

THANK YOU!

We are grateful that you chose our digital radio.

We believe this DMR Digital 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 DMR Digital Transceiver:



Before using this DMR Digital Transceiver, 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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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

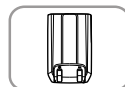
Description	Quantity
Unit Transceiver	1
Rubber Antenna	1
Li-ion Battery Pack	1
Charger	1
Adapter	1
Belt Clip	1
Hand Strap	1
User's Manual	1



Unit Transceiver



Rubber Antenna



Li-ion Battery Pack



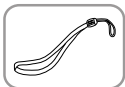
Charger



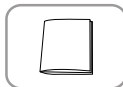
Adapter



Belt Clip



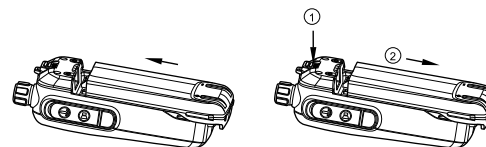
Hand Strap



User's Manual

PREPARATION

Installing/Removing the Battery Pack

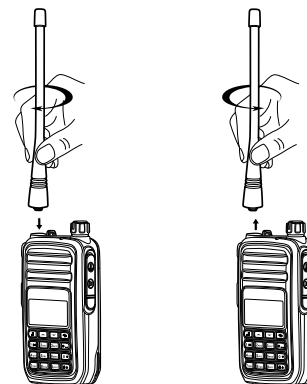


Install

Remove

Note: To remove the battery, please turn off the radio first, then press down the battery lock button to unlock the battery.

Assembling the Antenna



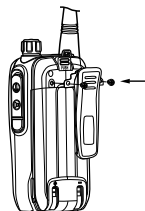
Assemble

Disassemble

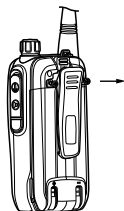
Caution: Do not swing the radio when holding it by the antenna, so as to avoid lowering the performance and shortening the life span of the antenna.

PREPARATION

Installing the Belt Clip

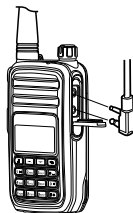


Install the Belt Clip



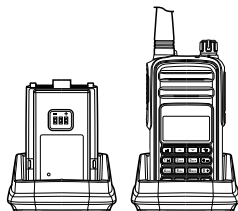
Uninstall the Belt Clip

Installing the Accessories



Charging the Battery Pack

Please charge your battery only with our approved charger, and follows the charging steps as shown below:



PREPARATION

Charging LED Indicator

LED Indicator	Radio Status
The LED glows red.	Charging the battery pack.
The LED flashes between red and green.	Already charge the battery pack up to 90%.
The LED flashes red.	The battery pack is short circuit the terminals or low voltage status.
The LED glows green.	Already finish the charging.

Programmable Auxiliary Functions

Your dealer may program the [SK] key (long press or short press) as shortcuts with one of the following auxiliary functions respectively.

No.	Feature	No.	Feature
1	Key Null	12	LCD Reverse
2	EMG On	13	Vox Switch
3	EMG Off	14	Reverse
4	Scan	15	Zone Switch
5	SQ Off	16	1750Hz
6	SQ Mome	17	Smart Call 1
7	SQ Switch	18	Smart Call 2
8	Power Switch	19	Smart Call 3
9	Talk Around	20	Smart Call 4
10	Back Home	21	Smart Call 5
11	FM	22	Smart Call 6

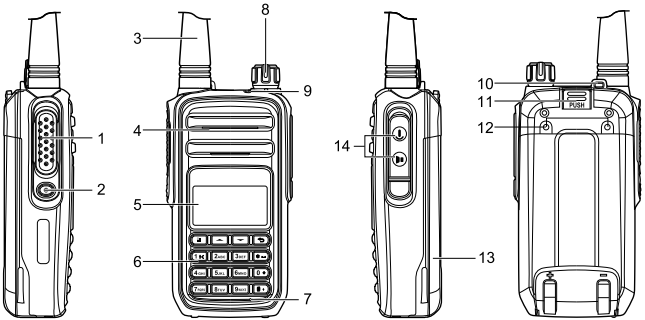
PREPARATION

Note:

- You can set the time of pressing long key from 1.5-5 seconds (default: 2.0 seconds) with programming software, when you press and hold the [SK] key, the time of pressing is over your setting time, then it's a long time key, otherwise, it's a short key.
- Squelch Off and Squelch Off Momentary feature only to be enabled for analog channels.

GETTING ACQUAINTED

Orientation



No.	Part Name	No.	Part Name
1	PTT Switch (PTT)	8	Power Switch/Volume Tuning
2	Programming Key (SK)	9	TX/RX Indicator
3	Antenna	10	Hand Strap Hook
4	Speaker	11	Battery Lock Button
5	LCD	12	Belt Clip Screw Holes
6	Keypad	13	Battery Pack
7	Microphone	14	Earphone/Data Cable Jack

GETTING ACQUAINTED

LCD Icons

No.	Indicator	Icon	Radio Status
1	RSSI		More bars indicate better signal strength.
2	Battery Strength Icons		More bars indicate more battery power.
3	Scan Icons		Scanning is in progress.
			Scanning pauses on a non-priority channel.
			Scanning pauses on Priority Channel 1.
4	TX Power Icons		Low Tx power for the current channel.
			High Tx power for the current channel.
5	Receiving Icons		Receiving is in progress.
6	Message Icons		New Message/Unread Message.
7	Dual watch the signal when use FM radio.	DW	Dual Watch when use FM Radio
8	Keypad Lockout		Appear when the key lock function is activated.
9	CTCSS	C	CTCSS
10	DCS	D	DCS
11	CT/DCS	C.D	CTCSS/DCS
12	FM Radio	FM	Turn on the FM radio.

GETTING ACQUAINTED

No.	Indicator	Icon	Radio Status
13	Encryption	E	The encryption feature is activated.
14	VOX		The VOX feature is activated.
15	Private Call		<ul style="list-style-type: none"> In call mode, the icon appears when transmit a private call. In contact list, the icon means it's currently in private call contact list.
16	Group Call		<ul style="list-style-type: none"> In call mode, the icon appears when transmit a group call. In contact list, the icon means it's currently in group call contact list.
17	All Call		<ul style="list-style-type: none"> In call mode, the icon appears when transmit an all call. In contact list, the icon means it's currently in all call contact list.

LED Indicator













The top LED indicator will help you easily identify the current radio status.

LED Indication	Radio status
LED glows red	Transmitting
LED flashes red	Low battery
LED glows green	Receiving
LED flashes orange	Scanning
LED glows orange	Within the call holding time

GETTING ACQUAINTED


Keypad

You can input name, number, message ect. or use combined keys via keypad to operate as your desired features.

Keypad	Operation
	Confirm the option, enter the editing mode or the submenu.
 / 	Select the optioned item, character or move the cursor position.
	Delete the input character or return back to previous menu. In standby mode, press this key shortcut to enter the channel editing mode.
 ~ 	Input the "0"~"9".
	<ul style="list-style-type: none"> In editing mode, press this key to input "*". In standby mode, press []+[] key to lock or unlock the keypad.
	<ul style="list-style-type: none"> In editing mode, press this key many times to cyclically change and select your desired input method. Press []+[] keys to quickly change the current channel to your desired one.

GETTING ACQUAINTED

Menu

Press the [] key to access menu items. Menu options are variety according to the channel which is in use.

No.	Main Menu	Submenu	Description
1	Contact	★ Contact List	Display the current contact list
		★ New	Input or set the "Alias/Type/ID/Save"
		★ Delete All	Delete all the contact list
2	Message	★ New	Edit by user
		★ Quick Text	Create quick text by user
		★ Inbox	Inbox List/Delete All
		★ Outbox	Outbox List/Delete All
		★ Draft	Draft List/Delete All
3	Call Logs	★ Outgoing	Outgoing List/Delete All
		★ Incoming	Incoming List/Delete All
		★ Missed	Missed List/Delete All
4	Vox	VOX Switch	On/Off
		VOX Level	1/2/3
5	Scan	--	On/Off
6	FM Radio	FM Switch	On/Off
		FM Mode	VFO/MR
		FM DW	On/Off
7	Setting	Key Tone	On/Off
		Power Tone	On/Off

GETTING ACQUAINTED

7	Setting	Backlight	Off/Infinite/5s/15s/30s/60s
		CH Disp Mode	Frequency/Alias
		Zone	Edit by user
		SQL Level	1/2/3
		★ MSG Ring Tone	On/Off
		Language	Chinese/English
8	Radio Set	Channel	CH List/New
		Zone Edit	View/Edit
		P-Key Edit	SK Short/SK Long (Please refer to "Programmable Auxiliary Functions")
		★ Rx Grp	View/Edit Group List
		★ Radio ID Edit	Edit Radio D
9	Radio Info	★ Radio ID	View Radio ID
		Firmware Ver	Display the current firmware version
		DSP Info	Display the current DSP Info
		Model Name	Display the current model name
		Freq Range	Display the current frequency range
		Last Prog Date	Display the last programming date

Note: ★ Indicates that the functions are available on digital channel only, the other menus indicate the functions are available for both digital and analog channel.

AUXILIARY FEATURES

1750Hz

Use audio 1750Hz to open the repeater.

LCD Reverse

Support a 180-degree reverse of the displayed content. In this way you can read the information in LCD easily without removing the radio from the holder to enhance your working efficiency.

Full Keypad Programming

With the full keypad, you can easily program all the radio settings without CPS on the computer.

Mixed Mode

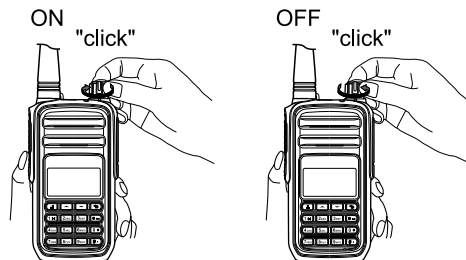
Compatible with analog conventional and digital conventional modes, allow to simultaneously monitor analog and digital modes and automatically respond in each mode.

Dual Capacity Direct Mode

In direct mode, you can have two voice calls simultaneously in the same frequency by adapting the two timeslots from DMR TDMA technology, this will increase the radio capacity at no extra costs or frequency license.

BASIC OPERATION

Switch Power On/Off



Adjusting the Volume



Selecting a Zone

The radio supports 16 zones, each with a maximum of 999 channels. You can select by any one of following methods:

1. Enter menu system and select "Zone", then use []/[] key to select your desired zone, at last press [] key to confirm your selection.
2. Program the featured key with "Zone Switch" by PC, then press this programming key to select.

BASIC OPERATION

Selecting a Channel

Use []/[] key to select your desired channel or directly press []+[] keys and input channel number, then press [] key to select.



New Contact

In digital channel, you can create a Private Call contact (7 digitals at most) to the contact list.

In main menu, select "Contact" -> "Contact List", then input the necessary information till finish.

Note:

The new contact is prohibited to the same as the one already existed in the contact list.

In order to ensure an optimal volume for the receiving radio, hold the radio approximately 2.5 to 5 centimeters away from your mouth during transmission.

Private Call

Private call means a private contact to transmit a call to the other private contact.

Transmitting a private call

In standby mode, select a private contact, then press and hold [PTT] key to transmit a call.

Receive and Responding to a private call

When a call is received, your radio will display the corresponding icon and you can hear without any operation. You may press the [PTT] key within the preset time period to call back.

Group Call

Group call means a private contact to transmit a call to all the contacts in the same group.

Transmitting a group call

In standby mode, select a group contact, then press and hold [PTT] key to transmit a call.

Receive and Responding to a group call

When a call is received, your radio will display the corresponding icon and you can hear without any operation. You may press the [PTT] key within the preset time period to call back.

Calls on analog channels

To transmit on an analog channel, hold down the [PTT] and speak into the microphone. To receive, release the [PTT].

Note:

Sometimes you may not hear the call voice even by using the same frequency, that's because different setting of CTCSS/DCS, reverse or offset and so on.





Emergency

In case of an emergency, you can use the feature to ask for help from your companion or control center.

MESSAGE

You can create and send new message, also can directly send the quick text, or forward the messages in inbox/outbox/draft.

Send new message

1. In menu system of digital channel, select "Message"-> "New".
2. Input the message text via keypad, when finish input, press [] key to confirm. You can save the message text in draft box or send to a contact or group.
3. Use []/[] key to select a contact or a group.
4. Press [] key to send the message. "Send" will appear on LCD when successfully send the message.

Quick Text

The quick text may be set by the dealer and you can quickly send the message or edit the new message as you desired.

InBox

The InBox can save up to 16 received messages. When the InBox is full, the icon will appear, and the oldest entry will be overwritten by the latest one automatically.

OutBox

The OutBox can save up to 16 sent messages. When the OutBox is full, the oldest entry will be overwritten by the latest one automatically.

MESSAGE

Draft

The Draft can save up to 16 edited messages. When the Draft is full, the oldest entry will be overwritten by the latest one automatically.

TROUBLESHOOTING

Phenomena	Analysis	Solution
Power-on Failure.	• The battery may be improperly installed.	Remove the battery and reassemble it.
	• The battery power may be used up.	Recharge or replace the battery.
	• The battery is poorly connected due to dirtied or damaged battery contacts.	Clean the battery contacts. If the problem cannot be solved, contact your dealer or authorized service center for inspection and repair.
During receiving, the voice is weak, discontinuous or totally inactive.	• Low battery voltage.	Recharge or replace the battery.
	• Low volume level.	Increase the volume by rotating the Volume Control knob.
	• The antenna may be loosened or improperly installed.	Reassemble the antenna after turning off the radio.
	• The speaker may be blocked or damaged.	Clean the surface of the speaker. If the problem cannot be solved, contact your dealer or authorized service center for inspection and repair.

TROUBLESHOOTING

Phenomena	Analysis	Solution
Unable to communicate with other members.	• The frequency or signaling may be inconsistent with that of other members.	Set your TX/RX frequency and signaling to the same as that of other members.
	• The channel type (digital/analog) may be set inconsistently.	Make sure all members are on the same digital/analog channel.
	• You may be too far away from the group members.	Move towards other members.
Irrelevant communication or noise is heard on the channel.	• You may be interrupted by radios using the same frequency.	Change the frequency, or adjust the squelch level.
	• The radio may be set with no signaling.	Set signaling for all member radios to avoid interference at the same frequency. And change the signaling settings for all portable radios at the same time. The noise is too loud. You may be too far away from other members.

TROUBLESHOOTING

Phenomena	Analysis	Solution
The noise is too loud.	<ul style="list-style-type: none"> You may be too far away from other members. 	Move towards other members.
	<ul style="list-style-type: none"> You may locate in an unfavorable position. For example, your communication may be blocked by high buildings or frustrated in the underground areas. 	Move to an open and flat area, and restart the radio to try again.
	<ul style="list-style-type: none"> You may suffer from external disturbance (such as electromagnetic interference). 	Stay away from equipment that may cause interference.

SPECIFICATIONS

RT80 Electrical Specification (25KHz) (TIA-603)

General specifications	
Frequency Range	136-174 or 400-480MHz
Channel capacity	999
Channel spacing	12.5/25KHz
Working voltage	7.4V
Standard battery	1500mAh
Battery average working hours (5-5-90 working cycle)	11/12 (h)
Frequency stability	± 2.5 PPM
Working temperature range	-10~55°C
Antenna impedance	50 Ω
Dimensions (H x W x D) (Without antenna)	105x53x29.5mm
Weight (with antenna)	217g

SPECIFICATIONS

Transmitter	
Output Power	≤5W
Modulation(analog)	11KΦF3E@12.5KHz; 16KΦF3E@25KHz
Modulation (digital)	12.5KHz (data + voice): 7K60FXW; 12.5KHz (data only): 7K60FXD
Spurious emission	-36dBm<1GHz; -30dBm>1GHz
SNR	40dB@12.5KHz; 45dB@25KHz
Audio distortion	≤5%
Modulation limit	± 2.5@12.5KHz; ± 5.0@25KHz
Audio response (300-3000HZ)	± 3dB
Digital vocoder type	AMBE++
Digital protocol	ETSI-TS102 361-1,-2

SPECIFICATIONS

Receiver	
Sensitivity (analog)	≤0.3/0.22 μ V (12dB SINAD)
Sensitivity (digital)	≤0.3 μ V/BER 5%
S/R	40dB@12.5KHz; 45dB@25KHz
Audio output power	≥750mW
Audio distortion	≤5%
Audio frequency response	± 3dB
Conducted spurious emission	≤-57dBm


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	

DCS Standard Group Number

017	054	132	212	263	346	445	523	654
023	065	134	223	265	351	446	526	662
025	071	143	225	266	356	452	532	664
026	072	145	226	271	364	454	546	703
031	073	152	243	274	365	455	565	712
032	074	155	244	306	371	462	606	723
036	114	156	245	311	411	464	612	731
043	115	162	246	315	412	465	624	732
047	116	165	251	325	413	466	627	734
050	122	172	252	331	423	503	631	743
051	125	174	255	332	431	506	632	754
053	131	205	261	343	432	516	645	

1. Use the DMR Digital Transceiver: in the environment with the temperature between -10°C and 55°C, otherwise, it may damage your DMR Digital Transceiver.

2. For the following equipment: DMR Digital Transceiver:  Is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

EU Declaration of Conformity:

Refer to article 10(9), shall be provided as follows:

Hereby, Shenzhen Retevis Technology Co., Ltd declares that the radio equipment type RT80 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: www.retevis.com.

3. Test position and configuration Head SAR was performed with the device configured in the positions according to IEEE1528, and face up SAR was performed with the device 25mm from the phantom, Body SAR was performed with the belt clip on the device 0 mm from the phantom. Body SAR was also performed with the headset attached and without.



Use only RETEVIS's approved supplied or replacement belt clip, batteries, charger, antennas and accessories.

Use of non-manufacturer-name approved batteries, and accessories may exceed the RF exposure guidelines.

CE WARNINGS



- 1) The antenna in the packing is unique, please do not optional change.
- 2) For safe operation, the antenna for the product shall be least 25mm away from your face, when speaking.
- 3) DO NOT use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.



For adapter: Shall be installed near the equipment and shall be easily accessible.

For battery: Risk of explosion battery is replaced by an incorrect type, dispose of used batteries according to the instructions.

Only can use the adapter as below:

Manufacturer: Shenzhen Nalin Elec. Tech. Co.,Ltd.

Address: 2/f West & 3/f,A2 Bldg Zhouteng Industry Garden,
Shanglilang Community Nanwan Longgang,
Shenzhen,Guangdong,P.R.China

Model Name: NLA050120W1U6

Rated Input & Output: Input: 100-240V~50/60Hz, 0.2A Max;
Output: 12V 500mA

The plug considered as disconnect device of adapter.

Only can use the rechargeable Batteries as below:

Nominal voltage: 12V DC

CE WARNINGS



Batteries and chargers safety information

This document contains important safety and operating instructions. Read these instructions carefully and save them for future reference.

Before suing the battery charger, read all the instructions and cautionary markings on

- The charger
- The battery, and
- The radio using the battery

- 1) To reduce risk of injury, charge only the rechargeable Retevis-authorized batteries. Other batteries may explode, causing personal injury and damage.
- 2) Use of accessories not recommended by Retevis may result in risk of fire, electric shock, or injury.
- 3) To reduce risk of damage to the electric plug and cord, pull by the plug rather than the cord when disconnecting the charger.
- 4) An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in risk of fire and electric shock, if an extension cord must be used, make sure that the cord size is 18AWG for lengths up to 6.5 feet (2.0m), and 16AWG for lengths up to 9.8 feet (3.0m).
- 5) To reduce risk of fire, electric shock, or injury, do not

CE WARNINGS

operate the charger if it has been broken or damaged in any way.

Take it to a qualified Retevis service representative.

- 6) Do not disassemble the charger: it is not repairable and replacement parts are not available. Disassembly of the charger may result in risk of electrical shock or fire.
- 7) To reduce risk of electric shock, unplug the charger from the AC outlet before attempting any maintenance or cleaning.

Operational safety guidelines

- Turn the radio OFF when charging battery.
- The charger is not suitable for outdoor use. Use only in dry locations/conditions.
- Connect charger only to an appropriately fused and wired supply of the correct voltage (as specified on the product).
- Disconnect charger from line voltage by removing main plug.
- The outlet to which this equipment is connected should be nearby and easily accessible.
- Maximum ambient temperature around the power supply equipment must not exceed 40°C, (104°F).
- Make sure that the cord is located where it will not be stepped on, tripped over, or subjected to water, damage, or stress.

CE WARNINGS



When the conductive metals such as jewellery, key or decorative chains touch the battery terminals, all the batteries are likely to cause damage to the items or personal injury. These conductive metals may form a short circuit and generates much heat. Do deal with any battery carefully, especially when put it into pocket, wallet or other metallic containers.



Please read the following brief instructions, non-compliance with these rules may cause danger or violate the law.

- Obey the local government regulation before using this radio, improper use may violate the law and the punished.
- Do not charge the transceiver and battery pack when they are wet.
- Ensure that there are no metallic items located between the transceiver and the battery pack.
- Don not use the options not specified by Retevis.
- If the die-cast chassis or other transceiver part is damaged, do not touch the damaged parts.
- If the headset or headphone is connected to the transceiver, reduce the transceiver volume. Pay attention to the volume level when turning the squelch off.
- Do not place the microphone cable around your neck while near machinery that may catch the cable.
- Do not please the transceiver on unstable surfaces.

CE WARNINGS

- Ensure that the end of the antenna does not touch your eyes.
- When the transceiver is used for long transmissions, the radiator and chassis will become hot.
- Do not touch these locations when replacing the battery pack.
- Do not immerse the transceiver in water.
- Always switch the transceiver power off before installing optional accessories.
- The charger is the Device that disconnects the units from the AC mains line, the AC plug should be readily accessible.
- Do not transmit too long, for the radio may heat and hurt the user



TURN THE TRANSCEIVER POWER OFF IN THE FOLLOWING LOCATIONS:

- In explosive atmospheres (flammable gas, dust particles, metallic powders, grain powders, etc.)
- While taking on fuel or while parked at gasoline service stations.
- Near explosives or blasting sites.
- In aircraft. (Any use of the transceiver must follow the instructions and regulations provided by the airline crew.)
- Where restrictions or warnings are posted regarding the use of the radio devices, including but not limited to medical facilities.
- Near persons using pacemakers.

FCC WARNINGS



Your Retevis radio is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy:

- United States Federal Communications Commission, Code of Federal Regulations: 47 CFR part 2.1093
- IEEE Std. 1528:2013 and KDB447498, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- American National Standards Institute (ANSI)/Institute of Electrical & Electronic Engineers (IEEE) C95. 1-2005
- Institute of Electrical and Electronic Engineers (IEEE) C95.3-2002
- International Electrotechnical Commission IEC62209-2:2010

Test position and configuration Head SAR was performed with the device configured in the positions according to IEEE1528, and face up SAR was performed with the device 25mm from the phantom, Body SAR was performed with the belt clip on the device 0 mm from the phantom. Body SAR was also performed with the headset attached and without.

FCC WARNINGS



This product is compliance to FCC RF Exposure requirements and refers to FCC website <https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm> search for FCC ID: 2AAR8RETEVISRT80 to gain further information include SAR Values.



SAFETY INFORMATION

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%. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

To control your exposure and ensure compliance with the general population or uncontrolled environment exposure limits, transmit no more than 50% of the time. The radio generates measurable RF energy exposure only when transmitting.



Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment and should not be made. To comply with FCC requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter

FCC WARNINGS

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 FCC equipment authorization for this radio could violate FCC rules.

Note: Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.



Body-Worn Operation

To maintain compliance with FCC's RF exposure guidelines, for body-worn operation, this radio has been tested and meets the FCC RF exposure guidelines when used with Retevis Radio Corp. accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

If you wear the radio on your body when transmitting always use Retevis supplied or approved belt clip, holster, case, or body harness for this product.

If you do not use any accessories supplied or approved by Retevis, ensure the radio and its antenna are at least 1 inch (2.5cm) from your body when transmitting.

FCC WARNINGS



Antennas

- 1) The antenna in the packing is unique, please do not optional change.
- 2) For safe operation, the antenna for the product shall be least 25mm away from your face, when speaking.
- 3) DO NOT use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.



Batteries

All batteries can cause property damage and/or bodily injury such as burns if a conductive material touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become hot.

- Exercise care when removing the rechargeable batteries.
- Do not use sharp or conductive tools to remove these batteries.
- Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse or other container with metal objects.
- Do not discard your battery in a fire.
- Do not replace the battery in any area labeled "Hazardous Atmosphere". Any sparks created in a potentially explosive atmosphere can cause explosion or fire.
- Do not disassemble, crush, puncture, shred or otherwise attempt to change the form of your battery.

FCC WARNINGS

- Do not dry a wet battery or damp battery with an appliance or heat source, such as a hair dryer or microwave oven.
- If the radio battery contact area has been submerged in water, dry and clean the battery contacts before attaching the battery to the radio.



Battery Charger Safety Instructions:

1. Turn the radio off when charging the battery.
2. Do not expose the charger to outside environment. Chargers should only be used indoors.
3. Do not operate or disassemble the charger. Do not use a charger that has been dropped or damaged in any way.
4. Never alter the AC cord or plug provided with the unit. If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician. An improper condition can result in a risk of electric shock.
5. To reduce the risk of damage to the cord or plug, pull the plug rather than the cord when disconnecting the charger from the AC receptacle.
6. To reduce the risk of electric shock, unplug the charger from the outlet before attempting any maintenance or cleaning.
7. Use of an attachment not recommended or sold by Retevis Solutions may result in a risk of fire, electric shock or personal injury.

FCC WARNINGS

8. Make sure the cord is located so it will not be stepped on, tripped over or subjected to damage or stress.
9. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of a fire and/or electric shock. If an extension cord must be used, make sure that:
 - The pins on the plug of the extension cord are the same number, size and shape as those on the plug of the charger.
 - The extension cord is properly wired and in good condition.
10. The supply cord of the AC adaptor cannot be replaced. If the cord is damaged, call customer service.



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

Electromagnetic Interference/Compatibility

Note: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.

During transmissions, RETEVIS, INC. radio generates RF energy that can possibly cause interference with other devices or systems.

FCC WARNINGS



Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your radio in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Aircraft

When instructed to do so, turn off your radio when onboard an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.

Medical Devices - Pacemakers, Defibrillators or other Implanted Medical Devices

Persons with pacemakers, Implantable cardioverter defibrillators (ICDs) or other active implantable medical devices (AIMD) 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.

FCC WARNINGS

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.

Use of Communication Devices While Driving

Always check the laws and regulations on the use of radios in the areas where you drive.

- 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.

For Vehicle with Air Bags

Refer to the vehicle manufacturer's manual prior to installation of electronic equipment to avoid interference with air bag wiring. Do not place a portable radio in the area over an air bag or in the air bag deployment area.

Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates,

FCC WARNINGS

the radio may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmosphere

Turn off your radio prior to entering any area with a potentially explosive atmosphere. Only radio types that are especially qualified should be used in such areas as "Intrinsically Safe". Do not remove, install or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

Note: The areas with potentially explosive atmosphere referred to above include 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.

Blasting Caps and Areas

To avoid possible interference with blasting operations, turn off your radio when you are near electrical blasting caps, in a blasting area, or in areas posted "Turn off two-way radios". Obey all signs and instructions.

IC WARNINGS



This device complies with Industry Canada licence-exempt RSS standard (s). Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



Compliance with RF Exposure Standards

Your Retevis radio is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy:

- American National Standards Institute (ANSI)/Institute of Electrical & Electronic Engineers (IEEE) C95. 1.
- IEEE Std. 1528:2013 and KDB447498, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.

IC WARNINGS

- Ministry of Health (Canada) Safety Code 6 & Industry Canada RSS-102.
- International Commission on Non-Ionizing Radiation Protection (ICNIRP).e.
- International Electrotechnical Commission IEC62209-2:2010

Test position and configuration Head SAR was performed with the device configured in the positions according to IEEE1528, and face up SAR was performed with the device 25mm from the phantom, Body SAR was performed with the belt clip on the device 0 mm from the phantom. Body SAR was also performed with the headset attached and without.



IC Radiation Exposure Statement

This EUT is compliance with SAR for controlled exposure limits in IC RSS-102 and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528 and IEC 62209, this equipment should be installed and operated with minimum distance 1 cm between the radiator and your body. This device and its antenna (s) must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet appareil est conforme aux limites d'exposition DAS

IC WARNINGS

contrôlées pour de la norme CNR-102 d'industrie Canada et a été testée en conformité avec les méthodes de mesure et procédures spécifiées dans IEEE 1528 et IEC 62209. Cet appareil doit être installé et utilisé avec une distance minimale de 1 cm entre l'émetteur et votre corps. Cet appareil et sa ou ses antennes ne doivent pas être co-localisés ou fonctionner en conjonction avec tout autre antenne ou transmetteur.



Please refer to the following websites and Guidance documents for more information on what RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits: RSS-102, Safety Code 6 and www.who.int/en/.



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IC WARNINGS



Batteries

All batteries can cause property damage and/or bodily injury such as burns if a conductive material touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become hot.

- Exercise care when removing NiMH or AA batteries.
Do not use sharp or conductive tools to remove these batteries.
- Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse or other container with metal objects.
- Do not discard your battery in a fire.
- Do not replace the battery in any area labeled "Hazardous Atmosphere". Any sparks created in a potentially explosive atmosphere can cause explosion or fire.
- Do not disassemble, crush, puncture, shred or otherwise attempt to change the form of your battery.
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IC WARNINGS



CAUTION

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If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician. An improper condition can result in a risk of electric shock.
5. To reduce the risk of damage to the cord or plug, pull the plug rather than the cord when disconnecting the charger from the AC receptacle.
6. To reduce the risk of electric shock, unplug the charger from the outlet before attempting any maintenance or cleaning.
7. Use of an attachment not recommended or sold by Retevis Solutions may result in a risk of fire, electric shock or personal injury.
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IC WARNINGS

The pins on the plug of the extension cord are the same number, size and shape as those on the plug of the charger.

The extension cord is properly wired and in good condition.

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Turn off your radio prior to entering any area with a

potentially explosive atmosphere. Only radio types that are especially qualified should be used in such areas as "Intrinsically Safe". Do not remove, install or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

Note: The areas with potentially explosive atmosphere referred to above include 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.

Blasting Caps and Areas

To avoid possible interference with blasting operations, turn off your radio when you are near electrical blasting caps, in a blasting area, or in areas posted "Turn off two-way radios". Obey all signs and instructions.

Note:

1. This warranty card is only applicable to two-way radio of the above-listed model and serial number.
2. The warranty card is an important document for the end-user to enjoy warranty service, please keep it well.
3. The warranty card shall be filled and chopped by the dealer, or it is invalid.

Customer's name: Gender:

Add and postal code:

Customer's Tel:

Model:

Serial number:

Purchasing date:

Invoice No.:

Dealer: Stamp:

Add and postal code of the dealer:

Contact Tel:

Handling people: