RETEKESS

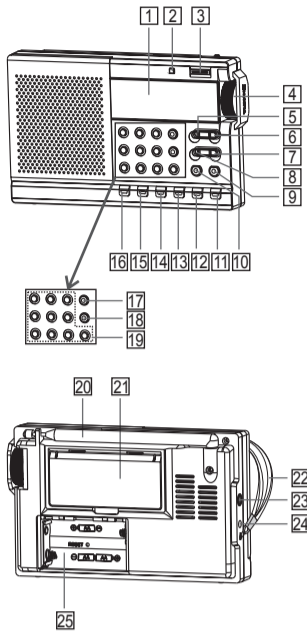## FM/MW/SW/AIRBAND RECEIVER   TR608

EXTERNAL VIEW AND FUNCTION INDICATION

1. Display screen
2. Locking switch
3. Power switch / sleep switch
4. Rotary knob-Multi Function
5. Up tuning / adjustment time -
6. Down tuning / adjustment time +
7. Radio station storage address +
8. Radio station storage address -
9. High volume
10. Low volume
11. Band switching
12. Short wave meter band
13. Stored radio station scanning
14. Timing ON / OFF
15. Clear
16. Radio station storage
17. Backlight ON / OFF
18. Frequency input
19. 0…9 number key
20. Telescopic antenna
21. Support frame
22. Wrist strap
23. Headset jack
24. External power source jack
25. Battery compartment

LCD SCREEN DISPLAY
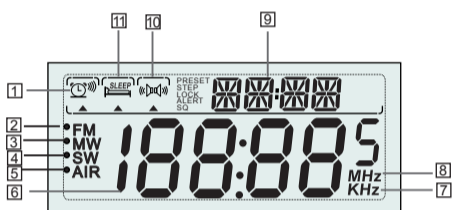
1. Timing ON indication
2. FM band display
3. MW band display
4. SW band indication
5. Airband display
6. Frequency display
7. MHz - MW/SW Band
8. KHz - FM/AIR
9. Clock display/ Volume level
10. Stereo symbol
11. Sleep symbol

BATTERY LOADING

1. Open the battery cover and load three pieces of 'AA' batteries into the battery compartment ensuring the correct polarity is observed (shown in Figure in the right).
2. Close the battery cover (shown in Figure in the right).
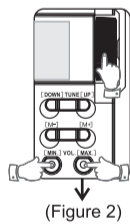3. We always suggest using Alkaline batteries for performance and prevents leakage.
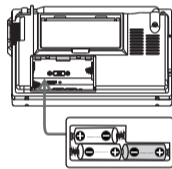
POWER SWITCH

Short Press the power switch key (3) for powering 'ON' the radio, as shown in Figure 1. To Power off again a Short Press.

(Figure 1)
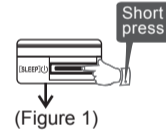
VOLUME ADJUSTMENT

1. Volume has a levels of 0- 30. The default ON volume is 20 sections. If the volume is less than V20 when you power off the volume will automatically restored to level V20, however if the volume is greater than V20 when you power off the volume when turned back on will be at that level.
2. Methods for setting the volume: Method 1: In the ON state, press the round volume key (9) marked Max to adjust the volume high until the highest volume 30. Press round volume key (10) marked Min to adjust the volume low until the lowest volume 0 (as shown in Figure 2).
Prompt: Press the Round Max or Min volume keys to adjust the volume quickly.

Method 2: Only when the volume digits are displayed [LCD 9], rotate rotary knob (4) clockwise and anticlockwise to adjust the volume within the range of 0~30 (as shown in Figure 2).


(Figure 2)

BAND SWITCHING

When the radio is powered on, press the band switching key (11) to select to receive the FM, MW, SM and air band programs (as shown in Figure 3).
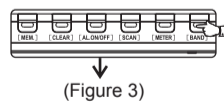

(Figure 3)

SHORT WAVE METER BAND

If the Radio is in any band and the meter key (12) to is pressed then the radio will switch the short wave meter bands (as shown in Figure 4). Pressing meter key progressively will take you
through the levels :2.30-3.20-3.90-4.75-5.95-7.10-9.50-11.65-13.60-15.10-17.50-21.45


(Figure 4)
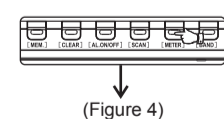
MANUAL ROTARY TUNING

1. Press the short wave meter band key (12) and select the meter band similar to the frequency of the radio station to be listened to (please skip this step when you listen to the FM and MW).
2. Rotate the rotary knob (4) clockwise and anticlock wise to select the radio station to be listened to (as shown in Figure 5).
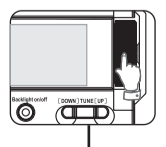
Prompt:
1. When there are many radio stations for the neighboring frequencies, which disturb you to listen to the radio station, please use the manual rotary tuning frequency to realize the best receiving effect.
2. If the rotary knob does not work, please check whether it is locked.

(Figure 5)
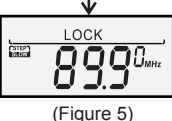
MANUAL RADIO STATION SEARCH

In the ON state, press the up tuning key (6) for searching the radio station forward. Press the down tuning key (5) for searching the radio station backward. The frequency will change once per press until you find the radio station (as shown in Figure 6).
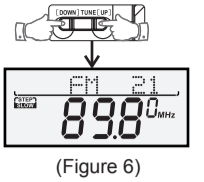
Notes: The manual radio station search is mainly used for covering the shortage of scanned storage, because the manually searched radio station and the radio station stored through scanning may not be easy for you, so in this mode you can search the radio stations manually.

(Figure 6)

AUTOMATIC RADIO STATION SEARCH

In the ON state, press the up tuning key (6) and automatically search the radio station forward 2 seconds later. Press the down tuning key (5) and automatically search the radio station backward 2 seconds later. When you receive the radio station, the search will automatically stop (as shown in Figure 12). During automatic search, it can be stopped by pressing any key.
**Notes:**
1. The automatic radio station search is suitable for searching the radio station with strong signals.
2. During automatic radio station search, if the digits displayed on the display screen change slowly, it means that there may be radio stations with weak sig-nals nearby, and the manual search and using the rotary tuning control.

Prompt:
1. **In the FM band, press the up tuning or down tuning key once, the frequency will be increased or decreased by 0.1MHz.**
2. **In the medium band, press the up tuning or down tuning key once, the frequency will be increased or decreased by 9KHz.**
3. **In the short band, press the up tuning or down tuning key once, the frequency will be increased or decreased by 0.005MHz.**
4. **In the air band, press the up tuning or down tuning key once, the frequency will be increased or decreased by 0.005MHz.**
5. **Press the up tuning key, the frequency will be searched in the ascending order; press the down tuning key, the frequency will be searched in the descending order.**

ENTER RADIO STATION FREQUENCY DIRECTLY

1. When the radio is ON, press the frequency input key (18), the frequency will disappear (as shown in Figure 7).
2. Press the number key to enter the required radio station frequency (as shown in Figure 8). FM band: You can ignore the decimal point. For example, when you need to enter 89.8MHz, press 8, 9 and 8. MW band: Enter 9K stepping frequency. SW band: When you need to enter 13.70MHz, you can adopt the precision and fuzzy entry.
  Precision entry: Press 1, 3, 7, 0 and 0, enter to the 3rd decimal place.
  Fuzzy entry: Press 1, 3 and 7, and press the frequency entry key for confirmation.
3. If the entered numbers are incorrect, press the clear key (15) to cancel the entered numbers one by one.
4. After numbers are entered, the radio will automatically receive the entered radio station frequency (as shown in Figure 8).
5. If you want to reenter numbers, repeat the operation from step 1 to step 3.

(Figure 7)

(Figure 8)
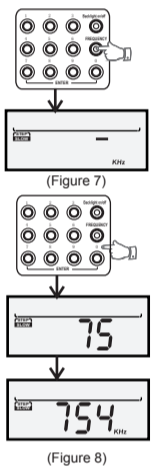
SCANNED STORAGE

1. Long press the scanned storage key(13) , the radio will automatically scan the radio station from the lowest frequency to the highest frequency of this band once, and save the scanned radio stations from the currently radio station storage address in order (as shown in Figure 9).
2. During scanned storage, press the scanned storage key to stop scanning.
3. After scanned storage, automatically enter the first scanned radio station (the radio station scanned each time may be different).
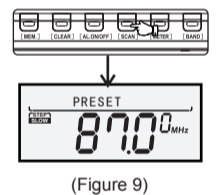
Prompt:
1. **Before using scanned storage, please adjust the radio according to the contents of "antenna use" to scan more radio stations.**
2. **When you listen to the radio station stored through scanning, if it is unclear or noisy, please make a minor adjustment through manual radio station search or use the rotary radio station tuning.**
3. **If the scanned storage function is used, when you receive the radio station, the original stored radio station will be covered.**

(Figure 9)

RADIO STATION STORAGE

This radio is provided with 120 stored radio stations. 30 radio stations are stored for each band. The default storage address starts from 0. Moreover, the stored radio stations will not be lost in case of long-term outage.
1. When the radio is ON, select the radio station to be stored (the radio station can be received through entering the radio station frequency directly, manual rotary tuning, automatic search or manual search).
2. Press the radio station storage key (16), the radio station storage indicator "POO" on the display screen will flash, and select the radio station storage address within 3 seconds of flash (as shown in Figure 10).
**The operation methods are as follows:**
Method 1: Press the radio station storage address + (7) or press the radio station storage address - key (8) to select the radio station storage address (as shown in Figure 14).
Prompt: You can select the radio station storage address quickly by pressing the radio station storage address + or radio station storage address - key.
Method 2: Rotate the rotary control knob (4) clockwise and anticlockwise to select the radio station storage address (as shown in Figure 11).
3. After radio station storage address is selected, press the radio station storage key (16) for confirmation, the radio station frequency will be stored in your set address (as shown in Figure 12).
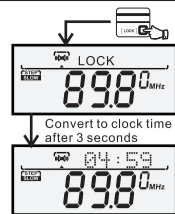

(Figure 10)

(Figure 11)

(Figure 12)
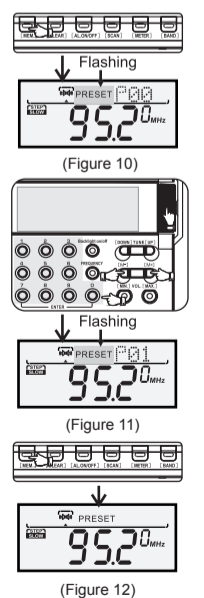
BACKLIGHT

Press the backlight key once to turn on the backlight. Repress it to turn off the backlight.
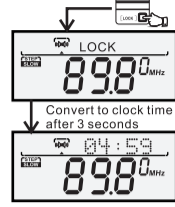
LOCKING SWITCH

1. In order to prevent miss-operation, this radio is provided with a feature to lock the manual rotary control, and all of the push buttons too.
2. Lock the surface control key: Press the locking switch key (2). If it is displayed twice that the locking indication "LOCK" flashes quickly, it means that the radio is in a locking state, and other surface control keys do not work (as shown in Figure 13).
3. Lock the manual flying shuttle knob: Press the locking switch key (2). If it is displayed that the locking indication "LOCK" flashes slowly, it means that the manual flying shuttle knob does not work (as shown in Figure 14).
4. If you want to cancel the locking function, press the locking switch key (2) to cancel the locking indication.

Prompt:
1. If "LOCK" flashes once per second, it means to lock the flying shuttle;
2. If "LOCK" flashes once per 0.5 second, it means to lock all.

LOCK
89.0 MHz

Convert to clock time after 3 seconds

89.0 MHz
04:59

(Figure 13)

LOCK
89.0 MHz

Convert to clock time after 3 seconds

89.0 MHz
04:59

(Figure 14)

CLOCK TIME SETTING

This radio employs a 24-hour time system. After the batteries are loaded, the clock will start to work from "12:00".
1. In the OFF state, press the SCAN key (13), the hour number on the display screen will flash. In the state of "hour" number flashing, the method for setting the hour:
Method 1: Press the time adjustment + key (6) or press the time adjustment - key (5) to set the hour (as shown in the right Figure).
Prompt: Press the time adjustment + or time adjustment - key to set the hour quickly.
2. In the OFF state, under the clock setting model, press the SCAN key (13) once, the minute number on the display screen will flash. In the state of "minute" number flashing, the method for setting the minute:
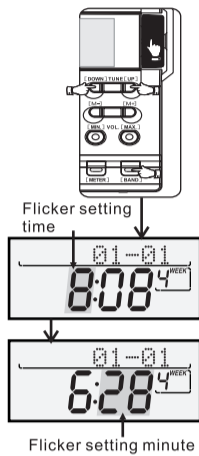**Method 1:** Press the time adjustment + key (6) or time adjustment - key (5) to set the minute (as shown in the right Figure).
Prompt: Press the time adjustment + or time adjustment - key to set the minute quickly.
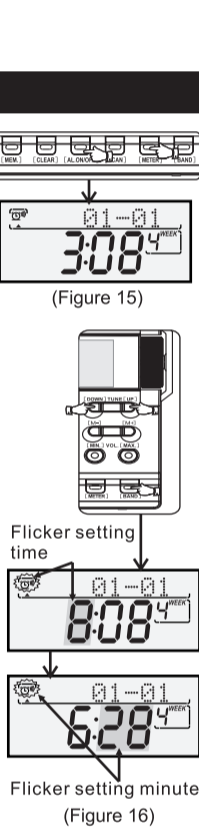3. When you correct the time, please reset.

Prompt:
When setting the clock time, you must operate it in the state of "hour" or "minute" number flashing; otherwise the setting will be invalid.

Flicker setting time

01-01
8:08

01-01
6:28

Flicker setting minute

USE TIMING ON

1. In the OFF state, press the timing setting key (14). If the display screen will display the timing ON indication and timing ON time, it means that the timing ON function works (as shown in Figure 15).
2. Within 3 seconds of the display of the timing ON time, press the timing ON / OFF key (14), the timing ON indication and "hour" number on the display screen will flash. In the state of "hour" number flashing, the method for setting the hour is as follows:
Method 1: Press the time adjustment + key (6) or time adjustment - key (5) to set the hour of timing ON (as shown in Figure 16).
3. After the hour is set, press the timing ON / OFF key (14) within 3 seconds, the timing ON indication and "minute" number on the display screen flash. In the state of "minute" number flashing, the method for setting the minute:
**Method 1:** Press the time adjustment + key (6) or time adjustment - key (5) to set the minute of timing ON (as shown in Figure 16).
4. When it is the timing ON time, the radio will automatically turn on and receive the band frequency before OFF.
5. If you want to turn off the radio in advance, press the power source ON-OFF key.
6. If you need to cancel the timing ON function, in the OFF state, press the timing setting key (14) to cancel the timing ON indication on the display screen.

Prompt: You must set the timing ON time within 3 seconds of flash of the timing OFF time, otherwise the setting will be invalid.

01-01
3:08
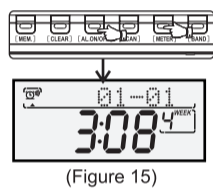
(Figure 15)

Flicker setting time

01-01
8:08

01-01
6:28
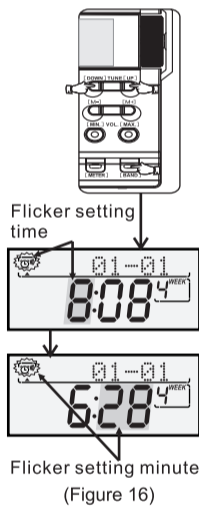
Flicker setting minute
(Figure 16)

USE SLEEP OFF

This radio is provided with a automatic sleep timing OFF function. If it is used before sleep, the radio will be turned off at the set time to avoid wasting the power source due to long-term powering on.
1. In the OFF state, press the sleep OFF key (3) to turn on the radio. 2 seconds later, if the display screen displays the sleep indication and sleep time "90", it means that the radio enters a sleep OFF state. After listening for 90min, the radio will automatically turn off (as shown in Figure 17).
2. In the state of sleep OFF time display, press the sleepOFF key to adjust the sleep OFF time (as shown in Figure 18). The change law of the sleep time is as follows: 90-80-70-60-50-40-30-20-10 (cancel the sleep function).
3. After adjusting the sleep time, you can listen to your favorite radio station program and the radio will automatically turn off at the sleep OFF time.
4. If you need to turn off the radio in advance, press the sleep OFF key (5).

90
(Figure 17)

30
Enter in about 3 seconds
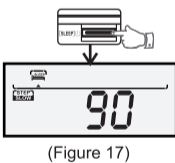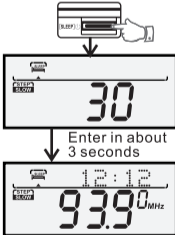
93.9 MHz
12:12
(Figure 18)

TECHNICAL INDICATORS

1. **Frequency range**
Frequency modulation (FM) 76-108 MHz
Medium wave (MW) 522-1620KHz (9KHz stepping); 520-1710KHz (10KHz stepping)
SW (short wave) 2.30-22.60MHz (5KHz stepping)
Air band 118-138MHz (5KHz stepping)
2. **Number of memory radio station frequencies (120 in total)**
FM 30 MW 30 SW 30 Air band 30
3. **Noise limit sensitivity**
FM Superior to 10dB   **MW** Superior to 70dB   **SW** Superior to 30dB   **Air band** Superior to 10dB
4. Single signal selection performance Superior to 40dB
5. **Signal to noise ratio**
Signal to noise ratio of FM: Superior to 55dB
Signal to noise ratio of MW: Superior to 45dB
6. **Power source**
Internally installed power source Three pieces of AA batteries (not supplied）
Externally connected power source ⊖-●-⊕ 5V 300mA
7. Maximum consumption current ≥ less than 250mA
8. Maximum output power ≥200mW
9. Loudspeaker at the airport: Φ57mm / 8Ω/ 0.5W
10. Externally connected headset: Φ3.5mm 32Ω
11. Radio dimension: 140×88×26mm
12. Radio weight: 175g (excluding batteries)

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.

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

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 Warning Statements
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

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.
• To avoid interference, turn off the radio in areas where signs are posted to do so.
• DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Avoid Choking Hazard

0-3   Small Parts. Not for children under 3 years.

Protect your hearing:

WARNING

• 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.

Approved Accessories

WARNING

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