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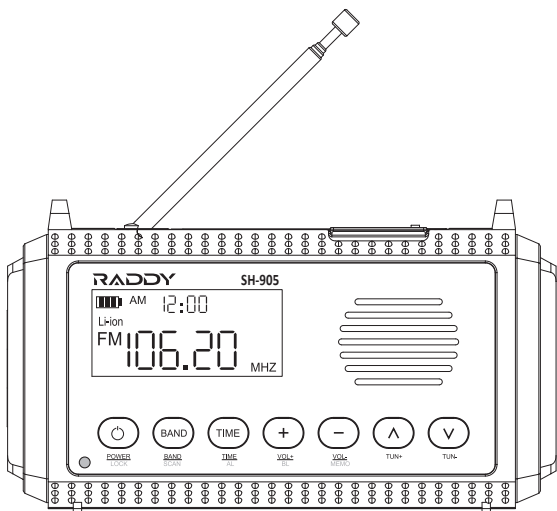## SH-905

Thank you for your purchasing our product.

Please read this operation guide carefully and keep it properly before using it.

1: Introduction to the product

Thank you for buying our portable disaster-prevention emergency all-band radio. The product uses software programming to realize digital display of all-band wireless radio: FM, AW, SW and WX. The built-in battery with ultra large capacity of lithium battery supports charging with solar energy, hand generator and DC5V external power . It also supports emergency power supply with 3x 1.5vAAA batteries. The radio is equipped with a reading light, a flashlight, SOS alarm and emergency facility used as power bank. It is an emergency product for use both at home and outdoors.

2: Functions of the radio

2.1: Press to sound the SOS alarm. Press to turn on the flashlight. Press to turn on the reading light (two levels of lighting). It's easy to use.

2.2: 10,000mAh large capacity lithium battery with long endurance. It supports charging with solar energy, hand generator and DC5V external power.

2.3: The radio also supports emergency power supply with three 1.5vAAA batteries.

2.4:The radio sensitively receives all-band signals: FM, AM, SW and WX. The 7-section 360° rotatable rod antenna is used.

2.5:The radio supports two ways of searching and storing channels: automatic tuning system (ATS) and automatic channel storage by scanning (SCAN).

2.6: The radio supports 12-hour time display.

2.7: The radio is equipped with a Φ40MM 4Ω 3W speaker, givi loud and clear sound.

2.8: LCD digital display and a lot of information to be displayed: frequency, battery level, volume, receiving mode, etc, giving a clear instruction to users.

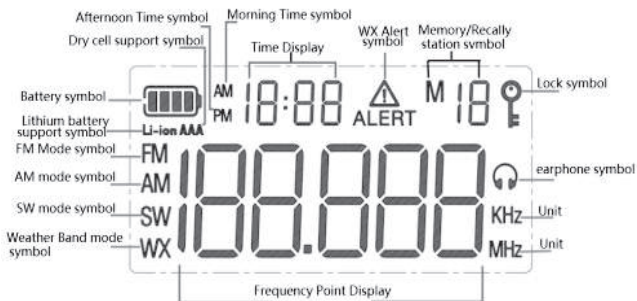2.9: LCD backlight is easy to use at night.

2.10: The radio supports 3.5mm earplug audio output. This is a multifunctional user-friendly radio. We hope it will give you infinite fun of receiving radio wave and offer help to more people. Before use, please carefully read this Instructions for Use and keep it properly for future reference.

3: Overview of buttons

Telescopic Antenna

left lanyard hole

Solar Panel
Reading Light

Right lanyard hole

Reading Light Open

SOS Lamp

Flashing Lamp

Power Lamp

LCD display

SOS Alarm Button

Reading Light Button

Flashing Light Button

Battery compartment
for 1.5v AAA batteries

Hand crank the generator handle

4: Introduction to buttons

POWER/ LOCK	1: POWER: light press "POWER" to turn on the radio. Light press "POWER" again to turn off the radio. (After startup every time, it is WX mode by default and the symbol "WX" flashes, which indicates alert is working) [See Article 6.1] 2: LOCK: when the radio is powered on, long press "LOCK" to lock, and long press "LOCK" again to unlock. [See Article 6.2]
BAND/SCAN	1: When the radio is powered on, light press "BAND" to switch between bands. [See Article 6.3] 2: In the mode of AM/FM/SW, long press "BAND" for two seconds to start the function of SCAN. [See Article 6.5.2.3] 3: After the radio is powered on, the status of WX receiving is displayed: long press "BAND" for two seconds to switch between AM step 9KHZ and 10KHZ. [see Article 6.5.4]
TIME/AL	1: When the radio is powered on, long press this button to start the alert signal. LCD displays the symbol " ALERT ", and press the button again to cancel the alert. 2: When the radio is powered on, long press this button for two seconds to start time setting, and press "TUN+" or "TUN-" to adjust the time. [See Article 13]
VOL+/BL	1: Turn on/off the LCD backlight. [See Article 8.1] 2: When the radio is powered on, light press this button to turn the volume up.
VOL-/MEMO	1: When the radio is powered on, light press this button to turn the volume down. 2: In the mode of AM/FM/SW, long press this button for two seconds to take a channel automatically. When the address of taking a channel [M*] is displayed, light press "VOL+" or "VOL-" to take a channel. [See Article 6.5.3]
TUN+	When the radio is powered on, light press "TUN+", and frequency will increase progressively based on the minimum step of each band. Long press this button for two seconds to automatically search channels up based on the minimum step of each band.

TUN-	When the radio is powered on, light press "TUN-", and frequency will decrease progressively based on the minimum step of each band. Long press this button for two seconds to automatically search channels down based on the minimum step of each band.
SOS (Alarm)	In the mode of unlock, light press this button to sound the alarm, and light press it again to cancel the alarm. [See Article 7]
(Reading light)	In the mode of unlock, light press this button for the first time to turn on the reading light; Light press it for the second time to lower the level of lighting; Light press it for the third time to turn off the reading light. [See Article 8.2]
(Flashlight)	In the mode of unlock, light press this button for the first time to turn on the flashlight; Light press it for the second time to lower the level of lighting; Light press it for the third time to turn off the flashlight. [See Article 8.3]
Power lamp	1: When the radio is powered off, the lamp is off. 2: When the radio is powered on, the green lamp is on, which means the radio is turned on. 3: Charge: the red lamp is on, which means it's charging.
TYPE-C USB JACK	DC5V power-in charging jack
USB CHARGING	DC5V power-out charging jack for external device (used as a power bank)
	3.5mm earplug jack

5: Symbols on LCD

6: How does the radio work

6.1: Turn on/off the radio

The radio has built-in lithium battery. Light press "POWER/LOCK" to turn on the radio. After startup every time, the radio will enter the mode of WX and the symbol "WX" will flash. After startup, the radio will automatically search the alert signal.

When the radio is powered on, light press "POWER/LOCK" again to turn off the radio.

Note: before use for the first time, please fully charge the battery.

6.2: Lock the radio

When listening to the radio, the function of lock can be used to avoid abnormal working due to other factors.

Lock: when the radio is powered on, long press "POWER/LOCK" for two seconds and the symbol.

6.3: Choose a receiving mode

When the radio is powered on, light press "BAND/SCAN" to switch between receiving modes and choose one you want.

The following table shows four receiving modes:FM, AM, SW and WB.

Receiving mode	Receiving range	Min step
FM	87.5-108MHZ	0.1MHZ
AM	520-1710KHZ (step: 10KHZ) 522-1710KHZ (step: 9KHZ)	9KHZ/10KHZ [users can choose according to their needs]
SW	2.30-23.00MHZ	0.005MHZ
WX	162.400－162.550MHZ	0.025MHZ

6.4: WX

Seven frequencies of WX:

162.400MHZ, 162.425MHZ, 162.450MHZ, 162.475MHZ, 162.500MHZ, 162.525MHZ, 162.550MHZ

6.4.1: When the radio is powered off, light press "POWER/LOCK", the mode of WX receiving is displayed,the symbol "WX" flashes and the radio automatically searches the alert signal. Light press "POWER /LOCK" again to turn off radio and cancel the alert signal.

6.4.2: When the radio is powered on, light press "BAND/SCAN" to switch to WX weather band. Light press "TUN+" or "TUN-" to choose a weather frequency.

6.4.3: When the radio is powered on, in the mode of WX, light press "TIME/AL" to start the function of alert. The symbol "⚠ On" appears on LCD and the radio automatically enters the mode of "ALERT".

6.5: Listen to the radio

6.5.1: Use the antenna

6.5.1.1: Before listening to FM/SW/WX, please pull out the antenna.
The radio uses a 7-section 360° rotatable antenna. Before listening to
FM/SW/WX, pull out the antenna and change its length and direction
to find the best position of receiving.

*Note: in case of channels in disorder due to strong interference,shorten
the antenna.

6.5.1.2: Listen to AM

The radio uses a built-in magnetic antenna to receive AM. The magnetic
antenna will be affected by direction when receiving signals, so when
listening to AM, you can rotate the radio to find the best position of
receiving.

6.5.2: The radio supports three ways of searching channels:

manual tuning system, automatic tuning system (ATS) and automatic
channel search and storage by scanning (SCAN).

6.5.2.1: Manual tuning system

In working mode of reception, light press "TUN+" or "TUN-", the radio
will increase/decrease progressively based on the minimum step in
current receiving mode.

6.5.2.2: Automatic tuning system (ATS)

In the mode of FM/AM/SW, long press "TUN+" or "TUN-" for two
seconds, the radio will automatically search channels up and down based
on the minimum step of each band, stop when finding a clear channel
and play the channel.

6.5.2.3: Automatic channel search and storage by scanning (SCAN)

In the mode of FM/AM/SW, long press "BAND/SCAN" for two seconds
to enter "SCAN" and automatically search channels from the lowest
frequency to the highest frequency based on the minimum step,

automatically store channels according to the addresses of storing channels from small to large, stop searching after finishing a round of search, and play the first stored frequency.

6.5.3: Take a channel manually

After SCAN is finished according to Article 6.5.2.3, in the mode of FM/AM/SW, long press "VOL-" for two seconds to enter the mode of taking a channel. The address of taking a channel [M*] is displayed on the top right of LCD, now light press "VOL+" or "VOL-" to take a channel up or down.

6.5.4: Switch between AM step 9KHZ and 10KHZ

6.5.4.1: Light press "POWER", the radio is turned on and the symbol "WX" is displayed. Long press "BAND" for two seconds, "9KHZ" or "10KHZ" is displayed on LCD. Long press "BAND" to switch between two steps.

6.5.4.2: In working mode of reception, light press "TIME/AL" to enter WX weather alert search. Long press "BAND" for two seconds, "9KHZ" or "10KHZ" is displayed on LCD. Long press "BAND" to switch between two steps.

Choose a step according to two methods above. The AM step displayed finally will be automatically confirmed two seconds later.

Note: AM step must be set as 10KHZ in America, Canada, Mexico and other countries in North America and South America and 9KHZ in other countries.

6.6: Adjust the volume

When the radio is powered on, light press "VOL-" or "VOL+" to adjust the volume up/down; or when volume level is displayed, long press "VOL+" or "VOL-" to adjust the volume up/down quickly. Volume level to be adjusted: 00-16.

7: SOS alarm

7.1: Sound the alarm: light press " 🆘 " to sound a loud alarm. The red LED light will flash with the rhythm of alarm sound.

7.2: Cancel the alarm: in case of a loud alarm, light press " 🆘 " to cancel the alarm.

8: Use the lights

The radio is equipped with the following lights: LCD backlight, reading light and flashlight. The lights can be used as follows:

8.1: Backlight: it can be turned on/off as follows:

When the radio is powered on, long press "VOL+/BL" for two seconds to show "OFF" or "ON".

"OFF" means LCD backlight is turned off.

"ON" means LCD backlight is turned on. In the mode of backlight, the backlight will be off after about 15 seconds without any operation. When the backlight is turned off, light press any button to restart the backlight.

Long press "VOL+/BL" to switch between two modes.

8.2: Reading light " 🔆 ": there are three levels of lighting. When the radio is unlocked, light press " 🔆 " for the first time to turn on the reading light; light press " 🔆 " for the second time to lower the level of lighting; light press " 🔆 " for the third time to turn off the reading light.

8.3: Flashlight " � ": there are three levels of lighting. When the radio is unlocked, light press " ☺ " for the first time to turn on the flashlight; light press " ☺ " for the second time to lower the level of lighting; light press " ☺ " for the third time to turn off the flashlight.

9: Charge the radio

The radio supports charging with hand generator, DC5V external power and solar energy,

9.1: Hand generator: open the handle and rotate it clockwise or anticlockwise to charge the lithium battery. LED red power light is on and the symbol " ▐▐ " flashes, which means it's

charging. After charging is finished, the symbol " ▥ " stops flashing and battery status is full.

9.2: DC5V external power: insert DC5V into TYPE-C USB charging jack. LED red power light is on and the symbol " ▯▯ " flashes, which means it's charging. After charging is finished, the symbol " ▥ " stops flashing and battery status is full.

9.3: Solar energy: put the radio in the sun and let the solar panel face the sun to charge. LED red power light is on and the symbol " ▯▯ " flashes, which means it's charging. After charging is finished, the symbol " ▥ " stops flashing and battery status is full.

10: USB CHARGING (power-out) external mobile power

By charging with solar energy, hand generator and external power DC5V, the electricity stored in the radio can charge your mobile phone, MP3, IPDA, etc. Before charging, please pull the rubber on the right of the radio, insert one end of USB cable into standard USB interface and insert another end into the external device to be charged.

In case of battery overload or short circuit, the battery will stop charging automatically. When the voltage of the radio is lower than 2.5V, the power will be turned off automatically.

Note:

1): The requirement for using the radio as a power bank: the voltage of the radio $\geqslant$ 3.5V

2): The requirement for using the radio as a power bank: the voltage of the radio $\geqslant$ the voltage of device to be charged

3): External input charging and internal output charging cannot be used at the same time.

11: TYPE-C USB(power-in) charging

Charge: DC5V/1A-DC3A charging device is recommended for use to avoid damage to lithium battery or radio.

If the radio is not in use for a long time, please charge the lithium battery every month.

Insert the USB cable, "POWER" red light is on and the symbol " ▮▮ " flashes, which means it's charging. After charging is finished, the symbol " ▮▮▮▮ " is full and stops flashing, which means the battery is fully charged. Charging time: about 10 hours.

12: Alternate use of lithium battery and dry battery

12.1: Three 1.5AAA batteries are used for emergency.

12.2: When the radio is powered by lithium battery, "Li-ion" is displayed on LCD.

When the electricity of lithium battery is lower than 3.5V, "AAA" is displayed on LCD, which means the radio is powered by 1.5V (AAA) dry battery. To ensure normal use, please charge the radio on a timely basis.

13: Adjust the time

When the radio is powered on, long press "TIME/AL" for two seconds, "**" flashes on screen. Light press or long press "TUN+" or "TUN-" to adjust current "hour". Light press "TIME/AL", "**" flashes on screen. Light press or long press "TUN+" or "TUN-" to adjust current "minute". After adjusting the time, light press "TIME/AL" to confirm, or the adjusted time will be automatically confirmed with no operation in five seconds.

Note: the radio uses 12-hour system.

14: Technical parameters

Frequency range	FM:87.5-108MHZ, AM:522-1710KHZ（9KHZ） 　　520-1710KHZ（10KHZ） SW:2.30-23.00MHZ WX:162.400-162.550MHZ
Sensitivity	FM 8dB AM 86dB SW 30dB
Signal to noise ratio	FM 38 dB AM 30 dB SW 35 dB
Max current	680mA
Quiescent current	160uA
Output current for external charging	800mA
Working voltage	3.5V-4.2V
Max power consumption	1.3W
Product size	164.2x62.5x94MM
Net weight	507g

Precautions:

Please abide by the following basic safety instructions to ensure safe and reliable use of the product.

♦ Read and understand all safety instructions and information for use.

♦ LCD: "AAA" means lithium battery is low, so please charge the radio on a timely basis to ensure normal use.

♦ If the red power light flashes or the frame of the symbol "" flashes, it means the battery is low, so please charge the radio on a timely basis to ensure normal use.

♦ In case of battery low because the radio is not in use for a long time, please charge the radio with hand generator for 5-10 minutes to activate the lithium battery before next use.

♦ DC5V/1A-DC3A charging device is recommended for use to avoid damage to lithium battery or radio.

♦ If the radio is not in use for a long time, please charge the radio every month.

♦ Keep the radio away from rain or damp. No liquid is permitted to be dropped on or splashed on the radio.

♦ Keep the radio away from high temperature heat source. Do not heat or dry the radio at high temperature.

♦ The radio cannot be put in direct sunlight for a long time.

♦ Drop, violent collision and heavy load on the radio are not permitted.

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