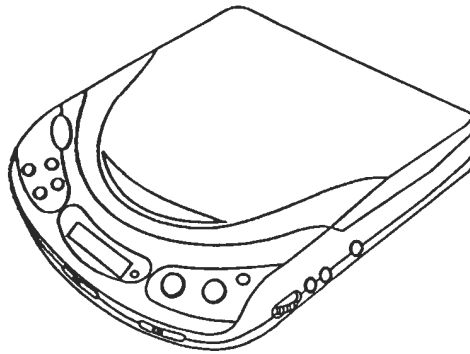


# Compact Disc Compact Player

## OPERATING INSTRUCTIONS

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



### 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.

### WARNING

#### CAUTION

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

#### INFORMATION (For the Customers in U.S.A)

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 and European Countries

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

CLASS 1 LASER PRODUCT  
LUOKAN 1 LASERLAITE  
KLASS 1 LASERAPPARAT

#### For the Customers in Canada

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

## 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 6V (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 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 the 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 subjected to:

- heat sources such as radiators or airducts.
- direct sunlight.
- excessive dust.
- moisture or rain.
- mechanical vibration or shock.
- unlevelled surface.
- Do not place any heavy object on top of the unit.
- When the unit is used with a 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.
- 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/earphone

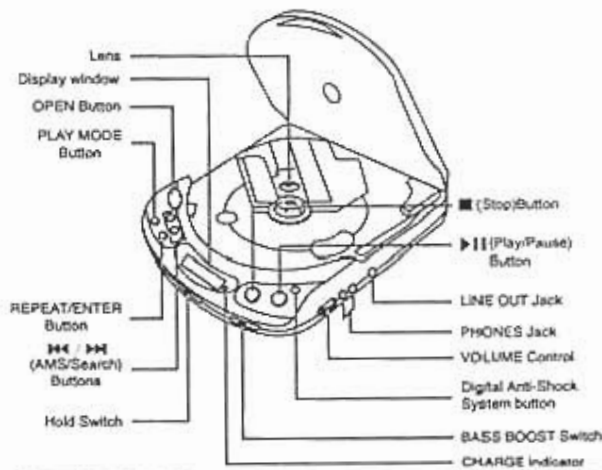
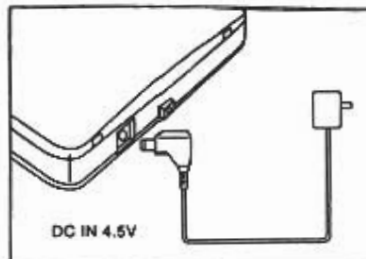
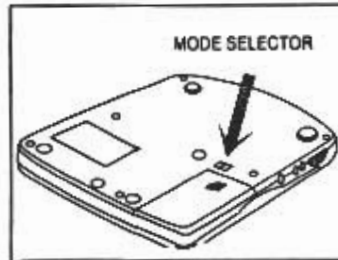
Do not use headphones/earphone while driving, cycling, or operating any motorized vehicle, it may create a traffic hazard and is illegal in some areas. It can also be potentially dangerous to play your headsets at high volume while walking, especially at pedestrian crossings. You should exercise extreme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

Avoid using headphones/earphone 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.

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 dealer.

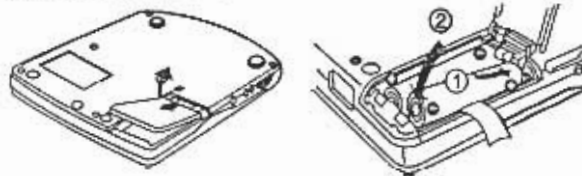
## Location and Function of Controls



## Power Sources

### Using with Batteries

Insert two size AA batteries(LR6 or SUM-3 alkaline or rechargeable) according to the  $\oplus$  and  $\ominus$  indications in the battery compartment.



#### Notes on batteries

- Fully charge the RECHARGEABLE BATTERIES before using it for the first time.
- 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.
- When the unit is not to be used for a long period of time, remove the batteries.





#### Battery life

##### CD PLAYING

	DASS ON	DASS OFF
ALKALINE	2.5 HOURS	3.5 HOURS
RECHARGEABLE	2 HOURS with 700mAh	2.5 HOURS with 700mAh

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

#### Notes on

- During playback (batteries are in use),  is off.
- When the battery voltage level is low,  will light for approx. 10 - 15 minutes, playback still continues in this period.
- Playback would automatically come to a stop when the batteries have no more power. Do not repeat pressing  as the unit may operate incorrectly. Replace all the batteries with new ones.
-  would not be on if an AC adaptor is used.



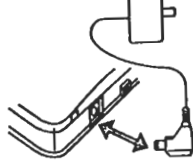
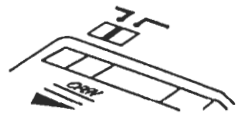

## Using on House Current

If the unit you purchased does not include an AC power adaptor, please use a 4.5V 750mA AC power adaptor. Otherwise please use only the supplied AC power adaptor.  
When the unit is not to be used, be sure to disconnect the AC power adaptor.

## Charging RECHARGEABLE BATTERIES

1. Insert two size AA RECHARGEABLE BATTERIES according to the "⊕" and "⊖" indications in the battery compartment.
2. The unit has to be in the stop mode.

### To charge

<p>1. Connect the AC power adaptor.</p> <p>AC power adaptor</p> 	<p>2. Slide mode selector to CHARGE</p>  <p>Use finger nail or a pen to move the switch.</p>
<p>3. Make sure CHARGE indicator is on. The batteries are now being charged.</p> 	<p>4. The batteries will be fully charged approximately in 12-15 hours.</p> <p><b>12-15HOURS</b></p>



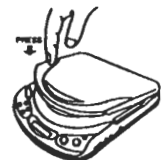
- \* Do not charge continuously for 24 hours or more. Doing so can cause the performance of the rechargeable batteries to deteriorate.
- \* More time may be required for charging in cold temperatures.
- \* Replace the rechargeable batteries if the operating time decreases drastically even when they are properly charged.

### WARNING

DO NOT CHARGE NORMAL BATTERIES AS IT MAY CAUSE EXPLOSION. CHARGE ONLY RECHARGEABLE NI-CAD BATTERIES.

ALWAYS MAKE SURE THE MODE SELECTOR IS IN THE "NORMAL" POSITION WHEN USING WITH NORMAL BATTERIES.

## Disc Playing

<p>1 Open the door.</p> 	<p>2 Put the disc.</p> 
<p>3 Close the door.</p> 	<p>Push the disc gently until it clicks so that the disc fits into the pivot.</p>

### Other operations

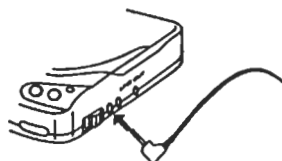
Operation	Press
To pause	▶
To release pause	▶
To stop	■ Disc playing stops
To locate the beginning of the current selection or previous selections-AMS*	<p>◀◀ lightly/repeatedly</p> <p>* If ◀◀ is pressed once at the first track, the last track will be located.</p> <p>The first track <span style="border: 1px solid black; padding: 2px;">0 100:00</span></p> <p style="text-align: center;">↓</p> <p>◀◀ is pressed once <span style="border: 1px solid black; padding: 2px;">1700:00</span></p>
To locate the beginning of next selection/selections-AMS*	<p>▶▶ lightly/repeatedly</p> <p>* If ▶▶ is pressed once at the last track, the first track will be located.</p> <p>The last track <span style="border: 1px solid black; padding: 2px;">1700:00</span></p> <p style="text-align: center;">↓</p> <p>▶▶ is pressed once <span style="border: 1px solid black; padding: 2px;">0 100:00</span></p>
To go back at high speed (search)	Keep ◀◀ depressed
To go ahead at high speed (search)	Keep ▶▶ depressed

\* AMS - auto music sensor

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



**4 Connect the headphones/earphones.**



\*When two headphones/earphones are used, the output level will be less than normal.

**5 Press ►||**

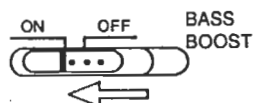


**6 Adjust the VOLUME CONTROL**



**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 "ON". You can then enjoy a powerful bass-boosted



#### Notes

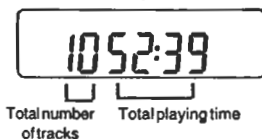
- The effect of the BASS BOOST function may be decreased according to the position of the volume control or the recording level of a disc.
- Sound may be cracked or distorted if you set the volume too high. In this case, turn down the volume.

#### On display window

**When you press ►||**

The total number of selections on the disc and the total playing time (T.O.C., Table of Contents) appear for 2 seconds.

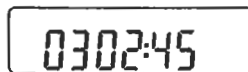
Example



Total number of tracks      Total playing time

#### During play

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

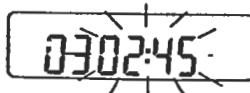


2 min. 45 sec. has elapsed from the beginning of the third track

When "STOP" is pressed during play, T.O.C. (Table of Contents) will be displayed and the unit is still on. If "STOP" is pressed again the unit will be returned to full stop mode. If "PLAY" is pressed the unit returns to play mode without T.O.C. reading. The unit will be returned to full stop mode automatically after approximately 30 seconds if no button is pressed. You can save battery life if the unit is played again within the 30 seconds.

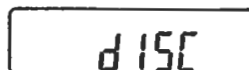
### During pause

The elapsed playing time of the current point flashes.

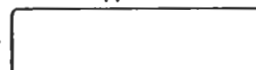


Pause mode at the point 2 min.  
45 sec. from the beginning of the  
third track

When no disc is inserted onto the player and when "▶||" is pressed, the display window shows:-



After approx. 30 sec.



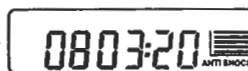
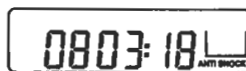
Full stop mode

The unit cannot be operated when "d 15C" is displayed. After approx. 30 seconds the unit will return to full stop mode, or reset the player by pressing "STOP" once and then insert a disc to start playing.

## Digital Anti-Shock System

The digital anti-shock function incorporates a special electronic circuit that prevents sound from skipping when the unit is subjected to shocks and vibration during play.

When listening while walking or when using in a car, you better press "DASS" button to prevent sound skipping. Once it pressed during play the "□" indicator appears in the display and the digital anti-shock function turns on. The "□" mark changes to the "■" mark, indicating the data buffer is full.



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. As the data is read from memory, the indicator changes from "■" to "□". Once the pickup returns to its original position, new data is stored in memory and display changes back to the "■" mark.



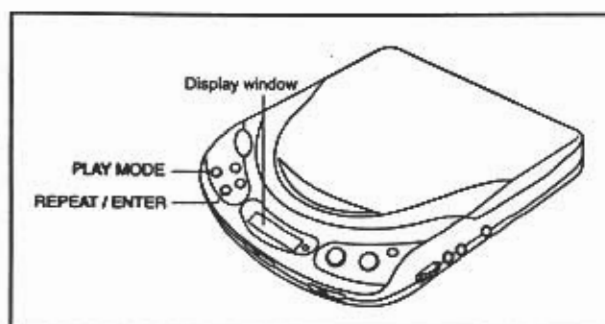
If the unit is subjected to continuous shocks and all the data stored in memory is used up the "□" mark is displayed and the sound will skip. If the vibration stops then the data memory will be restored. If continuous vibration is applied when the data memory is empty an error message will be displayed. To reset the CD player press "■" once.



#### NOTES:

- In the "DIGITAL ANTI-SHOCK SYSTEM", battery power consumption is more because the disc rotates faster than normal and the memory circuit is active.
  - When the digital anti-shock function is switched on or off, the sound will be interrupted for a short time. This is normal.
  - Under some conditions, 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 conditions, try to release "DIGITAL ANTI-SHOCK SYSTEM".

## Various Playing Modes



During playback, every time the PLAY MODE key is pressed, the mode would be changed to the next one as follows:

NORMAL play -> INTRO -> SINGLE MUSIC -> SHUFFLE -> PROGRAM

\* Repeat play of each mode is possible.

### Normal Play - Playing the Whole Disc

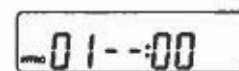
There is no play mode indication in the display window. To repeat the whole disc, press REPEAT/ENTER.

### Intro Play - Playing the First About Ten seconds of All the Selections

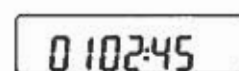
- 1) Press PLAY MODE during play until "INTRO" flashes in the display window.



- 2) Press ►|| to begin the INTRO play.



- 3) Pressing ►|| again will cease the INTRO play and continue playback in the NORMAL play mode.

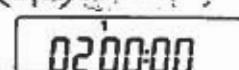


### Single Music - Playing Only One Selection

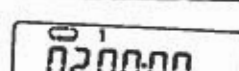
- 1) Press PLAY MODE during play until "1" appears in the display window.



- 2) Select desired track to be played only once by pressing ◀◀ or ▶▶.



- 3) To play only one track repeatedly, press "REPEAT/ENTER".



### Shuffle Play - Playing the Selections in Random Order

Press Play Mode until "SHUFF" appears in the display window. Shuffle Play starts from the next track, or when ►► is pressed.

SHUFF 0300:16

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

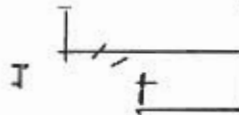
SHUFF 0800:00

- \* To locate the beginning of the track being played: press ◀◀◀.
- \* To locate the next track: press ►►►. However, you cannot locate a previous track even if you keep ◀◀◀ pressed.

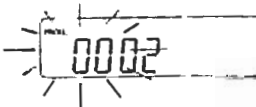
### PROG (Program) Play - Playing the Selections in the Desired Order

- 1) Press PLAY MODE during play until "PROG" and "00" flash in the display window.

- 2) Press ◀◀◀ or ►►► to select the desired selection.



- 3) Press REPEAT/ENTER to register track no.5, for example, as the first selection. The track no. indication will be returned to "00".



4) Repeat steps 2 and 3 (up to 20 selections)

If you try to register another selection after 20 selections have been memorized, the first selection will be cleared and the new one will take its place.

5) Press ►||, "PROG" stops flashing and play starts.

- To repeat program play, press "REPEAT/ENTER".
- If "STOP" is pressed or if the lid is opened, all the programs would be cleared.
- If the program mode is exited by means of the "PLAY MODE" key, all the programs would still remain in memory.
- During the program play, the AMS operates in the programmed order.

### Program Edition

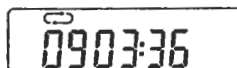
To check: Press "REPEAT/ENTER" lightly during programming before you press ►||. Each time "REPEAT/ENTER" is pressed the track number and the programmed order appear in the display window.

To change: When checking press either ◀◀ or ▶▶ to alter the track number for the program currently displayed. Press "REPEAT/ENTER" to register the newly selected track into memory.

To delete: When checking, if the track number of a program is selected as "00", all the subsequent programs starting from and including that program will be cancelled.

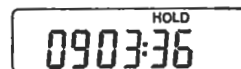
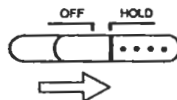
### REPEAT Play - Playing the Whole Disc Continuously

To repeat the whole disc (or selected tracks in Various Playing mode); press REPEAT/ENTER and '◀◀' will appear in the display window.



### Locking the Buttons

Slide the Hold switch to the "HOLD" direction as indicated to prevent accidental selection of an unwanted function during playback or stop mode.



In the HOLD position, no function button on the unit can operate. Moving the switch to the OFF position, the unit returns back to the normal operations.



## Troubleshooting Guide

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

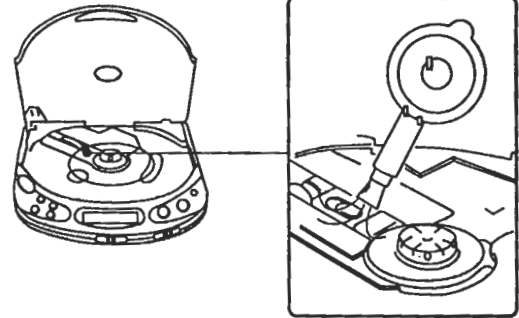
Symptom	Cause and/or solution
Disc play does not start	<ul style="list-style-type: none"> <li>• The HOLD switch is set to HOLD</li> <li>• The disc is inserted upside down or incorrectly. Insert the disc correctly with the label surface up</li> <li>• Dusty or defective disc</li> <li>• Dirty or dusty lens</li> <li>• The disc compartment lid is not closed</li> <li>• Moisture condensation -&gt; 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 unit is not placed on a level surface</li> </ul>
No sound from the headsets	<ul style="list-style-type: none"> <li>• Weak batteries</li> <li>• The headphones/earphones 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>
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>
Display window shows "d 15C" and the unit cannot be operated	<ul style="list-style-type: none"> <li>• No disc, dirty disc or scratched disc. The unit will return to full stop mode after approx. 30 seconds, or reset the player by pressing stop button once and then insert a disc to start playing</li> </ul>



## Maintenance

### Cleaning the Lens

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 a cleaning kit as shown.



### Cleaning the Headphones/Earphones Plug

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

### Cleaning the Casing

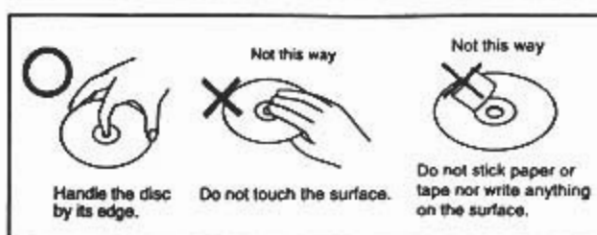
Clean the casing with a soft cloth slightly moistened with water or a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine as they may mar the finish of the casing.

### Notes on Compact Discs

- Before playing, clean the disc with a cleaning cloth. Wipe the disc from the centre out.
- Do not use solvents such as benzine, 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 temperature inside the car.
- After playing, store the disc in its case.



## Handling the Disc



## Specifications

### General

- \* Digital filter two-time oversampling
- \* Three-spot optical pick up
- \* Disc defect detection ability
- \* Up to 20 selected music stored ability

### 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)

### D-A conversion

#### Frequency response

#### Output (at 4.5 input level)

16 bits linear/CH

20 - 20000 Hz  $\pm 3 \text{ dB}$

Line output (stereo minijack)

Output level 0.4V rms at 10 kilohms at 1KHz

Headphones/earphones (stereo minijack)

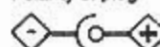
15 mW + 15 mW at 16W to 32W

### Power requirements

2 size AA (LR6 or SUM-3) alkaline batteries,

or DC IN 4.5V, 750mA power adaptor

Polarity of plug



Where purchase	Operating voltage
U.S.A., Canada, Central and South America	120V AC $\pm 5\%$ 60 Hz
Middle East and Australia	240V AC $\pm 5\%$ 50 Hz
United Kingdom and Germany	230V AC $\pm 5\%$ 50 Hz
Chile	230V AC $\pm 5\%$ 50 Hz
Singapore, Malaysia and Thailand	200-240V AC $\pm 5\%$ 50 Hz
Japan	100V AC $\pm 5\%$ 60Hz

Dimensions

Approx. 133 x 29 x 157 mm (5¼ x 1 x 6-1/8 in)  
(w/h/d)

Weight

Approx. 330.7 g (11.7oz.) Incl. batteries

Design and specifications are subject to change without notice.

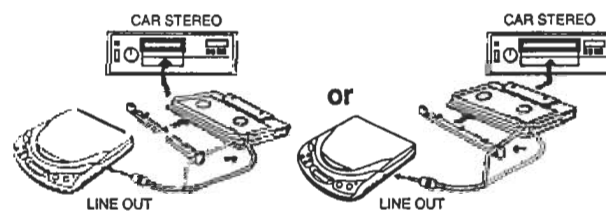
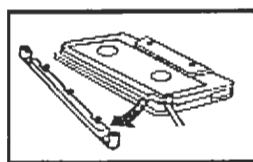
**Note**

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

## Using the Car Cassette Adaptor

### BEFORE USE

Check your car stereo tape insert system before use. If necessary, change the cord strain orientation (side of back edge of the cassette.) Some car stereos do not work with the supplied car cassette adaptor.

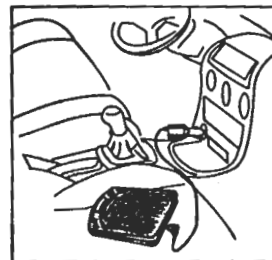
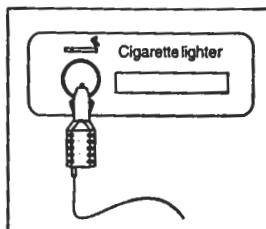


#### LISTENING IN A CAR

1. Plug the cord into the LINE OUT jack.
2. Insert the car cassette adaptor into the car stereo.

#### CIGARETTE LIGHTER ADAPTOR

Plug one end of the cigarette lighter adaptor into the DC4.5V jack and then plug the other end into the cigarette lighter socket.



#### Cautions on the cigarette lighter adaptor

- Use this unit only with the supplied cigarette lighter adaptor. Use with other cigarette lighter adaptors could damage the unit.
- When the inside of the cigarette lighter socket is dirty with ashes or dust, the plug section may become hot due to poor contact. Be sure to clean the cigarette lighter socket before use.
- After use, disconnect the cigarette lighter adaptor plugs from both this unit and the cigarette lighter socket.
- The cigarette lighter adaptor may cause interference with reception from the car radio or another radio inside the vehicle. If this is the case, disconnect the cigarette lighter adaptor from the cigarette lighter socket, or use the radio at a distance from the cigarette lighter adaptor.

**ATTENTION:** Please note the charge indicator may not light when the batteries are being charged while using the supplied Car Adaptor. In this case the batteries will still be fully charged as long as the Car Adaptor is properly connected.

- The supplied cigarette lighter adaptor is designed for use with vehicles that have a 12V, negative ground electrical system.
- Most vehicles have this type of electrical system, but if you are unsure about the type your vehicle has, contact the vehicle dealer