

Full-band Radio With Bluetooth Card Digital Recorder

Instruction Manual (Model: K-603)

FCC ID: 2APU9-K-603



Introduction to K-603 Radio:

Thank you for your purchase. This is a portable PLL digital radio with multiple functions. In addition to all band reception (FM, AM and SW) of a traditional radio, it is designed with the following functions: recording, bluetooth playback, TF card playback and audio input playback. What's more, it supports other functions, such as radio station selection and pick-up through keyboard as well as music selection. This is a versatile radio with high-fidelity sound quality. We sincerely hope this radio can bring you novel experience and make your life more colorful.

This radio enjoys the following features:

& Portable size and easy to carry. It has a stand on the back.

& Built-in ultra-capacity 1000MAH lithium battery (the lithium battery uses the universal BL-5C lithium battery) with long battery life. The battery is removable to extend the life of the product.

& Steady reception of all bands (FM, AM and SW) and intuitive key design. Radio station selection and pick-up through keyboard is designed for the radio mode, which is easy to operate.

& Power-off memory and power-failure memory.

& LCD lattice screen digital display with a display size of 43X22mm, which can display more complete content, including: radio frequency, radio band, synchronous display of music name, playback time, battery symbol indication, volume adjustment, locking or unlocking state as well as relevant functions designed by the system (such as, language, interchange of medium-wave stepping values

(9KHZ and 10KHZ) as well as backlight time and dimming. Thus, clear operation instructions are available for users.

& Radio station search mode: Full-automatic radio station search and saving; automatic radio station search; keyboard digital radio station selection.

& Radio station saving mode: Manual radio station saving; full-automatic radio station search and saving.

& Large capacity of the radio chip which can save up to 440 radio stations (80 radio stations for FM mode, 60 for medium wave mode and 300 for short wave mode).

& Locking function; mute function; radio station deletion; automatic power-off setting (0-10-20-30-40-50-60-70-80-90 minutes); backlight luminosity adjustment. Its humanized design enriches the functions of the product.

& Bluetooth connection of version 5.0 is used for short-distance music transmission (the receiving distance is no more than 10 meters). The bluetooth can be conveniently connected to the bluetooth device of laptops, mobile phones, PDA and other digital products, thereby realizing the wireless transmission of music.

& It supports music playback in the formats of MP3 and WMA of the TF card. It has the pointer memory function and supports playback of the TF card with a capacity of up to 32G. Functions of “playback loop, single loop and all loop” are available. And “sound effect” function can be used to select the sound quality effect.

& It supports 3.5MM audio input playback with HIFI sound quality effect.

& It supports recording, recording playback and recording deletion.

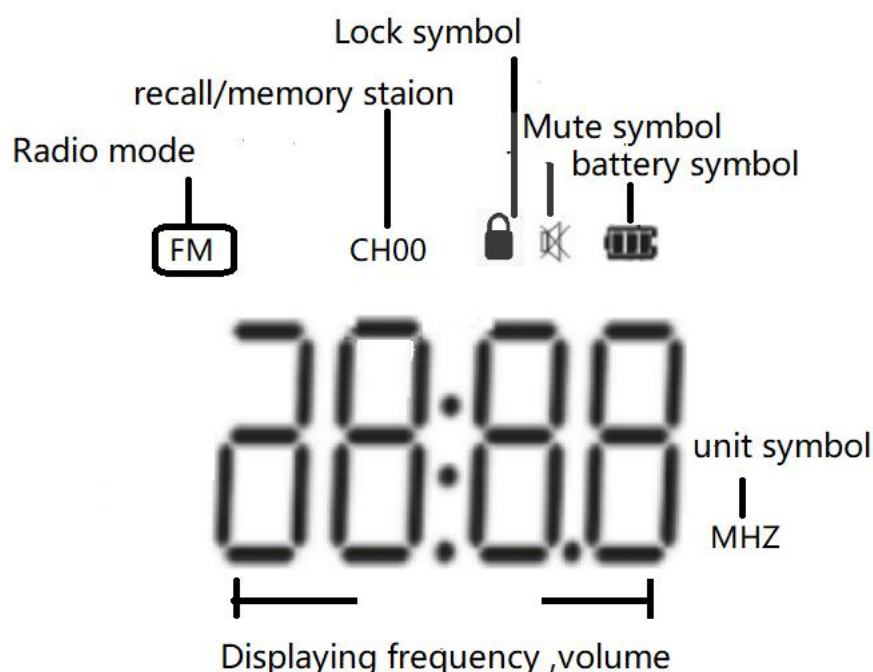
& It supports three-language display (Chinese, English and Spanish). Users can choose the language according to the actual needs.

& Medium wave stepping value: Users can make adjustment according to the actual needs. No national boundaries.

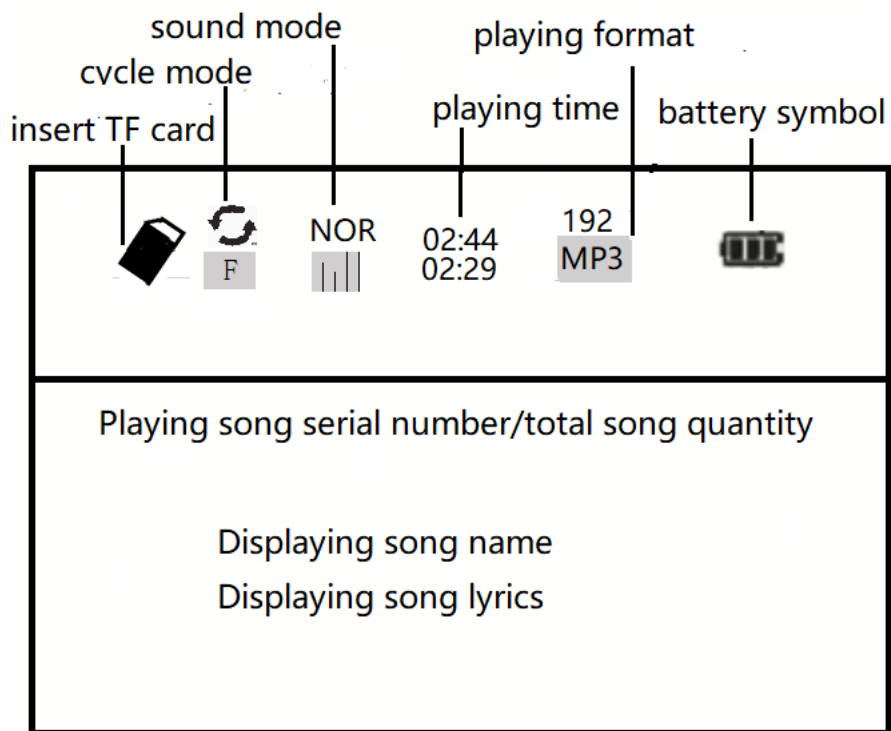
Factory standard parts for the radio: One USB charging cable and one manual.

Symbol description of the LCD display screen

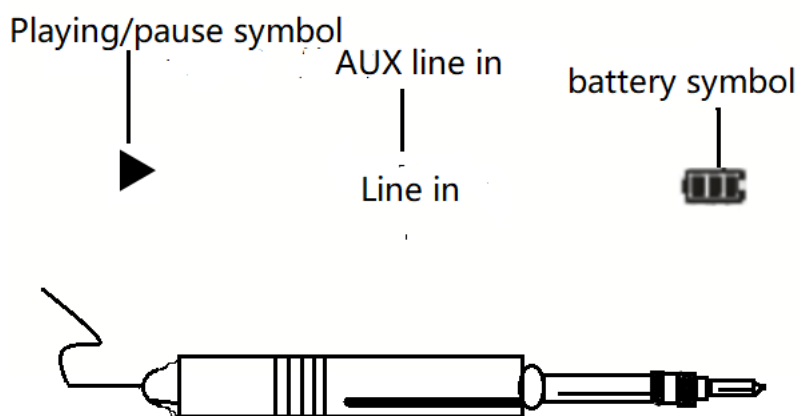
LCD screen display in radio mode



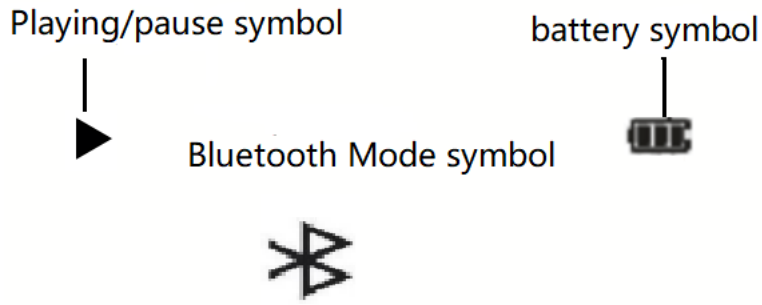
LCD screen display in TF music playback mode



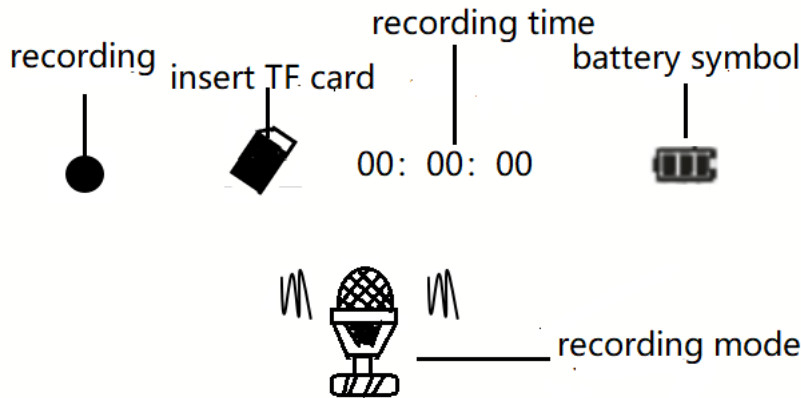
LCD screen display in external audio source playback mode



LCD screen display in bluetooth playback mode



LCD screen display in recording mode

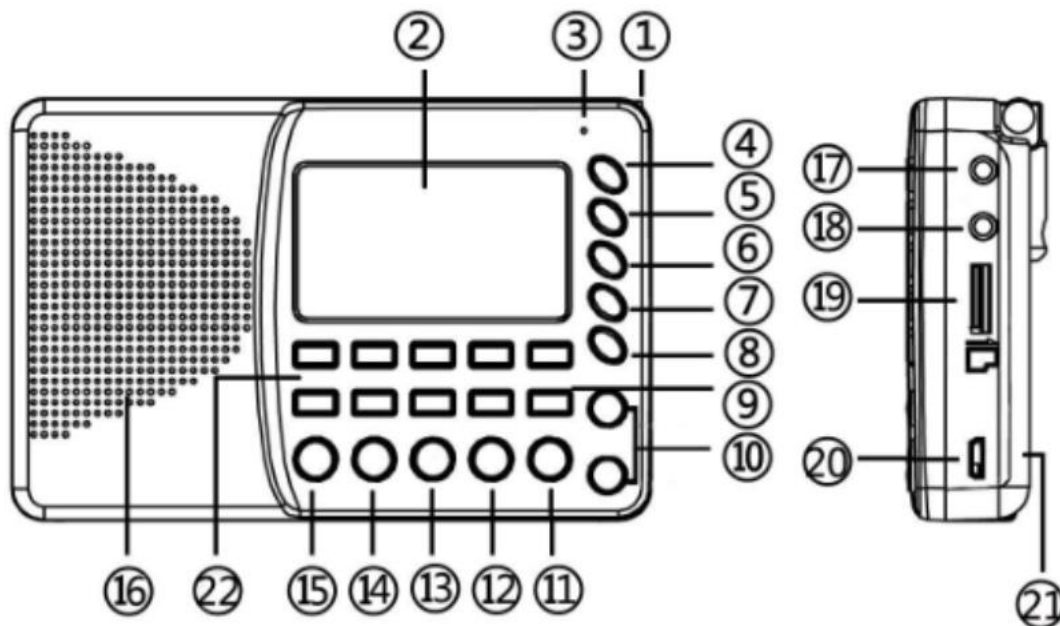


Notes:

Prior to using this pocket radio, be sure to follow the basic safety tips below so as to use the product safely and reliably.

- ◆ Read and understand all safety instructions and usage information.
- ◆ It is recommended to use the original lithium battery.
- ◆ It is recommended to use a charging device with an output voltage of DC5V/500M A or 1000 MA for charging, in order to avoid damage to the lithium battery or the device.
- ◆ When the lithium battery is unused for a long time, please be sure to take it out and keep it separately, and make sure to charge it once a month.
- ◆ Do you expose this product to rain, moisture. Do not drop or splash any liquid onto this product.
- ◆ Do not place this product near a high-temperature heat source. Do not bake or blow this product at high temperature.
- ◆ Do not keep the product under direct sunlight for a long time.
- ◆ Do not drop or hit the product or apply heavy weight on it.

Function schematic diagram of the K-603 appearance keys



- ① Seven 360-degree rotatable telescopic antenna
- ② Lattice screen display
- ③ MIC: Recording microphone
- ④ POWER: Power/Switch
- ⑤ MODE: TF card playback/ bluetooth /audio input (AUX in), playback mode switch/ lock
- ⑥ AM/FM: Medium wave, frequency modulation (FM), band switch key
- ⑦ SW: Short wave (meter-wave nine-band quick switch)
- ⑧ MENU: Enter the menu to make selection (including auto power adjustment, contrast adjustment, as well as settings of backlight time, language, recording and AM stepping).
- ⑨ 0/REC FILE: Long press this key to play the recording file, and long press it again to switch to the playback mode of the TF card.
- ⑩ VOLUME: Volume adjustment (“+”: volume up, “-”: volume down)
- ⑪ **▶▶** : Next/Down automatic radio station search
- ⑫ **||** : Playback/ Pause/ Enter/ Confirm/ Full-automatic radio station search and saving/ Mute setting/ Playback setting adjustment
- ⑬ **◀◀** : Previous/ Up automatic radio station search
- ⑭ DEL: Deletion
- ⑮ REC: Recording (the abbreviation of the English word “recording”)
- ⑯ 40mm external speaker
- ⑰ 3.5mm headset jack
- ⑱ LINE in: 3.5mm audio input interface
- ⑲ TF card jack
- ⑳ MICRO USB charging interface
- 21 Battery cap
- 22 1~9~0: Radio station and music selection through the digital keyboard (long press “5” to enter the “memo” function of manual radio station saving; long press “0” to fetch recording files)

Function introduction of the radio system settings:

Long press “⑧MENU” to enter the radio system settings (the settings include auto power, contrast adjustment, backlight time, language, recording set, AM stepping set and “back”).

Press “⑪▶▶▶ / ⑬◀◀◀” to select the menu to be adjusted; press “⑫▶▶▶” to enter the functions to be adjusted.

& Auto power: Press “⑪▶▶▶ / ⑬◀◀◀” to make up-and-down adjustment (ten options are available: 0, 10, 20, 30, 40, 50, 60, 70, 80 and 90 minutes). LCD displays the corresponding time. After the auto power time is selected, press “⑫▶▶▶” again to confirm (select the automatic power-off time; if no key is pressed within two seconds, the system will default to the last selected power-off time).

& Contrast: It is used to adjust the brightness contrast of the backlight. Press “⑪▶▶▶ / ⑬◀◀◀” to make up-and-down adjustment. 0-15 levels of brightness are available. After selecting the proper brightness contrast, press “⑫▶▶▶” again to confirm.

& Backlight time: It is used to adjust the backlight time. Six options are available: backlight staying on, 5-second delay, 10-second delay, 15-second delay, 20-second delay and backlight off. After selecting the proper backlight time, press “⑫▶▶▶” again to confirm.

& Language: Three languages are available (Chinese, English and Spanish). Press “⑪▶▶▶ / ⑬◀◀◀” to make up-and-down adjustment. After selecting the language needed, press “⑫▶▶▶” again to confirm.

& Recording set: Long recording, quality recording and premium recording are available. Press “⑪▶▶▶ / ⑬◀◀◀” to make up-and-down adjustment. After selecting the proper recording type, press “⑫▶▶▶” again to confirm.

& AM stepping set: Users can adjust the medium wave stepping value (9KHZ and10KHZ) according to the actual needs. Press “⑪▶▶▶ / ⑬◀◀◀” to make up-and-down adjustment. After selecting the proper value, press “⑫▶▶▶” again to confirm.

Note: In the United States, Canada, Mexico and other North and South American countries, the medium wave stepping value must be adjusted to 10KHZ, while in other countries, the value must be adjusted to 9KHZ.

When the medium wave stepping value is 9KHZ, the frequency range is 522-1710KHZ.

When the medium wave stepping value is 10KHZ, the frequency range is 520-1710KHZ.

Reminder: To exit from MENU, please select “Back” or tap “⑫▶▶▶” to exit.

The corresponding content in the three languages (Chinese, English and Spanish) is as follows:

中文	English	Espanol
定时关机	Auto power	Off time
对比调节	Contrast	Contraste
背光时间	Backlight time	Tiempo brillante
语言设置	Language	Idioma
录音设置	Record set	Record set
AM 步进设置	AM Stepping set	AM Stepping set
返回主界面	Back	Espada

Battery installation

1. Open the cap of the battery cover on the back of the radio.
2. Properly install the lithium battery according to the polarity mark.
3. Cover the cap of the battery.
4. Please charge the lithium battery for 6 hours at first use. Normally, the charging time is about 3-4 hours.
5. It is recommended to use a charging device with an output voltage of DC5V/500M A or 1000 MA for charging.
6. Normally, please charge the battery in the power-off state. During charging, the LCD displays “the charging interface” with flashing battery capacity indicator, indicating that the battery is being charged. When the battery is fully charged, the battery capacity indicator does not flash any longer but displays “Full Battery”. At this time, it is recommended that users continue charging for another 1-2 hours to ensure the maximum storage capacity of the lithium battery.

Introduction to the operation of the radio mode:

1. Power on/off:

Long press “POWER” to turn on the device, and LCD displays “Welcome”.

When the radio is on, long press “POWER” again to turn off the device, and LCD displays “Bye Bye!”.

Pull out the telescopic antenna and short press “FM/AM” or “SW” to select the band needed.

(FM: used to receive the local band signals; AM: used to receive the medium wave signals; SW: used to receive the short waves)

2. The following three ways are available for radio station search (full-automatic radio station search, automatic radio station search and radio station search through digital keyword):

2.1. Full-automatic radio station search:

In the radio state, long press “▶|” to enter full-automatic radio station search. Radio stations will be searched from low frequency to high frequency. Radio stations searched are automatically numbered and saved. After the completion of automatic radio station saving, tap “▶▶|” or “|◀◀” to fetch the saved radio stations.

2.2. Automatic radio station search:

In the radio state, long press “▶|” or “|◀◀” to search radio frequencies backwards or forwards. After a radio station is searched, search stops and the radio station searched at this time is played.

2.3. Radio station search through digital keyboard:

In the radio state, you can directly input a radio frequency for selection. For instance, if the frequency of the radio station to be searched is 106.2MHz, you can press the digit keys “1”, “0”, “6” and “2” in order, and then press “▶|” to confirm. At this time, the radio frequency can be switched to 106.2 receiving frequency.

FM:87.0-108.0MHZ; the tuning stepping value: 0.1MHZ. Take the stepping value as a unit and gradually increase or decrease the input value. AM(AM:9KHZ): 522-1710KHZ, input a multiple of 9.

AM(AM:10KHZ):520-1710KHZ, input a multiple of 10.

SW:4.75-21.85MHZ, the tuning stepping value: 0.005MHZ. Take the stepping value as a unit and gradually increase or decrease the input value.

3. Two ways available for radio station saving (full-automatic radio station search and automatic radio station saving, as well as manual radio station saving)

(80 radio stations can be saved in FM mode, 60 radio stations in AM mode and 300 radio stations in SW mode).

3.1: Full-automatic radio station search and automatic radio station saving:

In the radio state, long press “▶|” to enter full-automatic radio station search and saving. Radio stations will be searched from low frequency to high frequency. Radio stations searched are automatically numbered and saved. After the completion of automatic radio station saving, tap “▶▶|” or “|◀◀” to fetch the saved radio stations.

3.2: Manual radio station saving:

Search for the target point with the above three radio station search methods. Long press the digit “5” and the LCD displays “CH00...” The digit of the address number of the saved radio station flashes. Tap the digit keyboard (0-9) to choose the address

number of the saved radio station (it is necessary to input the address number of the saved radio station in the number of radio station saving in the corresponding mode). When the address number of the saved radio station flashes, press “▶||” to confirm and the LCD displays “prompt - save radio station - confirm”. Press “▶||” again to confirm. Thus the radio station is saved successfully.

★ If the above operation is not completed within 5 seconds, the operation of manual radio station saving will be abandoned by default.

4. About the SW short wave meter wave

The tuning range of the short waves is 4.750-21.850MHZ. Nine meter waves are particularly designed for quick radio station selection.

SW1:4.750MHZ SW2:5.950MHZ SW3:7.100MHZ SW4:9.500MHZ
SW5:11.650MHZ SW6:13.600MHZ SW7:15.100MHZ SW8:17.500MHZ
SW9:21.450MHZ

5. The operation of radio station deletion

For the saved radio stations, tap “▶▶|” or “|◀◀” to fetch the address number of the radio station to be deleted and the LCD displays “CH01...”. Select the address number of the radio station to be deleted and long press “DEL”. The LCD displays “prompt - delete radio station - confirm”. Short press “▶||” again to confirm so as to delete the current radio station.

★ If the above operation is not completed within 5 seconds, the device will automatically return to the radio state.
6. The mute operation

In the radio state, short press “▶||”. The “~~⊗~~” symbol at the top of the screen flashes, indicating the mute state. Short press “▶||” again to cancel the mute function.

7. Introduction to the operation of the locking function

When the radio is on, long press “MODE”. At this time, a lock symbol appears on the screen, indicating the locking state. At this time, the other keys do not work and a lock symbol appears on the screen. Long press “MODE” again and the lock symbol disappears, indicating the unlocking state.

Introduction to the operation of TF card music playback

- 1: Insert the TF card properly (the K603 radio supports the playback formats of MP3 and WMA).
- 2: Long press “POWER” to turn on the radio. When the radio is turned on, it is in the memory mode before it was turned off. Short press “MODE” to enter the TF card playback mode. The LCD screen displays the name of the song, the playback format, the playback time, etc (if the downloaded file has lyrics, the LCD screen will display the lyrics).
- 3: Short press “▶▶|” or “|◀◀” to select songs up or down.
- 4: You can also directly press the digit keyboard to select the song code for music selection. Press “▶||” again to confirm the song code for music playback.
- 5: Long press “▶||” to enter “playback setting” of the TF card setting. Short press “▶▶|” or “|◀◀” to select the option to be adjusted. Press “▶▶|” to enter. After selection, press “▶▶|” again to confirm the adjusted option.

The following options are available for playback setting:


Home directory: It displays all the songs on the TF card. Short press “▶▶|” or “|◀◀” to select the song to be played from the directory.

Playback mode: Three modes are available for users’ selection, including “all loop”, “single loop” and “directory loop”.


Sound effect: Seven modes are available for users' selection: natural, popular, rock, jazz, classic, country, and heavy bass.

★ If the above operation is not completed within 5 seconds, the device will automatically return to the original state of TF card playback. Long press “▶||” again to return to the radio mode.

Introduction to the operation of bluetooth playback

Short press “MODE” to switch to the bluetooth mode and the bluetooth music symbol “” on the LCD screen flashes. Use your mobile phone to turn on bluetooth and search. After successful search, the mobile phone displays the name of K603. Then click the phone to enter the pairing connection and music can be played after connection.

Corresponding operations can be realized by operating the mobile phone or the device, such as volume adjustment or music selection (next or previous).

After successful connection, if the device is turned off or switched, it can be automatically connected without pairing when being turned on again. After connection, the bluetooth music symbol “” does not flash any longer. If no connection, it will continue to flash.

4. The effective receiving distance of the K603 bluetooth is no more than 10 meters. The device can be conveniently connected to the bluetooth device of laptops, mobile phones, PDA and other digital products, thereby realizing the wireless transmission of music.

Recording operation:

Insert the TF card. Press “POWER” and the radio is turned on. Short press “MODE” to enter TF card playback mode. Long press “REC” to enter MIC recording mode. Short press “▶||” to pause or restore. Short press “REC” to finish the recording and exit. External audio source recording and radio recording are available.

LINE IN recording:

Short press “MODE” to enter the audio source input playback (LINE IN) mode (the screen displays “LINE IN”). Confirm that an external audio song is playing at this time and adjust the volume of the external audio source. Long press “REC” to enter external audio recording. During recording, short press “▶||” to pause or restore. Short press “REC” to finish the recording and exit.

Radio recording:

Short press “FM/AM” or “SW” to enter the radio mode. Adjust the radio station and long press “REC” to enter the radio recording mode. During recording, short press “▶||” to pause, then short press “▶||” again to restore. Short press “REC” to finish the recording and exit.

★ In the recording state, the volume is locked at the volume value set before recording, and pressing the volume keys does not change the volume of the sound.

Introduction to the operation of fetching and playing recording files

Long press “0/REC FILE” to fetch recording files. Short press “▶▶” or “◀◀” to select the recording file to be played. The characters in front of the file indicate the mode in which the device was recording. For instance, “MIC xxx” refers to microphone recording files, “LINE xxx” refers to recording files of external audio source, and “RAD xxx” refers to radio recording files.

Operation of deleting a recording file

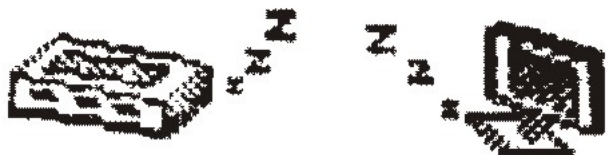
Long press “0/REC FILE” to fetch the recording file, then long press “DEL”. At this time, the screen prompts you whether to delete the file. Short press “▶||” to confirm and then exit.

External audio source (LINE IN) input playback:

When the radio is on, plug the 3.5MM audio source device (such as a mobile phone or computer) into “LINE IN” of the radio with the 3.5MM audio line. Tap “MODE” and select “audio source input” mode, then the radio plays the external audio source. (Note: This device is not equipped with any audio line.)

Computer data transmission:

First remove the radio battery and insert the TF card, connect this device to the computer with the micro USB data, short press any key of the radio. At this time, the computer will install driver software automatically and the computer connection symbol appears on the LCD of the radio which indicates successful connection, as following symbol:



At this moment, the computer can read, copy, and delete files of the TF card in the radio.

Note: Some computers with different configurations may not be compatible with this radio.

Parameter specifications:

Type of storage supported	Trans Flash card
FM frequency range	87-108MHz
AM frequency range	522-1710KHz
SW frequency range	4.75-21.85 MHz (nine meter waves)
Playback format of the TF card	MP3. WMA
Bluetooth version	5.0
External audio source playback	3.5MM jack audio source input
The number of radio stations saved in radio mode	Altogether 440 (FM mode: 80 /AM mode: 60 /SW mode: 300)
Headset output jack	Standard 3.5mm stereo
Audio input interface	Standard 3.5mm dual loop
Charging data interface	Micro USB-5P
Speaker	Φ40mm/4Ω/3W
External power supply	DC5V
Minimum operating voltage	3.3V
Output power	1.6W
Lithium battery specifications	BL-5C 1000MAH 3.7V
Volume of the product	L120*H79*D23
Net weight	150g (including the lithium battery)
Screen resolution	128*64 point

FCC Statement

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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, 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,

- 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.

FCC RF Radiation Exposure Statement

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