

SHARP

FM/LW/MW/SW 10 BANDS RECEIVER
UKW/LW/MW/KW ZEHNBAND-EMPFÄNGER
RÉCEPTEUR 10 GAMMES FM/GO/PO/OC
RECEPTOR DE 10 BANDAS DE FM/OL/OM/OC
FM/LV/MV/KV 10-BANDSRADIO
調頻 / 長波 / 中波 / 短波10波段接收機
FM/LW/MW/SW 10방송 라디오

FV-610GB/FV-610GG



SHARP CORPORATION

TINS20663AF22

OPERATION MANUAL
BEDIENUNGSANLEITUNG
MODE D'EMPLOI
MANUAL DE MANEJO
BRUKSANVISNING
使用説明書
사용 설명서

ENGLISH

DEUTSCH

FRANÇAIS

ESPAÑOL

SWEDISH

中

日本語

한국어

This apparatus complies with requirements of BS800 and EEC directive 76/889/EEC.

Das Apparat stimmt mit den Bedingungen der EG-Richtlinien 76/889/EWG überein.

Cet appareil répond aux spécifications de la directive CEE 76/889/CEE.

Quest'apparecchio è stato prodotto in conformità alle direttive CEE 76/889/CEE.

Dit apparaat voldoet aan de vereisten van EEG-reglementen 76/889/EEG.

Apparatet opfylder kravene i EF direktivet 76/889/EF.

NOTE FOR USERS IN U.S.A.

FOR YOUR RECORDS

For your assistance in reporting this unit in case of loss or theft, please record below the model number and serial number which are located on the rear and in the battery compartment of the unit.

Please retain this information.

Model number _____

Serial number _____

Date of purchase _____

Place of purchase _____

CALLING FOR SERVICE

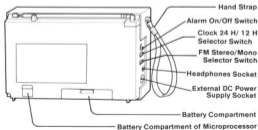
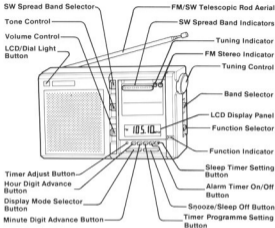
For your nearest Sharp authorized service station,

Please call Toll Free: **800-447-4700**

In Hawaii or Alaska, please contact your local dealer.

www.shortwaveradio.ch

NAMES OF CONTROLS



PRECAUTIONS

- Do not expose the unit to temperatures higher than 60°C (140° F). This includes leaving the unit inside closed vehicles, and placing it in direct sunlight or in the vicinity of heaters, etc.
- Do not expose the unit to rain or moisture, as this will result in damage to internal circuitry.
- Do not position or store the unit for extended periods in places with high humidity or high concentrations of dust.
- Do not apply petroleum, any organic solvents, or insecticides to the cabinet surface, as this may result in cracking or other surface damage.
- Do not leave the microprocessor battery (LR44 or SR44) within the reach of children. In the event of accidental swallowing, contact a doctor immediately.
- To prevent traffic accidents, do not listen with headphones while driving a car or motorcycle, or riding a bicycle.

POWER SOURCE

OPERATION FROM DC POWER SUPPLY: BATTERIES

This unit is designed to operate with two kinds of DC battery power sources: one for the microprocessor, and the other (the main batteries) for the remaining functions and circuits (radio and audio amplifier, etc). The main power supply can be switched over from batteries to external DC power, but the DC power source for the microprocessor must be maintained constantly, regardless of whether the main DC power source is internal or external.

INSTALLATION OF MICROPROCESSOR BATTERIES

CAUTION

Batteries (mercury) contained in the battery compartment of the microprocessor has been already used for inspection of the unit at the factory.

The weakened clock indication on the LCD display panel when the function selector is set to the ON position indicates that the batteries are weak.

Replace the batteries with new ones (LR44 or SR44).

- Install the microprocessor batteries before the main batteries. If this order is reversed, the microprocessor will not function correctly.

1 Set the function selector to the OFF position.

2 Remove the battery compartment cover.

3 Insert two new batteries (LR44 or SR44, 1.5V x 2) into the compartment.

4 Replace the battery compartment cover.

- If the microprocessor does not function normally (or does not function at all), remove the batteries, wait for 20 seconds, and reinsert them.

▼ How to remove the battery compartment cover.

▼ How to insert the batteries.



INSTALLATION OF MAIN BATTERIES

- ▼ How to remove the battery compartment cover.



- ▼ How to insert the batteries.



- The batteries must be removed on becoming weak, or when the unit is not to be used for an extended period. This will prevent damage to the unit from battery leakage.
- Be sure to keep the battery contact parts clean. Dust accumulating between the batteries and battery terminals may result in imperfect contacts, and can even prevent the unit from operating.

- 1 Set the function selector to the OFF position.

- 2 Remove the battery compartment cover.

- 3 Insert five new batteries (UM/SUM-3, RG, HP-7, or AA type, 1.5V x 5) into the compartment. Battery polarity and location are shown on the back of the unit.

- 4 Replace the battery compartment cover.

OPERATION FROM EXTERNAL DC POWER SUPPLY

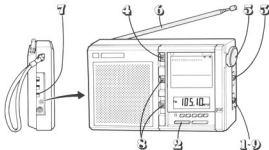


The centre pin is the negative (–) terminal. Connecting the external DC power supply lead plug with incorrect polarity will result in damage to the unit.

Connect the external DC power supply lead plug to the DC 7.5V socket of the unit. Then connect the external DC power supply lead plug to the external DC power source.

- Inserting the external DC power supply lead plug into the unit automatically disconnects the main batteries. For this reason, the external DC power supply lead plug must be removed from the DC 7.5 V socket when the unit is to be operated on battery power.

RADIO OPERATION



- 1 Set the function selector to the ON position. The function indicator will display **DN**.
- 2 Push the DISPLAY MODE button. The display in the LCD display panel will change from "clock" to "radio frequency".
- 3 Set the band selector to the U/FM, LW, MW or SW position.
- 4 If the band selector is in the SW position, set the SW spread band selector to the appropriate position (SW₁ – SW₅). The SW spread band indicator will display the selected SW spread band.
- 5 Rotate the tuning control in the appropriate direction until the desired station is received. At this time, the frequency indicator in the LCD display panel will move up or down in steps of:
 - 0.05 MHz for the FM band;
 - 1 kHz for the LW/MW band; and
 - 0.005 MHz (5 kHz) for the SW band.
- 6 Adjust the aerial to obtain best reception in the band selected (see page 5 for more detailed instructions regarding aerial adjustment).
- 7 With the band selector in the FM position, set the FM ST/MONO selector switch to the FM ST (stereo) position. The FM ST indicator will light up when an FM stereo signal is received. A mono signal can also be received with the FM ST/MONO selector switch in the FM ST (stereo) position, provided that the broadcasting station is not transmitting a stereo programme at the time. If stereo reception is unsatisfactory, set the FM ST/MONO selector switch to the MONO position.

Even when an FM stereo broadcast is being received with the FM ST/MONO selector switch in the FM ST (stereo) position, if the built-in speaker is used, it will be heard as monophonic sound. If headphones (not supplied) are connected, it can be heard as stereophonic sound.

- Adjust the VOL (volume) and TONE controls to the desired levels.
- To turn off the radio, set the function selector to the OFF position. The display in the LCD display panel will change from "radio frequency" to "clock".

LCD/DIAL LIGHT BUTTON



When the DL button is pressed, the LCD display panel and the dial scale board are lit up.

HEADPHONES



Connect the headphones plug to the headphones socket on the side panel of the unit. Speaker output will be automatically disconnected. The volume level can be adjusted with the VOL control.

Headphones should have an impedance of 8 ohms to 32 ohms and be equipped with a 3.5 mm-diameter stereo plug.

- When using headphones with a 6.3 mm-diameter plug, purchase a stereo plug adaptor.

ADJUSTING THE AERIAL



FOR MW OR LW BROADCASTS:

Rotate or reposition the unit until peak strength MW or LW reception is obtained.

Grasp the lower part of the telescopic rod aerial, pull it upwards and adjust it, as shown below.



FOR FM BROADCASTS:

Raise and extend the telescopic rod aerial, and adjust its position and length until peak strength FM broadcast reception is obtained.



FOR SW BROADCASTS:

Raise and extend the telescopic rod aerial vertically to its full length.

CLOCK OPERATION

- When the current time is being shown in the LCD display panel, a colon flashes intermittently.
- By use of the clock 24 H/ 12 H switch, the current time display can be switched either to the 12 hours (a.m. or p.m.) system, or to the 24 hours system.



When the clock 24H/12H switch is set to the 12H position, the time is displayed as follows:



When the clock 24 H/12 H switch is set to the 24 H position, the time is displayed as follows:



RESETTING THE CLOCK TIME



- 1 Push the DISPLAY MODE button and the LCD display panel will indicate the current time.
- 2 Push the [TIMER ADJUST] button. The colon of the LCD display panel stops flashing, and the entire clock display begins flashing.
- 3 Push the HOUR or MINUTE button.
 - Every time the HOUR button is pushed, the hour numeral advances by one hour.
 - Every time the MINUTE button is pushed, the minute numeral advances by one minute. When the minute numeral is advanced from 58 - 59 - 00 - 01....., the hour numeral does not advance.
- 4 When the clock time resetting is finished, push the [TIMER ADJUST] button to synchronize with an "on-the-minute" radio time signal, or the "00" seconds reading of another clock. When the [TIMER ADJUST] button is pushed, the clock starts immediately, the flashing of the entire clock display stops, and the flashing of the colon only begins.

ALARM TIME AND ALARM ON TIME

- When the alarm time is shown in the LCD display panel, the colon remains lit up. By use of the clock 24 H/ 12 H switch, the alarm time display can be switched either to the 12 hour (a.m. or p.m.) system, or to the 24 hour system.

SETTING THE ALARM TIME

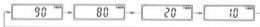


- 1 Push the DISPLAY MODE button. The alarm time is indicated in the LCD display panel.
- 2 Push the HOUR or MINUTE button and set the alarm time (refer to step 3 of "Resetting the Clock Time" on page 6).

SETTING THE ALARM ON TIME

- When the set alarm time and the current time are the same, the timer tone sounds up to a maximum of 90 minutes.

- 3 Push the TIMER PROG (programme) button and set the alarm on time.
 - The LCD display panel indication changes from "alarm time" to the "TIMER" mark and a two-digit numeral.
 - If this button is pushed within about 4 seconds, the two-digit numeral changes as follows with every push:



- If more than 4 seconds are allowed to elapse, the display changes automatically to current time indication, and the "TIMER" mark remains lit up. In this situation, to return to the alarm on time mode, push the DISPLAY MODE button and then push the TIMER PROG (programme) button.
- 4 Set the function selector to the TIMER position.

When you wish only the alarm tone to sound:

Set the ALARM ON/OFF switch on the side of the unit to the ON position, and the VOL control to the MIN position.

When you wish to hear only radio broadcast programmes:

Set the ALARM ON/OFF switch to the OFF position and the VOL control to the desired level.

SNOOZE/SLEEP OFF



- If the SNOOZE/SLEEP OFF button is pushed during the alarm on time:
The alarm tone or radio is switched off, and switched on again about 8 minutes later (snooze function).



- If the TIMER ON/OFF button is pushed during the alarm on time:
The "TIMER" mark indication disappears, and the alarm tone or radio is switched off. If the button is pushed again, the "TIMER" mark reappears and the alarm tone or radio will sound after 24 hours. So alarm tone or radio can be activated everyday at the set alarm time.



- If the TIMER PROG (programme) button is pushed during the alarm on time:
After pushing the button, the alarm or radio can be reset up to a maximum of 90 minutes.

PROGRAMME TIMER FUNCTION

1. Set the alarm time at any desired time such as when you get up or when the radio programme you listen to begins.
2. The alarm time can be freely set from 10 to 90 minutes, corresponding with the length of time until when you have to leave home for work, or with the length of the radio programme, etc.
3. With this function, the timer will automatically operate every day, assuring you not to miss the programme nor forget to turn the power off.

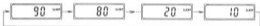
SLEEP TIMER

- The radio can be set to play up to a maximum of 90 minutes, and to switch itself off automatically after the set period.

SETTING THE SLEEP TIMER



- 1 With the radio playing, push the SLEEP button and set the sleep time.
 - The LCD display panel indication changes from "radio frequency" to the "SLEEP" mark and a two-digit numeral.
 - If this button is pushed within about 4 seconds, the two-digit numeral changes as follows with every push:



- If more than 4 seconds are allowed to elapse, the display changes automatically to current time indication, and the "SLEEP" mark remains lit up. In this situation, to return to the sleep time mode, push the SLEEP button again.
- 2 After setting the sleep time, turn the function selector to the TIMER position. When the time arrives to which the sleep time has been set, the power is switched off automatically.

- To cancel the sleep time function:
Push the SNOOZE/SLEEP OFF button. The "SLEEP" mark indication will then disappear.

This unit gives priority to the sleep timer.

- Even with the alarm on time set and the "TIMER" mark displayed, if the SLEEP button is pushed, the alarm on time function is cancelled.
- If the SLEEP button is pushed when the snooze function is operating, the snooze function is cancelled.
- If the SLEEP button is pushed and the sleep time changed while the sleep time function is in operation, the altered sleep time takes effect from that moment.

MAINTENANCE

CLEANING THE CABINET

Clean the surface of the cabinet with a soft cloth moistured with water. Do not use any other cleaning materials.

SPECIFICATIONS

Power Source:	DC 7.5V (UM/SUM-3, R6, HP-7 or AA type × 5, or external 7.5 V DC); DC 3V (LR44 or SR44 × 2) for microprocessor	Speaker:	8 cm (3-1/8") permanent dynamic speaker
Frequency range:	FM: 87.6 – 108 MHz LW: 150 – 285 kHz MW: 525 – 1605 kHz SW ₁ : 5.85 – 6.35 MHz (49 m) SW ₂ : 6.95 – 7.45 MHz (41 m) SW ₃ : 9.50 – 10.00 MHz (31 m) SW ₄ : 11.60 – 12.10 MHz (25 m) SW ₅ : 15.10 – 15.60 MHz (19 m) SW ₆ : 17.45 – 17.95 MHz (16 m) SW ₇ : 21.40 – 21.90 MHz (13 m)	Output power:	RMS: 900 mW (DC operation 10% distortion, DIN 45324)
Circuit:	FM/MW/LW: super-heterodyne system SW: dual-conversion superheterodyne system.	Semiconductors:	1 LSI 5 ICs 14 Transistors 3 FETs 2 LEDs 8 Crystals
Aerial:	FM/SW: telescopic rod aerial MW/LW: built-in ferrite bar aerial.	Dimensions:	Width: 210mm (8-1/4") Height: 135 mm (5-5/16") Depth: 42 mm (1-11/16")
		Weight:	700g (1.54 lbs) without batteries.

SHARP reserves the right to make design and specification changes for product improvement without prior notice.

Note:

When the DISPLAY MODE button is pushed for changing the indications from current time to radio frequency on LCD display panel, and when the TIMER PROG button is pushed with radio frequency displayed (i.e. during radio reception), the following phenomena are observed. But this is not a failure.

While, either button is depressed, LCD does not display the tuned-in radio frequency. However, when you release your finger from the button, the panel will display the current frequency.

Hinweis:

Wenn die DISPLAY MODE-Taste für den Wechsel der Anzeige von gegenwärtiger Zeit zur Radiofrequenz auf dem LCD-Anzeigefeld gedrückt wird und/oder wenn die TIMER PROG-Taste gedrückt wird, während eine Radiofrequenz angezeigt wird (d.h. während des Radioempfangs) treten folgende Erscheinungen auf. Hierbei handelt es sich nicht um einen Fehler.

Solange eine der betreffenden Tasten gedrückt gehalten wird, zeigen die LCD nicht die eingestellte Radiofrequenz an. Wenn sie die Taste jedoch loslassen, erscheint die richtige Frequenzanzeige auf dem Anzeigefeld.

Note:

Quand la touche DISPLAY MODE est enfoncée pour passer des indications horaires à l'affichage des fréquences radio sur le panneau d'affichage à cristaux liquides et/ou quand la touche TIMER PROG est enfoncée avec la fréquence radio affichée. (i.e. au cours d'une réception radio, les situations suivantes ne constituent pas une défaillance.)

La poussée d'une touche quelconque ne commande pas l'affichage de la fréquence radio accordée. En revanche, il suffit de relâcher la pression sur la touche pour que le panneau affiche la fréquence correcte.

Nota:

Cuando presione el botón DISPLAY MODE para cambiar las indicaciones del panel visualizador de LCD de la hora en curso a la frecuencia recibida, y/o cuando presione el botón TIMER PROG mientras está visualizándose la frecuencia (es decir, durante la recepción de un programa radiofónico), se observarán los fenómenos siguientes. Pero esto no significa avería alguna.

Cuando presione cualquiera de los botones, el LCD no visualizará la frecuencia recibida. Sin embargo, cuando suelte el botón, el panel visualizará la frecuencia correcta.

Anmärkning:

När du trycker in väljaren för indikeringslätt (DISPLAY MODE) för att skifta om den flytande kristallindikeringsrutan (LCD) för indikering av stationsfrekvenserna istället för den aktuella tiden och om då timer-inspelningstangenten (TIMER PROG) rörkars intryckt eller trycks in när rutan visar stationsfrekvensen (d v s under pågående radiomottagning), kan det följande hända.

Detta indikerar emellertid inte felfunktion.

Indikeringsrutan kommer inte att visa stationsfrekvensen när den änders tangenten trycks in. Den rätta stationsfrekvensen visas, emellertid, i indikeringsrutan så fort du släpper den intryckta tangenten.

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