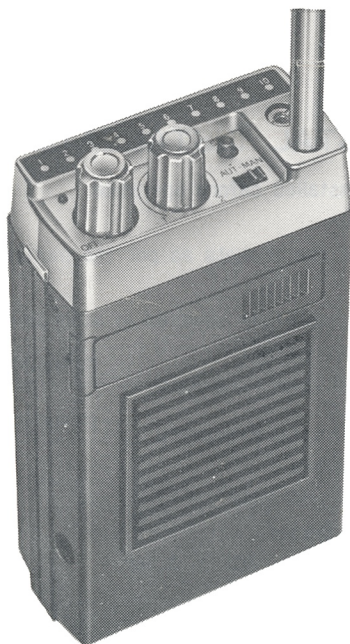


VHF 10 CHANNEL

POCKET SCANNER



GENERAL DESCRIPTION

This programable scanning monitor receiver can receive a total of 10 (ten) fixed frequencies in VHF low band or high band and the number of channels to receive VHF low or high is selected by you and can easily be re-arranged at any time. This scanner has unique features, which you can not find in many other scanners now being sold.

- 1.) Very compact, small size.
- 2.) Operates on DC 4.8 volt Nicad battery included in the receiver.
- 3.) Can be operated manually or automatically.
- 4.) LED band indicator lights.
- 5.) Squelch control for noise reduction.
- 6.) Earphone as antenna (when earphone is plugged in, the earphone cord serves also as antenna).
- 7.) Built-in speaker and earphone jack.
- 8.) Indication of battery drain (when battery is going to be exhausted, warning is given by flickering of LED lights).

Accessories.

- a.) Rod Antenna.
- b.) Instruction Book.
- c.) Carrying Case.
- d.) Earphone.

CRYSTAL INSTALLATION

Suitable crystals must be installed before operation.

- 1.) Open Bottom Lid.
- 2.) Install crystals in the sockets as per the picture given on the back of the lid.
- 3.) Crystals must be carefully selected in accordance with a basic receiving frequency.
VHF Low Band Crystal Frequency = $\frac{F(\text{RX-Freq}) + 10.7}{2}$ MHz
VHF High Band Crystal Frequency = $\frac{F(\text{RX-Freq}) - 10.7}{3}$ MHz
- 4.) Crystal Specifications.
 - a. Holder Type : HC-25U
 - b. Resonance : Series
 - c. Load Capacitance : 20f ± 0.5pf
 - d. Drive Level : 2.0mW
 - e. Resistance : less than 40 ohms
 - f. Shunt Capacitance : less than 7.0pf
 - g. Frequency Tolerance : ± 0.0015% (-20°C — +50°C)

CONTROL AND OPERATION

ON/OFF VOLUME CONTROL.

It varies sound output of the loudspeaker and also functions as "On-Off" Switch. Clockwise rotation increases volume level.

SQUELCH CONTROL.

It is designed to reduce excessive noise, such as high line interference.

This control must be set only when noise is heard (no signal). Turn the control fully counter-clockwise and by turning the on/off volume control increase volume until noise or signal is heard. Only when noise is present, turn the squelch control clockwise until the noise is blanked out.

MANUAL/AUTO SELECT SWITCH

Push AUT-MAN Selector to left and channels can be selected manually.

Push the selector to right and channels are to be selected automatically.

CHANNEL INDICATOR

Fast-acting LED indicators show channel selected (one through ten).

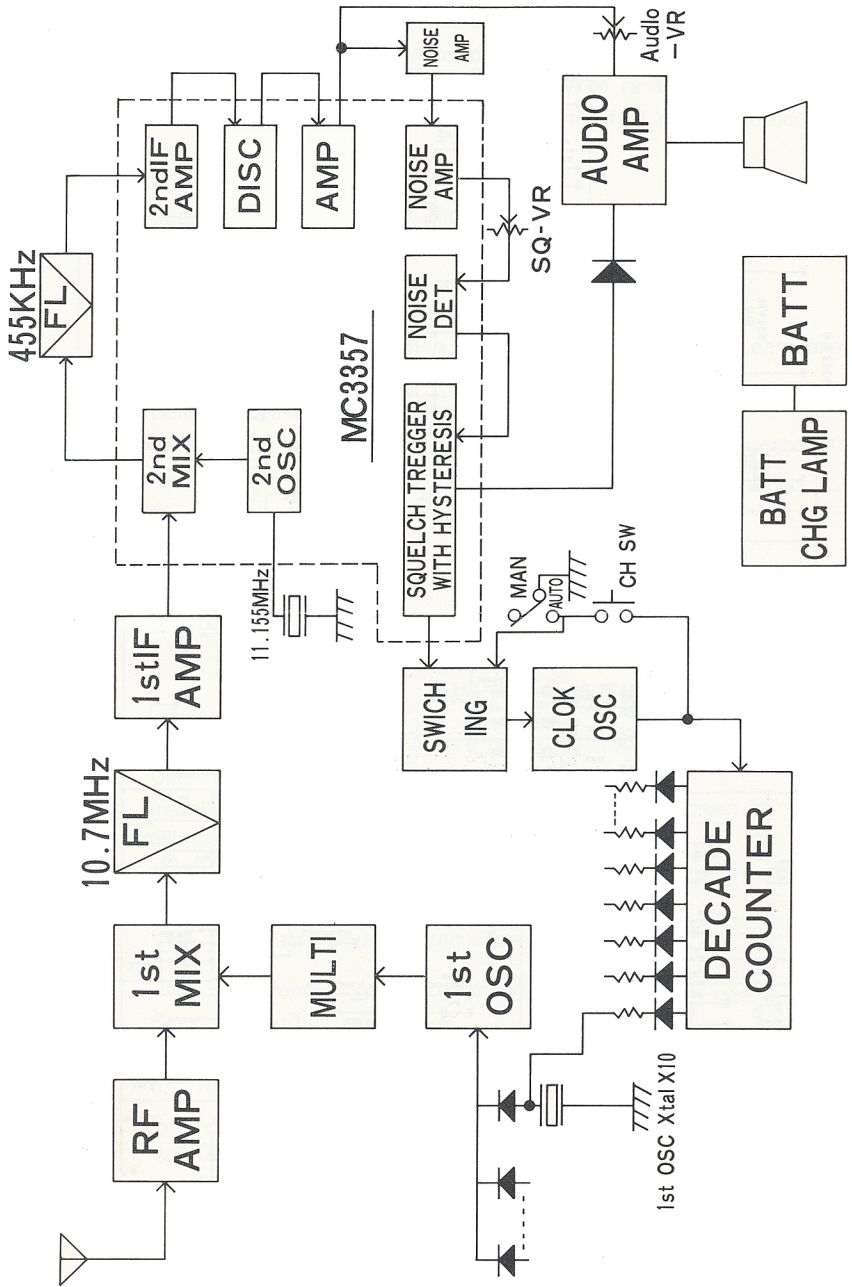
DC POWER SOCKET :

A socket is provided in the side of the unit for connection to external source of 6V DC and also for re-charging the battery.

SPECIFICATIONS

- * Frequency Range : **75.0 MHz ~ 88.0 MHz**
- * Intermediate Frequency : 1st 10.7 MHz/2nd 455 KHz
- * Center Frequency : **81.5 MHz**
- * Delay Time : 2.5 sec.
- * Antenna Impedance : 50 ohm
- * Scanning Speed : 10 channels per second
- * Frequency Tolerance : 0.001% (-20°C — +50°C)
- * Frequency Deviation : ± 5 KHz
- * Sensitivity : 20 db QS, less than 0 db
- * Squelch Sensitivity : less than 6 db
- * Selectivity : less than 50 db ± 12 KHz
- * Speaker & Earphone Impedance : 8 ohm
- * Battery : 4.8V Nicad Battery (1.2V \times 4)
- * Dimension : 69 \times 112 \times 33 (mm)
- * Weight : 240 g including batteries

BLOCK DIAGRAM



SCHEMATIC DIAGRAM

