three times. 1 Press [+10] twice.
2 Press [2]. 2 Press [10].

If, within approx. 5 seconds, no button is pressed after [+10], [+10] will function as the [10] button

What is this indication?

" - - - - " indication will appear in the display window instead of numbers, if a selection numbered 21 or higher is selected.

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 when you reach the point in the selection you want.

To locate at high speed

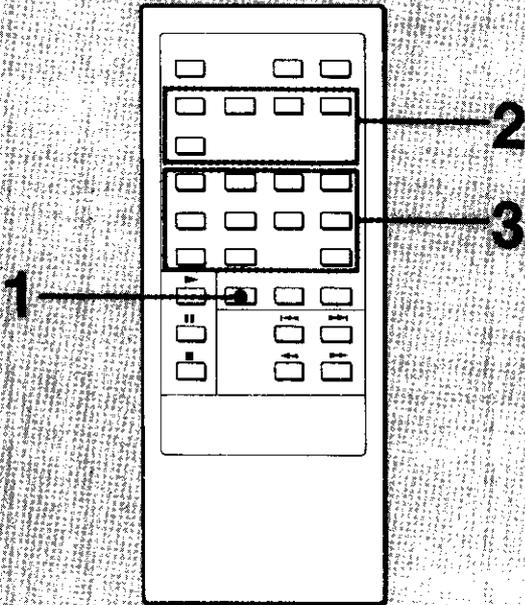
Press ◀◀ or ▶▶ in the pause mode. Search speed will increase three times, but there will be no sound. Find the desired point by watching the numbers in the display.

Playing in a Specific Order —Program Play

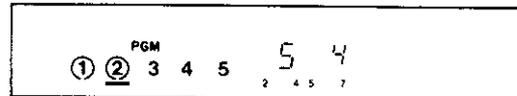
(possible only when using the remote commander)

Programming Selections Using the Remote Commander of the CDP-C50

You can play up to 32 selections in the desired order.



- 1 Press PGM.
- 2 Press the DISC SELECT button which corresponds to the disc you want.
- 3 Press the numeric button which corresponds to the selection you want.



- 4 To program additional selections on a same disc, **repeat step 3**.
To program additional selections on another disc, **repeat steps 2 and 3**.

To play the programmed selections

Press ► (or ► || on the main unit).

To return to normal play mode

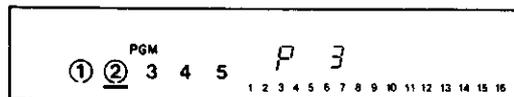
Press PGM again.

To insert a pause into your program

(possible only with the CDP-C50)

While programming, press || at a point between two selections. When the program is played and reaches this point, the disc will stop and stand by until you press || again.

This function allows you to change the tape when making a recording. A pause cannot be programmed first in the program line up.



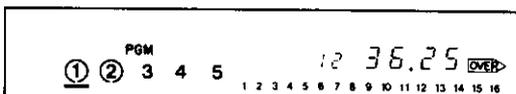
P (pause) has been programmed. It is 3rd in the program line up.

The maximum selection number which can be programmed

On the disc in the DISC 1 tray; up to the 99th selection
On the disc in the other trays; up to the 30th selection

To display the total playing time of the program

Press TIME before starting play.



To display the time remaining in a selection

Press TIME once while the unit is in the play or pause mode.
To return to normal display, press TIME once more.

To program while observing the disc labels

You can program the selections with the disc compartment open.

When a program is full

FULL appears and no more selections can be added.

Space between selections

There is a 3 second blank between each programmed selection. However, when consecutive selections (e.g. 4th - 5th) from one disc are added to a program, the original amount of time between the selections is retained.

Programming Selections Using the Remote Commander of the Sony Stereo System

You can play up to 32 selections in the desired order.

- 1** Press PGM.
- 2** Press D. SELECT (disc skip) to move the disc tray.
- 3** Choose the selection by pressing ◀◀ or ▶▶. (To choose a whole disc, press ▶▶, and then ◀◀.)
- 4** Press PGM again.
- 5** To program additional selections on a same disc, repeat steps 3 and 4.
To program additional selection on another disc, repeat steps 2, 3 and 4.

To play the programmed selections

Press ▶ (or ▶|| on the main unit).

To return to normal play mode

Press PGM again.

To program a whole disc under a single program number

Simply press the DISC SELECT button which corresponds to the disc you want. The TRACK indicator will show \overline{R} , which means that all the selections on the disc have been programmed under a single program number.

To program shuffle play

Press SHUFFLE PLAY when adding an entire disc to your program. All the selections on that disc will be played in random order. Shuffle play will not affect the other selections in your program. SHUFFLE PLAY cannot be used while a program is being played. (See page 15.)

The program will be cleared in the following situations

- ■ is pressed during stop.
- ▲ is pressed during program play.
- Power is turned off.

Skipping to the next selection programmed

Press ▶▶ during play.

Going back to the beginning of the selection being played

Press ◀◀ during play.

To play a selection not included in the program

Press PGM again. PGM will disappear and you can then play another selection on a disc. This operation does not clear the programmed selections, and you can resume program play by pressing ■, PGM, and then ▶.

To stop program play

Press ■. The last selection number programmed will be displayed.

To resume play, press ▶. Play begins from the beginning of the program.

Playing in a Specific Order—Program Play

Checking the Programmed Selections

For the CDP-C50:

Press CHECK on the remote commander.
Each time you press CHECK, a selection will be displayed for a few seconds, in the order they have been programmed.

For the CDP-C40:

- 1 Press **II**.
- 2 Press **▶▶**.

Each time you press **▶▶**, a selection will be displayed for a few seconds, in the order they have been programmed.

Clearing the Programmed Selections

Clearing the whole program

Press **■** once during stop, or twice during play.
All the selections will be cleared.

Clearing the last selection in a program

(possible only when using the remote commander of the CDP-C50)

Press CLEAR during stop.

The last selection will be cleared each time CLEAR is pressed.

Clearing a specific selection

(possible only when using the remote commander of the CDP-C50)

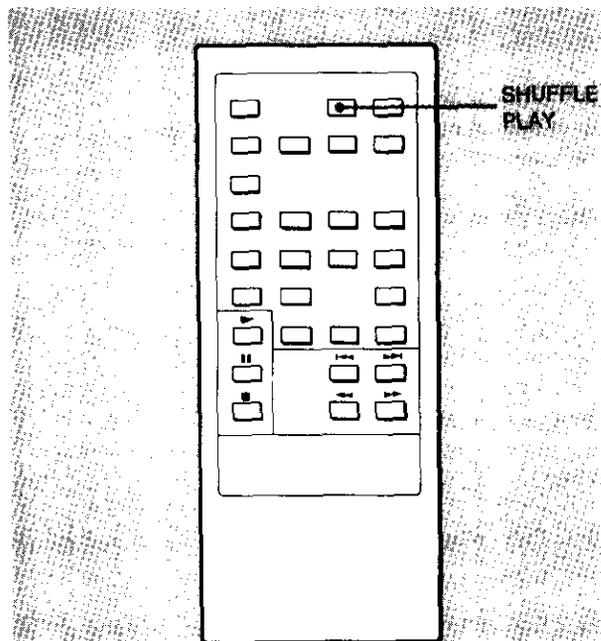
- 1 Press CHECK repeatedly until the selection to be cleared is displayed.
- 2 Press CLEAR while the selection number is displayed. The selection will be cleared from the program. You cannot clear the selection currently being played.

What is this indication?

E n d This indication will appear when the last selection is reached while checking the selections you have programmed. The indication will automatically change to the number of the last selection after several seconds.

Playing in Random Order—Shuffle Play

(possible only when using the remote commander)



Remote commander of the GDP-C50

1 Press SHUFFLE PLAY.

Shuffle play will begin.

When two or more discs are in the compartment:

All the discs and selections will be played in random order. After one selection is played, the next selection will be from another disc.

When a single disc is in the compartment:

After all the selections have been played in random order, play will stop.

To return to normal play

Press SHUFFLE PLAY again.

What is this indication?



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

To skip the selection

To skip to the next selection, press the ►► button.

To return to the beginning of the selection being played, press the ◀◀ button.

During shuffle play, you cannot return to the previous selections.

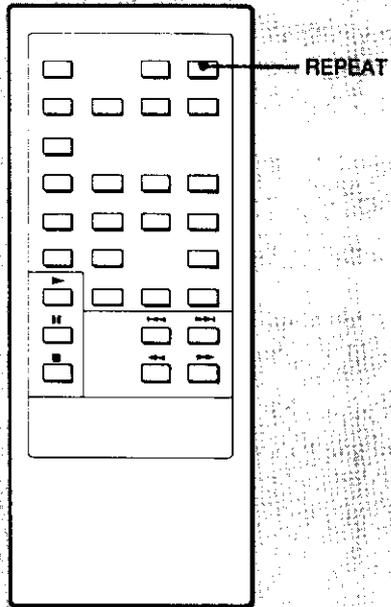
Changing from program play directly to shuffle play

Press SHUFFLE PLAY during program play. Shuffle play will begin. To resume program play, press ■, PGM, and then ►.

Repeating Selections — Repeat Play

(possible only when using the remote commander)

You can repeat a single selection, a single disc or all the discs.



Remote commander of the CDP-C50

What to be repeated	Operation (during play or pause)
A selection being played	Press REPEAT once.
A disc being played	Press REPEAT twice.
All the discs	Press REPEAT three times.

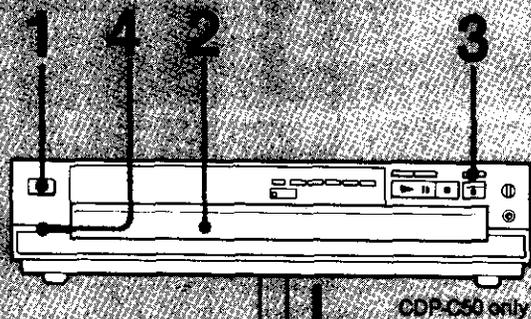
To return to normal play
Press REPEAT repeatedly until REPEAT disappears.

During shuffle play

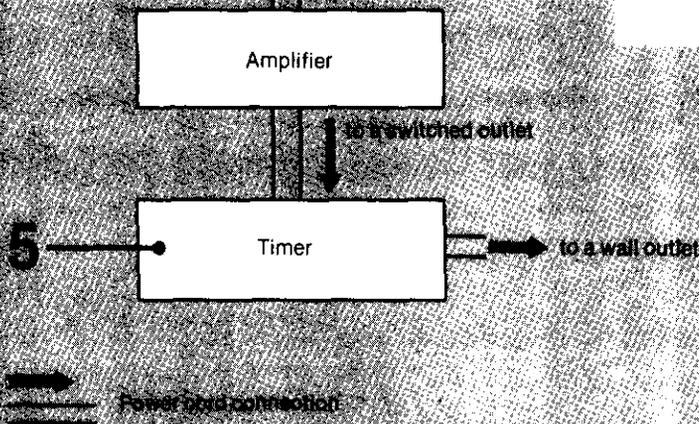
The repeat play function cannot be used.

Timer Activated Play (possible only with the CDP-C50)

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



- 1** Press **POWER**.
- 2** Set the **disc** in the disc compartment.
- 3** Select the **disc** to be played first with **DISC SELECT**.
- 4** Set **TIMER** to **ON**.
- 5** Set the **timer** for the desired time. Play will begin automatically at the preset time.



When the timer play has ended
Be sure to set the **TIMER** switch to **OFF**.

You cannot select the program or shuffle function
With timer operation, only normal play is possible.

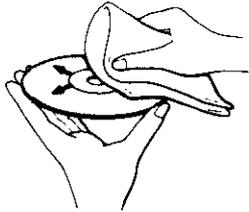
Maintenance

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 benzene.

Cleaning discs

Before playing, clean the disc with the cleaning cloth. Wipe the disc from the center out.



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

After playing, store the disc in its case.

Specifications

COMPACT DISC PLAYER

System	Compact disc digital audio system
Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$) Emission duration: continuous
Laser output	Max. $44.6 \mu\text{W}^*$ <small>* This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.</small>
Frequency response	2 Hz – 20 kHz ($\pm 0.5 \text{ dB}$)
Signal to noise ratio	More than 100 dB
Dynamic range	More than 88 dB
Harmonic distortion	Less than 0.05% (1 kHz)
Channel separation	More than 95 dB (1 kHz)
Wow and flutter	Below measurable limit
Outputs	LINE OUT (phono jacks) Output level 2 V (at 50 kilohms) Load impedance over 10 kilohms HEADPHONES (stereo phone jack) (CDP-C50 only) Output level 0 – 2.4 mW (variable) (at 32 ohms)

General

Power requirements	120 V AC, 60 Hz
Power consumption	12 W
Dimensions	Approx. 430 × 110 × 385 mm (w/h/d) (17 × 4 ³ / ₈ × 15 ¹ / ₄ inches) not including projecting parts and controls
Weight	Approx. 5.7 kg (12 lbs 10 oz), net

REMOTE COMMANDER (supplied only for the CDP-C50)

Remote control system	Infrared control
Power requirements	3 V DC with two size AA (R6) batteries
Dimensions	Approx. 61 × 20 × 150 mm (w/h/d) (2 ¹ / ₂ × 1 ³ / ₁₆ × 6 inches)
Weight	Approx. 110 g (4 oz) including batteries

SUPPLIED ACCESSORIES

Audio signal connecting cord	(phono plug × 2 ↔ phono plug × 2) (1)
CDP-C50 only:	
Sony SUM-3 (NS) batteries	(2)

Design and specifications subject to change without notice.

Troubleshooting Guide

The following checks will assist in the correction of most problems which you may encounter with your unit. Should any problem persist after you have made these checks, consult your nearest Sony service facility. Before going through the check list below, first refer back to the connection and operating procedures.

Trouble	Causes	Remedy
No audio from one or both channels	Incorrect operation of the amplifier	Operate correctly.
	Loose connection	Connect the cords firmly.
Play does not begin.	No disc in the disc compartment	Put disc(s) in the compartment.
	The player is in the pause mode.	Press ► (or on the remote commander) to release pause.
	Moisture condensation	Leave the player turned on for about an hour.
	The disc is set upside down.	Set the disc with the label side up.
	The disc is tilted.	Set the disc correctly.
	The disc is extremely dirty.	Clean the disc.
Discs cannot be played continuously.	Play did not start from the disc in the DISC 1 tray.	Press DISC SELECT 1 to start play.
Remote commander does not operate the unit.	The batteries are exhausted.	Replace both batteries.
	The remote commander is not pointed at the remote control sensor.	Point the remote commander to 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.
Any operation is not possible.	The internal control program may not run.	Turn OFF the power and turn it ON again.