

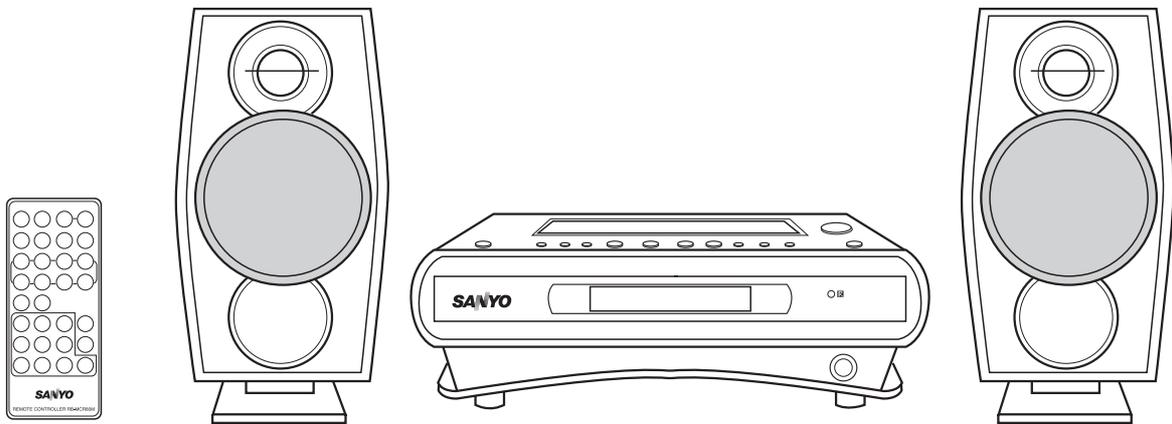
# SANYO

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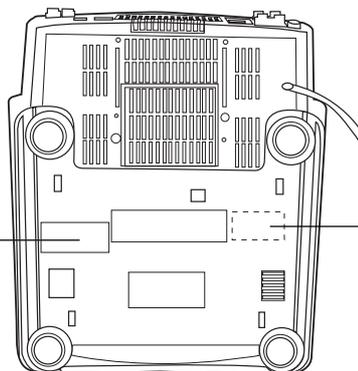
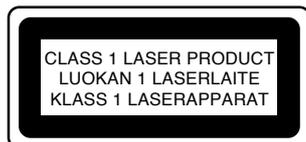
## INSTRUCTION MANUAL

## DC-MCR80M

### Micro Component System



# PRECAUTIONS



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 TRITT 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.

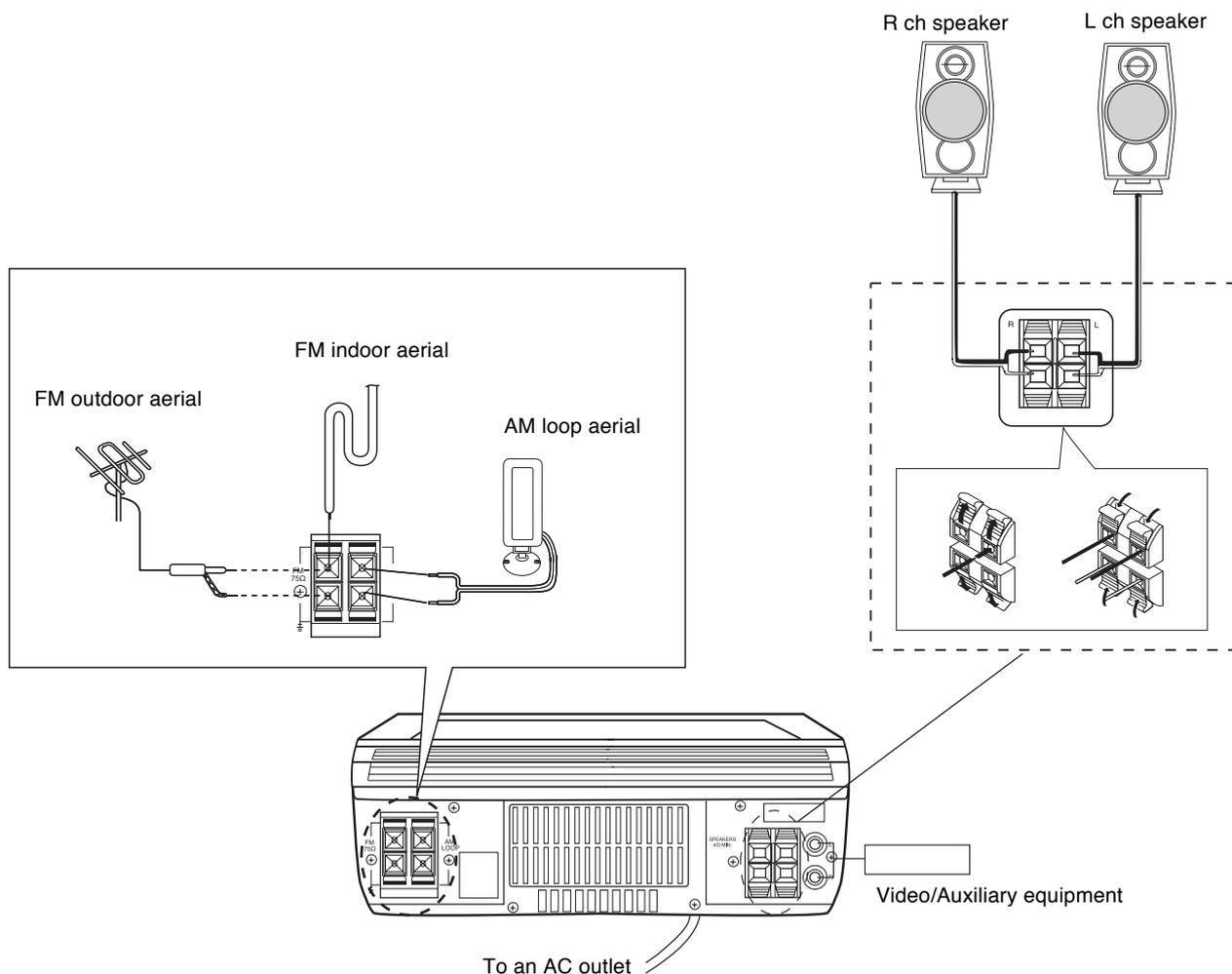


**CAUTION** - USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED IN THE OPERATING INSTRUCTIONS MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

THE PRODUCT SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED PERSONNEL.

- 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) or where direct sunlight may strike it.
- Because of the CD player's extremely low noise and wide dynamic range, there might be a tendency to set the volume on the amplifier unnecessarily high. Doing so may produce an excessively large output from the amplifier which could damage your speakers.
- When carrying the unit, be sure to remove a disc which may be inside and turn the power off. Wait at least 10 seconds, then unplug the mains lead from the AC outlet. Carrying the unit with a disc inside may damage the disc and/or the unit.
- 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.
- The system's speakers use powerful magnets. Do not place timepieces, credit cards, cassette tapes or video tapes, etc. near the speakers.
- Do not install this equipment in a confined space, such as a book case or built in cabinet.
- No object filled with liquids, such as vases, shall be placed on the apparatus.

# CONNECTIONS



**Note:**

- Do not connect the mains lead to an AC outlet until all connections have been made.
- The system is not completely disconnected from the mains when the  $\text{ON/OFF}$  button is set to the  $\text{OFF}$  position.

**Speakers**

When connecting the speakers, make sure that (+) and (-) polarities are matched properly. Otherwise, the sound may appear to be lacking in the bass range and stability.

Connect the blue speaker wire to the red terminal  $\oplus$  and the other wire to the black terminal  $\ominus$ .

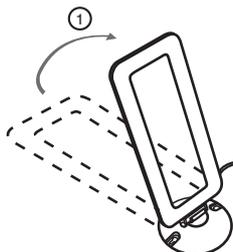
**Aerial**  
**FM aerials**

In areas close to a transmitter the simple indoor aerial is sufficient to receive broadcasts. Extend the aerial wire as straight as possible and, while listening to the sound from the system, secure it in a position which yields minimal distortion and noise.

In fringe areas or where reception is distorted or noisy an external aerial (not supplied) should be connected instead of the simple indoor aerial. Consult your dealer.

**AM loop aerial**

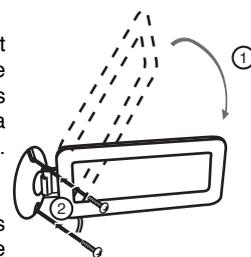
Assemble the loop aerial as shown in figure.



Unwind the aerial wires, then connect them to the AM LOOP terminals. Place the loop aerial in a position which yields the best AM reception, or attach it to a wall or other surface as shown in figure.

**Note:**

To minimize noise, the speaker, mains and any other leads should not come close to the FM aerial lead and AM loop aerial. Do not place the aerial leads close to the system.



Screws (not supplied)

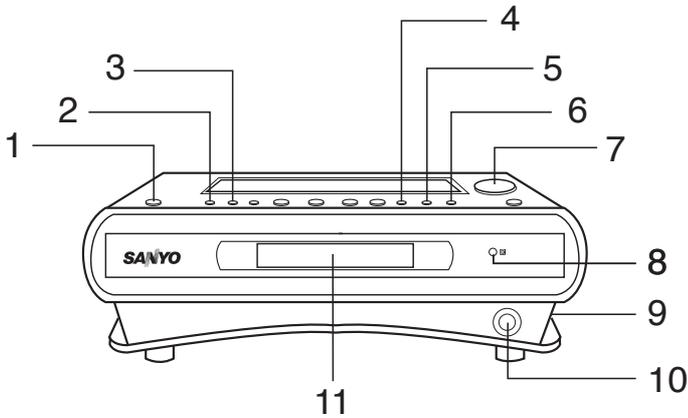
**Video/Auxiliary equipment input sockets (AUX IN)**

Connect audio leads (not supplied) from the audio output sockets of a video/auxiliary equipment to the AUX IN sockets.

**Headphones**

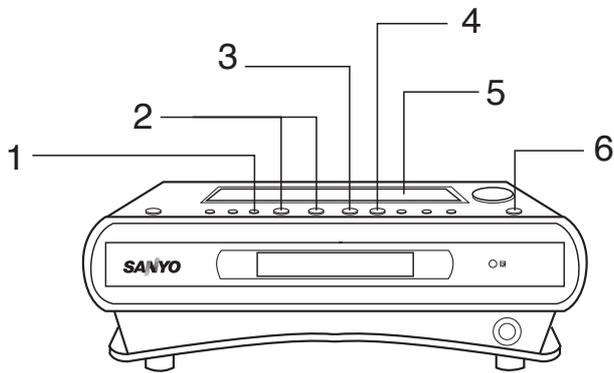
Connect stereo headphones (not supplied) to the PHONES socket for monitoring or for private listening. The speakers are automatically disconnected when headphones are connected.

# CONTROLS



## Amplifier/Common section

1. Power button (⏻/ON)
2. Sleep button (SLEEP)
3. Memory button (MEMORY)
4. AUX function button (AUX)
5. Sound preset button (SOUND PRESET)
6. Bass expander button (BASS)
7. Volume control (VOLUME)
8. Remote sensor (IR)
9. Reset button (RESET)
10. Headphones socket (PHONES)
11. Display

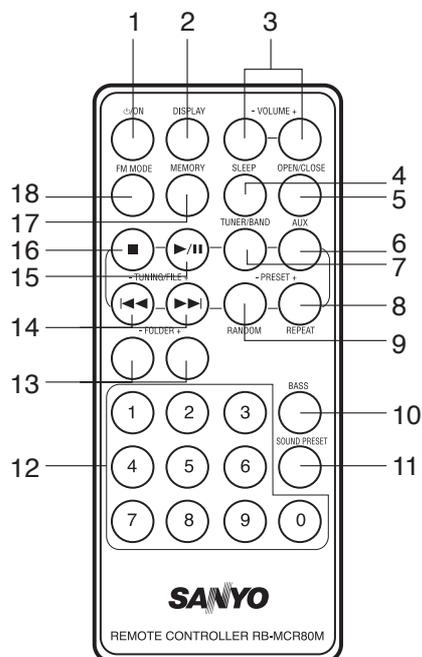


## CD player/Tuner

1. Tuner function/Band select button (TUNER/BAND)
2. Skip/Search/Tuning/MP3 CD's file select buttons (◀◀ - TUNING/FILE +, ▶▶)
3. Stop button (■)
4. Play/Pause button (▶/||)
5. Top CD compartment door
6. Open/Close button for CD Compartment lid (▲ OPEN/CLOSE)

# REMOTE CONTROL

## Controls



1. Power button (ON/OFF)
2. Display button (DISPLAY)
3. Volume buttons (VOLUME +, -)
4. Sleep button (SLEEP)
5. Open/Close button for CD Compartment lid (OPEN/CLOSE)
6. Aux function button (AUX)
7. Tuner function/Band select button (TUNER/BAND)
8. Preset tuning up/Repeat play button (PRESET +/ REPEAT)
9. Preset tuning down/Random play button (PRESET -/RANDOM)
10. Bass expander button (BASS)
11. Sound preset button (SOUND PRESET)
12. Number buttons (1~9, 0)
13. MP3 CD's folder select buttons (FOLDER -, +)
14. Skip/Search/Tuning/MP3 CD's file select buttons (TUNING/FILE -, TUNING/FILE +, >>>)
15. Play/Pause button (▶/||)
16. Stop button (■)
17. Memory button (MEMORY)
18. FM mode button (FM MODE)

### Number buttons (1-9, 0)

These buttons are used to select the track numbers on a disc or preset radio stations.

If the function is "CD", the buttons select the track numbers on a disc.

If the function is "TUNER", the buttons select preset radio stations.

With any other function, the buttons will not function.

Example:

To select No. 3, press 0, then 3.

To select No. 10, press 1, then press 0.

### When you use the remote control for the first time...

Pull the plastic sheet. The remote control can be used from now.

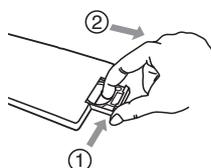


### Note:

There is CR2025 Lithium Battery (supplied) in the battery compartment of the remote control.

## Replacing the battery

1.



2.



Please purchase CR2025 Lithium Battery.

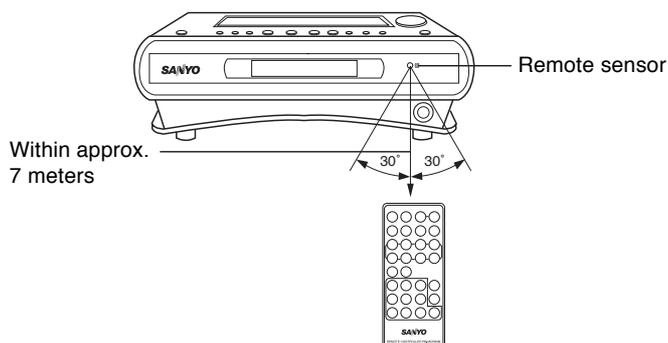
### CAUTION:

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

### Note:

Always remove battery if the remote control is not to be used for a month or more. Battery within the unit may leak and cause damages.

## Remote control range



The buttons on the remote control perform similar functions to similarly marked buttons on the front panel.

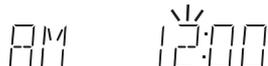
# ADJUSTING THE CLOCK

When the unit is first connected to the AC power line, the clock display blinks on the display.

Example: To set "PM6:30".

First, press the  $\odot$ /ON button to turn the power off. The clock display appears dimly.

1. Press the MEMORY button for at least 2 seconds.



The hours display blinks.

2. Press the  $\ll$  or  $\gg$  button to set the "hours".



3. Press the MEMORY button.



The minutes display blinks.

4. Press the  $\ll$  or  $\gg$  button to set the "minutes".



5. Press the MEMORY button. The clock starts dimly.



- The time can be set accurately by pressing the MEMORY button when a time signal is heard.
- If a power failure occurs or the mains lead is disconnected, the clock display blinks. Reset the time again.

# BEFORE OPERATION

## Turning the power on and off

Press the  $\odot$ /ON button, the display light.

To turn the power off, press the  $\odot$ /ON button again. The clock display remains lit dimly.

- When the mains lead is connected to the AC outlet, the unit will respond to commands from the remote control.

## Adjusting the volume

Turn the VOLUME control, or press the VOLUME - or + button on the remote control. The volume level appears by numbers (VOL MIN ~ VOL MAX) on the display.

## Bass expander system

Press the BASS button to enhance the bass sound. "BASS ON" appears briefly on the display.

## Selecting the sound mode

Press the SOUND PRESET button to select the sound mode matching the music to be listened to.

ROCK: Rock music, etc.

JAZZ: Jazz, etc.

CLASSIC: Classical music, etc.

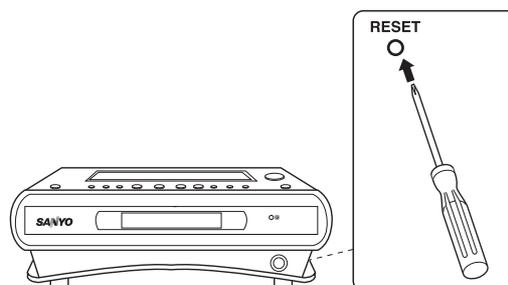
POP: Pops, etc.

FLAT: Flat music, etc.

## WHAT TO DO IF ...

If the operation of the unit or display is not normal,

1. Disconnect the mains lead.
2. Press the RESET button (right side of the unit) for at least 30 seconds
3. Connect the mains lead.
4. Resume the operation.

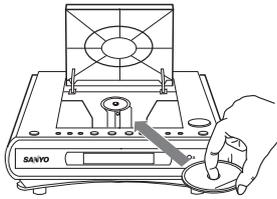


# CD PLAY

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



1. Press the ►/|| button to select "CD" function. "CD" appears on the display, then "CD" is replaced by the CD mode display.
2. Press the ▲ OPEN/CLOSE button to open CD compartment, "OPEN" appears.
3. Place the disc with the label facing up on the disc turntable. (Place only one disc at a time.)



4. Press the ▲ OPEN/CLOSE button again to close CD compartment, "CLOSE" display briefly, "READING" blinks for several seconds, then the total number of tracks and total playing time on the disc appear.

Note:

If a badly scratched disc is loaded or if the disc is loaded with the label facing downward, "NO DISC" appears. If this occurs, load the disc correctly or replace the damaged disc.

5. Press the ►/|| button. Play starts from the first track.



The current track number and elapsed playing time are displayed.

6. Press the ■ button to end disc play. When the last track has been played, the player stops automatically.

## Notes on handling compact discs

- 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 centre 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.

## To start play from the desired track

Select the track by using the ►| or |◀ button, then press the ►/|| button.

## Temporarily stopping play

Press the ►/|| button, elapsed playing time blinks on the display. To resume play, press the button again.

## Skip play

To skip to track 6 while track 3 is playing, press the ►| button repeatedly until "6" appears (in the track section) on the display. To skip back to track 3 while track 6 is playing, press the |◀ button repeatedly until "3" appears.

- The number buttons on the remote control can also be used for skip play. To skip to track 6 while one track is playing, press 0, then 6.

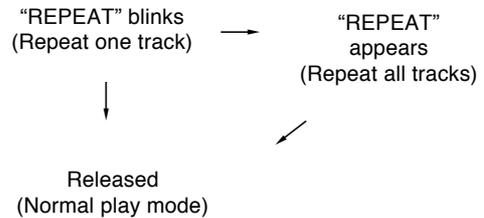
## Search (forward/reverse)

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.

## Repeat play (Remote control only)

Press the PRESET+/REPEAT button repeatedly before or during play to select various repeat mode available.

Each time the PRESET+/REPEAT button is pressed, the repeat mode changes as shown below:



## Random play (Remote control only)

1. Press the PRESET-/RANDOM button, "RANDOM" appears.
2. Press the ►/|| button. All tracks on the disc are played in random order.
3. To cancel random play, press the PRESET-/RANDOM button again, "RANDOM" disappears.

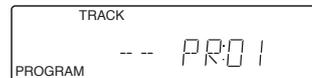
- Random play will not function during programmed play.

## PROGRAMMED PLAY

Up to 32 tracks on a disc can be programmed for play in any order.

- First, select "CD" function and load a disc that you want to programme.
- The tracks must be programmed in the stop mode.
- The same track can be programmed more than once.

1. Press the MEMORY button.

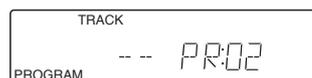


2. Select a track by using the ►| or |◀ button.

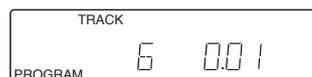
- The number buttons on the remote control can also be used.



3. Press the MEMORY button.



4. Repeat steps 2 - 3 to programme additional tracks.
5. Press the ►/|| button to start programmed play.



When all programmed tracks have been played, the player stops automatically.

- The programme contents are retained in memory.
- Any attempt to programme more than 32 tracks will result in the first programmed track being displayed and discontinuation of the programming.
- To cancel programmed play, press the ■ button twice.

### Checking the programme

Each time the MEMORY button is pressed in the stop mode, the programmed details sequentially appear on the display.

### Changing a programme

#### To add a new track to a programme:

1. In the stop mode, press the MEMORY button repeatedly until “- - -” on the track number part is displayed.
2. Select a track as explained above.
3. Press the MEMORY button.

#### To change a track:

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

Note:

Programmed details cannot be partially deleted or inserted.

## MP3 CD OPERATION

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

### MP3 CD information

- 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.  
As for multi-session disc, only the first session can be played back.
- This unit can recognize up to 255 folders or 640 files per disc.  
The CD with 256 folders or 641 files and over is not available to this unit.
- 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.
- “Mixed CD” cannot be played back.
- Music files recorded by “Packet Writing” cannot be played back.

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”.)

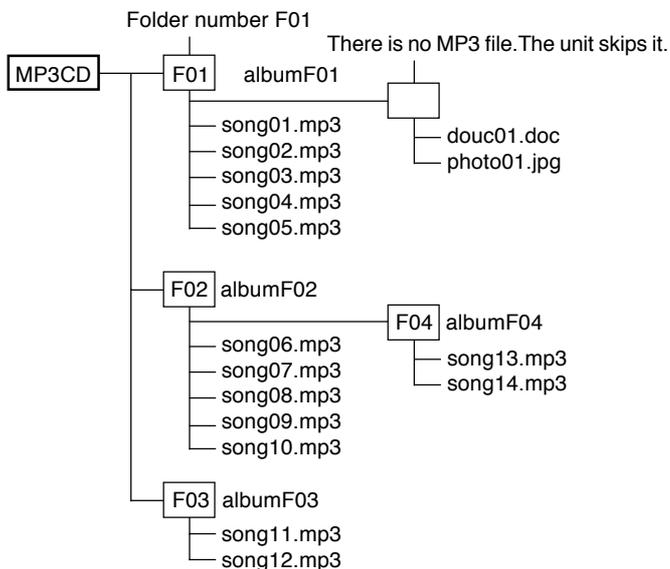
Music files recorded by “Packet Writing” cannot be played back.

### Limitations on display

Available letters for display are the following: capital alphabets of A through Z, numbers of 0 through 9, and \_ (underline).

### MP3CD directory sample:

Playback order: song01 → song02 → ... song14

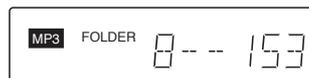


Note:

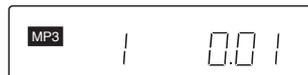
- Some MP3 CDs can not be played back depending on the recording conditions.
- The CD-R/RW that has no music data or non-MP3 files can not be played back.
- Do not make an empty folder. It may not work correctly.
- In this model, recommendable recording setting is 128 kbps of fixing bit rate. If files are recorded in other bit rate (for example: 320 kbps) or in variable bit rate, track-jump may sometimes happen according to recording conditions.

### MP3 CD Play (Remote control only)

1. Load the MP3 CD.  
“READING” blinks, then the total number of folders and total number of files on the disc appear.



2. Press the FOLDER + or - button on the remote control to select the desired folder.
3. Press the ◀◀ or ▶▶ button to select the desired file.
4. Press the ▶/|| button to start play.



Note:

If there is no music data, “NO DISC” appears.

### Display selection

The ID3-Tag is an information field for MP3. Music title, artist name and album name can be stored into the tag. This unit shows these information.

Press the DISPLAY button on the remote control during play.

Each time the button is pressed, the display changes in the following sequence.

Folder name (Album name)/File name (Music name)

Music information: music title

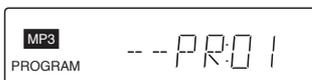
Music information: artist name

Music information: album name

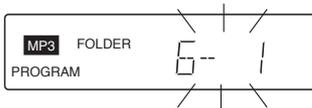
- If no music information is stored, “NO ID3” appears. Press the DISPLAY button again, the file number and elapsed playing time appear.

## Programmed playback

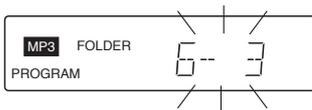
1. In stop mode, press the MEMORY button.



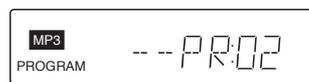
2. Press the FOLDER + or - button on the remote control to select desired folder.



3. Press the << or >> button to select desired file.



4. Press the MEMORY button.



5. Repeat 2 ~ 4 steps to programme additional tracks.
6. Press the >|| button to start programmed play.



7. Press the ■ button at any time to stop the programmed play.
- To cancel programmed play, press the ■ button twice.

## LISTENING TO THE RADIO

### Before use

When the unit is shipped from the factory, its AM frequency band is set as "522 - 1710 kHz (in 9 kHz steps)".

If your local AM broadcast system is organized in 10 kHz steps, change the frequency band to "520 - 1710 kHz (in 10 kHz steps)" as follows.

1. Disconnect the mains lead.
2. Connect the mains lead again.
3. Press the ⏻/ON button for at least 2 seconds.

To return the original setting, repeat steps above.

### Automatic/Manual tuning

1. Press the TUNER/BAND button to select FM or AM. "TUNER" appears briefly, then the "TUNER" is replaced by the radio frequency.

#### 2. Automatic tuning

Press the TUNING/FILE + or - button for at least 1 second to tune in a station. The unit will scan up or down the band and receive the next receivable station. Press the button again to continue.

#### Manual tuning

Press the TUNING/FILE + or - button briefly until the desired frequency is displayed.



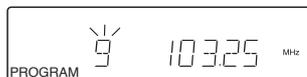
### To preset stations (Remote control only)

Up to 24 stations for FM band, 16 stations for AM band can be preset.

1. Tune in the station to be preset as described above.
2. Press the MEMORY button.



3. Press the PRESET + or - button on the remote control to select the channel to be preset.



- The number button(s) on the remote control can be used to preset the station. In this example, press 0, then 9 after the step 2 above.
4. Press the MEMORY button.
  - In this example, "103.25 MHz" FM station is preset on FM channel 9.
  5. Repeat steps above to add more preset stations.

When presetting a new station, the previous preset station is cleared.

### Listening to preset stations (Remote control only)

1. Press the TUNER/BAND button to select FM or AM.
2. Press the PRESET + or - button on the remote control to select the desired channel number.
- The number button(s) on the remote control can also be used.

### To receive FM stereo broadcasts (Remote control only)

"STEREO" appears when an FM stereo broadcast is received. If not, press the FM MODE button on the remote control to turn the "STEREO" indication on.

- If the signal from an FM stereo station is weak and reception is poor, press the FM MODE button to change to the monaural mode. The reception may be improved, but the sound will be monaural.

### When beat interference is heard

A high-pitched noise called "beat" is sometimes heard during reception of radio broadcasts. If this occurs, Press the FOLDER + button to select "BC-1" or "BC-2". Select the setting that gives the best result.

## LISTENING TO OTHER SOURCES

1. Press the AUX button to select "AUX"
2. Follow the instructions supplied with the video/auxiliary equipment.

## USING THE SLEEP TIMER

### USING THE SLEEP TIMER

The sleep timer automatically switches off the power after a preset time has elapsed. There are 9 time periods available: 10, 20, 30, 40, 50, 60, 70, 80, and 90 minutes.

Press the SLEEP button repeatedly to select the desired sleep time.

"SLEEP" appears and the selected time appears on the display. After several seconds, the original display returns, "SLEEP" remains lit.

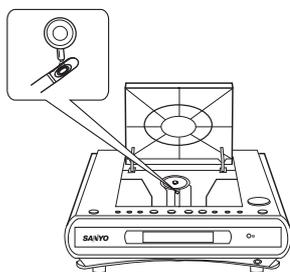
#### To release the sleep timer while in operation

Press the SLEEP button repeatedly to select "SLEEP: 00", "SLEEP" disappears from the display. The timer is also released if the power is switched off.

## MAINTENANCE

### Cleaning the CD player lens

The lens should never be touched. If dust is on the lens, blow it off using a camera lens blower. (Consult your dealer.)



### Cleaning the unit

Clean the outside of the unit with a clean soft cloth, moistened with lukewarm water. Do not use benzene, thinner or alcohol since they will mar the finish of the surfaces.

# SPECIFICATIONS

## Tuner

Reception frequency:

FM: 87.5 - 108 MHz

AM: 522 - 1710 kHz (9 kHz step)

520 - 1710 kHz (10 kHz step)

## CD player

Type:

2-channel stereo

Sampling frequency:

44.1 kHz

Pick-up:

Optical 3-beam semiconductor laser

Laser output:

0.6 mW (Continuous wave max.)

Wave length:

790 nm

Wow/flutter:

Below measurable limits

## General

Output power:

10 W x 2 (at 4 ohms, 10% distortion)

Outputs:

SPEAKERS: 4 ohms

PHONES: 8 - 32 ohms

Power requirements:

AC 230 - 240 V, 50 Hz

Power consumption:

30 W

Dimensions:

256(W) x 88(H) x 286(D) mm

Weight:

2.9 kg

## Speaker systems

Type:

2 way bass reflex

Unit used:

Woofers: 8cm

Tweeter: 3.5cm

Maximum power-handling capacity:

20 W (peak)

Nominal impedance:

4 ohms

Dimensions:

115(W) x 233(H) x 192(D) mm

Weight:

1.9 kg (per speaker)

Specifications subject to change without notice.

