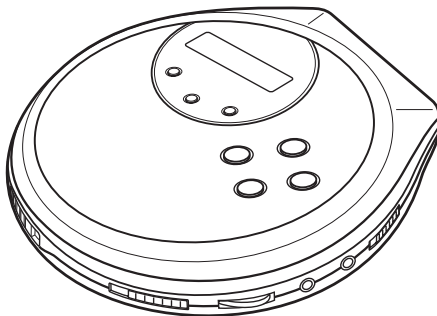


SANYO

INSTRUCTION MANUAL

CDP-M470

Compact Disc Player with MP3 Decoder

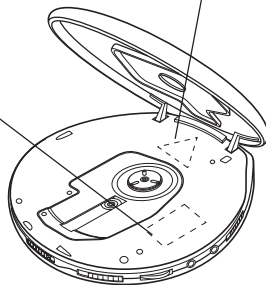
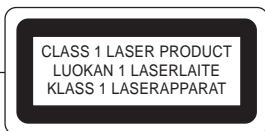
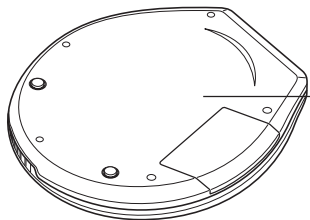


PRECAUTIONS

CAUTION

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

THIS COMPACT DISC PLAYER SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT QUALIFIED SERVICE PERSONNEL.



CAUTION - INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

ADVARSEL - USYNLIG LASER STRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION, UNDGÅ UDSÆTTELSE FOR STRÅLING.

VARNING - OSYNLIG LASER STRÅLNING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRR ÄR URKOPPLAD. STRÅLEN ÄR FARLIG.

VORSICHT - UNSICHTBARE LASERSTRAHLUNG TRITTS AUS, WENN DECKEL GEÖFFNET UND WENN SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT IST. NICHT, DEM STRAHL AUSSETZEN.

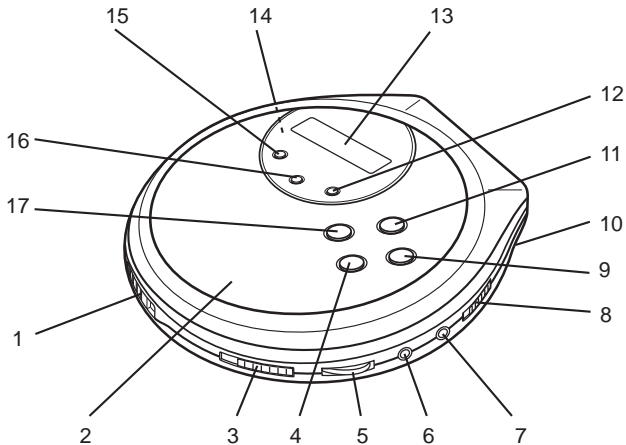
VARO - AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

- High volume levels can create potentially dangerous situations by drowning out surrounding sounds. Use caution when driving while operating the unit, and obey all applicable laws. Do not play your headset at a high volume level. Hearing experts advise against continuous extended play. If you experience a ringing in your ears, reduce the volume or discontinue use.
- No objects filled with liquids, such as vases, shall be placed on the apparatus.
- Do not use while bicycling, running or operating a motorized vehicle.
- The rating label is located on the bottom of the unit.
- The apparatus shall not be exposed to dripping or splashing.
- Do not use where there are extremes of temperature (below 5°C or exceeding 35°C).
- Sudden changes in the ambient temperature may cause condensation to form on the optical lens inside the unit. If this happens, take out the disc, leave the unit for about 1 hour, and then proceed to operate.
- Do not insert pins, etc., inside the unit.

This unit is equipped with a safety device which automatically turns the laser beam off when the disc compartment is opened. If a pin or other metal object should get inside the unit, however, this safety device may be deactivated.
- The rating label is located on the bottom of the unit.

CONTROLS

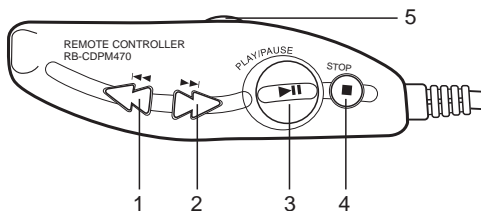
1. Open switch (OPEN)
2. Disc compartment
3. Bass expander switch (DBBS)
4. Stop button (■/∨)
5. Volume control (VOLUME)
6. Headphones socket (PHONES)
7. Line output socket (LINE OUT)
8. Hold switch (HOLD)
9. Skip-up/Search button (▶▶/>)
10. External DC socket (DC IN 4.5V)
11. Play/Pause button (▶/||/∧)
12. Mode/Clear button (MODE/CLEAR)
13. Display
14. Battery compartment (bottom)
15. Menu/ASR button (MENU/ASR)
16. PROG/ENTER button (PROG/ENTER)
17. Skip-down button (◀◀/◀)



REMOTE CONTROL

The buttons on the remote control function in the same way as the corresponding buttons on the unit.

1. Skip down button (◀◀)
2. Skip up button (▶▶)
3. Play/Pause button (▶||)
4. Stop button (◻)
5. Volume control (VOLUME ▶)



POWER SUPPLY

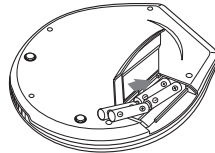
AC adaptor

Plug one end of the supplied AC adaptor into the DC IN 4.5V socket, then plug the other end into an AC outlet.

- Use only the supplied AC adaptor
- If the AC adaptor is connected. The power supply automatically switches to the AC power source and the installed batteries are disconnected.

Alkaline batteries

Install four “R03/AAA” batteries (not supplied) as shown below. Observe proper polarity.



Battery replacement

If the batteries are weak, “LOW BATTERY” appears on the display. Replace the batteries.

- Dispose of all used batteries safely and in accordance with all applicable laws.

Note:

When you are not going to use the unit for one month or more, take the batteries out of the battery compartment.

BEFORE OPERATION

Anti rolling shock function

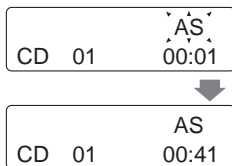
In the previous anti-shock function, when skips occurred while available memory runs out, then the sound would suffer some interruption.

The new anti rolling shock function is designed to prevent skipping to the greatest extent possible instead of supplementing the skipped portion of the sound. This is achieved by expanding the memory capacity, and in addition full attention has been given also to increasing the unit's signal reading capability.

Moreover, consideration has been given to eliminating the basic causes of skipping, both from the standpoint of horizontal shock and vertical shock.

Use this function when listening during walk or playing in a car.

When the ►/||/∧ button is pressed first time, the anti rolling shock function turns on automatically. "AS" blinks on the display. Then "AS" is remain standby when the buffer memory is full of next 45 seconds music data to Music Cd and full of next 120 seconds music data to MP3 CD.



Note:

- Press the MENU/ASR button to turn the anti rolling shock function off. "AS" disappears. Press the button again to turn it on.
- Sound may skip or mute for a few seconds when you press the MENU/ASR button during play.
- Playing may stop when the unit gets strong shock even when the anti rolling shock function is on.
- When playing back MP3 CD, this function always works even if "AS" doesn't appear.
(The function is not cancelled by pressing the MENU/ASR button.)

Dynamic bass boost system (DBBS)

Set the DBBS switch to ON to enhance the bass sound.

Auto power on function

The power turns on automatically when ►/II/∧ button is pressed.

Auto power off function

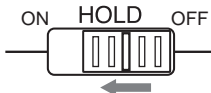
The power turns off automatically after about 60 seconds when all tracks on a disc have been played or when the ■/∨ button is pressed once to stop play.

Hold function

The HOLD switch disables the buttons from operating to prevent play from starting or stopping due to accidental operation. For normal use, leave the switch in the off position.

To prevent battery drain:

Set the HOLD switch to the on position when carrying the unit in a bag. The ►/II/∧ button will not function even if the button is pressed accidentally. "HOLD" appears briefly on the display.



To prevent play from being interrupted:

Set the HOLD switch to the on position after starting play. "HOLD" appears.

If the operating buttons do not function when pressed ...

1. Check whether the HOLD switch is on or not.
2. Remove the batteries and/or disconnect the AC adaptor from the unit. Wait a few seconds, then re-install the batteries or reconnect the AC adaptor.
3. If the buttons still do not function, insert new batteries .

HANDLING COMPACT DISCS

Use compact discs bearing the symbol shown below. In addition to conventional 12 cm CDs, this unit can be used to play 8 cm CDs without an adaptor.



- Do not expose the disc to direct sunlight, high humidity or high temperatures for extended periods of time.
- Discs should be returned to their cases after use.
- Do not apply paper or write anything on the disc surface.
- Handle the disc by its edge. Do not touch the playing surface (glossy side).
- Fingerprints and dust should be carefully wiped off the playing surface of the disc with a soft cloth. Wipe in a straight motion from the center to the outside of the disc.
- Never use chemicals such as record cleaning sprays, antistatic sprays or fluids, benzene or thinner to clean compact discs.

The unit will not play a disc that has been inserted upside down, or discs which do not conform to the Compact Disc standard.

INFORMATION

This unit can play back the CD-R/RW that has recorded music data or MP3 files. Before playing back Music CD or MP3 CD, please read the following.

- MP3 CD is the disc that standardized by ISO9660, its file name must include 3-digits extension letters, "mp3".
- The directory and file names of the MP3 CD must be corresponded to the ISO standardized files.
- Single-session disc can be played back.
- Some multi-session discs and mixed discs cannot be played back depending on the recording condition.
- This unit can recognize up to 99 folders or 300 files per disc.
The CD with 99 folders or 300 files and over is not available to this unit.
And if CD has a long file name, this unit can't recognize up to 300 files.
- This unit can recognize up to 8 directory trees per disc.
- MP3 CD may not be played in the recorded order.
- Music section in "CD Extra" can be played back, not Data section.
- Music files recorded by "Packet Writing" cannot be played back.

Notes on disc writing method

When you make MP3 CD by using your PC, set 44.1 kHz of sampling frequency. There are three basic methods for writing to a CD: "Track-at-Once", "Disc-at-Once", and "Packet Writing".

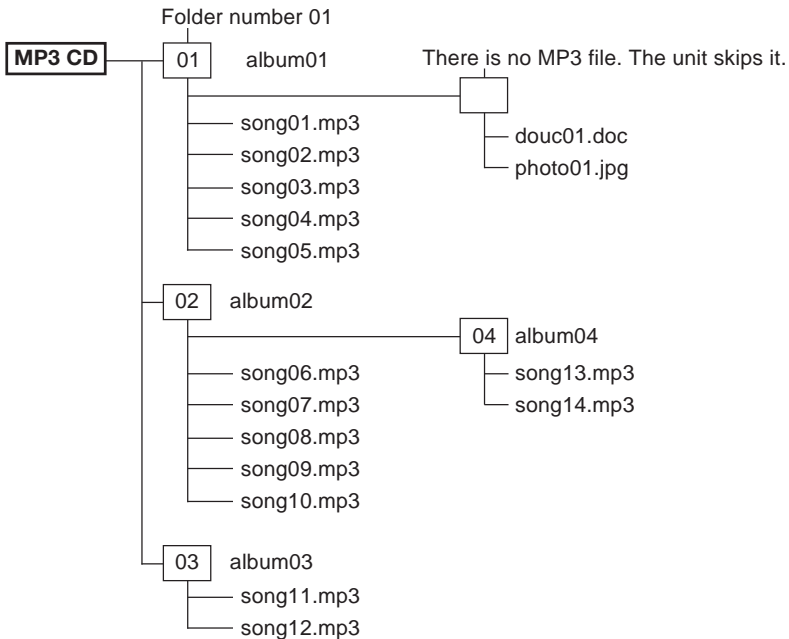
Music files recorded by "Track-at-Once" or "Disc-at-Once" can be played back on this unit.

(Note: The unit cannot play back the music files added with "Track-at-Once".)

Music files recorded by "Packet Writing" cannot be played back.

MP3 CD directory sample:

Playback order: song01 ⇒ song02 ⇒ ... song14



CAUTION:

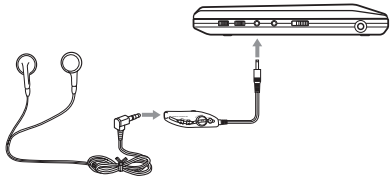
- Some MP3 CDs can not be played back depending on the recording conditions.
- The CD-R/RW that has no music data or non-MP3 files can not be played back.
- Do not make an empty folder. It may not work correctly.

PLAYING A DISC

- Be sure to reduce the volume before connecting or disconnecting the headphones.

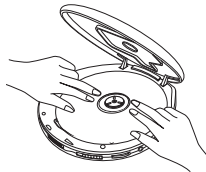
BASIC OPERATION [MUSIC CD] [MP3 CD]

1. Connect the remote control and headphones, then plug the cord from the remote control into the PHONES socket.



2. Slide the OPEN switch right to open the disc compartment lid.

3. Hold the disc with the labeled side up and press it onto the pivot until it "clicks" into place.



WARNING!

Do not insert your fingers into the opened panel. You may damage the unit or cause personal injury.
Do not allow young children to operate the unit unattended.

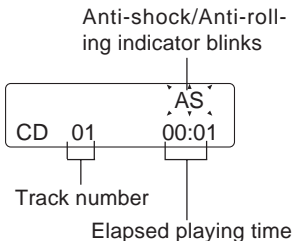
To remove the disc

Remove the disc while pressing the pivot. Opening the disc compartment lid must be in stopped condition otherwise could scratch the disc.

4. Close the disc compartment lid.

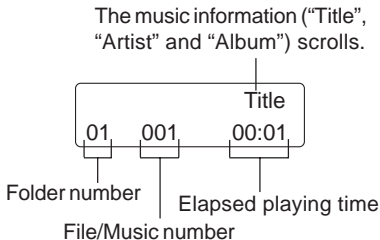
5. Press the ►/||/∧ button to begin play.

For Music CD



For MP3 CD

The music information (“Title”, “Artist” and “Album”) scrolls.



The track number and elapsed playing time for the current track are displayed.

6. Adjust the VOLUME control as desired.
7. To stop play temporarily, press the ►/||/∧ button. The display blinks. Press the ►/||/∧ button again to

resume.

8. To stop play, press the ■/∨ button once. The total number of tracks and total playing time appear.
- To turn the power off, press the ■/∨ button once again.

Skip play

To skip to track 6 while track 3 is playing, press the ►►/|> button repeatedly until “06” appears on the display.

To skip back to track 3 while track 6 is playing, press the ◀◀/|< button repeatedly until “03” appears.

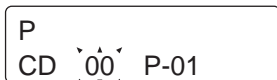
Search (forward/reverse)

If the ►►/|> or ◀◀/|< button is pressed during play, the player will search at high speed in the forward or reverse direction while the button is being pressed. When the button is released, normal play will continue.

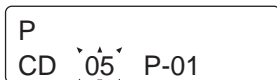
PROGRAMMED PLAY [Music CD]

Up to 24 tracks on a disc can be programmed for play in any order.

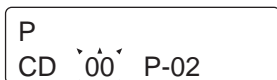
1. Press the PROG/ENTER button during stop.



2. Press the $\blacktriangleleft\blacktriangleleft$ / \blacktriangleleft or \blacktriangleright / $\blacktriangleright\blacktriangleright$ buttons to select a track.



3. Press the PROG/ENTER button.



4. Repeat steps 2 and 3 to programme tracks.
5. To check the programme contents after all tracks have been programmed, press the PROG/ENTER button repeatedly. The programmed track numbers sequentially appear on the display.

6. Press the \blacktriangleright / \blacksquare / \blacktriangle button to start programmed play.
 - To cancel programmed play, press the \blacksquare / \blacktriangledown button once, then press the MODE/CLEAR button for at least 2 seconds.

Changing a programme

To add a new track to a programme:

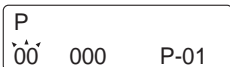
1. In the stop mode, press the PROG/ENTER button repeatedly until "00" is blinked.
2. Select a track as explained above.
3. Press the PROG/ENTER button.

To change a track:

1. In the stop mode, press the PROG/ENTER button repeatedly until the track number to be replaced is displayed.
2. Select a track as explained above.
3. Press the PROG/ENTER button.

PROGRAMMED PLAYBACK [MP3 CD]

1. Press the PROG/ENTER button during stop.



2. Press the ◀◀/◀ or ▶▶/▶ button to select a folder number.



3. Press the PROG/ENTER button. The folder number remains.
Press the ◀◀/◀ or ▶▶/▶ button to select a track.



4. Press the PROG/ENTER button. It is programmed.
5. Repeat steps 2 to 4 to programme track.
6. Follow the same procedure as steps 5 to 6 in the "programmed playback [Music CD]".

VARIOUS PLAYING MODE

Press the MODE/CLEAR button repeatedly during stop to select a various play mode available. Each time the button is pressed, the mode changes as shown below:

Repeat one (REP 1) → Repeat all (REP A) → Repeat D (REP D) → Introscan (INT) → Random play (RND) → Released

- During programmed play mode, “RND” (random play) can not be selected.
- Repeat D only for MP3 CD play.

Once the desired play mode is displayed, press the ►/II/^ button to begin play in that mode.

REPEAT PLAY

You can play tracks repeatedly in normal or programmed play modes.

Single track repeat

Press the MODE/CLEAR button once. “REP 1” appears on the display.

All tracks repeat

Press the MODE/CLEAR button twice. “REP A” appears.

- To cancel repeat play, press the MODE/CLEAR button repeatedly until “REP 1” or “REP A” is disappeared.

Repeat D

Repeat all tracks in selected folder (MP3 CD only).

Press the MODE/CLEAR button three times during play. “REP D” appears.

INTROSCAN

1. Press the MODE/CLEAR button during stop till “INT” appears.
2. Press the ►/II/^ button. The first 10 seconds of each track on a disc are played from the first track.
3. When the desired track is playing, press the MODE/CLEAR button twice. Normal play continues.

RANDOM PLAY

1. Press the MODE/CLEAR button during stop till “RND” appears.
 2. Press the ►/II/^ button. All tracks on the disc are played in random order.
- To cancel random play, press the MODE/CLEAR button once.

ADVANCE OPERATION [MP3 CD]

File Search playback [MP3 CD]

1. Press the MENU/ASR button during stop, the alphabet will appear in the display.



2. Using the ◀◀/◀ or ▶▶/▶ button to select the first letter of a file you would like to listen.
 - Press the stop ■/▼ button to access the lower letters.
3. Press the PROG/ENTER and a list of files starting with the selected letter will appear.

4. Press the ◀◀/◀ or ▶▶/▶ button to scroll through the list.

When the desired file appears, press the PROG/ENTER button and the file will automatically start playing.

Note:

If you select a letter that does not contain any files, "No File" will appear in the display

FOLDER SEARCH AND MP3 DIRECTORIES PLAYBACK

1. Press the MENU/ASR button twice during stop, the first folder will appear in the display, as well as its contents.
Example

lightmusic
>[F] 001

2. Press the ►/||/∧ or the stop ■/∨ button to change folder.
3. Press the ◀◀/◀ or ▶▶/▶ button to select a file from the folder, then press the PROG/ENTER button and the file will automatically start playback.

USING THE LINE OUT SOCKET

To record from the CD player

Connect the patch cable (not supplied) from the LINE OUT socket on the unit to the LINE INPUT sockets on a cassette recorder.

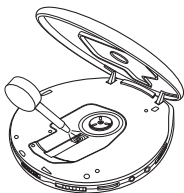
To hear through a pair of speakers

Connect the patch cable (not supplied) from the LINE OUT socket on the unit to the AUX or CD INPUT sockets on a stereo system.

CLEANING

Cleaning the pickup lens

Dust on the pickup lens can lead to erratic operation and interruption of the sound during play.



- To clean the pickup lens, open the disc compartment lid. Blow the dust off of the lens using a camera lens blower (available at most camera stores).
- Do not touch the surface of the lens.

Cleaning the cabinet

Use a soft cloth moistened with plain lukewarm water and wrung dry. Never use benzol, benzene or other strong chemical cleaners.

SPECIFICATIONS

Channels:	2 channels
S/N ratio:	60 dB
Wow and flutter:	undetectable
Sampling frequency:	44.1 kHz
Pickup light source:	Semiconductor laser
Pickup wave length:	790 nm
Laser output:	0.5 mW (continuous wave max.)
Terminal impedance:	PHONES: 16 - 32 ohms
Power source:	AC adaptor: AC 230 ~ 240V, 50 Hz DC: 4.5V (AC adaptor) DC: 3V (R03/AAA x 4)
Dimensions:	137 x 25 x 147 mm (W x H x D)
Weight:	Approx. 194g (without batteries)

Specifications subject to change without notice.

8052M470AU76-
(AU)

SANYO

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