

SH-200 VHF Radio

Owner's Manual

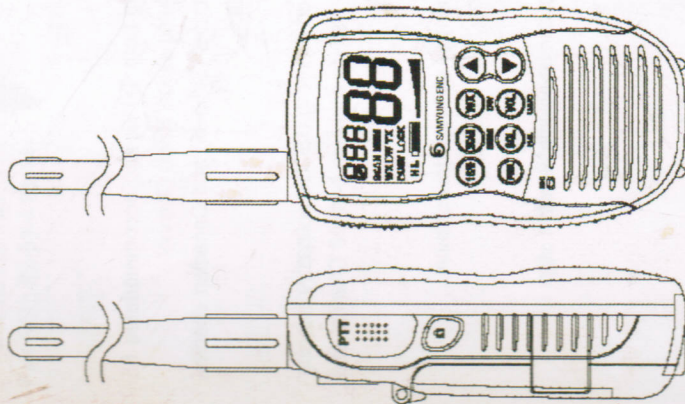


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Chapter 1 Outline

1.1 Outline

SH-200, VHF FM Transceiver, is designed to use for marine mobile communication from vessel to vessel, from land station to vessel and vice versa inside harbors and bays and at coastal sea that accommodates 156MHz ~ 162MHz with all channels serviceable for Marine mobile communication.

SH-200 is also designed to comply with all technical parameters set by Korean Radio regulation and therefore it can be applied to any places of International Port and Coastal sea.

1.2 Characteristic

1.2.1 SH-200 adapts directly synthesizer mode in both Tx/Rx and accommodates 65 channels (inclusive of Weather channel) as an International Radio Channel.

Out of 65 channels, it can use both USA channel (Simplex) and Canadian channel transferable to simplex mode at USA coastal sea.

1.2.2 It adds DW (DUAL WATCH) function that can do scanning USCG's obligatory listening channel 13 and 16 simultaneously, and it can also do scanning both 16 Channel and user's optional channel simultaneously.

1.2.3 As scan function built-in, it is possible to scan memory and important channel.

1.2.4 16 Channel designated at safety communication can be selectable with 1 step.

1.3 Precaution before handling

SH-200 is manufactured under careful Quality Control fully reflected on long experiences on knowledge of measuring instrument and working place and therefore you are kindly requested to keep the machine unchanged as it is for keeping it maintain with its performance of its design.

We ask for your careful attention and cooperation while handling for maintaining the order of radio communication. In case that you need After Service assistance in terms of technical affairs, you are also kindly requested to contact worldwide SAMYUNG distributor or SAMYUNG headquarters with overseas marketing dept.

E-mail : overseas@samyungenc.com or mskim@samyungenc.com

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Chapter 2 Components

Item	Model	Q'ty	Remark
Main Unit	SH-200	1 SET	
Antenna	ANT-300	1 SET	
Battery Charger	SC-63	1 SET	
Battery Pack	SPN-50	1 SET	
Charger Case	SC-65	1 SET	
Belt Mounted	SA-66	1 SET	
Manual		1 LOT	

Chapter 3 Specification

3.1 General

Channels : All current USA, International, Canadian channels and all Russian channels, Weather(WX) Channels

Channel Spacing : 25 [KHz]

Emission Type : G3E

Operation : Simplex, Duplex

Supply Voltage : 7.2 Vdc 1200mAh Ni-MH rechargeable battery

Current Drain : Standby : 40mA

RX : 190mA at 0.5W audio output (1KHz)

TX : Less than 1.5A at 5W, 0.7A at 1W

Operating Temperature Range : -20 °C ~ +60 °C

Battery Life

: 10 Hrs. @ 5W (High) / 15Hrs. @ 1W(Low)

(TX : 5%, RX : 5%, Standby : 90%)

Dimensions : 115mm(H) * 62.6mm(W) * 37.4mm(D)

Weight : 241g with Ni-MH rechargeable battery

3.2 Transmitter

Frequency Range : 156.025MHz ~ 157.425MHz

RF Output Power : 5W, 1W, 0.5W (50Ω, 7.4Vdc)

Spurious Emissions & Harmonic : -60dB at 5W, -55dB at 1W

AF Distortion : Less than 3% at 1 KHz for +/-3KHz Deviation

Max Deviation : +/-5 KHz

Frequency Stability : +/-5 ppm

FM Noise : More than -40dB

3.3 Receiver

Frequency Range : 156.050MHz ~ 163.275MHz

Circuit Type : Dual conversion superheterodyne

Sensitivity : 0.2uV at 12dB SINAD

Adjacent Channel Selectivity : More than 60dB

Intermodulation Response : More than 60dB

Spurious Emissions & Harmonic : More than 60dB

Audio Output Power : 0.5W at 10% distortion into 8Ω load

3.4 Frequency Chart

3.4.1. USA Frequency Chart

Ch No.	Rx Frequency (MHz)	Tx Frequency (MHz)	Status
1	156.0500	156.0500	
2	X	X	TX/RX Inhibit
3	156.1500	156.1500	
4	X	X	TX/RX Inhibit
5	156.2500	156.2500	
6	156.3000	156.3000	
7	156.3500	156.3500	
8	156.4000	156.4000	
9	156.4500	156.4500	
10	156.5000	156.5000	
11	156.5500	156.5500	
12	156.6000	156.6000	
13	156.6500	156.6500	1 W Only
14	156.7000	156.7000	
15	156.7500	Inhibit	TX Inhibit
16	156.8000	156.8000	
17	156.8500	156.8500	1W Only
18	156.9000	156.9000	
19	156.9500	156.9500	
20	157.0000	157.0000	
21	157.0500	157.0500	
22	157.1000	157.1000	
23	157.1500	157.1500	
24	161.8000	157.2000	RX/TX Shift
25	161.8500	157.2500	RX/TX Shift
26	161.9000	157.3000	RX/TX Shift
27	161.9500	157.3500	RX/TX Shift
28	162.0000	157.4000	RX/TX Shift

Ch No.	Rx Frequency (MHz)	Tx Frequency (MHz)	Status
60	X	X	TX/RX Inhibit
61	156.07500	156.07500	
62			TX/RX Inhibit
63	156.1750	156.1750	
64	156.2250	156.2250	
65	156.2750	156.2750	
66	156.3250	156.3250	
67	156.3750	156.3750	1W Only
68	156.4250	156.4250	
69	156.4750	156.4750	
70	156.5250	Inhibit	TX Inhibit
71	156.5750	156.5750	
72	156.6250	156.6250	
73	156.6750	156.6750	
74	156.7250	156.7250	
75	X	X	TX/RX Inhibit
76	X	X	TX/RX Inhibit
77	156.8750	156.8750	1W Only
78	156.9250	156.9250	
79	156.9750	156.9750	
80	157.0250	157.0250	
81	157.0750	157.0750	
82	157.1250	157.1250	
83	157.1750	157.1750	
84	161.8250	157.2250	RX/TX Shift
85	161.8750	157.2750	RX/TX Shift
86	161.9250	157.3250	RX/TX Shift
87	161.9750	157.3750	RX/TX Shift
88	157.4250	157.4250	

3.4.2 INT Frequency Chart

Ch No.	Rx Frequency (MHz)	Tx Frequency (MHz)	Status
1	160.6500	156.0500	RX/TX Shift
2	160.7000	156.1000	RX/TX Shift
3	160.7500	156.1500	RX/TX Shift
4	160.8000	156.2000	RX/TX Shift
5	160.8500	156.2500	RX/TX Shift
6	156.3000	156.3000	
7	160.9500	156.3500	RX/TX Shift
8	156.4000	156.4000	
9	156.4500	156.4500	
10	156.5000	156.5000	
11	156.5500	156.5500	
12	156.6000	156.6000	
13	156.6500	156.6500	
14	156.7000	156.7000	
15	156.7500	156.7500	1W only
16	156.8000	156.8000	
17	156.8500	156.8500	1W only
18	161.5000	156.9000	RX/TX Shift
19	161.5500	156.9500	RX/TX Shift
20	161.6000	157.0000	RX/TX Shift
21	161.6500	157.0500	RX/TX Shift
22	161.7000	157.1000	RX/TX Shift
23	161.7500	157.1500	RX/TX Shift
24	161.8000	157.2000	RX/TX Shift
25	161.8500	157.2500	RX/TX Shift
26	161.9000	157.3000	RX/TX Shift
27	161.9500	157.3500	RX/TX Shift
28	162.0000	157.4000	RX/TX Shift

Ch No.	Rx Frequency (MHz)	Tx Frequency (MHz)	Status
60	160.6250	156.0250	RX/TX Shift
61	160.6750	156.0750	RX/TX Shift
62	160.7250	156.1250	RX/TX Shift
63	160.7750	156.1750	RX/TX Shift
64	160.8250	156.2250	RX/TX Shift
65	160.8750	156.2750	RX/TX Shift
66	160.9250	156.3250	RX/TX Shift
67	156.3750	156.3750	
68	156.4250	156.4250	
69	156.4750	156.4750	
70	156.5250	Inhibit	TX Inhibit
71	156.5750	156.5750	
72	156.6250	156.6250	
73	156.6750	156.6750	
74	156.7250	156.7250	
75	X	X	TX/RX Inhibit
76	X	X	TX/RX Inhibit
77	156.8750	156.8750	
78	161.5250	156.9250	RX/TX Shift
79	161.5750	156.9750	RX/TX Shift
80	161.6250	157.0250	RX/TX Shift
81	161.6750	157.0750	RX/TX Shift
82	161.7250	157.1250	RX/TX Shift
83	161.7750	157.1750	RX/TX Shift
84	161.8250	157.2250	RX/TX Shift
85	161.8750	157.2750	RX/TX Shift
86	161.9250	157.3250	RX/TX Shift
87	157.3750	157.3750	RX/TX Shift
88	157.4250	157.4250	RX/TX Shift

3.4.3 RUS Frequency Chart

Ch No.	Rx Frequency (MHz)	Tx Frequency (MHz)	Status
1	160.6500	156.0500	RX/TX Shift
2	160.7000	156.1000	RX/TX Shift
3	160.7500	156.1500	RX/TX Shift
4	160.8000	156.2000	RX/TX Shift
5	160.8500	156.2500	RX/TX Shift
6	156.3000	156.3000	
7	160.9500	156.3500	RX/TX Shift
8	156.4000	156.4000	
9	156.4500	156.4500	
10	156.5000	156.5000	
11	156.5500	156.5500	
12	156.6000	156.6000	
13	156.6500	156.6500	
14	156.7000	156.7000	
15	156.7500	156.7500	1W only
16	156.8000	156.8000	
17	156.8500	156.8500	1W only
18	161.5000	156.9000	RX/TX Shift
19	161.5500	156.9500	RX/TX Shift
20	161.6000	157.0000	RX/TX Shift
21	161.6500	157.0500	RX/TX Shift
22	161.7000	157.1000	RX/TX Shift
23	161.7500	157.1500	RX/TX Shift
24	161.8000	157.2000	RX/TX Shift
25	161.8500	157.2500	RX/TX Shift
26	161.9000	157.3000	RX/TX Shift
27	161.9500	157.3500	RX/TX Shift
28	162.0000	157.4000	RX/TX Shift

Ch No.	Rx Frequency (MHz)	Tx Frequency (MHz)	Status
29	157.450	157.450	
30	157.500	157.500	
31	157.550	157.550	
32	157.600	157.600	
33	157.650	157.650	
34	157.700	157.700	
35	157.750	157.750	
36	157.800	157.800	
37	157.850	157.850	
38	157.900	157.900	
39	157.950	157.950	
40	158.000	158.000	
41	158.050	158.050	
42	158.100	158.100	
43	158.150	158.150	
44	158.200	158.200	
45	158.250	158.250	
46	158.300	158.300	
47	158.350	158.350	
48	158.400	158.400	
49	158.450	158.450	
50	158.500	158.500	
51	158.550	158.550	
52	158.600	158.600	
53	158.650	158.650	
54	158.700	158.700	
55	158.750	158.750	
56	158.800	158.800	
57	158.850	158.850	
58	158.900	158.900	
59	158.950	158.950	

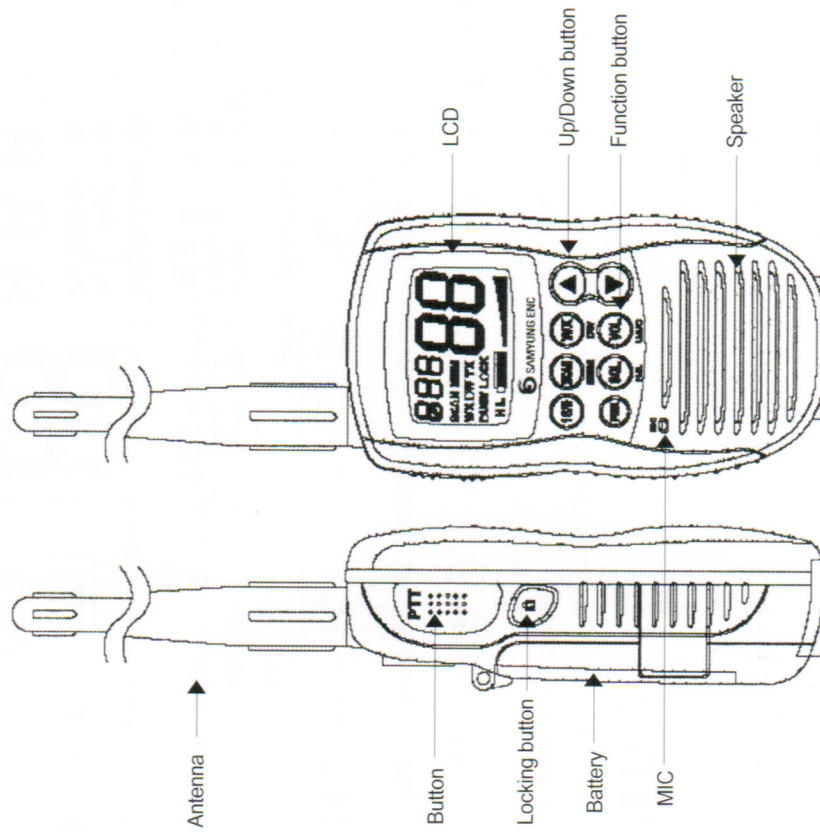
Ch No.	Rx Frequency (MHz)	Tx Frequency (MHz)	Status
60	160.6250	156.0250	RX/TX Shift
61	160.6750	156.0750	RX/TX Shift
62	160.7250	156.1250	RX/TX Shift
63	160.7750	156.1750	RX/TX Shift
64	160.8250	156.2250	RX/TX Shift
65	160.8750	156.2750	RX/TX Shift
66	160.9250	156.3250	RX/TX Shift
67	156.3750	156.3750	
68	156.4250	156.4250	
69	156.4750	156.4750	
70	156.5250	X	Tx Inhibit
71	156.5750	156.5750	
72	156.6250	156.6250	
73	156.6750	156.6750	
74	156.7250	156.7250	
75	X	X	RX/TX Shift
76	X	X	RX/TX Shift
77	156.8750	156.8750	
78	161.5250	156.9250	RX/TX Shift
79	161.5750	156.9750	RX/TX Shift
80	161.6250	157.0250	RX/TX Shift
81	161.6750	157.0750	RX/TX Shift
82	161.7250	157.1250	RX/TX Shift
83	161.7750	157.1750	RX/TX Shift
84	161.8250	157.2250	RX/TX Shift
85	161.8750	157.2750	RX/TX Shift
86	161.9250	157.3250	RX/TX Shift
87	157.3750	157.3750	RX/TX Shift
88	157.4250	157.4250	RX/TX Shift
89	157.4750	157.4750	RX/TX Shift

Ch No.	Rx Frequency (MHz)	Tx Frequency (MHz)	Status
90	157.525	157.525	
91	157.575	157.575	
92	157.625	157.625	
93	157.675	157.675	
94	157.725	157.725	
95	157.775	157.775	
96	157.825	157.825	
97	157.875	157.875	
98	157.925	157.925	
99	157.975	157.975	
100	158.025	158.025	
101	158.075	158.075	
102	158.125	158.125	
103	158.175	158.175	
104	158.225	158.225	
105	158.275	158.275	
106	158.325	158.325	
107	158.375	158.375	
108	158.425	158.425	
109	158.475	158.475	

3.4.4 Weather Frequency

Ch No.	Rx Frequency (MHz)	Status
WX01	162.5500	
WX02	162.4000	
WX03	162.4750	
WX04	162.4250	
WX05	162.4500	
WX06	162.5000	
WX07	162.5250	
WX08	161.6500	
WX09	161.7750	
WX10	163.2750	

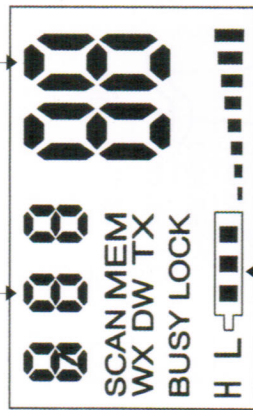
4. External Feature 4.1 Overall



4.2 LCD Display

USA/INT/RUS mode display

Channel mode display

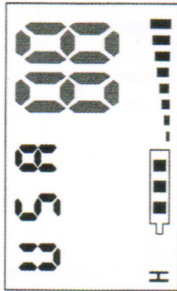


Battery remain display

- M/L : Tx Power display
5W (High) Power (No display), Mid (1W) Power (M-Display), Low(0.5W)Power (L-Display)
- SCAN : Displaying for General SCAN / Important SACN
- MEM : Displaying Channels memorized
- WX : Displaying Weather Channel
- DW : Displaying Dual Watch
- TX : Displaying Tx status
- BUSY : Displaying Rx status
- LOCK : Displaying Locking Button Status.

1. RX/TX Channel Change

Press Up or Down key in RX or RX standby status for changing current RX/TX channels. If press Up or Down key for more than 1 sec., the channel increase or decrease rapidly.

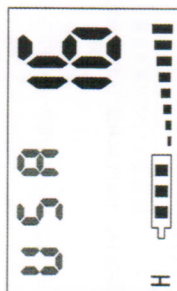


** Display a memory status of changed channel in case of changing channel.

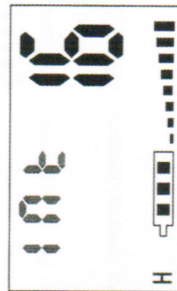
2. USA/International mode change

Press VOL/UI key for more than 2 sec. in RX or RX standby status for changing the area.

USA → International → USA → ...

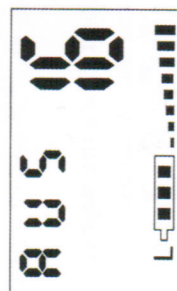


→



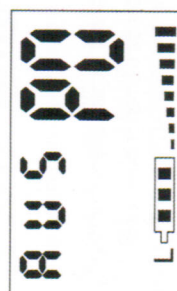
3. Russian mode change

Power on while pressing VOL/UI key and Russia Mode is set or released.



** In case pressing VOL/UI key for over 2 sec. in Russian Mode, it occurs error beep tone.

** 109 channels for memory (Display channel number - P0 to P9 in case of over LCD 100)



Ex) Channel No. 100

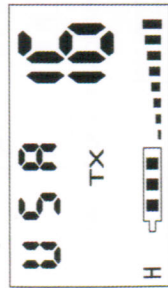
4. VOL/UC Key

Display the level by bar format while displaying VOL when press and release the VOL/UI key shortly within one(1) sec.



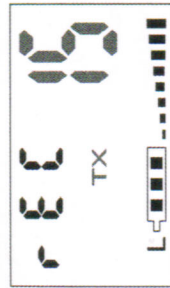
** Go back to previous status if there's no working for three(3) sec.

5. Transmitting



** If press PTT key at weather channel mode, an error beep tone will sound, the channel number and TX icon will blink.

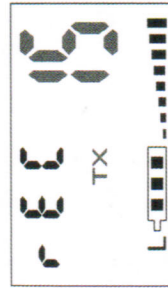
** If press PTT key at TX inhibited channel, an error beep tone will sound, the channel number and TX icon will blink.



** After the channel number and TX icon blinked three times, go back to the normal display.

** Receiving continuously in case of busy and the channel number and TX icon blinked three times.

** If the PTT key is pressed when the battery condition is low, for the first transmission will be allowed and then an error tone will sound with BAT LO displayed. No further transmission will be allowed.

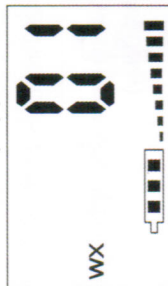


** Go back to channel display after error display for three(3) seconds with error beep tone.

6. Weather Channel

Press WX/DW key shortly within one (1) sec. at Marine/Russia Channel mode that leads and to go into Weather channel mode. Press WX key at Weather channel mode, it goes into Marine/Russian channel mode.

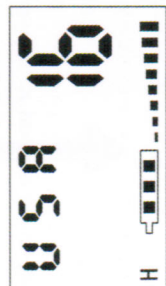
** WX Model display (ex : Weather Channel 01)



** It doesn't work with beep tone if press SCAN, MEM, H/L key at WX mode.

** It doesn't work if VOL/UC key for over 2 sec. at WX mode.

** Marine Mode display (ex : USA Mode Channel 16)



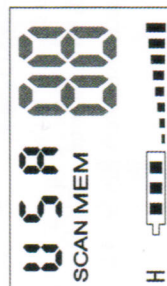
7. SCAN operation

Scan a MEM channel which is being MEM if press and release SCAN / MEM key within one sec.

(Memory Scan)

Ex) MEM Channel : 1, 10, 15, 65, 77

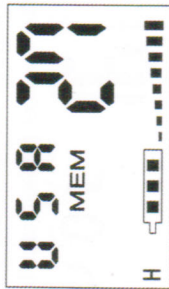
Scan sequence : Ch1 → Ch10 → Ch15 → Ch65 → Ch77 → Ch1 → Ch10 → ...



** No scanning with error beep tone if press Scan Key at WX mode.

** No scanning with error beep tone if there's no MEM channel.

** If there is only one channel in the scan memory, the radio will sound error tone "beep beep" and move to appropriate channel.

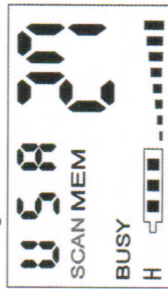


** If there is a traffic on a channel under scanning, the channel will be displayed until the traffic disappeared and then 3 second later, scanning is restarted. (SCAN Delay)

** If the PTT key is pressed while in Scanning Mode,

- While the radio is receiving a traffic or has SCAN Delay time, the radio will transmit through the current channel before the continuing to scan
- While the radio is scanning, the radio will transmit through the start channel(SCAN Home Channel)

** The SCAN indicator will flash when the radio is either receiving, or pausing before the continuing to scan.



EX) In case as the radio has received on channel 27

** You can change the order in which the channel are scanned (increasing or decreasing) by pressing the ▲ or ▼ keys.

** If the 16/DUAL key is pressed briefly(less than one second), the radio will switch from Channel 16 to Channel 9 and back to Scan Mode in turn.

- ** If Scan key is pressed during scanning(including "Receive", "Scan", "Delay time"), Scanning will be stopped on the start channel(SCAN Home Channel)

** Pressing the WX key while scanning will change to Weather Channel Mode.

** Pressing the SQL/UIC key briefly(less than one second) While scanning will change to Squelch Change Mode. The LCD display will show the squelch level(which can be changed with the ▲ or ▼ keys)and the radio will continue to scan.

** Pressing the VOL/UIC key briefly(less than one second) While scanning will change to Volume level Change Mode after stopping scan for a while. The LCD display will show the volume level(which can be changed with the ▲ or ▼ keys)and the radio will continue to scan.

** Pressing the VOL/UIC key for over two seconds While scanning will stop SCAN and change Country Change Mode in turn.

EX) In case being memorized into channel 27.

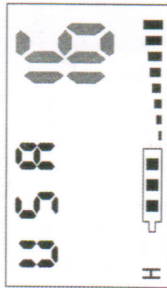
** If the H/L key is pressed while scanning, the radio will make an error tone and the key press will be ignored.

8. Channel 16/9 key

Each time the 16/9 key is pressed briefly, the radio will change from Ch16 to Ch9 and back to the starting channel.

Ex) Used Channel Marine mode USA 61, MEM on, DW on

** 16/9 key push/release



* Change to Ch16

* If radio was on scanning, scanning is paused

* If radio was on Dual Watch Mode, Dual Watch is paused

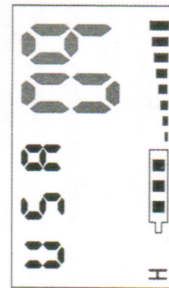
- If ▲ key is press on the above status, Channel will be changed to Ch17 and Ch16 mode will be released (Scan mode and Dual Watch mode will be back)

- If ▼ key is press on the above status, Channel will be changed to Ch15 and Ch16 mode will be released (Scan mode and Dual Watch mode will be back)

- If WX key is press on the above status, Channel will be changed to WX mode and Ch16 mode will be released

- If VLO/UI key is pressed over two seconds on the above status, It will change Country mode and Ch16 mode will be released.

- If WX/DW key is pressed over two seconds on the above status, It will make an Error beep.



* Change to Ch09

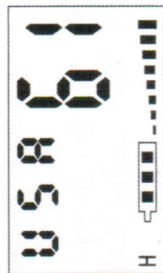
* If radio was on scanning, scanning is paused

* If radio was on Dual Watch Mode, Dual Watch is paused

- If ▲ key is press on the above status, Channel will be changed to Ch10 and Ch09 mode will be released (Scan mode and Dual Watch mode will be back)

- If ▼ key is press on the above status, Channel will be changed to Ch08 and Ch09 mode will be released (Scan mode and Dual Watch mode will be back)

- If WX key is press on the above status, Channel will be changed to WX mode and Ch09 mode will be released



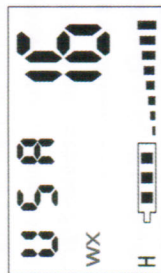
If VLO/UI key is pressed over two seconds on the above status, It will change Country mode and Ch09 mode will be released.

If WX/DW key is pressed over two seconds on the above status, It will make an Error beep

* Change to Main Channel (ex :channel 61) and release 10/09 mode

(Scan mode and Dual Watch mode will be back)

Ex) Used Channel Weather mode Channel 01,DW on



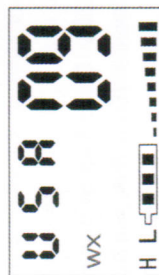
** 16/9 key push/release

*Change to Ch16 (WX icon blink : showing

WX mode is paused)

*If radio was on Dual Watch Mode, Dual Watch is paused

- If ▲ key is press on the above status, Channel will be changed to Ch17 (Pause of Dual Watch mode last)
- If ▼ key is press on the above status, Channel will be changed to Ch15 (Pause of Dual Watch mode last)
- If WX key is press on the above status, Channel will be changed to WX mode and Ch16 mode will be released
- If UI key is pressed over two seconds on the above status, It will change Country mode and Ch16 mode will be released.
- *** In case of Russia Mode, It will make an Error beep.
- If WX/DW key is pressed over two seconds on the above status, It will make an Error beep



Change to Ch09

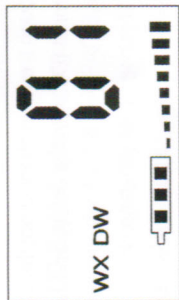
- If ▲ key is press on the above status, Channel will be changed to Ch10 and Ch09 mode will be released (Pause of Dual Watch mode last)
- If ▼ key is press on the above status, Channel will be changed to Ch08 and Ch09 mode will be released (Pause of Dual Watch mode last)
- If WX key is press on the above status, Channel will be changed to WX

mode and Ch09 mode will be released

- If VOL/UI key is pressed over two seconds on the above status, It will change Country mode and Ch09 mode will be released.(WX Mode is released completely)

*** In case of Russia Mode, It will make an Error beep.

- If WX/DW key is pressed over two seconds on the above status, It will make an Error beep.



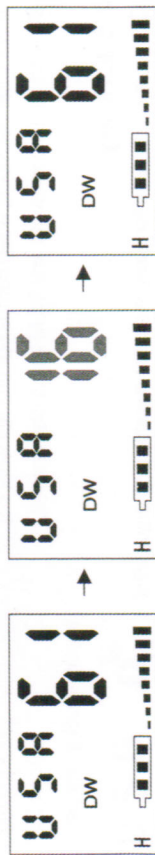
* Change to WX Channel (ex: Channel 01) and Channel 16/09 mode is released (WX icon blink stop) (Dual Watch mode is back)

** Dual Watch

If WX/DW key is pressed over two seconds, "DW" icon will be on and CH16 will be checked for every two seconds.

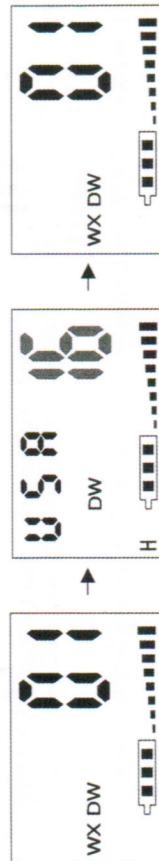
Ex) Marine USA mode Channel 18,DW on

** CH 61(current) -> (2 second later)->Check Ch16 -> Back to Ch 61



Ex) Weather Channel 01 ,DW on

** Weather Ch01 (current) -> (2 second later)->Check Ch16 -> Back to Ch01



** A Channel is received on Dual Watch Mode

1) In case of the received Channel is Ch16

: Keep receiving traffic until the traffic is missed and waiting for three second on Ch16 after the receiving is finished and then the Dual Watch function will be on again if no

further traffic is detected.

2) In case of the received Channel is not the Ch16

CH16 will be being checked for every two seconds and Radio will be on standby with pausing for three seconds after traffic is missed and then the Dual Watch function will be on again

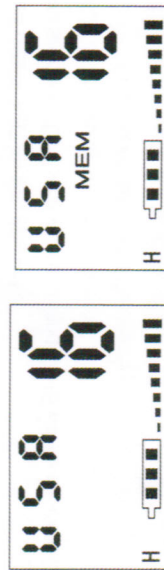
** If the PTT key is pressed to transmit while Dual Watch mode in on

1) While the radio is receiving a traffic or has Dual Watch Delay time , the radio will transmit through the current received channel

2) Beside the above cases , the radio will transmit through the Main channel not the Ch16 After transmission, delay for 3 seconds at transmitted channel (Dual Watch delay) and reset Dual Watch.

9. MEM

Press Scan/MEM for 2 seconds to release or set MEM



*when scan is required, only scan MEM Channel

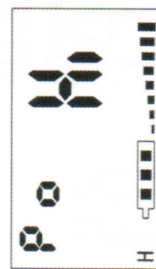
**In WX Channel mode, noise comes out and not work out.

**On scan, noise comes out and MEM key is disregarded.

10. SQL/HL key

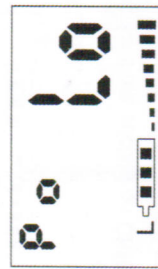
SQL/HL key is pressed for 2 seconds, set transmission power 5W, 1.0W

*High power → 5W icon Display → H



** Displaying 3 seconds , back to Channel No. display

• Low power → 1.0 W icon Display → L



** Displaying 3 seconds, back to Channel No. display

** Because of fixed Low Power(1W), if it is pressed H/L Key channel which fixed as Low Power only channel shouldn't be worked out.

(USA mode Ch 13,17,17,67,77, INT mode Ch 15, 17, RUS mode Ch 13,15,17,20,66,77)

** If H/L Key is pressed Tx inhibit Channel would make a noisy and not work out.

(H/L => No Display)

(WX mode All channel, USA mode Ch, 15,70, INT mode Ch 70, CAN mode Ch 70)

** On scan, If H/L key is pressed, noisy comes out and not work out.

** In WX mode If H/L key is pressed noisy comes out and not work out.

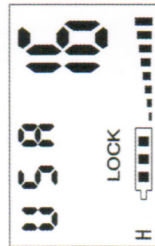
11. LCD Back-Light motion.

Press any key, LCD & Key-PAD Back-Light should be ON.

Keep ON constantly for 10 seconds when Light on.

12. Key-PAD Lock

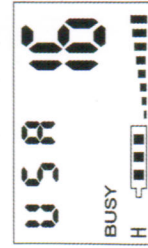
Press Light/Lock key for 2 seconds, Key-PAD Lock would be set or released.



*As Key Lock is operated, any other key should be not working except PTT Button & Light/Lock key.

13. RX mode

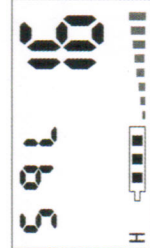
On receiving, Busy icon on



14. Squelch control

Press and release SQL/HL key in shortly (within 1 second), it should move to Squelch level setting mode.

Control squelch control by using UP/Down key



**Level digit (00~88) blinking Level should be displayed as Bar.

* Above condition ,press Up/Down Key to modify Squelch Level.

Squelch Level 00~08

** Level 00 : No matter what signal is existent, Squelch open

* Above condition, press PTT Button or SQL/HL Key above , modified Squelch Level is saved and moves to Channel No. display.

*Above condition, any other key doesn't work out except Up, Down, PTT, SQL/HL key, Power Key.

*Above condition, if any key doesn't be pressed for 3 seconds, , modified Squelch Level is saved and moves to Channel No. display.

15. Radio Initial

With pressed WX/DX key, power on and initialize Memory states.

** Initializing Condition

Country Mode : USA Mode

Last Used Channel : 16

WX mode : release

WX Last Used Channel : 01

Key Lock : release

Dual Watch : release

All Channel MEM : release

Squelch level : 4

Volume Level : 4

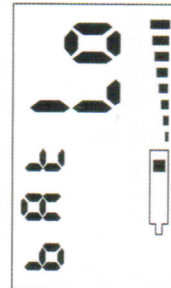
16. Battery Level display & Low Battery display

Check Battery Level to display Battery Level periodically

If Battery Level drops under the ruled voltage, it turns Low Battery.

At Low battery, Display Low Battery according to following picture and display

Error Message one time at 10 seconds.



With sound of noisy , display Message for 3 seconds and moves to Channel No. display

At Low Battery, blink icon and press PTT button trying to transmit.

The first round permits transmission and next round doesn't allow transmission for displaying Low Battery error message.

17. Power on/Off key

Press Power key for 2 sec , Power on

On Power on, If Power key is pressed for 1.5 sec , Power off

On Power on, Being displayed all things with LCD as well as Power on beep tone.