

Panasonic®

Operating Instructions Portable CD Player

Model No. SL-SX470

Dear Customer

Thank you for purchasing this product. Before connecting, operating or adjusting this product, please read the instructions completely. Please keep this manual for future reference.

MP3 and **CD-DA** indicate limitations on these discs only.



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Troubleshooting guide

Before requesting service, make the following checks. If you are in doubt about some of the check points, or if the solutions indicated in the chart do not solve the problem, refer to the "Customer Services Directory" on page 3.

<p>No play.</p>	<ul style="list-style-type: none"> •The HOLD function is on. Cancel HOLD (↔page 5). •The batteries may be depleted (↔page 4). •The disc isn't correctly set. •The disc is scratched or dirty. (Tracks may be skipped particularly with MP3 discs.) •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). You cannot use a CD type lens cleaner. If the lens gets marked with fingerprints, gently wipe them off with a cotton swab. •The unit may not read a track properly if shaken strongly during disc reading. •If there is no data between sessions on a multi-session disc, play may not be possible. •If there is a large amount of JPEG data etc. within a MP3 file, sound may be muted and play may not be possible. •If the disc contains data with different formats, sound may be muted and play may not be possible. •If a CD-ROM format disc contains MP3 and other files, only the MP3 files will be playable. 	<p>Play doesn't resume from the last point stopped.</p> <ul style="list-style-type: none"> •This doesn't work during random play. •It may not work correctly under some conditions. •If the batteries are depleted, removed, or the unit is subjected to strong shock, resume function is canceled.
<p>No sound or there is a lot of noise.</p>	<ul style="list-style-type: none"> •Ensure the plugs are inserted firmly. •Wipe the plugs with a clean cloth. •The disc is scratched or dirty. •The sound may be interrupted or there may be noise when playing MP3 if the recording quality is poor. •The elapsed play time disappears and sound is interrupted if bumps continue repeatedly. •Separate the unit from mobile telephones. 	<p>Play doesn't start from the first track.</p> <ul style="list-style-type: none"> •Random play modes may be on (↔page 5). •Play resumes from where last stopped (↔page 5).
<p>Disc rotation stops and starts during play.</p>	<p>Disc rotation stops and starts to save power.</p>	<p>Cannot search through tracks.</p> <p>You cannot search through a disc with MP3 files.</p> <p>Cannot specify point A or B.</p> <p>You may not be able to specify point A or B at the end of a disc.</p>
<p>Operation sounds are heard from the unit.</p>	<p>There is some sound heard when a disc is being accessed or disc rotation starts.</p>	<p>Cannot change the Digital Re-master mode, anti-skip mode.</p> <p>If [◀◀] or [▶▶] is pressed before [MEMO] you cannot change the mode.</p> <p>Digital Re-master does not work.</p> <p>Depending on the type of MP3 disc recording, the effect may not appear.</p> <p>Cannot skip albums.</p> <p>You cannot skip from the last to first album, or vice versa, during play.</p> <p>The battery indicator fails to appear or is incorrect.</p> <p>The indicator may not appear correctly under certain conditions.</p> <p>The unit stops working.</p> <p>Remove then insert the batteries again.</p> <p>All settings are canceled.</p> <p>If the batteries are depleted, removed, or the unit is subjected to strong shock, all settings are canceled, and the volume is reset to 10.</p>

Caution

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.

■ Batteries

- Do not peel off the covering on the 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 a 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.

■ 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.

■ 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 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.



IMPORTANT SAFETY INSTRUCTIONS

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

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

FCC Note:

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.

Responsible Party:
Panasonic Corporation of North America
One Panasonic Way
Secaucus, NJ 07094
Telephone No.: 1-800-211-7262

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.

Marking sign is located on bottom of the unit.

MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

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:
Refer to "Customer Services Directory" below.

The model number and serial number of this product can be found on either the back or the bottom of the unit.

Please note them in the space provided below and keep for future reference.

MODEL NUMBER _____ SL-SX470
SERIAL NUMBER _____

User memo:

DATE OF PURCHASE _____
DEALER NAME _____
DEALER ADDRESS _____
TELEPHONE NUMBER _____

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San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Panasonic Audio Products Limited Warranty

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 Puerto Rico, Inc. (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, IC Recorder, Headphone Stereo, Tape Recorder	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 Puerto Rico, Inc. (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

Obtain Product Information and Operating Assistance; locate your nearest Dealer or Servicer; purchase Parts and Accessories; or make Customer Service and Literature requests by visiting our Web Site at: <http://www.panasonic.com/consumersupport> or, contact us via the web at:

<http://www.panasonic.com/contactinfo>

You may also contact us directly at:

1-800-211-PANA (7262),
Monday-Friday 9 am-9 pm; Saturday-Sunday 10 am-7 pm, EST.

For hearing or speech impaired TTY users, TTY: 1-877-833-8855

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 Servicer or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE".

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 of 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 Servicer. 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.

Accessory Purchases

Purchase Parts, Accessories and Instruction Books online for all Panasonic Products by visiting our Web Site at: <http://www.pasc.panasonic.com> or, send your request by E-mail to: npcparts@us.panasonic.com You may also contact us directly at:
1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only) (Monday-Friday 9 am to 8 pm, EST.)
Panasonic Services Company
20421 84th Avenue South, Kent, WA 98032
(We Accept Visa, MasterCard, Discover Card, American Express, and Personal Checks)

For hearing or speech impaired TTY users, TTY: 1-866-605-1277

Service in Puerto Rico

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

Supplied Accessory

Check the packing carton for this accessory.

- 1 Pair of stereo headphones: LOBAD0000177

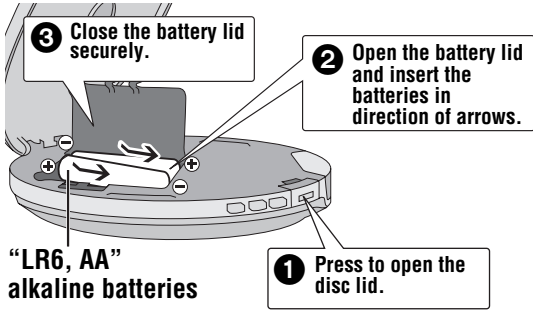
Use numbers indicated when ordering replacements or optional accessories from your Panasonic dealer.
(Product numbers correct as of July 2005. These may be subject to change.)

To order accessories, refer to "Accessory Purchases" on page 3.

Power Supply

Play time ⇄ page 6, Specifications

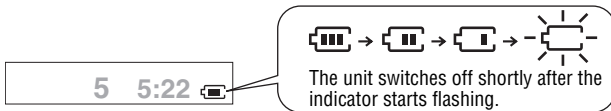
Dry cell batteries (not included)



- Fit the battery lid so it is secure and flush with the battery compartment. If it comes loose, it may scratch your discs.
- Lift up the left side of the battery when removing.

The battery indicator

This indicator appears when the unit is on.

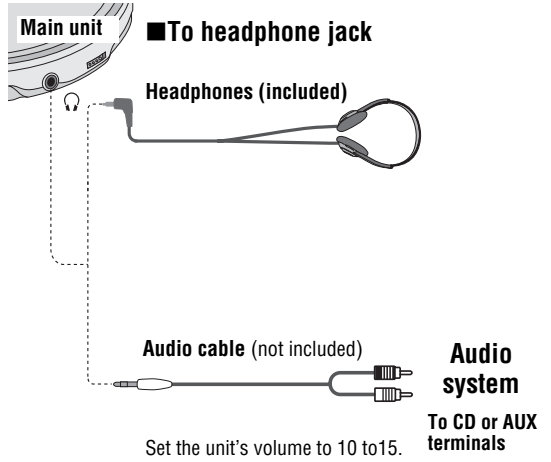


- Before play starts the battery indicator level may temporarily go down or flash although the batteries are not drained. It appears correctly once you start play.

Connections

Turn off this unit and the other equipment before connection. Insert each plug fully. [Plug type: 3.5 mm (1/8 in.) stereo]

When the unit is connected to other equipment, adjust the volume on the connected equipment.



Note on CD-R and CD-RW

(CD-DA/MP3 only)

For CD-DA format, use a music disc and finalize* it after recording. The unit may not be able to play some discs due to the condition of the recording.

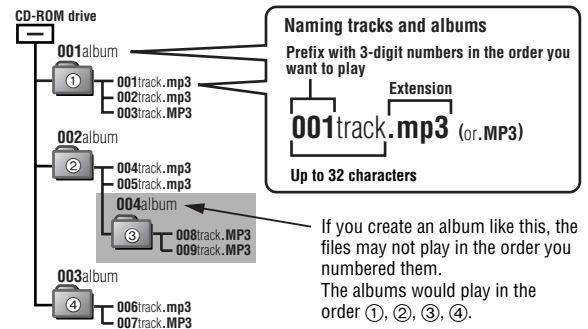
*A process performed after recording that enables CD-R/CD-RW players to play audio CD-R and CD-RW.

Playing MP3

MP3: A method of compressing data with little loss to the original sound quality.

■When creating MP3 files to play on this unit

Disc formats: ISO9660 level 1 and level 2 (except for extended formats)



■Unit limitations

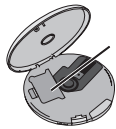
- This unit is compatible with multi-session discs but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.
- This unit cannot play files recorded using packet write.
- Depending on how you create MP3 files, they may not play in the order you numbered them or may not play at all.
- You cannot play WMA files.

Basic play

1 Press to open the disc lid.



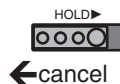
Insert a disc and close the disc lid.



Make sure that battery lid is securely closed.

removing a disc

2 Slide to cancel the HOLD function.



4 Press to control the volume. (0 to 25)

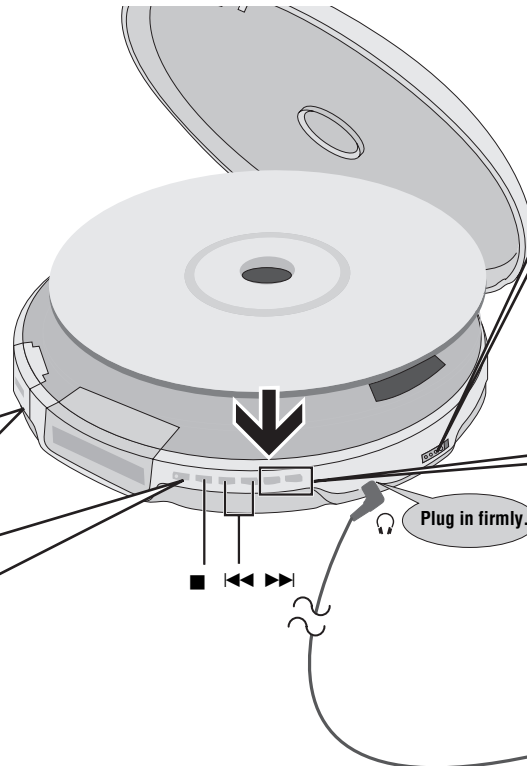


VOL+ (Increase)
VOL- (Decrease)

3 Press to start playing a disc.



Lights while playing MP3
Current track number
Elapsed play time of track



Plug in firmly.

Pause

Press to pause. Press again to restart play.

Stop/ Turn off

While playing, press to stop and again to turn off the unit.



Number of tracks Total play time Number of albums Number of tracks

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

Skip [Backward] [Forward]

Press to skip.

- Press [Backward] twice consecutively to skip to the previous track during play.
- You cannot use [Backward] to skip to any previous tracks during random and random repeat (↔; below) modes.

Search [Backward] [Forward]

During play, press and hold to search.

- You can only search within the current track except for during all track repeat (↔; below) and regular play.

Album skip [Backward] [Forward]

Press and hold until the album you want to play appears.



Album number Number of tracks

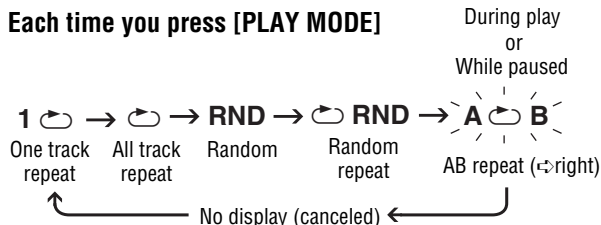
Resume function

- Play begins from where last stopped when [Play/Pause] is pressed in the stop mode. (This will be canceled if you change a disc, open the disc lid while the unit is on, or press [Play/Pause] when the disc lid is open while the unit is off.)
- If the batteries are depleted, removed, or the unit is subjected to strong shock, all settings are canceled including resume function.

Useful functions



Selecting a desired play mode



You cannot select "RND" and "A B" while playing MP3.

Specifying the AB segment

Press [MEMO] at the start point (A) and once more at the end point (B).



- Stop or skip (↔; above) to cancel.
- If you do not specify point B this will automatically be set as the end of the disc. Repeat begins when this point is reached. You can specify point B again by pressing [MEMO].

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

Each time you press and hold [PLAY MODE] **ALBUM MODE** Album mode No display (canceled)

- To select another album (↔; above, Album skip)
- You cannot turn album mode on during program play (↔; page 6).

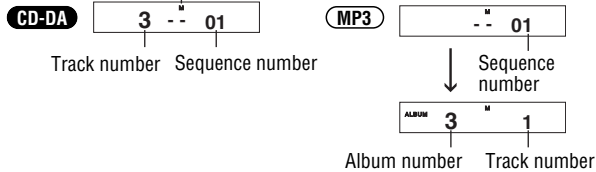
Useful functions



MEMO Program play (Desired tracks only)

While stopped, use [◀◀] or [▶▶] to select the track, then press [MEMO].

Will appear after [MEMO] is pressed



Repeat to program up to 20 tracks.

Play	▶/	Press after all desired tracks have been programmed.
Confirm tracks selected	MEMO	Press during play.
Cancel	■	Press. ("M" disappears.)

MEMO Changing the anti-skip mode

CD-DA

The anti-skip function (ANTI-SKIP SYSTEM) reduces or eliminates skipping caused by vibration. You can change the anti-skip memory time.

While stopped, each time you press and hold [MEMO]

POS2 ← → POS1

Sound enhanced mode,
10-second anti-skip memory

Anti-skip enhanced mode,
45-second anti-skip memory

- You cannot change the memory time for MP3. It's a maximum of 100 seconds for MP3 recorded at 128 kbps.

MEMO Enjoying more natural sound (Digital Re-master)

MP3

You can regenerate signal frequency lost during compression, restoring the sound to near pre-compression form.

While stopped, each time you press and hold [MEMO]

RMTR ← → No display
Sound enhanced Conserves battery life



EQ Changing the sound quality

Each time you press [EQ]

S-XBS → S-XBS+ → TRAIN → No display (canceled)
Boosts the bass Enhanced S-XBS Reduces sound leaks and listening fatigue

- The effect may differ with different kinds of music.
- Depending on the recording conditions, sound may be interrupted when switching between EQ settings.

Specifications

Audio (CD-DA)

Sampling frequency: 44.1 kHz
No. of channels: 2 (left and right, stereo)
Frequency response: 20 Hz to 20,000 Hz (+0 dB to -3.6 dB)
Headphone output level: RMS max. 8 mW+8 mW/16 Ω (adjustable)

Pickup

Light source: Semiconductor laser
Wavelength: 780 nm

MP3

Supported bit rates (Supports variable 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 (total no. of albums and tracks): 999 (maximum no. of albums): 500
Maximum album levels: 100

General

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

Play time:

Using on a flat stable surface at 25 °C (77 °F), EQ is off, Hold is on, Anti-skip is on POS 1 (CD-DA), recommended bit rate (MP3:128 kbps), and the Digital Re-master is off (MP3). Play times are in hours and approximate.

Batteries used	MP3 disc	CD-DA disc
2 alkaline batteries	75	33

- 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): 138.6 mm×24.4 mm×138.6 mm (5¹⁴/₃₂"×3¹/₃₂"×5¹⁴/₃₂")
Mass: 206 g (7.3 oz.) (with batteries) 159 g (5.6 oz.) (without batteries)

Note:

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

Display

hold	The HOLD function is on. Cancel HOLD (→page 5).
no disc	<ul style="list-style-type: none"> You haven't inserted a disc or it isn't inserted correctly. You have inserted a disc this unit cannot play.
OPEN	The disc lid is open.
F	The program already contains 20 tracks.
]	Reading MP3 files.

Note about using a DualDisc

- The digital audio content side of a DualDisc does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so play may not be possible.
- Do not use a DualDisc in this unit as it may not be possible to insert it correctly and it may get scratched or scraped.

-If you see this symbol-

Information on Disposal in other Countries outside the European Union

- This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.