

**SONY**<sup>®</sup>

COMPACT DISC PLAYER

# CDP-102

## OPERATING INSTRUCTIONS

Before operating the unit, please read this manual thoroughly.

This manual should be retained for future reference.

**COMPACT**  
**disc**  
**DIGITAL AUDIO**



## OWNER'S RECORD

The model and serial numbers are located on 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-102

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.

### DANGER

Invisible laser radiations when open.  
Avoid direct exposure to beam

\*This label is located on the left side of the unit.

### CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

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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## FEATURES

With the CDP-102, flat frequency response (2 - 20,000 Hz), low wow and flutter (lower than the measurable limit), wide dynamic range (more than 96 dB), minimal distortion (0.003%) and high channel separation (more than 95 dB) are achieved. Listening to the sound reproduction of your CDP-102 is just like being in the concert hall.

### Quick operation

- Feather-touch function keys for direct mode change.
- Linear motor for quick selection search.

### Various functions

- AMS (Automatic Music Sensor) for quick selection location.
- Index function for quick location of the part you want.
- Full repeat functions for one selection, the whole disc and a particular portion.
- Large and easy-to-read digital display for elapsed playing time and remaining playing time.

### Various remote control functions

- Remote commander RM-D302 supplied.
- Optional Sony ST-V77 FM stereo/FM-AM system control tuner can be connected for total audio system control.

## PRECAUTIONS

### On safety

- Operate the unit only on 120V 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 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 slightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzene.

### 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.

### For the customers in the 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.

## NOTES ON MOISTURE CONDENSATION

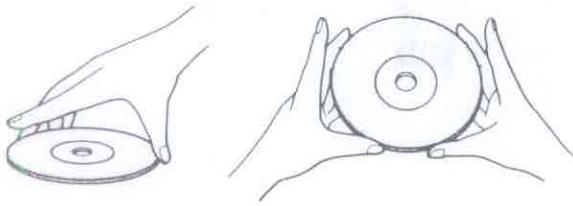
If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the unit.

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.

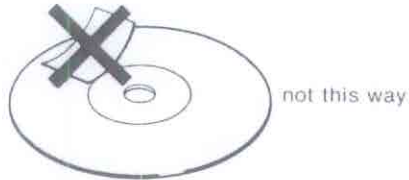


## NOTES ON COMPACT DISCS

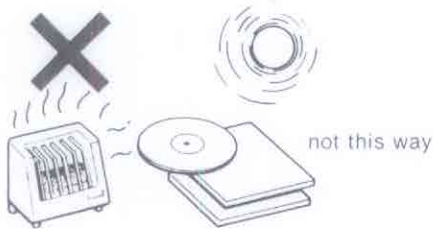
Handle the disc by its edge, and to keep the disc clean, do not touch the rainbow colored surface.



Do not stick paper or tape on the labeled surface.

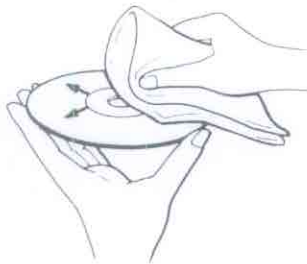


Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight where there can be a considerable rise in the temperature.



Before playing, clean the disc with the supplied cleaning cloth.

Wipe the disc from the center out.

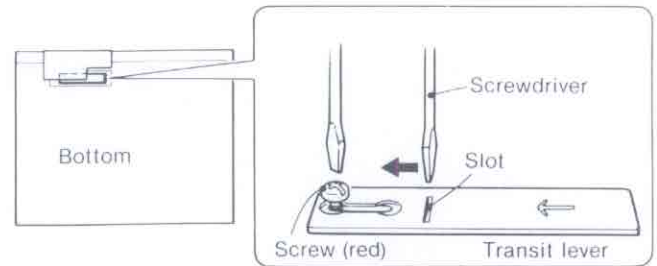


Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for analog discs.

After playing, store the disc in its case.

## PREPARATION

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.



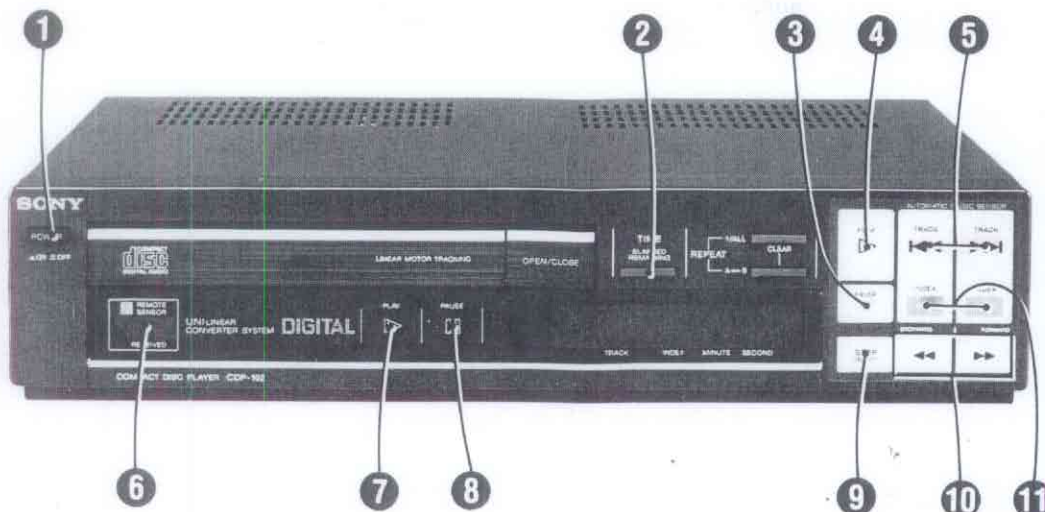
- 1 Loosen the screw (red) with the screwdriver.
- 2 Insert the screwdriver into the slot in the lever and move it in the direction of the arrow until it stops.
- 3 Tighten the screw.

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

# LOCATION AND FUNCTION OF CONTROLS

Before plugging in or attempting to operate this unit, it is suggested that you familiarize yourself with all its switches and controls and the purpose of each.

Each number in the photo is keyed to the descriptive text.



## 1 POWER switch

Depress to turn on the power (ON). To turn the power off, press the switch again (OFF).

## 2 ELAPSED/REMAINING TIME button

The time counter normally indicates elapsed time. When this button is pressed, the time counter shows the time remaining before the end of the last selection, preceded by a minus sign. When this button is pressed a second time, the time counter reverts to the elapsed time.

## 3 II PAUSE key

Press to pause during play. The II indicator 8 will illuminate. To release the pause mode, press this key again. The indicator will go off and disc play will resume.

## 4 ► PLAY key

Press to start normal disc play. The ► indicator 7 will illuminate.

## 5 AUTOMATIC MUSIC SENSOR keys

◀◀ (back selection) : Press to go back to a previous selection.

▶▶ (forward selection): Press to skip ahead to a later selection.

## 6 REMOTE SENSOR and indicator (for remote control)

The infrared beam transmitted by the supplied remote commander is received here. The indicator blinks to indicate that a function key of the remote commander has been pressed.

## 7 ► PLAY indicator

When the ► PLAY key is pressed, this indicator illuminates.

## 8 II PAUSE indicator

When the II PAUSE key is pressed, this indicator illuminates.

## 9 STOP (RESET) key

When this key is pressed, disc play is reset to the very beginning of the first selection and the player stands by.

## 10 Manual search keys

Keep the appropriate key pressed to search for a particular point on the disc during either play or pause. You can monitor the disc sound reproduced in forward or in reverse at a high speed while searching during play. When you release this key, normal-speed play will resume (during play) or the player will return to the pause mode (during pause).

◀◀ : To go backwards at a high speed (several times higher than the normal playing speed).

▶▶ : To skip ahead at a high speed (several times higher than the normal playing speed).

In the pause mode, the search speed is tripled.

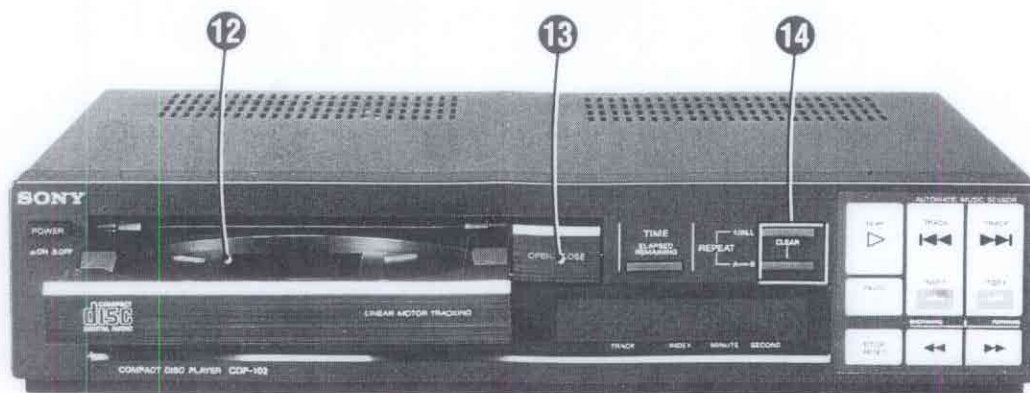
## 11 INDEX keys

Press one of these keys to search for a particular index number so that playback can begin at that point.

Index numbers will be displayed in the display window. When a key is pressed and immediately released, the index number will increase or decrease by one. When the key is kept depressed, the index number will change continuously.

If a key is pressed during playback of a disc on which no index numbers have been recorded, playback will begin from the beginning of the current selection.





### 12 Disc compartment

To open the disc compartment, press the OPEN/CLOSE button. Place a compact disc in the compartment. To close the disc compartment, press the compartment itself, the OPEN/CLOSE button or the ► PLAY key.

### 13 OPEN/CLOSE button

With one touch of this button the disc compartment opens for disc loading. The DISC indicator will flicker while the compartment is opening. With another touch the compartment closes.

### 14 REPEAT programming buttons

Press these buttons to program repeat play of the disc.

**1/ALL/CLEAR:** To repeat the selection currently being played, press this button once. To repeat all the selections on the disc, press the button again. To release repeat play, press the button again.

The selected repeat mode is displayed in the display window.

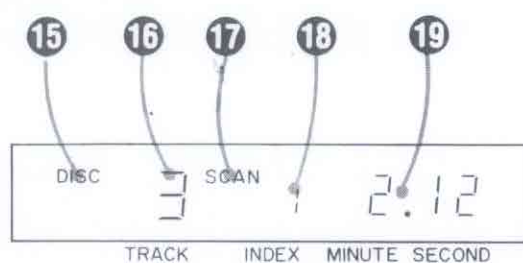
**A ↔ B:** To repeat play between specific points on the disc.

With one touch of this button the indicator in the display window flickers and the point where the button has been pressed is memorized as the "A" (start) point of repeat play.

With another touch, the indicator illuminates steadily and the point where the button has been pressed a second time is memorized as the "B" (end) point of repeat play.

When the 1/ALL/CLEAR button is pressed, this repeat play will be cancelled.

### Display window



### 15 DISC indicator

The indicator illuminates steadily when the disc compartment is moving, when the disc compartment has closed with a disc in place (in the standby mode) and during disc playing.

### 16 TRACK indicator

When the disc is placed in the disc compartment and the disc compartment is closed by pressing the OPEN/CLOSE button or the disc compartment, this indicator shows for a few seconds the total number of the selections recorded on the disc.

During play, this indicator shows the track number of the selections being played.

### 17 SCAN indicator

This indicator illuminates while the player is searching for the point on the disc you have programmed.

### 18 INDEX indicator

If index signals are recorded on the disc to allow significant parts of a program to be easily located, the index numbers are shown here.

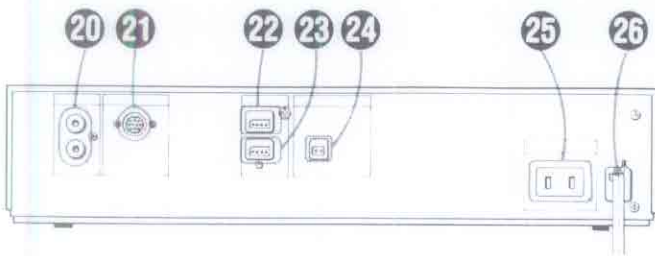
### 19 Time counter

When the disc is placed in the disc compartment and the disc compartment is closed by pressing the OPEN/CLOSE button or the disc compartment, this indicator shows for a few seconds the total playing time of the disc. During play, this time counter shows the location in a particular selection by means of actual elapsed time. When the ELAPSED/REMAINING TIME button is pressed, the time counter shows how much playing time is left on the disc. The first two digits of the counter show playing time of the selection in minutes, and the last two digits show the seconds.

## CONNECTIONS

### BEFORE CONNECTION

Rear panel



#### 20 LINE OUT jacks

These jacks can be connected to the line input jacks of an amplifier using the supplied connecting cord.

#### 21 SUBCODE OUT connector

This connector is provided to extend the utility of this compact disc player by allowing for the connection of optional equipment which will be available in the future.

#### 22 R REMOTE IN (remote control input) connector

Use this connector to remotely control the whole audio system with the optional Sony ST-V77 FM stereo/FM-AM system control tuner. For details, refer to the operating instructions of the ST-V77.

#### 23 R REMOTE OUT (remote control output) connector

Use this connector to remotely control the whole audio system with the optional Sony ST-V77 FM stereo/FM-AM system control tuner. For details, refer to the operating instructions of the ST-V77.

#### 24 FUNCTION CONTROL connector

This connector can be connected to the CD connector of the optional Sony ST-V77 FM stereo/FM-AM system control tuner.

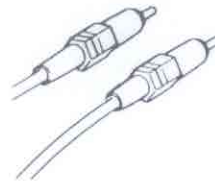
#### 25 AC OUTLET (unswitched)

An audio component with a power consumption under 100 watts can be connected to this outlet. POWER is always supplied at this outlet regardless of the POWER switch setting. Do not connect an electrical home appliance, such as an electric iron, fan, TV or any other high-wattage equipment, to this ac outlet.

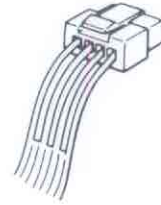
#### 26 Power cord

### CONNECTING CORDS

Audio signal connecting cord



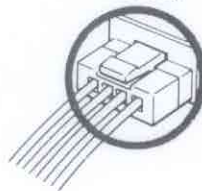
Remote control cord (4 pin)



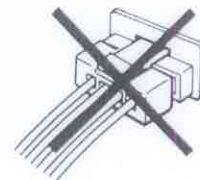
### NOTES ON CONNECTION

- 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.
- Leave a little slack in the connecting cord to allow for inadvertent shock or vibration.
- 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 power of the CD player or move the player away from the receiver.
- Be sure to insert the remote control cord securely.

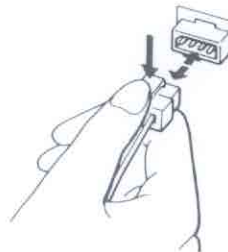
This way



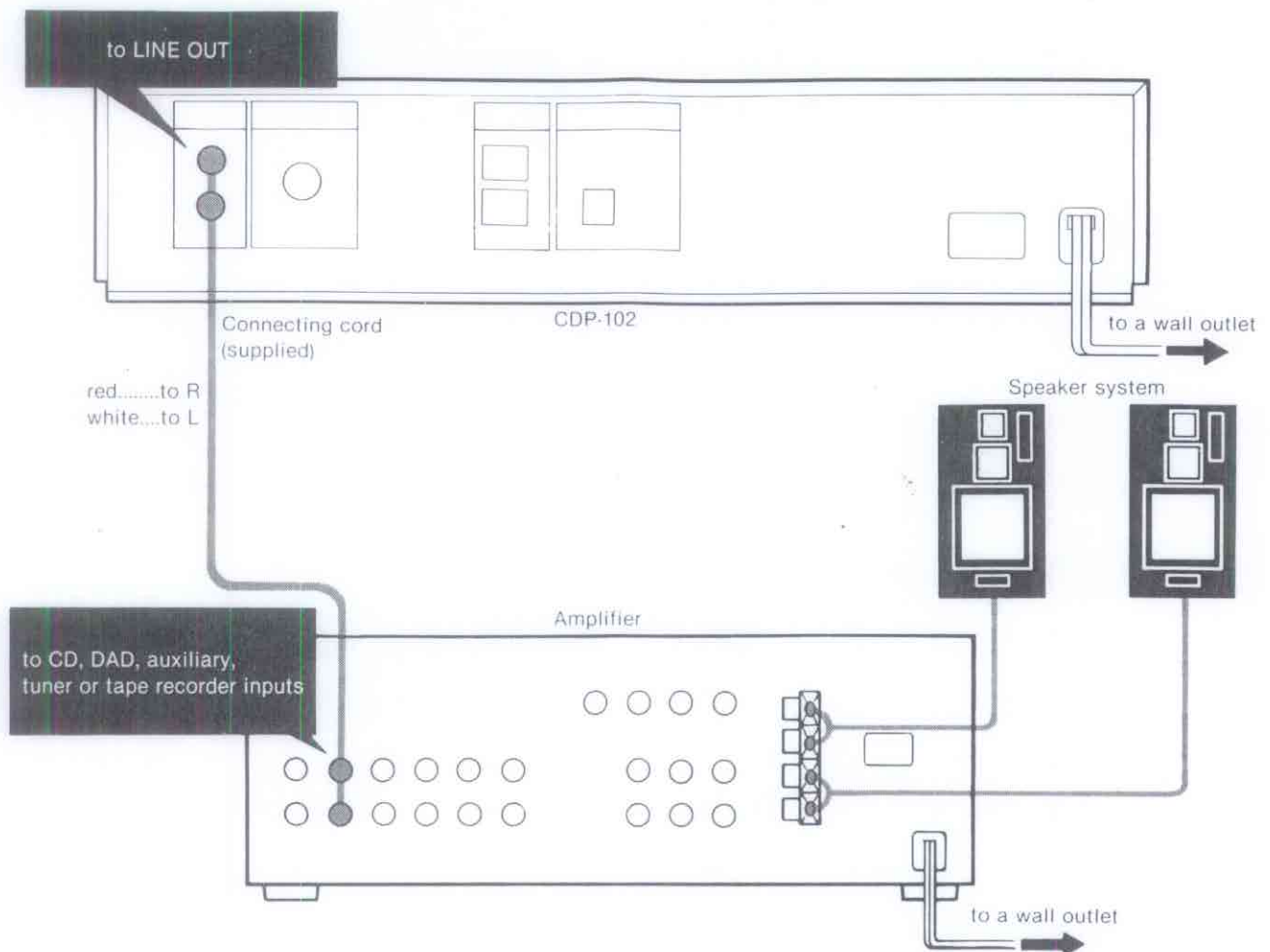
Not this way



- To disconnect the remote control cord, press the center and pull out the connector. Do not pull the cord itself.



## CONNECTION DIAGRAM



## CONNECTION IN COMBINATION WITH A SYSTEM CONTROL TUNER

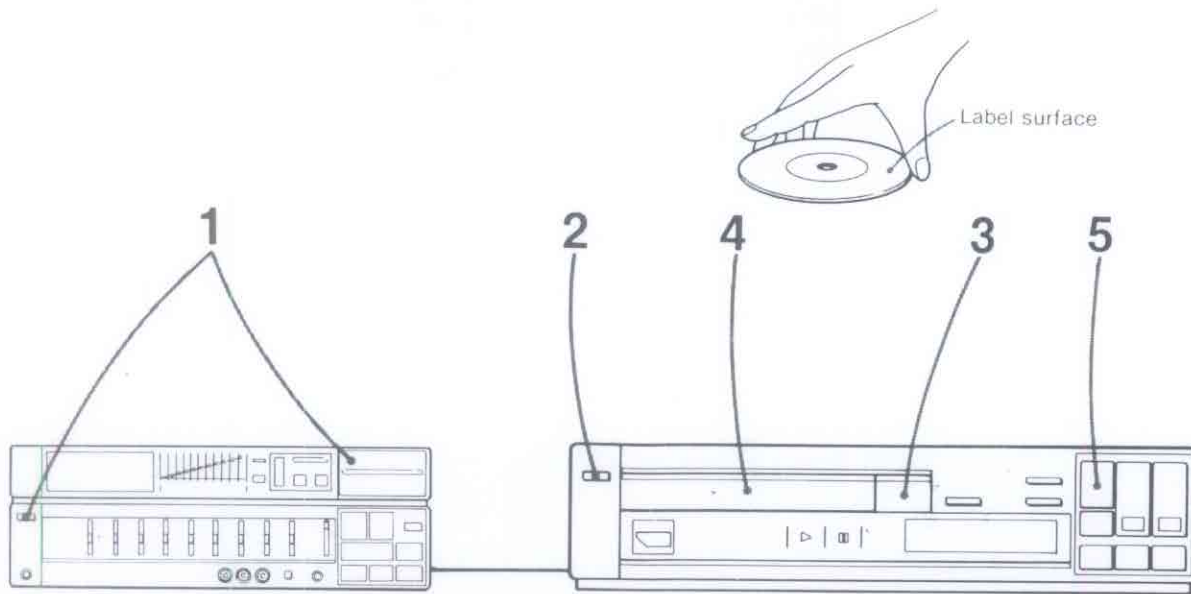
When this CD player is connected to the optional Sony ST-V77 FM stereo/FM-AM system control tuner, total system remote control and direct function\* are possible. For details, refer to the ST-V77 operating instructions.

\* With the direct function, the amplifier operation mode can automatically be changed simply by pressing the operation key of the required equipment. For example, when you want to change to listen to a compact disc during FM listening, press the ► PLAY key. The operation mode of the amplifier is automatically set to CD and CD play starts.



# DISC PLAYING

## TO PLAY



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

When the disc compartment is closed by pressing the OPEN/CLOSE button or by pressing the disc compartment itself, the total selection number and total playing time are displayed in the display window.

To select a desired selection when the compartment is open press the ►► key and then press the ► PLAY key. The compartment will close and play will begin from that selection.

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

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.

To open the compartment, press the OPEN/CLOSE button.

## TO STOP DURING PLAY

### To open the compartment

Press the OPEN/CLOSE button. The disc will stop rotating and the compartment will open.

### To pause for a moment during play

Press the ■ PAUSE key. The ■ indicator will illuminate. To release pause and restart play from the same point, press the ■ PAUSE key again.

### To reset to the beginning of the first selection

Press the STOP (RESET) key. The player will stand by.

### An important point to remember

In the CD system, a wider dynamic range is achieved than that of the conventional analog system, and the peaks of high level inputs are recorded with high-fidelity. In addition, the noise level is very low.

If you turn up the volume inadvertently while listening to a portion where no audio signals or very low level inputs are recorded, the speakers may be damaged when the portion with peak levels is played.

# SEARCH OPERATION

## TO SEARCH FOR A PARTICULAR SELECTION—AMS (Automatic Music Sensor) function

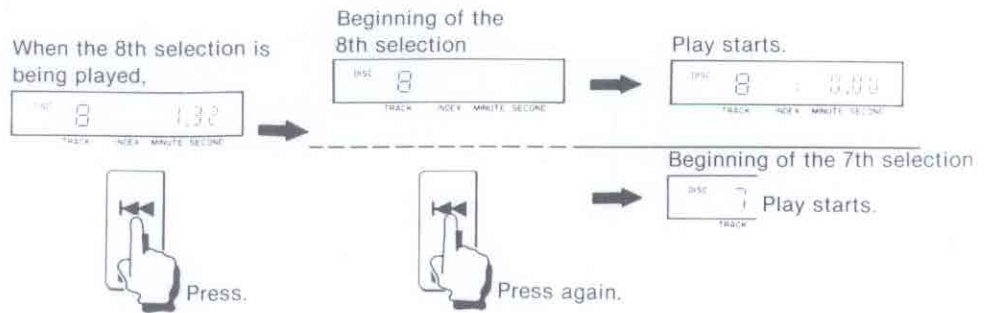
Using the **◀◀** or **▶▶** key, you can quickly locate a desired selection ahead or back. When the button is pressed, the player searches the selection data recorded at the beginning of each selection and play will start from the beginning of the selection.

### To search for a previous selection

Press the **◀◀** key during play or pause.

When the **◀◀** key is pressed once, the beginning of the selection being played is searched for.

When the button is continuously pressed, one selection back is searched for.



Keep the **◀◀** key pressed until the desired music number is displayed.

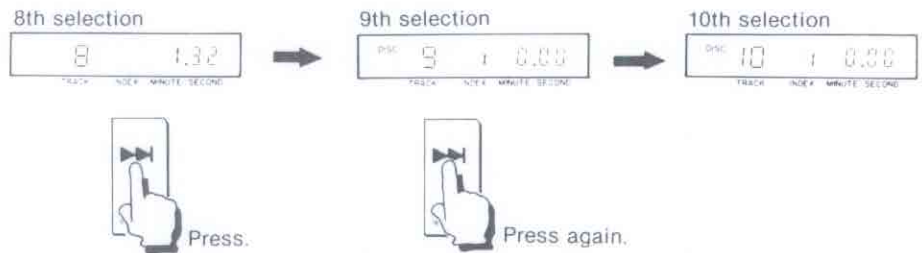
If you press the **◀◀** key after the first selection is located, the TRACK indicator will not change.

### To search for a selection ahead

Press the **▶▶** key during play or pause.

When the **▶▶** key is pressed once, the next selection after that being played is searched for.

When the button is continuously pressed, the selection ahead is searched for.



Keep the **▶▶** key pressed until the desired music number is displayed.

If you press the **▶▶** key after the 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 start playback from a particular section, you can press the INDEX keys any time you want, even during playback or in the pause mode, etc. The selected index number is displayed in the INDEX indicator.

Index number 1 of the first selection



When pressed once, the index number increases by one. When continuously pressed, the index number will keep increasing.



When pressed once, playback begins again at the beginning of the current index number. When continuously pressed, the index number will keep decreasing. When the INDEX indicator displays 1, the index number does not change even when the key is pressed.

### If playback does not start from the specified point

● Are you playing back a disc with no index numbers? In this case, playback starts from the beginning of the current selection.



● You have selected an index number which is not recorded on the disc. In this case, playback starts from the section with the highest index number.



● You have selected the wrong index number. Find the correct index number, referring to the notes accompanying the compact disc.

## TO SEARCH FOR A PARTICULAR POINT IN A SELECTION

### —Manual search

Using the manual search keys, you can locate a particular point of a selection during play or pause. While one of the manual search buttons is pressed, the disc playing goes ahead or back. Release the button at the desired point found by observing the time counter or monitoring the high-speed sound (only during play). In the pause mode, the search speed is tripled.

### Manual search keys

To go back at a high speed.

To go ahead at a high speed.

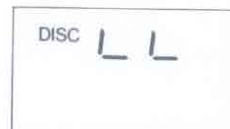


When the ◀◀ or ▶▶ key is kept pressed during repeat play and repeat play end is reached, “- 0.03” is displayed in the display window and repeat play resumes after 3 seconds.

### What are these indications?



This indication is displayed when you have passed the end of the disc by keeping the ▶▶ key pressed. The indication returns to normal display when the ◀◀ key or ◀◀ key is pressed.



This indication is displayed when you have passed the beginning of the disc by keeping the ◀◀ key pressed. When the player is in the play mode, the indication automatically returns to the normal display. In the pause mode, press the ▶▶ key or ▶▶ key.



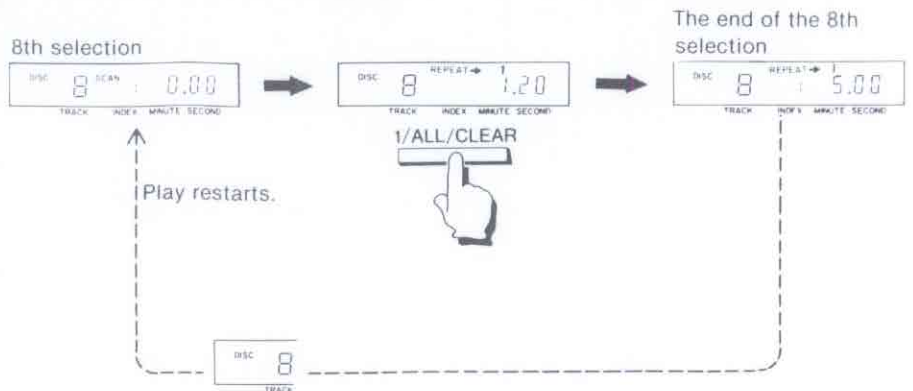
## REPEAT PLAY

Using the REPEAT programming buttons, you can repeat the selection being played, the whole disc, or particular portion of the disc.

### TO REPEAT ONLY THE SELECTION BEING PLAYED

Press the 1/ALL/CLEAR button once during play. The indicator in the display window will illuminate. When the disc reaches the end of the selection, it will automatically go back to the beginning of the selection and play will restart.

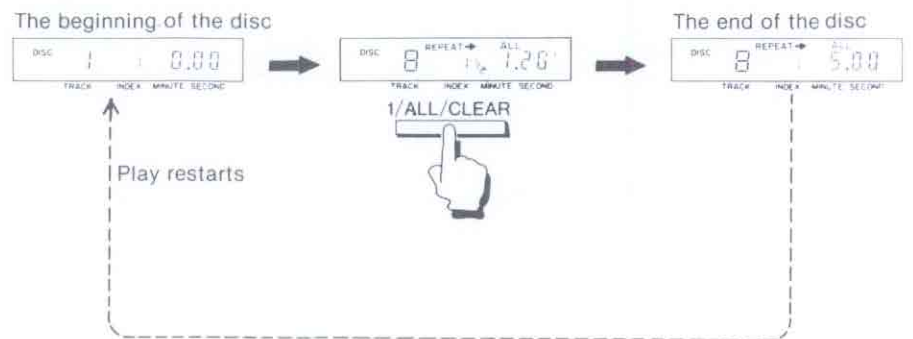
To release the repeat mode, press the 1/ALL/CLEAR button twice.



### TO REPEAT THE WHOLE DISC

Press the 1/ALL/CLEAR button twice. The indicator in the display window will illuminate.

When the disc reaches the end of the last selection, the player will automatically go back to the beginning of the first selection, and play will restart. To release the repeat mode press the 1/ALL/CLEAR button.



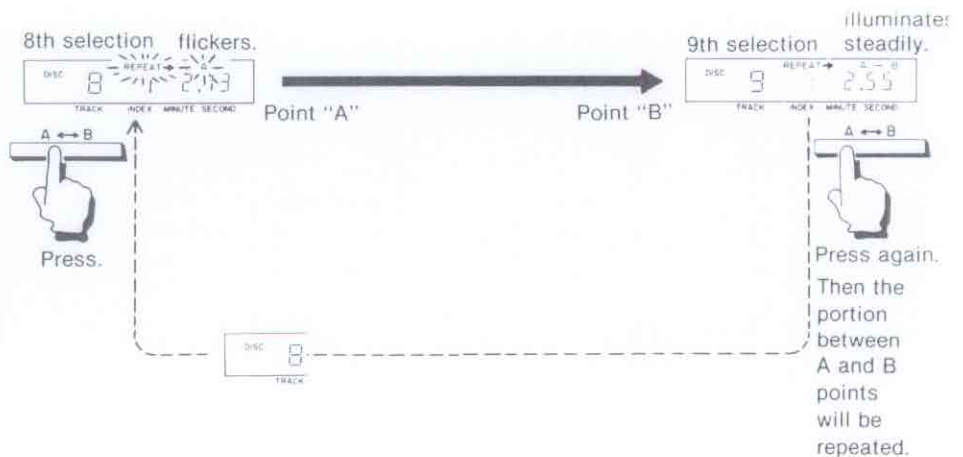
### TO REPEAT BETWEEN PARTICULAR POINTS

1 When the disc plays the point from which you wish to start the repeat play (point A), press the A ↔ B button. The indicator in the display window will start flickering showing the point A is memorized.

2 When the disc reaches the point at which you wish to stop the repeat play (point B), press the A ↔ B button again. The indicator will then illuminate steadily showing the point B is memorized.

The disc will go back to the point A and play will restart.

To release the repeat mode press the 1/ALL/CLEAR button.



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

## USING THE TIME COUNTER

### MORE ABOUT A ↔ B REPEAT FUNCTION

#### To play from a desired point (memory play)

- 1 At the point from which you wish to listen again (point A), press the A ↔ B button.
  - 2 Press the ► PLAY key at any point to go back to point A. Play will restart and continue until the end.
  - 3 To go back to point A again before reaching the end of the disc, press the ► PLAY key again.
- To cancel the point A, press the 1/ALL/CLEAR button.

#### To repeat the whole disc eliminating an unwanted portion (jump repeat)

- 1 At the point where you wish to end the portion to be eliminated (point A), press the A ↔ B button.
  - 2 Press the ◀◀ or ◀◀ key to search for the point from which you wish to start eliminating (point B), and then press the A ↔ B button. The repeat play eliminating the B — A portion will start.
- To cancel, press the 1/ALL/CLEAR button.

### TO CANCEL THE REPEAT PLAY

The 1 or ALL repeat play continues until the button is pressed again.

To cancel the A ↔ B repeat play, press the 1/ALL/CLEAR button.

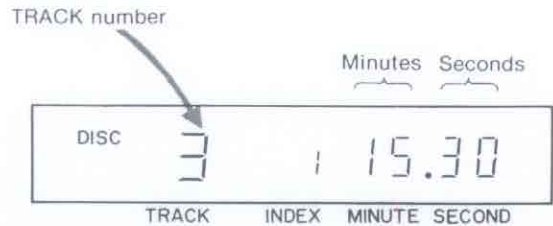
Any repeat program is also cancelled when the STOP (RESET) key is pressed.

### TO MONITOR THE ELAPSED PLAYING TIME

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.

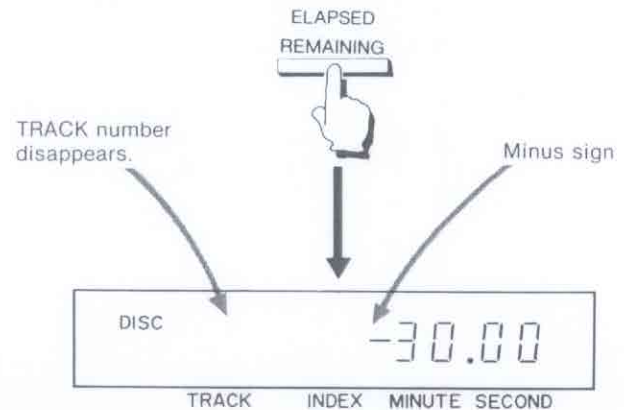
If the selection has a blank space at its beginning, the counter is reset to the time preceded by the minus sign such as "-0.02", "-0.01", etc.



shows 15 minutes 30 seconds have elapsed from the beginning of the third selection

### TO MONITOR THE REMAINING PLAYING TIME

When the ELAPSED/REMAINING TIME button is pressed, the counter shows the remaining time, preceded by a minus sign, before the end of the last selection.



shows 30 minutes 00 seconds remaining before the end of the disc

The digits will change, for example, from -30.00 to -29.59, -29.58... as the play goes on, and you can monitor the remaining playing time at any point of the disc.

To return the counter to the elapsed time, press the ELAPSED/REMAINING TIME button again.

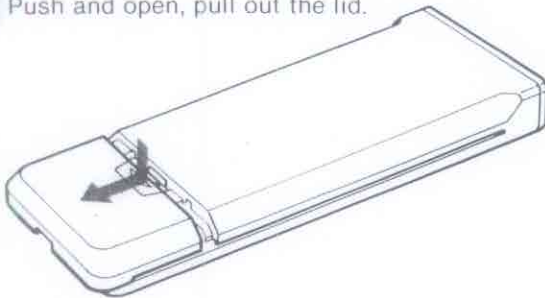
## REMOTE CONTROL OPERATION

Once the POWER switch is turned on, you can remotely control various functions of the CDP-102 with the RM-D302 remote commander (supplied).

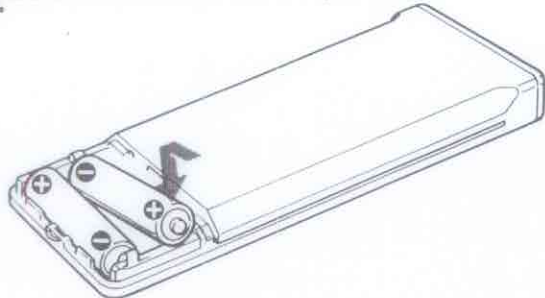
### Battery installation

The Sony RM-D302 remote commander operates on supplied two size AA batteries (IEC designation R6).

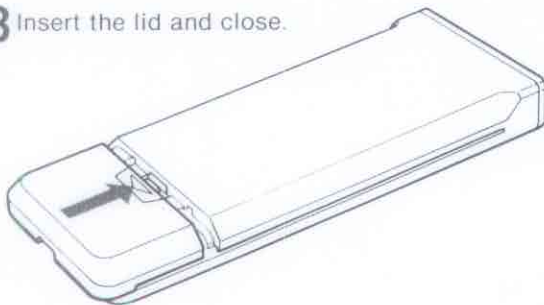
- 1 Push and open, pull out the lid.



- 2 Be sure to observe correct polarity.



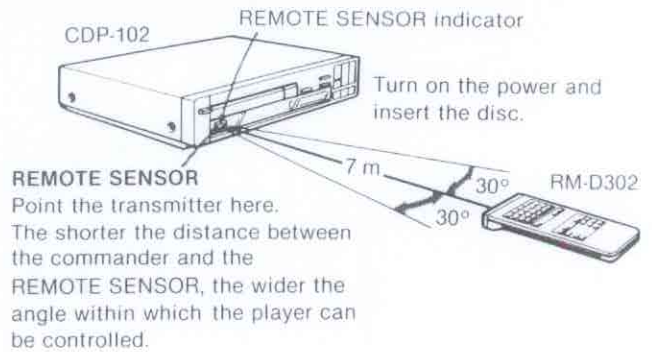
- 3 Insert the lid and close.



### Notes on the remote commander

- 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.
- 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 keys.
- If the output indicator does not light when any of the function keys are pressed, replace all the batteries.

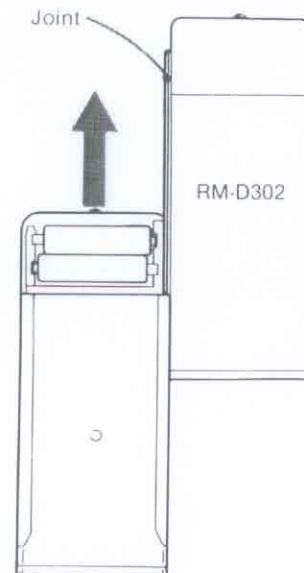
### Range of the remote control



### To use the remote commander in combination with another remote commander

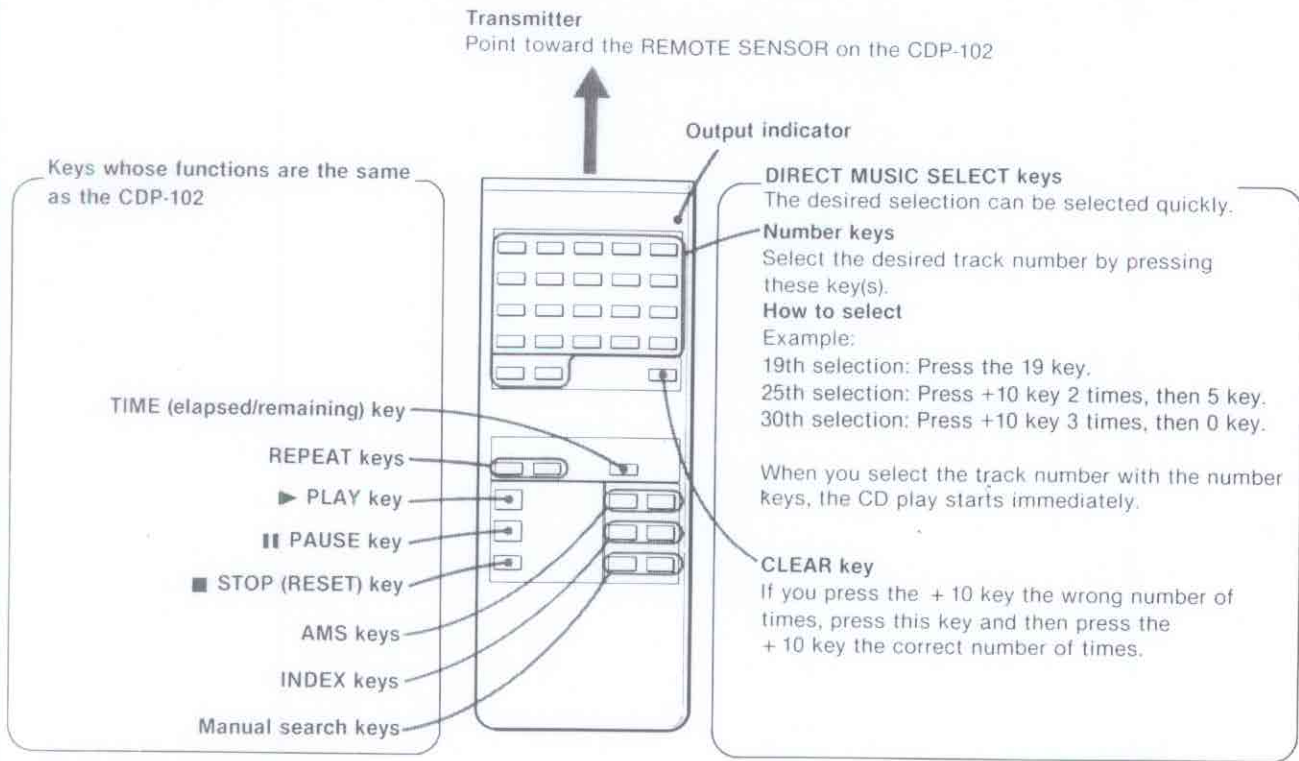
With the supplied joint, the RM-D302 can be attached to another remote commander, allowing you to have the central control center in your hand.

- 1 Remove the battery compartment lids from the remote commanders.
- 2 Insert the supplied joint into the groove in the side of the RM-D302 and attach the battery compartment lid.
- 3 Slide the other remote commander into the attached joint.
- 4 Close the battery compartment lid. The remote commanders can be attached at either side.





Function of keys on the remote commander



**Note**

- If you select a track number which is not recorded on the disc, the selected number will not be accepted.
- If you selected the wrong track number, select the correct track number.
- If the selected index number is not recorded on the disc, playback starts from the section with the highest index number.

## 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 disc is inserted with the labeled surface downwards.
- The disc is incorrectly inserted.
- Dusty or defective disc.
- The **II PAUSE** key is engaged.
- Moisture condensation (see page 3).

### No audio from one or both channels.

- Incorrect connections.

## SPECIFICATIONS

### COMPACT DISC PLAYER

System	Compact disc digital audio system
Disc	Compact disc
Laser diode properties	Material : GaAlAs Wavelength : 780 nm Emission duration : Continuous Laser output : Max. 0.6 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	500 r.p.m. to 200 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 $\pm 0.5$ dB
Harmonic distortion	Less than 0.003 % (1 kHz)
Dynamic range	More than 96 dB
Channel separation	More than 95 dB
Wow and flutter	Below measurable limit
Outputs	Line outputs Output level 2 V rms (at MSB) Load impedance over 10 kilohms
Other jack	Remote control connector (4 pin) Function control connector (2 pin)

### Disc

Track pitch	1.6 $\mu$ m
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	15 W
AC outlet	1 unswitched, 100 watts max.
Dimensions	Approx. 355 $\times$ 80 $\times$ 335 mm (w/h/d) (14 $\times$ 3 $\frac{1}{4}$ $\times$ 13 $\frac{1}{4}$ in.) including projecting parts and controls
Weight	Approx. 5.7 kg (12 lb 9 oz), net

### REMOTE COMMANDER RM-D302

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

### SUPPLIED ACCESSORIES

Audio signal connecting cord (1)
Remote control cord (1)
Disc cleaning cloth (1)
Sony New Super batteries SUM-3 (NS) (2)
Joint (for RM-D302) (1)

Design and specifications subject to change without notice.