Two Way Radio

TC328Plus

USER'S MANUAL

CONTENT

SPECIFICATION

Frequency Range	400-480MHz
Power	High Power: 4.5W; Midium Power:4.0W; Low Power: 1.0W
Channel Spacing	12.5 kHz
Antenna Impedance	50Ω
Operating Temperature	-10℃ ~ 45℃
Operating Voltage	DC7.4V
IP Protection Level	IP67
Dimension (Excluding antenna)	126*58*36mm (Not including knob and antenna)

* Frequency range take different variations according to the type of device you access because a radio designated for business use must comply with local rules, for example, in EU member states. If the type is subject to restrictions on putting into service or to requirements for authorization of use in your local district, your dealer or system administrator may set the operating frequency, and you cannot change the frequency. Please contact them for more information.

Note: To prevent radio interference caused by end-user transmissions on unauthorized frequencies, a user cannot modify channels preset by the manufacturer, equipment supplier, service technician, or maintenance personnel.

TRANSMITTER

Modulation Type	FM,4FSK
Free Time Slot Power	≤-57dB
Audio Distortion	≤5%
Modulation BER(Bit Emor Rate)	≤3%

TRANSMITTER

Sensitivity	≤-122dBm@SINAD=12dB
Adjacent Channel Selectivity	≥70dB
Inter-modulation	≥65dB
Block	≥84dB
S/N	45dB
Audio Output Power	750mW
Audio Distortion	≤5%

Main Functions and Features

● English/Chinese Voice Prompts
● Monitor
● AES256
● High/Middle/Low Power Adjustable
● VOX
● TOT
● Power Save/Low Power Alarm
● Battery Indicator
● Talk around
● Lone Worker
● Scan
● Emergency Alarm
● All Call/Group Call/Private Call
● Radio Kill/Active
● One Key Call
● Noise Canceling

Unpacking and Checking Equipment

Welcome to use our Two Way Radio. Before use, we suggest you:
● Check whether the packing box has been damaged.
● Please unpack the box carefully, and check if it includes all items supplied below. If any item is found missing or damaged during shipment, please notify your dealer.

TRANSMITTER

Item	Quantity
Two Way Radio	1
Antenna	1
Battery	1
Battery Charger	1
Type-C Charging Cable	1
Belt Clip	1
Hand Strap	1
User Manual	1

Charging the Battery

Please use our company's official charger, and follow the steps below to charge the battery.
1.Connect the charger to the power supply socket.
2. Install the battery or the transceiver with the battery, then the light turns red, indicating that the battery is being charged.
3. If the indicator lights up green, charging is completed.
4.Unplug the charger from the power supply socket, and remove the battery.

Battery Information

The battery is not fully charged in the factory, please charge it before use.
The battery may not reach its normal operating capacity when charging for the first time after purchase or extended storage (more than 2 months). After fully charged/discharged two or three times, the operating capacity will reach the best performance.

> ⚠ **Please do not continue charging when the battery is fully charged, otherwise, it will shorten the life of the battery.**
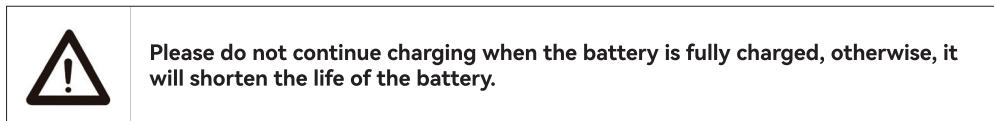
Note

1.The ambient temperature should be between 5℃ and 40℃ while charging. Otherwise, the battery can not be fully charged. Please prepare a spare battery to use during cold weather. Don't throw away batteries that can not be used at this time. They may be used at normal temperatures.
2.When the battery contacts are dirty or stained, it will affect charging use. Please wipe the battery clean and then start charging.
3.Before charging, turn off the radio. Or, it will affect the normal charging.
4.When the battery or radio is wet, do not charge. Please dry it before use.
5. If the battery capacity can not return to normal after being charged properly, its life is ended. Please replace it.

Battery Type

Please charge our company's official battery. Using other battery types may cause explosions and injure people.

Safety Precautions

1. Do not throw batteries into the fire.
2. Do not disassemble the battery pack housing by yourself.

Battery storage

1. The battery has the phenomenon of self-discharge. Therefore, if the battery is not used for a long, please charge it fully before storage and charge the battery after storing it for periods. This is to avoid battery damage due to excessive self-discharge.
2. Please pay attention to the temperature and humidity of the battery storage environment. Keep the battery in a cool, dry condition room to decrease battery self-discharge.

Install/Remove Accessories

Install/Remove Battery

Note:
● Don't short-circuit the battery terminal and throw the battery into the fire.
● Don't remove the battery shell.
● Don't install the battery in dangerous environments. The fire will cause an explosion.

Install: Put the battery in the battery socket. Push the battery forward and hear a click sound, the battery is installed.
Remove: To remove the battery, turn off the radio first. Push the battery clip and the battery down until the battery leaves the radio.

Install Antenna

Hold the antenna base and rotate it clockwise to the top port until it rotates it tightly.

Install/Remove Belt Clip

If you need, screw the supplied belt clip to the battery back for easy carry.
Remove the 2 screws when removing the belt clip.

Install Radio Hand Strap
Thread the radio strap through the loop in the middle of the radio.

Getting Started

Channel knob

Antenna

Volume/Power knob

Emergency Alarm Button

Indicator

Microphone

Speaker

Display

Charging indicator

Type-C charging port

	PTT key
	PF1 key
	PF2 key

SP/MIC
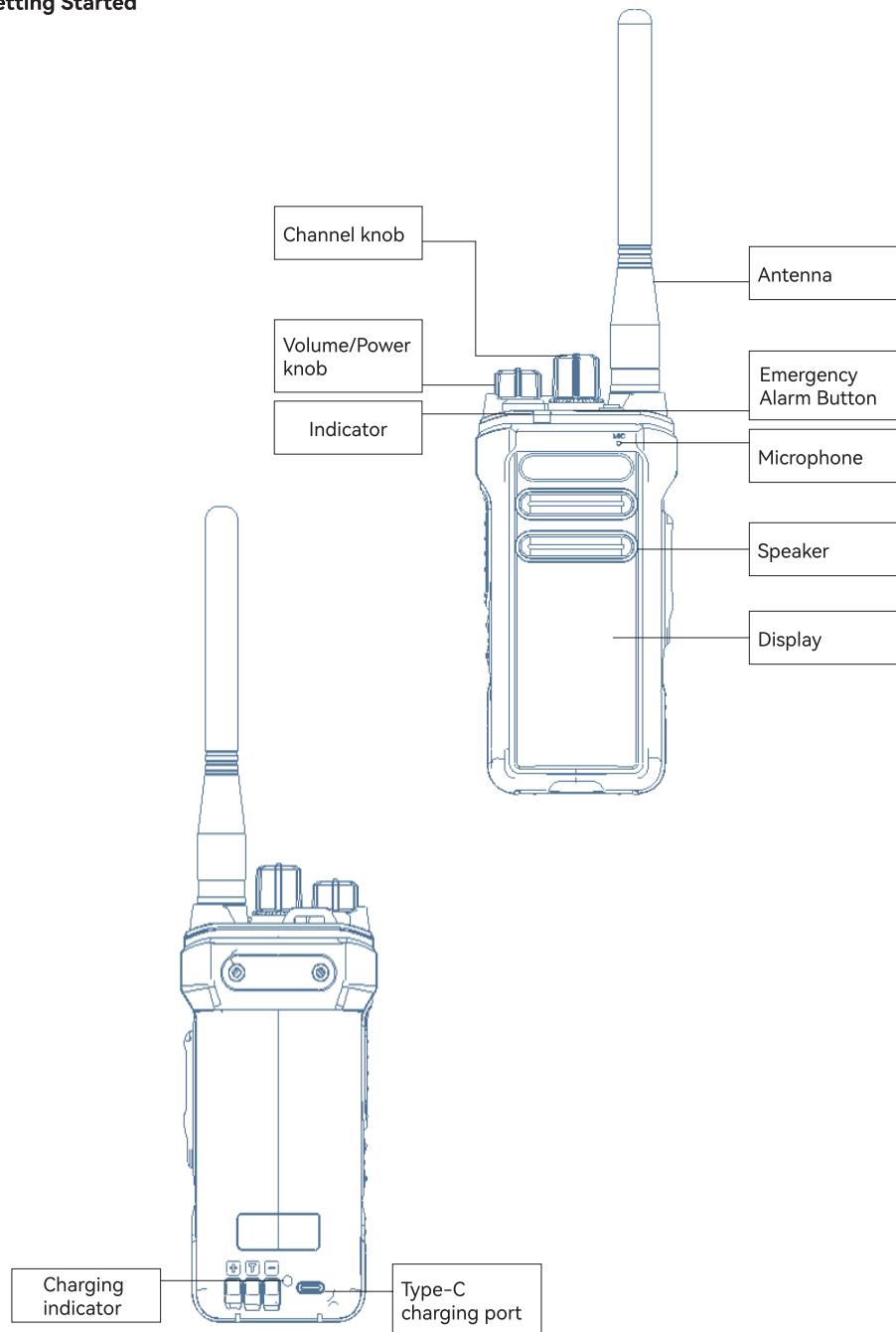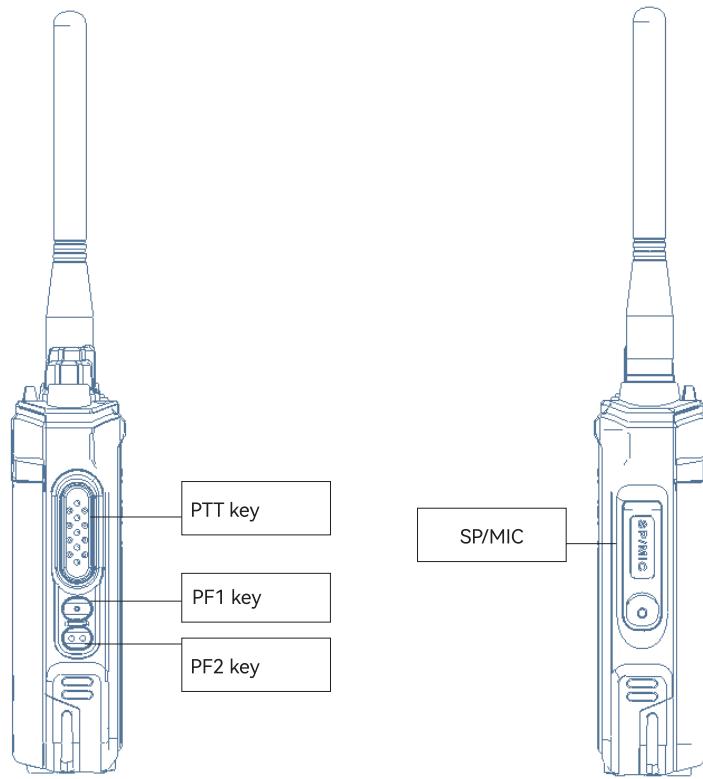
Remark: Different functions of Side Key 1, Side Key 2, which are used by the long press or a short press, can be defined by CPS.

The following functions can be defined:
Side Key:
1.None
2.Momentary Monitor(Analog)(Long Press)
3.Stable Monitor(Analog)
4.Transmit Power
5.VOX On/Off
6. Compand On/Off
7. Scramble On/Off
8. Zone UP
9. Zone Down
10. TalkAround
11. Radio Kill
12. Radio WakeUp
13. Emergency Call On
14. Emergency Call Off
15. One Touch Call 1
16.One Touch Call 2
17.One Touch Call 3
18.0ne Touch Call4
19.0ne Touch Call 5
20.Lone Worker
21.Noise Reduction On/Off
22.Channel Lock

Display

Display Description

NO.	CHAR	Description
1	H	High Power
2	M	Medium Power
3	L	Low Power
4	NR	Noise Reduction
5	VOX	VOX
6	DMR	DMR Mode
7	CH	Channel
8	188	Channel Number
9	🔒	Channel Lock
10	🔋	Battery Indicator
11	📶	TX/RX Signal Icon

Basic Operations

POWER ON and POWER OFF:
Rotate the Volume/Power knob clockwise until a "click" is heard. The transceiver will have a short beep sound, indicating power on detecting success.

Attention:
If your transceiver is not powered on, please check the battery. Confirm if the battery has been charged and installed correctly. Please contact the agent if it still can not be powered on.
To turn off the transceiver, please rotate the Volume/Power knob anticlockwise until a "click" is heard, then the transceiver is powered off.

Adjust Volume
When the transceiver is powered on, rotate the Volume/Power knob to adjust the volume.
Clockwise rotation to increase the volume;
Anticlockwise rotation to decrease the volume.
You can press the side key programmed with the MONITOR function to monitor the current volume.

Attention: PF1 or PF2 Key can be set as the MONITOR key according to the CPS.

Transmit
Press the PTT key, and keep the microphone from your mouth about 3-4cm when transmitting. Speak in your usual tone.

Receive
Release the PTT key to receive. Adjust the suitable volume to get the best receiving result.

Transmit
Press the PTT key, and keep the microphone from your mouth about 3-4cm when transmitting. Speak in your usual tone.

Receive
Release the PTT key to receive. Adjust the suitable volume to get the best receiving result.

Function Specification

LED indicator
LED indicator shows the transceiver's working status.
A red light indicates the transceiver is transmitting.
A green light indicates the transceiver is receiving a non-encrypted signal or data.

Receive and Transmit Calls
Zone Selection
The zone is a group of channels. The transceiver supports 2 zones at most, and each has not more than 32 channels.
1.Press the pre-programmed Zone UP/Down key.
2.You will hear a voice prompt announcing the current Zone.
3.Rotate the channel knob to choose the desired transmitting channel.

Receive and Reply Call
You can receive or reply to call after setting the channel, user ID, or group ID.
When transmitting the transceiver, the LED indicator turns red.
When receiving the message, the LED indicator turns green.

Receive and Reply Group Call
To receive a call from a user's group, the transceiver must belong to that group.
1.The LED indicator turns green.
2.Hold the transceiver vertically and keep about 1~2inches (2.5-5.0cm) away from the mouth.
3.Press PTT key to respond the call, and the LED indicator turns red.
4.Release PTT key to receive.

Receive and Reply Individual Call
Private Call is one-to-one calling.
When Receiving a Private Call:
1.The LED indicator turns green.
2.Hold the transceiver vertically and keep about 1~2 inches (2.5-5.0cm) away from the mouth.
3. Press PTT key to respond to the call, and the LED indicator turns red.
4. Release PTT key to receive.

Receive All Call
All Call is a call from an individual transceiver that calls all transceivers at the same channel. It is used to announce something important that users must pay special attention to.
When receiving all call, the LED indicator turns green.

Notice: when receiving all call, if you turn to another channel, the transceiver stops receiving all call. You can not use any re-programmed key until the call finishes.

Launch a Transceiver Call
You can choose a channel, user ID, or talking group ID through the following methods.
●Channel Knob

Launch a Group Call
To launch a group call, To launch the group call, the transceiver must belong to that group.
1.Rotate channel knob, using activated group ID to select the talking group.
2.Hold the transceiver vertically and keep about 1~2inches (2.5-5.0cm) 15 away from the mouth.
3.Press PTT key to launch the call, and the LED indicator turns red.
4. Release PTT key to receive, when the target transceiver is responding, LED indicator turns green.

Launch a Private Call
1. Rotate channel knob, using activated user's ID to select channel.
2.Hold the transceiver vertically and keep about 1~2inches (2.5- 5.0cm) away from the mouth.
3. Press PTT key to launch the call, and the LED indicator turns red.
4. Release PTT key to receive, when the target transceiver is responding, the LED indicator turns green.

Launch All Call
This functions allows you to transmit to all users in same channel. The transceiver must be programmed with this function so that you can send information to every user who are under the channel.
1.Rotate channel knob, using activated all call talking group ID to select a channel.
2.Hold the transceiver vertically and keep about 1~2inches (2.5- 5.0cm) away from the mouth.
3.Press PTT key to launch the call, and the LED indicator turns red.

Monitor Function (Analog)
The monitor is divided into temporary and permanent monitor. It is the receive method for receiving weak signals. Press the specific key to turn on the signal reception channel force. The operator recognizes the weak sound from the speaker through the ear to get reception. Analog monitor filters the own CTCSS/DCS temporarily. Analog permanent filters the own CTCSS/DCS forever.
● Set PF1 or PF2 short or long press as the permanent monitor.
● Set the PF1 or PF2 long press as the temporary monitor.

Power Adjustment
Set the PF1 or PF2 short or long press as the power adjustment. Press the corresponding key to switch high, middle, and low power circles, broadcasting the current power.

VOX ON/OFF
Method 1:Set the PF1 or PF2 key short or long press as the VOX ON/OFF inside software. Press the corresponding key, and the radio broadcasts ON, the VOX function is turned on. Speak towards the microphone to transmit without pressing PTT. Press the designate key again, and the radio broadcasts OFF, the VOX function is turned off. The VOX icon on display disappears.
Method 2:Long press the side key 2 + PTT key and turn on the radio. VOX is turned on when hearing the ON prompt. Repeating action: Long press the side key 2 + PTT key and turn on the radio again, VOX is turned off when hearing the OFF prompt.

Companding (Analog)
Set the PF1 or PF2 key to the companding ON/OFF. Press the key and broadcast the ON to turn on the companding function (radios turn on or off the function simultaneously). Broadcast the OFF to turn off the companding function.

Encryption Function (Analog/Digital)
Note: Analog channels are scramble ON/OFF. Digital channels are encryption ON/OFF.
1. Analog scramble ON/OFF: Off is no encryption, and On is the current channel encryption.
Set the PF1 or PF2 short or long press as the scramble ON/OFF. Press the corresponding key, and the radio broadcasts ON, the scramble/encryption function is turned on. Press the key again, and the radio broadcasts OFF, the scramble/encryption function is turned off.
2.Digital encryption list: OFF: Not encrypt, 1-10 encryption group is optional. The basic encryption is 8 bits. AES256 advanced encryption is 64 bits. The encryption consists of A, B, C, D, E, F, and 0-9 numbers.

Talkaround
In Different Frequency Mode:
When turned off, it is in repeater mode and needs repeater transformation to communicate. When turned on, it turns on the talk around function and turns to simplex mode. The transmit frequency will become the same as the receive frequency. (Two radios need to turn on the talk around function at the same time)
Set the PF1 or PF2 short or long press as the talkaround ON/OFF. Press the corresponding key, and the radio broadcasts ON, the talkaround function is turned on. Press the key again, and the radio broadcasts OFF, the different frequency transfer mode is turned on.

Remote Kill (Digital Individual Call)
Set the PF1 or PF2 short or long press as the remote kill ON/OFF. The receiver is killed when pressing the key and hearing a beep sound. The receiver can't transmit & receive and operate any function.

Activation (Digital Individual Call)
Set the PF1 or PF2 short or long press as the activation ON/OFF. The receiver restarts automatically and restores to normal when pressing the key and hearing a beep sound.

Transmission Permission
Allow transmission: whether it has activities, users can press the PTT key on the radio to transmit.
Free channel: When the channel is free, allow for transmitting when there isn't a carrier signal in the same frequency. The radio can't allow to transmit when there is a signal on the channel.
Only receive: Forbid radio transmits on the channel. But the radio can receive normally.

Emergency Alarm
Set alarm mode and type of emergency alarm system:
a.Normal: 10s direct communication without pressing the PTT key + remote alarm whistle + indicator lights up the red circle (Channel transmission contact must be the group call contact).
b. Turn on the warning light and whistle: the radio alarms.
c. Turn on the alarm indicator and whistle: The radio whistle and the indicator lights up red.
d. Turn on the whistle: Only the radio whistle, the indicator has no change.
Emergency alarm transmit radio long press the emergency alarm key to turn on and turn off the alarm function. Set the alarm times (impolite and retry). Emergency alarm receive radio press the PTT key to cancel the alarm.

One Key Call
One key call is valid in digital channels. It can be set to call certain contacts quickly. Digital individual ID channels can be set: Calls, Messages, Call prompts, Radio check, Radio kill, Radio activation, and Remote monitor function.

One key call 1-5 corresponding function setting, for example, following

No	Mode	Call	Call Type
1	Digital	Contact3 (Individual call ID)	Call
2	Digital	Contact3 (Individual call ID)	Radio check
3	Digital	Contact3 (Individual call ID)	Radio kill
4	Digital	Contact3 (Individual call ID)	Radio activation

1.Call (Digital)
Set the PF1 or PF2 short or long press as the one-key call 1. The indicator will light up lightly green within 3-5s. Press the PTT key and send the call to the contact 3.
2.Radio Check (Digital individual call)
Set the radio check to the PF1 or PF2 short or long press of the one-key call 3. Press the key and send the check order to the receiver. The red indicator will flash 4 times. And the radio will prompt a beep sound if the receiver is set incorrectly or is offline. It means that the radio can't contact the receiver.
3.Radio Kill (Digital individual call)
Set the radio kill to the PF1 or PF2 short or long press of the one-key call 4. The receiver is killed when pressing the key and hearing a beep sound. The receiver can't transmit & receive and operate any function.

4.Radio Activation (Digital individual call)
Set the radio activation to the PF1 or PF2 short or long press of the one-key call 5. The receiver restarts automatically and restores to normal when pressing the key and hearing a beep sound.

Lone Worker ON/OFF (Channel transmission contact must be group call contact)
Set the PF1 or PF2 to the lone worker function. Set lone worker response time and remind time in CPS. Lone worker response time means, if in the presetted(1-255 minutes optional) time period no operate the radio at all, it will trigger the alarm. Set the reminder time for lone worker (the time can be set from 1 to 255 seconds). You can get a reminder warning before the lone worker alarm is triggered. If you operate the intercom within the warning time, the alarm will be reset.

CTCSS/DCS List

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

DCS CODELIST										
Number	DCS-N	Number	DCS-N	Number	DCS-N	Number	DCS-N	Number	DCS-N	
1	D023N	2	D025N	3	D026N	4	D031N	5	D032N	
6	D036N	7	D043N	8	D047N	9	D051N	10	D053N	
11	D054N	12	D065N	13	D071N	14	D072N	15	D073N	
16	D074N	17	D114N	18	D115N	19	D116N	20	D122N	
21	D125N	22	D131N	23	D132N	24	D134N	25	D143N	
26	D145N	27	D152N	28	D155N	29	D156N	30	D162N	
31	D165N	32	D172N	33	D174N	34	D205N	35	D212N	
36	D223N	37	D225N	38	D226N	39	D243N	40	D244N	
41	D245N	42	D246N	43	D251N	44	D252N	45	D255N	
46	D261N	47	D263N	48	D265N	49	D266N	50	D271N	
51	D274N	52	D306N	53	D311N	54	D315N	55	D325N	
56	D331N	57	D332N	58	D343N	59	D346N	60	D351N	
61	D356N	62	D364N	63	D365N	64	D371N	65	D411N	
66	D412N	67	D413N	68	D423N	69	D431N	70	D432N	
71	D445N	72	D446N	73	D452N	74	D454N	75	D455N	
76	D462N	77	D464N	78	D465N	79	D466N	80	D503N	
81	D506N	82	D516N	83	D523N	84	D526N	85	D532N	
86	D546N	87	D565N	88	D606N	89	D612N	90	D624N	

91	D627N	92	D631N	93	D632N	94	D645N	95	D654N
96	D662N	97	D664N	98	D703N	99	D712N	100	D723N
101	D731N	102	D732N	103	D734N	104	D743N	105	D754N
106	D023I	107	D025I	108	D026I	109	D031I	110	D032I
111	D036I	112	D043I	113	D047I	114	D051I	115	D053I
116	D054I	117	D065I	118	D071I	119	D072I	120	D073I
121	D074I	122	D114I	123	D115I	124	D116I	125	D122I
126	D125I	127	D131I	128	D132I	129	D134I	130	D143I
131	D145I	132	D152I	133	D155I	134	D156I	135	D162I
136	D165I	137	D172I	138	D174I	139	D205I	140	D212I
141	D223I	142	D225I	143	D226I	144	D243I	145	D244I
146	D245I	147	D246I	148	D251I	149	D252I	150	D255I
151	D261I	152	D263I	153	D265I	154	D266I	155	D271I
156	D274I	157	D306I	158	D311I	159	D315I	160	D325I
161	D331I	162	D332I	163	D343I	164	D346I	165	D351I
166	D356I	167	D364I	168	D365I	169	D371I	170	D411I
171	D412I	172	D413I	173	D423I	174	D431I	175	D432I
176	D445I	177	D446I	178	D452I	179	D454I	180	D455I
181	D462I	182	D464I	183	D465I	184	D466I	185	D503I
186	D506I	187	D516I	188	D523I	189	D526I	190	D532I
191	D546I	192	D565I	193	D606I	194	D612I	195	D624I
196	D627I	197	D631I	198	D632I	199	D645I	200	D654I
201	D662I	202	D664I	203	D703I	204	D712I	205	D723I
206	D731I	207	D732I	208	D734I	209	D743I	210	D754I

RF ENERGY EXPOSURE AND PRODUCT SAFETY GUIDE FOR Two Way Radio

CAUTION!

Before using this device, please read this guide which contains important operating instructions for safe usage, control information and operational instructions for compliance with RF Energy Exposure limits in applicable national and international standards.
User' instructions should accompany the device when transferred to other users.

1.Unauthorized modification and adjustment
Changes or modifications not expressly approved by the party responsible for compliance may void the user's authority granted by the local government radio management departments to operate this radio and should not be made. To comply with the corresponding requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services.
Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the local government radio management departments equipment authorization for this radio could violate the rules.

2.1 Radio License
Governments keep the radios in classification. Two Way Radio are only operated on authorized radio frequencies that are regulated by the local radio management departments (such as FCC, ISED, OFCOM, ANFR, BFTK, Bundesnetzagentur, and so on.).The detailed classification and the use of your two radios, please contact the local government radio management departments.Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.

3.1 FCC Requirements
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interfer ence, and
(2) This device must accept any interference received , including interference that may c auseundesired operation.
Note: Changes or modifications to this unit not expressly approved by the party responsible for
compliance could void t he user's authority to operate the equipment.

3.2 Note: This equipment has been tested and found to comply with the limits for a Class B digital device. These limits are designed to provide reasonable protection against harmful interference in a residential 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 more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

4.1 CE Requirements:
• (Simple EU declaration of conformity) Shenzhen Retevis Technology Co., Ltd. declares that the radio equipment type is in compliance with the essential requirements and other relevant provisions of RED Directive 2014/53/EU and the ROHS Directive 2011/65/EU and the WEEE Directive 2012/19/EU; the full text of the EU declaration of conformity is available at the following internet address: www.retevis.com.

4.2 Restriction on putting into service
This product may be used in following countries and regions, including: Belgium (BE), Bulgaria (BG), Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and United Kingdom (UK).
For the intended country of use, please refer to the package.
This radio equipment is subject to restrictions on putting into service or to requirements for authorisation of use. Please make sure you have a valid radio license or radio operator permit before use.

5.1 Disposal
The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that all electrical and electronic products, batteries, and accumulators must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws and rules in your area.

6.1 RF Safety
This Two Way Radio uses electromagnetic energy in the radio frequency (RF) spectrum to provide communications between two or more users over a distance. RF energy, which when used improperly, can cause biological damage. Please refer to the following websites for more information on what RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits: http://www.who.int/en/
Keeping the radio at a proper distance is important as RF exposure decreases with increasing distance from the proper antenna. A proper antenna is the antenna supplied with this radio by the manufacturer or specifically authorized by the local authority for use with this radio. This radio can only be operated by use of an antenna of a type and maximum (or lesser) gain approved for the transmitter under regulations and rules. This transmitter must operate with the antenna(s) documented and in Push-to-Talk and body-worn configurations as documented.Using Authorized accessories is important because the use of Non-Retevis accessories may result in exposure levels, which exceed the IEEE/ICNIRP RF exposure limits.
Transmit no more than the rated duty factor of 50% of the time. Transmitting necessary information or less, is important because the radio generates measurable RF energy exposure only when transmitting in terms of measuring for standards compliance.Some measures to reduce your RF exposure include:
● Reduce the amount of time spent using your wireless device.
● Use a speakerphone, earpiece, headset, or hands-free accessory to reduce proximity to the head (and thus head exposure). While wired earpieces may conduct some energy to the head and wireless earpieces also emit a small amount of RF energy, both wired and wireless earpieces remove the greatest source of RF energy (handheld device) from proximity to the head and thus can greatly reduce total exposure to the head.
● Increase the distance between wireless devices and your body.

6.2 Only for licensed transmitters
This radio is designed for and classified as "Occupational/Controlled Use Only". Occupational/Controlled environments are defined as locations where there is exposure that may be incurred by people who are aware of the potential of exposure. It meaning a radio must be used only by individuals aware of the hazards, and the ways to minimize such hazards;
NOT intended for use in a General population/uncontrolled environment.

6.3 For handheld devices
Hand-held Mode
To control your exposure and ensure compliance with the Occupational /Controlled environment exposure limits, always adhere to the following procedure:

SAR tests are conducted using standard operating positions accepted by 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 is 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 device has been tested and meets the FCC RF exposure guidelines when used with and accessory designated for this product or when used with and accessory that contains no metal.
To maintain compliance with FCC RF exposure guidelines hold the transmitter and antenna at least 25mm from your face and speak in a normal voice, with the antenna pointed up and away from the face.
Use of non-approved antennas, batteries, and accessories may cause the radio to exceed the FCC RF exposure guidelines.
Transmit no more than the rated duty factor of 50% of the time. To transmit (talk), push the Push-To-Talk (PTT) button.
To receive calls, release the PTT button. Transmitting 50% of the time, or less, is important because the radio generates measurable

7.1 Electromagnetic Interference/Compatibility
Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic 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,such as hospitals or health care facilities
7.2 TX
Persons with pacemakers, Implantable cardioverter defibrillators (ICDs) or other active implantable medical devices should:
• Consult with their physicians regarding the potential risk of interference from radio frequency transmitters, such as portable radios (poorly shielded medical devices may be more susceptible to interference).
• Turn the radio OFF immediately if there is any reason to suspect that interference is taking place.
• Do not carry the radio in a chest pocket or near the implantation site, and carry or use the radio on the opposite side of their body from the implantable device to minimize the potential for interference.
Hearing Aids: Some digital wireless radios may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.
Other Medical Devices: If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.
8.1 Turn off your radio power in the following conditions:

⚠ **WARNING**
• Turn off your radio before removing or installing accessory.
• Turn off your radio prior to entering any area with a potentially hazardous or explosive atmosphere. Only radio types that are especially qualified should be used in such areas as "Intrinsically Safe".
Note: The areas with potentially explosive atmosphere referred to above include blasting caps, blasting area, inflammable gas, dust particles, metallic powders, grain powders, fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles (such as grain, dust or metal powders) and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often – but not always posted.
• Turn off your radio when taking on fuel or parked at gasoline service stations.
• Do not use any radio that has a damaged antenna. If a damaged antenna comes into contact with the skin when the radio is in use, a minor burn can result.
• Do not place a portable radio in the area over an air bag or in the air bag deployment area. The radio may be propelled with great force and cause serious injury to occupants of the vehicle when the air bag inflates.
• Turn off your radio when on board an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.

9.1 Use of Communication Devices While Driving

🚫 • **Always check the laws and regulations on the use of radios in the areas where you drive.Use of Communication Devices ,for example, mobile radio, may not be allowed.**
• **Give full attention to driving and to the road.**
• **Use hands-free operation, if available.**
• **Pull off the road and park before making or answering a call, if driving conditions or regulations so require.**

10.1 Protect your hearing

• Use the lowest volume necessary to do your job.
• Turn up the volume only if you are in noisy surroundings.
• Turn down the volume before adding headset or earpiece.
• Limit the amount of time you use headsets or earpieces at high volume.
• When using the radio without a headset or earpiece, do not place the radio's speaker directly against your ear
• Use careful with the earphone maybe possible excessive sound pressure from earphones and headphones can cause hearing loss
Note: Exposure to loud noises from any source for extended periods of time may temporarily or permanently affect your hearing. The louder the radio's volume, the less time is required before your hearing could be affected. Hearing damage from loud noise is sometimes undetectable at first and can have a cumulative effect.

⚠ **WARNING** **The plug of adapter is considered as disconnect device.The socket-outlet shall be installed near the equipment and shall be easily accessible.**

Warranty Card

Product model: _____ Date of purchase: _____

Serial Number: _____

Seller: _____ contact number: _____

Username: _____ contact number: _____

Address: _____ Zip code : _____

Warranty description:
1. The warranty card is saved by the customer as the warranty certificate, and the loss is not compensated.
2. This card must be stamped and dated for sale to take effect.
3. This card must not be altered. Please confirm that the warranty card serial number matches the purchase machine number, otherwise it will be invalid.
4. The warranty period is one year. Chargers, batteries, headphones, antennas and feeders are consumables, not covered by warranty.
5. Users can choose the following ways to get repair service:
a. At the original purchase office.
b. Our company is in the local special maintenance point.

Cut along this line

CE FCC RoHS Compliant
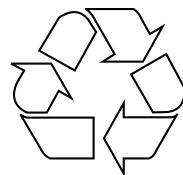
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