

MEGATEK

Multifunctional Hand Crank **Weather Radio**



WR-21 User's Manual

Please read this manual carefully before operation and keep it well for future use.

Questions or Concerns?

✉ service@megatekelec.com

🌐 www.megatekelec.com

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

1 Important safety instructions

- Use the speaker in normal temperatures.
- Do not use the radio near the water.
- Do not throw the radio.
- Clean only with dry cloth.
- Do not cover or insert anything into the holes in the radio.
- Do not put the radio close to any heat source.
- Apparatus shall not be exposed to dripping or splashing.
- Contact your retailer if the charging cable does not connect to your radio.
- Do not disassemble, repair, or modify the radio.
- Do not charge the radio using more than 5V.
- High volumes may damage your hearing. Use the radio at a lower volume.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.
- Ensure that the battery compartment is completely secure after you replace the batteries.

2 Get to know your radio

Thank you for your confidence in Megatek. Your WR-21 radio is designed for reliable and trouble-free performance. We will do everything in our power to keep you happy with your purchase for many years to come.

2.1 Introduction

The WR-21 is one of the best-built, best-backed, and most trusted multifunctional weather radio available today – features AM/FM radio, and 7-channel NOAA weather broadcasts. When a severe weather watch or warning is issued, the WR-21 automatically alerts you, giving you the ability to take proper action or seek shelter. This versatile weather radio also comes with lots of other useful features and functions.

2.2. Features

FM/AM radio

7-channel weather broadcast (WB)

5000 mAh internal rechargeable battery

3-mode flashlights

SOS siren alarm with LED flashing light pattern

Solar power and hand-crank power

LED reading lamp

Earphone jack for private listening

Charging out to your external mobile devices

Upgraded Type-C USB charging port

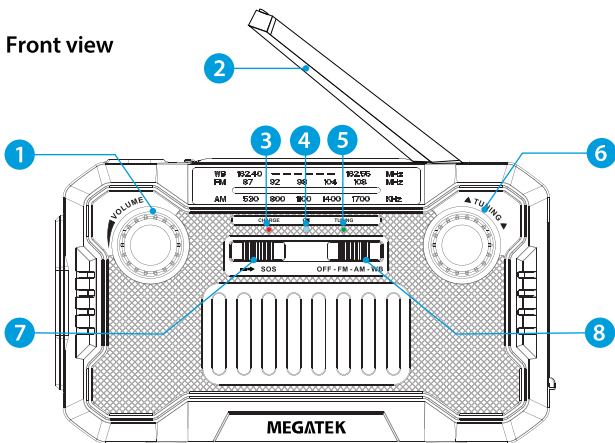
2.3. What's in the box

Check and identify the contents of your package:

- WR-21 radio
- USB charging cable
- User manual

2.3 Overview of the radio

Front view



1 VOLUME dial

- Turn clockwise to increase volume or counterclockwise to decrease volume.

2 LED reading lights

3 CHARGE indicator

-  Flashing red quickly: The radio is charging.
-  Solid red: Charging complete.

4 Battery indicator

5 TUNING indicator

-  Light off: No reception.
-  Flashing green: Poor reception.
-  Solid green: Radio station is received

6 TUNING dial

- Turn clockwise to tune to higher radio frequency or counterclockwise to lower frequency.

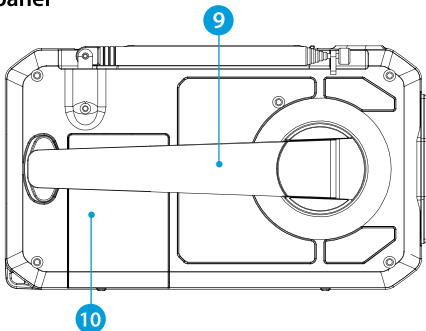
7 SOS alarm switch

- Slide in the direction of the marked arrow to activate SOS alarm.

8 OFF-FM-AM-WB switch

- Slide to turn on/off the radio and select radio band.

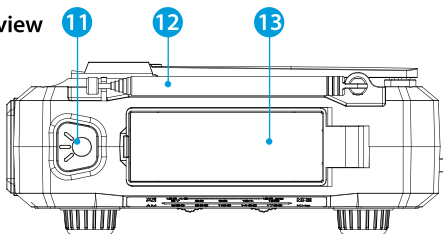
Rear panel



9 Crank handle

10 Battery compartment

Top view

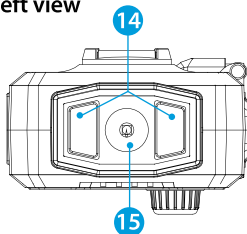


11 Flashlight button

12 Telescopic antenna (for FM/WB radio only)

13 Solar panel

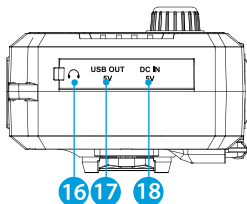
Left view



14 Flood lights

15 Spot light

Right view



16 Headphone/Earphone jack

17 USB OUT 5V

- Charges external mobile devices.

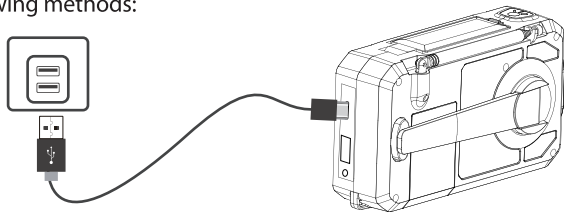
18 DC IN 5V

- Charges the internal battery.

3 Power you radio

3.1 Charging the internal battery

When the battery power is low, the radio may not work properly. You should recharge your radio straight away, using one of the following methods:



USB DC 5V Charging

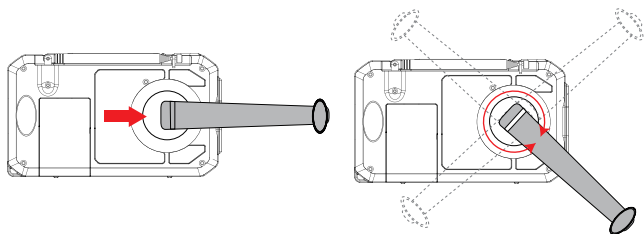
1. Connect the Type-C USB end of the charging cable (supplied) to DC IN 5V socket under the rubber cover on the right side of the radio. Plug the standard USB end of the charging cable into a computer or other USB charging device.
2. The “CHARGE” LED will turn flashing red, indicating that the battery is charging. When the battery is fully charged the LED will turn solid red.
3. Note: It will take approximately 5-6 hours to fully charge your radio, before first use.
4. When fully charged, unplug the USB charging cable. The  battery indicator will light solid blue for 20-30 seconds.

Note:

- Please have the radio charged at least once every three months.

Hand-crank power charging

The radio can also be charged by turning the crank handle on the back of the device.



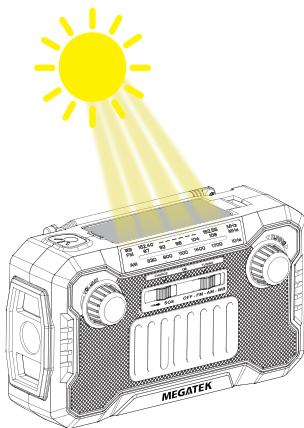
1. Pull out the crank handle and flip it 180 degrees.
2. Turn the handle either clockwise or counterclockwise, and it will activate the internal dynamo and charge the built-in battery. The CHARGE LED indicator will turn red when charging.

Note:

- 1 minute cranking at the speed of 130 rpm can support spot light for 30 minutes or radio playback for 6 minutes.
- Hand-crank power is for emergency use only for it may take approximately 17 hours to fully charge the radio.

Solar power charging

The radio can also be charged by the solar power.



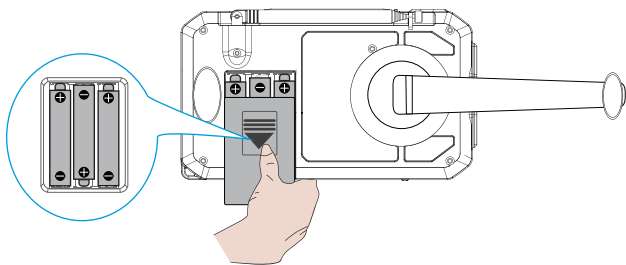
1. Expose the solar panel on the top in direct sunlight.
2. The solar power will charge the internal battery when the receiving light intensity reaches its starting point. The CHARGE indicator will turn red when charging.

Note:

- The solar power charging is for maintaining or extending the internal battery life only.
- Do not use the solar power for regular charging.

3.2 Installing 3 x “AAA” batteries

You can install 3 x “AAA” batteries for emergency power back-up.



1. Press on the battery compartment cover and slide it in the direction of the marked arrow.
2. Insert three “AAA” batteries into the battery compartment. Make sure that you match the + and - symbols on the batteries with the + and - symbols in the battery compartment.
3. Slide battery compartment cover back till you hear a “click” sound.

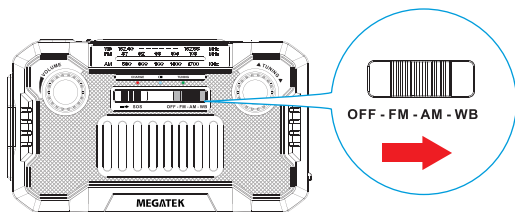
Note:

- Between the inserted “AAA” batteries and the internal battery, the radio will automatically detect and use either one having the higher power supply voltage.
- If your radio is not to be used for a long period of time, remove the “AAA” batteries to prevent damage or injury from possible battery leakage.
- The radio does not support charging “AAA” batteries.

4 Using your radio

4.1 Turning on/off

Slide the OFF-FM-AM-WB switch from the OFF position to the FM, AM or WM position, to turn on the radio and select radio band.



Slide the OFF-FM-AM-WB switch to the OFF position, to turn it off.

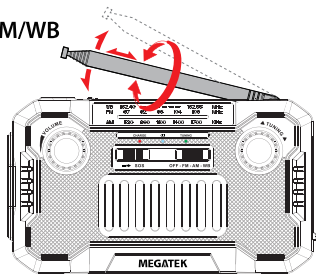
Tips:

- For the first use or when the unit not having been used for 60 days, please hand crank for 1 minute to activate the internal battery.
- The radio will automatically power off when the power supply voltage is lower than 2.7V, to protect the batteries from being over-discharged and damaged. In this case, please recharge the internal batteries or install new AAA batteries before using it.

4.2 Listening to the FM/AM/WB radio

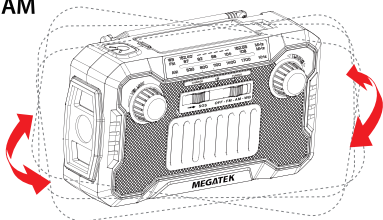
1. Slide the OFF-FM-AM-WB switch to the FM, AM or WB position.
2. Turn the VOLUME dial to adjust to your desired volume level.
3. Adjust the antenna for optimum reception.

FM/WB



Extend the telescopic antenna **12** and adjust its length and angle for optimum reception.

AM



Reorient the unit itself for optimum reception (a ferrite bar antenna is built into the unit).

4. Turn TUNING dial to tune to a station. When an FM/AM/WB station is received, the TUNING indicator turns solid green.

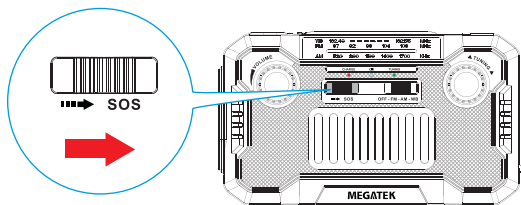
Tips:

- The unit of frequency of tuned stations is MHz for the FM/WB band and kHz for the AM band.
- Location, conditions of weather and terrain effect the reception. To improve radio reception, use the radio in a place where radio signals can be easily received such as near a window. Also, adjust the antenna (FM/WB) or reorient the unit itself (AM) for good reception. If the reception problem persists, try changing the installation location.
- Typical broadcasts are within reception distance of 25-40 miles of the weather broadcast station.
- Find the weather broadcast channel for your area by visiting <http://www.nws.noaa.gov/nwr/nwrbro.htm> and reviewing the corresponding frequency and channel for your area using the chart below.

Channels on the Weather Radio	Broadcast Frequency (MHz)
1	162.400
2	162.425
3	162.450
4	162.475
5	162.500
6	162.525
7	162.550

If a weather broadcast is not heard on any of the 7 channels, contact your local weather office and verify that the closest station is on air and the channel frequencies you are using are correct.

4.3 SOS alarm

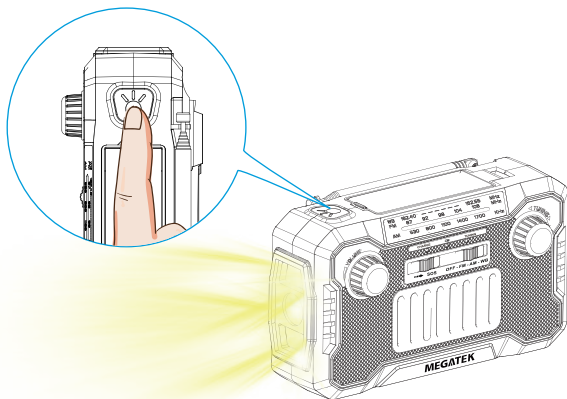


- Slide the SOS switch in the direction of the marked arrow to activate a loud and prolonged siren alarm sound with SOS flashing light pattern at the same time.
- Slide the SOS switch back to its original position to turn off the SOS alarm.

Note:

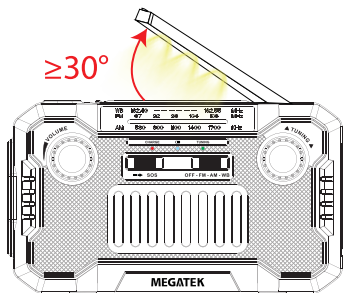
- When SOS alarm is activated, all the other functions will be deactivated automatically.
- SOS alarm can be activated in any condition when it has power supply, even if the OFF-FM-AM-WB switch is set to the OFF position.

4.4 Flashlight



1. Press the  button on the top of the radio for the first time, and the spot light will turn on.
2. Press it for the second time, and the the flood lights will turn on.
3. Press it for the third time, and both the spot light and the flood lights will turn on.
4. Press it for the fourth time, and all the flashlights will turn off.

4.5 Reading lamp



- Lift the LED reading lamp on the top of the radio by more than 30 degrees, and the reading lamp will light up automatically.
- Adjust the panel to your comfortable angle.
- Close the reading lamp, and the reading light will turn off automatically.

4.6 Listening through headphones

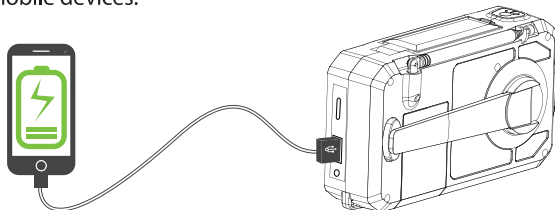
Connect headphones (ø3.5 mm, 1/8-inch phone plug) to the  jack under the rubber cover on the right side of the radio for private listening.

Note:

- Always turn down the volume before connecting your headphones.
- While the headphones are connected to the  jack, the radio speaker will be turned off automatically.

4.7 Charging External Mobile Devices

The weather radio can work as a power bank to charge external mobile devices.



1. If your external mobile device supports Type-C USB charging input, the supplied charging cable can be used for charging it. If not, change to another compatible charging cable.
2. Plug the standard USB end of the charging cable to USB OUT 5V socket under the rubber cover on the right side of the radio. Plug the other end of the charging cable to your external device.
3. Check the  indicator for the charging out status:

 Indicator	Charging Status
Lights solid blue	Device is charging
Blinks blue	Device is charging with the radio's internal battery low.
Turns off	Charging complete, or charging is discontinued when the radio's internal battery is too low.

4. Unplug the USB charging cable, when the charging is completed.

Note:

- The supplied USB charging cable is not compatible for all external devices, depending on their connector types.
- The charging out feature is suggested to use in emergency, do not use it as a regular power bank.
- The charging will be discontinued automatically when the radio detects that its internal battery is too low. This is to protect the internal battery from be over-discharged and damaged.

Tips:

- The charging out function is available even if the OFF-FM-AM-WB switch is set to the OFF position.

5 Specifications

Dimensions	158 x 64 x 92 mm
Weight	0.38 kg
Power supply	DC 5V, 1A
Charging input port	Type-C USB
Charging time	5-6 hours
Working voltage	2.7 ~ 4.2 V
Power consumption	10 W (max.)
Operating temperature	0-45°C
Internal battery	5000 mAh/3.7V Li-ion
Back-up battery	3 x AAA (not supplied)
Charging out	DC 5V, 1A
Radio frequency	FM 87~108MHz AM 530~1700KHz WB 162.400~162.550MHz
Waterproof level	IPX3
LED flashlight	135 LM (max.)
Internal battery time	Spot light or flood lights: ≥ 20 h Spot light and flood lights: ≥ 13 h Reading lamp: >20 h Radio (at middle vol.): up to 50 h

6 Troubleshooting

The power does not turn on.

- Fully charge the internal battery.
- Replace all the AAA batteries with new ones.
- Check if the AAA batteries are inserted correctly, matching the polarities.

There is no sound.

- Check if the volume is set to the minimum level and turn the VOLUME dial clockwise to increase the volume.
- Unplug the headphones when listening through speakers.
- Make sure the appropriate radio band is selected.

The sound is weak, or reception is poor.

- Fully charge the internal battery.
- Replace all the AAA batteries with new ones.
- For FM/WB reception, extend the antenna to its full length, and reorient it for best reception. For AM reception, reorient the unit itself to find the best reception.
- If you are in a building, listen near a window.
- If a mobile phone is placed close to the radio, a loud noise may be heard from the unit. Keep the phone away from the radio.

A small humming noise is heard from the radio.

- This is not a malfunction. You may hear a small humming noise from the radio depending on the status of the power supply.

indicator flashes when charging external device.

- Stop charging external device, and **fully** charge the internal battery or insert new AAA batteries before charging out again. This indicates that the battery power drops to a certain level when charging external device.

Charging out does not work

- Make sure the connector of the charging cable is inserted into USB OUT 5V port securely.
- Check if the  indicator is off. In case the internal battery power is too low, the radio won't start charging out and the indicator won't light up. **Fully** charge the internal battery or insert new AAA batteries before charging out.

18 Months Warranty

Thank you for choosing Megatek.

Megatek Electronics warrants your new product to be free from defects in materials and workmanship for a period of **eighteen (18) months**, from the date of receiving. This warranty is in addition to your rights under Amazon's return and refund policies which apply to your purchase.

Megatek will provide you with a brand-new replacement (where possible) for this product if it becomes defective within the warranty period. Megatek will bear the reasonable expense of claiming the warranty. This warranty will no longer apply where the defect is a result of alteration, accident, misuse, abuse, or neglect.

Please contact our Customer Service with your order ID and description of the problem, for warranty claim or any difficulties with your product:

Email: service@megatekelec.com

Amazon Buyer-Seller Messages: Go to **Your Orders** then find your order in the list, click **Megatek Electronics** link below the product title, click the **Ask a Question** button.

We will always be there to support.