# Concerning Compact Discs



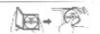
Only compact discs bearing this mark can be used with this unit.

However, continued use of irregular shape CDs can damage the unit.



How to remove a disc from its case

How to store the disc in its case





#### How to hold a disc



#### If the surface is dirty

Wipe if with a damp cloth and then wipe dry. Wipe from the center toward the outer circumference.

Play surface (shiny surface)



#### If moisture has formed on a disc

When maisture has formed because the disc was brought suddenly into a warm room from a cold environment, wipe it off using a soft dry cloth.

## When storing discs

Avoid locations which are

- Exposed to direct sunlight.
- ·Susceptible to high levels of humidity or dust.
- . Directly exposed to heat from a heating appliance
- On lop of a car dashboard or near the rear window.

#### Handling precautions

- On the label side (the side with writing) Do not write anything using a pencil. ball-point pen, etc. Do not stick paper or labels
- On the disc (shiny) side
- Handle this side carefully to keep it free from lingerprints or scratches. Do not use record cleaners, solvents, etc.
- . Do not attach labels or stickers to CD's. Do not use CDs with exposed adhesive from tape or left over peeled off stickers.
- . Do not use scratch-proof protectors or covers other than those specified for use with this unit

# Portable CD player

# Operating Instructions

Panasonic<sup>®</sup>

# Dear Customer

Thank you for purchasing this product For optimum performance and safety, please read these instructions carefully

The model number and serial number of this product can be found un either the back or the bottom of the unit Please note them in the space provided below and keep for future reter-

MODEL NUMBER \_ SL-SX510

SERIAL NUMBER



# Supplied Accessories

AC adaptor	External battery case 1 pc. (RFA1139-H)
Wired remote control 1 pc. (RFEV015PCKS)  For U.S.A. Stereo headphones 1 pc. (RFEV711P-KS)  For Canada  Stereo earphones 1 pc.	Nickel-metal hydride rechargeable batteries with carrying case 1 pc. (RFKFHHR4AHBA) Hemove the rechargeable batteries from their case before use. If the irrer tray is removed, the case can be used to carry two "AA" (LR8) batteries, used in the external battery case.

Use numbers indicated in parentheses when asking for replacement pans. (Only for U.S.A.) To order accessories contact 1-800-332-5368 or web site (http://www.panasonic.com).

Before connecting, operating or adjusting this product, please read these instructions completely. Please save this manual



Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America

One Panasonic Way Secaucus, New Jersey (7794 http://www.panasonic.com Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc. ("PSC") Ave. 65 de Infanteria, Km. 9.5 San Gabriel Industrial Park, Carolina. Puerto Rico 005 Panasonic Canada Inc.

5770 Arribler Drive, Mississauga, Ontario L4W2T3 www.panasonic.ca

ROTAR11.P F0299R0 (D)

# Precautions

Before using this unit, be sure to read the applicable items of the operating instructions and these safety suggestions carefully

Afterwards keep them handy for future reference. Take special care to follow the warnings indicated on the unit itself as well as in the operating instructions

# Safety

- 1. Power Source-The unit should be connected to power supply only of the type described in the operating instructions or as marked on the unit. Use only the AC adaptor or car adaptor described in the operating instructions when recharging.
- 2. Polarization—If the unit is equipped with a polarized AC power plug (a plug having one blade wider than the other), that plug will fit into the AC outlet only one way. This is a safety feature. If you are unable to in-sert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 3. Care of AC adaptor Take care that the cord of the AC adaptor should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Never take hold of the AC adaptor if your hand is wet, and always grasp the plug body when connecting or disconnecting it.
- 4. Nonuse Periods....When not in use, be sure to disconnect the AC adaptor from the AC power outlet.
- 5. Batteries If the set is not used for a long period of time or is used only from an AC power source, remove all the batteries to prevent potential damage due to possible hattery leakage. Do not mix batteries (old and new) or different types of batteries

### Installation

#### Environment

- 1. Water and Moisture-Do not use this unit near water-for example, near a bathfub, washbowl swimming pool, or the like. Damp hasements should also be avoided.
- 2. Condensation-Moisture may form on the lens in the following conditions
  - ·immediately after a heater has been turned on
  - in a steamy or very humid room.
  - when the unit is suddenly moved from a cold envirunment to a warm one. If moisture forms inside this unit, it may not operate properly. To correct this problem wait about one hour for the moisture to
- 3. Heat Never use or place this unit near a heat source. Do not leave it in an automobile exposed to direct sunlight for a long time with the doors and windows closed as this may deform the cabinet.

### Placement

- 1. Foreign Material-Care should be taken so that objects do not fall into and liquids are not spilled into the unit. Do not subject this unit to excessive smoke, dust, mechanical vibration, or shock
- 2. Magnetism-The unit should be situated away from equipment or devices that generate strong magnetic
- 3. Stacking-Do not place any objects, on top of the

#### Maintenance

(See page 7 for details.)

Clean the cabinet, panel and controls with a soft cloth lightly maistened with mild detergent solution

Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

# **Service**

- 1. Damage Requiring Service-The unit should be serviced by qualified service personnel when:
  - The AC adaptor is damaged; or
  - Objects have fallen or liquid has been spilled into the unit; or
  - The unit has been exposed to rain; or
  - The unit does not appear to operate normally or exhibits a marked change in performance; ur
  - The unit has been dropped, or the enclosure damaged.
- 2. Servicing-The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to an authorized service personnel.

For the address of an authorized servicenter: In the U.S.A.1-800-211-7262 or web site (http://www.panasonic.com) In Canada 905-624-5505 or web site (www.panasonic.ca)



# Power Supply Preparations

Refer to the specifications (page 8) for information on operating times when using rechargeable batteries or dry-cell batteries.

# Using rechargeable batteries

Make sure to recharge the batteries before using them. The unit cannot be used to charge rechargeable batteries other than those specifically designed for it.

• Supplied batteries (HHR4AHEBA1)

- Ontional batteries For U.S.A.(HHR-4AHA/2B) ~ For Canada (HHR-4AHC/2B)

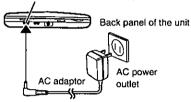
### Recharging procedure

Insert the special rechargeable batteries into the unit.

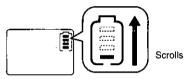


Connect the AC adaptor.

DC IN jack ( ♦-@- DC IN 4.5 V)



Recharging starts and a battery indicator appears on the display as shown below



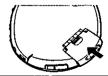
When the rechargeable batteries are fully recharged, the battery indicator disappears, (It takes approximately 3 hours to fully recharge the supplied rechargeable batteries.)

When recharging is complete, unplug the AC adaptor from the power outlet and the DC IN jack.

- Rechargeable batteries have a service life of approximately 300 charge-discharge cycles. If the operating time on one full charge becomes noticeably shorter than it used to be, the bat-tery has reached the end of its service life and should be re-
- Recharging may only be performed when the unit is powered off. (It is not possible to recharge the batteries while playing a
- The AC adaptor and rechargeable batteries may become warm while recharging is in progress. This is not a malfunction

# If the battery lid comes loose





#### Removing batteries

Push up on the battery in the direction indicated by the arrow. Then lift it out.



# Using the AC adaptor

### Connect the AC adaptor supplied.

Refer to the step 2 in "Using rechargeable batteries" for connection instructions.

# Using the car adaptor (not included)

Be sure to obtain the car adaptor (SH-CDC9), available as an optional accessory.

# **CAUTION:**

Use only car adaptor, Model: SH-CDC9 manufactured by Matsushita Electric Industrial Co., Ltd.

The car adaptor can be used to recharge the unit's batteries while in the car.

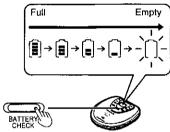
# Using dry cell batteries (not included)

After disconnecting the AC adaptor, insert two "AAA" (LR03) alkaline batteries.

The procedure for inserting and removing dry-cell batteries is identical to that for rechargeable batteries.

# Checking the battery condition

When the unit is off, pressing [BATTERY CHECK] causes the battery indicator to appear on the main unit's display for a few seconds. This works even if the unit is on hold. The indicator is always on when the unit is operat-



#### When the battery indicator flashes

Power is cut off a short while later. Recharge the rechargeable batteries or replace the dry cell batteries with new ones



# Note

- •When the unit is used with a AC adaptor, the battery indicator is not displayed.
- The battery may temporarily show a lower level or otherwise not operate correctly when searching and skipping, and also if the unit is used in an extremely cold environment.
- The length of time the unit will continue to operate between when the battery indicator starts flashing and when the power is cut off differs depending on the type of batteries used.
- The battery indicator, may not be displayed if rechargeable batteries other than those designated by Panasonic, are used.

# Using the external battery case

The external battery case allows you to extend the maximum playing time of the unit by loading an additional two "AA" (LR6) alkaline batteries.

Open the cover of the external battery case and insert the batteries.

> Insert the end marked (-) first.



Mount the external battery case on the unit body.

> Insert the protrusions on the external battery case into the three,indentations in the unit body.



3 Secure in place with the screw.



Reverse the above procedure to remove the external battery case.

### For your reference:

- The unit can be powered by the batteries in the external battery case alone. Batteries do not need to be loaded in the unit.
- The maximum playing time will differ depending on the type of batteries (rechargeable/dry-cell) loaded in the unit body.

If the cover of the external battery case comes loose:

Insert the protrusions into the holes on either end of the case.

# Note

Though you can use rechargeable batteries in the external battery case, it does not recharge them. (Use dry cell batteries if possible.)

 When using rechargeable batteries in the unit body, and dry-cell batteries in the battery case, be sure to use fully charged rechargeable batteries and new drycell batteries

. When using four dry-cell batteries, do not mix new and old batteries.

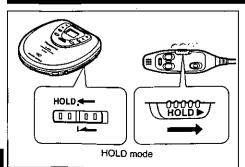
If the unit malfunctions or freezes during use, disconnect the power sources (the AC adaptor and batteries).

Re-connect the power source and continue operation.

When the unit is in hold status, pressing any button causes the indication "ho! d" to appear on the display.

The " $h_0 \mid d$ " indication appears only when [ $\triangleright$  11] is

# **HOLD** function



This function causes the unit to ignore short, accidental button presses. (The disc lid can still be opened and closed.

# The HOLD function prevents the following:

- Powering on the unit accidentally (which can cause the batteries to go dead).
- ·Play being cut off unexpectedly in the middle of a selection.

#### To use the HOLD function

is in hold position.)

Set [HOLD] to the HOLD position.

The unit and wired remote control have [HOLD] switches, each of which works independently. (The hold indicator lights green when the remote control

When the unit is powered off

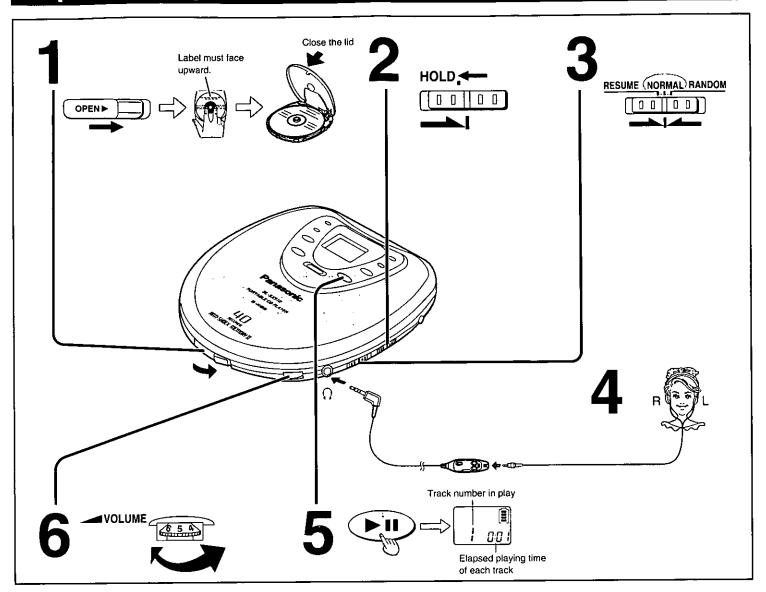
"ho ! d" indication

pressed.

Be sure to move [HOLD] to release the unit from the hold mode.

Before operating the buttons

# Sequential Play Basic Play



# Follow steps 1-6.

In step 4, connect the stereo headphone/stereo earphones and wired remote control to the  $[\Omega]$  jack. (Plug in firmly)

• Play stops automatically when all the tracks have been played.

•If the unit has been connected to the car audio system, adjust the volume level between 4 and 6 on the unit, then adjust the volume level on the system.

Operation	Button	Display/reference
To pause play	Press during play.	Press again to restart play.
To stop play Stop mode	Press during play.  POWER OFF	Total playing time  Total number of II 44.48
To turn off the unit Off mode	Press during stop mode.	
Skip forward/ backward (skip function)	Press during play.  Backward Forward	During program play, these buttons are used to skip forward or back through the programmed sequence of tracks.      During random play, the skip buttons cannot be used to skip back to tracks that were played pre-
Rapid forward/ backward (search function)	Keep depressed during play.	viously in the random sequence.  •During program play, random play or 1 track repeat play, search operation is limited to the current track only.  (See page 4.)

### For your reference:

### "no d | S[" indication

This indication appears for about 30 seconds if [> 11] is pressed when no disc is loaded in the unit or if the disc is not completely seated.

# "[[Pf]]" indication

This indication appears for about 10 minutes when the cover is opened. (However, the indication does not appear when the unit is powered off.)

# Auto power off function

If the unit is left in stop or paused status for approximately 10 minutes, the unit powers itself off automatically in order to prevent the batteries from running down.

(If no disc is loaded in the unit it powers itself off in 30 seconds.)

#### Removing discs

After the disc has stopped rotating, press [PUSH] to release the disc. (To protect the disc, never open the cover while it is playing.)



Note

Never insert foreign objects into the unit body.

# Other Play Methods

The letters such as (a) in the various illustrations refer to the descriptions in the "Location of Controls" section.

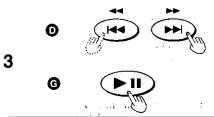
# Skip play

The disc plays from the selected track through to the last track, then play stops automatically.

Preparation: Put unit in stop mode.

RESUME (NORMAL) RANDOM

2 Select the desired track.

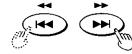


# **Program play**

Up to 24 tracks can be entered in the program. **Preparation:** Put unit in stop mode.

RESUME (NORMAL) RANDOM

2 Select the desired track.



3 Register in sequence.

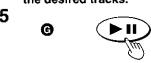
0

➌

(The indication "M" and the programmed sequence appear on the display panel.)



Repeat steps 2 and 3 to program all the desired tracks.



■ To program the same track in the sequence more than once

After step 3, press [MEMORY/RECALL] the desired number of times.

■ If " F" is displayed

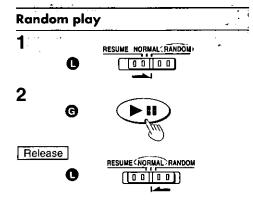
No more tracks may be programmed.

■ To confirm the contents of the program

Press [MEMORY/RECALL] while the disc is playing. (The numbers of the programmed tracks appear on the display panel in sequence.)

■ To delete the entire program

Press [ , POWER OFF].

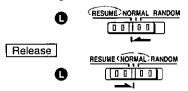


#### For your reference:

- •It is also possible to press [▶►] while the unit is in stop status to change the first track to be played. (All tracks are played eventually, regardless of which is played first.)
- Program play is not possible in the random mode.

# Resume play

This function allows you to listen from the beginning of the track where play stopped because the unit was powered off (or switched to stop status). It is useful when listening to CDs in the car, etc.



# For your reference:

- If the [RESUME, NORMAL, RANDOM] (play mode) switch is
  put in the [RESUME] position, the all-repeat function will be activated automatically as soon as the unit is powered on.
- If power is cut off near the end of a track (power off status), playback may resume from the beginning of the next track in some cases.
- •If the unit is powered off while a disc was playing and then a new disc is inserted, play will begin from the middle of the new disc-because the unit remembers the position where play stopped on the previous disc.

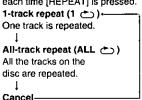
#### Repeat function

Press during play or stop mode.





The setting is switched in the sequence indicated below each time [REPEAT] is pressed.



#### For your reference:

If [REPEAT] is pressed during program play, only the tracks in the program are repeated.

(The indication "ALL" is not displayed.)

# Changing the sound quality

Press during play or stop mode.



The setting switches in the sequence indicated below each time [EQ] is pressed.

 $\textbf{S-XBS} {\rightarrow} \textbf{LIVE} {\rightarrow} \textbf{Cancel}$ 

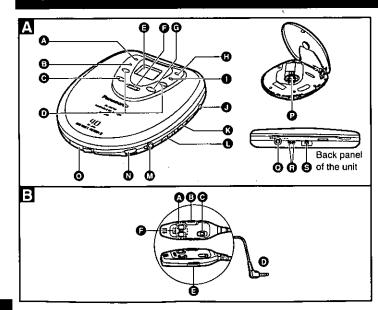
#### S-XBS:

Select this setting to boost the low-range response.

#### LIVE:

Select this setting to reproduce the sound as it would be heard in a concert hall.

# **Location of Controls**



# Portable CD player 🖾

- DEQ button (EQ)
- Memory/recall button (MEMORY/RECALL)
- G Stop/power off button
  (■, POWER OFF)
- Skip/search buttons
   ( |◄◄, ▶►) / ◄◄, ▶►)
- (a) Display
- Battery check button (BATTERY CHECK)
- P!ay/pause button (► II)
- (A. SHOCK)
- Repeat button (REPEAT)
- Out jack (OUT)
- (Note: Hold switch (HOLD)
- Play mode selector (RESUME, NORMAL, RANDOM)
- M Headphones jack (∩)
- N Headphones volume control (VOLUME)
- Open switch (OPEN)

- CD release button (PUSH)
- O DC in jack ( ← ← DC IN 4.5 V )
- Connection terminal for external battery case
- S Hole for car insulator mounting screw/external battery case

## Wired remote control 3

- Skip/search buttons (+,-)
- Hold switch (HOLD)
- Play/stop/off button
- Plug
- Volume control (VOL)
- Hold indicator

# Anti-Shock Function

Anti-shock works by reading audio data and storing it in memory (up to 40 seconds worth). The unit then fills in interruntions caused by bumps and vibrations with data from the memory. This unit also incorporates a powerful anti-shock mechanism that prevents skipping caused when play speed is changed by swinging of the unit.

#### Press during play or stop mode.





The following indicator appears on the display panel.





# To cancel the anti-shock function

When bumps continue repeatedly

The following indicator appears on the display panel

A.SHOCK

Sarr

Press [A.SHOCK] again.

and sound is interrupted.

- The anti-shock setting can be changed during play. but this may cause a slight interruption in the sound because the disc's rotational speed changes.
- During anti-shock operation, the disc rotates at a higher rate than usual in collecting extra audio data. This could result in a slight increase in disc rotation noise.

#### Using the unit with an audio system

The anti-shock function uses digital signal compression technology. It is recommended that the anti-shock function be canceled if the unit is connected to a home audio system.

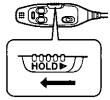
If you have pressed [A.SHOCK] when the unit is in stop status, press [► 11] to start play.

# the Wired Remote Control

The remote control can be operated regardless of the hold mode of the unit.

#### Preparation:

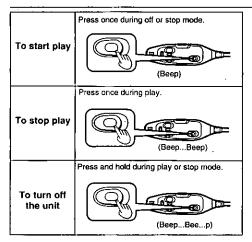
Release the remote control from the hold mode.

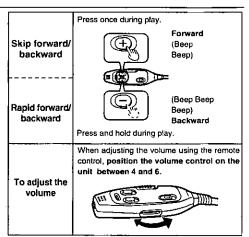


# Operation confirmation tones

When an operation button is pressed, a confirmation tone sounds. Refer to the parentheses in the illustration for the different types of confirmation tones.

### How to use the wired remote control



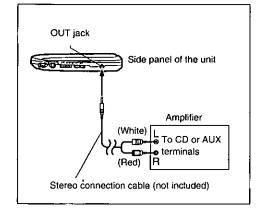


# **Using the Unit with Optional Accessories**

# Using the unit with an audio system

Using stereo connection cable (not included), you can listen to CDs on your audio system.

- Turn off the amplifier power and connect the cable.
- . Do not connect the cable to the PHONO jacks on the amplifier.
- Obtain the optional connecting cable if the amplifier comes with mini-phone jacks.
- Adjust the volume on the amplifier.
- Sound quality changes when S-XBS or LIVE is selected, but volume is reduced by approximately fifty per-
- You can connect speakers, active or otherwise, with an impedance of  $1k\Omega$  or less to the headphone jacks. Set the unit's volume between 4 and 6.



# Using the unit with a car audio system

### Items to be purchased

For connection to the car audio system: Car stereo cassette adaptor (SH-CDM10A)

Connect the car stereo cassette adaptor to the unit's headphones jack.

(When doing this, keep the unit's VOLUME control at a setting between 4 and 6.)

For securing the unit and connecting the power supply:

Car adaptor (SH-CDC9)

Car mounting kit (SH-CDF7)

Car mounting arm, Car insulator

It may not be possible to use the unit with some types of car stereos owing to restrictions imposed by the construction of the car stereo cassette adaptor.

For further details, refer to the instructions of the part concerned.

Hollywood, FL 33020

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact: 1-800-211-PANA (7262), Monday–Friday 9 am–9 pm; Saturday–Sunday 9 am–7 pm, EST.

Web Site: http://www.panasonic.com You can purchase parts, accessories or locate your nearest servicenter by visiting our Web Site.

# Accessory Purchases:

1-800-332-5368 (Customer Orders Only) Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032 (6 am to 5 pm Monday-Friday; 6 am to 10:30 am Saturday; PST) (Visa, MasterCard, Discover Card, American Express, Check)

Fax (808) 486-4369

#### Factory Servicenters Locations CALIFORNIA GEORGIA MICHIGAN **TENNESSEE** 6550 Katella Avenue 8655 Roswell Road 37048 Van Dyke Avenue 3800 Ezell Road Cypress, CA 90630 Suite 100 Sterling Heights, MI 48312 Suite 806 Atlanta, GA 30350 Nashville, TN 37211 800 Dubuque Avenue **MINNESOTA** 7850-12th Avenue South S. San Francisco **ILLINOIS TEXAS** CA 94080 9060 Golf Road Airport Business Center 7482 Harwin Drive Niles, IL 60714 Bloomington, MN 55425 Houston, TX 77036 20201 Sherman Way Suite 102 1703 North Randall Road OHIO 13615 Welch Road Canoga Park, CA 91306 Elgin, IL 60123 2236 Waycross Road Suite 101 (Pick-up/Drop-off only) Civic Center Plaza Farmers Branch. 3878 Ruffin Road Forest Park, OH 45240 TX 75244 Suite A **MARYLAND** San Diego, CA 92123 62 Mountain Road **PENNSYLVANIA** WASHINGTON Glen Burnie, MD 21061 2221 Cabot Blvd. West 20425-84th Avenue South **COLORADO** Suite B Kent, WA 98032 1640 South Abilene Street **MASSACHUSETTS** Langhorne, PA 19047 Suite D 60 Glacier Drive Aurora, CO 80012 Suite G Chartiers Valley **HAWAII** Westwood, MA 02090 Shopping Center 99-859 Iwaiwa Street FLORIDA 1025 Washington Pike Aiea, Hawaii 96701 3700 North 29th Avenue Bridgeville, PA 15017 Phone (808) 488-1996 Suite 102

Service in Puerto Rico.

Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/Factory Servicenter: Ave. 65 de Infanteria, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985 Phone (787) 750-4300 Fax (787) 768-2910

### If you ship the product

Carefully pack and send it prepaid, adequately insured and preferably in the original carton. Attach a postage-affixed letter, detailing the complaint, to the outside of the carton.

Do NOT send the product to the Executive or Regional Sales offices. They are NOT equipped to make repairs.

	Customer's Record	·
Model No.	Dealer's Name	_
Serial No. or		
Code No.	Dealer's Address	
Date of Purchase		

# Product Service

Do not attempt to remove the cover(s) or repair the unit yourself. Refer servicing to qualified personnel only.

#### **Product information**

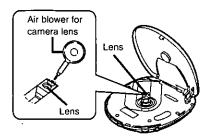
For product service, product information or assistance with product operation, refer to the servicenter directory.

User memo:

DATE OF PURCHASE	
DEALER NAME	
DEALER ADDRESS	
TELEPHONE NUMBER	

# Maintaining the

Open the lid and clean the lens as shown in the figure. Use a cotton swab to gently wipe off any finger-prints. Recommended product: Lens cleaner kit (SZZP1038C)



# WARNING:

TO REDUCE THE RISK OF FIRE, ELEC-TRIC SHOCK OR PRODUCT DAMAGE. DO NOT EXPOSE THIS APPLIANCE TO RAIN, SPLASHING, DRIPPING OR MOISTURE.

# **CAUTION!**

THIS PRODUCT UTILIZES A LASER. **USE OF CONTROLS OR ADJUSTMENTS** OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIA-TION EXPOSURE.

DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

THE FOLLOWING APPLIES ONLY IN THE

### **CAUTION:**

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 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.

Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Panasonic Sales Company, Division

of Matsushita Electric of Puerto Rico, Inc. ("PSC") Ave. 65 de Infanteria, Km. 9.5 San Gabriel Industrial Park

Carolina, Puerto Rico 00985 Tel. (809) 750-4300

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Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America One Panasonic Way, Secaucus, New Jersey 07094

### ONLY FOR U.S.A.

# **Panasonic Audio Products**

**Limited Warranty** 

which occur during normal use and does not cover normal wear to the stylus (when applicable) or dealer installed cartridge or stylus. It does not cover damage which occurs in shipment or failures which are caused by products not supplied by the warrantor or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, faulty installation, set-up adjustment, improper maintenance, alteration, improper antenna, inadequate signal pick-up, maladjustment of consumer controls, modification, or commercial use of product, or service by anyone other than a PASC Factory Servicenter or authorized PASC

lectively referred to as "The warrantor") will repair this product with new or refurbished parts, free of charge, in the U.S.A. or Puerto Rico from the date of original purchase in the event of a defect in materials or workmanship as follows: AUDIO COMPONENTS, RADIOS, COMPACT DISC PLAYERS, VIDEO CD PLAYERS AND HOME ENTERTAINMENT SYSTEMS—For one (1) year.

Panasonic Consumer Electronics Company or Panasonic Sales Company (col-

ACCESSORIES, HEADPHONES AND CARTRIDGES—(when applicable) For

BATTERIES-(when applicable)-New rechargeable batteries in exchange for defective rechargeable batteries-For ten (10) days. Non-rechargeable batteries are not warranted.

RECHARGEABLE BATTERY PACKS—(when applicable)—New rechargeable battery packs in exchange for defective rechargeable battery packs for (90) days. Non-rechargeable battery packs are not warranted.

Carry-in or mail-in service in the continental U.S.A. can be obtained during the warranty period from a Panasonic Services Company (PASC) Factory Servicenter listed in the Servicenter Directory. Or call 1-800-211-7262, toll free, to locate an authorized PASC Servicenter. Carry-in or mail-in service in Puerto Rico can be obtained during the warranty period by calling the telephone numbers listed in the Servicenter Directory.

This warranty is extended only to the original purchaser. A purchase receipt or other proof of date of original purchase will be required before warranty service is

This warranty only covers failures due to defects in materials or workmanship

### LIMITS AND EXCLUSIONS

Servicenter, or damage that is attributable to acts of God

There are no express warranties except as listed above.

THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR
ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING WITH-OUT LIMITATION, DAMAGE TO TAPES RECORDS OR DISCS. ALL EXPRESS AND IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MER-CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the Consumer Affairs Division at the company address indicated above.

# pecifications

### Audio (ANTI-SHOCK off)

2 (left and right, No. of channels:

stereo)

Frequency

20 to 20,000 Hz response:

(+0.5 dB to -- 1.5 dB)

Output voltage: S/N:

0.6 V (50 kΩ) More than 96 dB\*

Wow and flutter:

Below measurable limit

Headphones

DA converter: 1 bit, MASH

output level: Max. 9 mW+9 mW 16Ω (adjustable)

Pickup

Light source: Semiconductor laser Wavelength: 780 nm

General

Operational temperature

range: 0°C-40°C (32°F-104°F)

Rechargeable temperature

> range: 5°C-40°C (41°F-104°F) DC 4.5 V

Power supply: Power consumption:

Power source	Anti-shock off/on
Using AC adaptor	2.2 W/2.4 W

When recharging: About, 4.6 W

Play time:

[When used in hold mode, at 25°C (77°F) temperature and on flat and stable surface)

Batteries used	Anti-shock off/on
2 "AA" (LR6) alkaline batteries	About 22 hours/ About 28 hours
2 "AAA" (LR03) alkaline batteries	About 9 hours/ About 12 hours
Rechargeable batteries	About 6 hours/ About 8 hours
4 alkaline batteries	About 33 hours/ About 43 hours
2 rechargeable and 2 alkaline batteries	About 28 hours/ About 36 hours

The play time may be less depending on the operating conditions.

Recharging time: About 3 hours

Dimensions

(W×H×D): 128×20.8×

131 mm

(51/16"×13/16"×53/16") 191 g (6.7 oz.)

(with batteries) 169 g (6.0 oz.) (without batteries)

\*These specifications were measured in the ANTI-SHOCK off mode.

Weight:

Specifications are subject to change without notice.

Weight and dimensions are approximate.

# Troubleshooting Guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized Service Centers (enclosed with this unit) to locate a convenient service center, or consult your dealer for instructions.

For detailed instructions, contact an authorized servicenter in the U.S.A. and Panasonic Canada Inc. Customer Care Centre in Canada.

In the U.S.A. 1-800-211-7262 or web site (http://www.panasonic.com) In Canada 905-624-5505 or web site (www.panasonic.ca)

Problem	Check this
Cannot close cover.	Is the disc properly secured in place?
Cannot play discs.	Is the unit in HOLD status?     Is the disc properly secured in place?     Is there moisture condensation on the lens?     (Wait for about an hour and then try again.)
Cannot remove disc.	Did you press [PUSH] to release the disc?
Tracks on disc do not play in order, starting with the first track.	Is the [RESUME, NORMAL, RANDOM] (play mode) selector in the [NORMAL] position?
Cannot hear music—too noisy.	Have the earphone and wired remote control plugs been inserted firmly?     Are the plugs dirty? (Wipe away dirt on plug.)
TV picture is distorted. Radio reception is noisy.	Are you using the unit body too near a TV or tuner? (If the TV or tuner is connected to a simple indoor antenna, connect it to an outdoor antenna.)

# Cautions

## Listening caution





Do not play your headphones or earphones at a high volume Hearing experts advise against continuous extended play.

If you experience a ringing in your ears, reduce volume or dis-

Do not use while operating a motorized vehicle. It may create a traffic hazard and is illegal in many areas.

You should use extreme caution or temporarily discontinue use in potentially hazardous situations.

Even if your headphones or earphones is an open-air type designed to let you hear outside sounds, don't turn up the volume so high that you can't hear what's around you.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing.

Guard against this by setting your equipment at a safe level BE-FORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- ·Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

·Set the dial and leave it there.

# Rechargeable batteries

For U.S.A

Only the HHR4AHEBA1, HHR-4AHA/2B batteries can be recharged

For Canada

Only the HHR4AHEBA1, HHR-4AHC/2B batteries can be recharged.

- If the power delivered by the batteries lasts for a very short time after recharging, it means that the batteries' service life is over. Do not use them any more.
- . When recharging batteries for the first time or when they have not been used for a long period of time, the play time may be shorter than usual. In a case like this, repeatedly recharge and discharge the batteries. This will restore them to their regular state.
- Do not allow any metal objects to touch the terminals of rechargeable batteries since this may cause short-circuiting which is dangerous.
- · Do not peel off the plastic covering on the rechargeable batteries. Short-circuiting may occur which is dangerous

## Dry cell batteries/rechargeable batteries

To prevent damage to the batteries and electrolyte leakage, heed the following points

- Align the ⊕ and ⊕ polarities properly when inserting the bat-
- . Do not mix different types or makes of batteries or old and new **batteries**
- Remove the batteries if you do not plan to use the unit for a long period of time. of throw batteries into a fire, and do not short-circuit, disas-
- semble or subject them to excessive heat. Do not attempt to recharge dry cell batteries.

# Unit

The lid is metallic. If exposed to direct sunlight or left for a long time in any other place with high temperatures, the cover may become not.

# Carrying dry cell batteries/ rechargeable batteries around

When putting dry cell or rechargeable batteries in a pocket or bag, ensure that no other metal objects such as a necklace are placed together with them. Contact with metal may cause shortcircuiting which, in turn, may cause a fire.

Be absolutely sure to carry the rechargeable batteries in the bat-

# When purchasing rechargeable **batteries**

As a safety precaution, the portable CD players made by Panasonic have a construction designed to make it impossible to recharge ordinary batteries.

To use rechargeable batteries, be absolutely sure to purchase the rechargeable batteries designed especially for this unit.

Special nickel-metal hydride rechargeable batteries:

For U.S.A.: HHR-4AHA/2B (set of 2) For Canada: HHR-4AHC/2B (set of 2) For details, check with your dealer.

Special rechargeable Ordinary dry cell batteries/rechargeable batteries batteries ⊕«  $(0) \ominus \oplus$ 

#### When driving a car

In the interest of traffic safety, do not operate the unit while dri-