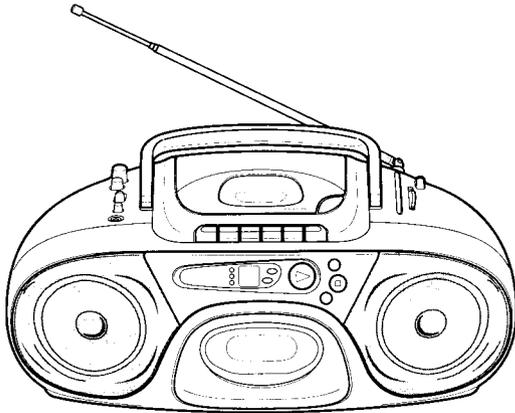


SANYO

INSTRUCTION MANUAL

MCD-Z150F

CD Radio Cassette Recorder



ENGLISH	4 ~ 10
ESPAÑOL	11 ~ 18

CAUTION

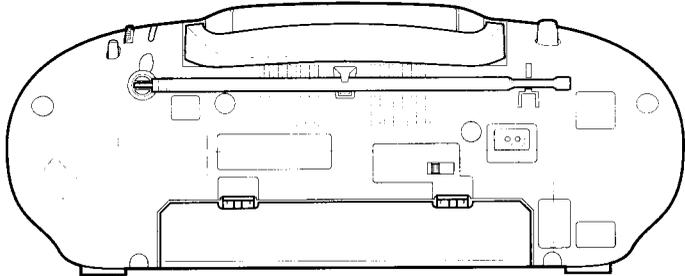
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED IN THE OPERATING INSTRUCTIONS MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

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

PRECAUCIÓN

EL USO DE CONTROLES O AJUSTES, O PROCEDIMIENTOS DE OPERACION DIFERENTES DE LOS ESPECIFICADOS EN ESTE DOCUMENTO RESULTARAN EN EXPOSICION PELIGROSA A LA RADIACION.

ESTA UNIDAD NO DEBERA SER AJUSTADA O REPARADA POR OTRO QUE NO SEA EL PERSONAL DE SERVICIO DEBIDAMENTE CALIFICADO.



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. STRÅLEN ÅR FARLIG.

VORSICHT - UNSICHTBARE LASERSTRÄHLUNG TRITTS AUS. WENN DECKEL GEÖFFNET UND WENN SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT IST. NICHT DEM STRAHL AUSSETZEN.

VARO! Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso äteeseen.



CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

- The rating label is located on the bottom of the unit.
- La etiqueta de capacidad nominal se encuentra ubicada en la parte inferior de la unidad.

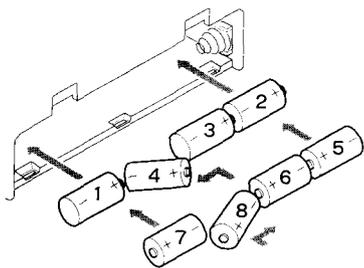


Fig. 2

COMPACT
disc
DIGITAL AUDIO

Fig. 3

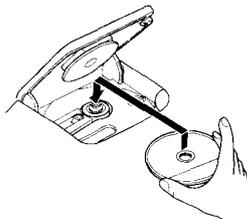


Fig. 4

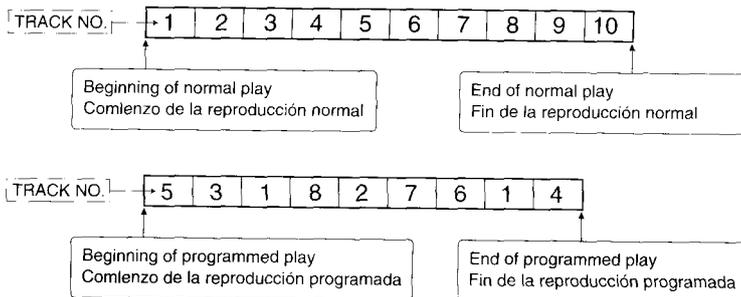


Fig. 5

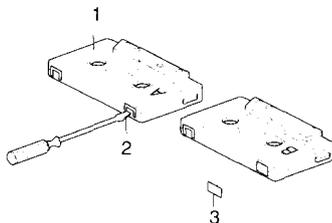


Fig. 6

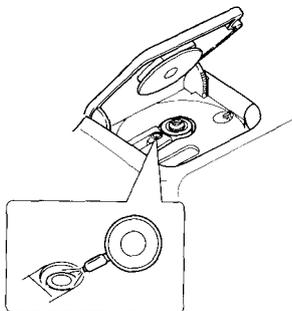


Fig. 7

POWER SUPPLY

AC power operation

Connect one end of the mains lead to [AC INPUT] socket and the other end to an AC outlet.

NOTES:

- When the mains lead is connected to the unit, the installed batteries will be automatically disconnected.
- The FUNCTION switch is mounted on the secondary side. The unit is not disconnected from mains, even switched off.

Battery power operation

1. Open the battery compartment lid by pushing down on the tabs.
2. Install 8 "C" size batteries (not supplied). Refer to the polarity diagram on the back of the unit. Match the (+) and (-) marks on the diagram to the (+) and (-) marks on the batteries. (Fig. 2)
3. Replace the lid.

CAUTION

WHEN INSTALLING BATTERIES

To prevent battery electrolyte leakage, which may result in injury and damage to the unit or other objects, observe the following precautions:

1. All batteries must be installed with the proper polarity (see diagram on the back of the unit).
2. Do not mix new with old or used batteries.
3. Only use batteries of the same type and brand.
4. Remove the batteries when they are not to be used for a long period time.

BEFORE OPERATION

Stereo headphones socket

Insert the miniplug from a pair of headphones (not supplied) into the [PHONES] socket. When the headphones are plugged in, speakers are automatically disconnected.

Bass expander switch (BASSXPANDER)

ON (Button in): Increases the bass output level.

OFF (Button out): For normal bass output level.

RADIO OPERATION

1. Set [FUNCTION] to RADIO.
2. Select the desired radio band with [BAND].
3. Tune in a desired station by turning [TUNING].
The unit will automatically switch to stereo when an FM stereo broadcast is received.
4. Adjust [VOLUME], [TONE] and [BASSXPANDER] as desired.

Aerials

For FM reception, pull out the telescopic aerial and determine the direction, length and angle for optimum reception.

For AM reception, the aerial inside the unit is somewhat directional, rotate the unit to improve AM reception.

FOR SAFE AND EFFICIENT OPERATION

- Do not damage the mains lead.
- When not in use, disconnect the mains lead from the outlet.
- Grasp the plug, not the mains lead, when disconnecting the unit.
- If water should enter the unit, electrical shock or malfunction may result. Use in an area where there is low humidity and little dust.
- Do not disassemble or alter the unit in any way.
- Do not use the unit in areas where extremes in temperature occur (below 5°C or exceeding 35°C), or where it may be exposed to direct sunlight.
- Because of the CD player's extremely low noise and wide dynamic range, there is a tendency to set the volume on the amplifier higher than necessary. Doing so may produce an excessively high output from the amplifier which can cause damage to your speakers.
Please be careful in this regard.
- Sudden changes in the surrounding temperature can cause dew to form on the optical pickup lens inside the unit. Under this condition the unit may be unable to operate properly. If this should occur, remove the disc and allow the player to adjust to the surrounding temperature.
- This unit must be operated in a horizontal position.

- Do not install this equipment in a confined space, such as a book case or built in cabinet.
- The apparatus shall not be exposed to dripping or splashing.

CONTROLS (Fig. 1)

- | | |
|---|--|
| 1. Telescopic aerial | 18. Play button [PLAY] |
| 2. CD compartment lid | 19. Rewind button [REW] |
| 3. CD lid opening button [CD OPEN] | 20. Fast forward button [FFWD] |
| 4. Tuning control [TUNING] | 21. Stop/Eject button [STOP/EJECT] |
| 5. Band switch [BAND] | 22. Pause button [PAUSE] |
| 6. Skip/Search button [▶▶] SKIP/SEARCH] | 23. Stereo headphones socket [PHONES] |
| 7. Stop/Clear button [STOP/CLEAR] | 24. Bass expander switch [BASSXPANDER] |
| 8. Skip/Search button [SKIP/SEARCH ◀◀] | 25. Function switch [FUNCTION] |
| 9. Cassette compartment lid | 26. Tone control [TONE] |
| 10. Play/Pause button [PLAY/PAUSE] | 27. Volume control [VOLUME] |
| 11. CD repeat button [REPEAT] | |
| 12. CD memory button [MEMORY] | 28. AC input socket [AC INPUT] |
| 13. CD track display [CD TRACK NO.] | 29. Beat cancel switch [BEAT CANCEL] |
| 14. CD memory indicator [MEMORY] | 30. Battery compartment lid |
| 15. CD repeat indicator [REPEAT] | |
| 16. CD play indicator [CD PLAY] | |
| 17. Record button [REC] | |



Track search

1. In the play mode, press and hold down [►► | SKIP/SEARCH] or [SKIP/SEARCH | ◀◀] to lower the volume level and quickly advance or return to any part of the disc. The number will flash.
2. Release [►► | SKIP/SEARCH] or [SKIP/SEARCH | ◀◀] to return the volume to normal level and resume play. The number will remain on.

NOTE:

If [►► | SKIP/SEARCH] is pressed during the pause mode, no sound will be heard, and the pause mode will continue when the button is released.

Track skip

1. Press and release [►► | SKIP/SEARCH] or [SKIP/SEARCH | ◀◀] repeatedly during play to quickly locate the beginning of a track.
2. [CD TRACK NO.] will show the number of the selected track. Play will continue from the beginning of the new track.

NOTE:

If [►► | SKIP/SEARCH] or [SKIP/SEARCH | ◀◀] is pressed when the unit is in pause mode, when the button is released, the unit will remain in the pause mode.

PROGRAMMED PLAY

With programmed play, up to 16 tracks on a disc can be memorized and played in any order. [CD TRACK NO.] will show the track number 1 - 19.

In this example, tracks 1 - 8 on a 10-track disc are entered into the unit's program memory, for play in the order shown in Fig. 5.

Example program

1. Press [STOP/CLEAR].
2. Press [►► | SKIP/SEARCH] repeatedly until [CD TRACK NO.] shows "5". The number will flash.
3. Press [MEMORY]. The number will remain on. [MEMORY] will light.
4. Press [SKIP/SEARCH | ◀◀] repeatedly until [CD TRACK NO.] shows "3". The number will flash.
5. Press [MEMORY]. The number will remain on.
6. Repeat steps 2 - 3 to memorize tracks 1, 8, 2, 7, 6, 1 and 4.

NOTE:

A track number can be entered more than once.

7. Checking the program
After the last track number has been entered, press [MEMORY] to view the memorized track numbers, in the order they were entered and last display will display "0".
8. Press [PLAY/PAUSE]. Programmed play will begin with the first programmed track.
9. When the last programmed track has finished playing, the CD player will stop, unless [REPEAT] has been pressed (see REPEAT PLAY).

NOTE:

If you want to add a program number, select the track number, and press [MEMORY]. It is not possible to change a programmed entry, or to add an entry between the programmed selections.

Ending programmed play

Press [STOP/CLEAR] twice (during programmed play), or once (during the stop mode), to clear the program memory.

COMPACT DISC OPERATION

- Both 8 cm and 12 cm discs can be played in this unit.
NOTE:
Place only one disc at a time in the CD compartment.
- Only disc bearing the logo in Fig. 3 can be played in this unit.

Handling compact discs

- Always place the compact disc in the CD compartment with the label facing upward.
Compact discs can be played on only one side.
- Fingerprints and dust should be carefully wiped off the disc's signal surface (opposite the labeled side) with a soft cloth. Gently wipe in a straight motion from the inside to the outside of the disc.
- Discs should be returned to their cases after used to avoid serious scratches that could cause the player to skip.
- Do not expose a disc to direct sunlight, high humidity, or high temperatures for extended periods of time to prevent warping the disc.
- Do not stick paper or write anything with a ballpoint pen on a disc.
- Do not use cleaners or antistatic sprays on discs, like those used for phonograph records.

LOADING A DISC

1. Set [FUNCTION] to CD.
" - " lights.
2. Press [CD OPEN]. The lid will open.
3. Place a disc carefully on the turntable in the CD compartment, with the label side facing up (Fig. 4).
4. Close the lid.
[CD TRACK NO.] will show the total number (max. 19) of tracks on disc.

NOTES:

- If a disc is loaded upside down, or if no disc is loaded, the CD player will not operate.
- Opening the CD compartment lid while a CD is played could scratch the disc. Always press [STOP/CLEAR] and wait for the disc to stop rotating before opening the CD compartment lid.

NORMAL PLAY

1. Press [PLAY/PAUSE]. Play will begin with track number 1. [CD TRACK NO.] will show the track number.
NOTE:
 - To start play from a designated track, press [▶▶|SKIP/SEARCH] until the desired track number is indicated and track number will flash. Then press [PLAY/PAUSE]. Play will start from the selected track.
2. Adjust [VOLUME], [TONE] and [BASSXPANDER] as desired.
3. Press [STOP/CLEAR] to stop play at any time.
When the last track has played, the player will automatically stop.

Pause

1. Press [PLAY/PAUSE] during play.
Play will temporarily stop, [CD PLAY] will flash.
2. Press [PLAY/PAUSE] again to resume play. The [CD PLAY] will remain on.



PLAYBACK

1. Set [FUNCTION] to TAPE.
2. Press [STOP/EJECT] and insert a prerecorded cassette into the cassette compartment with the tape side facing up.
3. Press [PLAY].
4. Adjust [VOLUME], [TONE] and [BASSXPANDER] as desired.
5. Press [STOP/EJECT] to stop playback at any time. When the end of the tape has been reached, [PLAY] will release automatically.

RECORDING

WARNING

UNAUTHORIZED RECORDING OF COPY-RIGHTED MATERIAL MAY VIOLATE APPLICABLE COPYRIGHT LAWS. SANYO ASSUMES NO RESPONSIBILITY FOR THE UNAUTHORIZED DUPLICATION, USE OR OTHER ACTS WHICH INFRINGE UPON THE RIGHTS OF COPYRIGHT OWNERS.

Automatic Level Control (ALC) recording

The ALC circuit adjusts the recording input level automatically. No adjustment are required.

Preparation

Press [STOP/EJECT] and insert a cassette into the cassette compartment with the tape side facing up.

A) Recording from the built-in radio

1. Tune in a program as described in the "RADIO OPERATION" section.
2. Press [PAUSE].
3. Press [REC]. [PLAY] will lock down at the same time.
4. During recording, the sound can be monitored through the speakers. [VOLUME], [TONE] and [BASSXPANDER] will not affect the recording. Adjust them as desired.
5. Press [PAUSE].
6. Press [STOP/EJECT] to stop recording at any time.

Beat cancel switch (BEAT CANCEL)

When recording a radio program, an irritating "whistling" sound may sometimes be heard. If this occurs, select position 1, 2 or 3. Leave the switch in the position that gives the best results

B) Recording from a compact disc

Synchronous recording (CD-TAPE SYNCHRONOUS DUBBING)

This recording system starts disc play and cassette recording at the same time.

Recording from Track No. 1

1. Set [FUNCTION] to CD.
2. Load a disc into the CD player.
3. Press [REC]. Recording will start at the beginning of track number 1.
4. Press [STOP/EJECT] to stop recording at any time.

When the disc play finishes, the disc will automatically stop, but [REC] does not pop up and the tape running not stop, press [STOP/EJECT], otherwise the tape is erased.

Recording programmed tracks

1. Program the unit as described in the "PROGRAMMED PLAY" section.
2. Press [REC]. Recording will start from the programmed track.

Recording from playing track

When you want to record music as you listen, press [REC]. Recording starts automatically from the beginning of the track.

MAINTENANCE

Cleaning the unit

Do not use volatile chemicals on this unit (insecticides, etc.). Clean by lightly wiping with a soft cloth.

Cleaning the tape heads

When dust or reddish-brown oxide builds up on the tape deck heads, pinch roller and capstan, the following problems may result:

- Poor sound quality during playback
- Distorted, poor quality recordings
- Erratic tape speed during recording or playback

To ensure playback and recording with good-quality sound, use a cleaning tape (available from your local audio dealer) to clean the head block of the deck after about every 10 hours of use.

Cleaning the CD player lens (Fig. 7)

If dust is on the lens, blow the dust away by using a blower. (Please consult your dealer.)

The lens should never be touched. However, if a finger-print does get the lens, wipe it gently by using a cotton swab moistened with isopropyl alcohol. (Please consult your dealer)

CAUTION:

Do not apply excessive pressure; you might damage the lens.

Apply alcohol sparingly. Only a small amount is needed. Use of too much alcohol may cause some to enter the unit, which may cause damage.



SPECIFICATIONS

(Cassette Section)

Recording system:
AC bias, 4 track stereo

Erasing system:
Magnet erase

Tape speed
4.75 cm/sec.

Fast forward and rewind time:
110sec. (C-60 tape)

Frequency response:
80 - 12,000Hz (normal tape)

(CD Section)

Channels:
2 channels

S/N ratio:
70 dB

Wow & Flutter:
undetectable

Sampling frequency:
44.1 kHz

Quantization:
16 bits linear/ch

Pick up light source:
Semi-conductor laser

Pick up wave length:
790nm

Laser output:
Continuous wave max. 0.6mW

(Radio Section)

Tuning ranges:
FM:88 - 108 MHz
AM:525 - 1,710 kHz

Aerials:
Built-in ferrite bar and telescopic rod aerials

(General)

Power output:
2.5 W/ch (DC max.)

Speaker:
10 cm x 2, 8ohms

Terminal impedance:
PHONES: 32ohms

Power source:
AC: 230 - 240 V, 50 Hz
DC: 12 V(8 "C" size batteries)

Dimensions:
412 x 158 x 239 mm (W x H x D)

Weight (approx.):
3.2kg (including batteries)

Specifications subject to change without notice.

SANYO

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Printed in Hong Kong