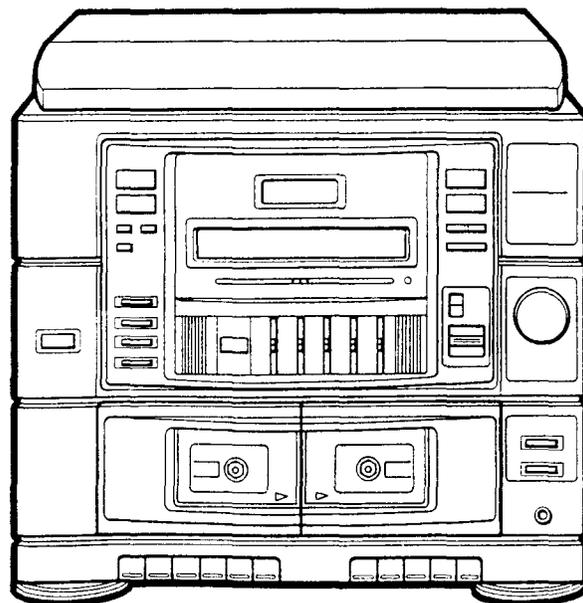


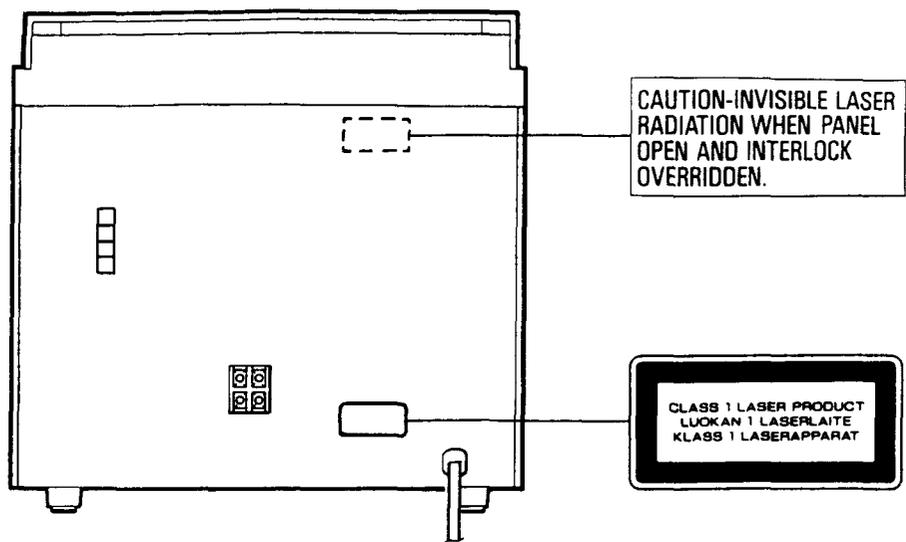
INSTRUCTION
MANUAL

SANYO

GCD 1500

CD STEREO SOUND SYSTEM





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

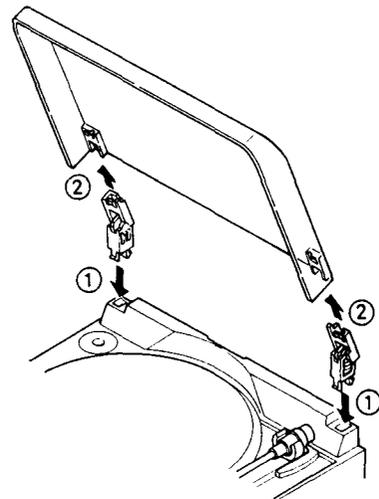
THE COMPACT DISC PLAYER SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED PERSONNEL.

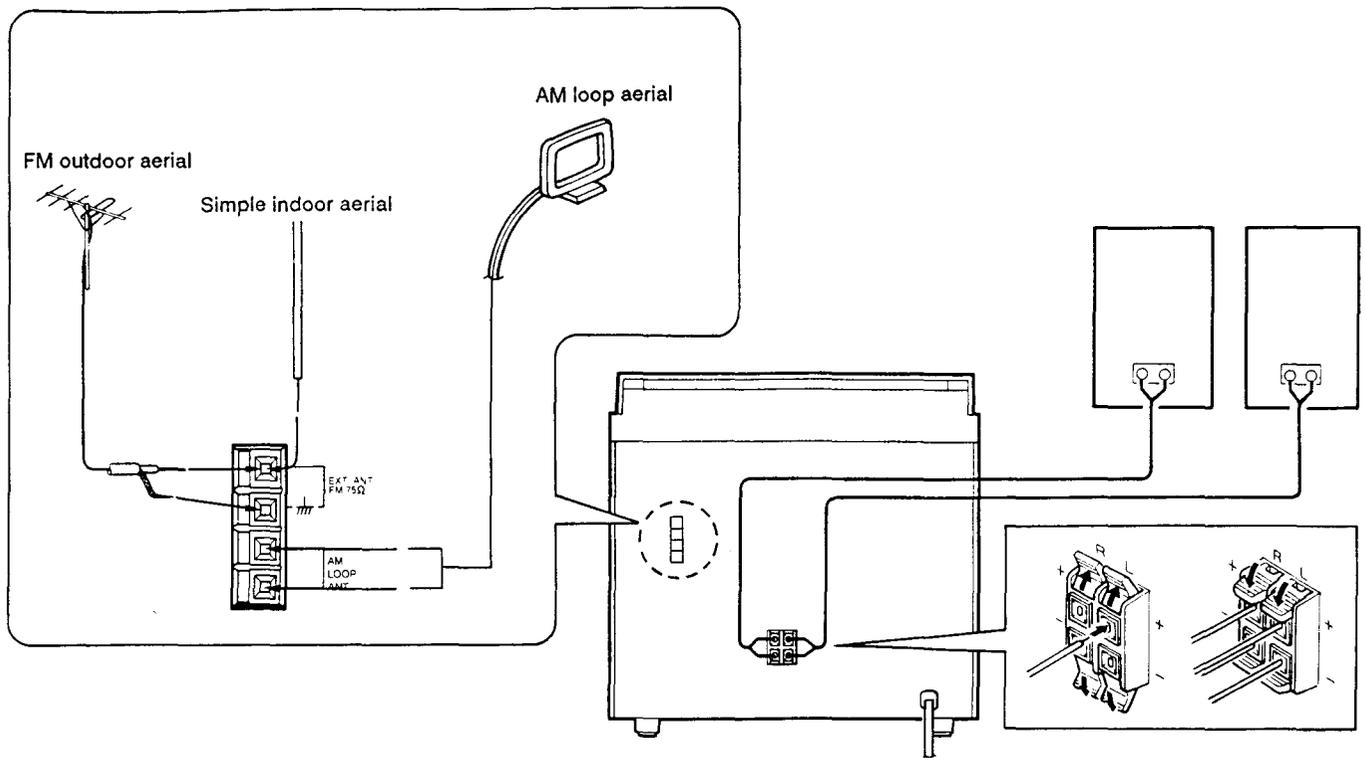
PRECAUTIONS

- If water should enter the unit, electrical shock or malfunction may result. Always use it in a place where there is low humidity and little dust.
- 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 turn the volume on the amplifier unnecessarily high. Doing so may produce an excessively large output from the amplifier which could damage your speakers.
- 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 with the disc tray extended for about 1 hour, and then proceed to operate.

Before use

1. Carefully unpack the unit and other parts. Remove all packing material from around the unit.
2. Locate the unit horizontally on a heavy duty stand or firm level surface, and away from the speaker system to avoid sound feedback.
3. Fit the dust cover to the unit with the hinges as shown in figure.
4. Place the rubber mat on the turntable platter.
5. Place the 45 rpm adaptor in its appropriate rest position.





Power supply

Connect the mains lead to an AC 230 - 240 V wall outlet.

Note:

- Do not connect the mains lead to an AC outlet until all connections have been made.
- Before connecting the mains lead, set the POWER switch to OFF.

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.

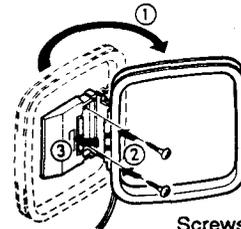
In fringe areas or where reception is distorted or noisy, an external aerial (not supplied) should be connected instead of the simple indoor aerial. Consult your dealer.

loop aerial

Assemble the loop aerial as shown in figure.



Unwind the aerial wires (about 3 turns), then connect them to the AM LOOP ANT. 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.



Screws (not supplied)

Note:

- To minimize noise, the speaker, mains and any other leads should not come close to the EXT. ANT. socket.
- Do not place the unit beside a metal surface.

Speaker terminals (SPEAKERS)

These terminals will accept speakers of 8 ohms minimum impedance. The speaker wires should be connected to the speaker terminals with the proper polarity. The red terminals are (+) positive and black terminals are (-) negative.

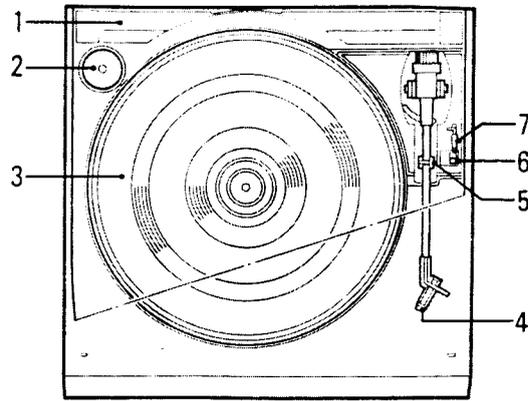
Headphones socket (PHONES)

Connect stereo headphones (8 ohms - 10 kohms, not supplied) for monitoring or for private listening. The speakers are automatically disconnected when headphones are connected to this socket.

CONTROLS

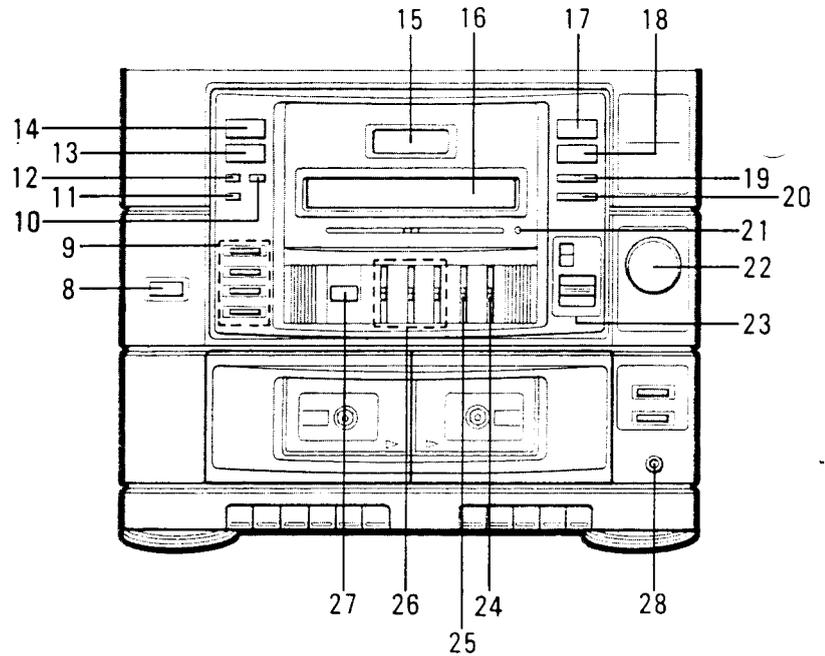
Turntable section

1. Dust cover
2. 45 rpm adaptor
3. Turntable platter
4. Cartridge
5. Tone arm rest
6. Speed selector (33/45)
7. Tone arm lift lever



CD/Tuner/Audio section

8. Power switch (POWER)
9. Function switches (CD/PHONO/TUNER/TAPE)
10. Intro scan switch (INTRO SCAN)
11. Edit switch (EDIT)
12. Random play switch (RANDOM PLAY)
13. Memory switch (MEMORY)
14. Repeat play switch (REPEAT)
15. Multi-display (MULTI-FUNCTION LCD DIGITAL DISPLAY)
16. Disc tray
17. Play/Pause switch (▶/⏸)
18. Stop switch (■)
19. Skip/Search switches (◀◀ / ◀, ▶▶ / ▶)
20. Disc tray open/close switch (OPEN/CLOSE)
21. FM stereo indicator (FM STEREO)
22. Tuning control (TUNING)
23. Band select switch and indicator (BAND SELECT)
24. Volume control (VOLUME)
25. Balance control (BALANCE)
26. Graphic equalizer controls (GRAPHIC EQUALIZER)
27. Bass expander switch (BASSXPANDER)
28. Headphones socket (PHONES)



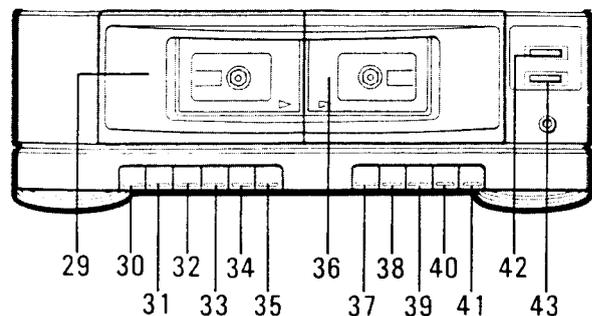
Tape section

TAPE B

29. Cassette holder
30. Record button (REC)
31. Play button (PLAY)
32. Rewind button (REW)
33. Fast forward button (FFWD)
34. Stop/Eject button (STOP/EJECT)
35. Pause button (PAUSE)

TAPE A

36. Cassette holder
37. Play button (PLAY)
38. Rewind button (REW)
39. Fast forward button (FFWD)
40. Stop/Eject button (STOP/EJECT)
41. Pause button (PAUSE)
42. Dubbing speed/Beat cancel switch (DUBBING SPEED/BEAT CANCEL)
43. Dolby NR switch (DOLBY NR)



BEFORE OPERATION

Press the POWER switch.
To turn off the power, press it again.

Adjusting the volume

Move the VOLUME control upwards to increase volume or downwards to decrease volume.

Adjusting the left/right speaker balance

Use the BALANCE control to adjust the left/right speaker balance.

Adjusting the sound quality

The GRAPHIC EQUALIZER controls (300Hz/1kHz/10kHz) allow the sound to be tailored to individual musical preferences or to fit the acoustics of the room. Moving the control will adjust the sound level in a narrow range of musical frequencies.

Bass expander switch (BASSXPANDER)

Press the switch to the ON position to enhance the bass sound.

WHAT TO DO IF ...

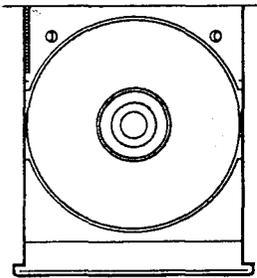
If the operation of the unit or display is not normal, turn off the POWER switch. Then turn it on again and resume the operation.

CD PLAY

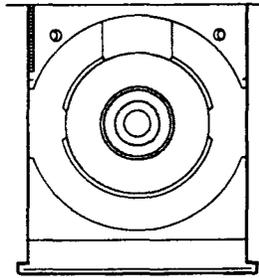
Use compact discs bearing the symbol shown below. In addition to conventional 12 cm CDs, this system can be used to play 8 cm CDs without an adapter.



1. Press the CD function switch.
"no diSC" appears on the display.
2. Press the OPEN/CLOSE switch.
The disc tray slides out.
The display shows "OPEN".
3. Place the disc with the label facing up on the disc tray.



For 12 cm CD



For 8 cm CD

4. Press the OPEN/CLOSE switch again to close the disc tray.
The total number of tracks and total play time on the disc appear.
NOTE:
If a disc is loaded upside down, or if no disc is loaded, "no diSC" will appear on the display.
5. Press the "▶/||" switch.
"PLAY ▶" appears on the display and play starts from the first track.
The following informations are displayed:
 - The current track number.
 - Elapsed time for the current track.**NOTES:**
 - If the "▶/||" switch is pressed after the disc has been placed in the disc tray, the disc tray will close and play will start.
 - If you wish to start play from a desired track, press the "▶▶/▶▶" switch until the desired track number is shown on the display. Then press the "▶/||" switch.
6. Press the "■" switch to end disc play.
When the last track has been played, the player automatically stops.
The total number of tracks and total play time are displayed.
 - When the OPEN/CLOSE switch is pressed during play, play will stop and the disc tray will slide out.

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, benzine or thinner to clean compact discs.

Temporarily stopping play

Press the "▶/||" switch. "PLAY ▶" blinks. To resume play, press the switch again.

Skip play

To skip to track 6 while track 3 is playing, press the "▶▶/▶▶" switch repeatedly until "6" appears on the display.
To skip back to track 3 while track 6 is playing, press the "◀◀/◀◀" switch repeatedly until "3" appears.

Search (forward/reverse)

If the "▶▶/▶▶" or "◀◀/◀◀" switch is pressed during play, the player will search at high speed in the forward or reverse direction while the switch is being pressed. When the switch is released, normal play will continue.

- While the "◀◀/◀◀" or "▶▶/▶▶" switch is pressed, the sound will be reduced in volume.

IntrosCAN

Press the INTRO SCAN switch to play the first 10 seconds of each track. "INTRO" appears on the display.

- Press the INTRO SCAN switch again to return to normal play.
- If the INTRO SCAN switch is pressed during normal play, introsCAN will start with the next track on the disc.
- Press the "◀◀/◀◀" or "▶▶/▶▶" switch to skip to another track during introsCAN play.

Random play

Press the RANDOM PLAY switch to begin random play. The player will automatically select and play tracks on the disc at random. "RANDOM" appears on the display.

- If the RANDOM PLAY switch is pressed during random play, the player will select the next random track.

Random introsCAN play

Press the INTRO SCAN switch, then the RANDOM PLAY switch, to play the first 10 seconds of each track at random.

Repeat play

Before or during play, press the REPEAT switch. The player will play all the tracks, all the programmed tracks or all the random play tracks repeatedly. "◁" appears on the display.
To cancel repeat play, press the REPEAT switch again. "◁" goes out.

PROGRAMMED PLAY

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

- To begin the programming procedure, select the CD function first.
- The same track can be programmed more than once.

Example:

To programme tracks 5, 2, 6 and 10

1. Press the MEMORY switch. "PROG." blinks on the display.
PROG.
/ | \ 1 Pr. 1
 2. Select track 5 by pressing the "▶▶ / ▶▶|" switch.
PROG.
/ | \ 5 Pr. 1
 3. Press the MEMORY switch. "PROG." remains lit.
PROG.
5 Pr. 1
 4. Select track 2 by pressing the "◀◀ / ◀◀" switch. "PROG." blinks on the display.
PROG.
/ | \ 2 Pr. 2
 5. Press the MEMORY switch. "PROG." remains lit.
PROG.
2 Pr. 2
- The remaining tracks can be programmed in the same way.
6. Press the ▶/|| switch to start play.
When all programmed selections have played, the player stops automatically.
- The programme contents are retained in memory.
 - The maximum number of selections that can be programmed is 24. If you try to enter more selections, "FULL" will appear on the display.

The programme is cleared in the following cases:

- When the "■" switch is pressed in the stop mode
- When the EDIT switch is pressed in the stop mode
- When the OPEN/CLOSE switch is pressed
- When other source is selected
- When the power is switched off

Checking the programme

Whenever the MEMORY switch is pressed in the stop mode, the programmed track numbers sequentially appear on the display.

To add a new selection to a programme

1. In the stop mode, press the MEMORY switch repeatedly until the following display appears:
"-----"
2. Select a track number.
3. Press the MEMORY switch.

To change a selection

1. Press the MEMORY switch repeatedly until the selection to be replaced is displayed.
2. Select a track number.
3. Press the MEMORY switch.

Operations during programmed play

- Press the ▶▶ / ▶▶| or ◀◀ / ◀◀ switch to skip programmed tracks.
- If the end (or beginning) of the current track is reached in forward (reverse) search mode, the player enters the pause mode.

LISTENING TO TAPES

TAPE A is for playback only; TAPE B is for both playback and recording. Do not turn the unit off while the tape is running. Otherwise, the pinch roller may be damaged.

Playback (TAPE A or TAPE B)

1. Press the STOP/EJECT button to open the cassette holder.
2. Load the cassette(s).
To load, place the tape with its exposed end at the bottom. After the tape has been loaded, push the cassette holder back into position.
3. Press the TAPE function switch.
4. Set the DOLBY NR switch to ON or OFF according to whether the tape has been recorded with the Dolby NR system or not.
5. Press the PLAY button.
6. Press the STOP/EJECT button to stop playback at any time.
When the end of the tape has been reached, automatic stop will be activated.

Types of usable tapes

The following types of tape can be used with the both decks.

- Normal
- CrO2

Notes:

- CrO2 tapes without sensing holes cannot be used since they cannot be identified by the auto tape selector.
- Endless tapes cannot be used.
- Do not use C-120 tapes. They may jam in the mechanism.

Pause

Press the PAUSE button to temporarily stop playback or recording. Press the button again to re-start playback or recording.

Fast forward and rewind

Press the FFWD or REW button.

When the tape has been wound to the end (or beginning), the fast forward or rewind function will be automatically released.

Note:

While playing or recording, do not press the FFWD or REW button of the other tape mechanism, as it may result in inferior sound quality.

Continuous playback (From TAPE A to TAPE B)

1. Press the PLAY button of TAPE A. TAPE A will begin to play back.
2. Press the PAUSE button of TAPE B.
3. Press the PLAY button of TAPE B (TAPE B will not move).
When the tape automatically stops on TAPE A, TAPE B automatically starts playback.
When the end of the tape has been reached on TAPE B, automatic stop will be activated.

Dolby NR system

Dolby Noise Reduction circuitry provides superior recording and playback results by suppressing tape hiss by up to 10 dB for virtually noise free recordings.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

LISTENING TO THE RADIO

1. Press the TUNER function switch.
2. Select the desired band (and FM mode) using the BAND SELECT switch.
3. Tune in a desired station by turning the TUNING control.

BAND SELECT Switch

FM MONO:

For receiving weak (noisy) FM stereo broadcasts. The reception may be improved, but the sound will be monaural.

FM STEREO:

For receiving FM stereo broadcasts. The FM STEREO indicator will light when an FM stereo broadcast is received.

AM:

For receiving AM broadcasts.

LISTENING TO RECORDS

Note:

- Remove the stylus protector.
- Be sure that the tone arm is detached from the tone arm rest before operation, and re-secured again after use.
- Do not turn the turntable platter counter-clockwise.
- When operating the unit for the first time, the tone arm might return to its rest position. This is not a malfunction.
- When operating the unit for the first time, the tone arm might not return to its rest position. Should this occur, shift the arm lift lever to up and gently move the tone arm to near the centre shaft of the turntable. The tone arm will automatically return to its rest position. This is not a malfunction.
- Never grasp or hold the tone arm and platter during operation of the automatic mechanism.

1. Press the PHONO function switch.
2. Place a record on the platter (if required, use the 45 rpm adaptor).
3. Select the speed with the speed selector depending on the disc to be played (33 or 45 rpm).
4. Shift the arm lift lever backward.
The tone arm will ascend from the tone arm rest.
5. Slowly move the tone arm to the desired position by hand. The platter will begin to rotate.
6. Shift the arm lift lever forward. The tone arm will then descend onto the disc.
 - If you wish to momentarily stop disc play, shift the arm lift lever backward. Shift it forward to start disc play again.
7. When play is finished, the tone arm will return to its rest position and the platter will cease rotation automatically.

BEFORE RECORDING AND DUBBING

Recording copyright material without permission of the copyright owners is usually an infringement. If you wish to re-record copyright material, permission from the copyright owner is necessary. SANYO does not approve of, and cannot be held responsible for, any unlawful use of this machine.

This unit features ALC (Automatic Level Control) which automatically adjusts the recording level.

Use TAPE B for recording.

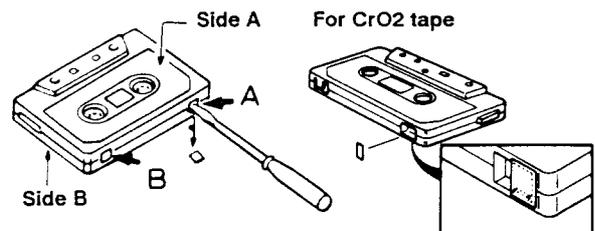
1. Press the STOP/EJECT button and load the cassette for recording.
Rewind the tape to the beginning.
3. Set the DOLBY NR switch to ON or OFF as desired.
 - During dubbing operation, the DOLBY NR switch has no effect to the copied tape.

Accidental erasure prevention tabs

(for protecting valuable recordings)

Accidental erasure can be prevented by breaking out the tabs on the end of the cassette tape (where the tape is not exposed) using a screwdriver or similar implement.

If a tab is broken out in error and you wish to re-record the tape, simply block the tab hole using adhesive tape and the tape can be used for recording again.



Break out tab A for side A.
Break out tab B for side B.

RECORDING COMPACT DISCS

EDIT RECORDING

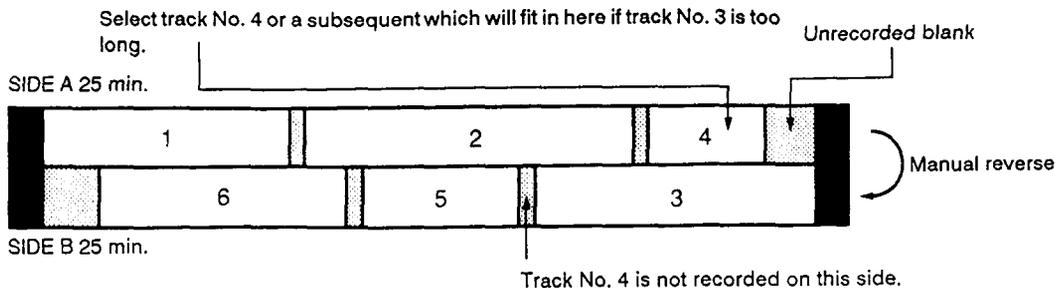
The following edit recording operations can be performed.

- Time edit recording
- Programme edit recording
- Backward skip edit recording

NOTES:

- CD play starts automatically after 8 seconds, so the recording will not be interrupted by the leader tape at the beginning of sides A and B.
- A short blank space is automatically recorded at the end of each track.
- The highest track number which can be edited is 24.

a) Time edit recording



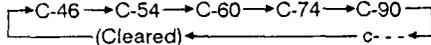
The tracks on a CD are recorded in order within the assigned tape length. Any track that does not fit within the remaining time at the end of the tape is replaced automatically with a subsequent track that will fit within the available time.

To record all tracks on a 6-track disc (total play time of 47 min 20 sec), onto a 50-minute tape:

- Press the CD function switch.
- Load the disc into the CD player.
- Press the EDIT switch to select the recording tape length.

The display indicates:
EDIT SIDE-A
C-46

Each time the EDIT switch is pressed, the tape length display changes in the following sequence:



To set the desired tape length up to C-99, use the "◀◀ / ▶▶" or "▶▶ / ▶▶" switch.

To set "C-50", press the EDIT switch to select "C-46" and press the "▶▶ / ▶▶" switch 4 times. "C-50" appears on the display.

- Insert a C-50 cassette tape into the TAPE B tape deck to record side A.
- Press the REC button to set the record pause mode for side A.
- Press the "▶/||" switch to start playback with track 1. The deck starts recording.

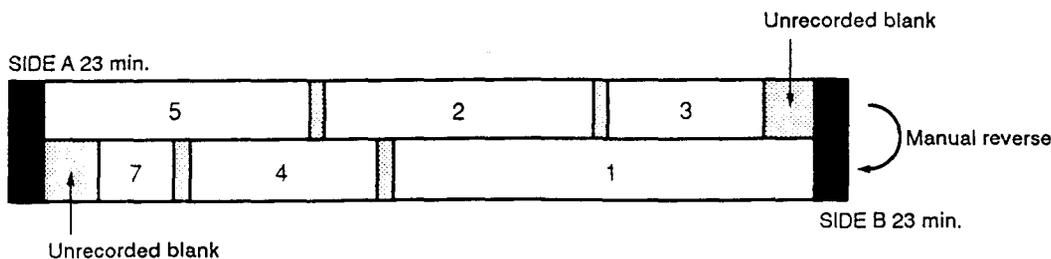
PLAY ▶ EDIT SIDE-A
PROG. 1 0.01

When all of the tracks for side A have finished playing, the player will go to pause mode at the beginning of the first track (Track 3) to be recorded onto side B.

- After the tape deck stops automatically at the end of side A, turn over the cassette and reinsert it.
- Press the REC button to start recording of side B. The player will start playback with track 3. When all tracks for side B have finished, disc play stops. The tape deck will continue recording to the end of the tape (side B).

- The edit mode remains operational when recording ends. Press the "■" switch to cancel the edit mode.

b) Programme edit recording



The desired selections can be rearranged and recorded on the tape within a designated tape length.

Example:

The following tracks are to be recorded.

- Track 5 : 10 min 00 sec
- Track 2 : 7 min 26 sec
- Track 3 : 4 min 37 sec
- Track 1 : 11 min 09 sec
- Track 4 : 9 min 21 sec
- Track 7 : 1 min 10 sec

These tracks are recorded in the following order on a 46-minute tape.

- SIDE A: Track 5
Track 2
Track 3
- SIDE B: Track 1
Track 4
Track 7

- Press the CD function switch.
- Load the disc into the CD Player.
- Press the EDIT switch until "C-46" appears.
- Press the MEMORY switch. "PROG." blinks and the display indicates:

EDIT SIDE-A
PROG. 1 Pr. 1

- Press the "◀◀ / ▶▶" or "▶▶ / ▶▶" switch to select the track (Track 5).

EDIT SIDE-A
PROG. 5 Pr. 1

- Press the MEMORY switch.
"PROG." remains lit.

EDIT SIDE-A

PROG.
5 13.00

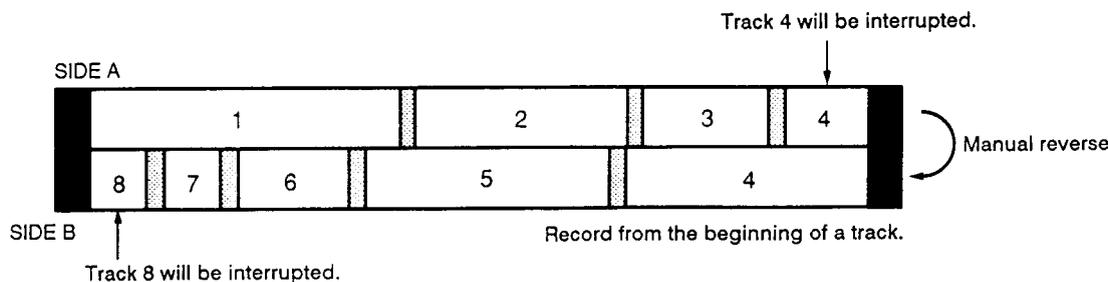
- The remaining time on side A appears on the time display.
- Repeat steps 5 - 6 to programme the tracks to be recorded onto side A.
 - If a track which exceeds the remaining time on side A is selected, "SIDE-A" blinks on the display. When the MEMORY switch is pressed, "SIDE-A" disappears and "SIDE-B" appears. The remaining time on side B appears on the display. This and subsequent tracks are recorded on side B.
 - Repeat steps 5 - 6 to programme the tracks to be recorded onto side B.
 - If a track exceeding the remaining time on side B is programmed, "Err" will appear on the display for 4 seconds.

- Insert the C-46 cassette tape into the tape deck to record side A.
- Press the REC button on TAPE B.
- Press the "▶/||" switch. Recording starts.
The programmed tracks will play in sequence starting from track 5, and pause at the beginning of track 1.

\ / \ / \ /
PLAY ▶ EDIT
PROG. SIDE-B
1 0.00

- After the tape deck stops automatically at the end of side A, turn over the cassette and reinsert it.
- Press the REC button to start recording of side B.
The player will start playback with track 1.
When all tracks for side B have finished, disc play stops. The tape deck will continue recording to the end of the tape (side B).

c) Backward skip edit recording



This type of recording is the easiest to perform and the tape length setting is not required.

- Press the CD function switch.
- Load a disc into the CD player.
- Press the EDIT switch until "c- --" appears on the display.
- Press the REC button.
- Press the "▶/||" switch. Recording starts on side A.

- After the tape deck stops automatically at the end of side A, turn over the cassette and reinsert it.
- Press the REC button to start recording of side B.
The player will start playback with the beginning of track 4.
When all tracks for side B have finished, disc play stops. The tape deck will continue recording to the end of the tape (side B).

MANUAL RECORDING

- For programmed recording, programme the material in advance (as described under "PROGRAMMED PLAY").
- Press the CD function switch.
 - Load a disc into the CD player.
 - Press the REC button.
 - Press the "▶/||" switch. Recording starts.

TAPE DUBBING (TAPE A to TAPE B)

- Load the playback tape into TAPE A and a blank tape into TAPE B.
- Press the TAPE function switch.
- Wind the tape on TAPE A to the beginning of the tape or a particular selection.
- Select the dubbing speed with the DUBBING SPEED/BEAT CANCEL switch.

HIGH:
For dubbing the whole tape at high speed (twice normal speed).

NORMAL:
For dubbing with monitoring at normal speed.
- Press the PAUSE button of TAPE B, then press the REC button of TAPE B.
- Press the PLAY button of TAPE A to start dubbing.
- To stop the dubbing operation, press both STOP/EJECT buttons simultaneously.

Automatic stop during dubbing

- When TAPE A tape is longer than TAPE B:
When TAPE B stops automatically, TAPE A continues playback mode at normal speed.
 - When TAPE B tape is longer than TAPE A:
When TAPE A stops automatically, TAPE B erases the tape to the end.
- To dub other selections repeat steps 3 - 7 as described above.
 - If you change the function position during the dubbing operation, TAPE B will continue to record the new sound source at normal speed.
 - Do not change the dubbing speed during the dubbing operation.

RECORDING FROM THE TUNER OR PHONO

1. Tune in the radio station to be recorded, or play a record.
2. Press the REC button to start recording.
3. Press the STOP/EJECT button to stop recording at any time.
When the end of the tape has been reached, automatic stop will be activated.

When beat interference is heard

A high-pitched noise called "beat" is sometimes heard during the recording of radio broadcasts.

In cases like this, set the DUBBING SPEED/BEAT CANCEL switch to the position which will reduce the level of the beat noise.

MAINTENANCE

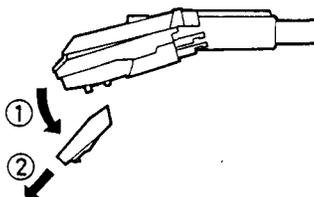
Cleaning the stylus

From time to time, the stylus must be checked for dust particles etc. Cleaning is best carried out with a small very soft brush.

Stylus replacement

After a long period of use or when an inferior sound is obtained, the stylus assembly should be replaced with a new one. To remove the stylus assembly, pull it downwards gently. To mount the new one, re-assemble in reverse order.

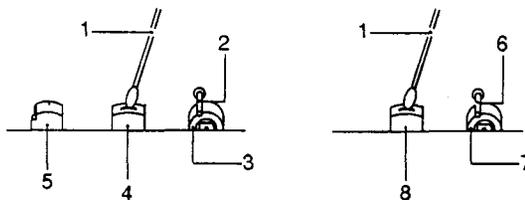
Please see the label on the turntable panel to find the stylus number.



Cleaning TAPE A and B heads

To ensure playback and recording with good-quality sound, use cotton swab (1) to clean the heads (4, 5, 8), pinch rollers (3, 7) and capstans (2, 6) of the decks after about every 10 hours of use.

If the dirt persists, soak the swab in a little methylated spirit or head cleaning fluid and then clean.



Main unit

Use a soft cloth to remove dirt on the main unit.

If the dirt persists, dip a soft cloth into a diluted solution of neutral detergent, wring it out, wipe away the dirt, and then take up any moisture with a dry cloth.

Do not use benzine, thinners or alcohol since they will mar the finish of the surfaces.

SPECIFICATIONS

Turntable section

Drive system:
Belt drive

Tuner section

Frequency range:
FM: 87.5 - 108 MHz
AM: 530 - 1700 kHz

Cassette deck section

Recording system:
AC bias, 4-track stereo
Rewind and fast forward time:
Approx. 120 sec. (C-60)

CD player section

Channels
2 channels
Frequency response
20 - 20,000 Hz
S/N ratio
94 dB
Channel separation
90 dB (1 kHz)
Distortion
.04% (1 kHz)
Wow and flutter
Undetectable

General

Output power:
5W x 2 (at 8 ohms, 10% distortion)
Outputs:
SPEAKERS: 8 ohms
PHONES: 8 ohms
Power requirements:
AC: 230 - 240 V, 50 Hz
Power consumption:
28 W
Dimensions (W x D x H):
Approx. 360 x 365 x 355 mm

Specifications subject to change without notice.



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