TR113 wideband full-band radio manual

Bluetooth TF card AUX-in plays Recording

1: Overview of the product

TR113 radio is a wide-band full-band radio that supports APP intelligent remote control and DSP digital display . This product is a wide-band multi-function receiver: it can not only receive FM, medium wave, short wave, VHF very high frequency (VHF-NFM & VHF-WFM), multi-band broadcast reception of North American weather bands, but also supports Bluetooth and TF cards. Multimedia music playback, high-fidelity sound quality.

It also supports the APP -SOS alarm emergency function. It is an emergency product that can be prepared at home and can be carried when playing outdoors. If you want to know more, please read this operating guide and keep this manual properly.

2: Brief description of product features:

2.1: This product uses programming software to achieve wide-band reception and supports reception of the following frequency bands:

FM frequency modulation, MW medium wave, SW short wave , USB upper sideband, LSB lower sideband, LW long wave, VHF very high frequency, UHF ultra high frequency , AIR aviation band, CB city band. Multi-band broadcast reception on the WB North American national weather band.

Adjustable DEMOD demodulation mode, BW bandwidth value, LOCAL short-range, DX long-range, dual shuttle speed tuning radio, supports medium and short wave magnetic rod antenna reception, supports DIY medium and short wave loop antenna..., the product is extremely playable high.

2.2: This product supports multiple channel adjustment methods:

Digital key frequency, shuttle fine-tuning, shuttle quick tuning, push-button fine-tuning, push-button automatic station search, fully automatic search and storage of stations.

2.3: This product uses two display screens, one main screen (displaying various working status, etc.) and one secondary screen (marquee/time/signal strength indication, etc.).

The main screen uses a FSTN full-view screen, and the small screen uses VA color. It brings better visual effects to users.

The main screen uses a large 3.54-inch display: (displayable window size: 82.9mmx45.2mm)

Displayable window of secondary screen: 47.5x35.56mm

2.4: This product supports mobile APP smart remote control. Within a range of less than 20 meters, intelligent short-range remote control radios can be realized.

2.5: This product uses high-tech audio technology and can be connected to Bluetooth wireless music transmission and playback.

2.6: This product supports TF card music playback, up to 256G, and supports MP3, WMA, WAV, APE, and FLAC playback formats.

2.7: This product uses a polymer lithium battery with a capacity of 3600mAh, which has a long battery life. The battery is rechargeable to extend product life.

2.8: This product is designed with 5 meter waves in the AIR aviation band, 15 meter waves in the SW short wave, 8 meter waves in the VHF very high frequency, and 8 meter waves in the UHF UHF, making it easy and quick to switch frequencies. . Find the target station quickly.

2.9: The product has 3 options in the FM (frequency modulation) frequency range; there are two options in the AM (medium wave) frequency range:

1）: FM1: 87.5-108MHZ

FM2: 76.0-108MHZ

FM3: 64.0-108MHZ

2）: AM receiving frequency range: 522-1710KHZ (step value: 9KHZ);

AM:520-1710KHZ (step value: 10KHZ) optional.

2.:10: When this product is playing music, it can turn on the marquee and lead you into the wonderful music melody.

2.11: This product has BASS bass sound quality and a 3-inch full-band 20W high-power speaker. It also supports listening with headphones, which is suitable for the needs of the majority of users.

2.12: This product can choose four types of playback in the TF card playback state:

: (sequential playback: repeat all), : (single loop: repeat one),

: (repeat songs in the current folder: repeat file), : (randomly play: random)

2.13: This product supports enabling the locking function to facilitate locking each button;

2.14: This product can set the sleep shutdown time, and you can set sleep cycles of different lengths such as 90/80/70/60/50/40/30/20/10 minutes.

2.15: This product can be set to two modes: scheduled power on/scheduled alarm clock , and two groups of scheduled power on/scheduled alarm times can be set.

2.16: After selecting the scheduled power on, you can set the scheduled time after the scheduled power on.

2.17: This product is equipped with backlight display/button lighting function, which is convenient for users to use in the dark.

2.18: In radio mode, this product has a large memory capacity and can store 1,600 radio stations (FM/MW/Shortwave/VHF/UHF/Longwave/Urban Band/Aviation. Each band can store 200).

2.19: This product can adjust a variety of EQ sound effects.

2.20: The product can display temperature, time, and adjustable perpetual calendar.

2.21: Adjustable display color, multiple lighting times, multiple alarm options..., humanized design, increased playability

2.22: The product supports restoring factory settings.

3: Packing list

Name	Quantity
TR113 high performance full band radio	1
Strap	1
Polymer lithium battery, 3600mah 3.7V	2 (locked inside the product)
USB TYPE-C data charging cable	1
Operating Instructions	2 (product operating instructions/APP operating instructions)
Screwdriver	1
Cleaning sweep	1
Packaging box	1

4: APP related content description

Mobile APP download process instructions (for detailed APP operation process, please refer to the APP manual):

1: The first step : turn on the TR113 radio, and at the same time, turn on the user's own mobile phone.
2: Step 2: Download the APP (if you already have our APP software Radio-C, you do not need to re-download it, you can click to connect to the product named " Retekess-TR113 " and then connect), the specific steps are as follows :

A: For Android and Hongmeng system phones, please scan the following QR code to install the APP

Android and Hongmeng system phones support "scanning" this QR code with the browser on the phone to install the APP. For detailed operations, please refer to 2.1.

Android and Hongmeng system phones support APP installation using the "WeChat scan" QR code on the phone. For detailed operations, please refer to 2.2.

B: To install on Apple system mobile phones, please go to the "APP Store " and search for the name "Radio-CT " to download.

You can also scan the QR code below to enter the APP Store interface to download.

5: Function description of each radio button:

SLEEP ⏻	1: On/off: Press any key to turn on the time display first. In the time state, press lightly to turn on; in the radio on state, press and hold to turn off. See description in 7.1.1 for details. 2: In the time display state, press and hold to enter the setting of sleep shutdown time (display operation on the secondary screen). For details, see 7.1.2 operation description .
RADIO BAND	Power on state: Tap to switch between FM (frequency modulation); MW (medium wave); LW (long wave); SW (short wave) bands .
UHF VHF	Power on state: Tap to enter VHF/UHF/AIR/CB/WB band switching selection.
SUB BAND	1: In FM/AM working state: Tap Yes to select the FM&AM receiving frequency range. For details, see 7.3.2/7.3.3 operation description 2: In SW / UHF / VHF / AIR working state: tap to switch between SW&UHF&VHF&AIR meters (please see 7.3.5 operation description).

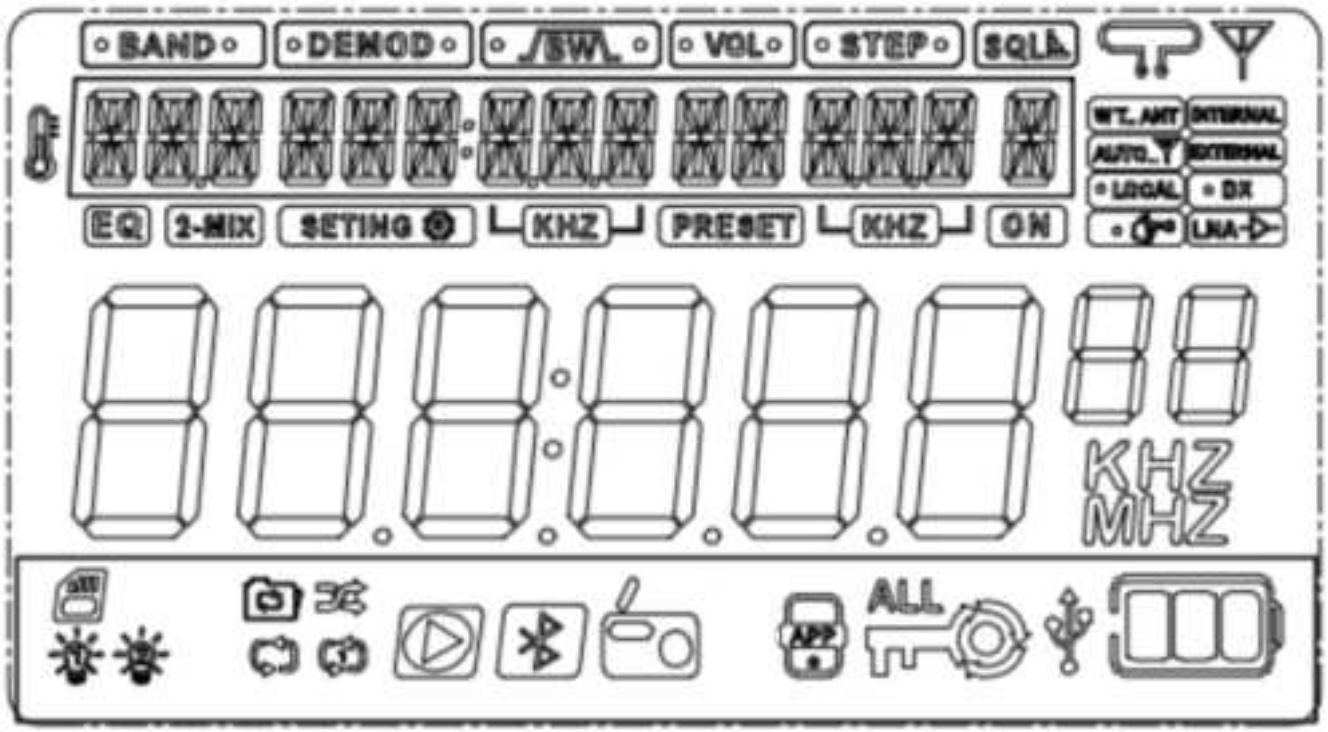
	3: TF card working mode: Tap to enter: sequential play , single loop , repeat current folder songs , random play selection. 4: Insert the TF card and after recording the radio, press and hold to enter the recording folder.
BW DEMOD	1: Set the bandwidth value in each radio band working mode. For details, see Operation Guide: 7.3.14 2: FM (frequency modulation)/ SW (short wave) working mode: long press to enter the setting demodulation mode. For details, see the operation introduction: 7.3.11
ATT -10/20	In radio FM/SW/UHF/VHF/AIR/CB working mode: select LOCAL and DX mode
▷II SQL	1: Radio/AUX-IN/PC working mode: Tap to turn on/off mute. 2: Bluetooth/TF card working mode: tap to pause/play switch 3: In VHF/UHF/AIR/CB/SW working mode: press and hold for 2 seconds to turn on/off SQ (squelch).
	1: Power-on working mode: switch between Bluetooth/TF/PC; press and hold to disconnect the Bluetooth connection. 2: Shutdown clock display mode: Long press to disconnect from the APP.
SEL	1: Tap to select the antenna method 2: Long press the setting button to enter the selection of antenna attenuation (according to the 10/20d attenuation entered into the setting, see: 7.3.10 Operation Introduction for details)
TIME/SET	1: Set the time function, see point 12 for details. 2: In the menu setting, the main screen of the radio is on for 5 seconds to 30 seconds [see Operation Point 14 for details; A-LCD SETTING Operation Introduct]. Tap [TIME/SET] to enable the backlight stay on, and the " " symbol will be displayed in the lower left corner of the home screen. Tap [TIME/SET] again to turn off the continuous lighting. The " " symbol will disappear and the set backlight screen time will be restored. 3: When the menu is set, the main screen of the radio is always on (FULL is selected). For details, please refer to Opera n Point 14; A-LCD SETTING Operation Introduction], the lower left corner of the main screen displays the " " symbol. Press the [TIME/SET] button lightly to quickly turn the backlight on for 30 seconds and then turn off the screen. Press the [TIME/SET] key again to switch to the steady state.
ALARM	1: Set the alarm clock function. For details, see point 13 for the operation introduction. 2: In the menu settings, the radio secondary screen is on for 5 seconds to 30 seconds [see Operation Point 14 for details; B-LCD SETTING Operation roduction]. Tap [ALARM] to enable the cklight to stay on, and the " " symbol will be displayed in the lower left corner of the home screen. Tap [[ALARM] again to turn off the constant lighting. The " " symbol will disappear, and the set backlight screen time will be restored. 3: When the menu is set, the radio secondary screen is always on (FULL is selected). For details, please refer to Opera n Point 14; B-LCD SETTING Operation Introduction]. The " " symbol is displayed in the lower left corner of the main screen. Press the [ALARM] button lightly to quickly turn the backlight on for 30 seconds and then turn off the screen. Press the [ALARM] key again to switch to the steady state.
DISPLAY	1: Clock mode/Bluetooth & TF card playback mode: Tap to view the time set by the alarm clock. 2: Radio working mode: Tap to display the time/radio reception signal strength.

VOL+	Power on state: light press/long press: volume increases.
VOL-	Power on state: light press/long press: the volume decreases.
SCAN... ATS	1: Radio mode (except WB) mode: Press and hold for 2 seconds to enter fully automatic station search/store. 2: VHF/UHF/AIR/CB/LSB/USB playback mode: Press this button lightly to enter the automatic scanning and search radio mode (SCAN-FREQ mode), and scan for radio stations with signals; if no valid signal radio is scanned, the While searching; until you tap the key again to exit scan mode. 3: WB playback mode: Press and hold for 2 seconds to turn on/off automatic search for North American weather radio stations.
SET	1: Enter the menu settings in power-on mode. See 7.3.10 Operation Introduction for details. 2: Time display enters the menu setting. Details are explained in point 14.
DEL	1: In radio mode, enter the station retrieval mode: long press for 2 seconds to delete the station. 2: After internal recording, enter the TF card playback mode, select the recording file to be deleted, press and hold for 2 seconds, after the main screen displays the del character, tap again to confirm deletion. 3: When you enter the wrong number for the radio number frequency/the wrong number for the TF card number to select the song, tap to remove the wrong number.
PRESET	1: Press and hold for 2 seconds to enter the station saving mode, tap again to confirm saving the station. 2: Tap to enter the channel retrieval mode;
TUNE+ NEXT △	1: Radio working mode: Press lightly: The frequency increases according to the minimum step value of each band. Press and hold for 2 seconds to enter the upward automatic search station. 2: TF card playback mode: tap to enter the next song; long press to fast forward playback. 3: Bluetooth playback mode: Tap to enter the next song.
TUNE- PREV ▽	1: Radio working mode: Press lightly: the frequency decreases according to the minimum step value of each band. Press and hold for 2 seconds to enter the automatic search station downwards. 2: TF card playback mode: tap to return to the previous song; press and hold to rewind playback. 3: Bluetooth playback mode: Tap to return to the previous song.
Small and large shuttle button	: Radio working mode: Turn the inner and outer shuttle knob to select the radio point. 2: Press the inner wheel button lightly, and the STEP value changes. Press the button each time to select the required step value, and rotate the large shuttle button to increase or decrease the frequency. 3: Rotate the inner wheel knob, the last number of the frequency flashes, turn the inner wheel knob to quickly adjust to the target frequency. 4: When playing the TF card, you can rotate the inner and outer pulleys to select songs, and press the button to confirm the final selection. 5: When setting time/alarm clock/menu settings, select settings according to the task

	command.
【 number key 】	1: Radio mode: 1-1: Frequency click: non-channel mode, press the [EN] key lightly to enter the numeric key frequency click, press the [EN] key to confirm. 1-2: Retrieve the station: After saving the radio station, enter the valid station address number and press the [EN] key to directly retrieve the station. You can also press the [PRESET] key to enter the station retrieval mode, press the numeric keys to retrieve the valid radio station address number, and press the [EN] key to confirm. 1-3: Select the station number for manual station saving: long press the [PRESET] key to enter the manual station saving mode, press the numeric keys to select the station address number, and lightly press the [PRESET] button to confirm. 2: TF card mode: After lightly pressing the number keys to select a song, lightly press the [EN] key to select the track to play.
EN	1: Radio working mode: After lightly pressing the [EN] key, enable the digital key to click the frequency. After clicking the frequency, press the [EN] key again to confirm. 2: TF card playback mode: After selecting a song directly with the numeric keys, tap [EN] to confirm the selected song for playback.
• UN-LOCK • RS-LOCK • .....LOCK 【Push lock】	1: Pull the switch to the "UN " position and the key will not be locked. 2: Pull the switch to the "RS-LOCK " position and lock the pulley rotating knob. 3: Pull the switch to the "...LOCK" position, and all buttons and rotating knobs are locked (locked state).
EQ/.	Power-on state: Tap EQ Sound quality: NORMAL, POP, ROCK, JAZZ, CLASSIC, COUNTRY, NEWS, VOICE), analog output (DAC-ANALOG) switching, CW (filter)
【 TF card jack】	Power-on working mode: Insert the TF card and automatically play TF card songs first.
eadphone output]	Power-on working mode: Plug in 3.5MM headphones to listen to the program, cut off the external sound,
AUX.Audio input】	Power-on working mode: Plug in the 3.5mm external audio source input, and the external audio source music will be automatically played first.
DC5V [TYPE-C hole]	1: Charging hole (external DC 5V power supply for charging) AUX-IN) on the computer 3: Connect the computer with a data cable and use it as a TF card reader
【Right】	Medium wave, short wave, when connecting an external T-shaped antenna, adjust the signal-to-noise ratio and antenna field strength. The higher the RSSI and SNR values, the better.

6: LCD display content description

6.1 Main screen content description:



	Loop antenna usage mark (magnetic rod loop antenna)
WT. ANT	Intercom SMA socket input markings
AUTO.	Auto antenna mode
• LOCAL	Short-range reception (antenna attenuation 10/20dB)
•	Manual antenna tuning markers
	Telescopic antenna (including external antenna)
INTERNAL	Built-in antenna (including telescopic antenna/magnetic rod) receiving mark
EXTERNAL	External antenna (including WT.ANT, external earplug antenna input) reception mark
• DX	Remote reception (default)
LNA	LNA1 usage flags (or settings)
• VOL •	Volume indicator
PRESET	Enter fully automatic radio station search Enter manual station saving mode (characters flashing state) Enter the channel removal mode (characters are always displayed)
	Battery indicator
	connection indication display symbol
KHZ	unit symbol
MHZ	unit symbol
ALL	Lock symbol (lock shuttle; all locked)
	Bluetooth connection symbol (“ ” flashes to indicate that the connection is pending; the constant display indicates that the connection is successful)
	Bluetooth & TF card playback display symbol (flashing means pause; constant display means playback)

ALE	North American National Weather Band Enables Early Warning Indicator Symbols
	MW: medium wave receiving mode; LW long wave receiving mode; FM: frequency modulation receiving mode; SW: shortwave mode; AIR: aviation band; VHF: very high frequency receiving mode; UHF ultra high frequency receiving mode; CB: urban band; WB: North American weather band.
	Demodulation mode display
	Bandwidth display
	Step value display
	Squelch/level display (“ ” opens the squelch; “ ” closes the squelch)
	Standby time: display time Working status: Radio mode: display frequency point/save station/retrieve station address number Bluetooth mode: Display Bluetooth status TF card working status: display playback time Plug in the 3.5mm audio cable: AUX displays external audio input playback
A-LCD SETTING	Enter the home screen lighting time/backlight color settings
B-LCD SETTING	Enter the secondary screen lighting time setting
C-KE Y SETTING	Enter button lighting time setting
APP ENABLE	Can connect to APP
APP DISABLE	Can't connect to APP
TIMER DISPLAY	Enter the clock display or turn off the clock display on the home screen
SYSTEM RESET	Enter settings to restore factory settings
VETSION-*-*	version number
	This product has been successfully connected to the mobile APP.
	Display of the TF card inserted into the machine
ATT-SETING	Antenna multiple reception settings
ANT-CHANNLE	Antenna channel selection
ANT-KEEP-PASS	Antenna channel pass-through
ANT-LNA1-GAIN	LNA1 antenna channel gain selection
ANT-LNA1-GAIN - L	LNA1 antenna channel low gain
ANT-LNA1-GAIN - H	LNA1 antenna channel high gain
ANT-LNA2-GAIN	LNA2 antenna channel gain selection
ANT-LNA2-GAIN - L	LNA2 antenna channel low gain
ANT-LNA2-GAIN - H	LNA2 antenna channel high gain
ATT-GAIN antenna attenuation selection	ANT-10DB: Antenna attenuation 10DB ; ANT-20DB: Antenna attenuation 20DB

ANT-LNA1: Antenna LNA1 channel	ANT-LPF: Antenna LPF channel ; ANT-HPF: Antenna HPF channel
	Home screen always-on symbol
	Secondary screen always-on symbol
	Loop the current folder
	Shuffle Playback
	play in order
	Single cycle

6.2 Secondary screen content:

SNR	signal-to-noise ratio	Remark
RSSI	Antenna field strength	
	Timing 1 symbol (displayed on the left side of the screen)	
	Timing 2 symbol (displayed on the right side of the screen)	
	Shutdown symbol with sleep (displayed on the right side of the screen)	

7: Function introduction

7.1 SLEEP **key function description:**

7.1.1: On/off function :

Lightly press any key to turn on the time display, lightly press the SLEEP key to turn on the machine.

In the power-on working state, press and hold the SLEEP key for 2 seconds to shut down the machine.

Before using it for the first time , it is recommended to fully charge the battery of the machine before using it.

7.1.2: Set sleep time: In the clock display state, press and hold the SLEEP key for 2 seconds to start setting the sleep time. The character [90] will be displayed on the secondary screen. Within 2 seconds, lightly press the [SLEEP] key to select automatic sleep shutdown. Time: 90.80.70.60.50.40.30.20.10 minutes.

After selecting automatic shutdown during sleep, the secondary screen LCD displays the symbol: character.

Tip: The light of the power button will have different colors in different working states. The actual product shall prevail.

7.2: VOL+ Volume adjustment key function description:

In the working state, lightly press or long press the [VOL+ & VOL-] key to adjust the volume. The volume level can be appropriately adjusted between "00-32" according to needs.

7.3: Listen to RADIO broadcast function description:

7.3.1 : The bands received by this product are as follows. Tap the [RADIO BAND] & [UHF VHF] keys to select the band you want to use to listen.

FM: 64-108MHZ (demodulation mode supports ST/WFM selection)
MW:520-1710KHZ
SW: 2.3-30.0MHZ (demodulation mode supports AM/LSB/USB selection) . For details, please refer to the following operations: 7.3.11
LW:153-522KHZ
VHF: 20-250.00MHZ
UHF: 250-999.00MHZ
AIR:118-138MHZ
CB: 25-28MHZ
WB:162.4-162.55MHZ

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7.3.2: The FM receiving frequency range of this product can be adjusted according to needs. There are three receiving ranges:

In the FM working state, lightly press the [SUB BAND] button , and the main screen will display: 64.0MHZ. Press the [SUB BAND] button continuously, and you will see the three numbers 64MHZ , 76MHZ, and 87.5

MHZ changing in rotation on the main screen. If you select 64MHZ, it means that the selected receiving frequency band is 64-108MHZ, and so on.

Home screen display value	The default working frequency band is
64MHZ	FM1: 64-108MHZ
76MHZ	FM2: 76-108MHZ
87.5MHZ	FM3: 87.5-108MHZ

After stopping the operation, it will automatically exit the settings and automatically default to the last selected frequency band settings.

7.3.3: The MW step value of this product, 9KHZ/10KHZ, can be adjusted according to needs.

In the MW working state, lightly press the [SUB BAND] button, and the main screen will display 520KHZ. Press the [SUB BAND] button continuously, and you will see the two values of 520KHZ and 522KHZ changing in rotation on the main screen.

Home screen display value	The default working frequency band is	The medium wave step value defaults to
522KHZ	522-1710KHZ	9KHZ
520KHZ	520-1710KHZ	10KHZ

Select the AM frequency range you need and stop the operation. It will automatically exit the settings and automatically default to the last selected frequency setting value.

Note: In North American and South American countries such as the United States, Canada, and Mexico, the AM step value is adjusted to 10KHZ, and in other countries it is adjusted to 9KHZ.

7:3.4 : Multiple channel search methods are supported:

Push-button manual tuning, push-button automatic search for stations , push-button fully automatic search and storage of stations , and rotary shuttle button for frequency selection.

7.3.4.1: Push-button manual channel adjustment :

Press the [TUNE+ NEXT △ or TUNE- PREV ▽] key lightly to increase or decrease the default value of each band.

FM frequency modulation minimum step value: 0.1MHZ, VHF very high frequency minimum step value: 0.0125MHZ

MW medium wave minimum step value: 9KHZ / 10KHZ UHF ultra high frequency minimum step value: 0.0125MHZ

LW long wave minimum step value: 9KHZ AIR aviation band maximum step value: 0.025MHZ

CB city band minimum step value: 0.005MHZ

When the demodulation mode of SW short wave is AM, the minimum step value is: 0.005MHZ

When the demodulation mode of SW short wave is LSB, the minimum step value is: 0.001MHZ

When the demodulation mode of SW short wave is USB, the minimum step value is: 0.001MHZ

7.3.4.2: Push-button automatic search for radio stations :

Press and hold the [TUNE+ NEXT △ or TUNE- PREV ▽] key for 2 seconds, and each band will quickly search for radio stations according to the default step value. If a radio station with a signal is found, it will stop searching and play.

7.3.4.3 : Button-type automatic search for radio stations:

In the radio mode, press and hold the [SCAN... ATS] key for 2 seconds to enter the fully automatic scanning station search and automatically save the station.

During the fully automatic scanning and search process, the main LCD screen displays the characters "PRESET" and flashes to search for radio stations with signals. The main LCD screen displays the characters "CH***", which represents the address number of the station.

After completing a round of search, the search will automatically stop and the first frequency program stored will be played.

The number of stations that can be stored in each band: 200, the total number of stations that can be stored: 1600 (except for the WB North American weather band)

Warm reminder: The amount of money stored in the radio station depends on the strength of the local signal.

7.3.4.4: Rotate the shuttle button to select frequency:

In the radio working mode, the station can be selected by rotating the inner and outer buttons of the front pulley of the machine.

----Enable the small and large shuttle button to select channels according to the step value. The steps are as follows:

Press the inner wheel button lightly , and the STEP value changes. Press the button each time to select the required step value, rotate the large shuttle button [ ], and press the selected step value clockwise or counterclockwise to select the required frequency point.

The STEP values that can be adjusted in each band are as follows:

Radio operating band	Selectable STEP step value	Default step value
FM	10KHZ, 50KHZ, 100KHZ	100KHZ
SW（AM/LSB/USB）	0.01KHZ, 0.02KHZ, 0.1KHZ, 1KHZ, 5KHZ	5KHZ
When the MW step value is 9KHZ	3KHZ, 9KHZ	9KHZ or 10KHZ
When the MW step value is 10KHZ	5KHZ, 10KHZ,	
LW	3KHZ, 9KHZ	9KHZ
VHF	1KHZ, 5.0KHZ, 6.2KHZ, 7.5KHZ, 12.5KHZ, 25KHZ	12.5KHZ
UHF	1KHZ, 5.0KHZ, 6.2KHZ, 7.5KHZ, 12.5KHZ, 25KHZ	12.5KHZ
AIR	8.3KHZ, 12.5KHZ, 25KHZ	25KHZ
CB	0.01KHZ, 0.02KHZ, 0.1KHZ, 1KHZ, 5KHZ	5KHZ
WB	25KHZ	25KHZ

---Enable the shuttle to quickly adjust the target frequency:

Rotate the small fly button , the frequency number flashes, lightly press the inner wheel button . The flashing number is shifted. If the number needs to be changed, you can rotate the small shuttle button at this time, and the flashing position of the number will change rapidly until the target frequency is adjusted.

7.3.5: About [SUB BAND] band quick switching:

SW short wave ● VHF very high frequency ● UHF ultra high frequency ● AIR aviation bands all have meter bands, the details are as follows:

Working frequency	Meepo
The demodulation mode of SW shortwave is in AM	2.3MHZ, 3.2MHZ, 3.75MHZ, 3.9MHZ, 4.75MHZ, 5.73MHZ, 7.1MHZ, 9.25MHZ, 11.5MHZ, 13.57MHZ, 15.03MHZ, 17.48MHZ, 18.9MHZ, 21.45MHZ, 25.67MHZ (15 pcs)
SW shortwave demodulation mode is LSB/USB	2.3MHZ, 3.5MHZ, 5.3510MHZ, 7.0MHZ, 10.10MHZ, 14.0MHZ, 18.068MHZ, 21.0MHZ, 24.89MHZ, 28.0MHZ,
VHF very high frequency	30.0MHZ, 42.0MHZ, 55.0MHZ, 68.0MHZ, 100.0MHZ, 136.0MHZ, 218.0MHZ, 250.0MHZ (8 pieces)
UHF ultra high frequency	250.0MHZ, 320.0MHZ, 460.0MHZ, 580.0MHZ, 620.0MHZ, 730.0MHZ, 800.0MHZ, 999.0MHZ (8 pieces)

AIR aviation band	118MHZ, 123MHZ, 128MHZ, 133MHZ, 138MHZ (5 pieces)

Ea[SUB BAND]ne you press the [ ] key, press [TUNE+ NEXT △ or TUNE- PREV ▽] or the shuttle key together, you can quickly call out the required frequency point.

7.3.6: Manually save the station:

---In the radio receiving mode, use the above 7:3.4 search methods to find the target frequency. Press and hold the [PRESET] button for 2 seconds to enter the station storage mode. The main screen LCD displays "PRESET ***" characters flashing. Press the [PRESET] button again to confirm.

---Press and hold the [PRESET] button for 2 seconds. The main screen LCD displays PRESET *** "characters flashing. Press the [TUNE+ NEXT △ or] button lightly to select the station address number (or the station number to be replaced), and tap the [TUNE- PREV ▽] button again. PRESET confirm.

---Press and hold the [PRESET] key for 2 seconds, the "PRESET ***" character on the main screen LCD is flashing, tap the [7 8 9 4 5 6 1 2 3 0] numeric key, enter the digital storage address number, tap the [PRESET] key again to confirm , and complete the manual storage operation .

7.3.7: About taking the channel

According to the [**7.3.4.3** Fully automatic search and save radio stations] method / [7.3.6 Manual radio station save] operation method, the station saving operation is completed.

---Press the [PRESET] key to enter the channel retrieval mode. When the main screen LCD displays "PRESET CH ***", lightly press the [TUNE+ NEXT △ or TUNE- PREV ▽] key to select the station retrieval address number.

---After saving a station, you can also directly enter the valid representative number of the saved station number on the numeric key [ ], and press the [7 8 9 4 5 6 1 2 3 0 EN] key again to confirm the station address number and frequency.

If the selected number is not a valid station number, the main screen LCD displays the character [null].

Exit the channel removal mode : Press the [PRESET] button lightly, and the [PRESET] character on the main screen LCD disappears. Indicates exiting the channel retrieval mode.

7.3.8: Delete radio station:

According to 7.3.7 station retrieval operation introduction, select the unwanted radio station, long press the [DEL □←] key , the main screen LCD displays the " dEL " character, indicating that the radio station has been deleted.

7.3.9: About the North American WB weather band:

Lightly press the [UHF VHF] key to switch to the WB weather band. Lightly press the [TUNE+ NEXT △ or TUNE- PREV ▽] key or rotate the large and small shuttle [◎] buttons to select the weather frequency points to be received. The receiving frequency points are:

1-162.400MHZ, 2-162.425MHZ, 3-162.450MHZ: 4-162.475MHZ,

5-162.500MHZ, 6-162.525MHZ, 7-162.550MHZ

7.3.9.1: Automatically search for North American weather radio stations : In WB working mode, press and hold the [SCAN... ATS] key for 2 seconds to enter the automatic search for weather radio stations. The LCD displays the "ALE" character. In the automatic search for "ALE" state, when no weather radio station is found , you need to press and hold the [SCAN... ATS] key again for 2 seconds to exit the "ALE" automatic search mode.

(Note that after entering the automatic search mode, pressing any key has no effect. You must press the [SCAN... ATS] key for 2 seconds to release the automatic search mode before you can use other radio functions)

7.3.10: When the radio is working in each band, enter the setting function

In the radio working mode, press and hold the [SETING] key to enter the setting function. After entering the main menu

Select the main menu by rotating the shuttle button [◎] clockwise or counterclockwise.

Press the shuttle button [◎] to confirm entering the submenu selection.

by rotating the shuttle button [◎] clockwise or counterclockwise. After selecting, press the shuttle button [◎] to confirm.

After confirmation, the main screen LCD displays: SETTING OK .

Exit settings : In submenu mode, if you are exiting: tap the [SETING] key to exit, or leave it alone for about 10 seconds, the system will automatically exit.

receiving frequency band	The main screen displays the main menu and 6 tasks are displayed.	Submenu selection operation instructions
FM	ANT-KEEP-PASS Antenna channel pass-through	Press the shuttle button [ ] lightly, SETTING OK is displayed, indicating that the setting is completed.
	ANT-CHANNLE Antenna channel selection	Press the shuttle button [ ] lightly to enter the submenu and select: ANT- HPF (HPF filter) ANT-LNA1 (LNA1 channel) After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	ANT-LNA1-GAIN LNA1 antenna channel gain selection	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: ANT- LNA1 -GAIN-L (LNA1 antenna channel low gain) ANT-LNA1-GAIN-H (LNA1 antenna channel high gain) After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	ANT-LNA2-GAIN LNA2 antenna channel gain selection	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: A NT- LNA 2-GAIN-L (LNA 2 antenna channel low gain) ANT-LNA2-GAIN-H (LNA 2 antenna channel high gain) After selecting, lightly press the shuttle button [ ] to confirm,

		and SETTING OK will be displayed, indicating that the setting is completed.
	ATT-GAIN Antenna attenuation selection	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: ANT-10DB: Antenna attenuation 10DB ANT-20DB: Antenna attenuation 20DB After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	ANT-DEFAULT Default antenna	Press the shuttle button [ ] lightly, SETTING OK is displayed, indicating that the setting is completed.

Receiving frequency band	**Main screen displays main menu and 7 task displays**	**Submenu selection operation instructions**
the SW demodulation mode is AM/CB two working modes	ANT-KEEP-PASS Antenna channel pass-through	Press the shuttle button [ ] lightly, SETTING OK is displayed, indicating that the setting is completed.
	ANT-CHANNLE Antenna channel selection	Press the shuttle button [ ] lightly to enter the submenu and select : ANT-LPF (HPF filter) ANT-LNA1 (LNA1 channel) After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	ANT-LNA1-GAIN LNA1 antenna channel gain selection	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: ANT- LNA1 -GAIN-L (LNA1 antenna channel low gain) ANT-LNA1-GAIN-H (LNA1 antenna channel high gain) After selecting, lightly press the shuttle button [ ] to confirm,

		and SETTING OK will be displayed, indicating that the setting is completed.
	ANT-LNA2-GAIN LNA2 antenna channel gain selection	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: ANT- LNA 2-GAIN-L (LNA 2 antenna channel low gain) ANT-LNA2-GAIN-H (LNA 2 antenna channel high gain) After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	ATT-GAIN Antenna attenuation selection	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: ANT-10DB: Antenna attenuation 10DB ANT-20DB: Antenna attenuation 20DB After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	SQL-LEVEL	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: SQL-LEVEL 00-01-02-03-04-05-06-07-08-09 (9-level squelch selection) After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	WT-SCAN-MODE	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: WT-SCAN-MODE-FREQ frequency scan mode WT-SCAN-MODE-PRESET Prestored radio station scanning mode After selecting, lightly pr the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	ANT-DEFAULT Default	Press the shuttle button [ ] lightly, SETTING OK is displayed,

	antenna	indicating that the setting is completed.

receiving frequency band	Main screen display main menu 3 kinds of task display	Submenu selection operation instructions
SW demodulation mode in LSB, USB working mode VHF/UHF band	ATT-GAIN Antenna attenuation selection	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: ANT-10DB: Antenna attenuation 10DB ANT-20DB: Antenna attenuation 20DB After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	SQL-LEVEL	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: SQL-LEVEL 00-01-02-03-04-05-06-07-08-09 (9-level squelch selection) After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	WT-SCAN-MODE	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: WT-SCAN-MODE-FREQ Frequency scanning mode (press the SCAN button to scan for a signal station before stopping the search, press the SCAN button again to stop scanning for signals) WT-SCAN-MODE-PRESET Prestored radio station scanning mode After selecting, lightly pr the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.

receiving	The main screen displays	Submenu selection operation instructions

frequency band	the main menu and 8 tasks are displayed.	
AIR working mode	ANT-KEEP-PASS Antenna channel pass-through	Press the shuttle button [ ] lightly, SETTING OK is displayed, indicating that the setting is completed.
	ANT-CHANNLE Antenna channel selection	Press the shuttle button [ ] lightly to enter the submenu and select: ANT-LPF (HPF filter) ANT-LNA1 (LNA1 channel) After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	ANT-LNA1-GAIN LNA1 antenna channel gain selection	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: ANT- LNA1 -GAIN-L (LNA1 antenna channel low gain) ANT-LNA1-GAIN-H (LNA1 antenna channel high gain) After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	ANT-LNA2-GAIN LNA2 antenna channel gain selection	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: ANT- LNA 2-GAIN-L (LNA 2 antenna channel low gain) ANT-LNA2-GAIN-H (LNA 2 antenna channel high gain) After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	ATT-GAIN Antenna attenuation selection	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: ANT-10DB: Antenna attenuation 10DB

		ANT-20DB: Antenna attenuation 20DB After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	SQL-LEVEL	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: SQL-LEVEL 00-01-02-03-04-05-06-07-08-09 (9-level squelch selection) After selecting, lightly press the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	WT-SCAN-MODE	Press the shuttle button [ ] lightly to enter the submenu, and rotate the shuttle button [ ] to select: WT-SCAN-MODE-FREQ Frequency scanning mode (press the SCAN button to scan for a signal station before stopping the search, press the SCAN button again to stop scanning for signals) WT-SCAN-MODE-PRESET Prestored radio station scanning mode After selecting, lightly pr the shuttle button [ ] to confirm, and SETTING OK will be displayed, indicating that the setting is completed.
	ANT-DEFAULT Default antenna	Press the shuttle button [ ] lightly, SETTING OK is displayed, indicating that the setting is completed.

Note: If the SQ squelch function is turned on, you can directly press and hold the [ ] key for 2 seconds to turn off the squelch function. The main screen displays a value of 0.

If you press a old the [ ] key again for 2 seconds, the LCD " " will display the currently set squelch level and restore the set SQ level.

7.3.11 : About the demodulation method of SW short wave

This product is in SW shortwave receiving mode and supports selection:

There are three demodulation methods: AM (normal receiving mode), LSB (lower sideband), and USB (upper sideband). The specific o ons are as follows :

In SW shortwave working mode, long press the [ ] key for 2 seconds, the main screen will display the "AM" character flashing. Press the [ ] key lightly within 2 seconds , the "USB"

symbol will be displayed flashing, and the " " symbol will be scrolling for search; after about 2 seconds, Enter the USB sideband.

In the "USB" upper sideband mode, long press the [BW DEMOD] key for 2 seconds and the "USB" character will flash. Press the [BW DEMOD] key again to switch to the "LSB" lower sideband.

In the "LSB" receiving mode, long press the [BW DEMOD] key for 2 seconds and the "LSB" character will flash. Press the [BW DEMOD] key again to switch to the "AM" normal receiving mode.

7.3.13: Demodulation methods of other bands

In the radio working mode, you can long press the [BW DEMOD] [DEMOD] he [ ] character on the main screen LCD is flashing, lightly press the [BW DEMOD] key to select the demodulation mode you need to use (SW selects the demodulation mode, as described in 7.3.11 operation)

The details of the demodulation methods of each band are as follows:

FM mode	MW mode	SW mode	LW mode	WB mode	CB mode	AIR mode	VHF mode	UHF mode
WFM	AM	AM	AM	NFM	AM	AM	NFM	NFM
ST		USB						
		LSB						

7.3.14: Regarding the selection of BW bandwidth value for each band:

In the radio working mode, you can tap [BW DEMOD] to select the BW bandwidth value for each band.

Press the [BW DEMOD] key lightly, the LCD BW value on the main screen flashes, press the [BW DEMOD] key lightly, the value rotates. After selecting, wait for 2 seconds and the final selection will be made by default.

BW values can be selected as shown in the following table:

FM mode	MW mode	SW mode	LW mode	WB mode	CB mode	AIR mode	VHF mode	UHF mode
110KHZ	1.0KHZ	1.0KHZ	1.0KHZ	3.0KHZ	1.0KHZ	1.0KHZ	1.7KHZ	1.7KHZ
84KHZ	1.8 kHz	1.8KHZ	1.8KHZ		1.8KHZ	1.8KHZ	2.0KHZ	2.0KHZ
60kHz	2.0KHZ	2.0KHZ	2.0KHZ		2.0KHZ	2.0KHZ	2.5KHZ	2.5KHZ
40kHz	2.5KHZ	2.5KHZ	2.5KHZ		2.5KHZ	2.5KHZ	3.0KHZ	3.0KHZ
	3.0KHZ	3.0KHZ	3.0KHZ		3.0KHZ	3.0KHZ	3.75KHZ	3.75KHZ
	4.0KHZ	4.0KHZ	4.0KHZ		4.0KHZ	4.0KHZ	4.0KHZ	4.0KHZ
	6.0KHZ	6.0KHZ	6.0KHZ		6.0KHZ	6.0KHZ	4.25KHZ	4.25KHZ

							4.50KHZ	4.50KHZ

8: Bluetooth function mode description:

---Bluetooth name of this product: " Retekess-TR113 "

---In the power-on working state, lightly press the [**]** key to switch to " bt" mode.

---The Bluetooth [ ] character is flashing, indicating that it is waiting to connect to the Bluetooth settings.

---Open the Bluetooth device and find HRD-C919 to connect. After the connection is successful, the Bluetooth [ ] character is always displayed, and the [ ] playback symbol is flashing. Open the music player on your mobile phone and connect to play via Bluetooth.

---Tap the [TUNE+ NEXT △] key to enter the next song, and tap the [TUNE- PREV ▽] key to return to the previous song.

---Tap the ▷|| SQL key to switch between pause/play, or operate the mobile phone for corresponding control.

---Disconnect Bluetooth connection : MODE etooth connection mode: long press the [ ] key to exit Bluetooth connection.

9: TF card playback function description:

---Insert TF card: Please insert the TF card slot correctly according to the direction of this " " icon. Press lightly to insert, then press lightly again to remove the TF card.

---In any boot mode, insert the TF card and automatically play TF songs first, and the screen will display the " TF card icon;

---If in other working modes, MODE he [ ] button to switch to TF card mode to play songs; tap the [ ] button to switch between pause/play. ▷|| SQL

---Tap the [TUNE+ NEXT △] key to enter the next song, tap the [TUNE- PREV ▽] key to return to the previous song, long press the [TUNE+ NEXT △] key to fast forward playback, long press the [TUNE- PREV ▽] key button to rewind playback.

---When playing the TF card, you can rotate the small and large shuttle knob to select a song, and tap the [ ] button to confirm the last selected song.

---You can also directly enter a valid track number on the numeric keyboard and tap the [EN] key to enter playback

---When playing TF card, you can choose the playback mode, and the operation is as follows:

Press the [SUB BAND] key lightly, the main screen LCD displays the characters of the current playback mode " " or " " or " " or " " .

Press the [SUB BAND] key lightly and the four symbols will change in turn.

Each of them represents the following functions:

(Sequential play: repeat all), (Single loop: repeat one),

(Repeat the song in the current folder: repeat file), : (Play randomly: random)

---TF card supports up to 256G

---TF card supports MP3, WMA, WAV, APE, FLAC, format song playback

---Maximum number of files supported by TF card: 65535

Kind tips:

When playing TF card music, please adjust the volume if the sound vibrates due to the source of the downloaded songs.

During radio & Bluetooth work, the TF card cannot be inserted and played, and "0000" is displayed. This may be due to the downloaded song source, or the TF card is broken. Please replace it with a normal TF card.

10: Instructions on setting EQ sound effects in each band of the radio, Bluetooth, and TF card mode:

In the working mode, lightly press the [ ] key to select the EQ sound effect:

Operating mode / EQ	FM	MW	SW	LW	WB	CB	AIR	VHF	UHF	BT blueto oth	TF card
EQ-NORMAL(natural)	■	■	■	■	■	■	■	■	■	■	■
EQ-POP (pop music)	■					■				■	■
EQ-ROCK (rock music)	■					■				■	■
EQ-JAZZ (Jazz)	■					■				■	■
EQ-CLASSIC (classical music)	■					■				■	■
EQ-COUNTRY (countryside)	■					■				■	■
EQ-NEWS (news sound	■	■	■	■	■	■	■	■	■		

effects)											
EQ-VOICE (Voice of the Earth)	■	■	■	■	■	■	■	■	■		
DAC-ANALOG (analog output)	■	■	■	■	■	■	■	■	■		
EQ-CW (Filter)		■	■	■		■		■	■		

■] symbol above indicates the EQ sound effects that can be selected in this working mode.

Note: NEWS filter description: Audio filter: 150-4000HZ range

VOICE filter description: Audio filter: 250-2500HZ range

CW filter description: Audio filter: 500-1100HZ range

11: Function description of LOCK/Lock [ ] key:

The right side lock of the machine has three gears to turn on. The functions represented by the three gears are:

Dial to the [UN-LOCK] position, which means it will not be locked/unlocked.

Dial to the [RS-LOCK] position, which means that only the small and large shuttle pulley buttons are locked, and the main screen LCD displays a flashing " " symbol.

Dial to [...LOCK], which means locking all the keys (do not lock the APP to enter the "connection " "operation). The main screen LCD displays the " ALL" flashing prompt with the " " symbol. At this time, all keys have been locked.

12: Instructions on the running time setting method :

In the time display state, press and hold the [TIME/SET] key for 2 seconds to start setting the running time/date. The specific steps are as follows

Step 1: Time display state 2024 01 03 12:37
Step 2: Long press the [TIME/SET] key

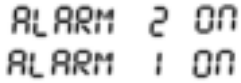
Step 3: The hour numbers [ ] are flashing
Step 4: Turn the large/small shuttle button [ ] to adjust the hour
Step 5: Tap the [TIME/SET] button
Step 6: The minute number [ ] is flashing
Step 7: Turn the large/small shuttle button [ ] to adjust the minutes
Step 8: Tap the [TIME/SET] button
Step 9: Year flashes
Step 10: Turn the large/small shuttle button [ ] to adjust the year
Step 11: Tap the [TIME/SET] button
Step 12: Month [ ] flashes
Step 13: Turn the large/small shuttle button [ ] to adjust the month
Step 14: Tap the [TIME/SET] key
Step 15: Date flashes
Step 16: Rotate the large/small shuttle button [ ] to adjust the date
Step 17: Tap the [TIME/SET] key to confirm

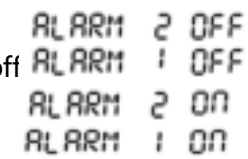
Note: MON (Monday); TUE (Tuesday); WED (Wednesday); THU (Thursday) TRI (Friday); SAT (Saturday); SUN (Sunday) As the date is updated, the week will be automatically updated.

13: Instructions for setting the alarm time:

According to the above 12-point operation introduction, after setting the current running time, in the time display state, press and hold the [ALARM] button for 2 seconds to enter the setting of alarm clock ringing/automatic startup (two sets of alarm clock times can be set).

The specific steps are as follows:

Step 1 : Time display state
Step 2 : Press and hold the [ALARM] key
Step 3: The characters [ALARM 1 ON] are displayed in the upper left corner of the  e number 1 is flashing Rotate the large/small shuttle button [ ] to choose to set the first group of alarm clocks or the second group of alarm clocks

Step 4: Press the [ALARM] key lightly
Step 5: The main screen displays ON/OFF flashing Rotate the large/small shuttle button [ ] to choose to turn on or turn off [ON] means choosing to turn on the alarm clock. [OFF] means choosing to turn off the alarm clock. 
Step 6: After selecting [ON], lightly press the [Alarm] key
Step 7: The alarm clock hour number [ ] is flashing
Step 8: Rotate the large/small shuttle [ ] to adjust the alarm hour.
Step 9: Tap the [Alarm] key
Step 10: The alarm minute number [ ] is flashing
Step 11: Rotate the large/small shuttle button [ ] to adjust the alarm minute
Step 12: Press the [Alarm] key lightly, and the main screen will display [ ] or [ ]. Choose whether to enable the [Alarm Sound] method or the [Set Automatic Power On] method. Rotate the large/small shuttle button [ ] to select any one [ ] indicates choosing to enable the alarm mode [ ] is setting the automatic power-on time mode.
Step 13: Select to enable alarm mode Press the [Alarm] key lightly and rotate the large/small shuttle button [ ] to select. Four ringtones can be selected After selecting, tap the [Alarm] key to confirm. Select to enable the automatic startup method of the shrinking machine Press the [Alarm] button lightly and rotate the large/small shuttle button [ ] to select the time for automatic power-on and automatic power-off. You can choose: 10-20-30-40-50-60-70-80-90-FULL (unit: minutes) If you select FULL (meaning it will not automatically shut down after automatic startup)
After setting the alarm clock function, the alarm clock symbol [/] is displayed on the secondary screen. If one set of alarm clocks is set, one alarm clock symbol is displayed. If two sets of alarm clocks are set, two alarm clock symbols are displayed on the secondary screen.

Turn off the alarm clock: Follow the above instructions and select 1 OFF/2 OFF.

After selecting the OFF state, the alarm clock symbol displayed on the secondary screen disappears.

Note: If [ ] is selected for schedul rAd er on, and the 10-20-30-40-50-60-70-80-90 minute automatic shutdown task is selected, the radio will be powered off at a scheduled time after being powered on, and the secondary screen LCD will display Sleep symbol: . The " " symbol disappears after automatic shutdown

※ After setting the scheduled power on and alarm time, turn on the phone or in the t display e, lightly press the [DISPLAY] button to view the time set by " " & " ".

14: In time mode, operating instructions for setting the menu keys:

In the time display state, long press the [SETING] key to enter the setting function. After entering the main menu, the main menu has options as shown in the table below.

by rotating the shuttle button [ ] clockwise/counterclockwise.

After selecting the main menu task to be set, lightly press the shuttle button [ ] to confirm entering the submenu selection.

Select the submenu task by rotating the shuttle button [ ] clockwise or counterclockwise. After selecting, press the shuttle button [ ] to confirm.

main menu	Submenu selection operation guide
A-LCD SETTING (**Set the home screen backlight color/lighting time)**	Press the shuttle button [ ] to enter the submenu and set the home screen off time. The time unit is "seconds (S) " **1: The main screen displays "TIME SET 05-S/06-S/07-S/08-S…… 30-S/FULL"** Rotate the shuttle button [ ] to select the screen off time from 5 seconds to 30 seconds. If you select the character [FULL], it means the backlight of the main screen is always on. After selection, " " will be displayed in the lower left corner of the home screen After selection, tap the shuttle button [ ] to enter the setting of the backlight color of the home screen: **2: COLOR SET 1……7** There are 7 colors to choose from: 1）：Fresh grass green, 2): Elegant brown, 3): Gentle blue, 4): light green, 5): blue, 6): noble color, 7): light blue Rotate the shuttle button [ ] to select the main screen LCD backlight

	display color After selection, if there is no operation within 10 seconds, the last selection will be automatically confirmed and the recovery time will be displayed .
B-LCD SETTING **(Set the secondary screen lighting time)**	Press the shuttle button [ ] lightly to enter the submenu and set the secondary screen off time, the time unit is "second (S) " **1:TIME SET 05-S/06-S/07-S/08-S.....30-S/FULL** Rotate the shuttle button [ ] to select the time If you select the character [FULL], it means the backlight of the secondary screen is always on. Does not turn off the screen. After selection, " " will be displayed in the lower left corner of the home screen After selection, if no operation is performed within 10 seconds, the final selection will be automatically confirmed and the recovery time will be displayed.
C-KEY SETTING **(Set the lighting time of the working status button)**	Press the shuttle button [ ] lightly to enter the submenu and set the button lighting time in the working state. The time unit is "second (S) " **1:TIME SET 05-S/06-S/07-S/08-S.....30-S/FULL** Rotate the shuttle button [ ] to select the time If you select the character [FULL], it means the button light is always on. Does not turn off the screen. After selection, if no operation is performed within 10 seconds, the final selection will be automatically confirmed and the recovery time will be displayed.
APP ENABLE (Open/close APP connection)	Press the shuttle button [ ] lightly to enter the submenu and enter settings. Rotate the shuttle button [ ] to select APP DISABLE----means to turn off the APP function. (Conducive to saving power and reducing interference) APP ENABLE----Indicates that the APP is in normal use After selection, if no operation is performed within 10 seconds, the final selection will be automatically confirmed and the recovery time will be displayed.
TIMER OFF (Home screen time display	Press the shuttle button [ ] lightly to enter the submenu and enter settings.

on/off)	Rotate the shuttle button [ ] to select TIMER DISPLAY---indicates the main screen display time is always displayed TIMER OFF--------Indicates that the time displayed on the main screen is turned off After selection, if no operation is performed within 10 seconds, the final selection will be automatically confirmed and the recovery time will be displayed.
SYSTEM RESET	Press the shuttle button [ ] lightly to enter the submenu and enter settings. Rotate the shuttle button [ ] to select YES---means to restore original factory settings NO---means to give up and restore the original factory settings. After selection, if no operation is performed within 10 seconds, the final selection will be automatically confirmed and the recovery time will be displayed.
VERSION-***	version number

15: Instructions for TYPE-C USB charging:

During charging, this product has overvoltage protection function, and the charging voltage is ≦ 6.2V.

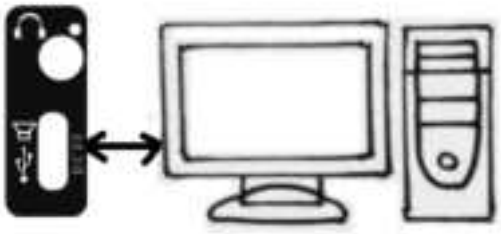
It is recommended to use a charging device with an output voltage of DC5V⎓1A~3A for charging.

If the product is not used for a long time, it is recommended to charge it once a month to maintain the lithium battery.

Plug in the USB charging cable, the main screen will display the " " character, and the charging indicator " " symbol will flash, indicating that it is in charging status. When fully charged, the " " character will display full grid and stop flashing. The charging time is about 5-7 hours.

16: Instructions for using the card reader:

When inserting the TF card into the radio, use the data cable to connect the radio to the computer, which can be used for file transfer and deletion of TF card files.



17: Function description of external audio source (AUX) playback:

In the power-on state, plug a 3.5MM audio source device (such as a mobile phone, computer, etc.) into the [AUX] jack on the right side of the radio with a 3.5MM audio cable. The main screen LCD displays the "AUX" character, and " AUX " plays the audio first.

(Note, this unit does not come with an audio cable when shipped from the factory)

18: Operating instructions for temperature display

In the time display state or power-c SETING e, tap the [ ] key, and the temperatu 10 e will be displayed in the upper left corner of the main screen. like:

Press the [SETING igain to exit the thermometer display.

19: Instructions for using the recording function

Insert the TF card and when the radi 0 REC working, press and hold the [ ] key to enter the radio internal recording. When recording, the main screen LCD displays the characters [RECORDING] and flashes, and the secondary screen LCD displays the recording time.

After completing the rec 0 REC ng, press and hold the [ ] key again to exit recording.

Take out the recording fi ress the [ ] key to enter the TF card playback mode, and select the track on the TF card.

Note: If no valid TF card is inserted or no TF card is inserted, em characters will be displayed on the secondary screen.

Operation steps for deleting recordings: In TF card playback mode, long press the [SUB BAND] key to switch

recording file playback, lightly press the [TUNE+ NEXT △ or TUNE- PREV ▽] key or rotate the large/small shuttle button, press the [ ] key to select the recording file to be deleted, and long Press the [DEL] key, the character "del " will be displayed on the main screen . Press the [DEL] key again to confirm the deletion.

20: Instructions for using the antenna:

When listening to FM, VHF, UHF, SW, AIR, CB, WB bands, pull out the antenna and change the antenna length and search direction. Find the best reception location.

*Tip: If there is strong radio interference, resulting in cross-channel interference, the telescopic antenna can be shortened.

Listening to AM & LW broadcasts This unit uses a built-in magnetic antenna to receive medium waves. The magnetic antenna has a certain directionality when receiving signals. Therefore, when listening to medium wave & long wave, you can appropriately rotate the body to find the best listening position.

Radio working mode: Press the [DISPLAY] button to turn on or off the signal-to-noise ratio "SNR " and antenna reception strength "RSSI" display.

For details on how to connect an external antenna, see the attached page.

21. Main specifications of the radio

band	Frequency Range	Demodulation method	Receive sensitivity	Band description
FM	64-108MHZ	WFM/ST	2uV	FM BAND FM
SW	2.30-30.00MHZ	AM/USB/LSB	20uV	SW BAND shortwave/upper sideband/lower sideband
MW	520-1710KHZ	AM	1mV/m	MW BAND medium wave
LW	153-522KHZ	AM	1mV/m	LW BAND long wave
AIR	118-138MHZ	AM	1uV	AIR BAND aviation band
CB	25-28MHZ	AM	10dBuV	CITY BAND city band
VHF	20-250MHZ	NFM	-9dBuV	very high frequency
UHF	250-999MHZ	NFM	-9dBuV	UHF
WB	162.4-162.55MHZ	NFM	-9dBuV	North American National Weather Band
Speaker: Φ 3 inches 3 Ω 20W				

Number of stations stored in radio mode: 1600
Bluetooth version: V5.0 (frequency range 2400-2483.5MHz)
Bluetooth receiving distance ≤ 20 meters (to avoid the impact of intermediate blockage, etc.)
Minimum operating voltage: 3.5V
External input voltage: DC5V
Lithium battery: 3.7v 3600mAh (non-removable)
TF card playback format supports MP3, WMA, WAV, APE, FLAC, playback formats
Maximum supported capacity of TF card : 256G
Product size: 1 78x184.5x92.5 mm
Product net weight: 1090g (including battery)

22、Precautions:

Before use, you need to make sure to comply with the following basic safety tips to ensure safe and reliable use of the product:

◆Read and understand all safety instructions and usage information.

◆When the battery " " character space is used , or the battery " " character frame flashes, it means that the battery power is low. Please charge the machine to avoid affecting normal use.

◆It is recommended to use charging equipment with an output voltage of DC5V⎓1A~3A for charging to avoid damage to the lithium battery or equipment.

◆If the machine is not used for a long time, please make sure to charge it once a month.

◆Do not let this product be exposed to rain, moisture, dripping or splashing of any liquid.

◆Do not allow this product to be close to high-temperature heat sources, and do not grill or bake at high temperatures.

◆Do not leave it under direct sunlight for a long time.

◆Do not let this product fall, be hit, or put heavy pressure on it.

Attachment 1:

The following is the reception of shortwave single sideband communication signals (SSB)

Some commonly used frequencies for shortwave single sideband communication (KHZ) (unspecified frequencies are USB)

Guangzhou Coast Station: 8716 8782 13107 13149 13182 17398 19772 19793 22735

Tianjin Coast Station: 13092

Shanghai Coast Station: 8773

Yantai Coast Station: 4381 8764 13077 17332

Zhanjiang Coast Station: 2182 6200 6501

Zhoushan Haixiang Shipping Company: 12408

Xiamen Coast Station: 4314 8453 12876

US Army Radio Hawaii Guam: 10320 13362 (day) 5765 6350 (night)

Manila Airport, Philippines: 8942

Iceland Radio: 13855

East Asia Pacific Aviation Weather Station: 8828

Ministry of Agriculture Nanhai District Fishery Port Supervision and Administration Bureau 12215

Guangdong Zhanjiang Ocean and Fisheries Bureau 4925

Guangxi Beihai Fisheries Bureau 6230

Hainan Sanya Ocean and Fisheries Bureau 8210

Guangdong Lianjiang City Ocean and Fishery Bureau 4378

Guangxi Fangchenggang Aquaculture and Animal Husbandry Bureau 6300

Ocean and Fisheries Bureau, Danzhou City, Hainan 13250

Hainan Lingao County Marine Fisheries Bureau 7735

International maritime communication band: 8195-8815 12330-13200

Frequencies commonly used by amateur radio stations:

Japan Meteorology: 9970 13597

Japanese newspapers: 12745

Taiwan weather: 13900

Southeast Asian languages, English coast station strong signal frequency band: 16590-16860

80 meters 3500-3900

40 meters 7000-7100 (LSB)

20 meters 14000-14350

15 meters 21000-21450

10 meters 28000-29700

Philippines: 6765

Amateur Radio: 14180

Ham Radio: 14270

LSB Japan Amateur Radio: 3569

Telegraph station: 12967

Aviation: 13281 13284

The above frequencies are for reference only.

Civilian intercom free channels:
China free channels:

1: 409.7500 2: 409.7625

3: 409.7750 4: 409.7875

5: 409.8000 6: 409.8125

7: 409.8250 8: 409.8375

9: 409.8500 10: 409.8625

11: 409.8750 12: 409.8875

13: 409.9000 14: 409.9125

15: 409.9250 16: 409.9375

17: 409.9500 18: 409.9625

19:409.9750 20:409.9875

European public walkie-talkie standard frequency (unit: MHZ)

1: 446.00625 2: 446.01875

3: 446.03125 4: 446.04375

5: 446.05625 6: 446.06875

7: 446.08125 8: 446.9375

Free home radio frequencies in the United States:

1: 462.5625 2: 462.5875

3: 462.6125 4: 462.6375

5: 462.6625 6: 462.6875

7: 462.7125 8: 467.5625

9: 467.5875 10: 467.6125

11: 467.6375 12: 467.6625

13: 467.6875 14: 467.7125

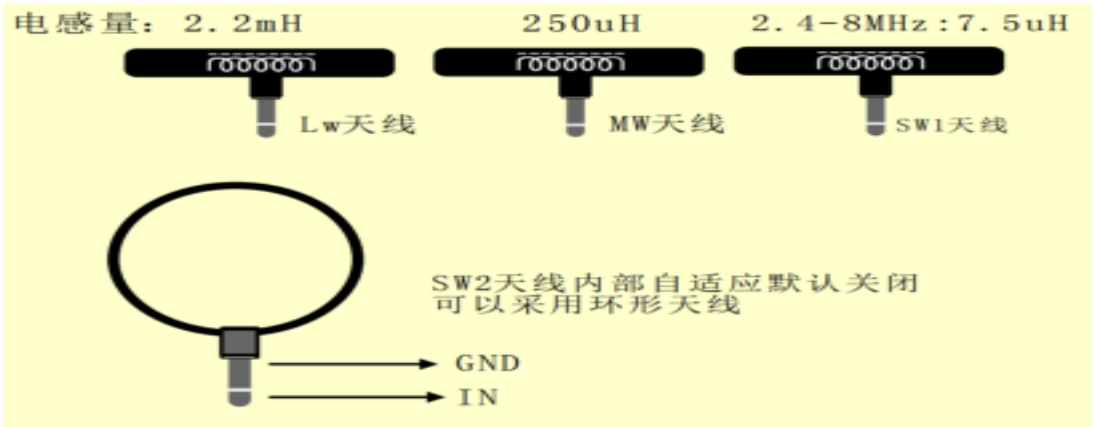
Attachment 2:

Instructions for using the shortwave RF channel in the top input

This machine adds an external input channel for medium wave, short wave 1, and short wave 2, providing users with hands-on ability to use self-winding receiving antennas to improve the reception effect.

At the same time, the product's internal MW, SW1, already has its own adaptive tuning function, and SW2 has this function turned off by default. (The antenna inductance needs to be within a roughly accurate range)

External loop antenna parameters open to users:



Instructions:

1. Turn the top switch to "ON";

2. Manually press the ANT-SEL button to select the "Loop Antenna" icon;

Note: During the process of connecting an external antenna, static electricity often occurs, causing damage to the antenna and other abnormalities. If such problems occur, we will not be responsible for free repairs.

(This input channel has three built-in ESD devices, but damage caused by static electricity and high-power signals cannot be absolutely avoided)

How to use manual medium wave, SW1, and SW2 antenna tuning:

MW manual tuning range: 510-1720Khz

SW1 manual tuning range: 5-15Mhz

SW2 manual tuning range: 13-30Mhz

Medium wave use: We recommend turning off this manual tuning function at SW1 and SW2 by default. After setting the switch to the MW position, adjust the knob on the side

Just observe the RSSI/SNR value to the highest value. The exact position of manual tuning can be judged by the sound clarity.

Shortwave use: Select the manual tuning channel through the ANT-SEL button. Turn the switch to SW1 or SW2 position, then adjust the side knob, and observe

Just set the RSSI/SNR value to the highest value; you can also judge the exact position of manual tuning by the sound clarity.

Note: The manual antenna tuning function of shortwave 1 and shortwave 2 can improve the receiving performance to a certain extent (but it requires

When used correctly). If the tuning is incorrect, reception may be worse than if it were not used.

1．CAUTION

EN：RF ENERGY EXPOSURE AND PRODUCT SAFETY GUIDE

EN：Before using this device, please read this guide which contains important operating instructions for safe usage, control information and operational instructions for compliance with RF Energy Exposure limits in applicable national and international standards.

EN:User' instructions should accompany the device when transferred to other users.

2. 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.

3.1 FCC

3.1.2 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.
(2) This device must accept any interference received, including interference that may cause undesired operation.

3.1.3 Note: This equipment has been tested and found to comply with the limits for a Class B digital device. 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.

3.2 IC

3.2.1 Licence-exempt radio apparatus

EN：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.

4 CE

4.1 (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.

5.1 Disposal

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The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that all electrical and electronic products, batteries, or accumulators 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 and rules in your area.

5.2

(1) Batterien und Akkus

Besitzer von Altgeräten haben Altbatterien und Altakkumulatoren, die nicht vom Altgerät umschlossen sind, im Regelfall vor der Abgabe an einer Erfassungsstelle von diesem zu trennen. Dies gilt nicht, soweit die Altgeräte bei öffentlich-rechtlichen Entsorgungsträgern abgegeben und dort zum Zwecke der Vorbereitung zur Wiederverwendung von anderen Altgeräten separiert werden.

a) Batterien können nach Gebrauch unentgeltlich in der Verkaufsstelle zurückgegeben werden.

b) Der Nutzer ist zur Rückgabe gebrauchter Batterien gesetzlich verpflichtet.

(2) Getrennte Erfassung von Altgeräten

Elektro- und Elektronikgeräte, die zu Abfall geworden sind, werden als Altgeräte bezeichnet. Besitzer von Altgeräten haben diese einer vom unsortierten Siedlungsabfall getrennten Erfassung zuzuführen. Altgeräte gehören insbesondere nicht in den Hausmüll, sondern in spezielle Sammel- und Rückgabesysteme.

(3) Möglichkeiten der Rückgabe von Altgeräten

Besitzer von Altgeräten aus privaten Haushalten können diese bei den Sammelstellen der öffentlich-rechtlichen Entsorgungsträger oder bei den von Herstellern oder Vertreibern im Sinne des ElektroG eingerichteten Rücknahmestellen abgeben. Ein Onlineverzeichnis der Sammel- und Rücknahmestellen finden Sie hier:

https://www.ear-system.de/ear-verzeichnis/sammel-und-ruecknahmestellen.jsf

(4) Datenschutz-Hinweis

Altgeräte enthalten häufig sensible personenbezogene Daten. Dies gilt insbesondere für Geräte der Informationsund Telekommunikationstechnik wie Computer und Smartphones. Bitte beachten Sie in Ihrem eigenen Interesse,dass für die Löschung der Daten auf den zu entsorgenden Altgeräten jeder Endnutzer selbst verantwortlich ist.

(5) Hersteller-Registrierungsnummer

Als Hersteller im Sinne des ElektroG sind wir bei der zuständigen Stiftung Elektro-Altgeräte Register (BennoStrauß-Str. 1, 90763 Fürth) unter der folgenden Registrierungsnummer registriert: DE 83916430

6.1

This two-way 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. 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/

Keeping the radio at a proper distance is important as RF exposure decreases with increasing distance from the proper antenna. A proper antenna is an antenna supplied with this radio by the manufacturer or specifically authorized by the local authority for use with this radio. This radio can only be operated by use of an antenna of a type and maximum (or lesser) gain approved for the transmitter under regulations and rules. This transmitter must operate with the antenna(s) documented and in Push-to-Talk and body-worn configurations as documented. Using authorized accessories is important because the use of Non-Retekess accessories may result in exposure levels, which exceed the IEEE/ICNIRP RF exposure limits.

Transmit no more than the rated duty factor 50% of the time. Transmitting necessary information or less, is important because the radio generates measurable RF energy exposure only when transmitting in terms of measuring for standards compliance. For users who wish to further reduce their exposure, some effective measures to reduce RF exposure include:

- Reduce the amount of time spent using your wireless device.
- Use a speakerphone, earpiece, headset, or other hands-free accessory to reduce proximity to the head (and thus head exposure). While wired earpieces may conduct some energy to the head and wireless earpieces also emit a small amount of RF energy, both wired and wireless earpieces remove the greatest source of RF energy (handheld device) from proximity to the head and thus can greatly reduce total exposure to the head.
- Increase the distance between wireless devices and your body.

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✓

6.2

This radio is designed for and classified as “General population/uncontrolled use”. General population/uncontrolled environments are defined as locations where there is exposure of individuals who have no knowledge or control of RF exposure level.

7.1 Electromagnetic Interference/Compatibility

Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility. 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, such as hospitals or healthcare facilities.

9.1 Protect your hearing

- Use the lowest volume necessary to do your job. Turn up the volume only if you are in noisy surroundings.
- 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 carefully with the earphone maybe possible excessive sound pressure from earphones and headphones can cause hearing loss.

CAUTION: 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.

10.1 Batteries Safety

•In the event of a battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice immediately.

•If a radio or a battery has been submerged in water, please dry and clean it before use. Do not dry the radio or battery with an appliance or heat source, such as a hair dryer or microwave oven. If the radio has been submersed in a corrosive substance (e.g. saltwater), rinse the radio and battery in fresh water, then dry them.

10.4

•Turn off your radio before charging.

•Batteries shall be charged at 10℃~40℃ environment temperature specified. If the environment temperature is lower than 0℃, the charge shall be prohibited.

•Rechargeable batteries are only to be charged by adults or by children at least 8 years old under adult supervision.

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11.1

WARINING:CHOKING HAZARD-Small Parts. Not suitable for children under 3 years old.

12.1 Adapter

The power delivered by the charger must be between min [4.5] Watts and max [5.5] Watts required by the radio equipment in order to achieve the maximum charging speed.

13.1 Authorized Accessories List

•Contact Retekess for assistance regarding repairs and service.

•For a list of Retekess-approved accessories for your radio model, visit the website http://www.retekess.com

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FCC Warnning:

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 againstharmful interference in a residential installation. This equipment generates, uses and can radiateradio frequency energy and, if not installed and used in accordance with the instructions, maycause harmful interference to radio communications. However, there is no guarantee thatinterference will not occur in a particular installation. If this equipment does cause harmfulinterference to radio or television reception, which can be determined by turning the equipmentoff and on, the user is encouraged to try to correct the interference by one or more of thefollowing 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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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 complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 0cm between the radiator and your body.