

USER'S MANUAL

Handheld FM radio

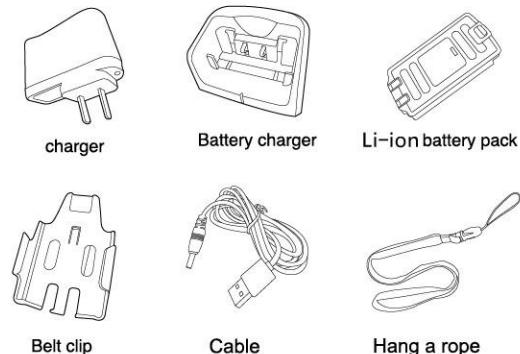
UNPACKING AND CHECKING EQUIPMENT

Carefully unpack the transceiver. We recommend that you identify the items listed in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, file a claim with the carrier immediately.

Supplied Accessories

Item	Qty
Battery charger	1
Li-ion battery pack	1
Belt clip	1
Cable	1
Hang a rope	1
Instruction manual	1

Note: A market code (M2orM4) can be found on the label attached to the package box.

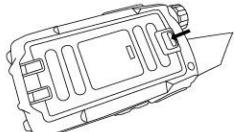


Installing/Removing the Battery Pack

The average life of the supplied NiCd battery pack is 8 hours. Average times are calculated using 5% transmit time, 5% receive time, and 90% standby time.



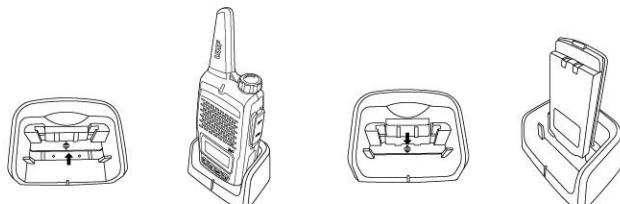
- ◆ DO NOT SHORT THE BATTERY TERMINALS OR DISPOSE OF THE BATTERY BY FIRE.
- ◆ NEVER ATTEMPT TO REMOVE THE CASING FROM THE BATTERY PACK.



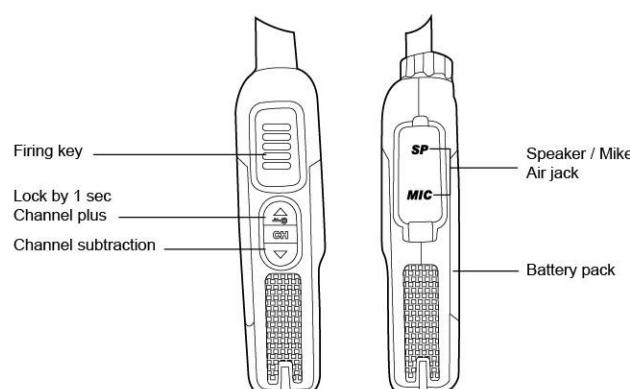
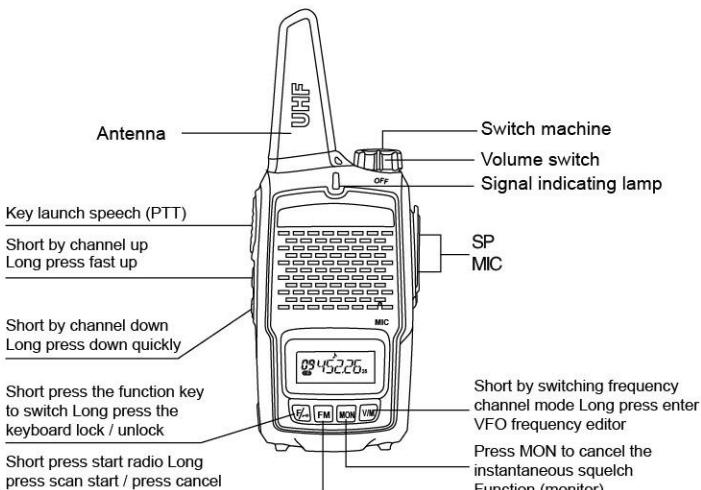
Installing the Belt Clip



The battery charging



BE FAMILIAR WITH THE MACHINE



PREPARATION

Charging the NiMh Battery Pack

The battery pack is not charged at the factory; charge it before use.

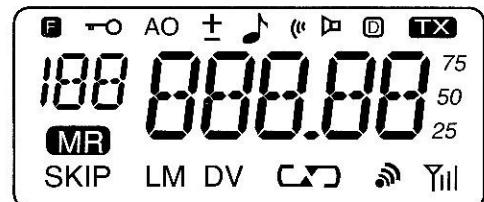
Initially charging the battery pack after purchase or extended storage (greater than 2 months) will not bring the battery pack to its normal operating capacity. After repeating the charge/discharge cycle two or three times, the operating capacity will increase to normal.



- ◆ DO NOT RECHARGE THE BATTERY PACK IF IT IS ALREADY FULLY CHARGED. DOING SO MAY CAUSE THE LIFE OF THE BATTERY PACK TO SHORTEN OR THE BATTERY PACK MAY BE DAMAGED.
- ◆ AFTER RECHARGING THE BATTERY PACK, DISCONNECT IT FROM THE CHARGER. CHARGING THE BATTERY PACK FOR MORE THAN 5 DAYS MAY REDUCE THE BATTERY PACK LIFE DUE TO OVERCHARGING.

Note:

- ◆ The ambient temperature should be between 41 and 104 F (5 and 40°C) while charging is in progress. Charging outside this range may not fully charge the battery.
- ◆ Always switch OFF the transceiver equipped with a NiMh battery pack before charging. Using the transceiver while charging its battery pack will interfere with correct charging.
- ◆ The battery pack life is over when its operating time decreases even though it is fully and correctly charged. Replace the battery pack.



- F: Press the function key
 -O: Key lock
 +: frequency flag
 -: frequency reduction flag
 ♫: Ring opening flag
 (II): Received 60MHz call code flag
 (II D): Analog audio logo
 D: Digital sub audio logo
 TX: Launch flag
 SKIP: Channel scan add flag
 DV: Inverted flag
 (CD): Group open flag
 (Wi-Fi): VOX open flag
 (Till): Receive flag

CTCSS/DCS

Sometimes, you may want to receive a specific person's call, CTCSS/DCS allows you to not receive calls from other people who use the same frequency. CTCSS/DCS is a mute audio signal.

You can choose from 39 groups of CTCSS and 83 groups of DCS frequencies.

BE CAREFUL

CTCSS/DCS doesn't guarantee your personal conversations, It only allows you to use the same frequency as others do not receive the call of others. CTCSS/DCS settings and changes, the need to operate through the PC write frequency software.

CTCSS standard frequency table

1	67.0	11	94.8	21	131.8	31	186.2
2	69.3	12	97.4	22	136.5	32	192.8
3	71.9	13	100.0	23	141.3	33	203.5
4	74.4	14	103.5	24	146.2	34	210.7
5	77.0	15	107.2	25	151.4	35	218.1
6	79.7	16	110.9	26	156.7	36	225.7
7	82.5	17	114.8	27	162.2	37	233.6
8	85.4	18	118.8	28	167.9	38	241.8
9	88.5	19	123.0	29	173.8	39	250.3
10	91.5	20	127.3	30	179.9	40	254.1

Digital sub audio frequency table (1):

1	023N	23	152N	45	343N	67	606N
2	025N	24	155N	46	346N	68	612N
3	026N	25	156N	47	351N	69	624N
4	031N	26	162N	48	364N	70	627N
5	032N	27	165N	49	365N	71	631N
6	043N	28	172N	50	371N	72	632N
7	047N	29	174N	51	411N	73	654N
8	051N	30	205N	52	412N	74	662N
9	054N	31	223N	53	413N	75	664N
10	065N	32	226N	54	423N	76	703N
11	071N	33	243N	55	431N	77	712N

Press to 18.STEP - step frequency - by

In step 50, select V ^ 30, 25, 20, 12.5, 10, 5.

Press 19.OPMSG - boot display mode - ON display custom characters

(Twentieth settings, OFF: full screen display)

Press 20 MSG - set the boot display custom characters -

5 character custom editing MON key switch character.

By 21 NAME - channel name display switch - ON for the open, OFF for the closure of.

By 22 EDIT - channel name character editor -

5 character custom editing MON key switch character.

Boot initialization settings mode

Press the letter V/M key to boot, switch channel rate mode

Hold down the PTT+F key to boot, reset and remove the channel.

Basic operation

1. press the V/M key, the switching frequency channel mode.
Press the V/M button, enter the VFO Quick Edit frequency.
2. the side key 1, to add. Long press up fast.
3. side key 2, down. Long press down quickly.
4. press MONI to cancel the instantaneous squelch function (listening)
5. alarm function:
Hold down the MONI key, immediately press the PPT button for 0.5 seconds, start the alarm function. Then take the PTT exit alarm.
6. VFO (Quan Pin) frequency editor:
1 press the V/M key to switch to the VFO state
2 press up and down key, frequency according to step into and add and subtract, 3 long press the V/M button until noon a "drop", while second digit flashing release frequency. Connect up and down keys, you can edit the bit number. Press FM key, MONI key can be cut to the editor or the next number.
4 more steps to complete the editing, again long press V/M to confirm the preservation. If not saved, then short press V/M key to exit.
- 7 channel storage:
1 press the V/M key to switch to the VFO state. (frequency mode)
2 short press the MENU key, the screen shows "F" icon.
3 long press the V/M button until noon a "drop", and the "F" icon flashing, release the button.
4 up and down to select the channel number to be stored. If the currently selected channel has data, The channel number flashes, if the channel is not flash.
5 again long press V/M key, confirm the save exit. Short press V/M does not save exit.
8 other options feature set:
1 short click "F" display "F" icon.
2 press up and down key to select the option to set.
3 press "F" key to enter the next level settings, press the key to change the value.
4 press "F" to confirm the return to the last level, according to the V/M does not save the return on the first menu.

Operation and description of the menu

Press to 1.VOICE - language newspaper in English to switch - by choice, CN for chinese, EN for the English OFF for the inter language closed.

Press 2. POW - high or low power selection - by choice, HIGH for high power, LOW for low power.

Press 3. SQ L - squelch level -- by choice, 1-9, 1 for the lowest sensitivity, 9 for the highest sensitivity.

According to 4.VOX, voice grade according to selection, select 1-9, 1 for the lowest 9 microphone microphone sensitivity, the highest sensitivity.

Press 5.BEEP - button - press the choice, OFF for the button tone off, ON for the opening.

Press 6.SAVE - power saving switch - press Select, OFF is off, ON is turned on. According to 7.TOT - launch time out - by choice, 60 seconds, 120 seconds, 100 seconds, OFF to close.

According to 8.SCAN - scan mode - by choice, CO (carrier), TO (time), SE.

According to 9.KEYBO - automatic keyboard lock switch - by choice, MAN to close, AUTO to open.

According to 10.ROGER (6 features useless to be upgraded)

According to the 11.LED backlight control, ON for normally open, AUTO for automatic, OFF to close.

Press 12.BUSY busy channel lock, ON is turned on, OFF is closed.

According to 13 N/W wide. The WIDE ARRO band.

According to the 14.SFE frequency difference frequency, one one for the frequency difference one one, for the frequency difference plus OFF to close.

By 15.DIFFR frequency difference frequency, 99.995 - 0.005

Press 16.R-CTC to receive sub tone settings - press the FM button to select the receive audio.

Press 17.T-CTC to launch sub tone settings - Press - press FM button to select the launch of sub audio

SPECIFICATIONS

Unity Section	
Frequency range	462MHz-468MHz
Rated Voltage	DC3.7V(Li-ion battery)
Memory channel	16channels
Antenna disposition	inductively loaded antenna
Antenna impedance	50Ω
Working manner	same frequency single operation or different frequency single operation
Ground method	negative pole
Volume	96x55x22mm
Launching Parts	
Output power	2W/ 0.5W
Modulation mode	frequency modulation
Maximum frequency deviation	≤ ± 5KHz
Remanent radiation	<-60dB
Preemphasis character	per fold frequency patch 6dB
Emission current	≤1000mA
Receiving Parts	
Sensitivity	<0.16 μ V(12dB SINAD)
Silent sensitivity	<0.2μ V
Intel modulation anti-interference	50dB
Audio frequency power	>300mW
Receiving current	<100mA
Silent waiting	20mA

- Specifications are subject to change for improvements without notice.

Warning:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
SAR tests are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. Before a new model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the exposure limit established by the FCC. Tests for each product are performed in positions and locations as required by the FCC.

For body worn operation, this model phone has been tested and meets the FCC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that contains no metal.

To maintain compliance with the FCC's RF exposure guidelines, hold the transmitter and antenna at least 1 inch (2.5 centimeters) from your face and speak in a normal voice, with the antenna pointed up and away from the face. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

In order to comply with the FCC RF exposure requirements, the antenna installation must comply with following. Users must be fully aware of the hazards of the exposure and able to exercise control over their RF exposure to qualify for the higher exposure limits.

Your wireless hand-held portable transceiver contains a low power transmitter. This product sends our radio frequency (RF) signals when the Push-to-Talk (PTT) button is pressed.
The device is authorized to operate at a duty factor not to exceed 50%.

FCC licensing Information

This device operates on GMRS frequencies which require a license from the Federal Communications Commission[FCC]for business, personal, education and recreational use. To obtain forms, call the FCC forms hotline at: 1-800-418-3676 or go to <http://www.fcc.gov>.

For questions concerning GMRS licensing, contact the FCC at 1-800-CALL-FCC (1-888-225-5322)

Channel Frequencies and Code Charts

GMRS Channel Frequencies	Channel	Frequency (MHz)	
1	462.5500	12	467.6250
2	462.5750	13	467.6500
3	462.6000	14	467.6750
4	462.6250	15	467.7000
5	462.6500	16	467.7250
6	462.6750		
7	462.7000		
8	462.7250		
9	467.5500		
10	467.5750		
11	467.6000		