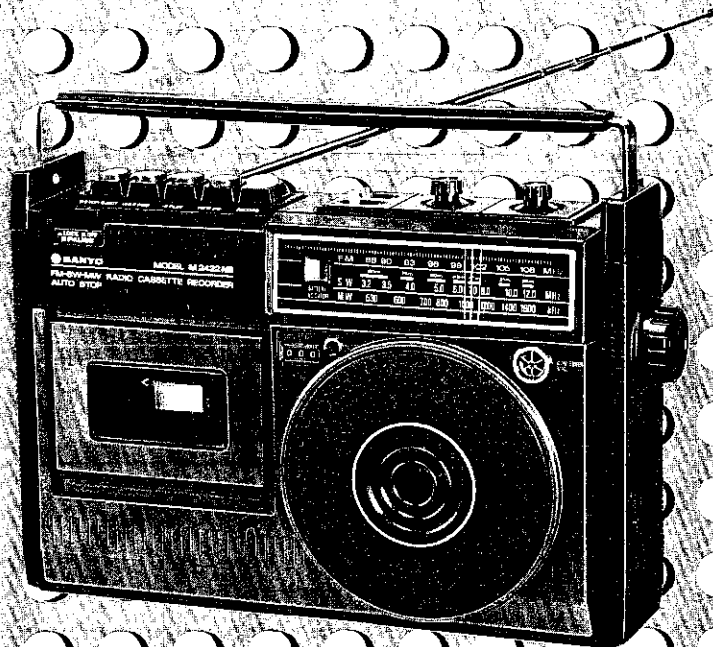


Portable Cassette Recorder With Radio

INSTRUCTION MANUAL

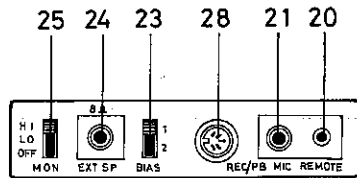
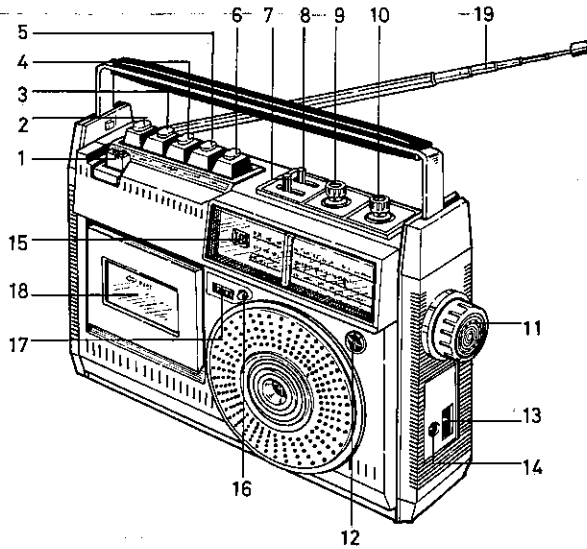


M 2422N

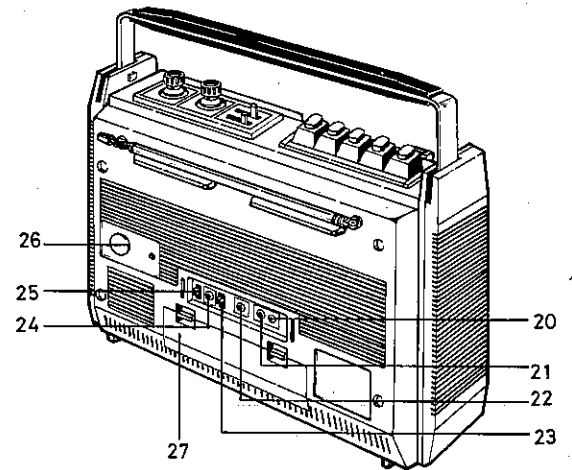
M 2422NB

This unit, developed and engineered by SANYO, will be a source of enjoyment for many years. To understand its functions, to keep it in top shape and to assure its trouble-free performance, read the instruction manual carefully. Consult your dealer, if necessary.

CONTROLS



FOR MODEL M2422NB



- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Pause button 2. Stop/Eject button 3. Fast forward button 4. Play button 5. Rewind button 6. Record button 7. Radio switch 8. Band select switch 9. Tone control/Built-in microphone switch (M2422N)
Tone control knob (M2422NB) 10. Volume control knob 11. Tuning control knob 12. Built-in microphone 13. AC input socket 14. External DC socket | <ol style="list-style-type: none"> 15. Battery meter 16. Tape counter reset button 17. Tape counter 18. Cassette compartment lid 19. Aerial (Antenna) 20. Remote socket 21. External microphone socket 22. Auxiliary input socket (M2422N) 23. Beat cancel switch (M2422N)
Bias shift switch (M2422NB) 24. External speaker socket 25. Monitor switch 26. Voltage select plug (M 2422N) 27. Battery compartment lid 28. REC/PB socket (M2422NB) |
|--|---|

POWER SUPPLY

Battery Power Operation

1. Open the battery compartment lid by pushing the knobs in the direction of arrow (Fig. 1).

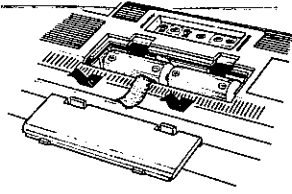


Fig. 1

2. Install 4 "D" size (UM-1) flashlight batteries carefully as indicated, placing the strip at the bottom for easy battery replacement (Fig. 2).

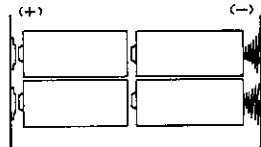


Fig. 2

3. Close the battery compartment lid.

Battery Checking

1. Press the PLAY button.
2. Check the battery condition. The pointer of the meter should be deflect in GREEN area. If the pointer only moves as far as ORANGE area, the batteries are exhausted and must be replaced (Fig. 3).
- 3.

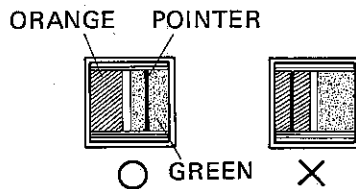


Fig. 3

External DC (Car Battery) Power Operation

1. Connect the plug of an Car adaptor (optional) or 6V external battery into DC socket of this unit.
2. When a plug is connected into the external DC socket, battery circuit is automatically disconnected.

AC Power Operation

1. For Model M 2422N

Before operating the unit for the first time in a new area, it is absolutely necessary to make sure that the setting of the voltage select plug (located on the back of the unit) corresponds as closely as possible to your local voltage. To reset the voltage, take off the cover of the voltage select plug, then pull out the plug and re-plug it into the socket which corresponds to your local voltage (Fig. 4).

2. Connect one end of the power cord to the AC input socket and the other end to an AC outlet.

NOTE: The batteries are automatically disconnected when AC power cord is plugged into the AC input socket.

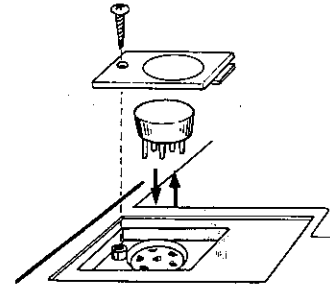


Fig. 4

COMPACT CASSETTE

Inserting and Removing the Cassette

Open the cassette compartment lid by pressing the STOP/EJECT button. Insert the cassette with the full reel to the right (visible through the window) and tape slot at the top (Fig. 5). The cassette fits into the unit only in the correct position. Push the cassette compartment lid at the top to put the cassette in place. Now the unit is ready to operate. To use the second track, press the STOP/EJECT button and remove the cassette. Turn the cassette over and reinsert it as previously described (Fig. 6).

NOTE: Both ends of the tape are attached permanently to the reels, when the end of the tape has been reached during fast forward or rewind mode, the reels will stop. Then the STOP/EJECT button should be

pressed. At the end of the tape while playback or recording, the PLAY button or RECORD and PLAY buttons will be automatically released and the unit will be in stop condition.

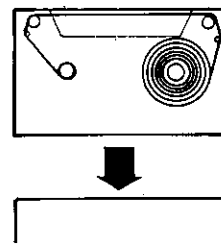


Fig. 5

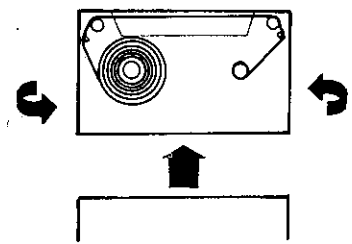


Fig. 6

Counter

A 3-digit counter enables you to instantly locate any point on a tape. When recording at the beginning of a tape, set counter to "000" by pressing reset button. As you record various selections, make a note of the counter number at the beginning of each selection. To playback a particular selection, use the F.FWD button to move the tape until the counter registers the previously noted number for that selection. If the cassette has been removed from the unit, first rewind the tape completely and reset the counter to "000".

To Avoid Accidental Erasing

Whenever a recording is made, the sound previously recorded is erased automatically. To protect valuable recordings from accidental erasing, the unit and cassette are equipped with safety devices. To keep the recorded material permanently, break out the tabs on the back of the cassette with a knife or screw driver.

To protect the TOP side of the tape from accidental erasing, break out the right side tab. To record on a cassette from which the tabs have been removed, simply attach adhesive tape over the tab opening (Fig. 7).

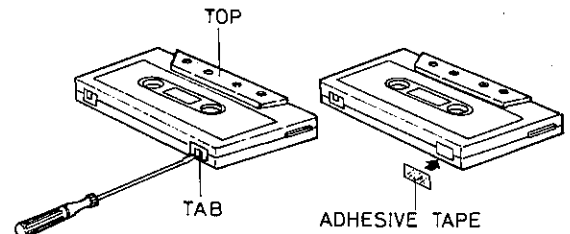


Fig. 7

RADIO OPERATION

Reception of Radio Programs

NOTE: Set the MONITOR switch in HI or LO position. (M2422NB)

1. Set the RADIO switch in ON position and select a desired radio band with the BAND SELECT switch.
2. Tune in a desired station by turning the tuning control knob.
3. For FM or SW reception pull out the aerial and determine the direction, length and angle to give the best reception.
For MW reception, the aerial inside of the unit is somewhat directional, reception from distant stations may sometimes be improved by rotating the unit.
4. Adjust the VOLUME and TONE control knobs for your desired volume and tone quality.
5. If you desire to listen to the radio program privately, plug in an optional earphone into the EXT. SP socket.
6. To turn off the radio, set the RADIO switch to the OFF position.

To Listen to the Radio Programs while Going to Sleep

If you desire to listen to the radio programs in the bed, auto-stop mechanism system of this unit working as a sleep timer. The radio operating time is determined by the cassette to be used.

C-30 Cassette	15 minutes
C-60 Cassette	30 minutes
C-90 Cassette	45 minutes
C-120 Cassette	60 minutes

1. Press the STOP/EJECT button and insert a selected cassette into its compartment lid.
2. Set the RADIO switch in ON position and tune in a desired station.
3. Press the PLAY button. Or if you wish to record the radio program, press the RECORD and PLAY buttons simultaneously.
4. Set the RADIO switch in SLEEP position.
5. When the tape is wound completely, the PLAY button or RECORD and PLAY buttons will be released and the radio power is shut off automatically.
6. To listen to the radio programs continuously, set the RADIO switch in ON position.

RECORDING

a) Recording through the Built-in Microphone

1. Press the STOP/EJECT button and insert the cassette into the cassette compartment lid, then close the cassette compartment lid.
2. Turn the TONE control knob clockwise to ON the built-in microphone (M2422N).
3. Set the MONITOR switch in OFF position to prevent howling.
4. Press the RECORD and PLAY buttons simultaneously. Then you are recording.
5. Speak in a normal voice at a distance of approximately 1 foot away from the unit (Fig. 8).

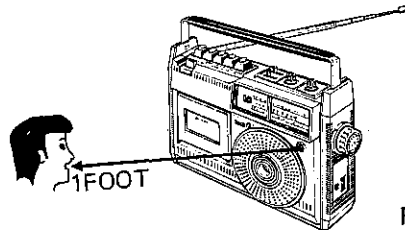


Fig. 8

6. The recording level will be adjusted with the automatic level control (ALC) circuit and does not require any recording level adjustment.
7. Press and re-press the PAUSE button to stop and start the recording momentarily.
8. Press the STOP/EJECT button to stop recording at any position. When tape is wound completely, the RECORD and PLAY buttons will be released automatically and the unit put in the stop condition.

b) Recording from an External Microphone

1. Plug in an external microphone (optional extra) into the MIKE (or MIC) and REMOTE sockets (Fig. 9).

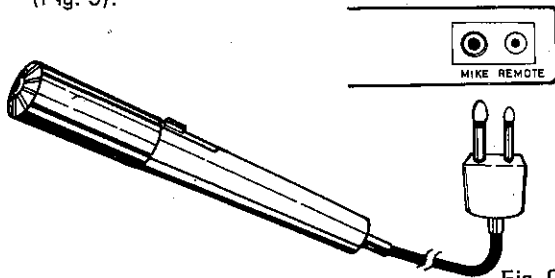


Fig. 9

2. Turn the TONE control knob counter-clockwise to OFF the built-in microphone (M2422N).
3. Press the RECORD and PLAY buttons simultaneously.
4. Speak in a normal voice at a distance of approximately 5 inches away from the microphone.
5. When this recording, earphone monitor is recommended. Plug in an optional earphone to the EXT. SP socket and be sure to set the MONITOR switch to the LO position.

NOTE: The remote control switch on the microphone can be used to start and stop the tape movement in all modes.

c) Recording from a Telephone

1. Attach the suction cap of the telephone pick-up (SANYO model TL-20 or TL-30 is available optional extra) to the telephone case and plug the cord into the MIKE (or MIC) socket of the unit (Fig. 10).
2. Follow steps 2 and 3 of "Recording from an External Microphone".

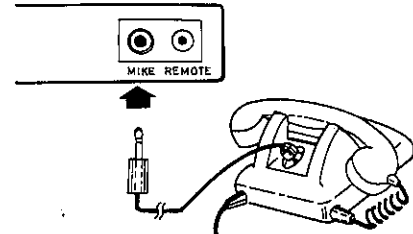


Fig. 10

d) Recording from the Built-in Radio

1. Set the RADIO switch in ON position and tune in a desired station as previously described in "RADIO OPERATION".
2. Press the RECORD and PLAY buttons simultaneously.
3. Since you can monitor through the speaker, set the MONITOR switch in the HI or LO position.
4. When recording an MW radio program on tape, an irritating beat sound may sometimes appear, caused by interaction between the radio frequency and the recording bias frequency. In such a case, simply set the BEAT CANCEL (or BIAS) switch to the other position.

e) Recording from an External Sound Source

1. Plug in an optional patch cord (or REC/PB cord) from loudspeaker socket or output of your player, tuner, amplifier or other signal source to AUX (REC/PB) socket of the unit (Fig. 11).
2. Follow steps "2" and "3" for "Recording from the Built-in Radio".

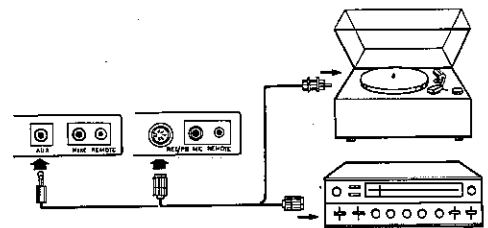


Fig. 11

MIXED RECORDING

a) Built-in Radio and an External Microphone

1. Set the RADIO switch in desired radio band and tune in a desired station as previously described.
2. Follow steps of "Recording from an External Microphone".

b) External Microphone and External Sound Source

1. Plug in an optional patch cord (or REC/PB cord) from loudspeaker socket or output of your player, tuner, amplifier or other signal source to AUX (REC/PB) socket of the unit (Fig. 11).
2. Follow steps of "Recording from an External Microphone".

FAST FORWARD AND REWIND

For fast winding or rewind the tape, press the F.FWD (marked ◀◀) or REW (marked ▶▶) button. When

desired section is reached, press the STOP/EJECT button.

PLAYBACK

NOTE: Set the MONITOR switch in HI or LO position. (M2422NB)

1. Press the STOP/EJECT button and insert the recorded cassette into the cassette compartment lid, then close the cassette compartment lid.
2. Press the PLAY button.
3. Adjust the VOLUME and TONE control knobs to your desired sound and tone quality.
4. For M2422NB,

To playback the tape with your amplifier, connect an optional REC/PB cord from REC/PB socket of this unit to your amplifier.

Set the MONITOR switch in OFF position.

5. To stop the playback at any position on a tape, press the STOP/EJECT button. When the tape is wound completely, the PLAY button will be automatically released.

MAINTENANCE

To ensure continued high performance from your unit, periodically clean the heads and pinch roller whenever dust or reddish-brown oxide has accumulated. Failure to clean these parts will result in inferior sound quality, distortion of recordings, deterioration of high frequency reproduction, and inconsistent tape speed (Fig. 12).

1. Press the STOP/EJECT button and open the cassette compartment lid.
2. Press the PLAY button.
3. Moisten a cotton applicator with cleaner or alcohol and apply to the face of both heads and pinch roller, rubbing gently until all traces of dirt or oxide are removed.

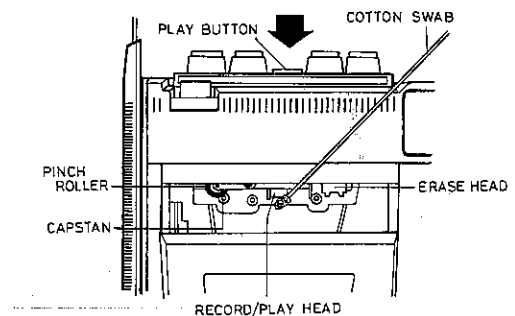


Fig. 12

SPECIFICATIONS

Recording system	AC bias, double track
Erasing system	DC erase
Rewind & Fast forward time	1'30" (C-60)
Signal to noise ratio	40dB
Frequency range	
(M 2422N)	MW: 530 – 1,605kHz FM: 87.5 – 108MHz SW: 3.2 – 12MHz
(M 2422NB)	MW: 530 – 1,605kHz FM: 87.5 – 108MHz SW: 3.2 – 12MHz
Terminal impedance	EXT. MIKE (or MIC): 680 ohms
(M2422N)	AUX: 220K ohms
(M2422NB)	REC/PB: input 22K Ohm output 1K Ohm
Output power	EXT. SP: 8 ohms 2.2W maximum
Power source	DC: 6V "D" cell (UM-1) x 4
(M 2422N)	AC: 120/200/240V, 50/60Hz
(M 2422NB)	AC: 230V, 50/60Hz
Dimensions	8-5/16" (H) x 4-1/32" (D) x 13-7/32" (W) (211 x 102 x 335 mm)
Weight	Approx. 6 lbs. excluding batteries

Specifications and design subject to change without notice.