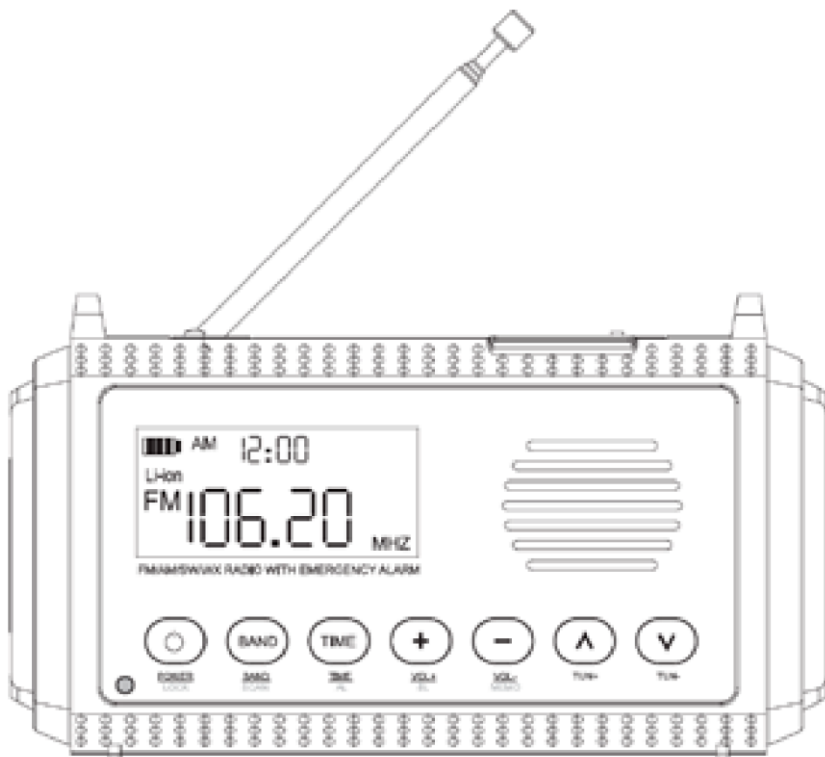


HanRongDa HRD-905 emergency - emergency radio

User manual



1. Introduction to HanRongDa HRD-905 emergency radio

Thank you for your purchase of our versatile emergency radio, which offers wide coverage of radio bands thanks to advanced software technology.

This software allows for digital tuning of a variety of radio bands, including FM, AM, shortwave (SW), and specifically the weather band (WX), which is essential for accessing weather-related broadcasts and alerts, primarily used in the United States.

With a high-capacity lithium-ion battery, the radio is designed to offer different charging methods – solar, manual hand generator, or DC 5V external power – so you always have access to reliable information and light when you need it most.

The radio also supports emergency power supply with 3 x 1.5V AAA batteries. The radio is equipped with a reading light, a flashlight, SOS alarm and emergency equipment that can be used as a power bank. It is a product for use both at home and outdoors.

2. Functions of the radio

2.1: SOS Alarm: A single touch activates the SOS alarm, vital in emergency situations.

2.2: Lighting Functions: Flashlight and reading light, this one with two brightness levels, facilitates dark use.

2.3: Battery capacity and charging: 10,000 mAh battery for long performance, charged via solar panel, generator, or DC 5V.

2.4: Emergency Power Supply: 3 x 1.5V AAA batteries ensure additional power supply.

2.5: Signal Reception: Receives FM, AM, SW, and WX clearly via a 360 degree antenna.

2.6: Channel Search and Storage: Use ATS or SCAN for easy channel management.

2.7: Time Display: 12-hour clock for time control.

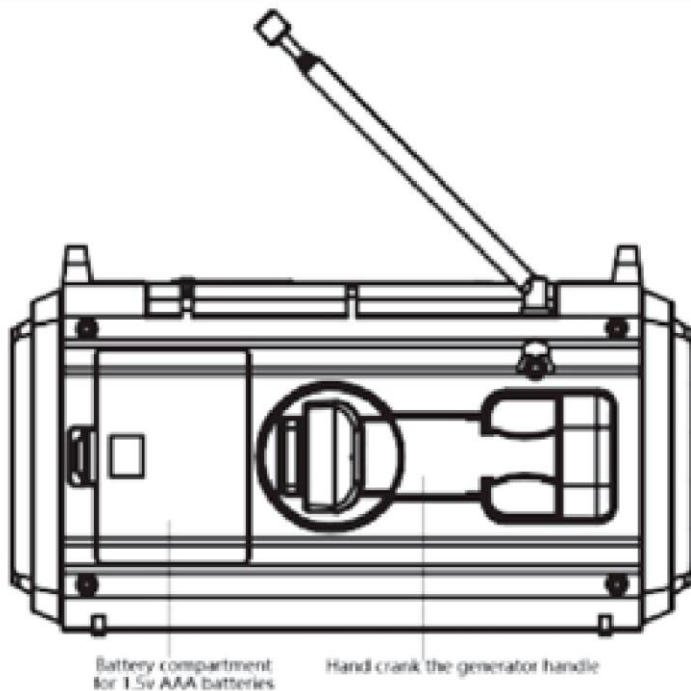
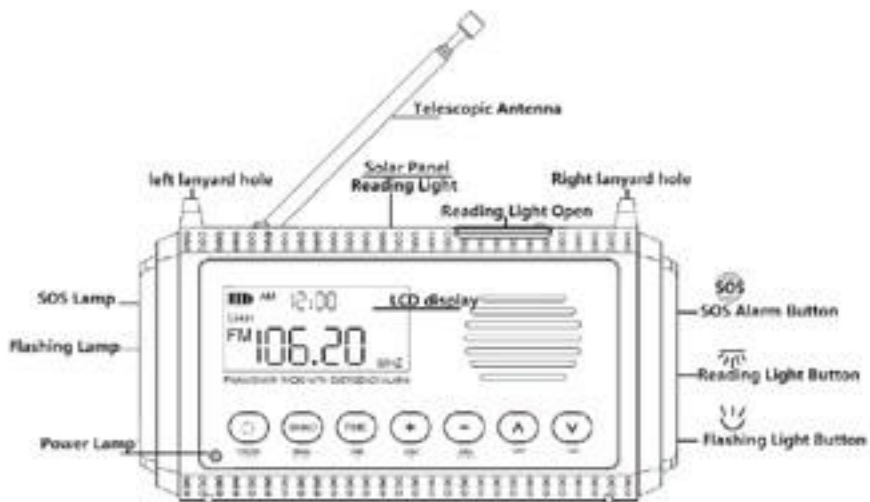
2.8: Sound quality: 40mm speaker delivers clear sound.

2.9: LCD Display: Information on frequency, battery, and more, clear in the dark with backlight.

2.10: Earphone Output: 3.5mm output for private listening.

This advanced emergency radio is designed to be a reliable companion, both at home and outdoors, with its wide range of life-saving features and ease of use. Remember to read the instruction manual carefully to maximize your use of all these features.

3. Overview of the radio's buttons



4: Functions of the buttons

POWER/LOCK

POWER: To turn on, hold down "POWER". To turn off, lightly press "POWER". The default setting at startup is WX mode, where the "WX" symbol flashes as a sign of active alarm. (Refer to section 6.1).

LOCK: When powered on, lock the radio by holding down "LOCK" and do the same to unlock. (See section 6.2).

BANDSCAN

Change the band by lightly pressing "BAND" when the radio is on. (See section 6.3).

In AM/FM/SW mode, start SCAN by holding down "BAND" for two seconds. (See section 6.5.2.3).

Switch between 9 kHz and 10 kHz AM steps by holding down "BAND" for two seconds after powering on. (See section 6.5.4).

TIME/AL

Start alarm with a long press, shows "Alarm" symbol. Cancel alarm with a light touch.

Set the time by long press and adjust with "TUN+" or "TUN-". (See section 13.)

VOL+/BL

Turn LCD backlight on/off. (See section 8.1).

Adjust volume up with a light tap.

VOL/MEMO

Adjust volume down with a light touch.

In AM/FM/SW mode, save a channel automatically with long press. Select the channel to save with "VOL+" or "VOL-" when the address is displayed. (See section 6.5.3).

TUN+

When the radio is on, adjust the frequency upwards by lightly pressing "TUN+". This increases the frequency gradually in the smallest possible increments for each band. To automatically search for channels upwards, hold down "TUN+" for

two seconds, which initiates a search for stations using the minimum frequency steps available for each band.

TUNA-

Lightly press "TUN-" when the radio is on, and the frequency will decrease in small increments. Hold down the button for two seconds to automatically search for downward channels.



(Alarm)

Activate the alarm by a light press in the on state; Press again to disable. (See section 7.)



(Reading lamp)

To turn on the reading light, press lightly once; To mute, press again; Turn off on the third press. (See section 8.3).



(Flashlight)

Turn on the flashlight with a light touch; mute with a different pressure; Turn off with a third press. (See section 8.3).

Power lamp

Switched off when the radio is off.

Green during use, indicates switched on radio.

Red while charging, shows charging status.

TYPE-C USB FLASH DRIVE

5V DC input for charging.

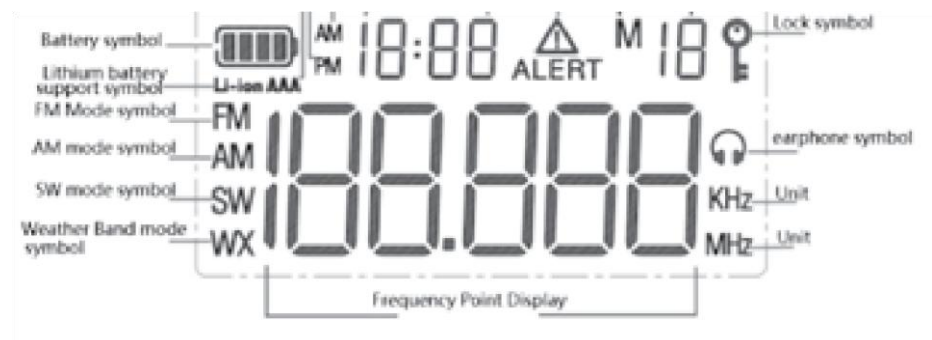
USB CHARGING

DC 5V Output: Allows for charging external devices, making the radio a convenient power bank.



3.5mm headphone jack: Connect headphones for private listening without disturbing the surroundings.

5: Symbols on the LCD screen



6. Operating the radio

6.1. Turning the Radio On/Off

To activate the radio, which is provided with a built-in lithium battery, press and hold the "POWER/LOCK" button. When turned on, it will automatically set itself to WX mode, indicated by a flashing "WX" symbol, and begin searching for alarm signals. To turn off, short press the "POWER/LOCK" button.

Important: Make sure to fully charge the battery before first use.

To avoid unwanted operation during use, the radio's lock function can be used by holding down the "POWER/LOCK" button for two seconds when the radio is on.

6.3. Select a Receive Mode

To switch the receiving mode, short press "BAND/SCAN" with the radio on. You can choose between FM, AM, SW, and WB.

6.4. WX (Weather frequencies, used in the United States.)

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

Seven WX frequencies are available: 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, and 162.550 MHz.

6.4.1. Receiving WX When the Radio Is Off

To activate WX reception with the radio off, lightly press "POWER/ LOCK". The "WX" symbol flashes and the radio automatically searches for weather-related alarm signals. Turn off the radio and disconnect the alarm signal by a short press of "POWER/LOCK".

6.4.2. Select WX Weather Frequency

With the radio on, switch the WX frequency by lightly pressing "BAND/SCAN". This allows you to review and select from the seven available WX frequencies for updates on weather conditions.

With the radio on, switch the WX frequency by lightly pressing "BAND/SCAN". This allows you to review and select from the seven available WX frequencies for updates on weather conditions.

6.4.3. When the radio is on, in WX mode, lightly press "TIME/AL" to start the alarm function. The "ALERT ON" symbol will appear on the LCD and the radio will automatically enter "ALERT" mode.

6.5. Listening

6.5.1. Using the Antenna

6.5.1.1. FM/SW/WX Reception: To listen to FM, SW, or WX, unfold the antenna first. The radio has a 7-section, 360-degree rotatable antenna. Adjust its length

and position for optimal reception. Note: In case of channel interference due to heavy interference, shortening the antenna may be beneficial.

6.5.1.2. AM Reception: For AM, a built-in magnetic antenna is used, sensitive for orientation when receiving. Optimal position is found by rotating the radio.

6.5.2. Channel search methods

6.5.2.1. Manual tuning: Adjust frequency up or down with "TUN+" or "TUN-" in small steps.

6.5.2.2. Automatic Tuning System (ATS): By holding down "TUN+" or "TUN-" for two seconds in FM/AM/SW, an automatic channel search starts up or down and plays the first clear channel it finds.

6.5.2.3. Automatic Channel Search and Save by Scan (SCAN) In FM/AM/SW modes, press and hold "BAND/SCAN" for two seconds to enter "SCAN" and automatically search channels from the lowest frequency to the highest frequency based on the smallest step.

6.5.3. Manual Channel Selection

After automatic scanning, you can manually save a channel in FM/AM/SW mode. Hold down "VOL-" for two seconds to activate save mode, indicated by [M*] on the screen. Select and save channel with "VOL+" or "VOL-".

6.5.4. Switching between AM stages of 9 kHz and 10 kHz

6.5.4.1. To switch between 9 kHz and 10 kHz, hold down "BAND" for two seconds at power-up. Switch between "9KHZ" and "10KHZ" by pressing "BAND".

6.5.4.2. In reception mode, activate WX weather alert by pressing "TIME/AL" and switching AM steps with "BAND". The selected step is confirmed after two seconds.

Note: The AM stage is set to 10KHZ in America and to 9KHZ in other countries.

6.6. Adjusting the volume

Adjust the volume with "VOL-" or "VOL+". For quick adjustment, hold down the button. The volume is adjusted from 00 to 16.

7. SOS Alarm

7.1. Activating the Alarm: Trigger the alarm with "SOS". The alarm sound starts loudly and a red LED flashes.

7.2. Cancelling the Alarm: Stop the alarm by pressing "SOS" again.

8. Use of light

Turn on the radio by holding down the [POWER] button to access the lighting functions: LCD backlight, reading light, and flashlight.

8.1. LCD Backlight

Enable or disable the LCD backlight by holding down "VOL/ BL" for two seconds while the radio is on. "OFF" indicates the off state, and "ON" on. The backlight will automatically turn off after 15 seconds of non-use. Reactivate with a light press of any button.

8.2. Reading lamp

The reading light, with three light levels, is activated by light pressure: once for full light, again to dim, and a third time to turn off.

8.3. Flashlight

The flashlight, also with three light levels, is turned on by a light touch: once for bright light, again for less brightness, and a third time to turn off.

9: Charging the Radio

The radio can be charged via hand generator, DC5V external power or solar power.

9.1. Hand generator

Charge with the hand generator by opening the handle and turning it in any direction.

When the radio is charging, the red LED will light up to indicate charging in progress. After a full charge, the charging symbol will stop flashing, signaling a fully charged battery.

9.2. DC5V External Power

Connect a DC5V power source to the TYPE-C USB charging connector to charge. The red LED will light up and *the charging symbol* will flash while charging. When the battery is fully charged, *the symbol* will stop flashing.

9.3. Solar energy.

For solar charging, position the radio so that its solar panel is directly in sunlight. The red LED and flashing charging symbol indicate that charging is in progress. Charging will end when *the symbol* stops flashing and the battery is fully charged.

10: USB Charging (Power Output)

As an external mobile power supply

The radio can store electricity from solar power, hand generator, or DC5V to charge devices. Connect the USB cable to the USB interface of the radio and the device to be charged. Charging stops automatically in the event of an overload or short circuit, and is interrupted if the voltage drops below 2.5V.

Note:

The radio works as a power bank at voltage $\geq 3.5V$.

The voltage must match the voltage of the device.

External input charging and internal output charging cannot be done simultaneously.

11. TYPE-C USB (Power Input) Charging

Use a charger on DC5V/1A-DC3A to avoid damage. Charge the lithium battery monthly during prolonged inactivity. While charging, the red "POWER" light will illuminate and the charging symbol will flash. When charging is complete, the symbol will become solid, indicating a fully charged battery. The charging time is about 10 hours.

12. Using Lithium Battery and Dry Batteries12.1.

Use three 1.5V AAA batteries as an emergency solution.

12.2. "Li-ion" is displayed when the radio is using lithium battery. If the voltage drops below 3.5V, the display will change to "AAA", indicating switching to AAA batteries. Charge for continuous function.

13. Setting the time

To set the time, hold down "TIME/AL" until the time indicator flashes. Adjust timer with "TUN+" or "TUN-", and minutes by pressing "TIME/AL" again first. Confirm the time with a light press of "TIME/AL" or wait five seconds for automatic confirmation. The radio uses the 12-hour format.

Observations

Ensure proper charging and battery maintenance for optimal performance. Remember to adjust the time correctly for accurate timekeeping.

Technical data

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 for Safe and Reliable Use

Read and understand the safety instructions: Read and understand all safety instructions and the instruction manual before using the product.

LCD and battery indication: If "AAA" is displayed on the LCD, it means that the lithium battery's voltage is low and should be charged. Flashing red power light or battery symbol also indicates low battery.

Lithium Battery Activation: For extended periods of inactivity and low battery, use the hand generator for a short charge of 5-10 minutes to activate the battery.

Recommended Charging Device: Use only one charging device on DC5V/1A-DC3A to avoid damage to battery or radio.

Monthly charging when idle: Charge the radio at least once a month if it is not used for a long time.

Protection from Liquid and Moisture: Avoid exposure to rain or moisture and do not expose the device to liquids.

Avoid high temperature: Keep the radio away from heat sources and avoid heating or drying at high temperature.

Direct sunlight protection: Do not leave the radio exposed to direct sunlight for extended periods of time.

Avoid physical injury: Protect against falls, heavy impacts, and heavy loads to prevent injuries.