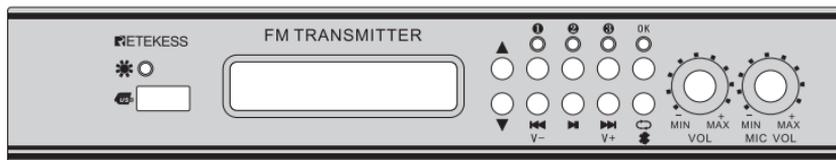


# RETEKESS

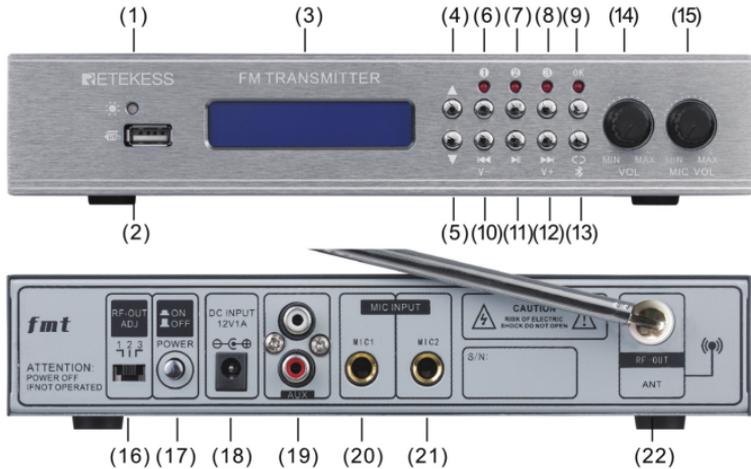
## FM Transmitter

### TR510 User Manual



1. Please make sure the antenna has been installed well and have all been extended vertically before power it on. Otherwise it will damage the transmitter.
2. Please set the output power according to the actual need. When using in a short range, please switch to the 1st level to avoid signal blockage and interference on the radio receiver.
3. Disassemble is forbidden, please contact the seller for repair if there is any fault
4. Put the equipment in a ventilated, dry place to work, keep away from heat source, avoid overheating, humidity and dust.

- Adopts CPU microprocessor, can preset and memorize frequency, LCD display
- Supports Mono and Stereo mode
- 3 levels of output power
- Preset 3 stations
- Multi-input ways USB flash drive/Bluetooth/Aux/Mic
- 2 Mic jack



- |                                    |                            |
|------------------------------------|----------------------------|
| (1) MP3/Bluetooth status indicator | (12) Next song             |
| (2) USB flash drive port           | (13) Loop/Bluetooth        |
| (3) LCD display                    | (14) AUX line input volume |
| (4) UP                             | (15) Mic volume            |
| (5) Down                           | (16) Output power          |
| (6) Preset station 1               | (17) Power                 |
| (7) Preset station 2               | (18) Charging port         |
| (8) Preset station 3               | (19) AUX input             |
| (9) Setting                        | (20) Mic 1                 |
| (10) Previous song                 | (21) Mic 2                 |
| (11) Play/Pause                    | (22) Antenna               |

## 1. Basic Operation

① Extend the antenna (22) vertically upwards to the maximum height before power it on. And make sure there are no obstacles around.

② Confirm the working frequency ( it shows on the display)

③ Transmit music or speaking

**Microphone input:** Insert a 1/4 inch mic to the Mic Jack (20/21), then adjust the Volume (15) to a suitable level.

**Aux input:** Insert the external audio source cable (such as deck, VCD, Mixer etc.) into the AUX input jack (19), adjust the Volume (14) to a suitable level.

**Play MP3:** Insert the USB flash drive to the USB port (2), the voice prompt “USB mode” , the Indicator (1) shows red and flash. Short press Previous song (10) or Next song (12) button to select the desired audio. Short press Loop (13) button to set it on Single Loop or Sequence Playback mode. When it is on Single Loop mode, the Indicator (1) flashes in fast speed. When it is on Sequence Playback mode, the Indicator (1) flashes in slow speed.

Adjust the Volume (14) to a suitable level, if it does not loud enough, you could long press Previous song (10) button to increase volume (not recommend).

**Bluetooth:** Remove the USB flash drive or long press Bluetooth(13) button for 2s, Indicator (1) shows green and flashes fast, you will be able to find “Reteless TR510” device on your phone, connect it then, the Indicator(1) will be always light in green color if they are connected successfully. When you play audio through Bluetooth, the indicator (1) in green color and flashes in slow speed.

④ Frequency setting

Press UP(4) or Down (5) button to change the frequency in the step of 0.1Mhz. Long press UP or Down buttons to change the frequency in fast way.

⑤ Preset Station

Set a desired frequency, long press Preset station 1 (6), Preset station 2 (7) or Preset station 3 (8) buttons for 3 seconds to store the frequency to a desired station. Then you will be able to short press the station buttons to recall stored frequencies quickly.

⑥ Mono/Stereo mode setting

Short press Setting (9) button to change it to Mono or Stereo mode

⑦ Pre-emphasis setting

Press and hold Setting (9) button for about 3 seconds, you could set it to 75  $\mu$ S or 50  $\mu$ S.

Problem	Solution
No power	1. The adapter is damaged 2. The plug is loose and reinserted or replaced
Large transmission noise	1. Make sure the audio signal cable is connected well 2. Adjust transmitter antenna length 3. Are there strong interference around the transmitter antenna
Short Range	1. Adjust Transmitter antenna length 2. The transmitter antenna is too close to the metal object 3. Make sure the frequency of the transmitter is consistent with the center frequency of the antenna

Working voltage:	DC 12V $\pm$ 10% , 1A
Frequency range:	87.9 ~ 91.9MHz
Frequency step:	100KHz
Frequency deviation:	$\leq$ 1KHz
SNR:	$\geq$ 68dB
Harmonic/clutter radiation:	<60dB
Pre-emphasis:	75 $\mu$ S/50 $\mu$ S
Frequency response:	$\leq \pm$ 1.5dB (100Hz ~ 10KHz)
Audio input level:	0dBm / 600 $\Omega$ (unbalanced)
Working temperature:	-25 $^{\circ}$ C ~ +45 $^{\circ}$ C

- 1\* TR510 FM Transmitter
- 1\* 12V charger
- 1\* User Manual

## 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.

•(If applicable) 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](http://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 (if appropriate)

- 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 31.7cm 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 Retekeess 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 Retekeess 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 Retekeess-approved accessories for your radio model, visit the following website: <http://www.Retekess.com>
- RF Exposure Warning Statements: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment shall be installed and operated with minimum distance 31.7cm between the radiator & body

### EU Importer:

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

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.



**CE FC RoHS**

Facebook: [facebook.com/RetekessRadio](https://facebook.com/RetekessRadio)  
E-mail: [support@retkess.com](mailto:support@retkess.com)  
Web: [www.retekess.com](http://www.retekess.com)



MADE IN CHINA

# 说明书要求

尺寸：120\*160mm

印刷：黑白印刷

装订：胶黏订

纸张材质：双胶纸

**本页无需印刷**