

Compact Disc Compact Player



D-321

Operating Instructions

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

Discman

Sony Corporation © 1993 Printed in Japan

Owner's Record

The model number and the serial number are located at the bottom.

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. D-321 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

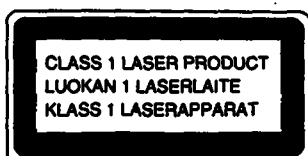
The use of optical instruments with this product will increase eye hazard.

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 the United Kingdom



This Compact Disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the bottom exterior.

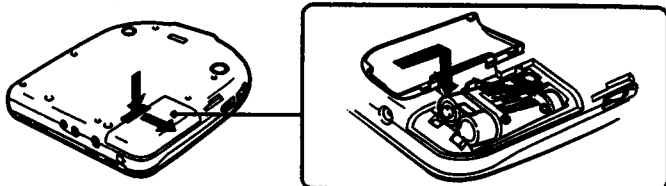
For the Customers in Canada

THIS APPARATUS COMPLIES WITH THE CLASS B LIMITS FOR RADIO NOISE EMISSIONS SET OUT IN RADIO INTERFERENCE REGULATIONS.

Power Sources

Using the Rechargeable Battery

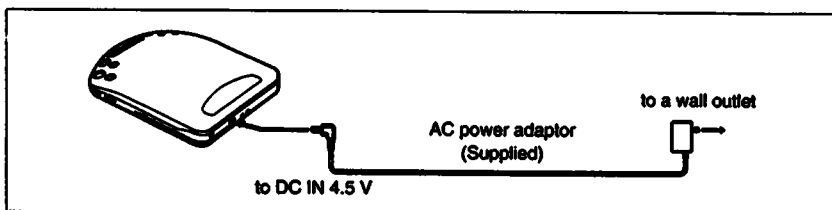
When using the rechargeable battery (supplied) for the first time, make sure to charge it. Open the battery compartment lid and insert the rechargeable battery as illustrated beside the battery compartment.



Charging the rechargeable battery

Insert the rechargeable battery and connect the supplied AC power adaptor when the unit is in the stop mode. Now charging starts.

The "CHG" indication appears in the display and the segments of the «000» indication light up one by one. They disappear when charging is completed. Disconnect the AC power adaptor from the unit and the wall outlet.



When to replace the rechargeable battery

If the operating time reduces about by half even if you charge it fully, replace it with a new BP-DM10 (not supplied). You cannot use BP-DM1 battery pack (not supplied).

Notes on the rechargeable battery (Ni-Cd battery)

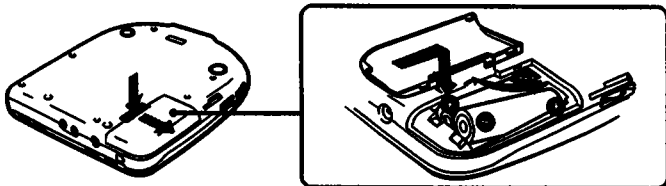
- Be sure to use the supplied AC power adaptor.
- Remember to recharge the battery pack after every use. Leaving the rechargeable battery discharged may shorten its life.
- When charging for the first time or after a long time, playing time may reduce. In this case, charge and discharge it several times.
- Store the battery in a temperature between 5° C (41° F) and 35° C (95° F) to make it work at its best.
- Never throw the battery into fire.
- If any metal object touches the metal portion of the battery pack, excessive heat may be generated and it is dangerous. When carrying the battery pack, do not put it in a pocket together with a metal object such as a key holder.
- Do not disassemble the battery. If the electrolyte inside the battery should come into contact with cloth or skin, wash the contaminated objects with water immediately.

The unit may become warm

The bottom of the unit may be warm during operation, which is normal. If it is unusually warm, disconnect the AC power adaptor and consult your Sony dealer.

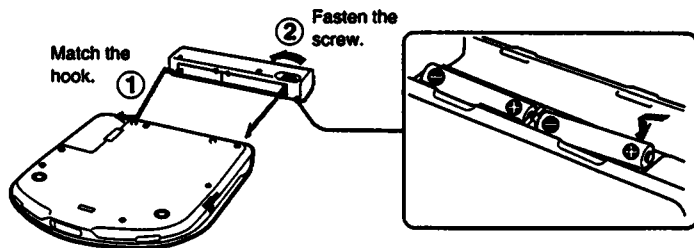
Using the Battery Case (Supplied)

Insert two size AA (LR6) alkaline batteries in the battery compartment.



Using the battery case (supplied)

Attach the battery case to the unit and insert two size AA (LR6) alkaline batteries in it.



You can use the unit for longer time by using the battery case, in addition to the rechargeable battery or batteries in the battery compartment of the unit. Batteries in the battery case and the rechargeable battery or batteries in the battery compartment are consumed together.

Notes on batteries

- Insert batteries with correct polarity.
- Do not use old batteries together with new ones or different types of batteries together.
- If the electrolyte inside the battery should leak, wipe the contaminated parts in the battery compartment with a cloth and replace the old batteries with new ones.
- Do not charge the batteries.
- When the unit is not to be used for a long period of time, remove the batteries.

Note on the «DDD» indication

When the battery becomes weak, the segments of the «DDD» indication will go out one by one from the left segment. When the last segment lights up, regard it as a criterion when to charge the rechargeable battery or to replace the batteries.

When the battery is used up, the "Lo batt" indication appears in the display. Do not repeat pressing ► when this indication lights up, as the unit may operate incorrectly. Charge the rechargeable battery or replace the batteries.

When using the battery case, replace the batteries inside when you charge the rechargeable battery or replace the batteries in the unit.

Life of the rechargeable battery or alkaline batteries

	CD playing	
	ESP: not active	ESP: active
Rechargeable battery (charged for 2 hours maximum*)	approx. 2.5 hours	approx. 2 hours
Two alkaline batteries or Battery case (two alkaline batteries)	approx. 6 hours	approx. 4 hours
Rechargeable battery + Battery case (two alkaline batteries)	approx. 8.5 hours	approx. 6 hours
Two alkaline batteries + Battery case (two alkaline batteries)	approx. 16 hours	approx. 11 hours

(When the unit is used on a flat and stable place.)

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

Battery life becomes shorter when the digital connecting cable is connected to the OPTICAL (DIGITAL)/LINE OUT jack. When you do not use the digital connecting cable, disconnect it from the jack.

Using an AC power adaptor

Connect the supplied AC power adaptor as illustrated in charging the rechargeable battery.

When the unit is not to be used, be sure to disconnect the AC power adaptor.

For the customers whose unit is supplied with an AC plug adaptor

Use the AC plug adaptor if the AC power adaptor does not fit the outlet.

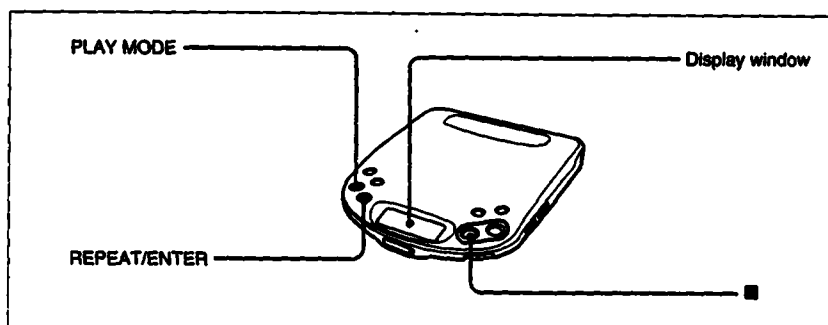
Note on the AC power adaptor

Use only the supplied AC power adaptor (for DC 4.5V, unified polarity type). If you use any other AC power adaptors, the unit may be damaged. Do not use the AC power adaptor supplied with other "Discman" CD compact players equipped with DC IN 6V or 9V jack, nor an optional AC power adaptor for DC 6V or 9V.



Polarity of the plug
(Unified polarity type)

Various Playing Modes



This unit has 10 playing modes: normal play, INTRO PGM play, one track play, SHUFFLE play, RMS* (program) play and 5 repeat plays of each mode.

* RMS: Random Music Sensor

To change the mode

Press PLAY MODE during play. The current mode appears in the display window.

To play repeatedly (REPEAT play)

Press REPEAT/ENTER. / appears in the display window. Press the button again to cancel the repeat play.

To stop the disc

Press ■.

Note

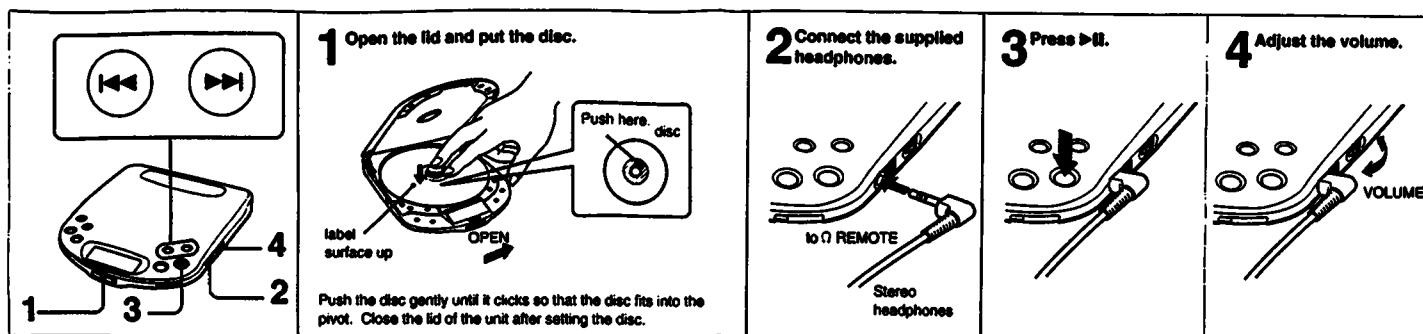
The PLAY MODE button or the REPEAT/ENTER button may not activate for 3 seconds before the end of the track, when the ESP system is active.

Playing the whole Disc — Normal Play

There is no play mode indication in the display window.

To repeat the whole disc, press REPEAT/ENTER.

Disc Playing



Other operations

Operations	Press	The following sound is heard.
To pause	⏸	Very short beep sound is repeated until the pause is released.
To release pause	⏸	Very short beep sound is heard once.
To stop	■	Long beep sound is heard. Disc playing stops and the power is turned off automatically.
To locate the beginning of the current track/previous tracks — AMS	⏮ lightly/repeatedly	Very short beep sound is heard three times.
To locate the beginning of the next track/tracks — AMS	⏭ lightly/repeatedly	Very short beep sound is heard twice.
To go back at high speed (search)	Keep ⏮ depressed.	No sound is heard.
To go ahead at high speed (search)	Keep ⏭ depressed.	No sound is heard.

- The unit pauses at the beginning of the located track when you press lightly ⏮ or ⏭ in the pause mode.
- During the program play, the AMS operates in the programmed order.
- Each time you press ⏮, the player locates the previous track. Each time you press ⏭, the player locates the next track and stops at the last track.

To eliminate the beep sound

Do not connect any power source. While keeping ■ pressed, connect the power source (the rechargeable battery pack, alkaline batteries, or external power source). Now, the beep sound is eliminated and this condition remains as long as the power source is connected. The beep sound is not output from the OPTICAL (DIGITAL)/LINE OUT jack.

To remove the disc
Pick up the disc, holding the edge, while pressing the pivot gently as illustrated.



To play an 8 cm (3-inch) disc
You can play it without an adaptor.

To limit the volume at a moderate level

The AVLS (Automatic Volume Limiter System) selector allows you to limit the maximum volume of your unit.

- When the AVLS selector is set to either position 1 or 2, the volume will be kept at a moderate level, even if you attempt to turn up the volume.
- When the AVLS selector is set to either position 1 or 2, the playback sound may be distorted or unstable according to the music (especially bass boosted part). If this happens, turn down the volume.
- When the AVLS selector is turned off, you will be able to enjoy the full volume capability of your unit.



Illumination of the display window

When using the unit on the AC power adaptor or car battery, the display window is always illuminated. (Light of the display window goes out when ■ is pressed and the disc stops.) When you use the unit on the rechargeable battery or alkaline batteries, the display window is illuminated for approx. 5 seconds when you press an operating button. If you do not want the display window to be illuminated, do as follows. Disconnect the power sources. While keeping PLAY MODE pressed, insert the rechargeable battery or alkaline batteries. The illumination setting remains as long as the rechargeable battery or alkaline batteries are not replaced.

Playing the Desired Tracks after Listening to the Beginning of All the Tracks — INTRO PGM Play

- Press PLAY MODE during play until "INTRO PGM" flashes slowly in the display window.
- Press play. "INTRO PGM" starts flashing fast and the unit starts to play the first 15 (approximately) seconds of each track from the first track.
- During 15 seconds of play, press REPEAT/ENTER if it is your desired track. When it is not your desired track, do not press any button during 15 seconds of play, or press play to skip the track. Select your desired tracks in this way. After the beginning of the last track is played, "INTRO PGM" stops flashing and the selected tracks will be played automatically in the order of the track number of the disc.

To finish programing before hearing through the disc
Press play. The selected tracks are played.

To try the programing again

Press ⏮ to go back while programing. As the programing of the tracks returned is canceled, select the desired tracks from that point.

To repeat the programed tracks

Press REPEAT/ENTER while they are played.

To repeat the beginning of all the tracks

Press REPEAT/ENTER first and then press PLAY MODE until "INTRO PGM" flashes. Then press play. If you did not enter any tracks in the program, the beginning of all the tracks will be repeated.

Playing Only One Track

Press PLAY MODE during play until "1" appears in the display window.

The unit plays only one track and stops at the end of the track.

To play only one track repeatedly, press REPEAT/ENTER.

Playing the Tracks in a Random Order — Shuffle Play

Press PLAY MODE during play until "SHUFFLE" appears in the display window. Play starts from the next track.

To play the tracks in a random order repeatedly

Press REPEAT/ENTER. After all the tracks have been played in a random order, they will be reshuffled and played repeatedly in a different order each time.

During shuffle play

To locate the beginning of the forthcoming tracks, press play repeatedly.

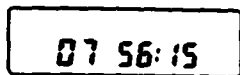
To locate the beginning of the current track, press ⏮. Even if you continue to press ⏮, the player will not go back to the previous track. The play starts from the beginning of the current track.

On display window

When you press ►II (when RESUME is set to OFF)

The total number of the tracks in the disc and the total playing time appear for 2 seconds.

Example

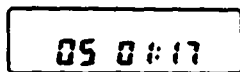


Total number of the tracks

Total playing time

During play

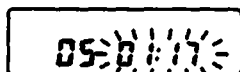
The track number and the elapsed playing time of the current track appear.



1 min. 17 sec. has elapsed from the beginning of the fifth track.

During pause

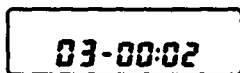
The elapsed playing time of the current point flashes.



Pause mode at the point 1 min. 17 sec. from the beginning of the fifth track

Between the tracks

The time to the beginning of the next track will appear.



2 sec. to the beginning of the 3rd track

How to Use DSP

Press to select the function of DSP according to the contents of your disc or where to use the unit.

BASS ■ **BASS** ■■: The bass sound will be boosted more powerfully.

BASS ■■ is more effective than **BASS** ■.

If you set the volume too high, the sound may be cracked or distorted. If this happens, turn down the volume.

VOCAL: Sound of the middle frequency range is emphasized and human voice becomes more audible.

CAR: Inaudible sound will be boosted for better audibility. This is useful when listening at noisy places.

* DSP: Digital Signal Processing

Notes

- The bass boost, or CAR effect may be decreased according to the output level of the recorded sound.
- While playing back the track with fast tempo or the track with narrow dynamic range, the CAR position may not give efficient effect.
- DSP also works on line output from the OPTICAL (DIGITAL)/LINE OUT jack. Thus, adjustment of DSP is also possible when listening through the external speakers or when recording on the cassette recorder. DSP does not work on optical digital output from the OPTICAL (DIGITAL)/LINE OUT jack.
- DSP is retained as long as the power is connected.

Display indication changes as follows.

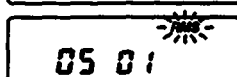


Program 22 Tracks in the Order of Your Own Selection

1 Press PLAY MODE during play until "RMS" flashes in the display window.



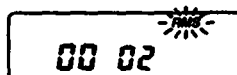
2 Press I◀◀ or ▶▶I to select the desired track. You can program the tracks in the desired order regardless of their track numbers.



Desired track number

The first selection

3 Press REPEAT/ENTER*.



The 2nd (next) selection

4 Repeat steps 2 and 3 (up to 22 selections).

If another track is memorized after 22 tracks have been memorized, the first track will be cleared and the new one will be memorized in its place.

5 Press ►II.

"RMS" stops flashing and play starts.

To repeat program play, press REPEAT/ENTER.

Press PLAY MODE again to resume normal play.

* When the REPEAT/ENTER button is pressed for more than 1 second, the total number and the total time of the programmed tracks will appear in the display window while the REPEAT/ENTER button is pressed.

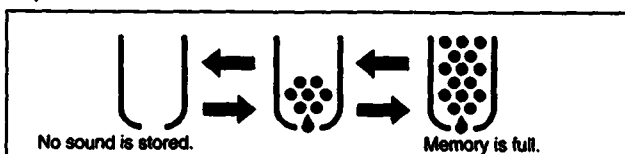
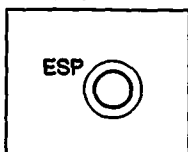
If a disc contains 32 tracks or more and you wish to program the 32th track or a track after that, or if the total playing time exceeds 100 minutes, the total playing time of the program will not be displayed. ("---" indication will appear instead.) However it is possible to program such tracks.

ESP (Electronic Shock Protection) System

This unit incorporates a special electronic circuit which prevents sound skipping caused by jarring or bumping. This system constantly stores the next 3 seconds of sound to be played. When the unit receives a physical shock which prevents the laser pick-up from "reading" the CD, this system immediately starts playing the sound stored in its memory and continues until the laser pick-up recovers.

When listening while walking or when using in a car, you had better press ESP to prevent sound skipping.

When the unit is continuously jarred, the stored sound will be played back completely, resulting in an interruption of the CD's sound. When shock ends, playback will restart from that point. While the stored sound is being played, the amount of stored sound remaining is displayed as flashing drops.



When using ESP system in INTRO PGM, Shuffle or Program play mode

You can enjoy playing with less blank space between the tracks.

When recording on a cassette

Press ESP again to release the ESP system as the blank search function of a cassette recorder might not work when it is active.

Notes

- In the ESP system, battery life becomes shorter because the disc rotates faster than normal and the memory circuit is active, and the disc rotating sound becomes louder.
- You can press ESP during play, but as disc rotating speed may change, the sound may be interrupted for a short time.
- In following cases, noise may be heard or sound skipping may occur.
 - when the disc is dirty or scratched.
 - when the disc contains certain signals.
 - when the unit is subjected to a certain kind of shock.

In these cases, try to release ESP system.

Slide the HOLD switch to the direction of arrow to avoid accidental pressing of the buttons. When the HOLD switch is set to the direction of arrow, "Hold" appears in the display window if you press any button.



To check the contents of the program during programing

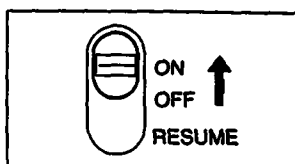
Press REPEAT/ENTER lightly during programing before you press ►II. Each time you press REPEAT/ENTER, the track number and the programmed order appear in the display window.

Example: Track number 2, 4 and 6 are programmed in order.



To Play from Where You Have Stopped — Resume play function

Set the RESUME switch to the ON position. When you press ►II, the play starts from where you have pressed ■.



Notes

- If you open the lid after pressing ■, the memory of the position where you pressed ■ is removed, thus canceling the resume function although the RESUME switch is still set to ON. The play starts from the first track.
- Resume play may start at a point about 30 seconds behind or ahead the point where you pressed ■ if you remove the batteries or the rechargeable battery.

Various Ways of Using

Refer to the operating manual of each equipment for more details.


You can listen to the disc through a car cassette deck by using the following equipment.

- Mount arm CPM-300PK (CPM-300A + CPM-300P)
- Plate arm CPM-300A
- Mount plate CPM-300P
- Car connecting pack CPA-3, CPA-4, CPA-5RM
- Mount kit CPM-300PC (CPM-300P + CPA-4)
- Mount kit CPM-300CK (CPM-300A + CPM-300P + CPA-4)

When you use the CPM-300P mount plate

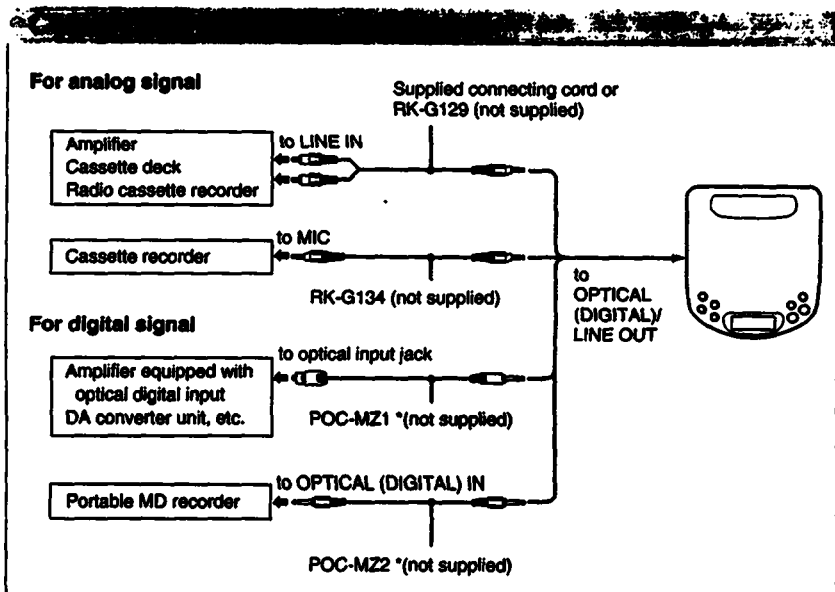
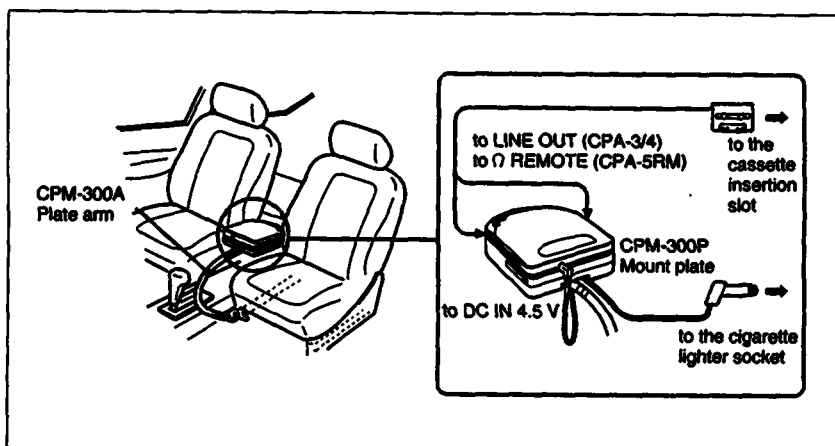
First, attach the car mount adaptor which is supplied with CPM-300P to the mount plate, then install the CD player.

When you turn off the engine

Even when the alkaline batteries are inserted in the unit, the unit stops operations when you turn off the engine of the car. (Switched ignition function) This function is not available with every model of the car. If not, press  to stop operation.

Note

Any connection other than with a Sony Car connecting pack may cause noise.




- When using a unit equipped with the rectangular shaped optical jack, use the digital connecting cable POC-MZ1 (not supplied), and when using a unit equipped with the optical minijack, use the digital connecting cable POC-MZ2 (not supplied).

Notes on connection

- Battery life becomes shorter when the digital connecting cable is connected to the OPTICAL (DIGITAL)/LINE OUT jack. When you do not use the digital connecting cable, disconnect it from the jack.
- Optical digital signal is not output when the ESP system is active.
- Turn off each equipment before making connections.
- Plug in the white plug to the L (left channel) jack, and the red plug to the R (right channel) jack.
- Do not connect the output from LINE OUT with the PHONO jacks of the amplifier.
- Make sure to insert the plugs of the cable firmly into the jacks. A loose connection may cause a humming noise.
- If the unit causes interference to the radio or television reception, turn off the unit or move the unit away from the receiver.

Troubleshooting Guide

Should any problem persist after you have made the following checks, consult your nearest Sony service facility.

Symptom	Cause and/or solution
Disc play does not start.	<ul style="list-style-type: none"> The HOLD switch is set to the direction of arrow. The disc is inserted upside down or incorrectly. → Insert the disc correctly with the label surface up. Dusty or defective disc Dirty or dusty lens The battery compartment lid is not closed firmly. Moisture condensation → Leave the unit in a warm place until the moisture evaporates. The AC power adaptor is not plugged into the wall outlet. The unit is not placed on a level surface. Weak rechargeable battery or alkaline batteries
No sound from the headphones	<ul style="list-style-type: none"> The headphones plug is not firmly connected to the  REMOTE jack. Adjust the VOLUME control. Dirty plug
No sound from the connected speakers	<ul style="list-style-type: none"> Check the connections. The amplifier is not turned on.
Skipping of sound	<ul style="list-style-type: none"> Dirty or defective disc Dirty lens Strong vibration
The "no disc" indication appears in the display window.	<ul style="list-style-type: none"> Place the CD with the label surface up. Replace the CD if the CD is badly damaged.
The "Hi dc in" indication appears in the display window.	<ul style="list-style-type: none"> Use the supplied AC power adaptor.
"Hold" appears when you press a button on the unit.	<ul style="list-style-type: none"> The HOLD switch is set to the direction of arrow.
When using with batteries, the battery life is short.	<ul style="list-style-type: none"> Manganese batteries are used. → Use alkaline batteries. Digital connecting cable is connected. → Disconnect it when it is not in use.
Optical digital signal is not output.	<ul style="list-style-type: none"> The ESP system is active. → Press ESP again to release it.

Specifications

System Laser diode properties

Compact disc digital audio system
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.)
Sony Super Strategy Cross Interleave Reed Solomon Code
1-bit quartz time-axis control
20 – 20,000 Hz $\pm 3 \text{ dB}$
(measured by EIAJ CP-307)
Line output (stereo minijack)
Output level 0.85 V rms at 50 kilohms
Load impedance over 10 kilohms
Optical digital output (optical output connector)
Output level: $-21 \text{ — } -15 \text{ dBm}$
Wavelength: 630 – 690 nm at peak level
Headphones (stereo minijack)
4 mW + 4 mW at 16 ohms

General Power requirements

Supplied:

- Rechargeable battery
- Battery case for use of two alkaline batteries (not supplied)
- DC IN 4.5 V jack accepts the Sony AC power adaptor for use on:

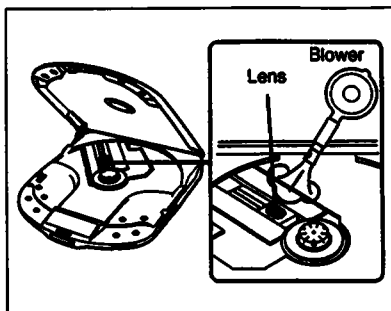
Where purchased	Operating voltage
European and Asian countries	220 – 230 V AC, 50 Hz
U.S.A., Canada, Central and South America	120 V AC, 60 Hz
Middle East	110 – 240 V AC, 50/60 Hz
United Kingdom, Australia	240 V AC, 50 Hz
Other countries	100 – 240 V AC, 50/60 Hz

Not supplied:

- DC IN 4.5 V accepts the Sony CPM-300PK mount arm for use on car battery
- DC 3 V, two size AA (LR6) alkaline batteries

Maintenance

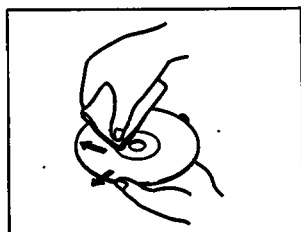
If you have accidentally touched the lens with dirty fingers or if dust on the lens prevents the unit from operating properly, open the disc compartment lid and clean the lens with lens cleaning kit (KK-DM1, not supplied).



Keep the plug of your headphones clean to obtain optimum sound. Wipe it with a dry, soft cloth.

Clean the casing with a soft cloth slightly moistened with water or a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzene as they may mar the finish of the casing.

- Before playing, clean the disc with a cleaning cloth. Wipe the disc from the center out.
- Do not use solvents such as benzene, thinner, commercially available cleaners or anti-static spray intended for analog discs.
- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in the temperature inside the car.
- After playing, store the disc in its case.



If there is a scratch, dirt or fingerprints on the disc, it may cause tracking error.



Dimensions

Mass

Supplied accessories

Approx. 132.5 x 25.9 x 155.3 mm (5 1/4 x 1 1/8 x 6 1/8 in.)
(w/h/d) incl. projecting parts and controls
Approx. 340 g (12.4 oz) incl. rechargeable battery
AC power adaptor (1)
Rechargeable battery (1)
Battery case (1)
Connecting cord (phono plug x 2 ↔ stereo miniplug) (1)
Stereo headphones (1)
Carrying case (1)

Design and specifications are subject to change without notice.

Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

Accessories not supplied

Mount arm CPM-300PK
Car connecting pack CPA-3, CPA-4, CPA-5RM
Car battery cord DCC-E145L
Active speaker system SRS-58
Rechargeable battery BP-DM10

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

Location and Function of Controls

Lens

The laser beam is emitted from this point to pick-up signal on the disc.

OPTICAL (DIGITAL)/ LINE OUT jack

RESUME switch

HOLD switch

OPEN switch

AVLS* switch

ESP** button

DSP*** button

PLAY MODE button

REPEAT/ENTER button

Battery case

DC IN 4.5 V jack (external power input)

Battery compartment

VOLUME control (for listening through headphones)

REMOTE (headphones/remote) jack

Display window

◀◀▶▶ (AMS****/search) buttons

▶|| (play/pause) button

■ (stop) button

*AVLS: Automatic Volume Limiter System

**ESP: Electronic Shock Protection

***DSP: Digital Signal Processing

****AMS: Automatic Music Sensor

Precautions

On safety

- As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Do not put any foreign objects in the safety slot inside the disc compartment. If you do so, the laser beam may come out when the lid is opened.
- Do not put any foreign objects in the DC IN 4.5 V (external power input) jack.
- Should any solid objects or liquid fall into the unit, disconnect the power supply and have the unit checked by qualified personnel before operating it any further.

On power sources

- Use the rechargeable battery (supplied), batteries (not supplied) or house current.
- For AC operation: Use the AC power adaptor supplied with this unit. Do not use any other AC power adaptor as it may cause malfunction.
- For car battery operation: Use the car mount arm CPM-300PK (not supplied) or mount plate CPM-300P (not supplied) and car connecting pack CPA-3, CPA-4, CPA-5RM (not supplied).
- If the unit is not going to be used for a long period of time, be sure to disconnect the power supply (AC power adaptor, the rechargeable battery or the batteries or mount plate) from the unit. To remove the AC power adaptor from the wall outlet, grasp the adaptor itself, never pull it by the cord.
- The nameplate indicating operating voltage, power consumption, etc. is located on the bottom exterior. (AC power adaptor for Middle East only.)

On operation

- Since the CD system offers a wide dynamic range, the peaks of the 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 part of disc with no audio signals or very low level inputs. If you do so, the speakers may be damaged when the peak level of the sound is played.
- The lens on the disc table should be kept clean. Do not touch the lens or poke at it. If you do so, the lens may be damaged and the unit will not operate properly.

On installation

- Never install the unit where it would be subject to:
 - heat sources such as radiators or airducts.
 - direct sunlight.
 - excessive dust.
 - moisture or rain.
 - mechanical vibration or shock.
 - unlevelled surface.
- Do not put the unit on a dashboard nor leave it in a car parked in sunlight since the temperature may rise excessively.
- When the unit is used with the AC power adaptor, do not wrap the unit in a cloth, blanket, etc. If you do so, the temperature inside and outside the unit may rise considerably, resulting in malfunctioning of the unit or serious accidents.
- Do not put any heavy object on top of the unit. The unit and the disc may be damaged.
- If the unit is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the unit. Should this occur, the unit will not operate. In this case, remove the disc and leave the unit in a warm place for several hours until the moisture evaporates.
- For the unit to operate at its best, it should not be subjected to temperatures below 5° C (41° F) or above 35° C (95° F).

Notes on headphones

Road safety

Do not use headphones 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 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.

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