

[1] SPECIFICATIONS

1. Frequency

VHF Low band....78-88MHz

2. Sensitivity

less than 1.0uV input for 20dB S/N

3. Selectivity

6dB + 7.5KHz

50dB + 12KHz

4. Modulation Acceptance

+ 5KHz

5. Intermediate Frequency

1st I.F. : 10.7MHz

2nd I.F. : 455KHz

6. Audio Power Output

120mW at 10% distortion

150mW at maximum

7. Scan Speed

10-channel/sec.

8. Delay Time

2 seconds

9. Antenna

50 ohms, External antenna

10. Semi-Conductors

4 ICs, 9 Transistors, 1 PUT, 15 Diodes

& 12 LEDs

11. Power Source

4.8 VDC

12. Frequency Stability

better than 0.002% at -20°C to + 50°C

13. Built-in Speaker

8 ohms, round type

[2] CRYSTAL INSTALLATION1) How to install crystals

Hold the top of the unit by one hand. Push the upper middle part of rear cabinet and pull it downward by another hand. Then, install crystals in each crystal socket.

2) Crystal Formula

$$\text{VHF Low Band Crystal Freq.} = \frac{\text{Channel Freq.} + 10.7}{2}$$

3) Crystal Specifications

- | | |
|--------------------------|-------------------|
| 1. Crystal Holder Type | HC-25/U |
| 2. Mode Oscillator | 3rd Overtone |
| 3. Operation Temperature | -20°C to +50°C |
| 4. Temperature Stability | + 0.005% |
| 5. Frequency Tolerance | 0.002% |
| 6. Load Capacitance | 20pF |
| 7. Equivalent Resistance | 35 ohms (maximum) |
| 8. Shunt Capacitance | 7pF (maximum) |
| 9. Drive Level | 2mW |

[3] CONTROLS & INDICATORS1) Control Functions

- ON/OFF Volume - Turn the knob clockwise to apply power to the unit and to set the desired listening level.
- SQUELCH - This control is used to cut off or eliminate receiving background noise in the absence of incoming signal. For maximum receiver sensitivity, it is desired that the control is adjusted only to the point where the background noise or ambient background noise eliminated. Turn the knob counterclockwise then slowly turn clockwise until the receiver noise disappears. Any signal to be received must now be slightly stronger than the average receiver noise. Further clockwise rotation will increase the threshold level which a signal must overcome in order to be heard. Only strong signal is heard at maximum clockwise setting.

2) Accessory Circuit Operation

- AUTO/MAN & CH SEL - This switch determines the desired scanning way, automatic scanning or manual channel selection. When you push this switch, LED 'AUTO' lights and you can manage automatic scanning from CH1 to CH10 one by one. When you push this switch again, LED 'AUTO' goes out and you can manage manual channel selection by pushing 'CH SEL' switch next to AUTO/MAN switch.
- EAR - plug an earphone into 'EAR' jack. Disable internal speaker when connected.
- ANT.CHG - Install an antenna into 'ANT.CHG' jack when normal operation. For re-charging Ni-Cad battery built-in, take out the antenna and plug a battery charger into 'ANT.CHG' jack.

3) Indicators

- LED Channel Indicator - You can see the received channel by lighting of 10 pcs. LED from CH1 to CH10.
- BATT - This LED shows the battery life automatically when battery is exhausted.
- AUTO - This LED lights when automatic scanning.