

SONY[®]

COMPACT DISC PLAYER

COMPACT
disc
DIGITAL AUDIO

CDP-620ES II

OPERATING INSTRUCTIONS

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



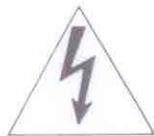
OWNER'S RECORD

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-620ESII Serial No. _____

WARNING

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



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.

For the customers in Canada

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

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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 is not to be used for an extended period of 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 installation

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

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 lenses 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 to evaporate the moisture.

On operation

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

On 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.

On repacking

Do not throw away the carton and the packing material. They make an ideal container to transport the unit in. When shipping the unit for repair work or to another location, repack it as illustrated on the carton box.

For the customers in USA

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.

FUNCTION OF CONTROLS

Refer to the pages indicated in ● for details.

Front panel

Direct selection buttons

Select the desired selection directly by number.

Display window

▲ OPEN/CLOSE button 8 9

Disc compartment

Place a compact disc here.

POWER switch

TIMER switch 11

Slide to play back when using the timer available optionally.

HEADPHONES jack (stereo phone jack)

Remote sensor (for remote control)

Picks up the infrared transmitting signal from the supplied remote commander.

REPEAT programming buttons 14

TIME (elapsed or remaining time) button 15

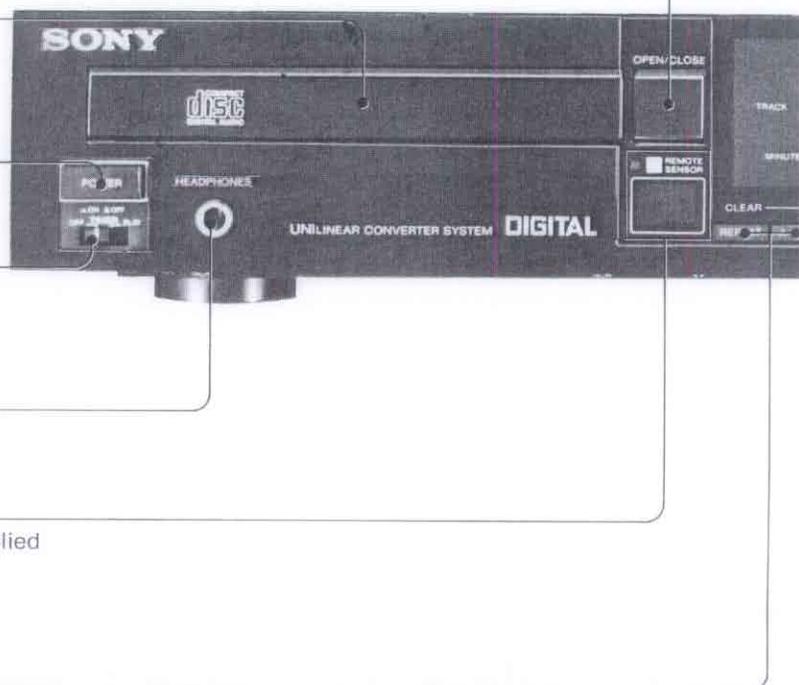
Shows the elapsed time, the remaining time on both the selection being played and the whole disc.

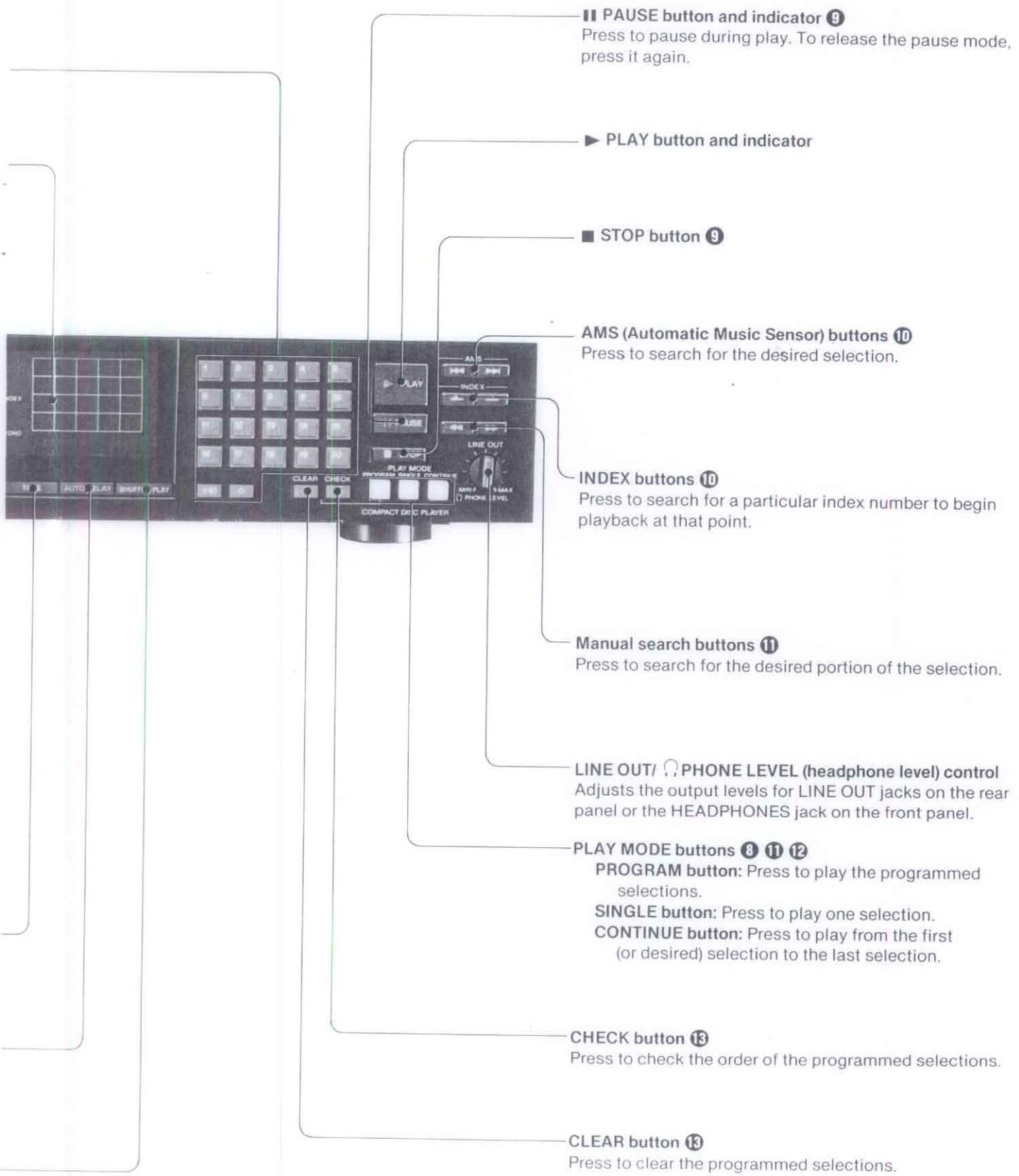
AUTO DELAY button 15

Inserts two seconds of blank space before the beginning of each selection.

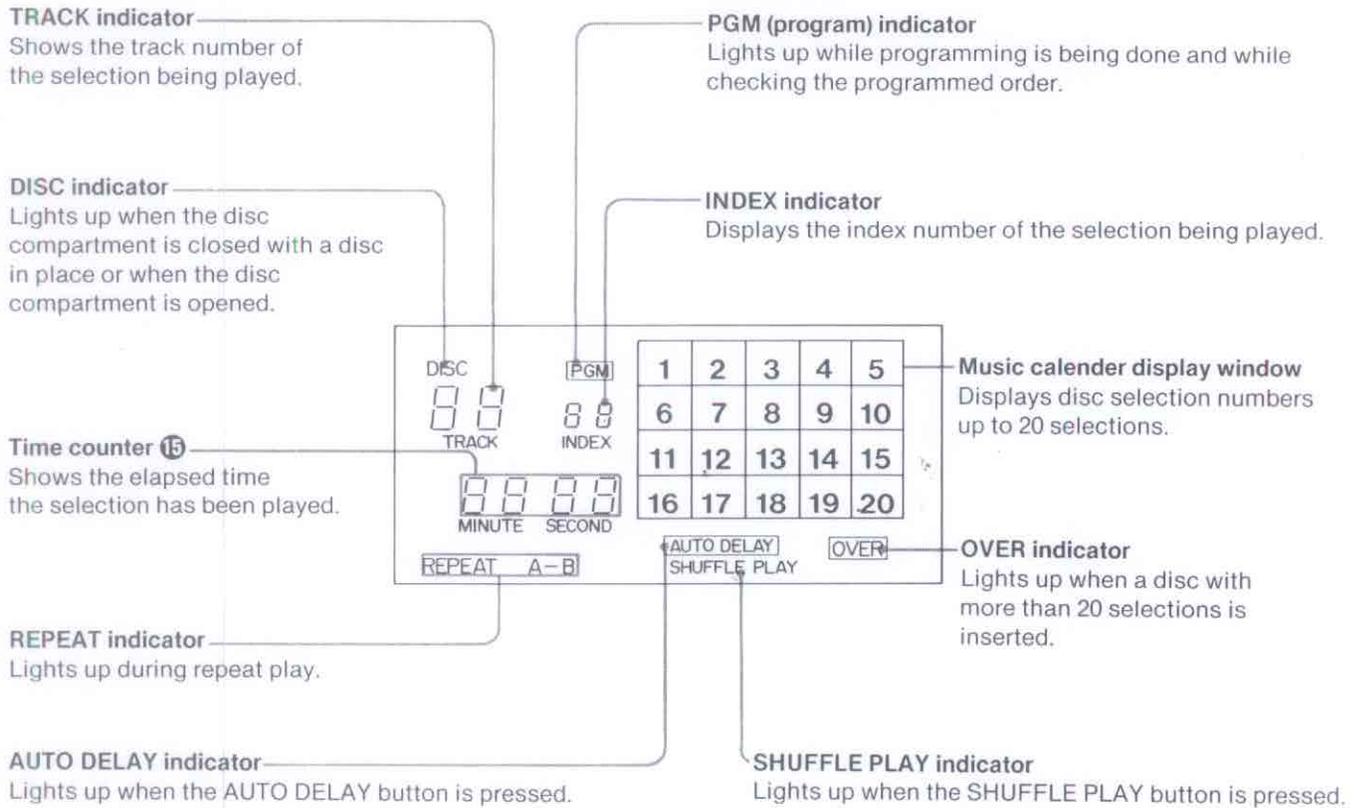
SHUFFLE PLAY button 15

Press to play selections in a random order.

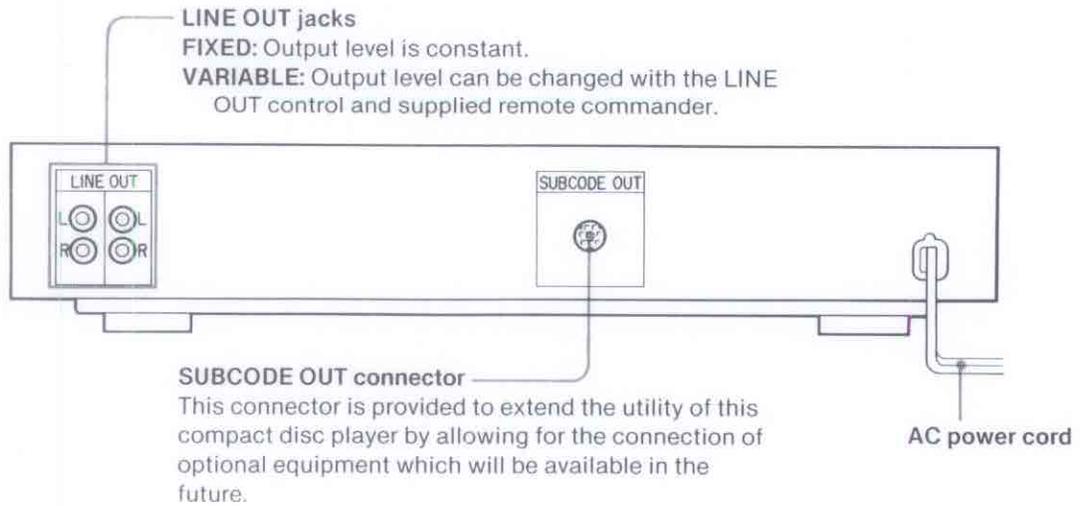




Display window



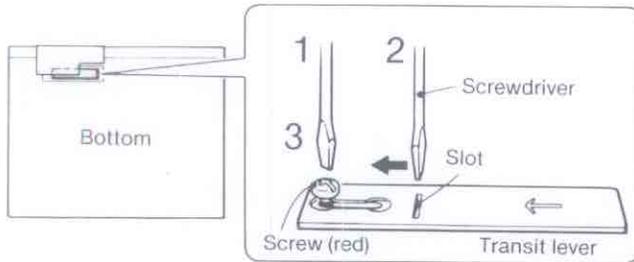
Rear panel



NOTE FOR A TRANSIT LEVER

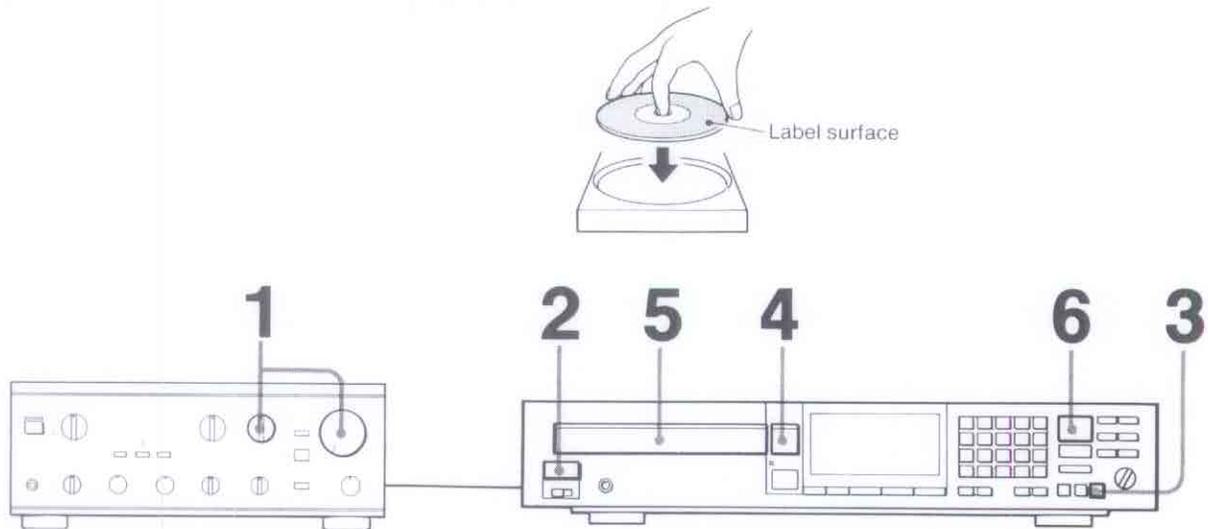
A transit lever is provided at the bottom of the unit to protect the optical system against shock during transportation.

Before operating the CD player, be sure to move the lever in the direction of the arrow and secure it.



- 1 Loosen the screw (red) with the screwdriver.
- 2 Insert the screwdriver into the slot in the lever and move it in the direction of the arrow until it stops.
- 3 Tighten the screw.

When transporting the unit again, move the lever in the opposite direction of the arrow and secure it with the screw.



TO PLAY

- 1 Turn on the amplifier and set the input selector to the CD player position.
- 2 Depress the POWER switch (ON).
- 3 Press the CONTINUE button.
- 4 Press the OPEN/CLOSE button. The disc compartment opens.
- 5 Put the disc in the disc compartment **with the label surface up**.
- 6 Press the PLAY button. The compartment closes and play begins from the beginning of the disc.

When the player reaches the end of the last selection of the disc, it is automatically reset to the beginning of the disc and stands by. TRACK indicator displays 0.

To check the total number of selections and total playing time, press the OPEN/CLOSE button or the compartment itself when closing the disc compartment. They are displayed for a few seconds.

If you press the PAUSE button when the compartment is open, the compartment will close and the disc will pause at the beginning of the first selection.

Notes

- The numbers for selections past the 20th will not be displayed in the music calendar display window, but only on the TRACK indicator.
- The MINUTE: SECOND display preceded by a minus sign which appears between selections indicates the blank time between selections.

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.

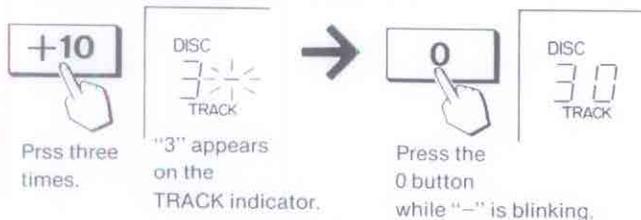
To play from a particular selection

Press the desired direct selection button.
The selected number is displayed in the display window and the play begins.

To play with number 21 or higher

- 1 Press the +10 button to select the tens-digit of the selection number.
- 2 Press the 0 button or the direct selection button to select the ones-digit of the selection number.

Example: To play from the 30th selection



Example: To play from the 26th selection



Or, press the +10 button once, then press the 16 button.

Note

When the disc compartment is open, you can select a number that is higher than the number of selections available on the disc. But when you press the ► PLAY button, the track indicator displays "1" and playback begins from the beginning of the disc.

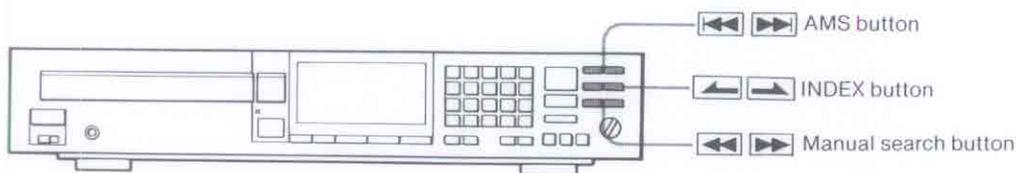
TO STOP DURING PLAY

Press the ■ STOP button.
The player will be reset to the beginning of the disc.

To stop and open the compartment
Press the ▲ OPEN/CLOSE button.

To pause for a moment during play
Press the || PAUSE button.
The || indicator will light up.
To restart play, press the || PAUSE button again.

SEARCH OPERATION



TO SEARCH FOR A PARTICULAR SELECTION —AMS (automatic music sensor) function

Using the \lll or \ggg button during play or pause, you can quickly locate a desired selection ahead or back.

To search for the beginning of the selection being played	Press the \lll button	once
To search for the previous selection		continuously
To search for the beginning of the next selection	Press the \ggg button	once
To search for the selection ahead		continuously

If you press the \lll or \ggg button after the first or last selection is located, the TRACK indicator will not change.

TO START PLAYBACK FROM A PARTICULAR SECTION—Index search

On some discs, the index numbers divide the selections into sections, such as chapters in a book or movements in a symphony.

To search for the beginning of the current index number	press the \leftarrow button	once
To search for the lower index number		continuously
To search for the next index number	press the \rightarrow button	once
To search for the higher index number		continuously

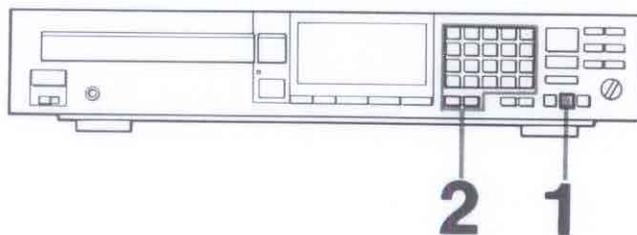
The selected index number is displayed in the INDEX indicator.

Notes

- When you have selected an index number which is not recorded on the disc, playback starts from the section with the highest index number.
- When you select the index number on a disc on which index numbers are not recorded, playback starts from the beginning of the selection.

TO PLAY ONE SELECTION ONLY

—SINGLE mode play



TO SEARCH FOR A PARTICULAR POINT IN A SELECTION—Manual search

Using the manual search buttons, you can locate a particular point of a selection during play or pause.

To go back at a high speed	Press or hold down the ◀◀ button
To go ahead at a high speed	Press or hold down the ▶▶ button

Release the button at the desired point found by observing the timer counter or monitoring the high-speed sound (only during play).

In the pause mode, the search speed is increased by three times.

What are these indications?



This appears if you continuously press the ▶▶ button at the end of the disc.

To return to the track indication, press the ◀◀ or ◀ button.



This appears if you continuously press the ◀◀ button at the beginning of the disc.

1 Press the SINGLE button.

2 Select the desired selection.
Playback begins.

After playback ends, the player returns to the standby mode.

To change the selection during play, press the AMS button or direct selection button.

The playback begins from the beginning of the new selection.

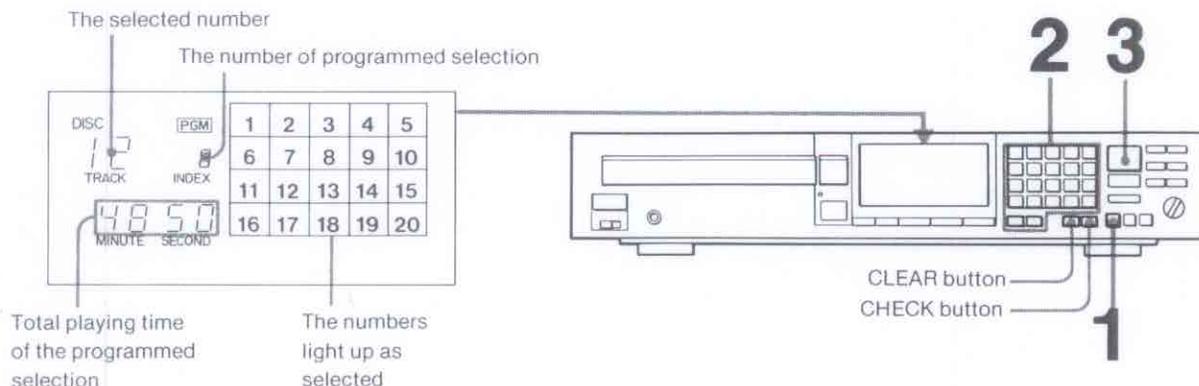
Notes

- If the ▶ PLAY button is pressed before you make a selection, the first selection of the disc will be played back.
- If you use the ▶▶ button, the unit will be in standby mode when the disc reaches the end of the selection.

TO PLAY THE SELECTIONS IN A DESIRED SEQUENCE—PROGRAM mode play

Any number of selections up to 20 can be selected and played in any order by pressing the PROGRAM button.

Display window



- 1 Press the PROGRAM button.
The PGM indicator will light up.
- 2 Press the direct selection buttons in the desired order.
The selected number will be displayed in the track indicator and the ► PLAY indicator will flicker.
- 3 Press the ► PLAY button.
Play begins in the order you have programmed.

When program play begins, the PGM indicator goes out. The INDEX indicator which displays the number of programmed selections returns to the first index number.

When a selection ends, its number disappears from the music calendar and the selection is also erased from the program memory.

To go ahead to the next programmed selection, press the ►► button.

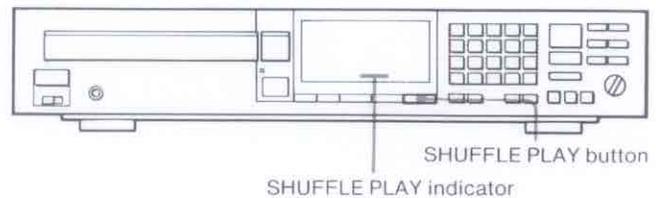
You cannot return to the previous selection even if you press the ◀◀ button continuously.

- Selections can be programmed even after play begins by pressing a direct selection button. Also, the same selection can be programmed to repeat.
- You can program even without the disc inserted. The total playing time is displayed when the disc is inserted.

Notes

- Three seconds of blank space are inserted automatically between selections except when the consecutive selections (ex. 4th - 5th) are played.
- When the PROGRAM button is pressed during CONTINUE play, the player goes into the program mode and play only the selection being played.
- The total playing time is not displayed if the selection numbered 21 or higher is programmed, instead the display shows "-----". Although the music calendar display window only shows the first 20 selections of the disc, they are all programmed.

TO PLAY THE SELECTIONS IN A RANDOM ORDER—SHUFFLE PLAY



TO CHECK THE PROGRAMMED SELECTIONS

Press the CHECK button.

With each press, the selection number and its order are displayed in the display window.

When the last selection is displayed, "End" mark will appear in the time counter. After all programmed selections are displayed, the original display appears.

- If the CHECK button is pressed continuously, the original display appears after 4 seconds.
- When selections after the 20th are being checked, the track number and program order number are displayed, but there is no display in the music calendar.
- The CHECK button also works during play.

TO CLEAR THE PROGRAMMED SELECTIONS

To clear the selection which was programmed last

Press the CLEAR button during the programming process. With each press, the selections will be cleared in the order from the last selection programmed.

To clear the selection only you want

1 Press the CHECK button to display the number you want to clear during programming or playing.

2 Press the CLEAR button.

Repeat these steps to clear any selection.

To clear all of the programmed selection

Press the ■ STOP button once during programming process, the ■ STOP button twice during playback or the ▲OPEN/CLOSE button.

Press the SHUFFLE PLAY button.

SHUFFLE PLAY indicator lights up and each selection is played once in a random order.

To release

Press the SHUFFLE PLAY button again to return to the CONTINUE play mode or press the ■ STOP button to reset the unit to the standby mode.

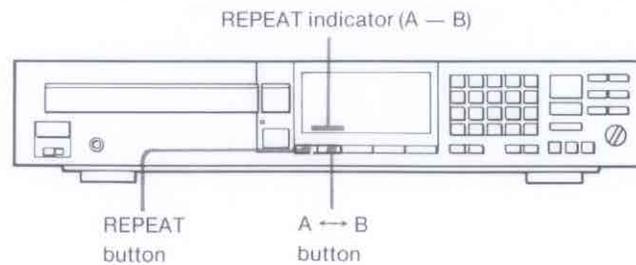
After playing a selection, its number disappears from the music calendar.

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

You cannot return to the previous selection.

- Even on discs with 21 or more selections, all of the selection can be shuffle played.
- Shuffle play is released if a direct selection button (1-20) is pressed, and the unit will change to the CONTINUE mode. When the SINGLE or PROGRAM button is pressed, shuffle play is also released.
- Shuffle play does not operate if the disc compartment is open.

REPEAT PLAY



TO REPEAT THE SELECTION BEING PLAYED

Press the REPEAT button during the SINGLE mode play. The REPEAT indicator will light up.

When the disc reaches the end of the selection, it will automatically go back to the beginning of the selection and play will restart.

TO REPEAT THE WHOLE DISC

Press the REPEAT button during the CONTINUE mode play. The REPEAT indicator will light up.

When the disc reaches the end of the last selection, it will automatically go back to the beginning of the first selection, and play will restart.

TO REPEAT PROGRAM MODE PLAY OR SHUFFLE PLAY

Press the REPEAT button during PROGRAM mode play or shuffle play. The REPEAT indicator will light up.

All programmed selections will be repeated in the PROGRAM mode or the whole disc will be repeated during the shuffle play.

- During shuffle play, it is impossible to repeat only one selection.
- Each time shuffle play is repeated, the selections are reshuffled.

TO PLAY BETWEEN TWO PARTICULAR POINTS REPEATEDLY (A ↔ B REPEAT)

- 1 Press the A ↔ B button at the starting point of the repeat play (point A). The REPEAT and A - indicators in the display window start flickering.
- 2 Locate the stopping point of the repeat play (point B) by pressing ►► button or ►► button.
- 3 Press the A ↔ B button again. The A ↔ B indicator lights up steadily showing the point B is memorized.

When the disc reaches the point B, it will go back to the point A and play will restart.

If the ► PLAY button is pressed during the A ↔ B repeat play, the disc will go back to the point A.

Note

When A and B points are in different selections, the A ↔ B repeat play can work only in the CONTINUE mode.

MORE ABOUT A ↔ B REPEAT FUNCTION

To play from a desired point (memory play)

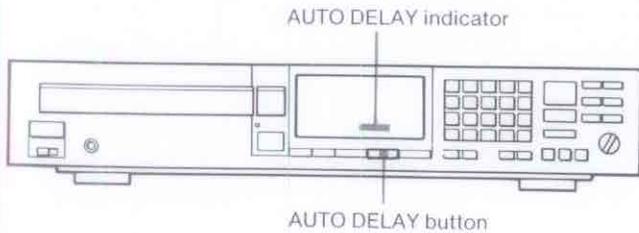
- 1 At the point from which you wish to listen later (point A), press the A ↔ B button.
- 2 When you press the ► PLAY button, the disc will go back to the point A and play will restart.

To cancel the point A, press the REPEAT button.

TO CANCEL REPEAT PLAY

Press the REPEAT button again or ■ STOP button.

AUTO DELAY FUNCTION



The unit leaves two seconds of blank space before the selection so that there will be a short pause between the time the operation button is pressed and the time the selection begins.

To activate the auto delay function

Press the AUTO DELAY button in any mode.

To cancel, press the AUTO DELAY button again.

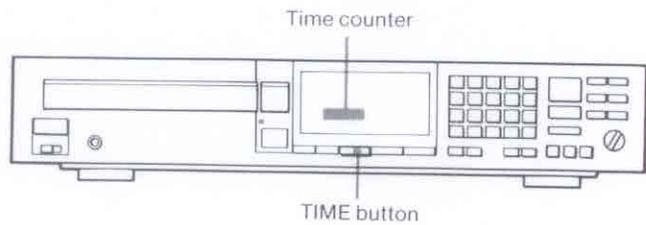
MEMORY BACK UP FUNCTION

Even if you turn the unit off, the unit will keep the following information in its memory for three days:

- which play mode the unit is in — CONTINUE, PROGRAM or SINGLE
- the sequence of selections memorized in the program mode
- which auto delay mode is on or off
- which repeat mode the unit is in (except for the A ↔ B repeat mode)

The power must have been kept on for at least two minutes if the unit is to be capable of memorizing the above information.

USING THE TIME COUNTER



Generally, the time counter shows the elapsed playing time from the beginning of the selection in minutes and seconds. When a new selection starts, the counter is reset to "0.00" and then starts counting time again.



Shows 5 minutes 30 seconds have elapsed from the beginning of the third selection

When a selection numbered 21 or higher is played, the time counter displays " - - - - - " indication. (The " - - - - - " shows no indication of the time.)

TO MONITOR THE REMAINING PLAYING TIME

Press the TIME button once.

The remaining time of the selection being played is displayed.

Press the TIME button twice.

The counter shows as follows.

Mode	Display
CONTINUE mode	total remaining playing time of the whole disc
SINGLE mode	the remaining playing time of the selection being played.
PROGRAM mode	the total remaining playing time of the selections programmed.

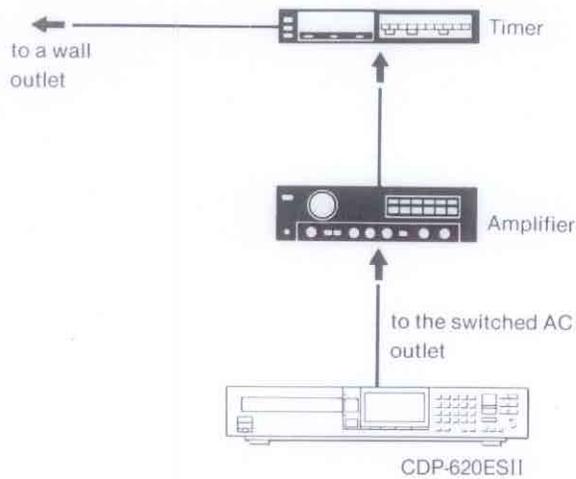
To return to the original display, press the TIME button again.

Notes

- When the selection numbered 21 or higher is played or programmed, the time counter displays " - - - - - ".
- The TRACK and INDEX indicators disappear when you press the TIME button second time.
- The total remaining time of the whole disc is not displayed during the shuffle play. (- - - - - is displayed)

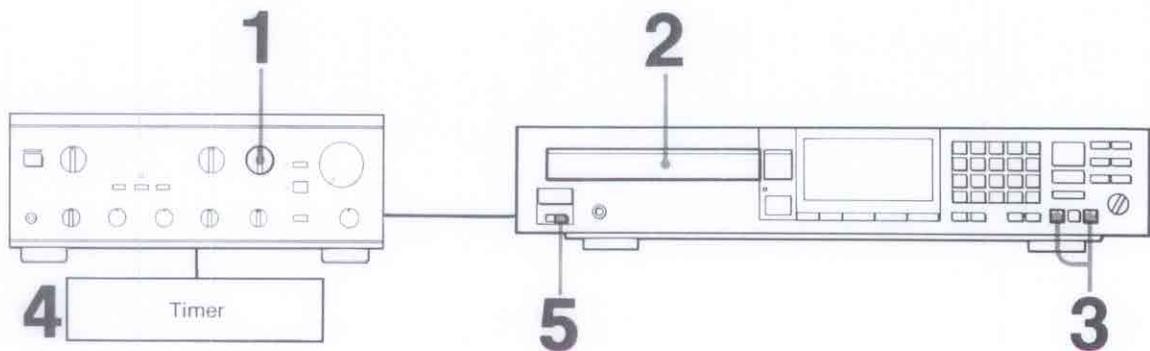
TIMER-ACTIVATED PLAY

By connecting a commercially available timer, a compact disc can be played at any time desired.



TO PLAY USING A TIMER

Be sure to set the TIMER switch of the unit to OFF and turn on the power switches for the equipment to be activated by the timer.



- 1** Set the input selector of the amplifier to the appropriate position.
- 2** Insert a disc.
- 3** Set the PLAY MODE switches to CONTINUE or PROGRAM.
Select the desired selections in the PROGRAM play mode.
- 4** Set the timer for the desired time.
Power will be cut off.
- 5** Set the TIMER switch of the unit to PLAY.
Playback begins at the time set.

Notes

- When you set the SINGLE mode, only the first selection is played.
- Shuffle play cannot be activated using a timer.

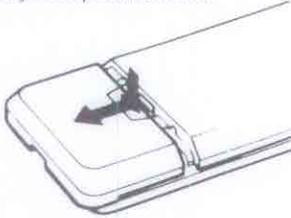
Be sure to set the TIMER switch of the unit to OFF after the timer-activated play has been completed.

REMOTE CONTROL OPERATION

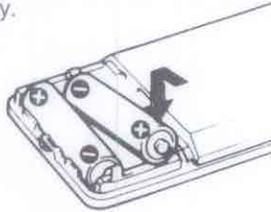
Once the POWER switch is turned on, you can remotely control various functions of the CDP-620ESII with the RM-D502 remote commander (supplied).

BATTERY INSTALLATION

1 Open the battery compartment lid.



2 Insert two size AA batteries (IEC designation R6) with correct polarity.



Notes on the batteries

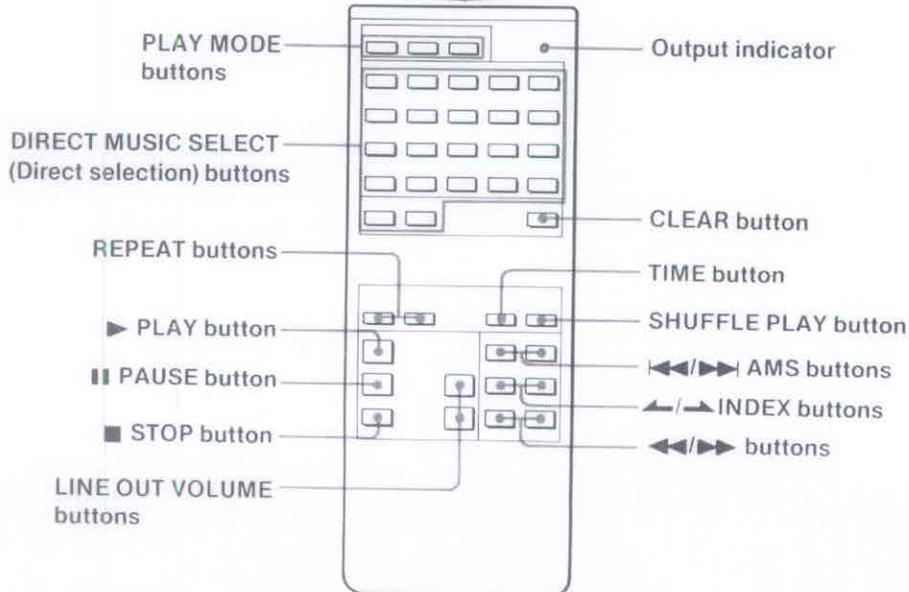
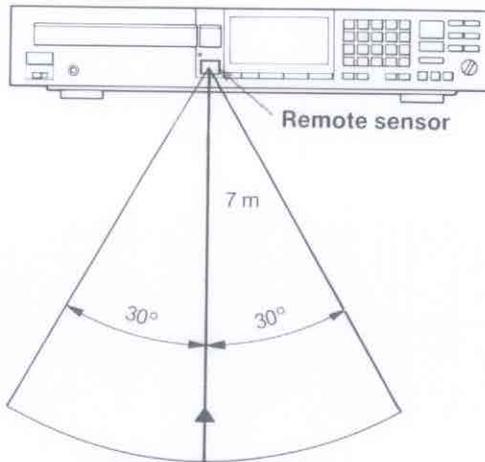
- In normal operation, battery life is up to half a year. When the battery is exhausted, the remote commander will not operate the unit. In this case, replace the batteries with new ones.
- When the commander is not to be used for a long period of time, remove the batteries to avoid damage from possible battery leakage.

Notes on the remote control

- Keep the commander away from extremely hot or humid places.
- Avoid dropping any foreign objects into the commander cabinet, particularly when replacing batteries.
- To avoid a malfunction, do not simultaneously depress two or more buttons.

HOW TO USE THE REMOTE COMMANDER

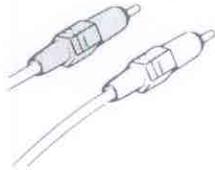
The functions of the remote commander buttons are the same as the CDP-620ESII.



CONNECTIONS

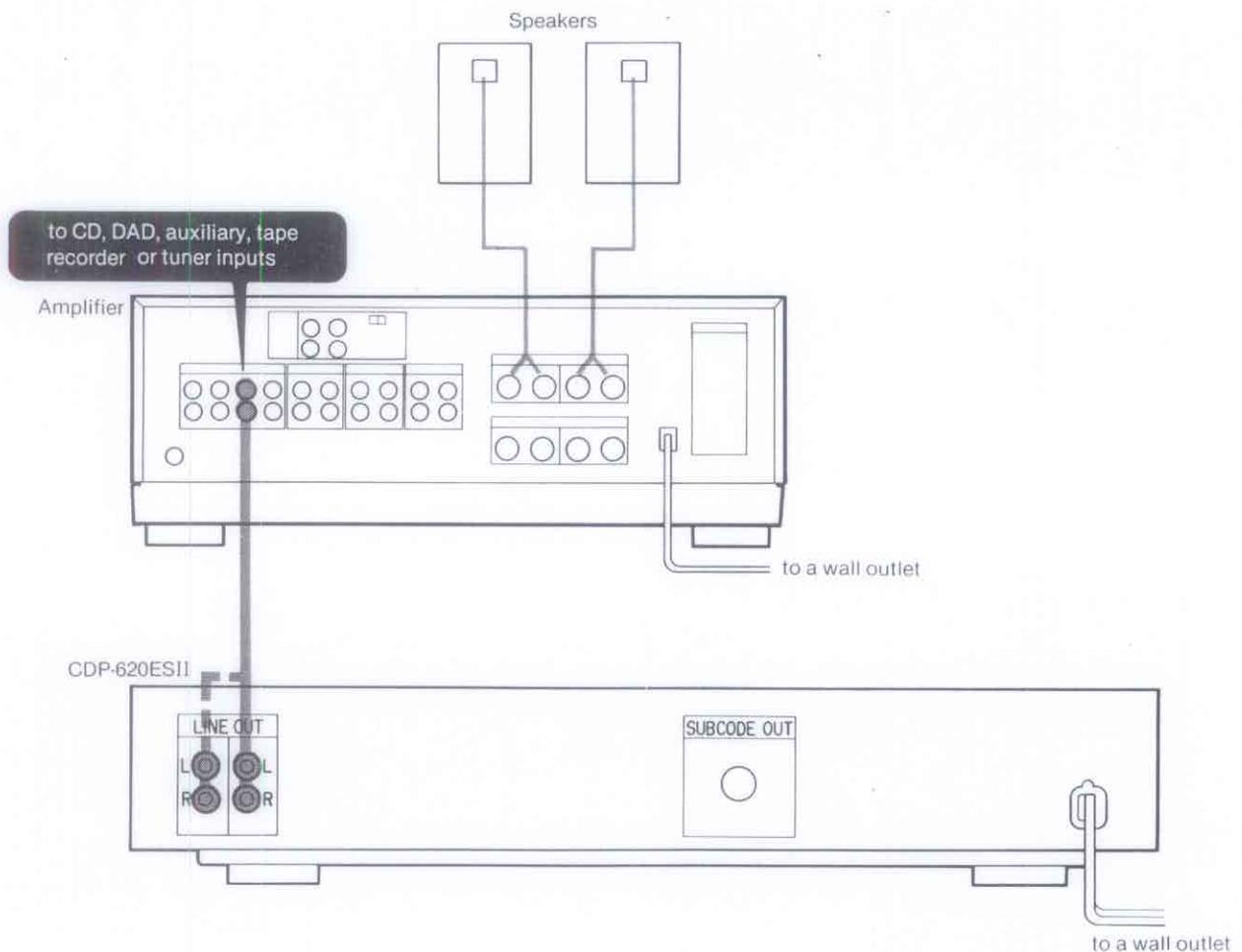
BEFORE CONNECTIONS

Audio signal connecting cord



- **Turn off the amplifier before making connections.**
- Be sure to insert the cable connectors firmly into the jacks. Loose connections may cause hum and noise.
- 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.
- Be sure not to connect the CD player to the PHONO input jacks of the amplifier.
- If the CD player causes interference to radio and television reception, turn off the player or move the player away from the receiver.

CONNECTING DIAGRAM

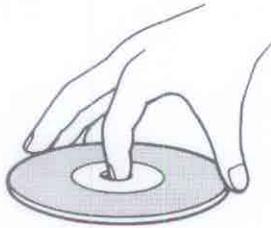


Power cord

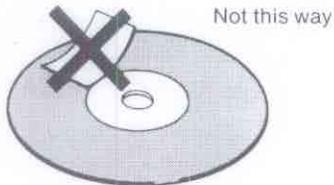
A white mark is visible on one lead of the power cord. This will help you drive the CD player and other components in the system "in phase" by aligning the ac power cord polarities with ac outlet polarities. In most cases, the marked plug of the CD player's power cord should be inserted into the negative potential of the ac outlet.

NOTES ON COMPACT DISCS

Handle the disc by its edge, and to keep the disc clean, do not touch the rainbow colored surface.

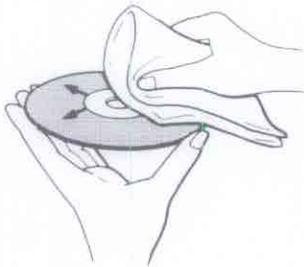


Do not stick paper or tape on the labeled surface.



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.

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.

FEATURES

- High performance and high fidelity.
- Feather-touch function buttons for direct mode change.
- Linear motor for quick selection search.
- A variety of playing modes: CONTINUE mode, PROGRAM mode and SINGLE mode.
- Index function for quick location of the part you want.
- Repeat function for one selection, the whole disc, programmed selections, selections with random order or a particular portion.
- Auto delay function allows you to delay the playback of the first selection 2 seconds.

SPECIFICATIONS

COMPACT DISC PLAYER CDP-620ESI

System	Compact disc digital audio system
Disc	Compact disc
Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$)
Laser output	Max. 0.4 mW* * This output is the value measured at a distance of about 1.6 mm from the objective lens surface on the Optical Pick-up Block.
Spindle speed	200 r.p.m. to 500 r.p.m. (CLV)
Scan velocity	1.2 - 1.4 m/sec.
Error correction	Sony Super Strategy Cross Interleave Reed Solomon Code
Number of channels	2
D-A conversion	16-bit linear
Frequency response	2 - 20,000 Hz \pm 0.3 dB
Harmonic distortion	Less than 0.0025% (1 kHz)
Dynamic range	More than 96 dB
Channel separation	More than 95 dB (1 kHz)
Wow and flutter	Below measurable limit
Outputs	- Line outputs - FIXED (phono jacks) Output level 2 V rms (at MSB) Load impedance over 10 kilohms - VARIABLE (phono jacks) Max. output level 2 V rms (at MSB) Load impedance over 50 kilohms Headphones (stereo phone jack) 28 mW at 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	120 V AC, 60 Hz
Power consumption	16 W
Dimensions	Approx. 430 \times 85 \times 335 mm (w/h/d) (17 \times 3 $\frac{3}{8}$ \times 13 $\frac{1}{4}$ inches) including projecting parts and controls
Weight	Approx. 8.5 kg (18 lbs, 12 oz), net

REMOTE COMMANDER RM-D502

Remote control system	Infrared control
Power requirements	3 V dc with two size AA batteries (IEC designation R6)
Dimensions	Approx. 67 \times 18 \times 175 mm (w/h/d) (2 $\frac{3}{4}$ \times $\frac{3}{4}$ \times 7 inches) incl. projecting parts and controls
Weight	Approx. 145 g (5.1 oz) incl. batteries

SUPPLIED ACCESSORIES

- Audio signal connecting cord (phono plug \times 2 \leftrightarrow phono plug \times 2) (1)
- Sony New Super batteries SUM-3 (NS) (2)
- Remote commander (1)

Design and specifications subject to change without notice.

TROUBLE CHECKS

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.

Play does not begin

- The **||** PAUSE button is engaged.
- Moisture condensation (see page 3).
- The disc is inserted with the labeled surface downwards.
- The disc is incorrectly inserted.

No audio from one or both channels.

- Incorrect connections.

Play begins as soon as the POWER switch is turned on.

- The TIMER switch is set at PLAY.

The sound volume is too low.

- The VARIABLE LINE OUT jack is used.