

Compact Disc Compact Player

Operating Instructions



D-240

D-242CK

D-242SK

D-245

D-247

Sony Corporation ©1995 Printed in Malaysia

Welcome!

Thank you for purchasing the Sony Compact Disc Compact Player. Before operating your Discman, please read this manual and retain it for future reference. For the accessories supplied with your Discman, check your model number and refer to "Supplied Accessories" towards the end of this manual.

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.

INFORMATION

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.

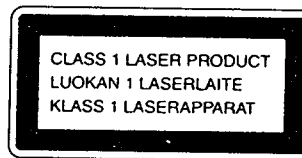
These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. 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 the U.K.

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



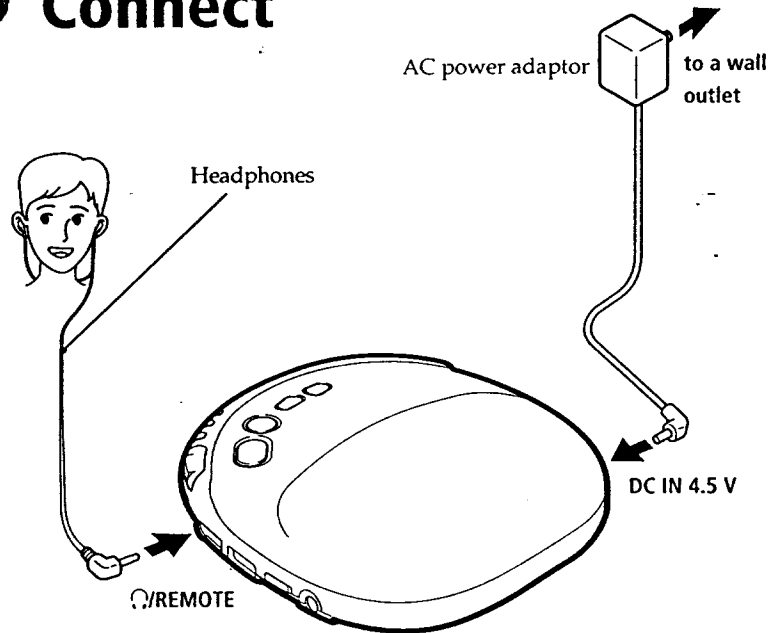
For the customers in Australia

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

Playing a CD right away!

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

1 Connect



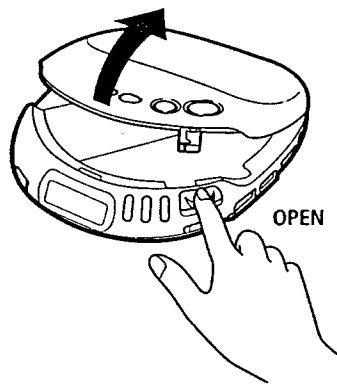
For models supplied with the AC plug adaptor

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

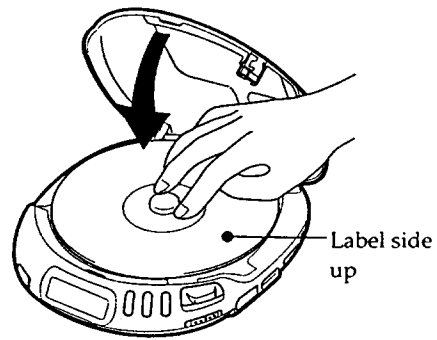
Note

The type of the headphones shown may not be the same as your headphones.

2 Place a CD

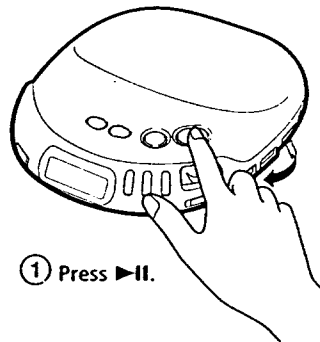


① Press OPEN and open the lid.



② Fit the CD to the pivot.

3 Play



① Press ►||.

② Adjust the volume.

To stop play, press ■.

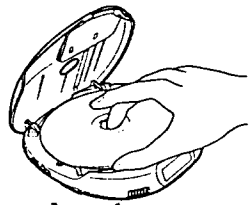
To	Press
Pause	▶
Resume play after pause	▶
Find the beginning of the current track (AMS*)	◀◀ once**
Find the beginning of previous tracks (AMS)	◀◀ repeatedly**
Find the beginning of the next track (AMS)	▶▶ once**
Find the beginning of succeeding tracks (AMS)	▶▶ repeatedly**
Go forward quickly	Hold down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

*AMS = Automatic Music Sensor

**These operations are possible during both play and pause.

To remove the CD

Remove the CD while pressing the pivot.



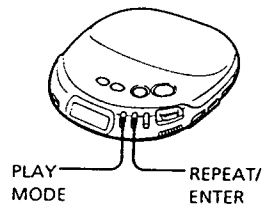
Notes on display

- When you press ▶|| (when RESUME is set to OFF), the total number of the tracks in the CD and the total playing time appear for 2 seconds.
- During play, the track number and the elapsed playing time of the current track appear.

►Other Operations

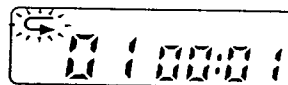
Playing tracks repeatedly (Repeat Play)

You can play tracks repeatedly in normal, INTRO, shuffle or RMS (Random Music Sensor) play modes. Repeat all the tracks or only one track.



To repeat all the tracks

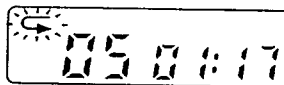
Press REPEAT/ENTER during play. The "◀" indication appears.



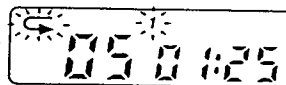
To cancel repeat play, press REPEAT/ENTER again.

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.

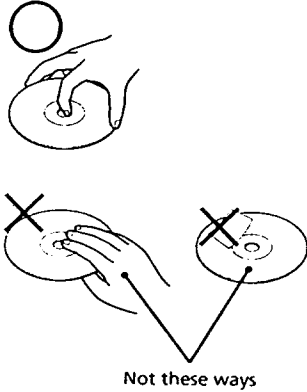


To repeat another track, press ◀◀ or ▶▶.

- During pause, the elapsed playing time flashes in the display.
- Between the tracks, the time to the beginning of the next track will appear with the "-" indication.

Notes on handling CDs

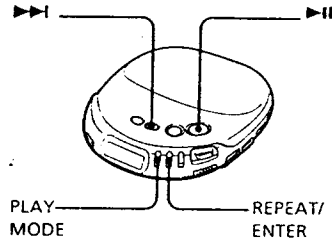
- To keep the CD clean, handle it by its edge. Do not touch the surface.
- Do not stick paper or tape onto the CD.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts. Do not leave the CD in a car parked in direct sunlight.



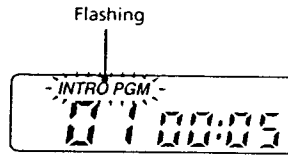
To cancel repeat play, press REPEAT/ENTER again.

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 ►► to start scanning. The Discman plays 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 ►► or just wait for the next track.

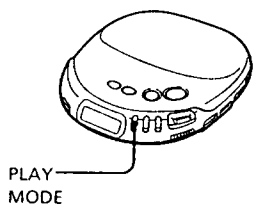
When you go through the CD, "INTRO PGM" stops flashing and the tracks you chose play automatically.

To finish programming before hearing through the CD, press **▶||**. The selected tracks are played.

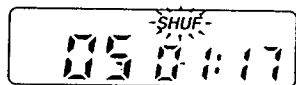
To cancel INTRO PGM play, press PLAY MODE repeatedly until no play mode is indicated in the display.

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 no play mode is indicated in the display.

Note

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

To cancel RMS play, press PLAY MODE until "RMS" disappears.

To check the program

To check during programming, press REPEAT/ENTER before step 5. To check during RMS play, press PLAY MODE repeatedly until "RMS" flashes, then press REPEAT/ENTER.

Each time you press the button, the track numbers appear in the order you specified.

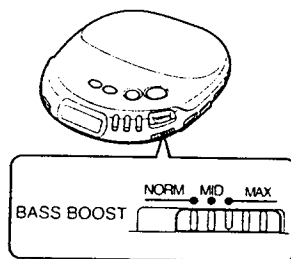
Note

- If you program another track after the 22nd track, the first track programmed is cleared and the new track is programmed instead.

Using other functions

To enjoy more powerful bass sound

You can enjoy a powerful bass-boosted sound.



Set BASS BOOST to the desired position.

Note

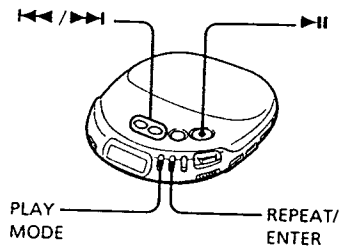
- If the sound is distorted when emphasizing bass, turn down the volume.

To prevent sound from skipping (ESP)

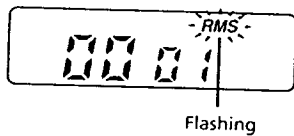
The ESP (Electronic Shock Protection) function prevents the sound from skipping by using a buffer memory that stores music data for about 3 seconds. Use this function when listening during a walk or playing in a car.

Playing tracks in the order you want (RMS play)

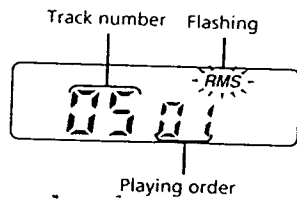
You can program up to 22 tracks to play in any order you choose.



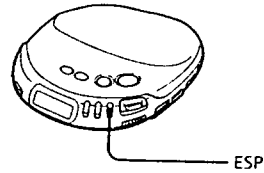
- 1 During play, press PLAY MODE repeatedly until "RMS" flashes.



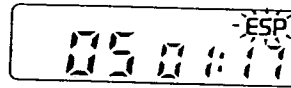
- 2 Press **◀▶** or **▶▶** to choose a track. The track number and the playing order appear.



- 3 Press REPEAT/ENTER to program the track.
- 4 Repeat steps 2 and 3 to program the remaining tracks.
- 5 Press **▶▶**. "RMS" stops flashing and the tracks you chose play in the order you specified.



Press ESP.
The ESP indication appears.

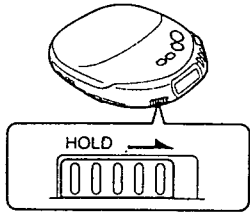


Notes

- Playing may stop when the Discman gets a strong shock even with the ESP function on.
- When you record a CD on a cassette tape using a tape recorder that has a blank search function, make sure that the ESP indication is not displayed (the ESP function is off).
- If you hear a noise or sound skip when:
 - listening to a dirty or scratched CD,
 - listening to an audio test CD or,
 - the Discman receives continuous shock,
 press ESP again so that the ESP indication will be turned off.
- Sound may skip if you press ESP during play.

Continue to the reverse side →

To lock the buttons
You can lock your Discman against any accidental operations.

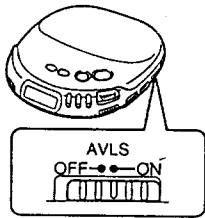


Slide HOLD in the direction of the arrow. When you press any button, "Hold" appears in the display.

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.



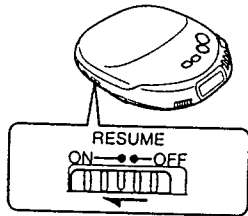
Set AVLS to ON.

Note

- If the sound is distorted when you listen to the bass-boosted sound with the AVLS function, turn down the volume.

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, lets you listen to from the point at which you last turned off the Discman.



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.

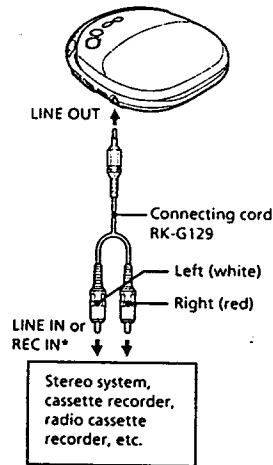
To turn off the beep

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

While you press and hold down ■, connect the power source.

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 other equipment for details. Before making connections, turn off each equipment.



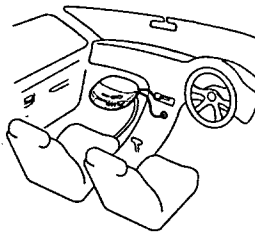
*To connect an equipment without LINE IN nor REC IN jack, use the RK-G134 connecting cord and connect to MIC jack.

Note

- Before you play the CD, turn down the volume of the connected equipment so as not to damage the connected speakers.

Playing a CD in a car

You can use your Discman in a car as illustrated below.



To connect your Discman to a car cassette deck, you need the following accessories:

- Mount plate CPM-300P*
 - Plate arm CPM-300A
 - Car connecting pack CPA-4, CPA-8,
- or,
- Mount arm CPM-300PK (Mount plate + Plate arm) and car connecting pack CPA-4, CPA-8
 - Mount kit CPM-300CK (Mount plate + Plate arm + Car connecting pack)
- or, to place your Discman on a console box,
- Mount kit CPM-300PC (Mount plate + Car connecting pack)

Refer to the instruction manual of each accessory for details.

When you use the CPM-300P mount plate

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

Notes

- Do not put the Discman on the dashboard.
- Do not leave the Discman in a car parked in sunlight.
- Use a Sony car connecting pack for reducing noise.

Switched ignition function

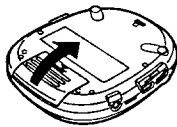
With this feature, your Discman stops automatically when you turn off the engine of the car. (This function is not possible with some cars depending on the model).

► Power Sources

Using rechargeable battery (BP-DM10)

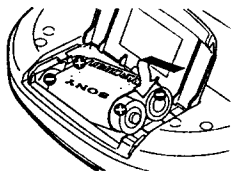
Charge the rechargeable battery before using it for the first time.

- 1 Open the lid of the battery compartment.

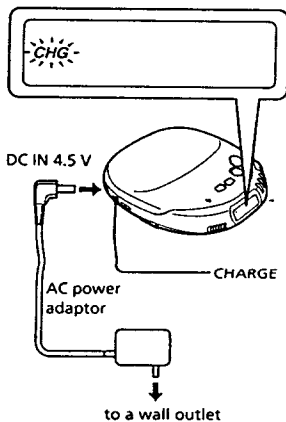


(rear)

- 2 Insert the rechargeable battery so that the word "Discman" is facing the same direction as illustrated inside the lid, and close the lid.



- 3 Connect the AC power adaptor and press CHARGE. Charge for about 2 hours. The indication "CHG" lights up.



- 4 When fully charged, disconnect the AC power adaptor.

When to charge the battery

When the battery is used up, ∞ indication appears in the display. Charge the rechargeable battery.

Battery life

When you use the Discman on a flat and stable place, approx. 3.5 hours (with ESP on) and 4.0 hours (with ESP off) of continuous play is possible.

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 BP-DM10 or BP-DM20 rechargeable battery. Do not use any other rechargeable battery.

If you use rechargeable battery

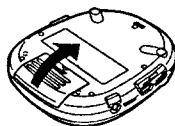
BP-DM20

You can use BP-DM20 in the same way as BP-DM10.

The charging time, however, is approx. 3 hours. Battery life is approx. 5.5 hours (with ESP on) and approx. 7 hours (with ESP off.)

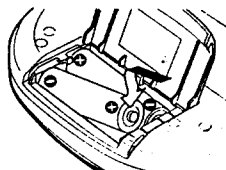
Using dry batteries

- 1 Open the lid of the battery compartment.



(rear)

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



When to replace the dry batteries

When the battery is used up, ∞ indication appears in the display. Replace all the batteries with new ones.

Alkaline battery life

When you use the Discman on a flat and stable place, approx. 8 hours (with ESP on) and 12 hours (with ESP off) of continuous play is possible.

Notes

- Do not charge the dry batteries.
- Do not mix new batteries with old ones.
- Do not use different types of batteries together.

► Additional Information

Precautions

On safety

- Should any solid objects or liquid fall into the unit, 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 unit for a long time, disconnect all power sources from the unit.
- The nameplate indicating operating voltage, power consumption, etc. is located at the back of the AC power adaptor (for Middle East only.)

On the AC power adaptor

- Use only the supplied AC power adaptor. If your unit 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 rechargeable battery 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.

On the unit

- Keep the lens on the unit clean and do not touch it. If you do so, the lens may be damaged and the unit will not operate properly.
- Do not put any heavy object on top of the unit. The unit and the CD may be damaged.
- Do not leave the unit 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 unit causes interference to the radio or television reception, turn off the unit or move it away from the radio or television.
- Do not wrap the unit in a cloth or blanket during use as it may cause malfunction or serious accidents.

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.

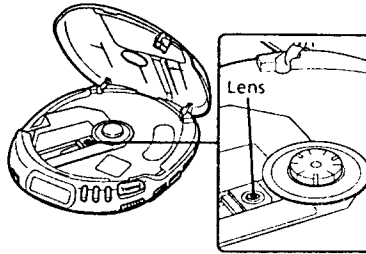
Caring for others

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

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.

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 unit.

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

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" appears in the display when you press a button.

- The buttons are locked. 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 ON. Set it to OFF.

Specifications

System

- Compact disc digital audio system
- Laser diode properties**
 - Material: GaAlAs
 - Wavelength: $\lambda = 780$ nm
 - Emission duration: Continuous
 - Laser output: Less than $44.6 \mu\text{W}$ (measured at 200 mm away from the objective lens surface)

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 ± 1 dB (measured by EIAJ CP-307)

Output (at 4.5 V input level)

- Headphones (stereo minijack)
 - 15 mW + 15 mW at 16 ohms
- Line output (stereo minijack)
 - Output level 0.7 V rms at 50 kilohms
 - Recommended load impedance over 10 kilohms

General

Power requirements

- Rechargeable battery: 2.4 V DC
- Two LR6 (size AA) batteries: 3 V DC
- AC power adaptor (DC IN 4.5 V jack):
 - 220 - 230 V, 50 Hz (European and Asian model)
 - 120 V, 60 Hz (USA, Canadian, Central and South American model)
 - 110 - 240 V, 50/60 Hz (Middle Eastern model)
 - 240 V, 50 Hz (U.K. and Australian model)
 - 100 - 240 V, 50/60 Hz (Model for other countries)
- Sony CPM-300P mount plate and CPM-300PK mount arm for use on car battery: 4.5 V DC

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

- Approx. 130 x 30.5 x 142 mm
- (5 $\frac{1}{8}$ x 1 $\frac{1}{4}$ x 5 $\frac{5}{8}$ in.)

Mass (without rechargeable battery)

- Approx. 270 g (9.6 oz)

Operating temperature

- 5°C - 35°C (41°F - 95°F)

Supplied accessories

D-240

- Stereo headphones (1)
- Carrying case* (1)
- *U.K. model only

D-242CK

- AC power adaptor* (1)
- Connecting cord** (Phono plug x 2 ↔ stereo miniplug) (1)
- Car battery cord (1)
- Car connecting pack (1)
- Spiral tube (1)
- Spare fuse (1)
- Velcro tapes (2)
- *Not supplied with U.K. and European model
- **Not supplied with U.K., U.S.A., European model, and world model

D-2425K

- AC power adaptor (1)
- Stereo headphones (1)
- Car battery cord (1)
- Car connecting pack (1)
- Spiral tube (1)
- Velcro tapes (2)
- Spare fuse (1)
- Original cap (1)

D-245

- AC power adaptor (1)
- Stereo headphones (1)
- Connecting cord (Phono plug x 2 ↔ stereo miniplug)* (1)
- Rechargeable battery BP-DM10** (1)
- Carrying case*** (1)
- *Not supplied with U.K. and European model, world model
- **World model only
- ***U.K. and world model only

D-247

- AC power adaptor (1)
- Connecting cord (Phono plug x 2 ↔ Stereo miniplug) (1)
- Stereo headphones (1)
- Rechargeable battery BP-DM10 (1)

Recommended accessories

- 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, CPA-8
- Car battery cord DCC-E245HG
- Active speaker system SRS-A50
- Rechargeable battery BP-DM10, BP-DM20
- Connecting cord RK-G129
- AC power adaptor AC-E45HG
- Stereo headphones MDR-25, MDR-E747

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