THANK YOU!

We are grateful that you chose our digital radio.

We believe this easy-to-use transceiver will provide dependable and reliable communication to personal operating at peak efficiency. The transceivers incorporate the latest in advanced technology. As a result, we feel strongly that you will be pleased with the quality and features of this product!

Product safety and RF Exposure for handheld two way radio:

⚠	Before using this two way radio, please read the manual which contains important operating instructions for safe usage, RF Energy Awareness, control information and operational instructions for compliance with RF Energy Exposure limits in applicable national and international standards, and also read the operational instructions for safe use.

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FOR YOUR SAFETY

Read these simple guidelines. Not following them may be dangerous or illegal. Read the complete user manual for further information.

SWITCH ON SAFELY

Do not switch the device on when transceiver use is prohibited or when it may cause interference or danger.

ROAD SAFETY COMES FIRST

Obey all local laws. Always keep your hands free to operate the vehicle while driving. Your first consideration while driving should be road safety.

INTERFERENCE

All wireless devices may be susceptible to interference, which could affect performance.

SWITCH OFF IN HOSPITALS

Follow any restrictions. Switch the device off near medical equipment.

SWITCH OFF IN AIRCRAFT

Follow any restrictions. Wireless devices can cause interference in aircraft.

SWITCH OFF WHEN REFUELING

Do not use the device at a refueling point. Do not use near fuel or chemicals.

FOR YOUR SAFETY

SWITCH OFF NEAR BLASTING

Follow any restrictions. Do not use the device where blasting is in progress.

USE SENSIBLY

Use only in the normal position as explained in the product documentation. Do not touch the antenna unnecessarily.

QUALIFIED SERVICE

Only qualified personnel may install or repair this product.

ENHANCEMENTS AND BATTERIES

Use only approved enhancements and batteries. Do not connect incompatible products.

WATER-RESISTANCE

Your device is not fully water-resistant. Keep it dry.

BACK-UP COPIES

Remember to make back-up copies or keep a written record of all important information.

CONNECTING TO OTHER DEVICES

When connecting to any other device, read its user manual for detailed safety instructions. Do not connect incompatible products.

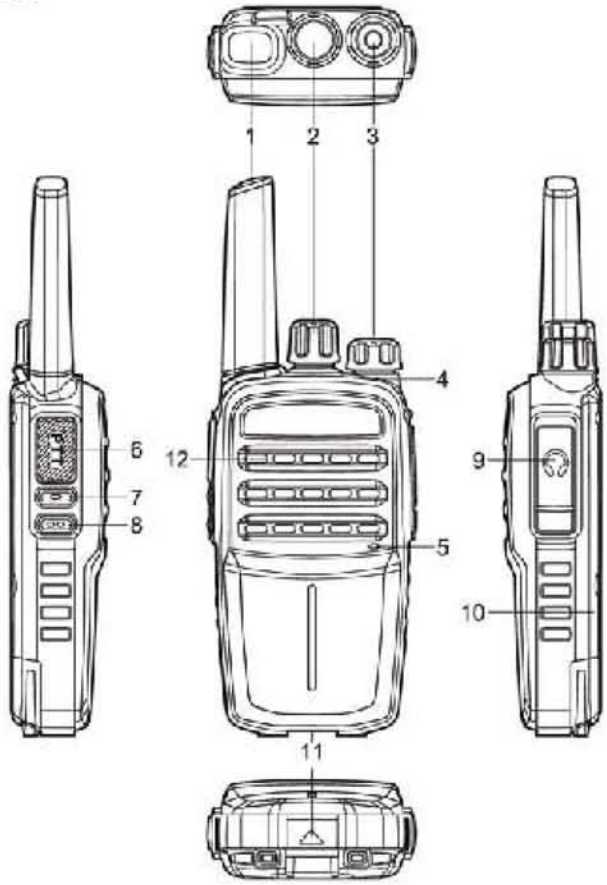
UNPACKING AND CHECKING EQUIPMENT

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.

Packing List

DESCRIPTION	QUANTITY
Unit Transceiver	1
Li-ion Battery Pack	1
Charger	1
Adaptor	1
Belt Clip	1
User Manual	1
Hand Strap	1

Orientation



1	Antenna	7	Programming Key (SK1)
2	Channel Selector Knob	8	Programming Key (SK2)
3	Radio On-Off/Volume Control Knob	9	Accessory Jack
		10	Battery Pack
4	LED Indicator	11	Battery Latch
5	Microphone	12	Speaker
6	PTT Switch (PTT)		

LED Indicator

	LED Indication	Radio status
●	LED glows red/orange	Transmitting.
✹	LED flashes red	Low power.
●	LED glows green	Receiving.
✹	LED flashes orange	Scanning.

Battery Capacity Indicator

Upon press the programmed Battery Capacity Indicator key, the transceiver will indicate the current battery level by voice.

Audible Indicator	Battery Level
"4"	High.
"3"	Satisfactory.
"2"	Low.
"1"	Very Low.
Please charge the battery	Under the low battery threshold, please charge the battery at once or replace a new battery.

Assembling the Battery Pack

1. To assemble the battery pack, position the two round bulges on the top of the radio body correspondingly, then press the bottom part of battery pack towards the radio and lift up the battery latch until a "click" sound is heard.
2. To disassemble the battery pack, pull outward the battery latch, then lift the bottom part of battery pack from the radio body.

Assembling the Belt Clip

1. Screw the belt clip at the back of the battery to assemble.
2. Screw counter clockwise the screws at the back of the battery to remove.

Assembling the Accessories

1. Open the cap of accessory jack.
2. Insert the accessories (such as: earphone/programming cable) plug into the earphone jacks.

Charging the Battery Pack

Please charge the battery pack as follows:

1. Slide the battery pack or transceiver with a battery pack into the desktop charger.
2. Make sure the battery pack contacts are in contact with the charging terminals.
3. The charging LED lights red and charging begins.

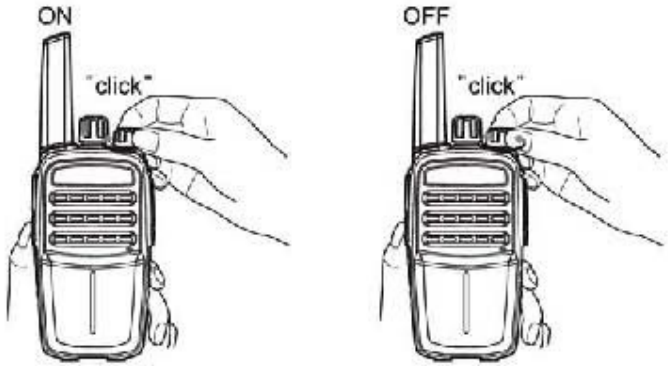
4. After charging about 4 hours, when the light turns to green, it means the battery pack is fully charged.
5. Then you can take off the battery pack or transceiver with the battery pack and use it.

Caution:

- Make sure the radio is powered off before charging and do not use the radio during charging.
- Read the Safety Information Booklet in advance to get necessary safety information.

Switch Power On/Off

1. Power ON: Rotate the **[Power On-Off/Volume Control]** knob clockwise until a "click" is heard.
2. Power OFF: Rotate the **[Power On-Off/Volume Control]** knob counter-clockwise until a "click" is heard.



Adjusting the Volume

After turning the radio on, rotate the **[Power On-Off/Volume Control]** knob clockwise to increase the output sound volume, or counter-clockwise to decrease it.

Selecting a Channel

There are 22 channels (include analog and digital channel)

Rotate the **[Channel Selector]** knob clockwise

to increases the number and counter clockwise to decreases it.

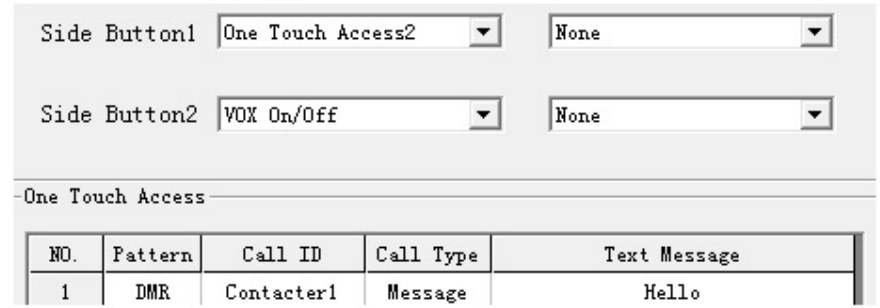
Available features of this radio are listed below. As to the operation of private call, group call and calls on analog channels, please refer to the above "Call" chapter. The other features should be programmed as default feature of [SK1] and [SK2] key by the dealers, please question with the dealer for more operation details.

Feature Type	Description	Detailed Feature
Common Features	Zone	There is a group of channels in each zone, the radio supports 3 zones with a maximum of 22 channels.
	Scan	To scan the list of current channels, a mixed channel between analog and digital channel can't be scanned.
	EMG Alert	Allows you to set up an emergency call with your partner or control center.
	VOX	The feature allows you to transmit hands-free with the transceiver or thru a headset.
	Busy Channel Lockout	This feature will not allow the user to transmit as long as the radio is receiving another signal.

Feature Type	Description	Detailed Feature
Common Features	Time-Out Timer	The feature limits each transmission time and sounds a warning beep if over setting time. If would like to continue for the transmission, please transmit after the preset time.
	Adjust Squelch Level	The squelch suppress the audio output of a receiver in the absence of a sufficiently strong desired input signal. The higher level of squelch, the strong signal will be requested.
	Battery Saver	When the radio standby without any operation over a certain time, battery saver feature will be automatically turned on.

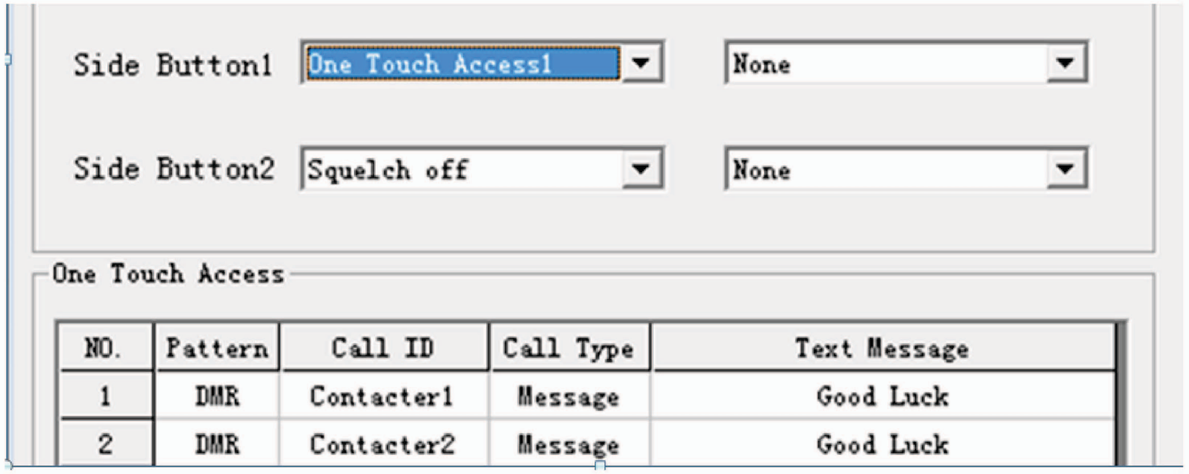
SMS on Digital Model

Through the programmable software, the "One Touch Access" set, you can send SMS function, as shown below:



Special note

1. Digital modulation can not make audio transmissions, but you can send text messages. Through the programmable software, the "One Touch Access" set, you can send SMS, as shown as below:



2. Digital modulation launch time is less than 1s, launch interval greater than 30s;
3. Short text messages up to 80 bytes, only the sending function.

Channel No.	Center frequency (MHz)
1	462.5625
2	462.5875
3	462.6125
4	462.6375
5	462.6625
6	462.6875
7	462.7125
8	467.5625
9	467.5875
10	467.6125
11	467.6375
12	467.6625
13	467.6875
14	467.7125
15	462.5500
16	462.5750
17	462.6000
18	462.6250
19	462.6500
20	462.6750
21	462.7000
22	462.7250

CTCSS

CTCSS Standard Frequency Table

1 - 63.0	14 - 100.0	27 - 156.7	40 - 196.6
2 - 67.0	15 - 103.5	28 - 159.8	41 - 199.5
3 - 69.3	16 - 107.2	29 - 162.2	42 - 203.5
4 - 71.9	17 - 110.9	30 - 165.5	43 - 206.5
5 - 74.4	18 - 114.8	31 - 167.9	44 - 210.7
6 - 77.0	19 - 118.8	32 - 171.3	45 - 218.1
7 - 79.7	20 - 123.0	33 - 173.8	46 - 225.7
8 - 82.5	21 - 127.3	34 - 177.3	47 - 229.1
9 - 85.4	22 - 131.8	35 - 179.9	48 - 233.6
10 - 88.5	23 - 136.5	36 - 183.5	49 - 241.8
11 - 91.5	24 - 141.3	37 - 186.2	50 - 250.3
12 - 94.8	25 - 146.2	38 - 189.9	51 - 254.1
13 - 97.4	26 - 151.4	39 - 192.8	

TROUBLESHOOTING GUIDE

Problem	Solution
No power.	• The battery pack may be dead, recharge or replace the battery pack. • The battery pack may not be installed correctly, remove the battery pack and install it again.
Battery power dies shortly after charging.	• The battery pack life is finished, replace the battery pack with a new one. • The battery pack strength may be too low, please recharge or replace the battery pack.
Cannot talk to or hear other members in your group.	• Make sure you are using the same frequency and CTCSS /Color code as the other members in your group. • Other group members may be too far away. Make sure you are within range of the other transceivers.
Other voices (besides group members) are present on the channel.	• Change the CTCSS /Color code setting. Be sure to change the tone/code on all transceiver in your group.
No voices or only little volume voice.	• Please make sure to adjust the volume suitable value. • Maybe the Mic is out of work, send to the dealers to check.
The noise is too loud.	• You may be too far away from other members. Move towards other members. • If you open the noise squelch, please close it.

CARE AND CLEANING

To guarantee optimal performance as well as a long service life of your radio, please follow the tips below.

Radio Care

- Do not pierce or scrape the radio with any edged instruments or hard objects.
- Keep the radio far away from substances that can corrode the electronic circuit.
- Do not hold the radio by its antenna or headset cable directly.
- Attach the accessory jack cover when the radio is not in use.

Radio Cleaning

- Clean up the dust and fine particles on the radio surface with a clean and dry lint-free cloth or a brush regularly.
- Use neutral cleanser and a non-woven fabric to clean the keys, control knobs and front case after long-time use. Do not use chemical preparations such as stain removers, alcohol, sprays or oil preparations, so as to avoid surface case damage. Make sure the radio is completely dry before use.

Caution: Power off the radio and remove the battery before cleaning.

FCC 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 a 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 or each product are performed in positions and locations as required by the FCC.

For body worn operation, this device 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 out 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%.