

HAM INTERNATIONAL UK

MODEL 120 FM

YOU HAVE JUST PURCHASED THE VERY BEST
120-CHANNEL AM/FM MOBILE CITIZENS BAND
TWO WAY RADIO



INSTRUCTION MANUAL

SECTION 1

GENERAL INFORMATION

DESCRIPTION

Your **MODEL 120FM** represents the most advanced Mobile Station type radio ever designed for use in the Citizens Band Radio Service. It will operate on any of the 120 frequencies designated as citizens band channels. Your **MODEL 120FM** features a frequency synthesizing circuit with **PHASE LOCK LOOP** techniques to assure ultraprecise frequency control.

SPECIFICATIONS

GENERAL

Channels:	120-CH
Frequency Range:	26.965 MHz to 28.305 MHz
Frequency Control:	PLL Synthesized.
Antenna Impedance:	50 ohms
Power Input:	13.8 V DC
Accessories:	Microphone, Microphone Hanger, Mounting Bracket.
Size:	180m/m(W) × 138m/m(D) × 60m/m(H).
Weight:	2.3Kgs.

TRANSMITTER

Output Power:	0.5—5—10 Watts.
Hum and Noise:	Better than -60 dB
Frequency Tolerance:	0.005%
Modulation Percentage(Peak):	100%
FM Deviation:	±1.5kHz with 1250Hz 20mV audio

RECEIVER

Sensitivity at 10dB N/S+N:(AM)	1.0uV
Sensitivity at 20 dB Signal-to-noise ratio(FM)	0.7uV
Squelch Threshold:	0.5 uV — 500 uV(Adjustable)
Maximum AF Output Power:	4 watts
Frequency Response:	400 Hz — 2,000 Hz
Image Rejection:	More than 45 dB
Selectivity:	5 KHz.
Speaker Impedance:	8 ohms.

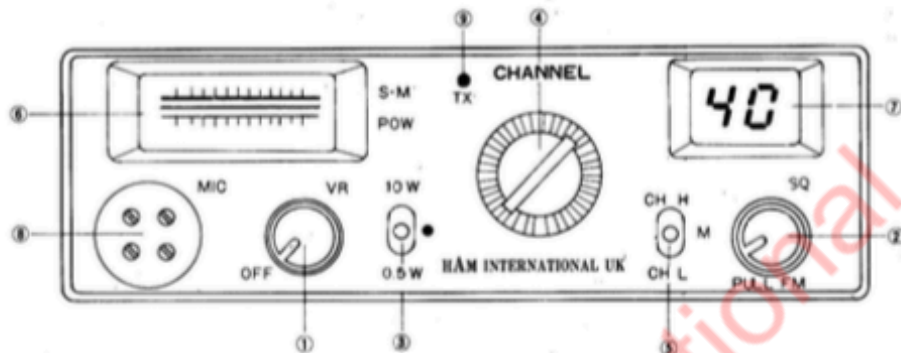
INTRODUCTION

This radio has been designed to provide high level performance in the Citizens Band Radio Service, which is comprised of the following frequency assignments :

ANT FREQUENCY (MHZ)							
CH	Low Band	Mid Band	Hi Band	CH	Low Band	Mid Band	Hi Band
1	26.965	27.415	27.865	21	27.215	27.665	28.115
2	26.975	27.425	27.875	22	27.225	27.675	28.125
3	26.985	27.435	27.885	23	27.255	27.705	28.155
4	27.005	27.455	27.905	24	27.235	27.685	28.135
5	27.015	27.465	27.915	25	27.245	27.695	28.145
6	27.025	27.475	27.925	26	27.265	27.715	28.165
7	27.035	27.485	27.935	27	27.275	27.725	28.175
8	27.055	27.505	27.955	28	27.285	27.735	28.185
9	27.065	27.515	27.965	29	27.295	27.745	28.195
10	27.075	27.525	27.975	30	27.305	27.755	28.205
11	27.085	27.535	27.985	31	27.315	27.765	28.215
12	27.105	27.555	28.005	32	27.325	27.775	28.225
13	27.115	27.565	28.015	33	27.335	27.785	28.235
14	27.125	27.575	28.025	34	27.345	27.795	28.245
15	27.135	27.585	28.035	35	27.355	27.805	28.255
16	27.155	27.605	28.055	36	27.365	27.815	28.265
17	27.165	27.615	28.065	37	27.375	27.825	28.275
18	27.175	27.625	28.075	38	27.385	27.835	28.285
19	27.185	27.635	28.085	39	27.395	27.845	28.295
20	27.205	27.655	28.105	40	27.405	27.855	28.305

SECTION 2 OPERATING INSTRUCTIONS

CONTROLS, INDICATORS, CONNECTORS AND THEIR FUNCTIONS



① Volume Control/Power ON-OFF Switch

This combination control supplies power to your CB transceiver and adjusts the receiver.

The switch should be turned clockwise from the "OFF" position. You will hear an audible "click"

To adjust the volume continue advancing the control in a clockwise position.

② Squelch Control / AM/FM Switch:

In the clockwise position, the unit is squelched. And PULL position, the unit is switched FM mode position.

③ PWR 0.5W—(5W)—10W Switch:

This switch selects the desired RF power output. When you select 0.5W position, RF output power is approx. 0.5 watt. At CENTER(5W) position, the power is approx. 5.0 watt. At 10W position, you can get maximum power output, approx. 10 watt.

④ **CHANNEL SELECTOR Switch:**

This switch selects the desired channel for transmission and reception. All channels may be used for communications between stations operating under different license.

⑤ **HI/MID/LOW BAND Switch:**

This switch selects the desired frequency. At LOW position, frequency range is 26.965 MHz to 27.405 MHz. At MID position, frequency range is 27.415 MHz to 27.855 MHz. At HI position, frequency range is 27.865 MHz to 28.305 MHz. please refer frequency chart in page 2.

⑥ **RF/S Meter:**

When receiving, Meter lamp lights in green and indicator vibrates by the receiving signal strength. When transmitting, Meter lamp light in red and the light and indicator changes sensitivity by the strength of voice.

⑦ **Channel Display:**

LED digital display indicates the channel.

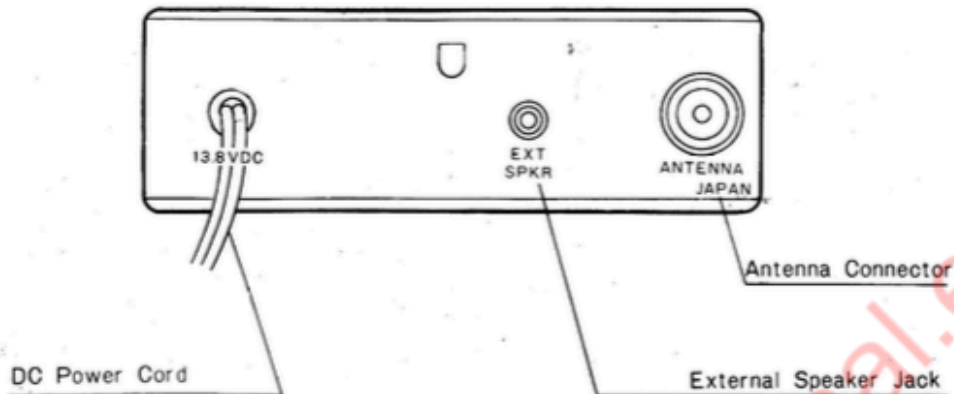
⑧ **Microphone Jack:**

Plug in attached microphone to Mic-Jack and it's ready to transmit by Press-Talking style.

⑨ **TX Indicator**

Light emitting Diode (LED) indicates Red while transmitting.

Rear View



REAR PANEL OPERATION

DC power cord: Attach red (+) and black (-) cord to the power source. DC power is adjusted at 13.8 Volts.

External SP jack: It is suggested to use external speaker and headphone when communication takes place where excessive background noise is arisen. Speaker and headphone impedance must be 4-8 ohm.

Antenna connector: To use antenna, it must be adjusted in correct impedance at 50 ohms.

CIRCUIT DIAGRAM

