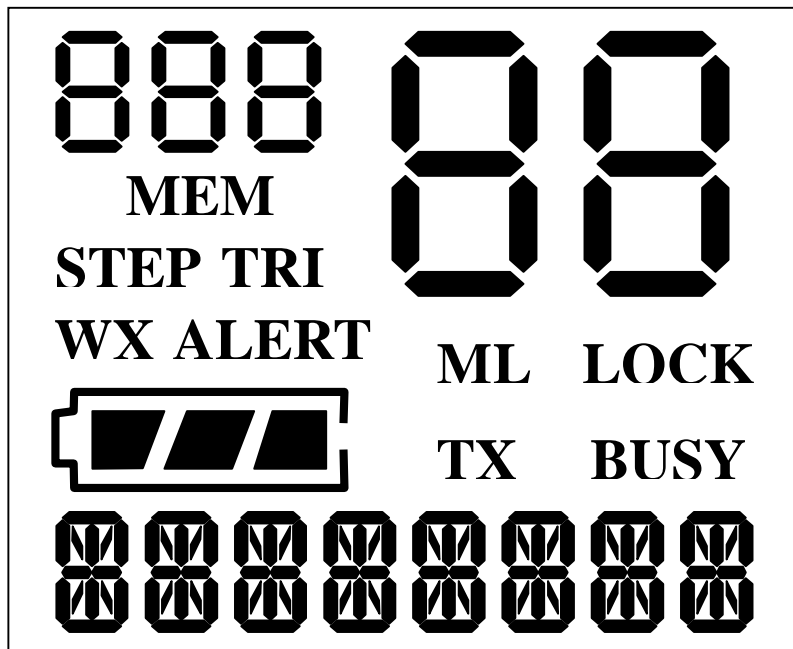



WM 200 Operation Manual Guide

. LCD Description



...  USA / CANADIAN / INTERNATIONAL display segment

...  Channel Number display segment

... **MEM** Each Channel Scan Memory status display icon

... **STEP** Each Channel step status display icon

... **TRI** Triple Watch status display icon

... **WX** Weather mode status display icon

... **ALERT** Weather Alert option status display icon


... **M** Tx Output Power Mid (1W) state display icon

... **L** Tx Output Power Low (0.5 W) state display icon

... **LOCK** Key-PAD Lock status display icon

... **TX** Transmit now display icon

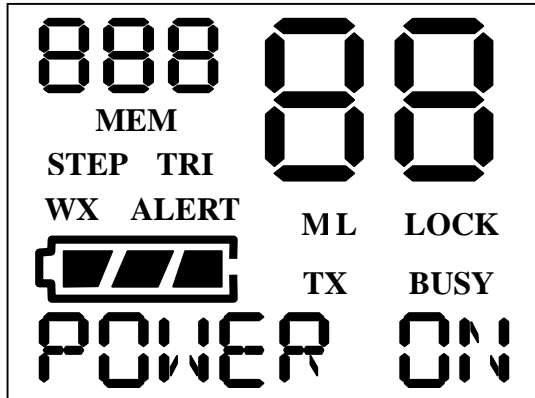
... **BUSY** Receive now display icon

...  Battery Level display icon

...  Channel Name or Radio condition display segment

. Power On

Rotate Power/Volume Knob clockwise till it sounds “tick” to power on.
When Power is on, the last used Country mode (USA / INT / CAN) and last used channel will be displayed with last set Tx Power H/M/L, Key Lock, Squelch Level and etc.



** Power On display

. Volume Control

Rotate volume knob clockwise to increase volume.
To reduce volume, rotate the knob counterclockwise.

. Channel Selection

To change channel, press Up or Down Key.

** If pressing and holding Up or Down Key, channels are changing rapidly.



Ex) Change to Channel 16

** Bottom Line Slide

“DISTRESS,SAFETY,CALLING”

** Bottom Line display

“DISTRESS”

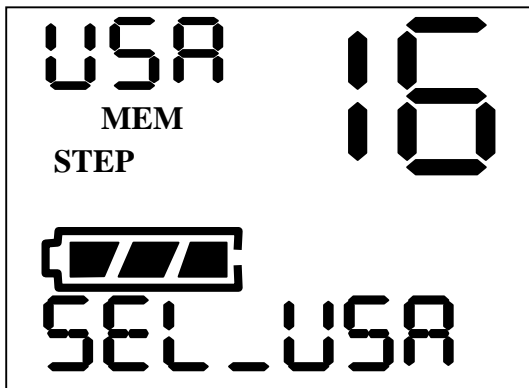
** When channel is changed, the Channel Full Name is scrolled and then it display an abbreviated word.

. USA / CANADIAN / INTERNATIONAL Country mode

Press U/I/C key within 1 sec, then it will change USA → INTERNATIONAL → CANADIAN in turn.

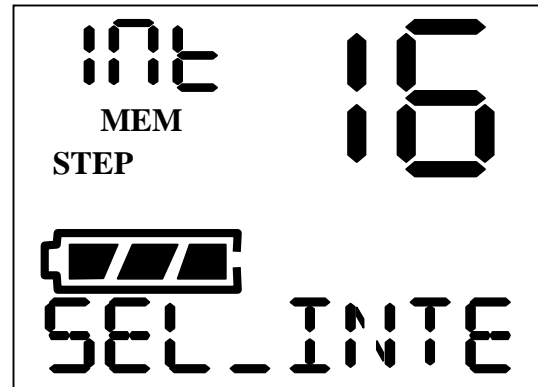
** When Country mode is changed, TX/RX channel is changed to Channel 16.

**** USA mode display**



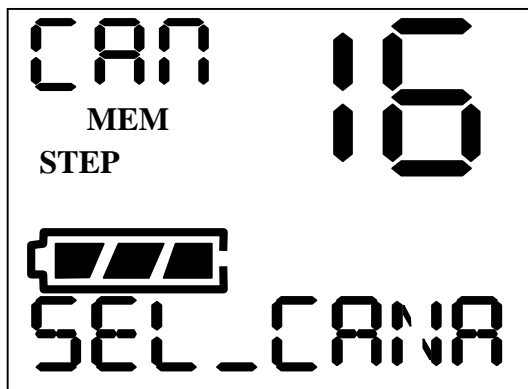
Bottom Line display 3 sec “SEL_USA”

**** INTERNATIONAL display**



“Bottom Line Slide “SEL_INTERNATIONAL”

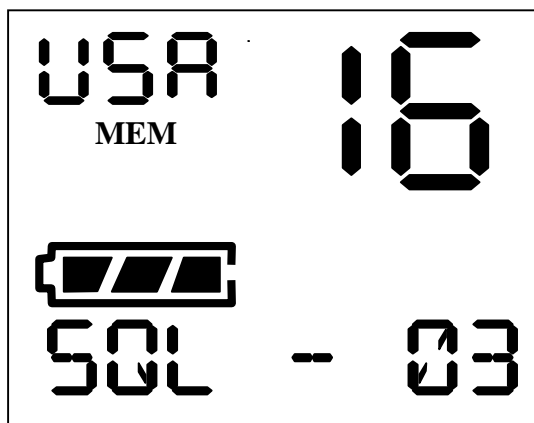
**** CANADIAN display**



Bottom Line Slide “SEL_CANADIAN”

. Squelch Level Setting

Press SQL (U/I/C) Key for over 2 seconds to enter Squelch Level setting mode.



Ex) Squelch Level is 03

Bottom Line display “SQL -- 03”

In the above, squelch level can be adjusted by Up or Down key.

(Total 9 level: 0 ~ 8)

Level 0 is squelch open regardless of RF condition.

On the above, if there is no key is pressed for 3 sec, it goes to Receive stand by mode.
(Channel name display 상태)

. Name display

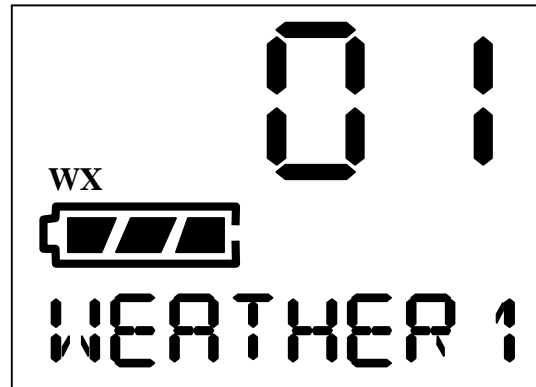
Channel Name will be shown on the display in RX or RX stand-by mode.

** 예) USA mode Channel 16



Bottom Line display “DISTRESS”

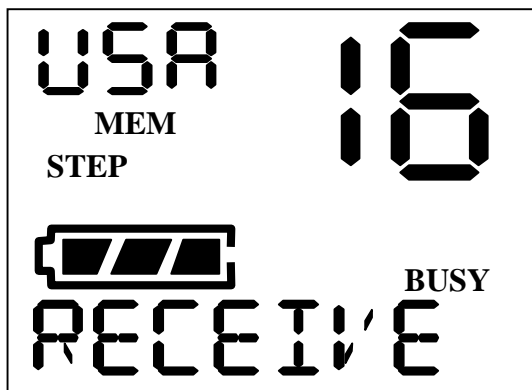
** WX Channel 1



Bottom Line display “WEATHER1”

. Receive operation

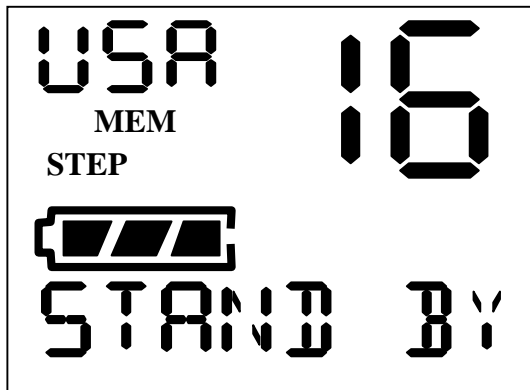
When the radio receives the signal, the display will be as under and the radio will open the speaker to listen to the call.



Bottom Line display 3 sec
“RECEIVE”

** Receive Out operation

When receive signal stops, it will display as under and lock the speaker.

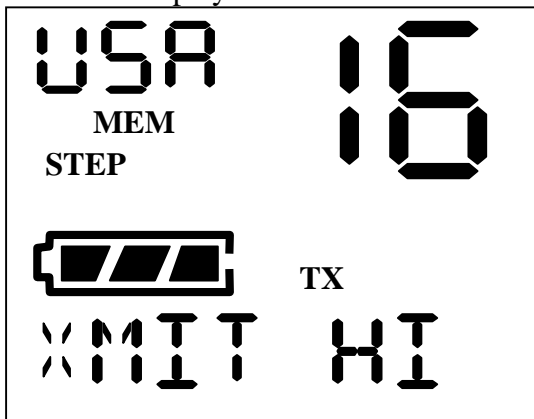


Bottom Line display 3 sec
"STAND BY"

. Transmit operation

Press PTT Button to transmit the signal. If PTT button is released, the radio turns to Receive or receive stand-by mode.

** Transmit display



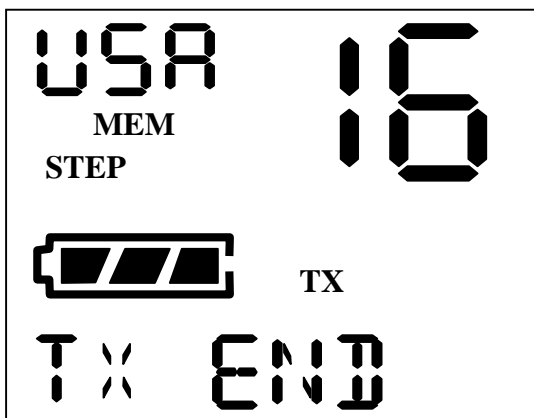
. Tx in Power High Setting
Bottom Line display
"XMIT HI"

. Tx in Power MED Setting
Bottom Line display
"XMIT MED"

. Tx Power Low Setting
Bottom Line display
"XMIT LOW"

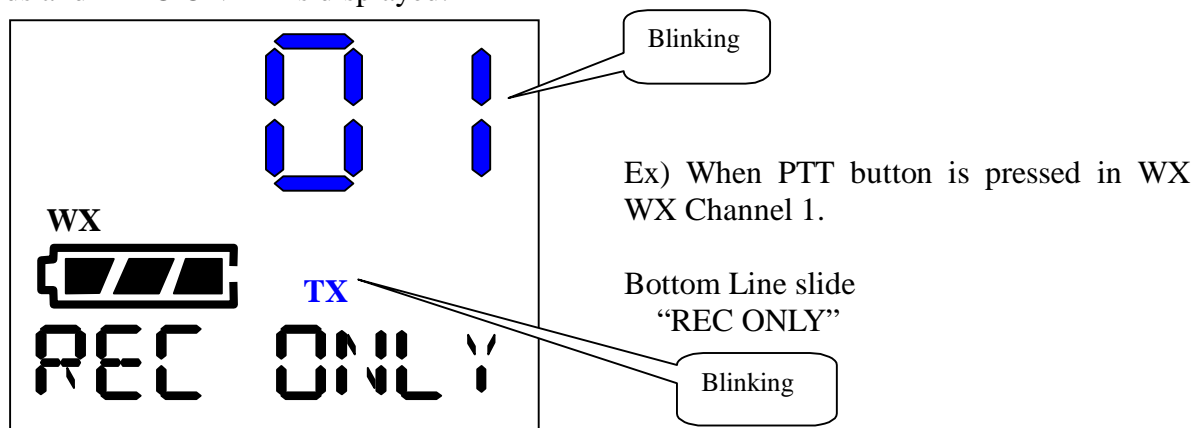
** It display XMIT HI/MID/LOW for 3 sec. and then return to the channel name display.

** Tx End display : When Transmit is ended. (PTT Button release)



. Bottom Line display 3 sec
"TX END"

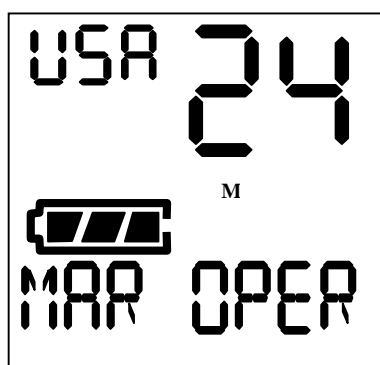
** If PTT button is pressed in WX Channel mode / Tx inhibit Channel, Error beep tone sounds and “REC ONLY” is displayed.



. 16 / 9 Channel

If 16/9/TRI key is pressed shortly(within 1 sec.), the channel changes **Channel 16 → Channel 9 → current Channel** in turn.

** The current Channel display



Bottom Line display
"MAR OPER"

** Channel 16 display



Bottom Line display
"DISTRESS"

** Channel 9 display

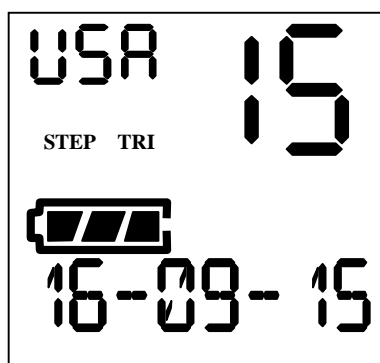


Bottom Line display
"CALLING"

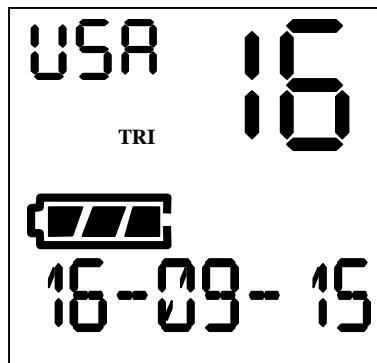
. Triple Watch

If 16/9/TRI key is pressed more than 2 seconds, Triple Watch starts its operation.

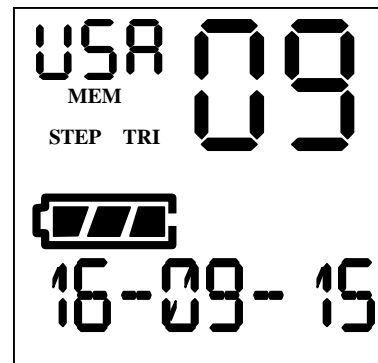
Triple Watch operation is to check Channel 16 and Channel 9 by every 2 seconds and if there is a signal in Channel 16, it stays in Channel 16 until the signal stops. If there is a signal in Channel 9, it stays in Channel 9 checking Channel 16 by every 2 seconds.



Bottom Line display
"16-09-15"



Bottom Line slide
"16-09-15"



Bottom Line slide
"16-09-15"

. SCAN operation

. Memory Channel Scan

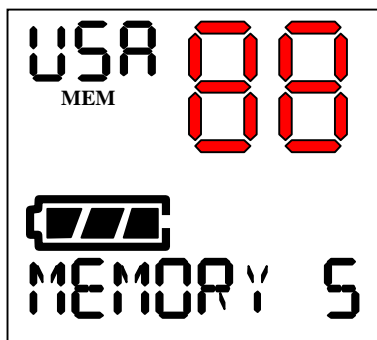
If SCAN key is pressed shortly (within 1 seconds), Memory Channel Scan starts.
(It scans only memorized channels.)

. Priority Channel Scan

Press SCAN key more than 2 sec. to start Priority Channel Scan.
(Memory Channel SCAN + Channel 16 Scan)

In scanning, press SCAN key to stop scanning.

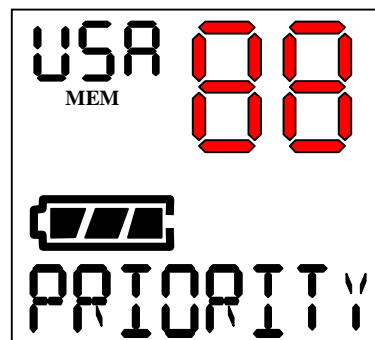
** Memory Channel Scan display



(Scan List display at bottom line)

“MEMORY SCAN 1,6,10,14,71,84”

** Priority Scan display



“PRIORITY SCAN 1,6,10,14,**16**,71,84”

** Channel Scan sequence

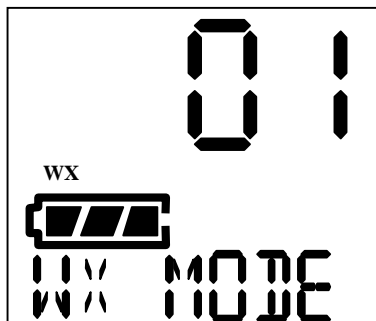
1 → 6 → 10 → 14 →
71 → 84 → 1 → 6 →

1 → **16** → 6 → **16** → 10 → **16** →
14 → **16** → 71 → **16** → 84 →
16 → 1 → **16** → 6 →

. Weather

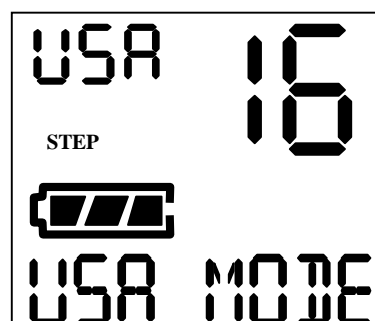
If WX key is pressed shortly (within 1 sec.), the mode changes Weather ↔ Marine mode.

** Weather Mode display



Bottom Line display 3 sec
“WX MODE”

** Marine mode display



Bottom Line display 3 sec
“USA MODE” or “INT MODE” or “CAN MODE”

. WX Alert

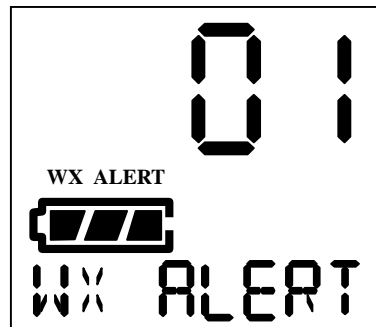
If WX key is pressed more than 2 seconds, WX Alert is enabled or disabled.

** Stand-by on the Marine Channel

** WX Alert Checking



Bottom Line display
"DISTRESS"



Bottom Line display 1 sec
"WX ALERT"

** WX Alert check at Marine mode

It checks alert tone every 7seconds in the last used WX Channel.

** WX Alert check at WX mode

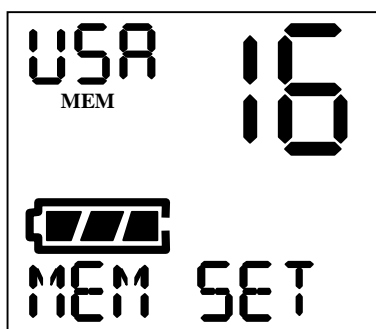
It checks alert tone in the current WX Channel.

If Alert option is on, it would not receive the signal in the current channel until alert tone is detected. (Speaker Mute)

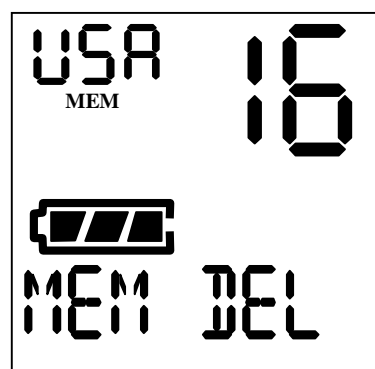
If Alert Tone is detected, it disables Alert option and turns to WX mode sounding Alert detect alarm for 10 seconds. (Max Volume)

. MEMory

If MEM key is pressed shortly (within 1 second), it toggles the current channels' MEMory status.



Bottom Line display 3 sec
"MEM SET"

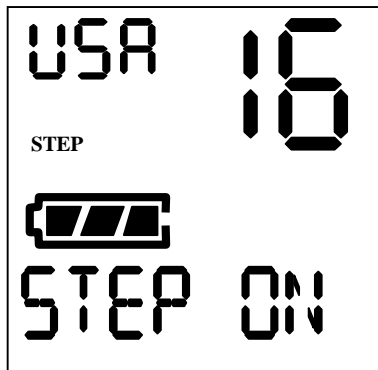


Bottom Line display 3 sec
"MEM DEL"

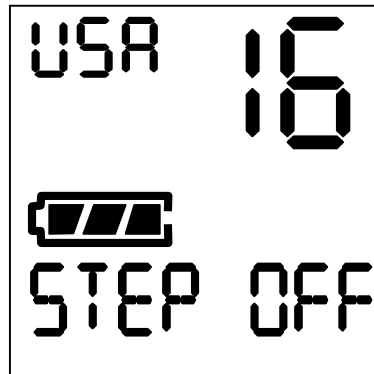
** In Memory Channel Scanning, it scans only memorized channels.

. STEP

If MEM key is pressed more than 2 seconds, STEP icon is toggled.



Bottom Line display 3 sec
"STEP ON"



Bottom Line display 3 sec
"STEP OFF"

.. Step Channel selection

When STEP is on, if Up / Down key is pressed, Channel is changed to STEP-on (Memorized) Channels.

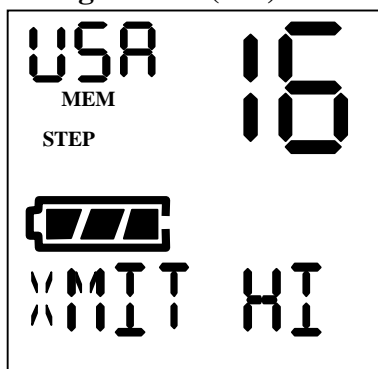
. Tx Output Power Selection

If H/L key is pressed, the TX output power setting will changed in turn as under;

High Power (5W) → Mid Power(1W) → Low Power(0.5W)

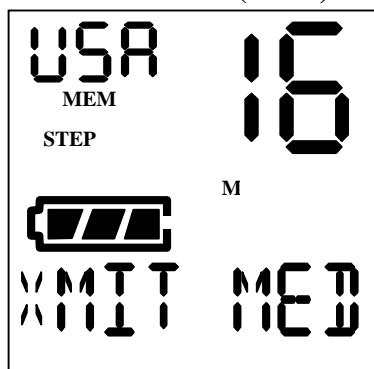
** It won't work in Low Power only Channel , WX Channel, and Tx inhibit Channel.

** High Power(5W)



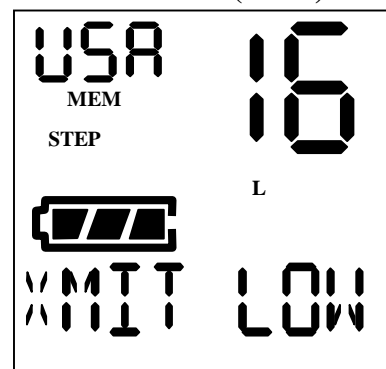
Bottom Line display 3 sec
"XMIT HI"

** Mid Power(1.0W)



Bottom Line display 3 sec
"XMIT MED"

** Low Power(0.5W)



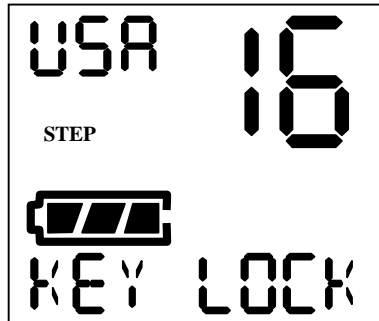
Bottom Line display 3 sec
"XMIT LOW"

. LCD / Key-PAD Back lighting

If any key on the radio is pressed, black light is on. Light-on will keep 10 seconds.

. Key-PAD Lock

If Lock key on the left side of the radio is pressed more than 2 seconds, key lock operation will work as an on/off toggle option.



** PTT button and Lock key won't be locked even key lock is enabled.

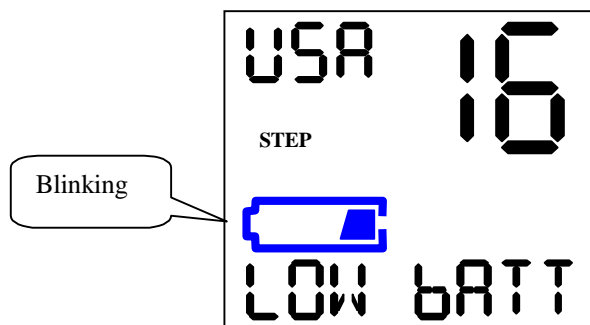
Bottom Line display
"KEY LOCK"

. Battery Level display & Low Battery

The current Battery Level will be checked and displayed.

In case of Low Battery, Low battery warning alarm sounds every 10 second.

** Low Battery display



Bottom Line display
"LOW BATT"

**** U.S.A Frequency Chart**

Ch No.	Rx Freq	Tx Freq	Full Name (Slide Name)	Name
1	156.0500	156.0500	VESSEL TRAFFIC SYSTEM/COMMERCIAL	VTS/COML
2				
3	156.1500	156.1500		
4				
5	156.2500	156.2500	VESSEL TRAFFIC SYSTEM/COMMERCIAL	VTS/COML
6	156.3000	156.3000	INTER-SHIP SAFETY	SAFETY
7	156.3500	156.3500	COMMERCIAL	COMMERCL
8	156.4000	156.4000	COMMERCIAL	COMMERCL
9	156.4500	156.4500	NON COMMERCIAL	NON COML
10	156.5000	156.5000	COMMERCIAL	COMMERCL
11	156.5500	156.5500	VESSEL TRAFFIC SYSTEM	VTS
12	156.6000	156.6000	VESSEL TRAFFIC SYSTEM	VTS
13	156.6500	156.6500	BRIDGE-TO-BRIDGE	BRG-BRG
14	156.7000	156.7000	VESSEL TRAFFIC SYSTEM	VTS
15	156.7500	<i>Inhibit</i>	ENVIRONMENTAL	ENVIRON
16	156.8000	156.8000	DISTRESS,SAFETY,CALLING	DISTRESS
17	156.8500	156.8500	STATE CONTROL	SAR
18	156.9000	156.9000	COMMERCIAL	COMMERCL
19	156.9500	156.9500	COMMERCIAL	COMMERCL
20	157.0000	157.0000	PORT OPERATION	PORT OPR
21	157.0500	157.0500	COAST GUARD ONLY	CC ONLY
22	157.1000	157.1000	COAST GUARD	
23	157.1500	157.1500	COAST GUARD ONLY	CG ONLY
24	161.8000	157.2000	MARINE OPERATOR	MAR OPER
25	161.8500	157.2500	MARINE OPERATOR	MAR OPER
26	161.9000	157.3000	MARINE OPERATOR	MAR OPER
27	161.9500	157.3500	MARINE OPERATOR	MAR OPER
28	162.0000	157.4000	MARINE OPERATOR	MAR OPER

Ch No.	Rx Freq	Tx Freq	Full Name (Slide Name)	Name
60				
61	156.0750	156.0750	COAST GUARD	CCG
62				
63	156.1750	156.1750	VESSEL TRAFFIC SYSTEM	VTS
64	156.2250	156.2250	COMMERCIAL	COMMERCL
65	156.2750	156.2750	PORT OPERATION	PORT OPR
66	156.3250	156.3250	PORT OPERATION	PORT OPR
67	156.3750	156.3750	BRIDGE-TO-BRIDGE	BRG-BRG
68	156.4250	156.4250	NON COMMERCIAL	NON COML
69	156.4750	156.4750	NON COMMERCIAL	NON COML
70	156.5250	<i>Inhibit</i>	DIGITAL SELECTIVE CALLING	DSC
71	156.5750	156.5750	NON COMMERCIAL	NON COML
72	156.6250	156.6250	NON COMMERCIAL (SHIP-SHIP)	NON COML
73	156.6750	156.6750	PORT OPERATION	PORT OPR
74	156.7250	156.7250	PORT OPERATION	PORT OPR
75				
76				
77	156.8750	156.8750	PORT OPERATION (SHIP-SHIP)	PORT OPR
78	156.9250	156.9250	NON COMMERCIAL	NON COML
79	156.9750	156.9750	COMMERCIAL	COMMERCL
80	157.0250	157.0250	COMMERCIAL	COMMERCL
81	157.0750	157.0750	COAST GUARD	USCG
82	157.1250	157.1250	COAST GUARD	USCG
83	157.1750	157.1750	GOVERNMENT	USCG
84	161.8250	157.2250	MARINE OPERATOR	MAR OPER
85	161.8750	157.2750	MARINE OPERATOR	MAR OPER
86	161.9250	157.3250	MARINE OPERATOR	MAR OPER
87	161.9750	157.3750	MARINE OPERATOR	MAR OPER
88	157.4250	157.4250	COMMERCIAL (SHIP-SHIP)	COMMERCL
WX01	162.5500			WEATHER1
WX02	162.4000			WEATHER2
WX03	162.4750			WEATHER3
WX04	162.4250			WEATHER4
WX05	162.4500			WEATHER5
WX06	162.5000			WEATHER6
WX07	162.5250			WEATHER7
WX08	161.6500			WEATHER8
WX09	161.7750			WEATHER9
WX10	163.2750			WEATHR10

** International Frequency Chart

[illegible]

Ch No.	Rx Freq	Tx Freq	Full Name(Slide Name)	Name
60	160.6250	156.0250	MARINE OPERATOR	MAR OPER
61	160.6750	156.0750	MARINE OPERATOR	MAR OPER
62	160.7250	156.1250	MARINE OPERATOR	MAR OPER
63	160.7750	156.1750	MARINE OPERATOR	MAR OPER
64	160.8250	156.2250	MARINE OPERATOR	MAR OPER
65	160.8750	156.2750	MARINE OPERATOR	MAR OPER
66	160.9250	156.3250	MARINE OPERATOR	MAR OPER
67	156.3750	156.3750	BRIDGE-TO BRIDGE	BRG-BRG
68	156.4250	156.4250	NON COMMERCIAL	NON COML
69	156.4750	156.4750	NON COMMERCIAL	NON COML
70	156.5250	<i>Inhibit</i>	DIGITAL SELECTIVE CALLING	DSC
71	156.5750	156.5750	NON COMMERCIAL	NON COML
72	156.6250	156.6250	NON COMMERCIAL	NON COML
73	156.6750	156.6750	PORT OPERATION	PORT OPR
74	156.7250	156.7250	PORT OPERATION	PORT OPR
75				
76				
77	156.8750	156.8750	PORT OPERATION (SHIP-SHIP)	PORT OPR
78	161.5250	156.9250	PORT OPERATION	PORT OPR
79	161.5750	156.9750	PORT OPERATION	PORT OPR
80	161.6250	157.0250	PORT OPERATION	PORT OPR
81	161.6750	157.0750	PORT OPERATION	PORT OPR
82	161.7250	157.1250	PORT OPERATION	PORT OPR
83	161.7750	157.1750	PORT OPERATION	PORT OPR
84	161.8250	157.2250	MARINE OPERATOR	MAR OPER
85	161.8750	157.2750	MARINE OPERATOR	MAR OPER
86	161.9250	157.3250	MARINE OPERATOR	MAR OPER
87	161.9750	157.3750	MARINE OPERATOR	MAR OPER
88	162.0250	157.4250	MARINE OPERATOR	MAR OPER
WX01	162.5500			WEATHER1
WX02	162.4000			WEATHER2
WX03	162.4750			WEATHER3
WX04	162.4250			WEATHER4
WX05	162.4500			WEATHER5
WX06	162.5000			WEATHER6
WX07	162.5250			WEATHER7
WX08	161.6500			WEATHER8
WX09	161.7750			WEATHER9
WX10	163.2750			WEATHR10

** Canadian Frequency Chart

[illegible]

Ch No.	Rx Freq	Tx Freq	Full Name (Slide Name)	Name
60	160.6250	156.0250	MARINE OPERATOR	MAR OPER
61	156.0750	156.0750	COAST GUARD	CCG
62	156.1250	156.1250	COAST GUARD	CCG
63				
64	156.2250	156.2250	MARINE OPERATOR	MAR OPER
65	156.2750	156.2750	SEARCH AND RESCUE	RESCUE
66	156.3250	156.3250	PORT OPERATION	PORT OPR
67	156.3750	156.3750	BRIDGE-TO-BRIDGE	BRG-BRG
68	156.4250	156.4250	NON COMMERCIAL	NON COML
69	156.4750	156.4750	NON COMMERCIAL	NON COML
70	156.5250	<i>Inhibit</i>	DIGITAL SELECTIVE CALLING	DSC
71	156.5750	156.5750	NON COMMERCIAL	NON COML
72	156.6250	156.6250	NON COMMERCIAL	NON COML
73	156.6750	156.6750	PORT OPERATION	PORT OPR
74	156.7250	156.7250	PORT OPERATION	PORT OPR
75				
76				
77	156.8750	156.8750	PORT OPERATION	PORT OPR
78	156.9250	156.9250	INTER SHIP	SHP-SHP
79	156.9750	156.9750	INTER SHIP	SHP-SHP
80	157.0250	157.0250	INTER SHIP	SHP-SHP
81	157.0750	157.0750	COAST GUARD	CCG
82	157.1250	157.1250	COAST GUARD	CCG
83	157.1750	157.1750	COAST GUARD	CCG
84	161.8250	157.2250	MARINE OPERATOR	MAR OPER
85	161.8750	157.2750	MARINE OPERATOR	MAR OPER
86	161.9250	157.3250	MARINE OPERATOR	MAR OPER
87	161.9750	157.3750	MARINE OPERATOR	MAR OPER
88	162.0250	157.4250	MARINE OPERATOR	MAR OPER
WX01	162.5500			WEATHER1
WX02	162.4000			WEATHER2
WX03	162.4750			WEATHER3
WX04	162.4250			WEATHER4
WX05	162.4500			WEATHER5
WX06	162.5000			WEATHER6
WX07	162.5250			WEATHER7
WX08	161.6500			WEATHER8
WX09	161.7750			WEATHER9
WX10	163.2750			WEATHR10

FCC NOTICE

Unauthorized changes or modifications to this equipment may void compliance with FCC Rules.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a marine installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or the following measures:

Consult the dealer or an experienced marine electronics technician for help.

SAFETY TRAINING INFORMATION



Your radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified for use to the General Public.

This radio has been tested and complies with the FCC RF exposure limits for General Population. In addition, your radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

- FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields— RF and Microwave.
- The following accessories are authorized for use with this product. Use of accessories other than those specified may result in RF exposure levels exceeding the FCC requirements for wireless RF exposure.; Belt Clip, Swivel Belt Clip , Slow charger, AC adapter, antenna, Ni-MH battery pack, Cigarette Lighter cord, and alkaline battery tray.



To ensure that your exposure to RF electromagnetic energy is within the FCC allowable limits for general population use, always adhere to the following guidelines:

- **DO NOT** operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed FCC RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or antenna specifically authorized by the manufacturer for use with this radio.
- **DO NOT** transmit for more than 50% of total radio use time ("50% duty cycle"). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the "TX indicator" lights red. You can cause the radio to transmit by pressing the "PTT" switch.
- **ALWAYS keep** the antenna at least 2.5 cm (1 inch) away from the body when transmitting and only use the supplied belt-clip or one that is comparable to it and made of plastic to ensure FCC RF exposure compliance requirements are not exceeded. For hand-held operation, the radio should be held 1 inch from the user's face. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to assure that this radio operates with the FCC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

During transmissions, your radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. **DO NOT** operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.