

**SONY**<sup>®</sup>

3-862-091-21 (1)

# ***Compact Disc Compact Player***

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## Operating Instructions

### **About area code**

The area code of the player you purchased is shown on upper left of the bar code label on the package.

For accessories supplied with your player, check the area code of your model and refer to "Supplied accessories" toward the end of this manual.



***D-E900***

***D-E905***

Sony Corporation ©1998 Printed in Japan

## Welcome!

Thank you for purchasing the Sony Compact Disc Compact Player. Before operating your player, please read this manual and retain it for future reference.

### About this manual

The instructions in this manual are for the D-E900 and D-E905. Before you start reading, check your model number.

### Owner's Record

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

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_

## WARNING

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

**To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.**

### CAUTION

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

### For the customers in the USA

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:


- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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


### For the customers in Australia

The supply cord of the AC power adaptor cannot be replaced; if the cord is damaged, the AC power adaptor should be discarded.


### For the customers not in Poland

The  mark on the unit is valid only for products marketed in Poland.

### For the customers not in Europe

 The CE mark on the unit is valid only for products marketed in the European Union.

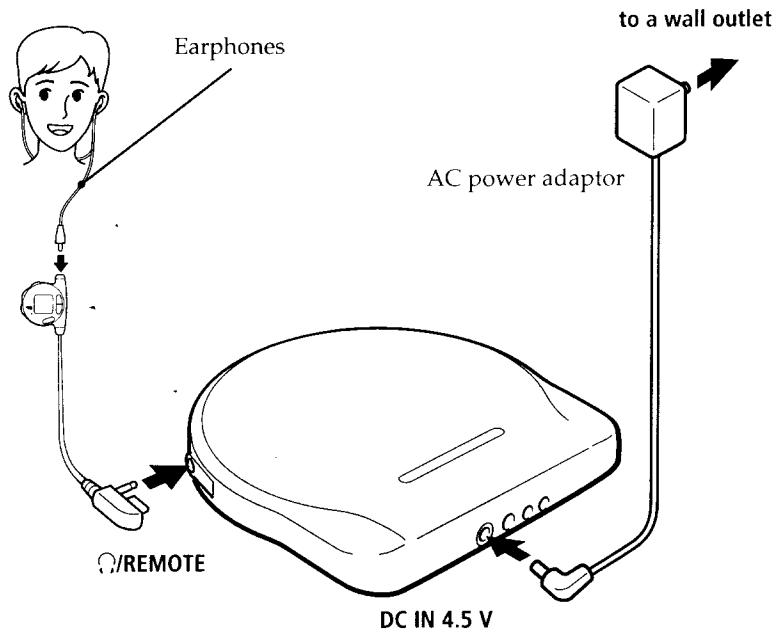
### For the customers not in Russia

The  mark on the unit and package is valid only for products marketed in Russia.

# Playing a CD right away!

If you want to play a CD right now, choose to use your player on house current. Other choices are the following two: rechargeable batteries and dry batteries (see "Power Sources" on the reverse side).

## 1 Connect



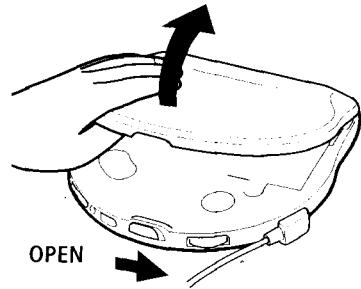
### ***For models supplied with the AC plug adaptor***

If the AC power adaptor does not fit the wall outlet, use the AC plug adaptor.

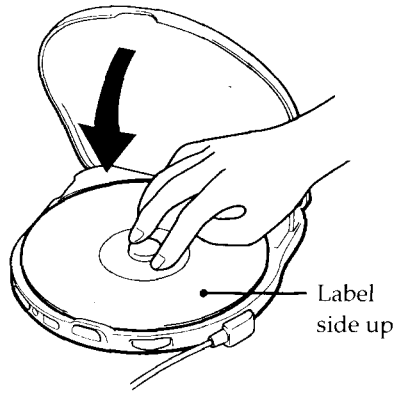
### ***For models supplied with the remote control***

- Connect the microplug of the earphones to the remote control, not to the  $\Omega$ /REMOTE jack of the player.
- Connect the earphones to the remote control firmly. A loose connection may cause noise during playback.

## 2 Place a CD



① Slide OPEN to open the lid.

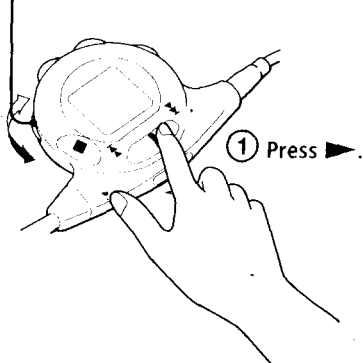


② Fit the CD to the pivot.

③ Close the lid.

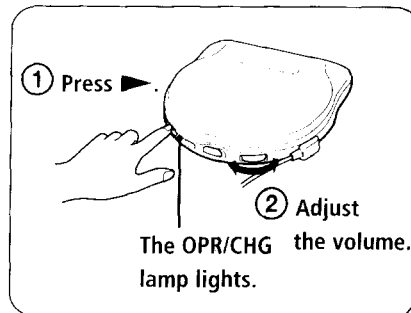
## 3 Play

② Adjust the volume.



To stop play, press ■.

Using the player

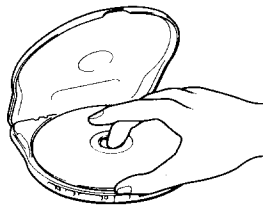


To	Press
Find the beginning of the current track (AMS*)	◀◀ side of ▶▶ once
Find the beginning of previous tracks (AMS)	◀◀ side repeatedly
Find the beginning of the next track (AMS)	▶▶ side once
Find the beginning of succeeding tracks (AMS)	▶▶ side repeatedly
Go forward quickly	Hold down ▶▶
Go backwards quickly	Hold down ◀◀

\*AMS = Automatic Music Sensor

**To remove the CD**

Remove the CD while pressing the pivot.



**Note on controlling the volume with the remote control**

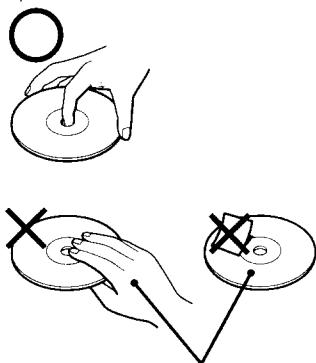
Set the VOL (volume) control on the remote control to MAX. Then adjust the volume on the player to the level that you want to be the maximum volume of the remote control.

**Notes on display**

- When you press ▶▶ (when RESUME is set to OFF), the total number of tracks in the CD and the total playing time appear for about 2 seconds.
- During play, the track number and the elapsed playing time of the current track appear.
- Between tracks, the time to the beginning of the next track will appear with the “-” indication.

**Notes on handling CDs**

- To keep the CD clean, handle it by its edge. Do not touch the surface.
- Do not stick paper or tape onto the CD.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts. Do not leave the CD in a car parked under direct sunlight.

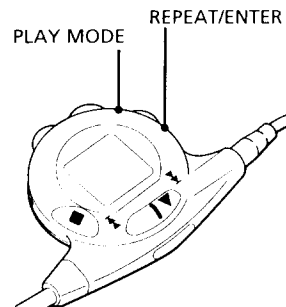


Not these ways

## ► Other Operations

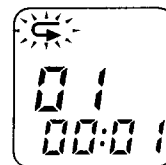
### Playing tracks repeatedly (Repeat Play)

You can play tracks repeatedly in normal, INTRO PGM and shuffle play modes. Repeat all the tracks or only one track.



#### To repeat all the tracks

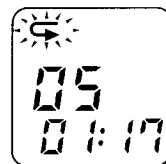
Press REPEAT/ENTER during play.  
The "↻" indication appears.



To cancel repeat play, press REPEAT/ENTER again.

#### To repeat a single track

1 Press REPEAT/ENTER while the track you want to repeat is playing.  
The "↻" indication appears.



2 Press PLAY MODE repeatedly until "1" appears.

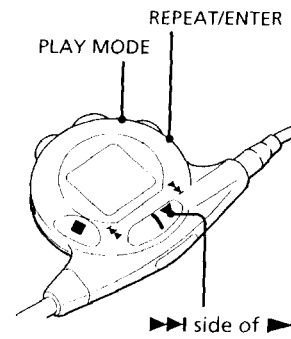


To repeat another track, press ◀◀ or ▶▶ side of ▶.

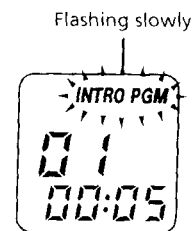
To cancel repeat play, press REPEAT/ENTER again.

## Playing only the tracks you want (INTRO PGM Play)

You can choose and play your favorite tracks  
by scanning through the beginning of each  
track in a CD.



- 1 During play, press PLAY MODE repeatedly until "INTRO PGM" flashes.



- 2 Press REPEAT/ENTER to start scanning. The player plays about the first 15 seconds of each track and "INTRO PGM" flashes faster.

- 3 Press REPEAT/ENTER while the track you want is playing. To skip the track, press ► side of ► or just wait for the next track.

After you have gone through the CD, "INTRO PGM" stops flashing and the tracks you have chosen play automatically.

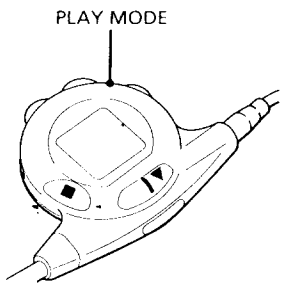
To finish programming before hearing through the CD, press PLAY MODE. The tracks you have chosen play automatically.

If you press ■, the program will be erased. To prevent accidental erasure, set the RESUME switch to ON.

To cancel INTRO PGM play, press PLAY MODE repeatedly until the play mode indication disappears from the display.

### Playing tracks in random order (Shuffle Play)

You can play the tracks in a CD in random order.



During play, press PLAY MODE repeatedly until "SHUF" appears. The tracks play in random order.



To cancel shuffle play, press PLAY MODE repeatedly until the play mode indication disappears from the display.

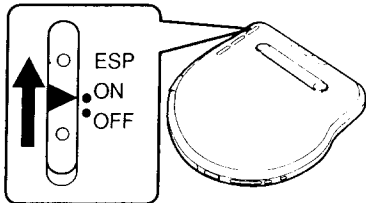
- Note**
- During shuffle play, you cannot return to previous tracks by pressing ◀◀ side of ►►.

### Using other functions

#### To minimize skipping (ESP<sup>2</sup>)

The ESP (Electronic Shock Protection) function minimize skipping by using a buffer memory that stores music data and plays it back in the event of a shock. The new ESP<sup>2</sup> (ESP Squared) system uses a new DSP (Digital Signal Processor) which can read and store music data more efficiently, providing a level of continuous skip protection not found in traditional buffer memory units. This decreases the frequency of sound skipping and the need to utilize the buffer memory. Use this function when listening in a car or while walking.\*

\* Although ESP<sup>2</sup> provides excellent protection against skipping, it will not prevent skipping while jogging or running.



Set ESP to ON. The ESP indication appears.

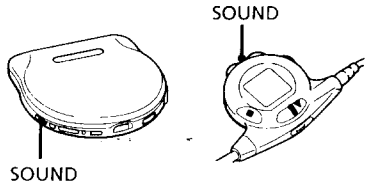
To release the ESP function, set ESP to OFF.



- Notes**
- Playing may stop when the player gets a strong shock even with the ESP function on.
  - You may hear a noise or sound skip when:
    - listening to a dirty or scratched CD,
    - listening to an audio test CD or,
    - the player receives continuous shock.
  - Sound may drop for a while if you set ESP to ON during play.

#### To enjoy more powerful bass sound

You can enjoy a powerful bass-boosted sound.



Press SOUND to select BASS ■ or BASS ■■■. BASS ■■■ is more effective.

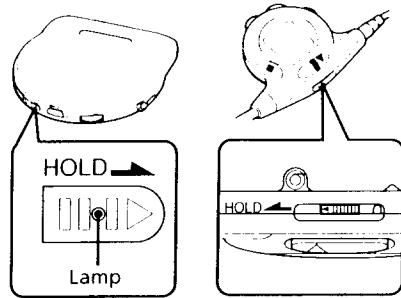


- Note**
- If the sound is distorted when emphasizing bass, turn down the volume.



### To lock the buttons

You can lock your player or remote control against any accidental operations.



To avoid accidental operation of the player, slide HOLD on the player in the direction of the arrow.

When you press any button, the HOLD lamp flashes and you cannot operate the player. (You can still operate the player with the remote control.)

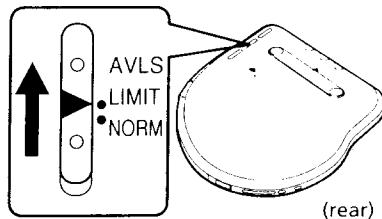
To avoid accidental operation of the remote control, slide HOLD on the remote control in the direction of the arrow.

When you press any button, "Hold" appears in the display and you cannot operate the player using the remote control. (You can still operate the player using the buttons on the player.)

To unlock, slide HOLD back.

### To protect your hearing (AVLS)

The AVLS (Automatic Volume Limiter System) function keeps down the maximum volume to protect your ears.



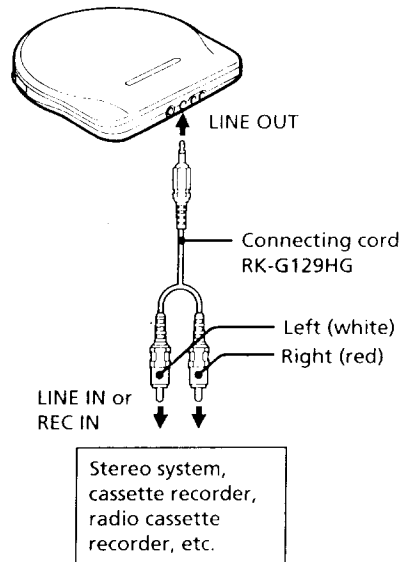
Set AVLS to LIMIT.

### Note

- If you use the SOUND function and the AVLS function at the same time, sound may be distorted. If this happens, turn down the volume.

## Connecting to other stereo equipment

You can listen to the CD through other stereo equipment or record a CD on a cassette tape. Refer to the instruction manual of the other equipment for details. Before making connections, turn off each piece of equipment.

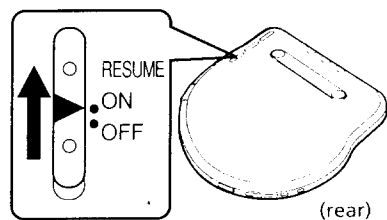


### Notes

- When you use a connecting cord, the SOUND function will be disabled.
- Before you play the CD, turn down the volume of the connected equipment so as not to damage the connected speakers.
- The beep sound is not output from the LINE OUT jack.
- When you connect other equipment to the LINE OUT jack of this player, adjust the volume on the connected equipment.
- When you record a CD on a cassette tape using a tape recorder that has the blank search function, release the ESP function. If the ESP function is on, the blank search function does not work.

### To resume playing from the point you stopped the CD (Resume Play)

Normally, every time you stop and play, playing starts from the beginning of the CD. The resume play function, however, let you listen to from the point at which you last turned off the player.



Set RESUME to ON.

To cancel resume play, set RESUME to OFF.

#### Notes

- Even if RESUME is set to ON, playing starts from the beginning when you open the lid.
- The resume point may be inaccurate by about 30 seconds.

### To turn off the beep

You can turn off the beep that sounds as you operate your player.

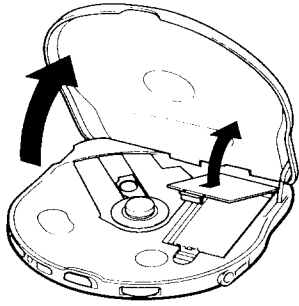
Disconnect the power source (AC power adaptor, rechargeable battery or alkaline batteries). While you press and hold down ■, connect the power source again. To make the beep sound again, disconnect the power source, and then connect it without pressing ■.

## ►Power Sources

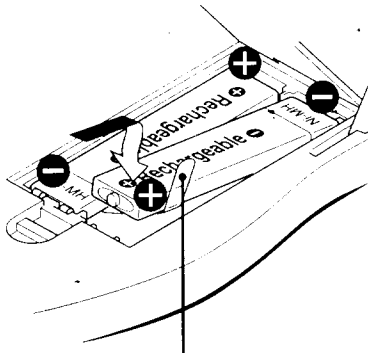
### Using rechargeable batteries

Charge the rechargeable batteries before using them for the first time.  
Use the NH-14WM rechargeable batteries (supplied) or the batteries listed in the Recommended accessories for this player.  
You cannot use any other rechargeable batteries.

- 1 Open the lid of the player, and open the lid of the battery compartment.

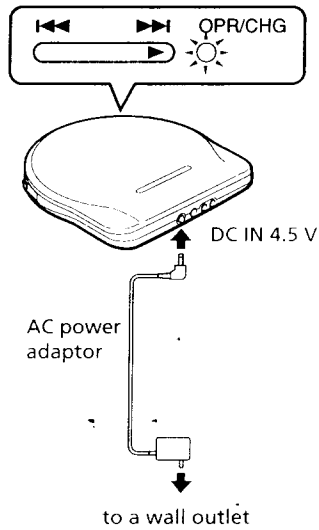


- 2 Insert two rechargeable batteries by matching the  $\oplus$  and  $\ominus$  to the diagram inside the battery compartment and close the lid. (Be sure to close it firmly, or the CD may be damaged.) Then close the lid of the player.





Put the end of the ribbon inside. (To remove the battery, pull the ribbon.)

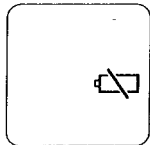
- 3** Connect the AC power adaptor.  
The OPR/CHG lamp on the player  
flashes. Charging time is about 4 hours.



- 4** When fully charged, the OPR/CHG lamp  
goes out. Then, disconnect the AC power  
adaptor.

#### **When to charge the rechargeable batteries**

When the rechargeable batteries become weak, the  indication in the display on the remote control flashes. When the batteries are used up, the  indication stops flashing and lights up. Charge the rechargeable batteries. To keep the original battery capacity for a long time, recharge the batteries when the batteries are used up (discharged).

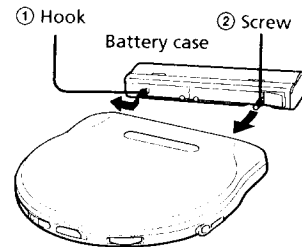


#### Notes

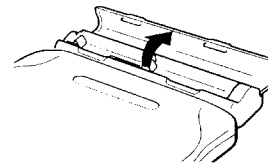
- Charging time varies depending on how the rechargeable battery is used.
- If the battery is new or has not been used for a long time, it may not be charged completely until you charge and discharge it several times.
- If the battery life becomes shorter by about half, replace it with Sony NH-9WM rechargeable battery. Do not use any other rechargeable battery.

## Using dry batteries

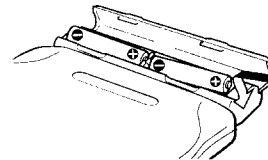
- 1 Hook the battery case onto the player and fasten the screw.



- 2 Open the lid of the battery case.



- 3 Insert two LR6 (size AA) alkaline batteries by matching the ⊕ and ⊖ to the diagram inside the battery compartment and close the lid.



#### Note



- Do not use manganese batteries for this player.

#### For extended use

Insert the rechargeable batteries and also attach the battery case.

For the battery life, see the table below.

#### When to replace the dry batteries

When the battery becomes weak, the  indication in the display on the remote control flashes. When the  indication stops flashing and lights up, replace all the batteries with new ones.

#### Notes

- Do not charge the dry batteries.
- Do not mix new batteries with old ones.
- Do not use different types of batteries together.
- When the batteries are not to be used for a long time, remove them.
- If the battery leakage occurs, wipe off any deposit in the battery compartment, and install new batteries.

**Battery life (approx. hours) (EIAJ\*)**

When using	ESP function	
	off	on
Two NH-14WM (charged for about 4 hours**)	9	8
Two NH-9WM (charged for about 4 hours**)	7.5	6.5
Two Sony alkaline batteries LR6SG	13	12
Rechargeable batteries NH-14WM and two alkaline batteries	24	22
Rechargeable batteries NH-9WM and two alkaline batteries	22.5	20.5

\*Measured value by the standard of EIAJ  
(Electronic Industries Association of Japan).  
(When you use the player on a flat and stable  
place.)

\*\*Charging time varies depending on how the  
rechargeable battery is used.

## ► **Additional Information**

### **Precautions**

#### **On safety**

- Should any solid objects or liquid fall into the player, unplug it and have it checked by qualified personnel before operating it any further.
- Do not put any foreign objects in the DC IN 4.5 V (external power input) jack.

#### **On power sources**

- When you are not using the player for a long time, disconnect all power sources from the player.
- The nameplate indicating operating voltage, power consumption, etc. is located on the bottom. (On the AC power adaptor for EA3 only.)

#### **On the AC power adaptor**

- Use only the supplied AC power adaptor. If your player is not supplied with it, use AC-E45HG AC power adaptor. Do not use any other AC power adaptor.

Polarity of the plug



- To unplug the AC power adaptor from the wall outlet, grasp the adaptor itself, do not pull its cord.

#### **On dry and rechargeable batteries**

- Do not throw the batteries into fire.
- Do not carry the batteries with coins or other metallic objects. It can generate heat if the positive and negative terminals of the battery are accidentally contacted by a metallic object.
- Do not mix rechargeable batteries with dry batteries.

#### **On the player**

Keep the lens on the player clean and do not touch it. If you do so, the lens may be damaged and the player will not operate properly.

Do not put any heavy object on top of the player. The player and the CD may be damaged.

Do not leave the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or sand, moisture, rain, mechanical shock, unlevelled surface, or in a car with its windows closed.

If the player causes interference to the radio or television reception, turn off the player or move it away from the radio or television.

Do not wrap the player in a cloth or blanket during use as it may cause malfunction or serious accidents.

**Road safety**

Do not use headphones/earphones while driving, cycling, or operating any motorized vehicle. It may create a traffic hazard and is illegal in some areas. It can also be potentially dangerous to play your headsets at high volume while walking, especially at pedestrian crossings. You should exercise extreme caution or discontinue use in potentially hazardous situations.

**Preventing hearing damage**

Avoid using headphones/earphones at high volume. Hearing experts advise against continuous, loud and extended play. If you experience a ringing in your ears, reduce volume or discontinue use.

**Caring for others**

Keep the volume at a moderate level. This will allow you to hear outside sounds and to be considerate to the people around you.

**On the remote control**

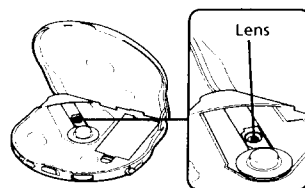
Use only the supplied remote control. You cannot operate this unit with the remote control supplied with other models.



## Maintenance

### To clean the lens

Clean the lens with a lens cleaning kit KK-DM1.



### To clean the casing

Use a soft cloth slightly moistened in water or a mild detergent solution. Do not use alcohol, benzine or thinner.

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## Troubleshooting

Should any problem persist after you have made these checks, consult your nearest Sony dealer.

### The CD does not play or "no disc" appears in the display though a CD is placed in the player.

- The CD is dirty or defective.
- Insert the CD with the label side up.
- Moisture condensation has occurred. Leave the player aside for several hours until the moisture evaporates.
- The lens is dirty.
- Close the lid of the player and the battery compartment firmly.
- Make sure the batteries are inserted correctly.
- Connect the AC power adaptor to a wall outlet securely.

### When you press ►, "00" appears in the display for a moment, and disappears. The CD does not play.

- Rechargeable battery or dry batteries are used up. Charge the rechargeable battery or replace dry batteries with new ones.

### No sound, or noise is heard.

- Connect the plugs firmly.
- Plugs are dirty. Clean the plugs with a dry soft cloth periodically.

### "Hi disc" appears in the display.

- Use only the supplied AC power adaptor or recommended AC power adaptor AC-E45HG (not supplied).

### HOLD lamp flashes when you press a button on a player.

- The buttons are locked on a player. Slide HOLD back.

### "Hold" appears in the display when you press a button on the remote control.

- The buttons are locked on a remote control. Slide HOLD back.

### The battery life is short.

- Manganese batteries are used. Use alkaline batteries.
- Replace the batteries with new ones.

### The volume is limited to a certain level even if you attempt to turn it up.

- AVLS selector is set to LIMIT. Set it NORM.

# Specifications

## System

Compact disc digital audio system

## Laser diode properties

Material: GaAlAs

Wavelength:  $\lambda = 780 \text{ nm}$

Emission duration: Continuous

Laser output: Less than  $44.6 \mu\text{W}$  (This output is the value measured at a distance of 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)

## Error correction

Sony Super Strategy Cross Interleave Reed Solomon Code

## D-A conversion

1-bit quartz time-axis control

## Frequency response

20 - 20,000 Hz  $\pm 1/2$  dB (measured by EIAJ CP-307)

## Output (at 4.5 V input level)

Headphones (stereo minijack)

10 mW + 10 mW at 16 ohms

Line output (stereo minijack)

Output level 0.7 V rms at 47 kilohms

Recommended load impedance over 10 kilohms

## General

### Power requirements

For the area code of the model you purchased, check the upper left side of the bar code on the package.

- Two Sony NH-9WM/NH-14WM rechargeable batteries: 2.4 V DC
- Two LR6 (size AA) batteries: 3 V DC
- AC power adaptor (DC IN 4.5 V jack):  
U2/CA2/E92 model: 120 V, 60 Hz  
CED/CEF/CEX/EE1/E13 model:  
220 - 230 V, 50/60 Hz  
CEK model: 230 - 240 V, 50 Hz  
EA3 model: 110 - 240 V, 50/60 Hz  
AU2 model: 240 V, 50 Hz  
JE.W/E33 model: 100 - 240 V, 50/60 Hz  
HK2 model: 220 V, 50/60 Hz  
CN2 model: 220 V, 50 Hz

### Dimensions (w/h/d) (without projecting parts and controls)

Approx.  $131 \times 19.4 \times 131.7 \text{ mm}$   
( $5 \frac{1}{4} \times 3 \frac{3}{8} \times 5 \frac{1}{4} \text{ in.}$ )

### Mass (without rechargeable batteries)

Approx. 175 g (6.2 oz)

### Operating temperature

5°C - 35°C (41°F - 95°F)

## Supplied accessories

For the area code of the model you purchased, check the upper left side of the bar code on the package.

- AC power adaptor (1)
  - Earphones with remote control (1)
  - Rechargeable batteries (2)
  - Connecting cord (Phono plug  $\times 2 \leftrightarrow$  stereo miniplug) (1)\*<sup>1</sup>
  - Battery case (1)
  - Carrying case (1)
  - AC plug adaptor (1)\*<sup>2</sup>
- \*<sup>1</sup> Not supplied with CED, CEK and JE.W models  
\*<sup>2</sup> Supplied with E13 and JE.W models

Design and specifications are subject to change without notice.

### For US customers

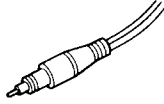
AC power adaptor supplied is not intended to be serviced. Should the AC power adaptor cease to function in its intended manner, during the warranty period, the adaptor should be returned to your nearest Sony Service Center or Sony Authorized Repair Center for replacement, or after warranty period, it should be discarded.

### **Recommended accessories**

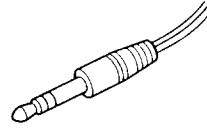
Active speaker system SRS-A15, SRS-A35,  
SRS-A71, SRS-T1  
Rechargeable battery NH-9WM  
Connecting cord RK-G129HG, RK-G136HG  
AC power adaptor AC-E45HG  
Stereo headphones MDR-A44L, MDR-301LP,  
MDR-E848LP, MDR-35

### ***When connecting optional headphones to the supplied remote control***

Use only headphones with micro plugs. You  
cannot use headphones with stereo mini plugs.



Micro plug



Stereo mini plug

Your dealer may not handle some of the above  
listed accessories. Please ask the dealer for  
detailed information about the accessories in  
your country.