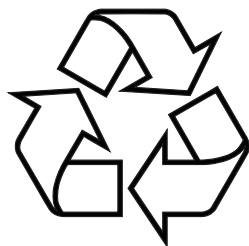




RETEKESS

TD159 User Manual



CE FCC RoHS



Henan Eshow Electronic Commerce Co., Ltd

Add: 7/F, Sanjiang Building, No.170 Nanyang Road, Huiji District,
Zhengzhou, Henan, China

EU Importer: Germany Retevis Technology GmbH

Address: Uetzenacker 29, 38176 Wendeburg

Facebook: facebook.com/RetekessWirelessSystem

E-mail: support@retekess.com

Web: www.retekess.com



MADE IN CHINA



Product introduction

Thanks for using Reteless wireless calling system, it adopts FSK wireless technology . The system consists of 1 keyboard transmitter and 10 coaster pagers, the receiver supports 1999-channel extensions. Each pager is rechargeable and labeled with a number, in standby status, it is plugged into the charging slots, while the guest places an order, he(she) will be dispatched one receiver with a number, when the order is ready, the waiter will press the keypad to call the corresponding number, the guest will get it through the buzzer/vibration/LED indications. The calling system greatly improves the work efficiency and avoid the guest waiting in a long queue. It is widely used in queuing occasions such as food court, logistics centers, clinics and so on.

Technical data

Receiver		Transmitting host	
Working voltage	DC 3.7V (Rechargeable battery)	Power input	DC5V/3A
		Working frequency	433.92MHz
Working frequency	433.92MHz	Transmit Power	<0.5W
Standby current	2mA	Modulation technology	FSK
Standby Time	≈48 Hour	Dimmension	170*85*41mm
Receive sensitivity	-106DB		
Battery capacity	250mAh		
Modulation technology	FSK		
Dimmension	Φ105*16mm		

Packing List

Number	Name	Quantity	Number	Name	Quantity
1	Transmitting host	1	5	Charging base	1
2	Receiver	10	6	Serial port line	1
3	Power adaptor	2	7	Serial port to USB line	1
4	Antenna	1	8	User manual	1



◆Product description

1.Instructions for the use of the keyboard transmitter

Install the antenna first, put the keyboard protective film to protect the keyboard from water and dust, and then connect the special power adaptor, the power indicator light is on, and the screen is displayed.

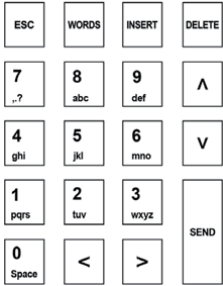
- Standby interface:



 : Number area: You can enter the call number (from 1 to 1999), if you do not need to sent extra message, press “SEND” directly to call the receiver.
 : Text area: You can enter the message (the default message can be set through the software),and when the number and content are set, you can press the SEND key to call the receiver.

●Keyboard description

The button layout is shown in the picture.:



ESC: Delete all numbers and message and return it to the standby interface.

Words: Invoke the stored messages or settings and insert them into the call contents.

Insert: Change the input status to add or overwrite, the default is to add.

Delete: Delete the character where the cursor is located.

Arrows: Move the cursor up,down,left and right.

0-9:In the number input area, only numeric works, and in the text input area, both the characters and punctuation marks all work. For example, if you press key 3 continuously, the 3, w, x, y loops are displayed.

2、Instructions for the use of pager

- Power on: The pager is powered on automatically while putting it in the charging base.
- Power off: Remove the pager from the charging base, then press the button on the back of the pager immediately, and the “OFF”will diplay on the digital tube.
- The pager could be called only when the pager is not on the charging base.
- When the pager is removing from the charging base, it will be detected automatically within seconds.The self-test mode (LED, buzzer and vibration) is same as the pagers actual reminder mode.
- Reminder mode: vibration, buzzer beep and flash can be freely combined.
- There are two red lights on both sides of the digital tube when the power of the pager is low,also the digital tube will show the number and LOW alternately,you need to put the pager back to the charging base.
- When the pager is being charged, the red light will be on, and when it is fully charged, the red light will go out.

3、Instructions for the use of the charging base

The charging base cannot be connected with a non-matching power supply.

◆Setting description

1、Pairing

In the standby mode, enter the number in the Number Area, press the drop-down button " v " to the Text Area, then press the WORDS button, and then press the drop-down button " v " again to enter into the setting mode, “STUDYCAPCODE” will be shown in the screen display, remove the pager from the charging base and press the button on the pager at the same time, then press the SEND button on the keyboard (this operation must be completed within 10s, otherwise it needs to be re-operated). Brief description: Enter the number to be paired →" v " →"Words"→ " v " (Display“STUDYCAPCODE”) → Press the button on the pager →"SEND"→ Done

2、Function setting:

The functions could be set through the keyboard transmitter while the pagers are on the charging base (standby mode).

Operation steps:

In the standby state, press the drop-down button " v " to move the cursor to the Text Area, press the"WORDS" button, then select the desired function through the up "Λ"/the drop-down key " v ", then press the “SEND” button on the keyboard, and the pager displays "SET" means the setting is completed.

The following features are supported:

- STUDYCAPCODE
- SET FLASH LED ENABLE/SET FLASH LED DISABLE
- SET BEEP ENABLE/SET BEEP DISABLE
- SET VIBRATE ENABLE/SET VIBRATE DISABLE
- SET REMIND VOICE ENABLE/ SET REMIND VOICE DISABLE

- SET ALERT LENGTH: From 1 to 30 (seconds)
- SET RESET BY CHARGER/ SET RESET NO CHARGER
- SET LOGO
- SET FLASH RESET BY CHARGER DISABLE/ SET FLASH RESET BY CHARGER ENABLE
- SET OUT OF RANGE TIME(2-9): From 2-9 (Minute)
- SET OUT OF RANGE ALERT INTERVAL TIME(1-9): From 1-9 (Minute)
- SET CHECK RSSI ENABLE/ SET CHECK RSSI DISABLE
- SET OUT OF RANGE DISABLE
- SET ZOOM 1/SET ZOOM 2/SET ZOOM 3

Brief description:

∇ (drop-down key) → "Words" → ∧ / ∇ (Up / Down to select function) → "SEND" → Show "SET " all → Succeeded.

Tips: The pagers must be placed on the charging base and paired before doing the settings.

If you want to use a function, press the "SEND" button to set it when it appears, and the "SET" will display on the pagers if the function is set successfully.

All the above functions which displayed or not displayed in the setting mode could be changed by software.

RF ENERGY EXPOSURE AND PRODUCT SAFETY GUIDE



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.Reteless.com>

Guarantee

Model Number: _____

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.

Cut along this line