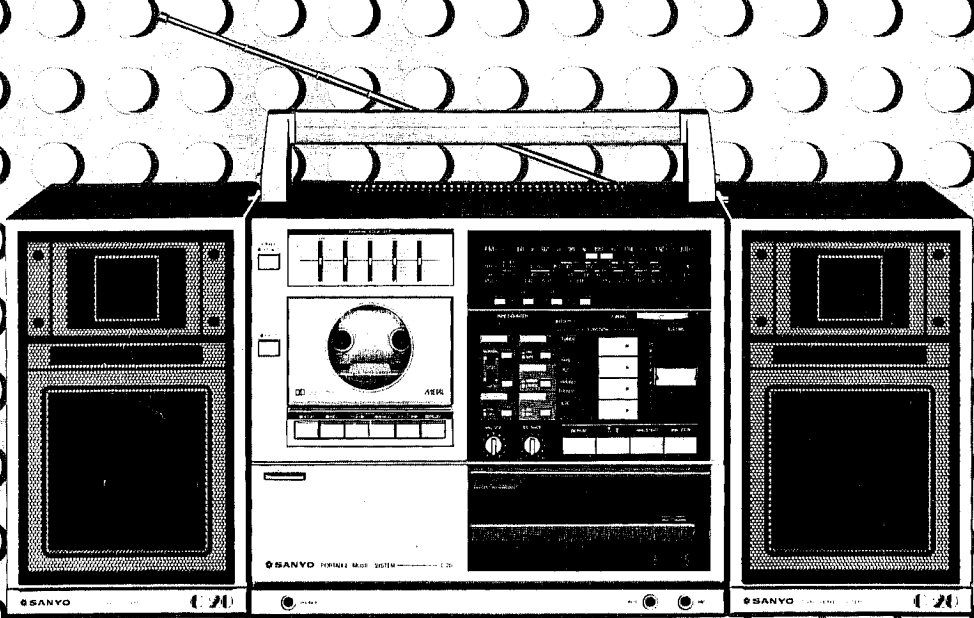



PORTABLE MUSIC SYSTEM INSTRUCTION MANUAL



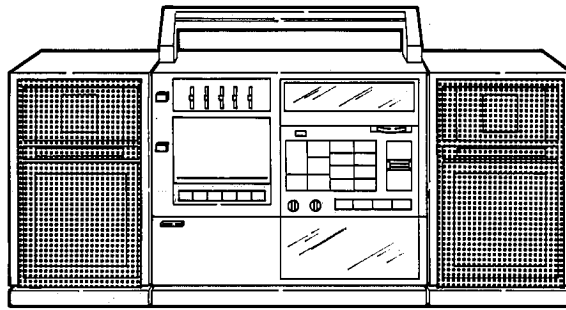
SANYO



 DOLBY SYSTEM

 AMSS

C-20



Left speaker system
Altavoces izquierdo
左揚聲裝置

Main unit
Unidad principal
主機

Right speaker system
Altavoces derecho
右揚聲裝置

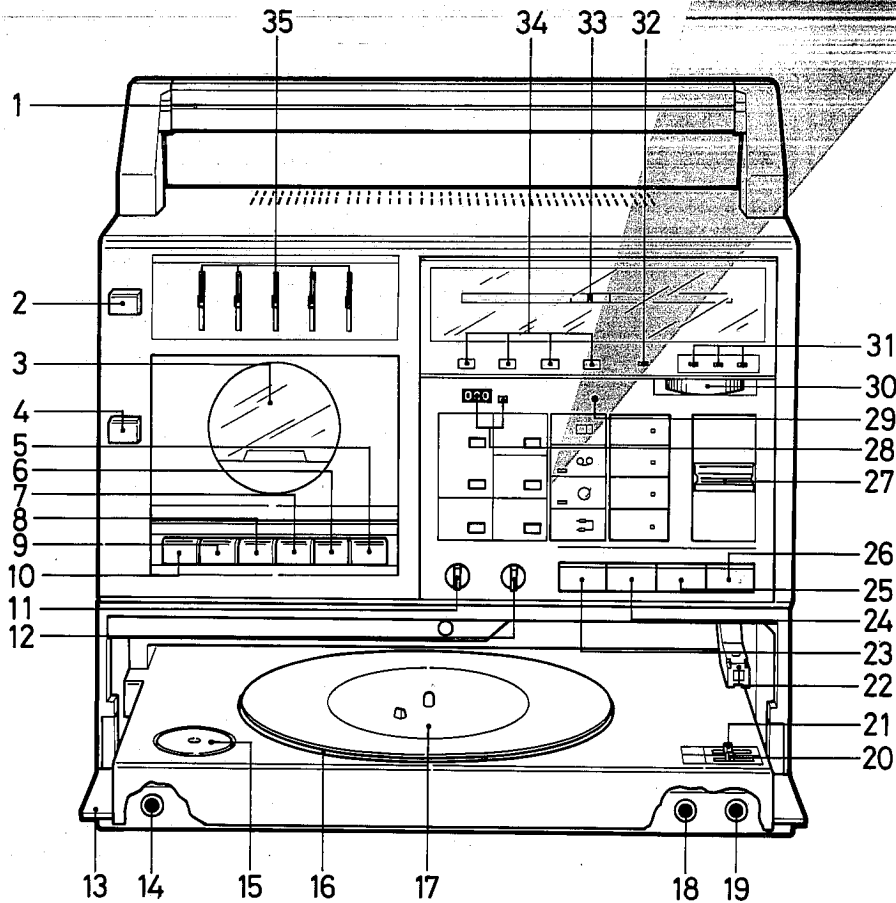
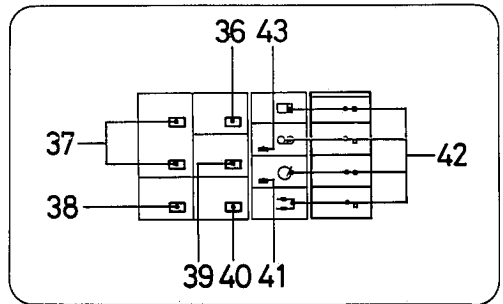


Fig. 1/ 第1圖

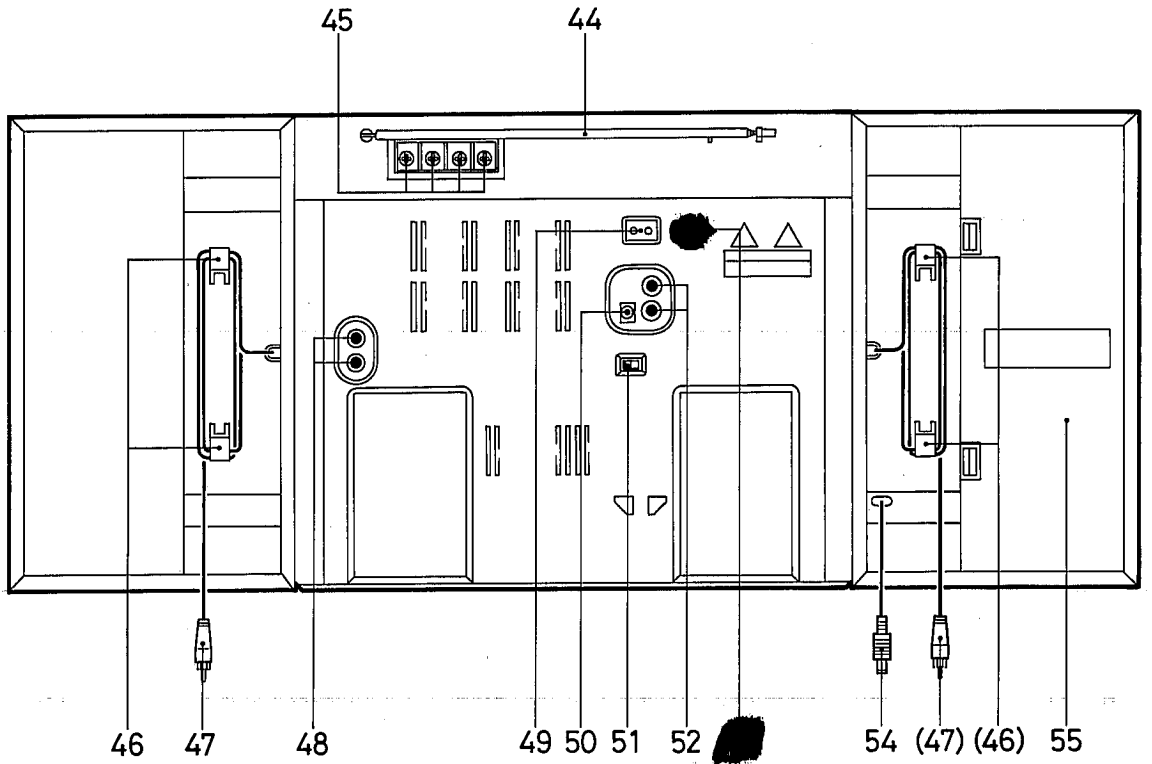


Fig. 1/ 第1圖

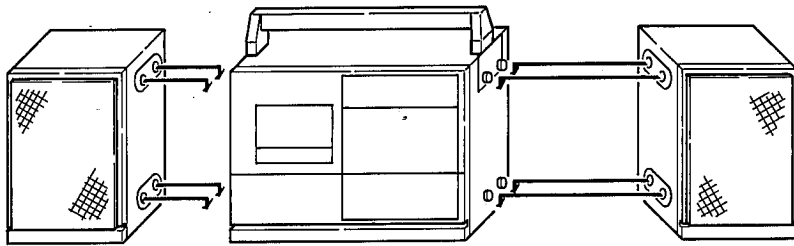


Fig. 2/ 第2圖

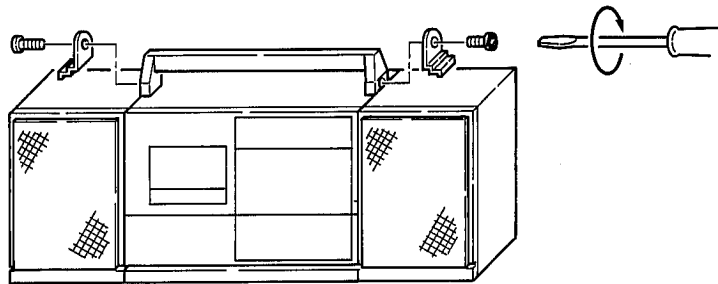


Fig. 3/ 第3圖

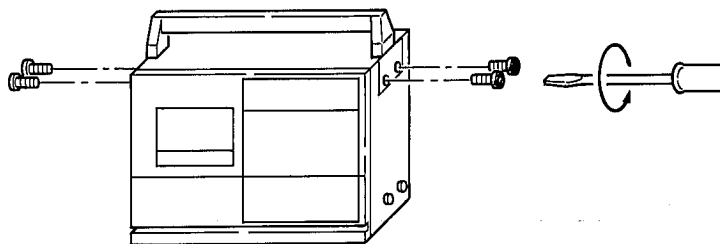


Fig. 4/ 第4圖

External audio equipment
 Equipos de audio externos
 外部音響裝置

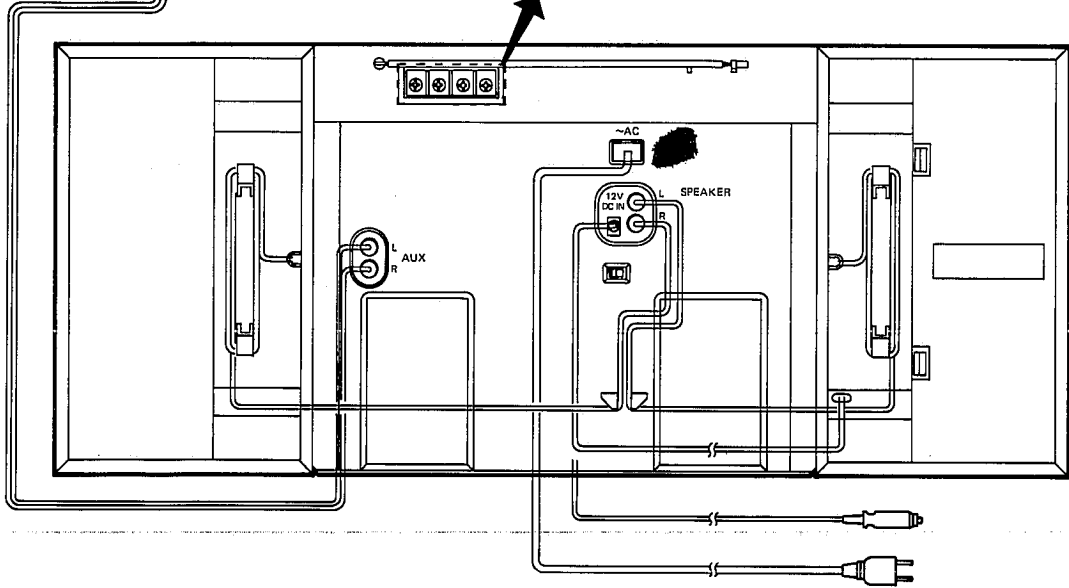
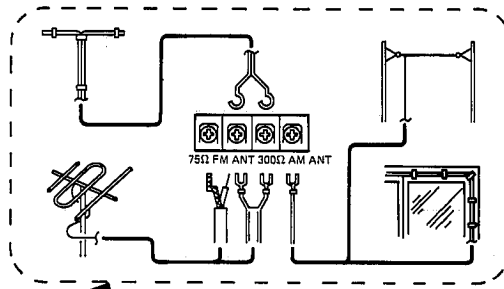


Fig. 5/ 第5圖

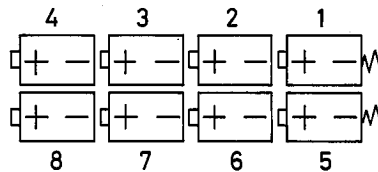
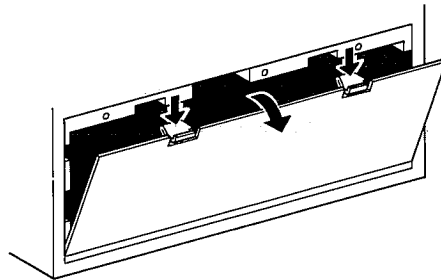


Fig. 6/ 第6圖

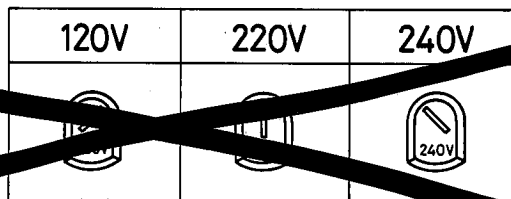


Fig. 7

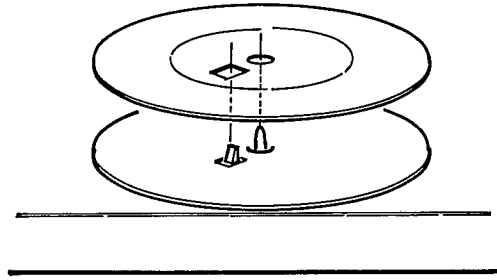


Fig. 8/ 第8圖

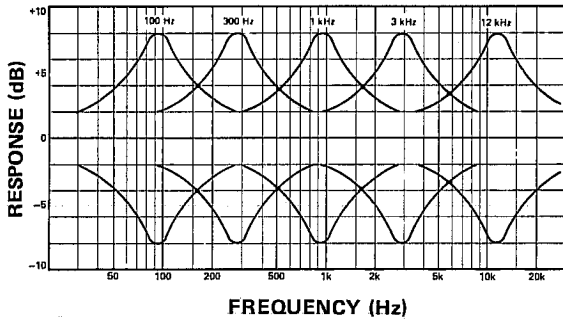


Fig. 9/ 第9圖

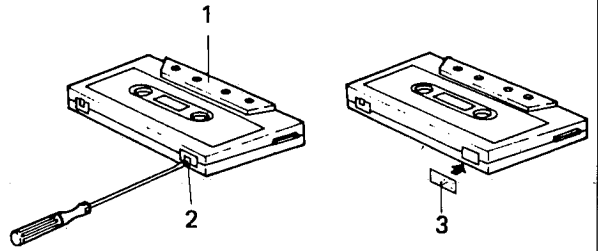


Fig. 10/ 第10圖

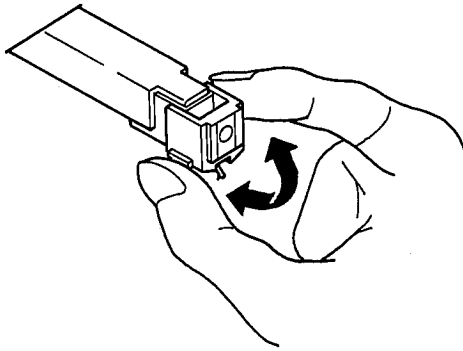


Fig. 11/ 第11圖

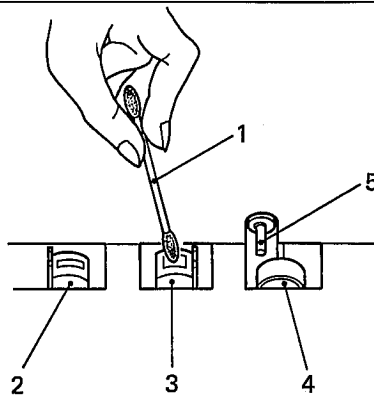


Fig. 12/ 第12圖

This portable music system, developed and engineered by SANYO, should be a source of enjoyment for many years. To understand its functions, to keep it in good order and to

assure trouble-free performance, please read the instruction manual carefully. Consult your dealer, if necessary.

CONTROLS (Fig. 1)

- | | |
|--|--|
| 1. Handle | 29. Battery indicator (BATTERY) |
| 2. Power switch (POWER) | 30. Tuning control (TUNING) |
| 3. Cassette compartment lid | 31. Signal indicator (SIGNAL) |
| 4. Eject button (EJECT) | 32. FM stereo indicator (FM STEREO) |
| 5. Pause button (PAUSE) | 33. Tuning pointer |
| 6. Fast forward/AMSS button (FFWD/AMSS) | 34. Band selectors (BAND SELECTOR) |
| 7. Rewind/AMSS button (REW/AMSS) | 35. Graphic equalizer controls (GRAPHIC EQUALIZER) |
| 8. Play button (PLAY) | 36. Dolby NR switch (DOLBY NR) |
| 9. Record button (REC) | 37. Tape select switches (TAPE) |
| 10. Stop button (STOP) | 38. Record muting switch (REC MUTE) |
| 11. Microphone volume control (MIC VOL) | 39. Mode switch (MODE) |
| 12. Balance control (BALANCE) | 40. Low filter switch (LOW FILTER) |
| 13. Turntable compartment lid | 41. Repeat indicator (REPEAT) |
| 14. Headphones socket (PHONES) | 42. Function selectors and indicators (FUNCTION) |
| 15. 45 rpm adaptor | 43. Record indicator (REC) |
| 16. Turntable platter | 44. Telescopic aerial |
| 17. Rubber mat | 45. External aerial terminals (FM ANT/AM ANT) |
| 18. Instrument input socket (INST.) | 46. Speaker lead reels |
| 19. Microphone input socket (MIC) | 47. Speaker leads |
| 20. Speed select switch (SPEED) | 48. Auxiliary input sockets (AUX) |
| 21. Disc size select switch (SIZE) | 49. AC input socket (AC) |
| 22. Tone arm with cartridge | 50. DC input socket (12V DC IN) |
| 23. Repeat button (REPEAT) | 51. Beat cancel switch (BEAT CANCEL) |
| 24. Arm lift button (▼ / ▼) | 52. Speaker sockets (SPEAKER) |
| 25. Leftwards arm travel/Start button (◀◀/START) | |
| 26. Rightwards arm travel/Stop button (▶▶/STOP) | |
| 27. Volume control (VOLUME) | |
| 28. Tape counter and reset button (TAPE COUNTER) | 54. Battery lead |
| | 55. Battery compartment lid |

INSTALLATION

Since both speakers can be mechanically separated from the main unit, you can enjoy stereophonic sound with various speaker settings you desire.

Speaker system installation (for outdoor use)

1. Install the left and right speaker system as shown in Fig. 2.

2. Fix both speakers by using the supplied mounting brackets and screws as shown in Fig. 3.

NOTE:

When moving the whole unit, be sure to use the handle.

To remove the handle (see Fig. 4)

CONNECTIONS AND POWER SUPPLY (Fig. 5)

Battery operation

1. Open the battery compartment lid by pressing the knobs in the direction of the arrows (Fig. 6).
2. Install 8 "D" size (SUM-1) batteries exactly as shown in Fig. 6.
3. Close the battery compartment lid.
4. Connect the battery lead to the DC IN socket.

NOTE:

When the unit is not to be used for a long period of time or is to be operated extensively on other power sources, remove the batteries to avoid possible damage from battery leakage.

CAUTION

THE DC PLUG OF BATTERY LEAD IS DESIGNED ONLY FOR USE WITH SANYO C20. DO NOT USE WITH OTHER APPLIANCES.

Car battery operation

Connect the plug of a car adaptor (SANYO model CA-12 optional extra) instead of the battery lead to the DC IN socket.

NOTE:

The centre pin of DC IN socket is negative.

AC power operation

NOTE:

- Do not connect the mains lead to an AC outlet until after all connections have been made.
 - Before connecting the mains lead, set the POWER switch to the OFF position.
1. Before operating the unit for the first time in a new area, it is essential to ensure that the setting of the VOLTAGE SELECTOR (located on the back of the unit) corresponds to the local voltage. To adjust the voltage selector, reset the VOLTAGE SELECTOR to correspond with the local voltage (Fig. 7).
 2. Connect one end of the mains lead to the AC input socket and the other end to an AC outlet.
 3. When the mains lead is connected to the AC input socket, a circuit of the DC IN socket is automatically disconnected.

Telescopic aerial and ferrite bar aerial

In local areas, the telescopic aerial is normally sufficient to receive local FM or SW2 broadcasts. Adjust its length, angle and direction for best reception.

The built-in ferrite bar aerial is usually sufficient to receive local MW or SW1 broadcasts. The aerial is somewhat directional, and so reception from distant stations may sometimes be improved by rotating the unit.

FM aerial terminals (FM ANT)

If reception with the telescopic aerial is unsatisfactory, connect a T-shaped indoor aerial (not supplied) to the 300 Ω FM ANT terminals. If further improved reception is required, an FM outdoor aerial should be employed. The 300 Ω terminals will accept 300-ohm twin leads and the 75 Ω will accept a coaxial cable. Consult your dealer.

AM (MW/SW) aerial terminal (AM ANT)

If reception with the telescopic or ferrite bar aerial is unsatisfactory, connect an AM indoor aerial to the AM ANT terminal. If further improved reception is required, an outdoor aerial should be employed. Consult your dealer.

NOTE:

For better AM (MW/SW) radio reception, the speaker, mains and any other leads should not come close to the external aerial terminals.

Speaker sockets (SPEAKER)

The speaker sockets will accept speakers of 3 ohms (or more) impedance. Connect the left and right speaker leads to these sockets.

Auxiliary input sockets (AUX)

These sockets are provided for expanding the versatility of the unit with auxiliary sources, such as an 8-track cartridge player, TV sound tuner, compact disc player or other sound source.

Microphone input socket (MIC)

Connection for a microphone with a 6 mm (1/4") plug (400 ohms to 10 kohms, optional).

Instrument input socket (INST.)

Connection for instruments, such as a card player, keyboard, etc. This socket will accept a 6 mm (1/4") plug.

Headphones socket (PHONES)

Provided for private listening with stereo headphones (SANYO model E 500 or E 800, optional). This socket will accept a 6 mm (1/4") plug. Before connecting the headphones, the VOLUME control should be set to the minimum position to avoid damage to your ears and headphones. Then adjust the sound level with the VOLUME control.

NOTE:

The speakers are automatically disconnected when headphones are connected to the PHONES socket.

Battery checking

1. Disconnect the mains lead from the AC input socket and connect the battery lead to the DC IN socket.
2. Set the POWER switch to the ON position.
3. Set the VOLUME control to the minimum position and press the PLAY button.
4. The BATTERY indicator shows battery condition.
bright good condition
dim exhausted
does not light . . . must be replaced

NOTE:

When the batteries are exhausted, the cassette deck may not operate correctly (the cassette compartment lid will not open or recording or playback will not start, etc.). If this occurs, change the unit to AC power operation mode or replace the batteries with new one. Press the STOP button once, then restart to operate.

TURNTABLE OPERATION

Initial preparation for turntable operation

1. Locate the unit horizontally on a heavy duty stand or firm level surface.
2. Set the POWER switch to the ON position.
3. Open the turntable compartment lid by hand.
4. Press the ◀◀/START button. The turntable unit will come out automatically.
5. Place the rubber mat on the turntable platter as shown in Fig. 8.
6. Take off tape holding the stylus protector.
7. Remove the stylus protector.
8. Place the 45 rpm adaptor in its appropriate rest position.
9. Press the ▶▶/STOP button. The turntable unit will go back into its original position.
10. Close the turntable compartment lid.

Leftwards arm travel/Start and Rightwards arm travel/Stop buttons (◀◀/START and ▶▶/STOP)

When the ◀◀/START button is pressed during all except disc play, the button works as a START button. When the button is pressed during disc play, the button works as a leftwards arm travel button.

When the ▶▶/STOP button is pressed less than 1 sec. during disc play, the button works as a STOP button. When the button is pressed continuously (more than 1 sec.) during disc play, the button works as a rightwards arm travel button. Also, these buttons are used for the front loading function.

Operation

1. Set the POWER switch to the ON position.
2. Press the "PHONO" FUNCTION selector.
3. Open the turntable compartment lid by hand.
4. Press the ◀◀/START button. The turntable unit will come out automatically.
5. Set the disc SIZE and SPEED select switches to the proper position depending on the disc to be used.

Type of disc	SIZE switch	SPEED switch
30 cm/33 rpm 17 cm/45 rpm	17/30	AUTO
25 cm/33 rpm	25	
30 cm/45 rpm	17/30	45
17 cm/33 rpm	17/30	33

- Automatic disc size select function
Setting the disc SIZE select switch to 17/30 will select the disc size automatically, when a 17 cm or 30 cm disc is used.
 - Automatic speed select function
Setting the SPEED select switch to AUTO will select the speed automatically, when a 30 cm/33 rpm, 25 cm/33 rpm or 17 cm/45 rpm disc is used.
6. Place the disc on the platter (if required, use the 45 rpm adaptor).
 7. Press the ◀◀/START button once again. The platter will begin to rotate and the turntable unit will go back halfway. The turntable compartment will be illuminated. Then the tone arm will move to the left, and descend onto the lead-in groove. The turntable compartment lamp will go out.

NOTE:

- Without a disc on the platter, the tone arm will not move, even when the ◀◀/START button is pressed to protect the stylus from damage.

- To start from a desired piece of music manually
Press the ◀◀/START button continuously until the tone arm reaches the desired position in the procedure of item "7" above.
Press the arm lift (▼/▼) button. The tone arm will descend gently onto the disc.
8. Adjust the VOLUME, BALANCE and GRAPHIC EQUALIZER controls to the desired sound level and tone quality.
 9. When disc play is finished or the ▶▶/STOP button is pressed during disc play, the platter will stop its rotation and the tone arm will return to its original position automatically. The turntable unit will come out.
 10. When finished using the turntable, remove the disc and press the ▶▶/STOP button once again. The turntable unit will go back into its original position. Then close the turntable compartment lid.

To repeat play

To play one side of a disc many times, press the REPEAT button any time during disc play. The REPEAT indicator will light up. The unit will repeat play until the REPEAT button is re-pressed. To stop the repeat play, press the ▶▶/STOP button. The REPEAT indicator will go out.

To interrupt play

To momentarily stop disc play, press the arm lift (▼/▼) button. Re-press it to start disc play again.

To change the music manually

Press either the ◀◀/START or ▶▶/STOP button continuously until the tone arm reaches the desired position during disc play. Press the arm lift button to start play.

NOTE:

- When the unit is turned on, the ◀◀/START button may be inoperative until the internal circuit is stabilized (about 3 seconds).
- Never grasp or hold the tone arm and platter during operation.
- The disc SIZE select switch should be operated while the tone arm is in its original position.
- To stop the disc play, the ▶▶/STOP button should be pressed less than 1 sec. while the tone arm is in the down position.
- When the tone arm has reached the end of disc via pressing the ◀◀/START button, the tone arm will stop. If this occurs, press the arm lift button. The tone arm will return to its original position. The turntable unit will come out.
- If the unit is turned off, power is interrupted or the batteries are exhausted during play, the tone arm will lift up to protect disc and stylus.
When the unit is turned on again, the tone arm will return to its original position. The turntable unit will come out.
- If the batteries are exhausted, the turntable may not operate correctly.
- When using discs other than standard, the unit may not operate correctly.

Graphic equalizer controls (GRAPHIC EQUALIZER)

By means of five independent frequency (100Hz/300Hz/1kHz/3kHz/12kHz) controls each with up to ± 8 dB adjustment, you can get your favourite sound shape flexibly. Typical frequency responses adjusted with the frequency controls are shown in Fig. 9. "Flat" response is obtained by setting the controls to the "0" positions.

Low filter switch (LOW FILTER)

If acoustic feedback or rumble noise is heard, press the switch to attenuate these noises. Normally, set the switch to the OFF (released) position.

Mode switch (MODE)

For monophonic operation, press the switch to the MONO position. For stereophonic operation, set it to the STEREO (released) position.

TUNER OPERATION

1. Set the POWER switch to the ON position.
2. Press the "TUNER" FUNCTION selector. The tuning pointer will light up.
3. Press the desired BAND SELECTOR.
4. Tune in a desired station by turning the TUNING control. Best reception is obtained when the SIGNAL indicator lights up as far to the right as possible. When an FM stereo broadcast is received, the FM STEREO indicator will light up. When a weak-signal FM station is received in stereo,

- press the MODE switch to the MONO position to improve reception. The FM STEREO indicator will go out.
5. Adjust the VOLUME, BALANCE and GRAPHIC EQUALIZER controls to the desired sound level and tone quality.

NOTE:

For better radio reception, the turntable compartment lid should be closed during tuner operation.

OPERATION WITH EXTERNAL AUDIO EQUIPMENT

1. Set the POWER switch to the ON position.
2. Press the "AUX" FUNCTION selector.
3. Operate your external audio equipment as instructed.

4. Adjust the VOLUME, BALANCE and GRAPHIC EQUALIZER controls to the desired sound level and tone quality.

COMPACT CASSETTE

Inserting and removing the cassette

Open the cassette compartment lid by pressing the EJECT button. Insert the cassette placing the full reel on the left (visible through the window) and the exposed section of tape at bottom. Close the cassette compartment lid. Now the unit is ready for operation. To use the second track, press the STOP button and then press the EJECT button and remove the cassette. Turn the cassette around and reinsert it as previously described.

Counter

When recording at the beginning of a tape, set the counter to "000" by pressing the reset button. As you record various selections, make a note of the counter number at the beginning of each selection. To play back a particular selection,

wind the tape until the counter registers the previously noted number for that selection.

Prevention of accidental erasing (Fig. 10)

Whenever recording, the sound previously recorded is erased automatically. To protect valuable recordings from accidental erasing, the cassette deck and the cassette are equipped with standard safety features. To keep the recorded material, break out the tabs on the back of the cassette with a knife or screwdriver. To protect the side A (1) from accidental erasure, break out the right side tab (2). To record on a cassette whose tabs have been broken, simply attach adhesive tape (3) over the tab opening. The unit will not operate in recording mode when a cassette tab has been removed.

The Dolby NR System explained

- Silence is an important part of music: the notes are only part of the music a composer writes. The silence between the notes is just as important. Real high fidelity means reproducing the silence as accurately as the sound.
- Recorded music has always included recorded noise. Since the earliest days of music recording, listeners have had to endure background noise, including the hiss produced by recording tape. Audio engineers have learnt that no technique can ever remove all the noise of a sound reproducing system. However, they also have learnt that noise is only detected by the ear and brain of a listener under certain conditions. The Dolby NR System works in a way that is based upon recent research into both electronics and hearing.
- A circuit that listens to music: The Dolby NR System is based on a patented circuit which is "programmed" with information about the way noise is heard by a human listener when music is played at the same time. By playing the music through the Dolby NR System before it is recorded, and again when the recording is heard by the

listener, the noise introduced by the recording process is reduced considerably.

- "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation. This Noise Reduction System is manufactured under licence from Dolby Laboratories Licensing Corporation.

About metal tape

- Metal tape has the following performance features when used on the cassette deck.
 1. Excellent frequency response at high input levels both in the recording and playback modes.
 2. High maximum output levels over the entire frequency range.
 3. A wide dynamic range at high frequency levels.
 4. A superior S/N ratio at high frequency levels.
 5. An excellent distortion factor at high input levels.
- When recording sound on metal tape, it is recommended that you read and follow the instructions contained in the manual on metal tape.

PREPARATION FOR CASSETTE DECK OPERATION

Soft touch control

Just a soft, fingertip touch of the power-assisted controls activates the transport function of your choice.

Dolby NR switch (DOLBY NR)

Activates the Dolby noise reduction circuit during recording and playback. Optimum music recording is achieved by setting the switch to ON.

Tape select switches (TAPE)

Select proper tape bias and equalization for the type of tape being used. As these switches affect circuitry in both recording and playback, they must be set to correspond with tape type in use during both operational modes.

Type of tape	TAPE switches	
	Upper	Lower
Normal	released	released
Chromium dioxide (CrO ₂)	depressed	released
Metal	depressed	depressed

Record muting switch (REC MUTE)

While a music programme is being recorded, press this switch if you wish to leave a blank tape section or omit a section. The blank tape section can be made as long as the REC MUTE switch is pressed. Release it to re-start recording on the tape.

NOTE:

To make a blank tape section which is to be used for the AMSS operation, the REC MUTE switch should be pressed for more than 4 seconds.

Beat cancel switch (BEAT CANCEL)

When recording a radio programme on the tape, an irritating beat sound may sometimes be heard. In such cases, simply set this switch to the other position.

Automatic stop

This unit employs full release automatic stop at the end of the tape.

CASSETTE DECK OPERATION

Do not turn the unit off while the tape is running. Otherwise, the pinch roller may be damaged or the EJECT button will not operate. If this occurs press the STOP button once and then press the EJECT button.

Recording

— This unit has an ALC (Automatic Level Control) circuit and no further adjustment is necessary.

1. Set the POWER switch to the ON position.
2. Press the desired FUNCTION selector according to the source to be recorded.
3. Press the EJECT button and insert a cassette.
4. Set the TAPE select switches for the type of tape being used.
5. Set the DOLBY NR switch to ON or OFF as desired.
6. Reset the counter to "000".
7. Press the REC button to start recording. The REC indicator will light up.
8. Since you can monitor through the speakers regardless of the recording level, adjust the VOLUME, BALANCE and GRAPHIC EQUALIZER controls to the desired sound level and tone quality.
9. Press the STOP button to stop recording at any time.
10. When the end of the tape has been reached, the automatic stop will be activated.

Playback

1. Set the POWER switch to the ON position.
2. Press the "TAPE" FUNCTION selector.
3. Press the EJECT button and insert the recorded cassette.
4. Set the TAPE select switches for the type of tape being used.
5. Set the DOLBY NR switch to ON or OFF, according to whether the tape has been recorded with the Dolby NR System or not.
6. Press the PLAY button.
7. Adjust the VOLUME, BALANCE and GRAPHIC EQUALIZER controls to the desired sound level and tone quality.
8. Press the STOP button to stop playback at any time.

Pause

Press the PAUSE button to momentarily suspend tape travel during recording or playback. Re-press the PAUSE button for pause release and recording or playback re-start. Pause control does not function during fast forward or rewind.

Fast forward and rewind

For fast winding or rewinding the tape, press the FFWD/AMSS or REW/AMSS button. Press the STOP button when the desired location has been reached. When the end of the tape has been reached the automatic stop will be activated.

Erasing

To erase the recorded tape without making a new recording, disconnect the microphone and the equipment that is connected to the INST. socket. Press the "TAPE" FUNCTION selector and let the unit operate in the recording mode.

AMSS (Automatic Music Select System) operation

This system lets the unit play selected passages of music automatically, utilizing a blank tape section between each selection to activate the switching.

To skip a music selection that has commenced playing

Press the FFWD/AMSS button during playback. The tape will run forward at high speed. At the start of the next passage of music, the unit will change to playback mode instantly.

— To skip more selections, follow the same procedure as described above.

To repeat a music selection that has just been playing

Press the REW/AMSS button during playback. The tape will rewind at high speed. At the beginning of the music selection that has just been playing, the unit will change to playback mode instantly.

— To repeat the same selection many times follow the same procedure as described above.

NOTE:

To stand by, after locating the music selection, press the PAUSE button before starting the AMSS operation. Re-press the PAUSE button to start playback.

NOTE:

The AMSS functions by detecting the blank tape section between selections (4 seconds minimum). The system will work correctly with virtually any commercially pre-recorded music cassette. Some tapes you record yourself may cause incorrect operation, for example:

- a) Voice tapes recorded with a pause in the conversation.
- b) Tapes with less than 4 seconds of silence between selections (see use of "Record muting switch" section).
- c) Tapes recorded at a very low level.
- d) Tapes with noise recorded on the blank spaces between selections (as from a very scratchy record, wind noise from a microphone, etc.).
- e) Placing the unit on a television set may make the AMSS function incorrectly because the AMSS is affected by signals radiated from a television set.

MIXED OPERATION

Mixed playback

If a microphone is connected to the MIC socket or an instrument is connected to the INST. socket during radio reception, record disc play, tape playback, etc., microphone or instrument mixed play can be done.

If the microphone and instrument are connected to the MIC and INST. sockets respectively, microphone and instrument mixed play can be done.

Adjust the microphone volume with the MIC VOL control.

NOTE:

To prevent feedback, the microphone volume should be reduced as much as possible.

Mixed recording

If a microphone is connected to the MIC socket or an instrument is connected to the INST. socket during recording, a microphone or instrument mixed recording can be made. If the microphone and instrument are connected to the MIC and INST. sockets respectively, microphone and instrument mixed recording can be made.

Adjust the microphone volume with the MIC VOL control.

Recording with a microphone only

Connect the microphone to the MIC socket, press the "TAPE" FUNCTION selector and set the unit in use to the recording mode.

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 (Fig. 11)

After a long period of use or when inferior sound is obtained, the stylus assembly should be replaced with new one (model no. ST-C20).

To remove the stylus assembly, pull it downwards gently. To mount the new one, follow in the reverse order.

Cleaning the heads (Fig. 12)

To ensure the continued high performance of your unit, periodically clean the heads and pinch roller to prevent the accumulation of dust or tape oxide deposits. Failure to clean these parts can result in inferior sound quality, distortion of recorded sound, deterioration of reproduction of high frequencies, and inconsistent tape speed.

1. Open the cassette compartment lid by pressing the EJECT button.
2. Moisten a cotton bud (1) with head cleaner or methylated spirit and apply to the faces of both heads (2 and 3), rubbing gently until all traces of dirt or oxide are removed. Also clean the surfaces of the pinch roller (4) and the capstan (5).

3. Dry, clean and polish the faces of the heads with a piece of cloth.

Power switch

After using the system, turn off the power by releasing the POWER switch.

Installing the system

Never place the system near a source of extreme heat such as a radiator or direct sunlight or in a moist environment. Following this advice will safeguard the system from damage. Placing the system in a well ventilated area is strongly recommended.

Cleaning the system

To retain the beauty of the control panel and cabinet, simply wipe with a soft, freshly laundered cloth moistened with plain lukewarm water.

If trouble occurs

To avoid electric shock hazard or any accidents to yourself or the system, have the system bench tested by a SANYO dealer. Do not remove the unit from its cabinet to attempt a repair yourself.

SPECIFICATIONS

Turntable section

Type	Belt drive/Full auto
Motor	DC servo motor (for turntable platter) DC stepping motor (for tone arm) DC motor (for front loading)
Speed	33-1/3 and 45 rpm
Wow and flutter	0.08% WRMS
Tone arm	Static-balance linear tracking type
Cartridge and stylus	Magnetic stereo cartridge (VM type) and 0.6 mil diamond stylus (No. ST-C20)

Tuner section

Frequency range	FM: 87.6 — 108 MHz SW2: 7.3 — 22 MHz SW1: 2.3 — 7.3 MHz MW: 531 — 1602 kHz
Aerials	Telescopic aerial and built-in ferrite bar aerial FM ANT: 75Ω unbalanced/300Ω balanced AM ANT terminal

Cassette deck section

Tape	Metal, CrO2, normal tape
Recording system	AC bias, 4-track stereo
Erasing system	AC erasing, 2-track
Rewind and fast forward time	Approx. 110 sec. (C-60)
Wow and flutter	0.05% (WRMS)
Frequency response	50 — 15,000 Hz (metal) 50 — 14,000 Hz (CrO2) 50 — 13,000 Hz (normal)
Signal to noise ratio (metal tape)	63 dB (Dolby NR on)

Amplifier section

Output power	70 W (P.M.P.O.), 26 W x 2 maximum music power 10 W x 2 maximum continuous power (at 3 ohms load/AC) 5 W x 2 maximum continuous power (at 3 ohms load/DC)
Inputs	MIC: 0.5 mV/10 kohms INST.: 300 mV/47 kohms AUX: 300 mV/47 kohms
Outputs	SPEAKER: 3 — 8 ohms PHONES: 8 ohms to 1 kohms
Graphic equalizer	±8 dB (100Hz/300Hz/1kHz/3kHz/12kHz)
Low filter	100 Hz (-6 dB/oct.)

Speaker section

Type	2 way speaker system, bassreflex type: Tweeter 5 cm, Woofer 12 cm
Impedance	3 ohms
Input power	20 W (maximum)

General

Power requirements	AC: [REDACTED] 240 V, 50 Hz DC: 12 V "D" (SUM-1) x 8 12 V car adaptor
Power consumption	[REDACTED]
Dimensions (Approx.)	Main unit: 335 (W) x 220 (D) x 280 (H) mm (without handle) (13-1/4" x 8-5/8" x 11") Speaker system: 170 (W) x 220 (D) x 280 (H) mm (per unit) (6-3/4" x 8-5/8" x 11") Total: 680 (W) x 220 (D) x 345 (H) mm (with handle) (26-3/4" x 8-5/8" x 13-5/8")
Weight (Approx.)	Total: 16.5 kg. (36 lbs.) including batteries

— Specifications subject to change without notice.

由三洋開發製造的這部手提式音樂裝置係將成爲你家裏快樂的源泉。請你詳細閱讀這部使用說明書以了解本機各種機能，並維持其卓越性

能。如有什麼問題發生就請向承銷店查詢。

各種調整控制機件(第 1 圖)

- | | |
|-------------------------------|----------------------------------|
| 1. 把柄 | 29. 電池指示燈 (BATTERY) |
| 2. 電源開關 (POWER) | 30. 調諧旋鈕 (TUNING) |
| 3. 卡式室蓋 | 31. 信號指示燈 (SIGNAL) |
| 4. 排出按鈕 (EJECT) | 32. 調頻立體聲指示燈 (FM STEREO) |
| 5. 暫停按鈕 (PAUSE) | 33. 調諧指針 |
| 6. 快進/AMSS按鈕 (FFWD/AMSS) | 34. 波段選擇開關 (BAND SELECTOR) |
| 7. 重繞/AMSS按鈕 (REW/AMSS) | 35. 圖表式均衡調整鈕 (GRAPHIC EQUALIZER) |
| 8. 播放按鈕 (PLAY) | 36. 杜比噪聲降低開關 (DOLBY NR) |
| 9. 錄音按鈕 (REC) | 37. 錄音帶選擇開關 (TAPE) |
| 10. 停止按鈕 (STOP) | 38. 錄音刪除按鈕 (REC MUTE) |
| 11. 麥克風音量調整鈕 (MIC VOL) | 39. 動作方式開關 (MODE) |
| 12. 平衡調整鈕 (BALANCE) | 40. 低頻濾波器開關 (LOW FILTER) |
| 13. 唱盤室蓋 | 41. 反覆指示燈 (REPEAT) |
| 14. 頭戴受話器插座 (PHONES) | 42. 機能選擇開關與指示燈 (FUNCTION) |
| 15. 45轉唱片適配器 | 43. 錄音指示燈 (REC) |
| 16. 唱盤 | 44. 套管式天綫 |
| 17. 橡皮墊 | 45. 外部天綫端子 (FM ANT/AM ANT) |
| 18. 裝置輸入插座 (INST.) | 46. 揚聲器軟綫捲筒 |
| 19. 麥克風輸入插座 (MIC) | 47. 揚聲器軟綫 |
| 20. 速度選擇開關 (SPEED) | 48. 輔助輸入插座 (AUX) |
| 21. 唱片尺寸選擇開關 (SIZE) | 49. 交流輸入插座 (AC) |
| 22. 拾音器和唱頭 | 50. 直流輸入插座 (12V DC IN) |
| 23. 反覆按鈕 (REPEAT) | 51. 差拍聲消除開關 (BEAT CANCEL) |
| 24. 拾音器臂舉起按鈕 (▲/▼) | 52. 揚聲器插座 (SPEAKER) |
| 25. 拾音器臂向左運行/開動按鈕 (◀◀/START) | 53. 電壓選擇開關 (VOLTAGE SELECTOR) |
| 26. 拾音器臂向右運行/停止按鈕 (▶▶/STOP) | 54. 電池的軟綫 |
| 27. 音量調整鈕 (VOLUME) | 55. 電池室蓋 |
| 28. 帶長計數計與復原按鈕 (TAPE COUNTER) | |

安置法

本機兩個揚聲裝置都可以和主機分開而安置於所希望的位置，讓你在方便的位置享受美妙的立體聲。

揚聲裝置的安置法(在屋外使用時)

1. 將左右兩個揚聲裝置裝在主機上，如第 2 圖所示。
2. 請用附屬的安裝用托架和螺絲將兩個揚聲裝置固定起來，如第 3

圖所示。

注：

要移動整個機器時請一定拿把柄部分。

把柄的撤除法(請參看第 4 圖)

連接法和電源(第 5 圖)

用電池供電

1. 將小鈕向箭頭方向一壓而打開電池室蓋(第 6 圖)。
2. 將 8 個“D”型(SUM-1)電池正確地插入電池室，如第 6 圖所示。
3. 將電池室蓋關起來。
4. 將電池的軟綫連接於 DC IN(直流輸入)插座。

注：

- 如果很久不用機器，或專用其他電源供電的話，就應將電池取出機外以免電池漏液損壞機器。
- 電池的軟綫只可用於 SANYO C20 型裝置。其他裝置不可使用這條軟綫。