



This manual was printed with soy based ink.

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Troubleshooting guide

Before requesting service, make the below checks. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem:
In the U.S.A., contact the Panasonic Customer Call Center at 1-800-211-7262, or e-mail consumerproducts@panasonic.com, or web site (<http://www.panasonic.com>).
In Canada, contact Panasonic Canada Inc. Customer Care Centre at 905-624-5505, web site (www.panasonic.ca), or an authorized Servicentre close to you.

No play.	<ul style="list-style-type: none"> The HOLD function is on (page 4). The disc isn't correctly set. The disc is scratched or dirty. (Tracks skipped.) The unit may not read MP3 correctly if it is shaken while it is reading the files. There is moisture on the lens. Wait for about an hour and then try again. The lens is dirty: clean it with a blower (recommended product: SZZP1038C). If the lens gets marked with fingerprints, gently wipe them off with a cotton swab. You may not be able to play MP3 if you have copied a multi-session disc that has no data between sessions.
No sound or there is a lot of noise.	<ul style="list-style-type: none"> Ensure the plugs are inserted firmly. Wipe the plugs clean with a clean cloth. Noise may occur when playing MP3 if recording quality is poor. The elapsed playing time disappears and sound is interrupted if bumps continue repeatedly. Separate this unit from mobile telephones.
Play doesn't resume from the track where play stopped at.	<ul style="list-style-type: none"> This doesn't work if you change discs. This doesn't work during random play. It may not work correctly under some conditions.
Play doesn't start from the first track.	<ul style="list-style-type: none"> Random play modes may be on (page 6). Play resumes from the track where you last stopped play. Use skip to return to the first track.
The unit stops working.	Disconnect then reconnect all power sources (batteries and AC adaptor).
Cannot search through tracks.	You cannot search through MP3 files.
Cannot skip albums.	You cannot skip between the first and last albums during play.
The unit malfunctions when connected to other equipment.	Be sure to connect other equipment through the remote control. Speakers connected directly to the unit should have an impedance of 1 kΩ or less.
Cannot hear the remote control's operation tone.	The operation tone may be off (page 6).
The remote control malfunctions.	
Use only the included remote control to operate this unit.	
Cannot recharge.	
• You aren't using the special rechargeable batteries (page 5).	
• You must insert two batteries before you can recharge them.	
• The unit must be off before you can recharge.	
The AC adaptor becomes warm during recharging.	
This is normal.	
The batteries are taking a long time to recharge.	
The batteries may take a maximum of 4 hours to recharge under some conditions.	
Play time is very short even after recharging.	
The batteries have reached the end of their service life. Usually they can be recharged 300 times.	
Play time is short after recharging.	
• This may occur after the first time you recharge the batteries or after you haven't used them for a long time. Play time should be restored after a few recharges.	
• The batteries can go flat if you leave the AC adaptor connected after recharging is complete.	
The battery indicator fails to appear or is incorrect.	
• The indicator does not appear when the AC adaptor is connected.	
• The indicator does not appear correctly under some conditions.	
Display	
<i>hold</i>	
The HOLD function is on (page 4).	
<i>no disc</i>	
• You haven't inserted a disc or it isn't inserted correctly.	
• You have inserted a disc this unit cannot play.	
<i>open</i>	
The disc lid is open.	
<i>F</i>	
Full: The program already contains 20 tracks.	
<i>J</i>	
Reading MP3 files.	

IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit. Follow the safety instructions on the unit and the safety precautions listed below. Keep these operating instructions handy for future reference.

Safety

- Power source**—Connect the unit to a power source of the type described in these instructions or as marked on the unit.
- Polarization**—The unit is equipped with a polarized power plug where one blade is wider than the other. This safety feature ensures that the plug fits into your household AC outlet only one way. If the plug doesn't fit one way, try reversing it. If the plug still doesn't fit, contact an electrician to replace the obsolete outlet. Do not attempt to defeat the safety purpose of the plug.
- Power cord protection**—Route the AC power supply cord so that it will not be walked on or pinched by items placed on or against it. Never take hold of the plug or cord with wet hands. Always grasp the plug body firmly when connecting and disconnecting it.
- Overloading**—When connecting the AC power supply cord, be careful not to overload the household AC outlet, extension cord, or outlet from any other device as this can result in fire or electric shock.
- Nonuse periods**—Turn the unit off when it is not in use. Unplug the unit from the household AC outlet if it is not to be used for a long time. Unplug the unit during lightning storms. Leaving the unit connected to a household AC outlet for extended periods can cause battery fluid leakage.
- Attachments and accessories**—Use only the attachments and accessories recommended in these operating instructions.

Installation

■ Placement

- Foreign material**—Ensure objects and liquids do not get into the unit. Avoid exposing the unit to excessive smoke, dust, mechanical vibration, and shock.
- Magnetism**—Situate the unit away from equipment and devices that generate strong magnetic fields.
- Stacking**—Do not place anything on top of this unit.
- Wall and ceiling mounting**—Do not mount the unit on walls or ceilings unless specified in the instructions.

■ Environment

- Water and moisture**—Do not use the unit near water, such as near a bathtub or swimming pool. Avoid damp basements.
- Heat**—Situate the unit away from heat sources, such as radiators. Do not leave it in an automobile exposed to direct sunlight with the doors and windows closed as this may deform the cabinet. Do not situate where temperatures fall below 5 °C (41 °F) or rise above 35 °C (95 °F).

Caution

■ Batteries

- Do not peel off the covering on batteries and do not use if the covering has been peeled off.
- Align the poles + and - correctly when inserting the batteries.
- Do not mix different types of batteries or old and new batteries.
- Remove the batteries if you do not intend to use the unit for a long time.
- Do not throw into fire, short-circuit, disassemble, or subject to excessive heat.
- Do not attempt to recharge dry cell batteries.
- When carrying batteries in a pocket or bag, ensure no metal objects such as necklaces are placed together with them. Contact with metal may cause short-circuiting which can cause a fire. For safety, carry the rechargeable batteries in the battery carrying case.

A nickel cadmium battery that is recyclable powers the product you have purchased. At the end of its useful life, under various state and local laws, it is illegal to dispose of this battery into your municipal waste stream. Please call 1-800-8-BATTERY for information on how to recycle this battery.



■ CDs

- Do not use irregularly shaped CDs.
- Do not use non-specification discs.
- Do not use CDs printed with label printers available on the market.
- Do not use CDs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers.

Maintenance

Unplug the unit from the household AC outlet before cleaning. Clean with a damp cloth. Do not use abrasive pads, scouring powders, or solvents.

Service

- Damage requiring service**—The unit should be serviced by qualified service personnel if:
 - The AC power supply cord or AC adaptor has been damaged; or
 - Objects or liquids have gotten into the unit; or
 - The unit has been exposed to rain; or
 - The unit does not operate normally or exhibits a marked change in performance; or
 - The unit has been dropped or the cabinet damaged.
- Servicing**—Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
- Replacement parts**—When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
- Safety check**—After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

■ Listening



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 discontinue use.

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 are the 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 BEFORE 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:

- Leave it there.

■ Allergies

Discontinue use if you experience discomfort with the earphones or any other parts that directly contact your skin. Continued use may cause rashes or other allergic reactions.

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

CAUTION!

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

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

CAUTION:

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

Marking sign is located on bottom of the unit.

THE FOLLOWING APPLIES ONLY IN THE U.S.A.

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 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.

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.

Product Service

1. **Damage requiring service**—The unit should be serviced by qualified service personnel if:
 - (a) The AC power supply cord or AC adaptor has been damaged; or
 - (b) Objects or liquids have gotten into the unit; or
 - (c) The unit has been exposed to rain; or
 - (d) The unit does not operate normally or exhibits a marked change in performance; or
 - (e) The unit has been dropped or the cabinet damaged.
2. **Servicing**—Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
3. **Replacement parts**—When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
4. **Safety check**—After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

Product information

For product information or assistance with product operation:

In the U.S.A., contact the Panasonic Customer Call Center at 1-800-211-7262, or e-mail consumerproducts@panasonic.com, or web site (<http://www.panasonic.com>).

In Canada, contact Panasonic Canada Inc. Customer Care Centre at 905-624-5505, web site (www.panasonic.ca), or an authorized Servicentre close to you.

User memo:

DATE OF PURCHASE _____

DEALER NAME _____

DEALER ADDRESS _____

TELEPHONE NUMBER _____

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

ONLY FOR U.S.A.

Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.
Ave. 65 de Infantería, Km. 9.5
San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Panasonic Audio Products Limited Warranty

Limited Warranty Limits And Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a Factory Servicenter or other Authorized Servicer, or damage that is attributable to acts of God.

THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the servicer, loss or damage to media or images, data or other memory or recorded content. The items listed are not exclusive, but are for illustration only.)

ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.

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 exclusions 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 warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.

Limited Warranty Coverage

If your product listed below does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

Product or Part Name	Parts	Labor
Radio, Clock Radio, Radio with Tape Player or Recorder, Portable CD Player, Headphone Stereo, Tape Recorder, Speaker	One (1) Year	One (1) Year
Rechargeable batteries (in exchange for defective item)	Ten (10) Days	Not Applicable
SD Memory Card (in exchange for defective item)	Ninety (90) Days	Not Applicable

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty excludes both parts and labor for batteries, antennas, and cosmetic parts (cabinet). This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

To obtain service in the USA please contact:

Panasonic Services Company, Panasonic Plus Department
20421 84th Avenue South
Kent, WA 98032
Tel: 1-800-833-9626 Fax: 1-800-237-9080

For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone number where you can be reached.

Customer Services Directory

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.

Service in Puerto Rico

Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/Factory Servicenter:

Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985
Phone (787) 750-4300 Fax (787) 768-2910

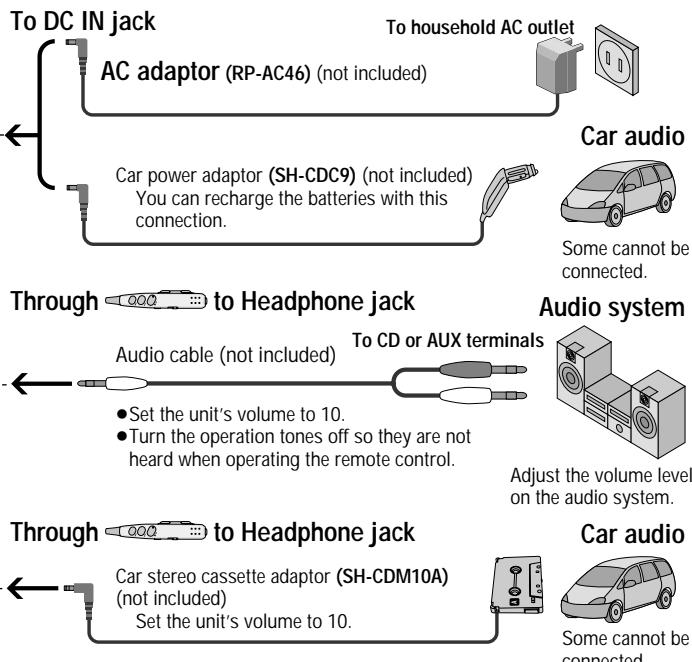
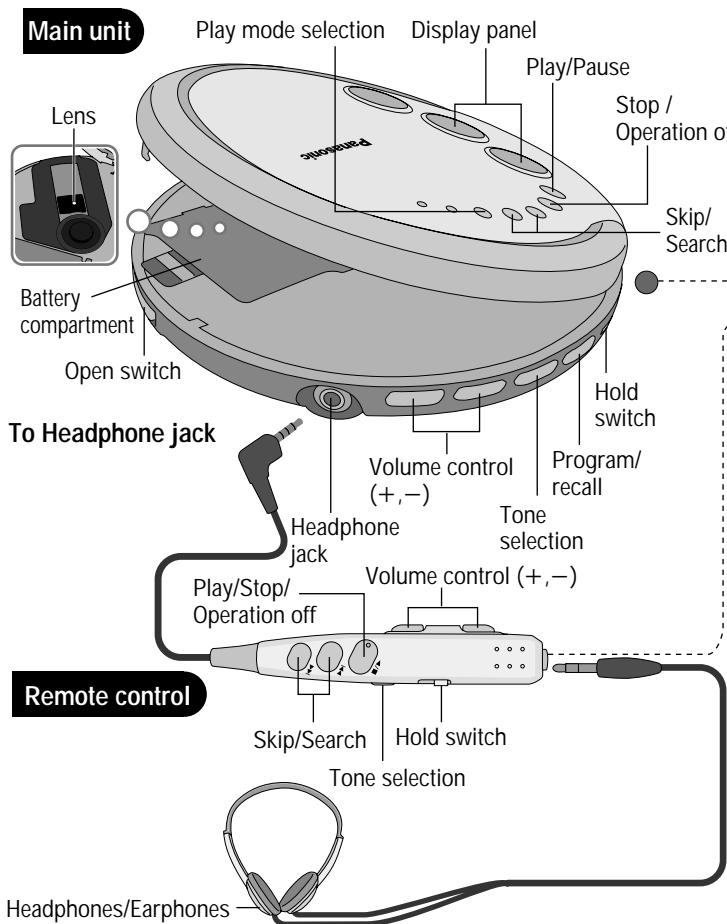
Accessory Purchases:

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)

Location of controls/Connection to other equipment

Turn off this unit and the other equipment before connection.



Supplied Accessories

Check the packing carton for these accessories.

- 1 Wired remote control: N2QCB000010
For U.S.A.
- 1 Pair of stereo headphones: LOBAD0000163
For Canada
- 1 Pair of stereo earphones: LOBAB0000124

Use numbers indicated when ordering replacements or optional accessories from your Panasonic dealer.

In U.S.A. contact 1-800-332-5368 or web site (<http://www.panasonic.com>).

Specifications

Audio (CD-DA)

No. of channels:
2 (left and right, stereo)
Frequency response:
20 to 20,000 Hz
(+0.5 dB to -10 dB)

DA converter: 1 bit, MASH
Headphone output level:
RMS max. 8 mW+8 mW/
16 Ω (adjustable)

Pickup
Light source: Semiconductor laser

Wavelength: 780 nm
MP3

Supported bit-rates:
32 kbps to 320 kbps
(128 kbps is recommended)

Supported sampling frequency
48 kHz/44.1 kHz/32 kHz

Maximum number of items
(sum of albums and tracks): 999

Maximum album levels: 100

General
Power supply:
DC input (via optional AC adaptor):

DC 4.5 V

Operational temperature range:
0 °C–40 °C
(32 °F–104 °F)

Rechargeable temperature range:
5 °C–40 °C
(41 °F–104 °F)

Play time:
[Approximate operating time in hours
(playing MP3 at the recommended
bitrate of 128 kbps, with HOLD on
and EQ canceled, at 25 °C (77 °F) on
a flat, stable surface)]

Batteries used	MP3 disc	CD-DA disc
2 optional alkaline batteries	37	25
2 optional rechargeable batteries	14	10

Recharging time: 3 to 4 hours
•The play time may be less
depending on the operating
conditions.

•Play time will be considerably
reduced when playing CD-RW.

Dimensions (W×H×D):
135×27.7×135 mm
(5⁵/₁₆×1³/₃₂×5⁵/₁₆)

Mass: 210 g (7.4 oz.)
(with batteries)
164 g (5.8 oz.)
(without batteries)

Note:
Specifications are subject to
change without notice.
Mass and dimensions are
approximate.

Playing MP3

This unit can play MP3 files you have recorded to discs.
MPEG Layer-3 audio decoding technology licenced from
Fraunhofer IIS and Thomson multimedia.

HOLD

This function causes the unit to ignore accidental button
presses.

Set to HOLD so the unit doesn't power on accidentally or
play is interrupted.

■The unit and remote control each have independent HOLD
switches.

Note on CD-R and CD-RW

This unit can play CD-R and CD-RW recorded with CD-DA or
MP3. Use an audio recording disc for CD-DA and finalize* it
when you finish recording. The unit may not be able to play
some discs due to the condition of the recording.

*A process performed after recording that enables CD-
R/CD-RW players to play audio CD-R and CD-RW.

Resume function

The player stores the track where you stopped play.
Replacing the disc cancels the function.

Auto power off function

If the unit is left in stop mode for approximately 10 minutes,
the unit powers itself off automatically.

Power Supply

Rechargeable battery (not included) Recharge before initial use.

As a safety precaution this unit is constructed so it is impossible to recharge ordinary batteries. For details, check with your dealer.

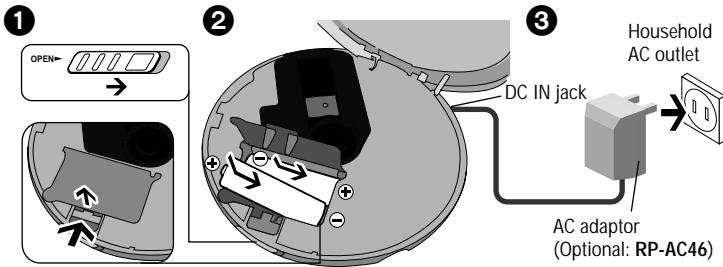
Special rechargeable Ni-Cd batteries: P-3GAVA/2B (set of 2)



Ordinary dry cell batteries/rechargeable batteries



Make sure the unit is off when recharging.



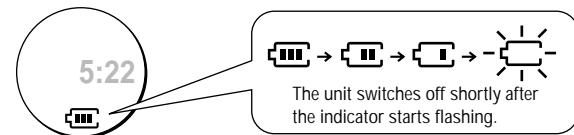
- The battery indicator (■) scrolls while recharging and disappears when finished (3 to 4 hours).
- You can recharge the batteries before they are fully discharged.
- Fit the battery lid so it is secure and flush with the battery compartment if it comes loose, otherwise it can scratch your discs.

Dry cell batteries (not included)

After disconnecting the AC adaptor, insert two "LR6, AA, UM-3" alkaline batteries. Insert the same way as the rechargeable batteries.

The battery indicator

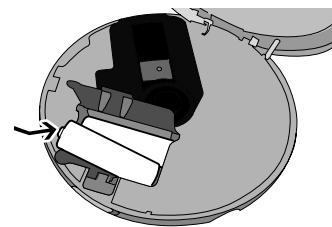
This indicator appears when the unit is on.



- Before playing starts the battery indicator may flash although the batteries are not drained. This is normal and recharging is unnecessary.

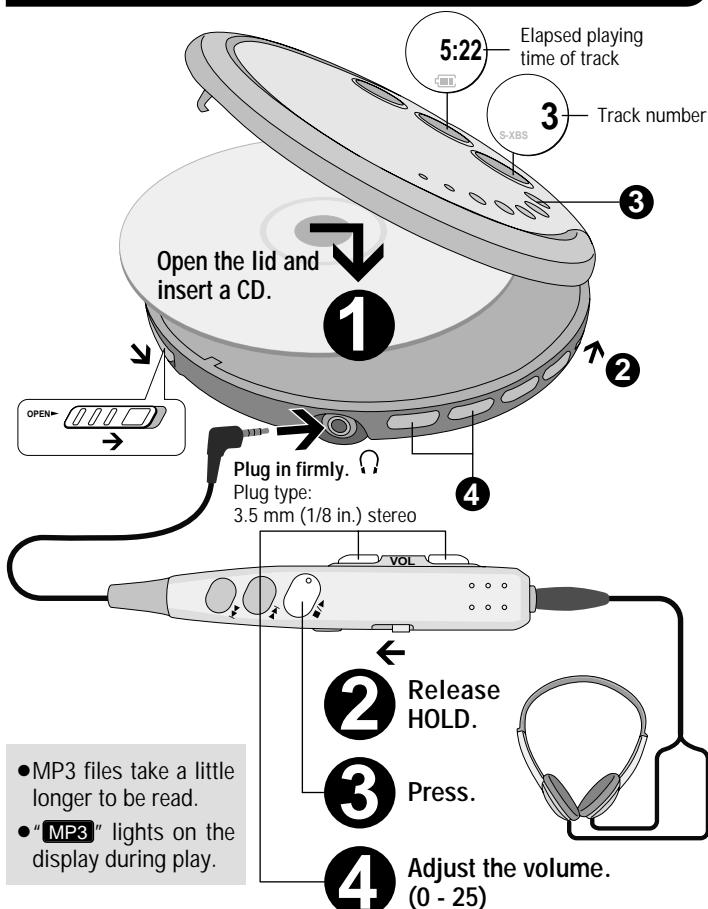
General

- Play time**
Specifications, page 4
- Removing batteries**



How to Use

Playback



Pause

Remote control

Not available.

Main unit



Press.

- Press again to restart play.

Search

Remote control

Not available.

Main unit



Press and hold during play.

- You cannot search while playing MP3.

- You can search only within the current track during program, one-track repeat, or random play modes (page 6).

Skip

Remote control

Press.

Main unit



Press.

- Press [◀◀] twice to skip to the beginning of the previous track during play.

Stop

Remote control

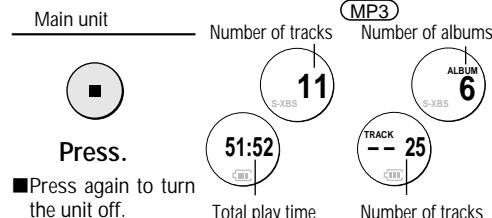
Press.

Main unit



Press.

- Press and hold to turn the unit off.



Other Play Methods

Program Play

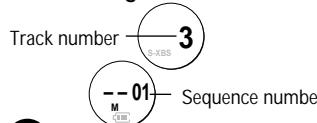
Main unit



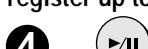
1 Select the tracks while stopped.
You can skip albums when programming MP3 tracks (→ below).



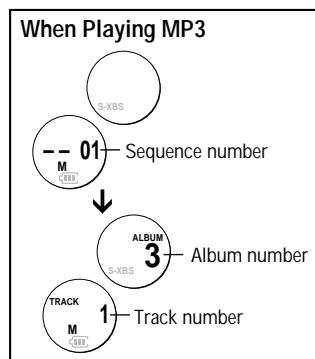
2 Press to register.



3 Repeat steps 1 and 2 to register up to 20 tracks.



4 Start play.



■ To confirm the contents of the program

Press [MEMO] while the disc is playing.

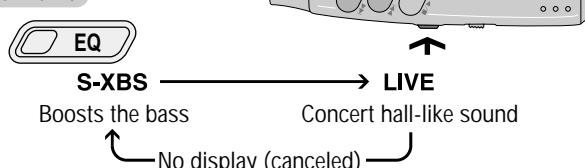
■ To delete the entire program

Press [■].

Changing the sound quality

Each time you press [EQ]

Main unit



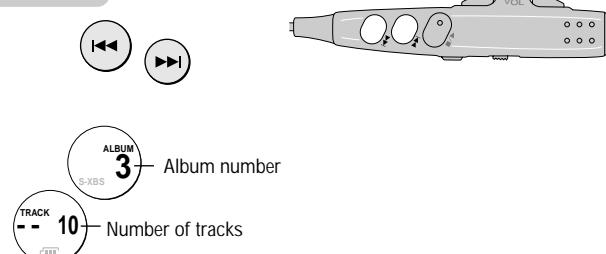
■ The effect may differ between different kinds of music.

Playing MP3

Starting play from an album (Album skip)

Press and hold until the album you want appears.

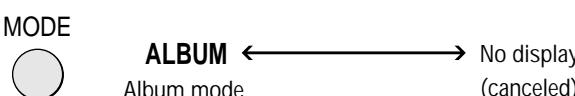
Main unit



Playing only the tracks in a selected album (Album mode)

Each time you press and hold [MODE]

Main unit



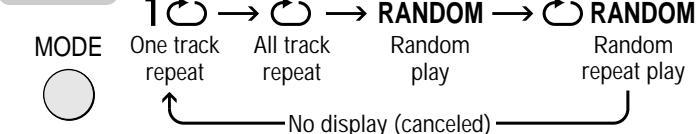
■ You cannot turn album mode on during program play.

■ You can select another album with album skip.

Play modes

Each time you press [MODE]

Main unit



■ You cannot select "RANDOM" while playing MP3.

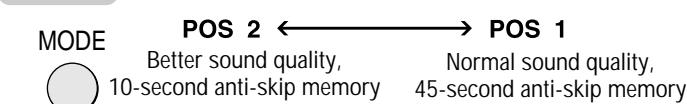
■ You cannot skip back to other tracks during random play.

Anti-Skip System

This system reduces the skipping caused by vibration to a minimum. You can change the anti-skip memory time for CD-DA to improve sound quality.

Each time you press and hold [MODE]

Main unit



■ You cannot change the memory time for MP3. It is a maximum of 100 seconds for data recorded at 128 kbps.

Turning the operation tone off

Press and hold [EQ] until "bP off" appears.



bP on

Tone on

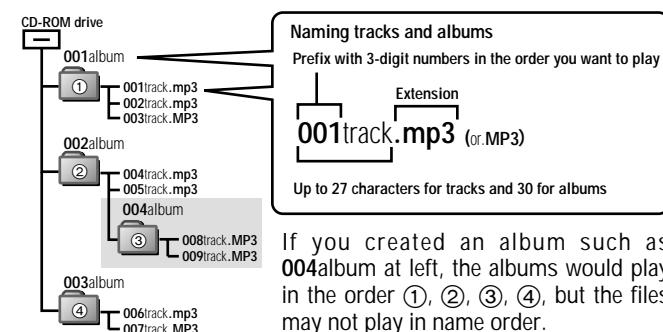
bP off

Tone off

This unit can play MP3, a method of compressing audio without overtly hurting audio quality.

■ When creating MP3 files to play on this unit

- Disc formats: ISO9660 level 1 and level 2 (except for extended formats)
- It is better not to create folders (album) within folders (004album below).



If you created an album such as 004album at left, the albums would play in the order ①, ②, ③, ④, but the files may not play in name order.

■ Limitations on MP3

- This unit is not compatible with ID3 tags.
- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.
- This unit cannot play files recorded using packet write.
- If the disc includes both MP3 and normal audio data (CD-DA), the unit plays the type recorded in the inner part of the disc. If the disc includes both MP3 and other types of audio data (e.g. WMA or WAV), the unit plays only the MP3.
- Depending on how you create MP3 files, they may not play in the order you numbered them or may not play at all.