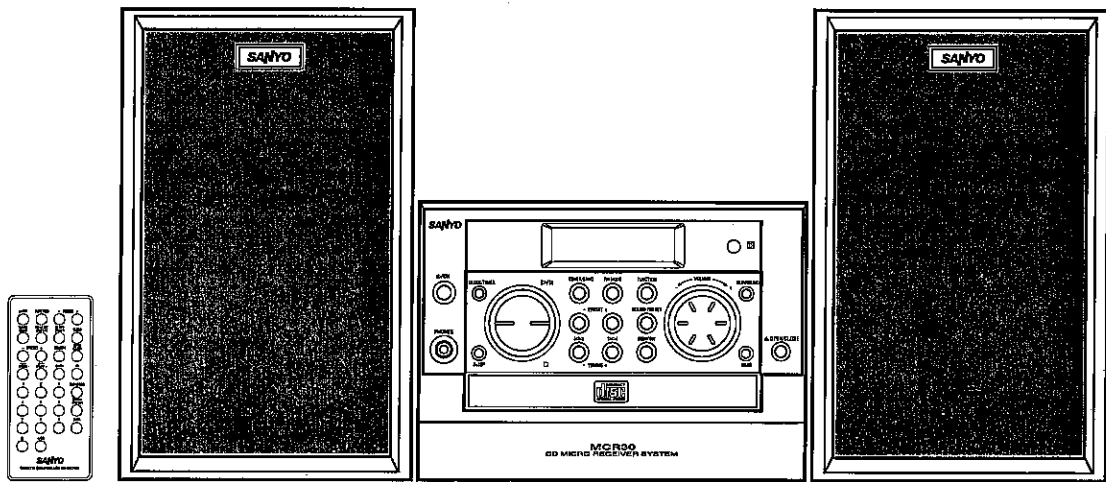


SANYO

INSTRUCTION MANUAL

DC-MCR30

Micro Component System



PRECAUTIONS

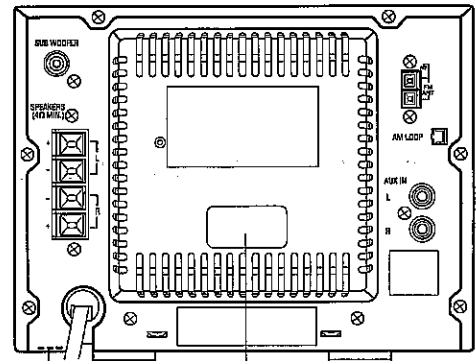
CAUTION – INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

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

VARNING – OSYNLIG LASER STRÅLNING NÅR DENNA DEL ÅR ÖPPNAD OCH SPÄRR ÅR URKOPPLAD. STRALEN ÅR 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 KÄTSO SÄTEESEEN.

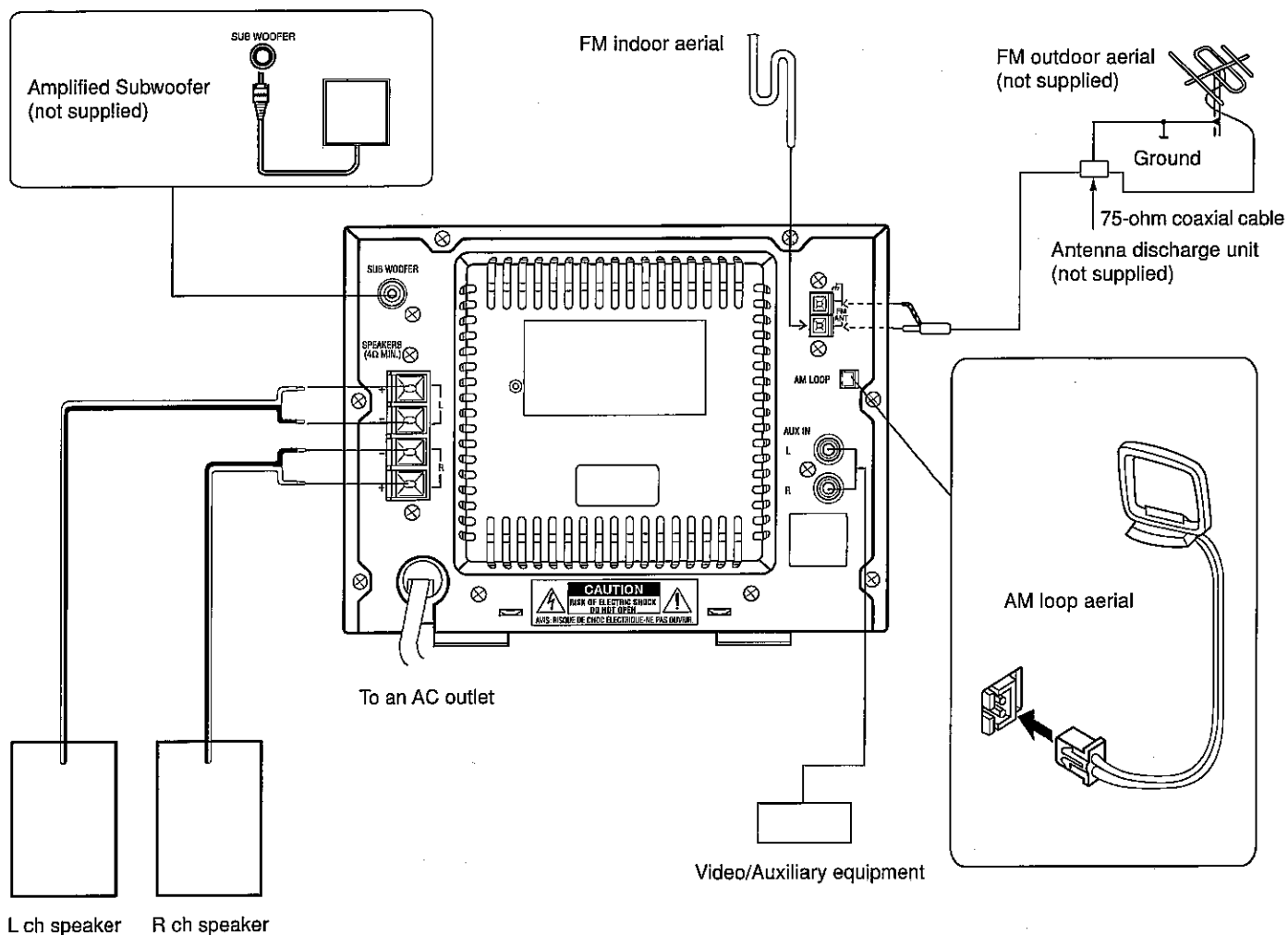


CAUTION - USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED IN THE OPERATING INSTRUCTIONS MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. THIS PRODUCT SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED PERSONNEL.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

- 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 vase, 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 ϕ /ON button is set to the ϕ 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 black speaker wire to the black terminal - and the other wire to the red terminal +.

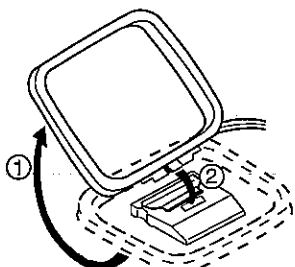
Aerials

The FM indoor aerial lead wire is sufficient to receive most local FM broadcasts and should be connected to the rear FM ANT terminal. Extend the aerial lead wire as straight as possible and, while listening to the sound from the system, secure it in a position where the best FM reception is found.

In fringe areas, or where reception is distorted or noisy, an FM outdoor aerial (not supplied) should be connected instead of the FM indoor antenna lead wire. The terminals will accept 75-ohm coaxial cable.

AM loop aerial

Assemble the loop aerial as shown in figure.

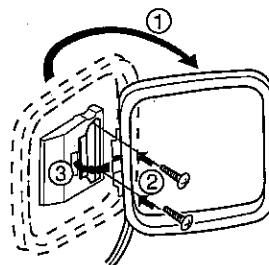


Unwind the aerial wires, then connect them to the AM LOOP terminals. Place the loop aerial in a position which yields the best AM (MW/LW) reception, or attach it to a wall or other surface as shown in figure.

If you have difficulty inserting the AM loop aerial cable connector, turn it over and reinsert it.

Note:

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



Screws (not supplied)

Video/Auxiliary equipment

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

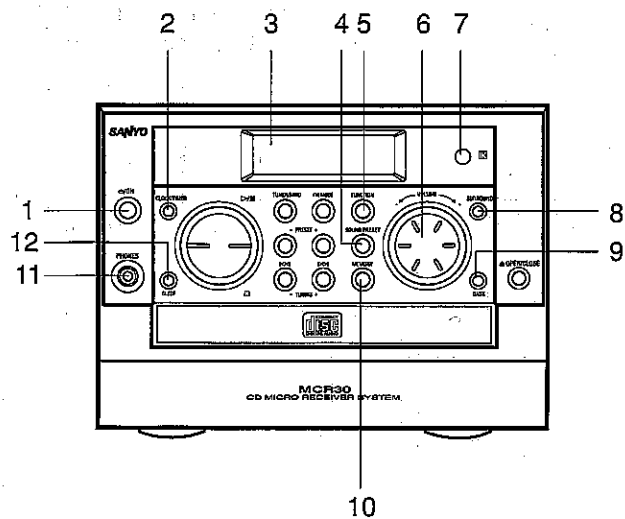
Subwoofer output socket (SUB WOOFER)

Connect the amplified subwoofer (not supplied) to the SUB WOOFER socket.

Headphones

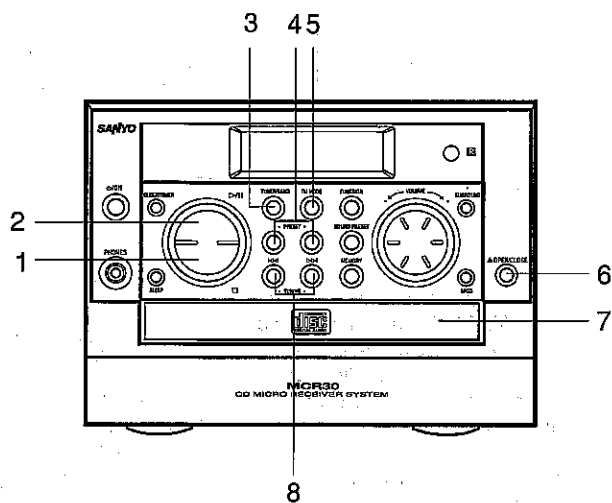
Connect stereo headphones (not supplied) to the PHONES socket for monitoring or for private listening. The speakers are automatically disconnected when headphones are connected.

CONTROLS



General

1. Power button (⏻/ON)
2. Clock/Timer button (CLOCK/TIMER)
3. Display
4. Sound preset button (SOUND PRESET)
5. Function button (FUNCTION)
6. Volume control (VOLUME/PTY SELECT)
7. Remote sensor (IR)
8. Surround button (SURROUND)
9. Bass expander button (BASS)
10. Memory button (MEMORY)
11. Headphones socket (PHONES)
12. Sleep button (SLEEP)

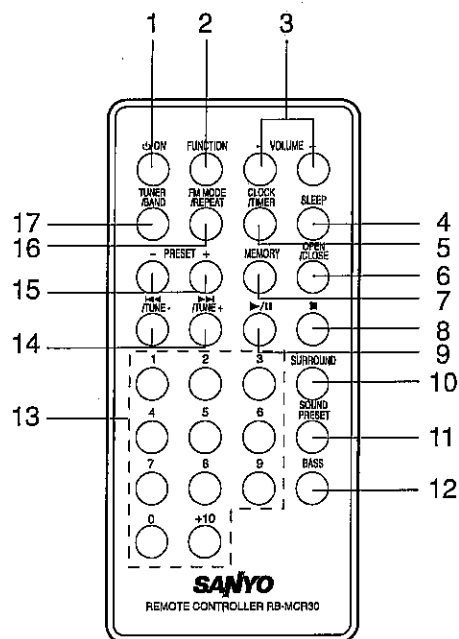


CD player/Tuner (Fig. 1b)

1. Stop button (⏻)
2. Play/Pause button (▶/⏸)
3. Tuner function/Band select button (TUNER/BAND)
4. Preset tuning buttons (- PRESET +)
5. FM mode button (FM MODE)
6. Open/Close button for CD compartment lid (▲ OPEN/CLOSE)
7. CD compartment
8. Skip/Search/Tuning buttons (⏮, ⏭, - TUNING +)

REMOTE CONTROL

Controls



1. Power button (ON/OFF)
2. Function button (FUNCTION)
3. Volume buttons (- VOLUME +)
4. Sleep button (SLEEP)
5. Clock/Timer button (CLOCK/TIMER)
6. Open/Close button for CD compartment lid (OPEN/CLOSE)
7. Memory button (MEMORY)
8. Stop button (■)
9. Play/Pause button (▶/⏸)
10. Surround button (SURROUND)
11. Sound preset button (SOUND PRESET)
12. Bass expander button (BASS)
13. Number buttons (1-9, 0, +10)
14. Skip/Search/Tuning buttons (◀◀/TUNE -, ▶▶/TUNE+)
15. Preset tuning buttons (- PRESET +)
16. FM mode/Repeat button (FM MODE/REPEAT)
17. Tuner function/Band select button (TUNER/BAND)

Number buttons (1-9, 0, +10)

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 3.

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

To select No. 25, press +10 twice, then 5.

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

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

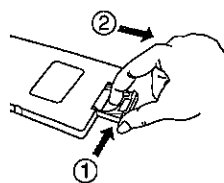


NOTE:

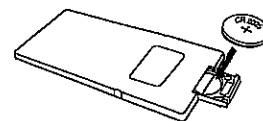
There is CR2025 Lithium Battery (supplied) in the battery compartment of the remote control.

Replacing the battery

1



2



Please purchase CR2025 Lithium Battery.

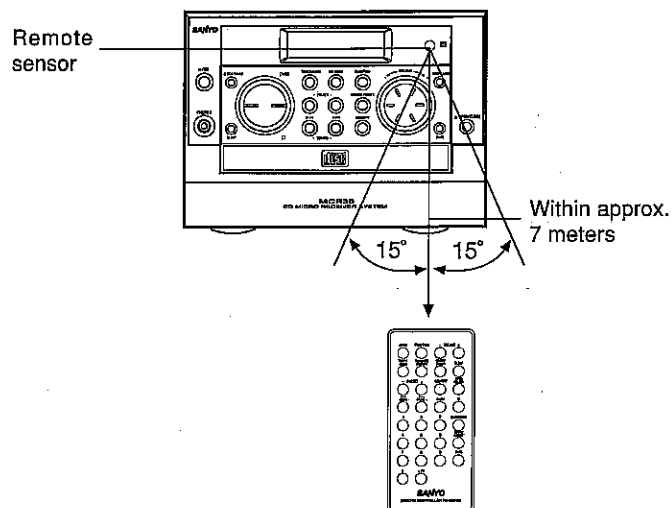
Notes:

- When the remote control does not work properly, the battery is weak. Replace it.
- Remove the battery if the remote control is not to be used for a month or more. Battery left in the unit may leak and cause damage.

CAUTION:

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

Remote control range



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

ADJUSTING THE CLOCK (Main unit only)

NOTE:

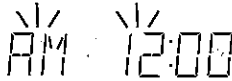
When the unit is first connected to the AC power line, it enters the demonstration mode.

To cancel this mode, press the ϕ /ON button or the CLOCK/TIMER button.

Example: To set "PM 6:30"

First, press the ϕ /ON button to turn the power off, then press the CLOCK/TIMER button, only the clock display appears.

1. Press the CLOCK/TIMER for at least 2 seconds. The hours display blinks.



2. Turn the VOLUME control to set the "hours".

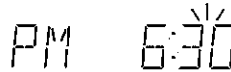


3. Press the MEMORY button.




The minutes display blinks.

4. Turn the VOLUME control to set the "minutes".



5. Press the MEMORY button. The clock starts.



- The time can be set accurately by pressing the MEMORY button when a time signal is heard.

- To display the clock during operation, press the CLOCK/TIMER button briefly. After a few seconds, the original display returns.

- If a power failure occurs or the mains lead is disconnected, the clock display blinks. Reset the time again.

Changing the clock to the 24-hour display

1. Disconnect the mains lead.
2. Connect the mains lead again.
3. Within 5 seconds press the FUNCTION button and the MEMORY button at the same time.

Example: PM 1:00 \rightarrow 13:00

To return the original setting, repeat steps above.

BEFORE OPERATION

Turning the power on and off

Press the ϕ /ON button. The displays light and "WELCOME" appears briefly.

To turn the power off, press the ϕ /ON button again, "GOODBYE" appears briefly and the clock display remains lit. (If the clock has not been set, the display enters the demonstration mode.)

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

Direct start function

If the following buttons are pressed when the unit is in standby, the unit turns on automatically and the selected function is set.

CD section	\triangleright /00
Tuner section	TUNER/BAND
Remote control	\blacktriangleright /II, TUNER/BAND

Selecting the function

Press the FUNCTION button to select the desired function. Each time the button is pressed, the display changes as follows:

CD \rightarrow TUNER \rightarrow AUX \rightarrow CD \rightarrow ...

The function is automatically selected when CD play started or when the TUNER/BAND button has been pressed.

- When the function selection is changed, CD play is automatically stopped.

Adjusting the volume

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

Surround sound system

Press the SURROUND button. "SURR" appears on the display and a 3 dimensional sound effect is created.

Bass expander system

Press the BASS button to enhance the bass sound. "BASS" appears 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.

WHAT TO DO IF ...

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

1. Disconnect the mains lead.
2. Connect the mains lead again.
3. Within 5 seconds press the FUNCTION button and the \square button at the same time.

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.



Note:

This unit can play back the CD-R/RW that have recorded music data as well. However, some CD-R/RWs can not be played back depending on the recording conditions.

If disc is loaded, you can turn the unit on and begin play immediately by pressing the $\triangleright/\text{III}$ button.

1. Press the FUNCTION button to select "CD" function. "CD" appears on the display, then "CD" is replaced by the CD mode display.
2. Press the \blacktriangle OPEN/CLOSE button to open the CD compartment lid "OPEN" appears.
3. Place the disc with the label facing up on the disc tray (Fig. 8). (Place only one disc at a time.)
4. Press the \blacktriangle OPEN/CLOSE button again to close the CD compartment lid. "CLOSE" appears briefly, then the total number of tracks and total playing time on the disc appear.

Note:

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

5. Press the $\triangleright/\text{III}$ button. Play starts from the first track.



The current track number and elapsed playing time are displayed.

6. Press the \square 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 $\triangleright/\text{III}$ or III/\triangleleft button.

Temporarily stopping play

Press the $\triangleright/\text{III}$ button. "►" and elapsed playing time blink on the display. To resume play, press the button again.

Skip play

To skip to track 6 while track 3 is playing, press the $\triangleright/\text{III}$ 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 III/\triangleleft 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 6.

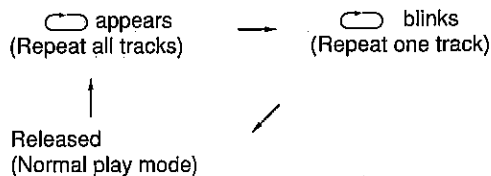
Search (forward/reverse)

If the $\triangleright/\text{III}$ or III/\triangleleft 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 REPEAT button repeatedly before or during play to select various repeat mode available.

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

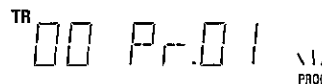


PROGRAMMED PLAY

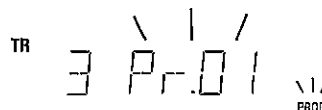
Up to 40 tracks on a disc can be programmed for play in any order.

- 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.

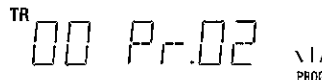
1. Press the MEMORY button.



2. Select a track by using the $\triangleright/\text{III}$ or III/\triangleleft 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 $\triangleright/\text{III}$ button to start programmed play.



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

- The first programmed track number appears and "PROG." blinks.

- Any attempt to programme more than 40 tracks will result in "FULL" and "PROG." blink on the display and discontinuation of the programming.

- To cancel programmed play, press the \square 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 "00" on the track section appears on the display.
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.

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 10kHz steps, change the frequency band to "520 - 1710 kHz (in 10 kHz steps)" as follows.

1. Press the TUNER/BAND to select AM.
2. While pressing the PRESET + button and the \square button on the front panel, within 3 seconds press the CLOCK/TIMER button at the same time.

To return the original setting, repeat steps above.

To turn the unit on and listen to the last received station, press the TUNER/BAND button.

Automatic/Manual tuning

1. Press the TUNER/BAND button to select FM, AM.
 - "TUNER" is selected automatically. "TUNER" appears on the display, then "TUNER" is replaced by the tuner mode display.

Automatic tuning

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

FM 103.25 MHz

To preset stations

Up to 24 stations for FM band, 12 stations for AM band can be preset.

1. Tune in the station to be preset as described in "Automatic/Manual tuning".
2. Press the MEMORY button.

00 103.25 MHz
ST
PROG.

3. Press the PRESET - or + button to select the channel number to be preset.

09 103.25 MHz
ST
PROG.

4. Press the MEMORY button.
 - In this example, "103.25 MHz" FM station is preset on FM channel 9.

- The number buttons on the remote control can be used to preset the station directly. In this example, press 9 after the step 2 above.

FM 103.25 MHz

Note:

If the next step is not taken within 4 seconds while performing steps 2 - 4, "PROG." disappears and the preset operation is cancelled. Press the MEMORY button to continue.

5. Repeat steps above to add more preset stations.

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

Listening to preset stations

1. Press the TUNER/BAND button to select FM, AM.
2. Press the PRESET - or + button to select the desired channel number.
 - The selected channel number appears briefly.
 - The number buttons on the remote control can also be used.

To receive FM stereo broadcasts

"ST" appears when an FM stereo broadcast is received. If not, press the FM MODE button to turn the "ST" 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 MONO mode. The reception may be improved, but the sound will be monaural.

LISTENING TO OTHER SOURCES

1. Press the FUNCTION button to select "AUX".

2. Follow the instructions supplied with the Video/Auxiliary equipment.

TIMER OPERATION

Using the timer

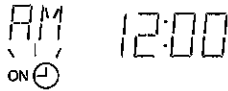
Set the on and off times, and function to be used. Operation will start with the selected function at the on time. The power will be switched off at the off time.

The timer will function every day unless it is released.

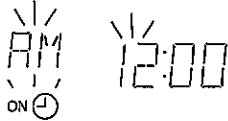
Example:

Waking up AM 7:30 every day and listening to music until AM 8:15.

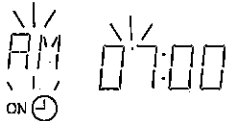
1. Press the CLOCK/TIMER button.
The present time appears.
2. Press the CLOCK/TIMER button again, "ON⊕" blinks. The previous timer ON time appears.



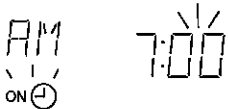
3. Press the CLOCK/TIMER button for at least 2 seconds, "ON⊕" and "hour" blink.



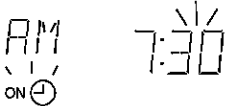
4. Press the << or >> button or turn the VOLUME control to set "hour" display.



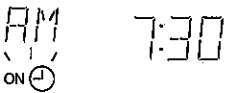
5. Press the MEMORY button. "ON⊕" and "minute" blink.



6. Press the << or >> button or turn the VOLUME control to set "minute" display.

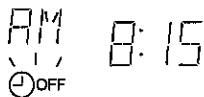


7. Press the MEMORY button. This completes the setting of the ON time. "ON⊕" remains blink.



8. Press the CLOCK/TIMER button while "ON⊕" is blinking. "⊕OFF" blinks. The previous Timer OFF time appears.

9. Repeat steps 3~7 above. This completes the setting of the OFF time.



10. Press the CLOCK/TIMER button. "ON⊕OFF" display lights, original display returns.
11. Press the FUNCTION button to select desired wake-up function (CD, TUNER, AUX).
12. Turn the VOLUME control to set the desired volume level.
13. Press the ⊕/ON button to turn the power off. The "ON⊕OFF" remains lit and present time displays.

When the timer ON time arrives, the power is turned on automatically and the unit starts playing with the preset function selected.

- "ON⊕OFF" remains lit while timer operation is engaged.
- When the timer OFF time arrives, the power turns off and the timer is set to the standby mode. Timer operation repeats this cycle every day.

To check the timer settings

Turn on the power, then press the CLOCK/TIMER button repeatedly. The timer settings are displayed in the following order.

- Present time.
- TIMER ON time.
- TIMER OFF time.
- Original display returns.

To change the timer settings

1. Press the CLOCK/TIMER button to select the setting to be changed.
2. Press the CLOCK/TIMER button for at least 2 seconds so that the display blinks.
3. Change the setting as explained above.

To release the timer

After turning the power on, press the CLOCK/TIMER button, "ON⊕OFF" display disappears.

To set the timer again with the same settings.

1. Press the CLOCK/TIMER button repeatedly to display "ON⊕OFF".
2. Press the ⊕/ON button to switch off the power.

Note:

The timer operation is released if a power failure occurs.

Using the sleep timer

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

Press and hold down the SLEEP button to select the desired sleep time. "SLEEP" blinks 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, "SLEEP" disappears from the display. The timer is also released if the power is switched off.

MAINTENANCE

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

Channels:
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:
20 W x 2 (at 4 ohms, 10% distortion)
Input:
AUX IN: 400 mV/50k ohms
Outputs:
SPEAKERS: 4 ohms
PHONES: 8 - 32 ohms
Power requirements:
AC 230-240 V, 50 Hz
Power consumption:
45 W
Dimensions:
190(W) x 150(H) x 323(D) mm
Weight:
4.2 kg

Speaker systems

Type:
2 way bass reflex
Unit used:
Woofer: 10 cm cone type
Tweeter: 2.5 cm balanced
Maximum power-handling capacity:
40 W (peak)
Nominal impedance:
4 ohms
Dimensions:
160(W) x 260(H) x 216(D) mm
Weight:
2.2 kg (per speaker)

Specifications subject to change without notice.



