


RF ENERGY EXPOSURE AND PRODUCT SAFETY GUIDE FOR PORTABLE RADIOS



ATTENTION! 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.

This 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 Reteless 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 the 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 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 Reteless radio has a RF Exposure Product Label. Also, your Reteless user manual, or separate safety booklet includes information and operating instructions required to control your RF exposure and to satisfy compliance requirements.

Radio License (if appropriate)

Governments keep the radios in classification, business 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 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 following two conditions:
 - (1) This device may not cause harmful interference, and
 - (2) this device must accept any interference received, including interference that may cause undesired operation.
- 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) Henan Eshow Electronic Commerce 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.retekess.com.
- Disposal
The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws in your area.



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 Information

- 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.
- The device complies with RF specifications when the device used at 5mm from your body. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided.
- DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Avoid Choking Hazard




Small Parts. Not for children under 3 years.

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
- 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 Reteless for assistance regarding repairs and service.
- The adapter shall be installed near the equipment and shall be easily accessible
- Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.
- Adapter shall be installed near the equipment and shall be easily accessible.
- The plug considered as disconnect device of adapter.
- The operating temperature of the EUT can't exceed the specified range.

Approved Accessories



- This radio meets the RF exposure guidelines when used with the Reteless 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 Reteless-approved accessories for your radio model, visit the following website: <http://www.Retekess.com>



TD156

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

Henan Eshow Electronic Commerce Co., Ltd
Add: 7/F, Sanjiang Building, No.170 Nanyang Road, Huiji District, Zhengzhou, Henan, China

Diagram of Hardware



Parameters

Coaster Pager	
Dimension	φ80*15mm
Material of Housing	PC
Receiving Sensitivity	-120db
Standby Time	Approximately 48 hrs
Battery	500 mAh Li-ion
Rx Frequency	424.8-469.025MHz
Charging Tray's Power Source	12V/1A
Reminder Method	Vibrating, Buzzing & LED Flashing
Distance of Transmission	About 600 meters in a wide-open field
Protection Level	IP67

Keypad	
Dimension	162*98*40mm
Material of Housing	abs
Transmitting Power	400mW
Standby Power	600mW
Max. Power	1W
Tx Frequency	424.8 - 469.025MHz
Power Supply	12V/1A
Keypress Method	Keystroke
Modulation	FM

Instructions Manual

At first, please unpack 9V/2A charger and insert it to the power outlet of charging tray. The battery will charge in usual after every coaster pager is placed on the charging tray. While the battery is full, please set and operate the device.

Powering Coaster Pager up/off

1. When the beeper is off, put it on the charging tray to turn it on.
2. When the beeper is on, put it on the charging tray, press "0" and CALL button to turn it off.

Function Interface

When you press SETTING button to enter password authentication interface, the display shows "----", waiting for the password to input. The default password is "2580". After you input the password to enter function interface, "F1" will be displayed in the screen and blinks. After you input the number or press UP button to select a function, press ENTER button to access relative setting interface. While the set is completed, press SETTING button to return to the home screen.

Introduce To Function Interface

1. To set the Duration of the Vibration/Buzzer/LED Flash (F0)

After you access F0 function interface, input two-digit number "00" or "05-99". The number stands for the duration in seconds of the Vibration/Buzzer/LED Flash. The number cannot be set to "01-04" because the length of the time is too short. Minimum time is 5 seconds. When the setting is 00, it means there is no limit on the length of time. When the Vibration/Buzzer/LED Flash function is turned off, it will not switch off their current setting and still follow the procedures from F2 to F4.

2. Setting ID for Coaster Pager (F1)

After the access to F1 function interface, input two-digit ID (Not input "99") for your Pager and press CALL button. At the moment, the keypad display blinks. Place the Pager to an area approximately 10cm right above infrared communication device of the keypad. If there are Buzzer and LED Flash from the Pager, it means that you finally make it. (Also, you can set it up in any time after you take the Pager off the charging tray.)

Notice: After the change of any parameter in the setting of the keypad, it is necessary to reset a new ID number if you want to apply the new setting to the Pager.

3. Setting LED Flash Mode for Pager (F2)

After the access to F2 function interface, the display shows the current LED Flash mode and you can select your desired mode:

- 0: OFF;
- 1: SLOW;
- 2: NEUTRAL;
- 3: FAST.

When you input the number and press ENTER button, the keypad chirps at the same time, meaning it is done.

4. Setting Buzzer Announcement Mode (F3)

After the access to F3 function interface, the display shows the current announcement mode and you can select your desired mode:

- 0: OFF;
- 1: SLOW;
- 2: NEUTRAL;
- 3: FAST.

When you input the expected number and press ENTER button, the keypad chirps at the same time, meaning it is done.

5. Setting vibration Mode (F4)

After the access to F4 function interface, the display shows the current vibration mode and you can select your desired mode:

- 0: OFF;
- 1: SLOW;
- 2: NEUTRAL;
- 3: FAST.

When you input the expected number and press ENTER button, the keypad chirps at the same time, meaning it is done.

6. Setting Alarm Time on Overstepping (F5)

After the access to F5 function interface, the display shows the current alarm time after overstepping and you can select your desired time. When the Pager is out of transmission range of keypad for a certain length of time, it will trigger an alarm. The pager shows "99" with vibrating and blinking. The time can be set to 0-30 minutes (0 means the alarm is off. And the other number stands for the time, after which the alarm begins to go off.)

7. Setting Service Countdown (F6)

After the access to F6 function interface, the display shows the current service countdown and you can select your desired countdown (0-99 minutes). 0 is to turn off the function, while the other number means that the Pager will remind the guest of collecting meals after an interval of countdown when it receives messages from the keypad. After the reminder of countdown, it is only when the Pager is placed on the charging tray connected to power that notification is closed. When it is sending the notification, the Pager is constantly vibrating and blinking and the ID of disc will be showed in the display.

8. Setting Channel Value (F7)

After the access to F7 function interface, the display shows the current channel and you can select your desired channel (Channel 1-99, each number stands for a channel). When you input the expected number and press ENTER button, the keypad chirps at the same time, meaning it is done.

Notice: It is necessary to set up a new ID for after you change the channel for the coaster Pager.

9. Setting Keypad Password (F8)

After the access to F8 function interface, the display shows "0.0.0.0.". To set up the password for the keypad, input four-digit number and press ENTER button. When the keypad chirps at the same time, meaning it is done. ("2580" is the default password for the keypad, which can unlock the keypad in any situation. Notice: The code can be set to "0000".)

10. Setting Frequency (F9)

After the access to F9 function interface, the display shows the current frequency and you can select your desired frequency (Channel 01-31, each number stands for a frequency). When you input the expected number and press ENTER button, the keypad chirps at the same time, meaning it is done.

Notice: It is necessary to set up a new ID for all discs after the frequency is changed for the coaster beeper.

Guarantee

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. Further details, pls read <http://www.retevis.com/after-sale/>
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.

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