

## 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 batteries (not supplied), house current or a car battery.
- 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-4 (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, 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 air ducts.
  - 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.
- 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.



## Compact Disc Compact Player

# D-121

## D-12ICK

## 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-121 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

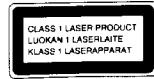
The use of optical instruments with this product will increase eye hazard.

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, Australia, European Countries and Middle East

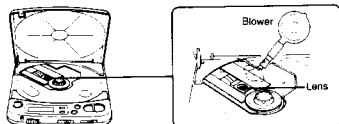


This Compact Disc player is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the bottom exterior.

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

## 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-9, 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.

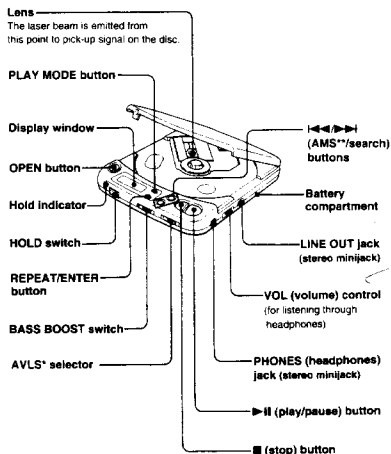
- Before playing, clean the disc with a cleaning cloth. Wipe the disc from the center out.
- Do not use solvents such as benzene, thinner, commercially available cleaners or anti-static spray intended for analog discs.
- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, 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.



## Location and Function of Controls



DC IN 4.5 V jack  
(external power input)

\* AVLS: Automatic Volume Limiter System  
\*\*AMS: Automatic Music Sensor

### General Power requirements

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-300P mount plate and CPM-300PK mount arm for use on car battery.  
• DC 3 V two size AA (LR6) alkaline batteries  
Approx. 132 x 30.2 x 155 mm (5 1/8 x 1 1/4 x 6 1/8 in.) (w/h/d) incl. projecting parts and controls  
Approx. 340 g (12 oz.) incl. alkaline batteries  
AC power adaptor (1)  
Connecting cord (phone plug x 2 + stereo miniplug) (1)  
Stereo headphones (1)

Design and specifications subject to change without notice.

### Accessories not supplied

Plate arm CPM-300A  
Mount plate CPM-300P  
Mount arm CPM-300PK  
Mount kit CPM-300PC  
Mount kit CPM-300CK  
Car connecting pack CPA-4  
Car battery cord DCC-EB45L  
Active speaker system SRS-58

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

### Note

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

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"> <li>The disc is inserted upside down or incorrectly. Insert the disc correctly with the label surface up.</li> <li>Dusty or defective disc.</li> <li>Dirty or dusty lens.</li> <li>The disc compartment lid is not closed.</li> <li>Moisture condensation. Leave the unit in a warm place until the moisture evaporates.</li> <li>The AC power adaptor is not plugged into the wall outlet.</li> <li>The mount plate is not firmly connected to a cigarette lighter socket.</li> <li>The disc is not placed on a level surface.</li> <li>The HOLD switch is set to the direction of the arrow.</li> <li>When the 12 cm CD which contains many selections is replaced with a disc with a few selections (such as CD single or CDV, etc.), it may take more than 10 seconds before play starts.</li> <li>Weak alkaline batteries.</li> </ul>
No sound from the headphones	<ul style="list-style-type: none"> <li>The headphones plug is not firmly connected to the PHONES jack.</li> <li>Adjust the VOL control.</li> <li>Dirty plug.</li> </ul>
No sound from the connected speakers	<ul style="list-style-type: none"> <li>Check the connections.</li> <li>The amplifier is not turned on.</li> </ul>
Skipping of sound	<ul style="list-style-type: none"> <li>Dirty or defective disc.</li> <li>Dirty lens.</li> <li>Strong vibration.</li> </ul>
Disc play does not stop when you turn off the engine of the car.	<ul style="list-style-type: none"> <li>Press <b>■</b> to stop operation.</li> </ul>
The "no disc" indication appears in the display window.	<ul style="list-style-type: none"> <li>Place the CD with the label surface up.</li> <li>Replace the CD if the CD is badly damaged.</li> </ul>
The "Hi dc in" indication appears in the display window.	<ul style="list-style-type: none"> <li>Use the supplied AC power adaptor.</li> </ul>
When using with batteries, the battery life is short.	<ul style="list-style-type: none"> <li>Manganese batteries are used. Use alkaline batteries.</li> </ul>

## Specifications

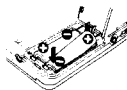
System	Compact disc digital audio system
Laser diode properties	Material: GaAlAs Wavelength: $\lambda = 780$ nm Emission duration: Continuous Laser output: Less than 44.6 $\mu$ W (This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.)
Error correction	Sony Super Strategy Cross Intermleave Reed Solomon Code
D-A conversion	1-bit quartz time-base control
Frequency response	20 - 20,000 Hz $\pm$ 0dB (measured by EIAJ CP-307)
Output (at 4.5 V input level)	Line output (stereo minijack) Output level 0.8 V rms at 50 kHzrms Load impedance over 10 kilohms Headphones (stereo minijack) 20 mW + 20 mW at 16 $\Omega$

## Power Sources

Insert two size AA (LR6) alkaline batteries according to the ⊕ and ⊖ indications in the battery compartment.



To take out the batteries, push a battery as shown.



### 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.

### Alkaline battery life

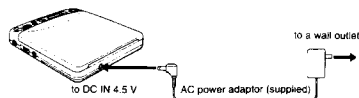
When the unit is used on a flat and stable place, approx. 8 hours of continuous play is possible.

### When indication lights up

As the battery is used up, the unit will stop its operation. When this indication lights up, replace the batteries with new ones.

Connect the supplied AC power adaptor as illustrated.

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

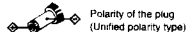


### For the customers whose unit is supplied with an AC plug adaptor

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. Never use any other adaptors manufactured by Sony because the polarity of the supplied adaptor is opposite of conventional adaptors. Do not use the AC power adaptor supplied with other "Discman" CD compact players with DC IN 5V/6V, nor the optional AC power adaptor such as the AC-D6M.



## 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-4
- Mount kit CPM-300PC (CPM-300P + CPA-4)
- Mount kit CPM-300CK (CPM-300A + CPM-300P + CPA-4)

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

### When you use the CPM-300P mount plate

Attach the car mount adaptor supplied to the CPM-300P before installing the CD player.

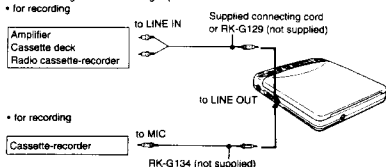
### When you turn off the engine

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  button to stop operation.

### Note

Any connection other than the CPA-4 may cause noise.

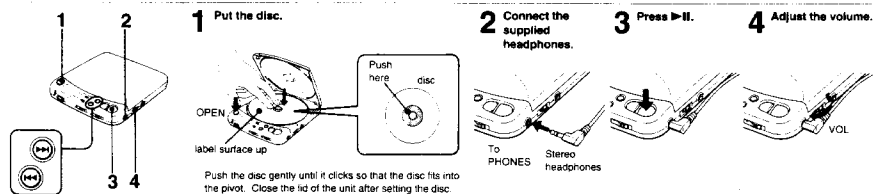
- for monitoring the sound through speakers
- for recording



### Notes on connection

- 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.

## Disc Playing



### Other operations

Operation	Press
To pause	>II<
To release pause	>II<
To stop	■
To locate the beginning of the current selection/previous selections—AMS	◀ lightly/repeatedly
To locate the beginning of the next selection/selections—AMS	>▶ lightly/repeatedly
To go back at high speed (search)	Keep ◀ depressed
To go ahead at high speed (search)	Keep ▶ depressed

- The unit pauses at the beginning of the located selection when you press shortly ◀ or ▶ in the pause mode.
- During the program play, the AMS operates in the programmed order.

### 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 enjoy more powerful bass sound

Set BASS BOOST to a desired position. You can then enjoy a powerful bass-boosted sound.



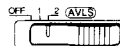
### Notes

- The effect of the BASS BOOST function may be decreased according to a position of the volume control or the recording level of a disc.
- Sound may be cracked or distorted if you set the volume too high. In this case, turn down the volume.

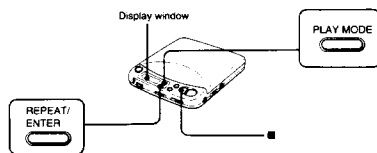
### To limit the volume at a moderate level

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 the volume up higher.
- 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.



## Various Playing Modes



This unit has 10 playing modes: INTRO play, one-selection play, SHUFFLE play, RMS\* (program) play, normal play and repeat play 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. "REPEAT" appears in the display window. Press again to cancel the repeat play.

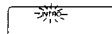


### To stop the disc

Press ■

There is no indication on the display window. To repeat the whole disc, press REPEAT/ENTER.

**1 Press PLAY MODE during play until "INTRO" flashes on the display window.**



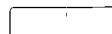
**2 Press >II<.** "INTRO" stops flashing and playing starts.

To repeat INTRO play, press REPEAT/ENTER.

### To listen to the selection to end during INTRO play

Press >II< again at the desired selection.

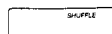
**Press PLAY MODE during play until "1" appears on the display window.**



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

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

**Press PLAY MODE until "SHUFFLE" appears on the display window.**



Play starts from the next selection.

To play the selections in random order repeatedly, press REPEAT/ENTER. After the every selection has been played in random order, they will be reshuffled and played repeatedly in a different order each time.

## 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"> <li>• The disc is inserted upside down or incorrectly.</li> <li>• Insert the disc correctly with the label surface up.</li> <li>• Dusty or defective disc</li> <li>• Dirty or dusty lens</li> <li>• The disc compartment lid is not closed.</li> <li>• Moisture condensation • Leave the unit in a warm place until the moisture evaporates.</li> <li>• The AC power adaptor is not plugged into the wall outlet.</li> <li>• The mount plate is not firmly connected to a cigarette lighter socket.</li> <li>• The disc is not placed on a level surface.</li> <li>• The HOLD switch is set to the direction of the arrow.</li> <li>• When the 12 cm CD which contains many selections is replaced with a disc with a few selections (such as CD single or CDV, etc.), it may take more than 10 seconds before play starts.</li> <li>• Weak alkaline batteries</li> </ul>
No sound from the headphones	<ul style="list-style-type: none"> <li>• The headphones plug is not firmly connected to the PHONES jack.</li> <li>• Adjust the VOL control.</li> <li>• Dirty plug.</li> </ul>
No sound from the connected speakers	<ul style="list-style-type: none"> <li>• Check the connections.</li> <li>• The amplifier is not turned on.</li> </ul>
Skipping of sound	<ul style="list-style-type: none"> <li>• Dirty or defective disc</li> <li>• Dirty lens</li> <li>• Strong vibration</li> <li>• Press <b>■</b> to stop operation.</li> </ul>
Disc play does not stop when you turn off the engine of the car.	
The "no disc" indication appears in the display window.	<ul style="list-style-type: none"> <li>• Place the CD with the label surface up.</li> <li>• Replace the CD if the CD is badly damaged.</li> </ul>
The "Hi dc in" indication appears in the display window.	<ul style="list-style-type: none"> <li>• Use the supplied AC power adaptor.</li> </ul>
When using with batteries, the battery life is short.	<ul style="list-style-type: none"> <li>• Manganese batteries are used. • Use alkaline batteries.</li> </ul>

## Specifications

System	Compact disc digital audio system
Laser diode properties	Material: GaAlAs Wavelength: $\lambda \approx 780$ nm Emission duration: Continuous Laser output: Less than 44.6 $\mu$ W (This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.)
Error correction	Sony Super Strategy Cross Interleave Read Solomon Code
D-A conversion	1-bit quartz time-axis control
Frequency response	20 - 20,000 Hz $\pm 1$ dB (measured by EIAJ CP-307)
Output (at 4.5 V input level)	Line output (stereo minijack) Output level 0.8 V rms at 50 kilohms Load impedance over 10 kilohms Headphones (stereo minijack) 20 mW + 20 mW at 16 $\Omega$