TO CUSTOMERS

Thank you very much for using our two way radio. This radio of modern design is reasonable structure with stable functions. It is designed to meet different customers’ need for high quality with easy operation and perfect capability. We believe you are pleased with its nice shape and excellent performance. This manual is suitable for using the model of RT83.
Welcome to use RETEVIS two-way radio

http://www.retevis.com

Main functions

- 1024 Channels
- Man down
- 7 hours voice recording function
- Dual time slot for repeater
- Dual time slot for point to point
- GPS function (optional)
- Wide/narrow bandwidth selection (Analog only)
- High/low power selection
- PC programming
- VOX
- CTCSS/DCS
- Battery save function
- Scan
- Encryption
- End-tone elimination
- Emergency call
- Side-key assignment
- IP67 waterproof
- Upgrade with firmware
- Busy channel lock
- TOT
- Talk around
Using tips

- 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 be published.
- Turn off the radio before entering flammable or explosive areas
- Do not use radio whose antenna is damaged, touching of damaged antenna will cause heat injury
- Do not attempt to disassemble this radio; the maintenance work should be done by technical expert only.
- To avoid troubles caused by electromagnetic interference of electromagnetic compatibility, please turn off the radio in places where have the banner "Do not use wireless equipment", such as hospital and other healthcare places.
- In the car with an airbag, do not put the radio under the direct sunshine or in hot areas. When you transmit with the radio, do keep away from its antenna for 3cm at least.
- If the radio appears smelly or smoke, please shut off its power immediately and contact with your local dealer
- Do not transmit too long, for the radio may heat and hurt the user.

Unpacking and checking equipments

Carefully unpacking the radio. We recommend you check the items listed in the following table before discarding the package. If any item is missing or has been damaged during shipment, please contact us immediately.

Supplied accessories

- Antenna
- Li-ion battery pack
- Belt clip
- Charger
- User’s manual

Note: The antenna frequency range please refers to the annular label at the bottom of antenna.
Installing and uninstalling of supplied accessories

Installing/Removing the battery

1. Align the two grooves of battery and the guide rail on the back of aluminum shell, ensuring full contact and in parallel, then push the battery up to the radio base along the rail on the back of aluminum shell, until the battery latch locks up.

2. To move the battery, please make sure the radio is closed, push the battery latch down, and then push the battery out from the radio.

Installing and removing the antenna

1. Align the threaded end of antenna and the treaded hole at the top of radio, rotate the antenna clockwise until it is tight.

2. To remove the antenna, rotate it counter-clockwise until the antenna spirals out.
Installing and removing the belt clip

1. Align the two holes of belt clip and the two holes of the radio, fix them with the supplied
   M2.5 X 5 screw.
2. Loosen the screw set to remove the belt clip

Installing external headset

Reveal (do not remove) the mic/speaker jack cover, insert the headset into the mic/speaker jack.
Getting Familiar

Channel-selecting knob
Select the working channel, total 16 channels.

Power/volume knob
To power on/off and adjust the volume. Rotate it clockwise, a “click” sound is heard and a “Du” tone prompts the radio power on, continue to rotate it to adjust the volume. Rotate it counter-clockwise until a “click” sound is heard, it powers off.

LED indicator light
The indicator light turns red when transmit, turns green when receive.

Speaker sound output
Microphone sound input

PTT switch
Mic/Speaker jack/Programming port
Used to connect headset or external programmable via PC programming software.

Side key 1 Programmable key
Side key 2 Programmable key
Li-ion battery for charging the radio
Battery release buckle

Notice: The side key 1, side key 2 and Emergency key can be assignment for long press or short press via programming software:

5. High/Low Power 10. Scan ON/OFF 15. One Access 4
Safety and Overview

Overview

Launch And Receive Calls

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

http://www.retevis.com
Overview

Switch On
Clockwise to turn on the radio volume knob there will be a “KADA” sound, message sound and the screen will show you “Welcome”, while the LED indicator lights up and becomes Green color if the battery is full charged.
Notice: If all LED indicators are forbidden the screen will not light up when switch on the walkie talkie, but with a message sound.
Notice: If the volume function is forbidden, there will be no any sound when power on. Now need to power off the walkie talkie and anticlockwise to rotate the knob until a “KADA” sound.

Adjust Volume
Clockwise the volume knob to higher the volume or anticlockwise to lower. And there shows a volume line on the screen.

Launch and Receive Calls

Zone Selection
Zone is a channel group. Each radio can set 64 zones and each zone with max 16 channels.
The menu function:
1. Press [ ] key to enter the menu, find out “Settings” in the menu, then press [ ] or [ ] key to choose the “Setting”, then you can see “Zone”.
2. Press [ ] key to “Zone”, after that with [ ] key to confirm.
3. Press [ ] key to chose the zone which you need, then press [ ] key to confirm.
4. Screen show “zone is set”, then back to screen in the chosen zone.

Selection of Channels, User ID or Group ID
Select the need zone (if there are more than one zone), using the channel knob to select the channel, user name or ID, or group name or ID.

Receive and Reply Group call
The radio must be under a group, then can receive the group call.
When receive the group call
1. LED indicator is green color,
2. On the top of the screen will show RSSI mark, under it, the first line will show “Group”, the name of the caller will be shows in the middle, the conversation time will shows in the third line, the “call” or “call end” will shows in the last line.
3. Hold and keep the radio in a vertical position and place it between your lip within 2.5–5.0cm.
4. Press [PTT] key to answer the call, LED indicator light change to red color.
5. Release [PTT] key to receive next call.
6. If there is no any voice activity, the call end.

**Receive and Reply the Single Call**

Single call means one on one call. Only with two types: one is testing presence of radio before call, and another one is to call immediately

When receive the single call:
1. LED indicator is green color
2. On the top of the screen will show RSSI mark, under it, the first line will show “PATCS”, the name of the caller will be shows in the middle, the conversation time will shows in the third line; the “call” or “call end” will shows in the last line.
3. Hold and keep the radio in a vertical position and place it between your lip within 2.5–5.0cm.
4. Press [PTT] key to answer the call, LED indicator light change to red color.
5. Release [PTT] key to receive next call.
6. If there is no any voice activity, the call end.

**Receive all calls**

All call means a radio can call to all other users in the channel so that it can publish important announcements that require special attention from users

When receive the all call:
1. LED indicator is green color
2. On the top of the screen will show RSSI mark, under it, the first line will show “All Call”, the name of the caller will be shows in the middle, the conversation time will shows in the third line; the “call” or “call end” will shows in the last line.
3. If on the “Channel Free Indication Tone”, when the transmitted radio release [PTT] key, you will hear a sound, that means this channel is free to use.

Notice: When radio receives all call, if you change to other channels, the radio will stops to receive all call. In the moment for receiving all call, you can’t use any programmed key until the all call is end.

**Launch a radio call**

You can choose a channel, user ID or group call with following methods:
- Channel knob
- Reprogrammed single call key
- Contact list
- Manual dialing (only for single call)

**Use channel knob to make a call**

Group call

The radio should be under the group then can have the group call
1. Turn over channel knob, use group name or ID to choose channel.
2. Hold the radio and place it between your lip with 2.5–3cm.
3. Press [PTT] key to call, the LED indicator is red, and the screen shows the contact list name or ID, and the mark.

4. Release [PTT] to receive, when the target radio is replying, the LED is green, the screen shows Group mark, contact list name or ID.

5. If the 'Channel Free Indication Tone' is on, when the transmitted radio is releasing [PTT], you will hear a short sound, means the channel is free for your answer.

6. The radio will back to the screen, you can make a group call with contacts.

**Single call**

1. Turn over channel knob, use the name or user ID to choose channel.

2. Hold the radio and place it between your lip 2.5~3cm.

3. On the top of the middle screen will show RSSI mark, follows shows single call

4. Press [PTT] key to receive, the target radio is replying, LED indicator becomes green.

5. If on the 'Channel Free Indication Tone' is on, when the transmitted radio releases [PTT] key, you can hear a message sound, means the channel is free for your answer. If there are not any transmitter within the time limited, the call end.

6. You will receive a message sound and screen shows call finished

You can make a single call using contact lists for quick access to contacts and use keyboard to search the target radio to make a call.

**All call**

Turn over channel knob, use the name or user ID to choose channel.

Hold the radio and place it between your lip with 2.5~3cm.

Press [PTT] key to release a call, LED indicator becomes to red color. Screen shows All call group name or ID.

The users under the channel can not reply the All call.

**Use a key to make a group call or single call**

Single key call function is convenient for you to set a name or ID for group call or single call with long press or short press the program key.

Set a name or ID for a key, there are more than one single key

Long press or short press the pre-programmed call key, LED indicator becomes to red color, screen shows name or ID with a mark.

Press [PTT] key or long press or short press the pre-programmed call key to receive, when the target radio is replying, LED indicator changes to green.

If on the 'Channel Free Indication Tone' function, press [PTT] key or long press or short press the pre-programmed call key, you can hear a message sound, means the channel is free for your answer.

If there are not any voice activity, the call end.
Emergency Function

Emergency alarm only use to transfer emergency situations, you can release a emergency call at anytime and anywhere. Even the walkie talkie is busy in transferring or receiving. Radio supports 3 types of emergency call:

- Emergency call
- Call follow emergency alarm
- A voice follow emergency alert

Receive the Emergency Call

1. When receiving emergency call, number of received calls and alarms received, exchange the sender name or ID.
2. With a message sound and LED indicator becomes red.
3. If the radio have activated, then will confirm the emergency alarm automatically.

When the radio receive the emergency alarm, screen shows the emergency alarm warning mark, until send with a confirm message then can logout. While, you will not receive any calls and notices from other radios during this situation.

Notice: short-press [ ] key, then with the pre—programmed off key, delete all received emergency call and logout the emergency mode.

Reply the Emergency Call

When receiving the emergency call
1. Press [PTT] key to stop emergency call alarm.
2. Hold the radio place it between your lip with 2.5–3cm.
3. Press [PTT] key to have a call. LED indicator becomes red. Walkie talkie under the emergency call mode.
4. Let go [PTT] key to receive, when reply the emergency, LED indicator becomes green. The screen shows group mark or ID and call ID.

Emergency Alarm
This function called speech signal and allows to send emergency alarm and will trigger on another radio.
1. Press pre-programmed power on key.
2. Screen shows sending emergency call, exchange ID with other walkie talkie.
   LED indicator changes to red and emergency call mark will down on the home screen.
3. When receive the emergency call, the radio issues the emergency call and LED indicator changes to red. LED shows emergency call and call ID.

Logout Emergency Mode
The walkie talkie will logout emergency mode when any of the following situations happen:
1. Confirm with the received emergency call, or
2. Meet with the max emergency call, or
3. Press the pre-programmed call, or
Notice: Emergency mode will be logout when power off the walkie talkie. Radio will not under emergency mode when the radio is power on next time.

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Menu Operation

Character Input
Users can use the 3X4 alphanumeric keypad to access the radio's function. When you're using the keypad to input a user alias or text messages, walkie-talkie input contains three modes: 1. English letter mode 2. Chinese input mode 3. Digital input mode.
When using the keypad input ID, you can only select the digital mode.

English Typing:
Users have to press a button several times for getting some characters. The following table shows how many times needed to press a button to get the required character.

<table>
<thead>
<tr>
<th>Button</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>0</th>
<th>Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.</td>
<td>,</td>
<td>?</td>
<td>!</td>
<td>@</td>
<td>$</td>
<td>%</td>
<td>*</td>
<td>&quot;</td>
<td>#</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>d</td>
<td>e</td>
<td>f</td>
<td>D</td>
<td>E</td>
<td>F</td>
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<tr>
<td>4</td>
<td>g</td>
<td>h</td>
<td>i</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>5</td>
<td>j</td>
<td>k</td>
<td>l</td>
<td>J</td>
<td>K</td>
<td>L</td>
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<td></td>
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<tr>
<td>6</td>
<td>m</td>
<td>n</td>
<td>o</td>
<td>M</td>
<td>N</td>
<td>O</td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td>p</td>
<td>q</td>
<td>r</td>
<td>P</td>
<td>Q</td>
<td>R</td>
<td>S</td>
<td></td>
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<td></td>
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<tr>
<td>8</td>
<td>t</td>
<td>u</td>
<td>v</td>
<td>T</td>
<td>U</td>
<td>V</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>w</td>
<td>x</td>
<td>y</td>
<td>z</td>
<td>W</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
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<td></td>
<td>Space</td>
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<td>#</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>Press # to switch mode</td>
</tr>
</tbody>
</table>
Chinese Typing:
Number 1 is a button of punctuation/s selection input, number 2-9 are correspond Pinyin input, when user input something, the screen shows the Pinyin input interface, the first line of interface shows the contents inputted by user, the second line of interface shows Chinese character what user input. When the content of Pinyin input interface shows in the first line, users can press [或] key to select Pinyin, press [或] key to delete the Pinyin what they inputted previously one by one, after all Pinyin characters of inputted are deleted, the interface of Pinyin will disappears. Press [或] key to choose corresponding Chinese characters and display them in the editing area. At this time the Chinese character input finished, Pinyin input interface disappears. Pressing ‘0’ key shows space, press ‘#’ to switch input modes.

Numerical typing
When in the numbers input mode, press the number keys to display the corresponding number, press ‘#’ key to switch input modes.
Note: When users enter a user alias, ID, or text messages, if editing area without any content, then the [或] key is used for returning to the higher level menu, or else if there is any content on the editor area, pressing [或] key will delete one character before the cursor at one time, until the editing area has no content, then press the [或]key to return to the higher level menu.

Menu Application
1. Press [或] to enter menu, then press left or right [或 or ] to access the menu function.

2. Press [或], select a function or go into a sub menu.
3. Press [或] to return the higher level menu.

Contacts setting
Contacts is “address book” for handheld two way radio. Each entry corresponds to an alias or ID used to start the call. In addition, each item, according to the different content setting, relate to three types of call: group call, single call, all call. Your radio support digital address book.

Group call with contacts
1. Press [或] key to enter menu.
2. Press [或 or ] to contacts, then press [或] to choose.
3. Press [或 or ] to required user alias or ID.
4. Hold radio and let it in a vertical position and keep mouth 1 to 2 inches with radio.
5. Press [PTT] key to transmit, the LED indicator turns to red, the screen shows user alias or ID and the group mark.
6. Release [PTT] key to receive, when any user response within the group, the LED light turns green. You will see on screen group call mark and the user’s ID.
7. If “Free channel indication tone” is one, when the transmitted radio release the [PTT] key, you will hear a short beep, said this channel is free, waiting for your answer. Press [PTT] key to answer. If in a preprogrammed hang time without any voice activity, the call is ended.
Single call with contacts
1. Press [ ] key to enter menu.
2. Press [ ] or [ ] to contacts, then press [ ] to choose.
3. Press [ ] or [ ] to required user alias or ID.
4. Hold radio and let it in a vertical position and keep mouth 1 to 2 inches with radio.
5. Press [PTT] key to transmit, the LED indicator turns to red, the screen shows user alias or ID and the group mark.
6. Release [PTT] key to receive, when any user response within the group, the LED light turns green. You will see on screen group call mark and the user's ID.
7. If ‘Free channel indication tone’ is one, when the transmitted radio release the [PTT] key, you will hear a short beep, said this channel is free, waiting for your answer. Press [PTT] key to answer. If in a preprogrammed hang time without any voice activity, the call is ended.

Call Log
Your radio can record all the missed, received, dialed Call.

Missed Call
Whenever you miss call, two way radio will display a not answered call, you can view in the Call Log.
1. Press [ ] key to enter the menu.
2. Press [ ] or [ ] key to the Call Log, and then press [ ] key to choose.
3. Press [ ] or [ ] key to the Missed call, and then press [ ] key to choose.
4. Press [ ] or [ ] to view the missed call ID.

5. You can press [ ] key to check the more information, time of call, send message or delete the missed call.

Diated Number
1. Press [ ] key to enter the menu.
2. Press [ ] or [ ] key to the Call Log, and then press [ ] key to choose.
3. Press [ ] or [ ] key to the Dialed Numb, and then press [ ] key to choose.
4. The screen will show the recent lists.
5. Press [ ] or [ ] key to view list.

Received Call
1. Press [ ] key to enter the menu.
2. Press [ ] or [ ] key to the Call Log, and then press [ ] key to choose.
3. Press [ ] or [ ] key to the Received call, and then press [ ] key to choose.
4. Press [ ] or [ ] to view the received call ID.
5. You can press [ ] key to check the more information, time of call, send message or delete the received call.

Delete Call Log's record
1. Press [ ] key to enter the menu.
2. Press [ ] or [ ] key to the Call Log, and then press [ ] key to choose.
3. Press [ ] or [ ] key to the Del Logs, and then press [ ] key to choose.
4. Press [ ] key, then press [ ] or [ ] to choose the Missed Call, Dialed Numb or Received Call.
5. Press [ ] to confirm delete the records.

Message
Your radio can receive message, if another radio sent text message, message if a maximum length is 144 characters.

Edit and Sending Message
Using the menu
1. Press [ ] to enter the menu.
2. Press [ F or J ] to message, and then press [ ] key to confirm.
3. Press [ F or J ] to Create message, then press [ ] key to choose.
4. Using the keyboard to input the messages, press [ F ] key to move to the left one, press [ ] key to the right one, when editing area have content, press [ ] key to delete any useless character.
5. After writing the message, press [ ] key to choose to send or save.
6. If you want to send the message, press [ F or ] to choose the Search, then press [ ] key to select.
Or press [ F or ] key to choose Write number, and then input the user ID and then press [ ] to send.
7. The screen will show “MES sending”, after succeed, the screen will shows “MES send end”.

Send pre-text message
Two way radio support maximum 16 programming of prefabricated text message.

When a predefined text message, you can edit every message before you send each message.
1. Press [ ] key to enter the menu.
2. Press [ F or ] to Message, then press [ ] to choose.
3. Press [ F or ] to CommMsg, then press [ ] to choose.
4. Press [ F or ] to required Pre–text message, then press [ ] to choose.
5. Press [ ] to choose “Edit” to edit message, press [ F ] key to move to the left one, press [ ] key to the right one, when editing area have content, press [ ] key to delete any useless character.
6. When finished message, press [ ] to send the message.

Send Pre–text message with a key
1. Press preprogrammed, single bond calls to a predefined alias or ID send a prefabricated text messages.
2. The screen displays MES Sending after that the screen will shows MES send end.

Edit message
Choosing Edit to edit message before you send.
1. Press key [ F or ] to Edit, then press [ ] to choose.
2. Using the keyboard to input the messages, press [ F ] key to move to the left one, press [ ] key to the right one, when editing area have content, press [ ] key to delete any useless character.
3. After writing the message, press [ ] key to choose to send or save.
4. If you want to send the message, press [F] or [J] to choose the Search, then press [A] key to select.

5. The screen will show "MES sending", after succeed, the screen will shows "MES send end".

Manage the sent messages

Once a message is sent to another radio, it will be saved in the 'Outbox'. Send after sending a text message has always been to "Outbox" at the top of the list. The "Outbox" folder can store up to 30 recently sent text messages. After the folder is full, the next sent text message will automatically replace the earliest messages in this folder.

Check the sent message

Using the menu function:
1. Press [A] button to enter the menu mode.
2. Press [F] or [J] the key to message, and then press [A] key to choose.
4. Press [F] or [J] the key to the required message, and then press [A] key choose.

Check and Read the Inbox Message

1. Press the [A] button to enter the menu mode.
4. Press the [F] or [J] key to check the message. If the messages are from the email Program, it will appear a subject line.

5. Press the [A] key to choose the current text, then press [A] key again to reply, delete, or forward this message.

Unread messages: [ ], Already read message: [ ]

Reply message

1. Press the [A] key to enter the menu.
4. Press [A] key to check the message.
6. You can text message, after finished the message, please press [A] key to reply the message.

Forwarder the received message

1. Press the [A] key to enter the menu.
4. Press [A] key to check the message.
6. Then press [A] key to search the contact or write the contact number.
7. Then press [A] key to forwarder the message.

Deleting all Messages in the Inbox

Use the menu function
1. Press [ ] key to enter the menu.
2. Press [ or ] key to message, and then press [ ] key to choose.
3. Press [ or ] key to the delete message, and then press [ ] key to choose.
4. Press [ or ] key to inbox, and then press [ ] key to choose.
5. The screen will appear "are you sure", press [ ] key to delete all messages, press [ ] to back.

Encryption
If you enable this feature, which is beneficial to prevent other users on the channel by using the method of software encryption for unauthorized eavesdropping. The launch of signaling and user identification part unencrypted. Your radio must be enabled on the channel encryption function, can send encrypted, even if the receiving transmission is not must request to do so.

Basic encryption
Two way radio can only be assigned more than one type of encryption. If users Call for encryption or decryption of data transmission, must make to be preprogrammed walkie-talkies and launch radio has the same "encryption keys" (suitable for basic encryption). If your radio to receive different encryption keys or key values and key encryption call ID, you will hear the sound of the transport chaos encryption (basic). Press the preliminary programming encryption keys on or off.

DTMF
Dual Tone Multi-Frequency (DTMF) function allows operating radio when there is interference in the radio system.
To initiate a DTMF call Setting the Coding sequence table from programming software, support 16 groups most.
You can set the code sending before PTT transmitter and after PTT transmitter, the duration time and the interval time of DTMF code sending.
You can disable DTMF tone by turning off all radio tone and prompts.

Secrecy
You can activate or kill any radio in the system. For example, you might want to disable a stolen radio, to prevent thieves use it, and enable it when you get it back.
Note: radio kill or activation is limited to activate the radios with these functions.

Remote disable
This function only can work in the single call.
1. Open the programming software.
2. You need to assign side--key to the Remote Disable by programming software.
3. Tick "Radio Disable Decode" in the DMR Basic Setting.
4. Choose the single call which you want to remote disable in the Remote control.
5. After finished operations in programming software, write to your radio.
6. Press the pre--programmed side key, then you will hear a sound, the target radio is remote disabled.
Also you can use the menu to achieve this function:
1. Press [ ] key to enter the menu.
2. Press [ or ] key to Contacts, then press [ ] key to choose.
3. Press [ or ] key to the single call, then press [ ] key to choose.
4. Press [ or ] key to Application, then press [ ] key to choose.
5. Press [ or ] key to Radio disable, then press [ ] key to choose.
6. If succeed, the screen displays Ok, Or if failed, the screen displays Fail.
Remote Enable

This function only can work in the single call.
1. Open the programming software.
2. You need to assign side-key to the Remote Enable by programming software.
3. Tick "Radio Enable Decode" in the DMR Basic Setting.
4. Choose the single call which you want to remote Enable in the Remote control.
5. After finished operations in programming software, write to your radio.
6. Press the pre-programmed side key, then you will hear a sound, the target radio is remote enabled.

Also you can use the menu to achieve this function:
1. Press [ ] key to enter the menu.
2. Press [ ] key to Contacts, then press [ ] key to choose.
3. Press [ ] key to the single call, then press [ ] key to choose.
4. Press [ ] key to Application, then press [ ] key to choose.
5. Press [ ] key to Radio disable, then press [ ] key to choose.
6. If succeed, the screen displays Ok. Or if failed, the screen displays Fail.

Radio check

If there are any activation, this feature allows you to determine whether there is other two way radio active inside the system, and does not disturb the walkie talkie users, none-voice or visual appears on the target two way radio.

Note: This function only apply to private call.

Send Radio check

1. Press [ ] key to enter menu.
2. Press [ ] or [ ] key to select Contacts, then press [ ] key to select.
3. Press [ ] or [ ] to the required user alias or ID, then press [ ] to select or press [ ] or [ ] key to manual dialing, and then press [ ] key to select. If there are before calling ID, show ID and along with the flashing cursor, using the keyboard editing ID, press [ ].
4. Press [ ] or [ ] to radio detection, and then press [ ] to select.
5. When screen displays radio detection: < use alias or ID>, it is indicating the ongoing radio detection.
6. Waiting for confirmation.
7. If the target radio is active in the system, then it makes a prompt sound, screen will shows success, or if is inactive, then it makes a prompt sound, screen will shows "fail".
8. Two way radio returns to user alias or ID screen. If you press [ ] when waiting for confirmation, made a prompt, two way radio will end all retry and exit the two way radio detection mode.

Monitor

Using monitoring function to open the target two way radio microphone (only the use alias or ID). You can use the function yo monitor any sound around target two way radio. You must allow your radio to use this function by programming software.

Start monitor

Using the menu
1. Press [Esc] key to enter menu.
2. Press [F or J] to contact then press [Esc] to choose.
3. Press [F or J] to required user name or ID, and then press [Esc] to choose.
4. Press [F or J] to select remote monitor then press [Esc] to select.
5. Waiting for confirmation.
6. Screen displays OK, or screen displays Fail.
   If success: two way radio began to receive voice signals from the radios which are being monitored voice and screen displays two way radio are monitoring, until the end of the duration of preprogrammed, two way radio made a prompt sound, and the LED light puts out, screen display that monitoring ends.
   If failed: two way radio repeats until reach the preprogrammed attempts.

Record
The radio has a 7 voice record function, you can check the communication records with this function.
1. Press [Esc] to enter the menu.
2. Press [F or J] to the Record, then press [Esc] to choose.
3. Press [F or J] to the Record Enable or Record Disable.
4. If you want to turn on the record function, choose the Record Enable; then when you communicate with other radios, the voice record function will record the voice.
   Otherwise, choose the Record Disable, the voice record will be turned off.
Notice: if the record time exceeds 7 hours in totally, the latest record will replace the earliest.

Scan
Create a scan list and assign to a single channel/talk group, your radio can support 16 scan lists, each up to 16 members. Each scan list support mixed analog and digital channels. You can edit the scan list to add/delete channels or set the priority channel.

Scan instruction
When scanning, your radio can view if there is a voice activity in current channel through circulating pre-programming scan list. LED lights flashing for green light.
According to a pre-programmed scan on/off key to start the scan, when you start scanning, radio will detect all channels/contact groups on pre-programmed scan list.

Start/stop scan
Press pre-programmed scan on/off key.
When the scan is activated, LED indicator flashed green.

Scanning reply
Radio detect active channel/contact group when scanning, at this time radio will stay in the channel/contact group, which is called "scan hang time" pre-programmed time.
1. Hold the radio in a vertical position and keep 1 to 2 inches (2.5 to 5.0cm) distance from the mouth.
2. Within the hang time by press [PTT] key, LED indicator is red.
4. If you do not respond within the hang time, radio will continue down the scan.

Talk around
When the transponder does not work, or when the radio located outside the range of the transponder but located within the range of other radios can call, you can continue to communicate. This is called "talk around".
Press pre-programmed side key, you can switch between repeater and talk around mode.
Settings

Setting includes the following contents:
- Attributes
- Restore factory
- Configuration
- Setting
- GPS information
- RX GPS info

Attributes
- Serial number
- Version
- Restore factory
This function can restore the factory setting

Configuration
- TX freq
- RX freq
- Channel name
- Dis select
- Tx limit time
- Color code
- Time slot
TX frequency
1. Press [ ] key to enter the menu mode.
2. Press [F or J] key to settings, and then press [ ] to choose.
3. Press [F or J] key to configuration, and then press [ ] key to choose.
4. Press [F or J] key to TX freq, and then press [ ] to choose.
5. The screen displays transmitting frequency of the current channel, and then press [ ] key to choose.
6. Press the [ ] key to delete the current frequency, then press the number keys to enter the corresponding number, press [ ] key to return the previous menu.
7. After finished the change, press [ ] key, the screen displays transmitting frequency has been saved.

Note: Editing frequency will be limited within the frequency range set by programming software, if less than the write frequency range set by software, the final change result will be the minimum frequency of frequency range set on software, otherwise it is maximum.

RX frequency
1. Press [ ] key to enter the menu mode.
2. Press [F or J] key to settings, and then press [ ] to choose.
3. Press [F or J] key to configuration, and then press [ ] key to choose.
4. Press [F or J] key to RX freq, and then press [ ] to choose.
5. The screen displays transmitting frequency of the current channel, and then press [ ] key to choose.
6. Press the [ ] key to delete the current frequency, then press the number keys to enter the corresponding number, press [ ] key to return the previous menu.
7. After finished the change, press [ ] key, the screen displays receive frequency has been saved.

Note: Editing frequency will be limited within the frequency range set by programming software, if less than the write frequency range set by software, the final change result will be the minimum frequency of frequency range set on software, otherwise it is maximum.

Channel name
1. Press [ ] key to enter the menu mode.
2. Press [F or J] key to settings, and then press [ ] to choose.
3. Press [F or J] key to configuration, and then press key [ ] to choose.
4. Press [F or J] key to Channel name, and then press [ ] to choose.
5. The screen displays the current channel name, press the [ ] key to switch the input method to enter the relevant letters, numbers or characters, the same as the input method for text editing.
6. After the change is completed, press [ ] key, the screen display been saved.

Display Select
1. Press [ ] key to enter the menu mode.
2. Press [F or J] key to settings, and then press [ ] to choose.
3. Press [F or J] key to configuration, and then press [ ] key to choose.
4. Press [F or J] key to Dis Selct, and then press [ ] to choose.
5. There are four options for your selection: None/Word/Picture/All.

Tx limit time
1. Press [ ] key to enter the menu mode.
2. Press [ ] key to settings, and then press [ ] to choose.
3. Press [ ] key to configuration, and then press [ ] key to choose.
4. Press [ ] key to Tx limit time, and then press [ ] to choose.
5. There are some options for your selection: 90s/120s/150s/180s/210s/240s/270s/
   300s/330s/360s/390s/420s/450s/480s/510s.

Color code
Color code only can be set on digital channels.
1. Press [ ] key to enter the menu mode.
2. Press [ ] key to settings, and then press [ ] to choose.
3. Press [ ] key to configuration, and then press [ ] key to choose.
4. Press [ ] key to Color code, and then press [ ] to choose.
5. Press [ ] key to select color code values, and then press [ ] key to choose.
6. Screen shows color code set.

Time slot
Time slot only can be set on digital channels.
The radio will have two time slots for repeater and two time slot for point to point.
If you need the repeater two time slot, please choose slot 1 or slot 2.
If you need two time slot for point to point, please choose DCDM slot 1 or DCDM slot 2.

Setting
- Lock key
- Led
- Man down
- Power
- Zone
- Date&time
- Tone
- GPS

Lock key
You can lock the keypad to prevent accidental key input, lock method includes manual
and automatic keypad lock, automatic keypad lock including: None, 5s, 10s, 15s.
1. Press [ ] key to enter the menu mode.
2. Press [ ] key to Settings, and then press [ ] key to choose.
3. Press [ ] key to Setting, and then press [ ] key to choose.
4. Press [ ] key to Lock key, then press [ ] key to choose.
5. Press [ ] key to None, 5S, 10S, 15S, then choose the corresponding time, then
   keypad will be locked and return to the main screen if user have not any operation after
   corresponding period of time.
6. To unlock the keypad, press [ ] key, then press [ ] key.
7. Screen shows keypad unlocked, and then return.
LED
You can turn on or off the screen backlight according to the need. Turn on or off LED as the pre-programmed setting:
1. Press [ ] key to enter the menu mode.
2. Press [ or ] key to Settings, and then press [ ] key to choose.
3. Press [ or ] key to Setting, and then press [ ] key to choose.
4. Press [ or ] key to Led, then press [ ] key to choose.
5. The screen displays on 5sec, 15sec, 30sec four options, choose “on”, the screen will remain lit and won’t turn off, if select the other options, the screen backlight will be off if user have not any keypad operation after corresponding period of time.

Man down
When you enable this function, if your wont stand vertically, your radio will release “Deng–Deng–Deng–Deng”, then it will send out one tone and other radio will receive alarm. But the condition is that other radio didn’t sent the ID verification.

Power
You can set each channel power level to high or low.
Setting high power radio implement communications with radios relatively far distance.
Low power radio implement communications with radios relatively close distance.
Press pre-programmed high/low power side key, you can switch high/low transmit power
Using the menu function:

1. Press [ ] key to enter the menu mode.
2. Press [ or ] key to Settings, and then press [ ] key to choose.
3. Press [ or ] key to Setting, and then press [ ] key to choose.
4. Press [ or ] key to Power, then press [ ] key to choose.
5. Press [ ] key to choose the power level.
6. Return to the main screen, the screen displays the power level icon H or L.

Zone
Change to different zone according to need:
1. Press [ ] key to enter the menu mode.
2. Press [ or ] key to Settings, and then press [ ] key to choose.
3. Press [ or ] key to Setting, and then press [ ] key to choose.
4. Press [ or ] key to Zone, then press [ ] key to choose.
5. Press [ ] key to choose the new zone.

Date & time
Time setting divided into:
- Date
- Time
- Date format

Date
1. Press [ ] key to enter the menu mode.
2. Press [ or ] key to Settings, and then press [ ] key to choose.
4. Press [F or J] key to Date & time, then press [E] key to choose.
5. Press [F or J] key to choose Date, and then press [E] key to display the current date.
6. Press [E] key to enter date setting interface.
7. Press [F or J] key to move left or right to choose the desired number, then enter the corresponding numbers to change the date via numeric keypad.
8. Press [E] key to save, the screen displays the date is set.

Time
1. Press [E] key to enter the menu mode.
4. Press [F or J] key to Date & time, then press [E] key to choose.
5. Press [F or J] key to choose Date, and then press [E] key to display the current time.
6. Press [E] key to enter time setting interface.
7. Press [F or J] key to move left or right to choose the desired number, then enter the corresponding numbers to change the date via numeric keypad.
8. Press [E] key to save, the screen displays the date is set.

Date format
1. Press [E] key to enter the menu mode.

Tone
- Profiles
- Keypad set
- Power tone
- Message tone
- Channel tone

Profiles
1. Press the [E] key to enter the menu mode.
3. Press [F or J] key to radio setting, and then press the [E] key to select.
6. Press [F or J] key to select General or Silent according to your need.
Keypad set
1. Press the [ ] key to enter the menu mode.
2. Press [ ] key to Settings, and then press [ ] key to select.
3. Press [ ] key to radio setting, and then press the [ ] key to select.
4. Press [ ] or [ ] key to Tone, and then press [ ] key.
5. Press [ ] or [ ] key to keypad tone set, and then press [ ] key.
6. Press [ ] or [ ] key to select KeyRington or KeyRingoff according to your need.
7. Press [ ] key to save.

Power tone set
you can choose turn on or turn off the prompt tone when you change the power level.
1. Press the [ ] key to enter the menu mode.
2. Press [ ] or [ ] key to Settings, and then press [ ] key to select.
3. Press [ ] or [ ] key to radio setting, and then press the [ ] key to select.
4. Press [ ] or [ ] key to Tone, and then press [ ] key.
5. Press [ ] or [ ] key to power tone set, and then press [ ] key.
6. Press [ ] or [ ] key to select CoulToneon or CoulToneoff according to your need.
7. Press [ ] key to save.

Message tone
1. Press the [ ] key to enter the menu mode.
2. Press [ ] or [ ] key to Settings, and then press [ ] key to select.
3. Press [ ] or [ ] key to radio setting, and then press the [ ] key to select.
4. Press [ ] or [ ] key to Tone, and then press [ ] key.

5. Press [ ] or [ ] key to Message Tones selection, and then press [ ] key.
6. Press [ ] or [ ] key to select Ring1 to Ring5 according to your need.
7. Press [ ] key to save.

Channel tone
If you enable this function, and one radio transmit with your radio, when the transmitted radio release [PTT]key, you will hear a voice, then you can reply.
1. Press the [ ] key to enter the menu.
2. Press [ ] or [ ] key to Settings, and then press [ ] key to select.
3. Press [ ] or [ ] key to setting, and then press [ ] key to select.
4. Press [ ] or [ ] key to tone, and then press [ ] key.
5. Press [ ] or [ ] key to Channel Tone, and then press [ ] key to select.
6. Press [ ] or [ ] key to select the Channel tone off or Channel tone on according to your need.
7. Press [ ] key to save.

GPS
Only GPS version has this function
1. Press the [ ] key to enter the menu mode.
2. Press [ ] or [ ] key to Settings, and then press [ ] key to select.
3. Press [ ] or [ ] key to radio setting, and then press the [ ] key to select.
4. Press [ ] or [ ] key to GPS, and then press [ ] key.
5. Press [ ] or [ ] key to select GPS on or off .
6. Press [ ] key to save.
GPS Info
GPS function of the machine starts when switch on the GPS. After Locked by the GPS, Latitude and longitude information shows here.
1. Press the [ ] key to enter the menu mode.
2. Press [ or ] key to Settings, and then press [ ] key to select.
3. Press [ or ] key to GPS information, and then press the [ ] key to enter in.

Receive GPS info
Here you can see the GPS positioning information send from the other radios.
1. Press the [ ] key to enter the menu mode.
2. Press [ or ] key to Settings, and then press [ ] key to select.
3. Press [ or ] key to Rx GPS information, and then press the [ ] key to enter in.

Specifications

General

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>VHF:136-174MHz or UHF:400-470MHz</td>
</tr>
<tr>
<td>Channel capacity</td>
<td>1024 Channels</td>
</tr>
<tr>
<td>Channel spacing</td>
<td>12.5KHz</td>
</tr>
<tr>
<td>Working voltage</td>
<td>7.4V</td>
</tr>
<tr>
<td>Battery type</td>
<td>Li-ion</td>
</tr>
<tr>
<td>Working temperature</td>
<td>$-40^\circ C + 85^\circ C$</td>
</tr>
<tr>
<td>Antenna Impedance</td>
<td>50 Ω</td>
</tr>
<tr>
<td>Audio output power</td>
<td>$\leq 1000$ Mw@16</td>
</tr>
<tr>
<td>Dimension</td>
<td>144<em>59</em>40mm</td>
</tr>
</tbody>
</table>

Receiver

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog sensibility</td>
<td>$0.35$uW/$-116$dBm (20dB SINAD)</td>
</tr>
<tr>
<td></td>
<td>$0.22$uW/$-120$dBm (Type)</td>
</tr>
<tr>
<td>Digital sensibility</td>
<td>$0.3$ uW/$-117.4$dBm (BER 5%)</td>
</tr>
<tr>
<td></td>
<td>$0.7$ uW/$-110$dBm (BER 1%)</td>
</tr>
<tr>
<td>Common channel Rejection</td>
<td>$\geq -12$dB</td>
</tr>
<tr>
<td>Adjacent channel selectivity</td>
<td>TIA603C: 65dB    ETSI: 60dB</td>
</tr>
<tr>
<td>Spurious response</td>
<td>TIA603C: 75dB    ETSI: 70dB</td>
</tr>
<tr>
<td>Rated audio power</td>
<td>$\leq 1$W</td>
</tr>
<tr>
<td>Rated audio distortion</td>
<td>3% (Type)</td>
</tr>
<tr>
<td>Audio response</td>
<td>$-1$dB -- $-3$dB</td>
</tr>
</tbody>
</table>
Transmitte

Output power
High: 10W
Low: 4 W

Frequency stability
\( +/-.1.0 \text{ppm} \)

Adjacent channel power
\( \leq -60 \text{dB} \)

Free time slot power
TDMA: \( \leq -57 \text{dBm} \)

FM modulation mode
12.5KHz; 11K0F3E

Modulation Deviation
2.5KHz; 12.5KHz

Nonactive slot power
\( -57 \text{dBm} \)

Digital protocol
ETSI TS 102 361-1-2-3

Vocoder type
AMBE+2TM

Modulation BER (Bit error rate)
\( \leq 5\% \)

4FSK digital mode
12.5KHz (data only): 7K60FXD
12.5KHz (data+voice): 7K60FXE

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Rf Energy Exposure And Product Safety Guide For Portable 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.

ATTENTION!

This two-way radio uses electromagnetic energy in the radio frequency (RF) spectrum to provide communications between two or more users over a distance. It uses radio frequency (RF) energy or radio waves to send and receive calls. RF energy is one form of electromagnetic energy. Other forms include, but are not limited to, sunlight and x-rays. RF energy, however, should not be confused with these other forms of electromagnetic energy, which when used improperly, can cause biological damage. Very high levels of x-rays, for example, can damage tissues and genetic material.

Experts in science, engineering, medicine, health, and industry work with organizations to develop standards for safe exposure to RF energy. These standards provide recommended levels of RF exposure for both workers and the general public. These recommended RF exposure levels include substantial margins of protection.

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 about 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/

Local Government Regulations
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
Governments keep the radios in classification, most of the classified walkie-talkie need to get local government License, and operation is allowed. The detailed classification and the use of your two-way radios, please contact the local government radio management departments. For the following specified classification: the USA FRS, Australian CB, the individual license is not required.

Compliance with RF Exposure Standards (If appropriate, Reference to the actual product’s Safety Marking)
Your Retevis two-way radio is designed and tested to comply with a number of national and international standards and guidelines (listed below) for human exposure to radio frequency electro-magnetic energy.

FCC ID The FCCID means: This radio complies with the IEEE (FCC) and ICNIRP exposure limits RF exposure environments at operating duty factors of up to 50% talk-50% listen and is approved for occupational use only.

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

IC ID This device complies with Industry Canada 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.

In terms of measuring RF energy for compliance with these exposure guidelines, your radio generates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.

NOTE: The approved batteries, supplied with this radio, are rated for a 5-5-90 duty factor (5% talk-5% listen-90% standby) even though this radio complies with FCC occupational exposure limits and may operate at duty factors of up to 50% talk.
RF energy exposure standards and guidelines (if appropriate)
Your Retevi two-way radio complies with the following RF energy exposure standards and guidelines:
- 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 Commission on Non-Ionizing Radiation Protection (ICNIRP)
- International Electrotechnical Commission (IEC) 62209-2-2010

RF Exposure Compliance and Control Guidelines and Operating Instructions
To control your exposure and ensure compliance with the occupational/controlled environment exposure limits, always adhere to the following procedures.

Guidelines
- User awareness instructions should accompany the device when transferred to other users.
- Do not use this device if the operational requirements described herein are not met.

Operating Instructions
- 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 50% of the time, or less, is important because the radio generates measurable RF energy exposure only when transmitting in terms of measuring for standards compliance.
- 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.
- When operating in front of the face, worn on the body, always place the radio in a Retevi approved clip, holder, holster, case, or body harness for this product. Using approved body-worn accessories is important because the use of Non-Retevi approved accessories may result in exposure levels, which exceed the IEEE/ICNIRP occupational/controlled environment RF exposure limits.
- If you are not using a body worn accessory and are not using the radio in the intended use position, in front of the face or at the body in the PTT mode or alongside of the head in the phone mode, then ensure the antenna and the radio are kept 2.5 cm (one inch) from the body when transmitting. Keeping the radio at a proper distance is important because RF exposures decrease with increasing distance from the antenna.

Hand-held Mode
- 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

- When placing or receiving a phone call, hold your radio product as you would a wireless telephone. Speak directly into the microphone.

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.

WARNING

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.

Note:

Pacemakers

Defibrillators or other Implantable Medical Devices Persons with pacemakers, Implantable Cardioverter-Defibrillators (ICDs) or other active implantable medical devices (AIMD) should:

- ALWAYS keep the radio more than 15 cm from their pacemaker when the radio is turned on.
- 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 they have 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.

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.

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

<table>
<thead>
<tr>
<th>Antennas</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Batteries (If appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>• When the transceiver is used for long transmissions, the radiator and chassis will become hot.</td>
</tr>
</tbody>
</table>

Safety Operation

<table>
<thead>
<tr>
<th>Forbid</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Do not use charger outdoors or in moist environments, use only in dry locations/conditions.</td>
</tr>
</tbody>
</table>

| • 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.

Use of Communication Devices While Driving
• Always check the laws and regulations on the use of radios in the countries and areas where you drive.
• Give your full attention to driving and to the road.
• If available, use the hands-free facility.
• If driving conditions or regulations require it, pull off the road and park before making or answering a call.

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

EU Importer:
Importer: Germany Retevis Technology GmbH
Address: Uetzenacker 29,38176 wendeburg
Warranty card

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: ____________________________

Thank you for buying Retevis two-way radios, we will do our best to provide you with a stable, clear and efficient wireless communication services. In order for you to enjoy a better quality warranty service, please focus on the following information:

The product warranty period begins from the purchasing date. If product failure under normal use within warranty period occurs, according to the contents of this warranty, the radio is guaranteed for 12 months, accessories 6 months), please carry the warranty card originals and purchase invoice to Retevis designated authorized warranty repair station for warranty service.

The following situations occur during warranty period will be implemented in paid service:
1) Failure to produce the warranty card
2) The card has altered traces or inconsistent with the product
3) Defect or damage caused by abnormal or non-normal use
4) Defect or damage caused by misuse, accident, water or negligence
5) Defect or damage caused by improper testing, operation, maintenance, installation, disassembly or adjustment
6) Defect or damage caused by unauthorized repair or disassembly
7) Defect or damage caused by force majeure
8) Wear and tear under normal use

When you are in need of repair, please send the radio, warranty card and purchase invoice together by post or take directly to Retevis designated authorized service stations, shipping costs should be borne by the user.

Maintenance record

<table>
<thead>
<tr>
<th>Carry-in date</th>
<th>Completion date</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Fault description</th>
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<table>
<thead>
<tr>
<th>Maintenance staff numbers</th>
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<table>
<thead>
<tr>
<th>Maintenance personnel No.</th>
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<table>
<thead>
<tr>
<th>Signature</th>
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This warranty card to be kept by the user, no replenishment if lost!