

# **RETG**/IS

# NR30 USER'S MANUAR

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For downloading further resources: Brochures, Software/Firmware, Manual etc, Pls contact your direct reseller first OR go to website retevis.com and check "support" in the each product link to download it.

## Warranty

#### Before using the radio, please read the manual carefully.

 Don't charge the radio in inflammable, explosive and radio-communication-banned areas (such as gas station, petrol station and airport, etc).

- · Don't operate the radio without license in the areas that government bans.
- · Ensure the radio to avoid being placed under the sun and near any heat equipment.
- Ensure the radio to avoid any dusty, humid and splashy place, and avoid being placed near any heat equipment.

• If the scent is smelled or smog is seen, please take down the battery from the radio, then contact with the nearest retailer.

• The repairing of the radio is in the charge of professionals and the self-dismantling is strictly prohibited.

## **Charging Attentions**

- Please use the matching charger to charge.
- · Suggest turning off the radio before charging.
- To get the best battery performance, please charge the radio at least 5 hours for the first charging.

 Don't charge the battery pack for a long time, or it will shorten service life of battery pack. When fully charged, stop charging in time.

• The charger is only responsible for the battery pack of this radio, and don't charge other battery packs.

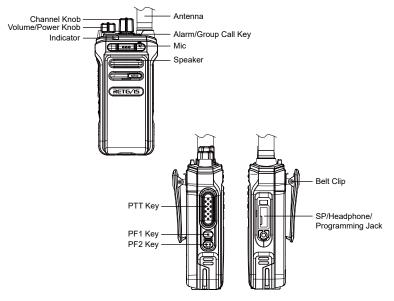
Otherwise, the charger and battery pack will be damaged.

When fully charged, battery pack should be placed in cool and dry areas, but near to fire or exposed to the sun, or there will exist potential safety hazard.

• In the progress of charging, it is suggested not proceeding transmission operation.

- . In the process of charging, slight heat of the battery pack is normal.
- . The radio's using should be complied with the local radio laws and regulations.

## **Radio Function**



List	Name	Function	List	Name	Function
1	Channel Knob	Channel Adjustment	7	Speaker	Voice output
2	Power/	Turn on/off the radio /	8	PTT	Transmitting
	Volume Knob	Volume adjustment			
3	Indicator	Indicate working status	9	PF1	Programming function
4	Antenna	Transmit and receive	10	PF2	Programming function
		wireless signal			
5	Alarm/Group Call	Alarm/Group call	11	Belt Clip	Portable
6	Mic	Voice input	12	SP/Headphone/	Headphone/
				Programming	Programming jack

## **Charging Instructions**

#### **Charging Mode**

Plug the radio into the charger slot and the charger indicator is red. When fully charged, the indicator turns green (As shown in the figure).



## **Function Operations**

#### Power Knob

Clockwise rotate the power knob and the radio is turned on when a click is heard. Anticlockwise rotate the power knob and the radio is turned off when a click is heard.

#### Communication

Press the PTT key to transmit and the radio indicator is red. Speak towards the microphone and the receiver will hear the voice information. Release the PTT key and receive receiver voice information. When receiving receiver voice information, the green indicator lights up.

#### Volume Adjustment

Clockwise rotate the volume knob to increase the volume. Anticlockwise rotate the volume knob to decrease the volume.

#### **Channel Adjustment**

Clockwise rotate the channel knob to increase the channel number. Anticlockwise rotate the channel knob to decrease the channel number.

#### Low Battery Voltage

That the radio prompts low power and the red indicator flashes, the current battery voltage is lower than working voltage, charge the battery.

Charge lamp

PF1(Programming) Factory default, shortly press: Monitor Long press: Power switch

#### PF2(Programming)

Factory default, shortly press: Scan Long press: Noise reduction

#### Alarm/Group Call Key

Shortly press: Alarm Long press: Group call

#### **Monitor Function**

Shortly/Long press the PF1/PF2 key set with monitor function to turn on the function and monitor whether there is audio transmission on the selected channel. If there is no signal, the radio will make a rustle sound. Shortly/Long press the PF1/PF2 key again to turn off the function.

#### VOX Function

Shortly/Long press the PF1/PF2 key set with VOX function and the function is turned on when a beep is heard. Repeatedly operate to adjust VOX levels, the higher the level, the lower the voice that you need to speak. Shortly/Long press the PF1/PF2 key again and the function is turned off when two beeps are heard.

#### Channel Lock

Shortly/Long press the PF1/PF2 key set with channel lock function and the function is turned on when a beep is heard. Shortly/Long press the PF1/PF2 key again and the function is turned off when two beeps are heard.

#### Scan Function

Shortly/Long press the PF1/PF2 key set with scan function and the function is turned on when a beep is heard. The radio starts to scan when the green indicator lights up. The radio stops scanning when receiving the signal. After receiving the signal, the radio automatically starts to scan again. Shortly/Long press the PF1/PF2 key again and the function is turned off when two beeps are heard.

#### **Emergency Alarm Function**

Shortly press the Top key to turn on the emergency alarm function. Two kinds of alarm: the local alarm(Only transmitter alarms) and remote alarm(transmitter and receiver alarm) are available to be set through the programming software. Press the PTT key to turn off the function.

## Specification

Frequency Range	GMRS
Channel Number	30
Audio Distortion	<5%
Working Temperature	-20°C+55°C
Antenna Impedance	50Ω
RF Power	≤10W
Frequency Stability	±2.5ppm
Maximum Frequency Deviation	Wideband: ≤5kHz; Narrowband: ≤2.5kHz
Spurious Radiation	TX≤7.5uW@-36dBm;RX≤2nW@-57dBm
Modulation Method	Wideband: 16KφF3E;Narrowband: 11 KφF3E
Transmitting Current	≤1500mA
Receiving Sensitivity	Wideband: ≤0. 25uV@-119dBm; Narrowband: ≤0. 282uV@-118dBm
Adjacent Channel Selectivity	≥65dB
Intermodulation	≥60dB
Working Voltage	DC 7.4V

# **Factory Setting**

CH NO.	TX-Frequency (MHz)	RX-Frequency (MHz)	Code(Hz)
1	462.5625	462.5625	67.0
2	462.5875	462.5875	118.8
3	462.6125	462.6125	127.3
4	462.6375	462.6375	131.8
5	462.6625	462.6625	136.5
6	462.6875	462.6875	141.3
7	462.7125	462.7125	146.2
8	467.5625	467.5625	D243N
9	467.5875	467.5875	D032N
10	467.6125	467.6125	D047N
11	467.6375	467.6375	D051N
12	467.6625	467.6625	D053N
13	467.6875	467.6875	D065N
14	467.7125	467.7125	D116N
15	462.5500	462.5500	123.0
16	462.5750	462.5750	D743I
17	462.6000	462.6000	D332I
18	462.6250	462.6250	127.3
19	462.6500	462.6500	D243I
20	462.6750	462.6750	D606N
21	462.7000	462.7000	D731I
22	462.7250	462.7250	136.5
23	467.5500	462.5500	-
24	467.5750	462.5750	-
25	467.6000	462.6000	-
26	467.6250	462.6250	-
27	467.6500	462.6500	-
28	467.6750	462.6750	-
29	467.7000	462.7000	-
30	467.7250	462.7250	-

## RF ENERGY EXPOSURE AND PRODUCT SAFETY GUIDE FOR TWO-WAY RADIOS



Before using this radio, read this guide which contains important operating instructions for safe usage and rf energy awareness and control for compliance with applicable standards and regulations.

•User instructions should accompany the device when transferred to other users.

•Do not use this device if the operational requirements described herein are not met.

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.

All Retevis two-way radios are designed, manufactured, and tested to ensure they meet government-established RF exposure levels. In addition, manufacturers also recommend specific operating instructions to users of two-way radios. These instructions are important because they inform users of RF energy exposure and provide simple procedures on how to control it.

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/

When two-way radios are used as a consequence of employment, the Local Government Regulations requires users to be fully aware of and able to control their exposure to meet occupational requirements. Exposure awareness can be facilitated by the use of a product label directing users to specific user awareness information. Your Retevis two-way radio has a RF Exposure Product Label. Also, your Retevis user manual, or separate safety booklet includes information and operating instructions required to control your RF exposure and to satisfy compliance requirements.

#### Radio License(only applicable to licensed radio)

Governments keep the radios in classification, business two-way radios operate on radio frequencies that are regulated by the local radio management departments (FCC, ISED, OFCOM, ANFR, BFTK, Bundesnetzagentur...). To transmit on these frequencies, you are required to have a license issued by them. 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.

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.

#### FCC Requirements:

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference. (Licensed radios are applicable);

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (Other devices are applicable)

FC

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

#### (Only Applicable to GMRS radio station):

A valid individual license is required to operate a GMRS station. To obtain an individual license, an applicant must be eligible and follow the applicable rules and procedures established by FCC. The applicant must pay the required application and regulatory fees. Each individual license in the GMRS will normally have a term of ten years from the date of grant or renewal, and may be renewed pursuant to the procedures of FCC. To obtain a GMRS operator license, you need FCC Form 605 & 159, we suggest visiting the FCC website at https://www.fcc.gov/wireless/support/fcc-form-605, which includes necessary instructions. More questions about the license application, please contact the FCC at 1-888-225-5322 or go to the FCC's website: http://www.fcc.gov. According to FCC rules, any individual who holds an individual license may allow his or her immediate family members to operate his or her GMRS station or stations. Immediate family members are the licensee's spouse, children, grandchildren, stepchildren, parents, grandparents, stepparents, brothers, sisters, aunts, uncles, nieces, nephews, and in-laws.

•(Only applicable to industrial environment)This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

•(Only applicable to home)This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a 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.

#### 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.

#### Restriction Information

This product can be used in EU 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 warning information of the frequency restriction, please refer to the package.

#### IC Requirements:

Licence-exempt radio apparatus

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference.

(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;

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

#### RF Exposure Compliance and Control Guidelines and Operating Instructions

•Occupational/Controlled Radio, this radio is designed for and classified as "Occupational/Controlled Use Only", meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards; NOT intended for use in a General population/uncontrolled environment. •General population/uncontrolled Radio, this radio is designed for and classified as "General population/uncontrolled Use".

# To control your exposure and ensure compliance with the occupational/controlled environment exposure limits, always adhere to the following procedures.

To When operating in front of the face, worn on the body, always place the radio in a Retevis approved clip, holder, holster, case, or body harness for this product. Using approved body-worn accessories is important because the use of Non-Retevis approved 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. To Transmit (Talk), push the Push to Talk (PTT) button. To receive calls (listen), release the PTT button. 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.

•DO NOT operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio, and the antenna gain shall not exceed the specified gain by the manufacturer declared.

•DO NOT transmit for more than 50% of total radio use time, more than 50% of the time can cause RF exposure compliance requirements to be exceeded.

•During transmissions, your radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so.

•DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

•Portable Device, this transmitter may operate with the antenna(s) documented in this filing in Push-to-Talk and body-worn configurations. RF exposure compliance is limited to the specific belt-clip and accessory configurations as documented in this filing and the separation distance between head and the device or its antenna shall be at least 2.5 cm.

 Mobile Device, during operation, the separation distance between user and the antenna subjects to actual regulations, this separation distance will ensure that there is sufficient distance from a properly installed externally-mounted antenna to satisfy the RF exposure requirements. Transmit only when people outside the vehicle are at least the recommended minimum lateral distance away from a properly installed according to installation instructions, externally mounted antenna.

#### Hand-held Mode(if applicable)

 Hold the radio in a vertical position with the microphone (and other parts of the radio including the antenna) at least 2.5 cm (one inch) away from the nose or lips. The antenna should be kept away from the eyes. Keeping the radio at a proper distance is important as RF exposure decreases with increasing distance from the antenna.



#### Phone Mode(if applicable)

•When placing or receiving a phone call, hold your radio product as you would a wireless telephone. Speak directly into the microphone. Do not use the equipment when you are driving

#### Electromagnetic Interference/Compatibility

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

#### Avoid Choking Hazard



Small Parts. Not for children under 3 years.

#### Turn off your radio power in the following conditions:

Turn off your radio before removing (installing) a battery or accessory or when charging battery.
Turn off your radio when you are in a potentially hazardous environments: Near electrical blasting caps, in a blasting area, in explosive atmospheres (inflammable gas, dust particles, metallic powders,



grain powders, etc.).

•Turn off your radio while taking on fuel or while parked at gasoline service stations.

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 (Pacemakers, Hearing Aids and Other Medical Devices) may be using equipment that is sensitive to external RF energy.

•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.

#### 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.

#### Avoid Burns



#### Antennas

•Do not use any portable 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.

#### Batteries (If appropriate)

•When the conductive material such as jewelry, keys or chains touch exposed terminals of the batteries, may complete an electrical circuit (short circuit the battery) and become hot to cause bodily injury such as burns. Exercise care in handling any battery, particularly when placing it inside a pocket, purse or other container with metal objects

•BATTERY WARNING: KEEP OUT OF REACH OF CHILDREN

·Store spare batteries securely

 If the battery compartment (if applicable) does not close securely, stop using the product and keep it away from children

 If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention

·Dispose of used batteries immediately and safely

#### Long transmission

•When the transceiver is used for long transmissions, the radiator and chassis will become hot.

#### Safety Operation



#### Forbid

•Do not use charger outdoors or in moist environments, use only in dry locations/conditions.

•Do not disassemble the charger, that may result in risk of electrical shock or fire.

Do not operate the charger if it has been broken or damaged in any way.

•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.

#### To reduce risk

•Pull by the plug rather than the cord when disconnecting the charger.

Unplug the charger from the AC outlet before attempting any maintenance or cleaning.

•Contact Retevis for assistance regarding repairs and service.

•The adapter shall be installed near the equipment and shall be easily accessible

#### Approved Accessories



•This radio meets the RF exposure guidelines when used with the Retevis accessories supplied or designated for the product. Use of other accessories may not ensure compliance with the RF exposure guidelines and may violate regulations.

WARNING

•For a list of Retevis-approved accessories for your radio model, visit the following website: http://www.Retevis.com

# Guarantee

Serial Number:	
Purchasing Date:	
Dealer:	Telephone:
User's Name:	Telephone:
Country:	Address:
Post Code:	Email:

# Remarks:

1. This guarantee card should be kept by the user, no replacement if lost.

2.Most new products carry a two-year manufacturer's warranty from the date of purchase.

3. The user can get warranty and after-sales service as below:

- •Contact the seller where you buy.
- •Products Repaired by Our Local Repair Center

4.For warranty service, you will need to provide a receipt proof of purchase from the actual seller for verification

# **Exclusions from Warranty Coverage:**

1.To any product damaged by accident.

2.In the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs.

3.If the serial number has been altered, defaced, or removed.



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