

KA009 Operating Manual

4-Way Powered AM/FM/TV2/TV13/AIR/VHF(Weather)/SW1-SW4 Portable Radio with SUPER BRIGHT LED Flashlight

Thank you for purchasing the KA009 super portable receiver. Please read the manual thoroughly before operating and keep this book in a safe place for future reference. With proper care, you will receive many years of trouble-free service from your new radio.

Description:

The KA009 portable radio is perfect for emergency situations and is also ideal for anyone who does not have access to a reliable AC power source. The radio can be powered by solar energy, batteries, AC adapter and hand-crank generator (magneto). With coverage of the AM/FM/TV/AIR/VHF (Weather) broadcast bands, plus 4 shortwave bands, you'll never run out of things to listen to!

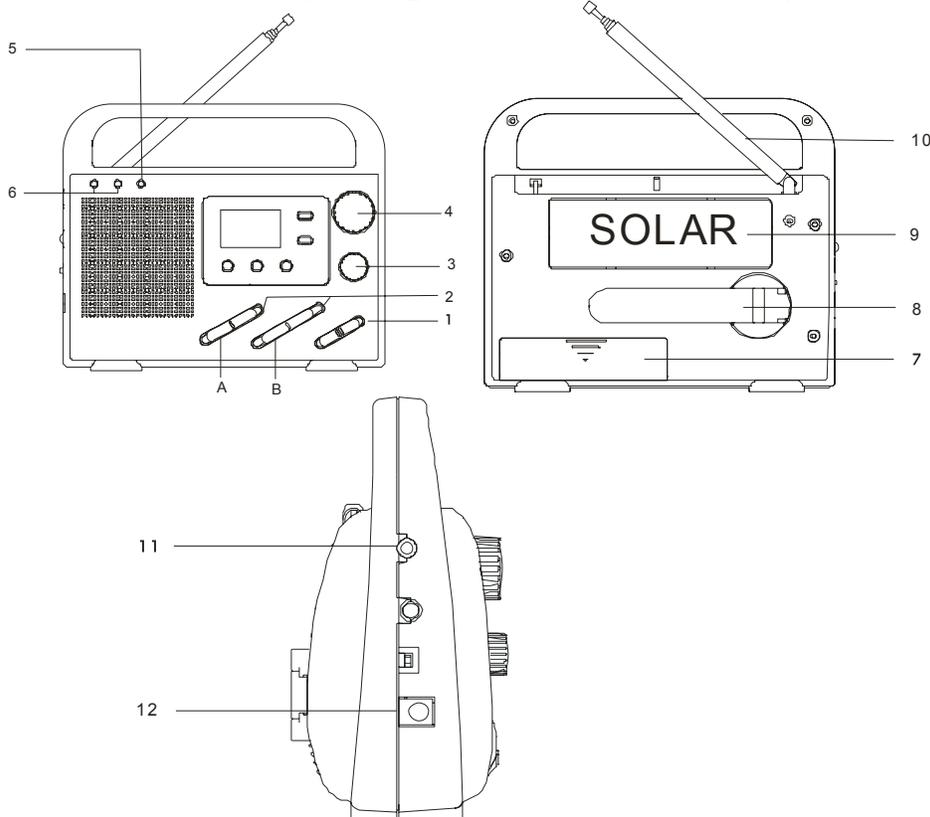
Features:

1. **Ten Bands:** Receives AM/FM/TV1/TV2/AIR/Weather broadcast bands and four shortwave bands (SW1-SW4).
2. **Built-in power generator:** Under emergency conditions where AC power, batteries and sunlight sources are unavailable, you can crank-up the radio to charge the internal batteries.
3. **Solar power:** The built-in solar panel is powerful enough to run the radio in direct sunlight.* It charges the batteries even in weak light conditions.
4. **Rechargeable pack:** It provides reliable, renewable internal power for everyday use. The high quality Ni-MH rechargeable batteries are installed inside the radio that can be replaced by a professional technician only.
5. **2 1/2" diameter speaker:** The high quality speaker provides clear dynamic audio.
6. **AC/DC power adapter:** You can use this adapter to charge the built-in battery or to directly power the radio. (The AC adapter is an option in some areas)
7. **DC jack:** A built-in 4.5V DC jack is provided for external power connection.
8. **Earphone:** A stylish earphone is included for private listening.
9. **Antennas:** The swirl telescopic antenna can be positioned to improve reception of FM/TV/AIR/VHF(Weather) and shortwave stations. A built-in AM ferrite antenna provides good sensitivity for AM reception. Also included with the radio is a portable wire antenna that can be used to further improve shortwave reception by plugging it into the earphone jack.
10. **Super bright LED** Long life super bright LED is convenient flashlight to use in the dark.
11. **Battery compartment:** Operates on 3 x "AA" size batteries. (Batteries not included)

*Important Notice Regarding Solar Operation:

The built-in solar panel can be used to directly power the radio even if the internal batteries are dead! The solar panel must face direct sunlight to get enough energy to operate the radio's speaker. If you cannot position the radio in direct sunlight, try to use the earphones. Earphones require less energy to operate than the speaker does. When switching to solar power always start with the volume control at the minimum position. The higher you turn the volume the more light you will need.

Operation at a Glance (see diagram for location of controls)



1. Power source selector: Down for battery or external power source, up for the built-in rechargeable batteries, the middle is for solar power. (This radio uses three Nickel-Metal Hydride rechargeable batteries, which have no memory effect and can be fully recharged over 1000 times.)
2. Band selector: Switch 2A selects AM/FM/TV1/TV2/AIR/VHF. Switch ②B selects AM bands for MW/SW1/SW2/SW3/SW4. (Switch □2B only works when Switch ②A is in the AM position.)
3. Volume control with main power off switch: To adjust the speaker volume or earphone volume, or power off the radio. The off position will turn off all power sources.
4. Tuner: Rotate the tuner control to select the station you want to listen to.
5. Tuner/Charge light: this LED is a two-color LED. It will light up in RED when you have optimized the tuning, It turns to Green if you crank charge the radio.
6. Battery level: The green (HI) LED indicates the battery level is OK to use.
The red (LO) LED indicates it is time to charge the internal battery.
7. Battery compartment: for 3 "AA" batteries. (Alkaline batteries are recommended.)
8. Dynamo cranking handle: crank to charge the built-in batteries.
9. Solar Panel: Works as a power source when using the radio in the sun. The solar panel charges the batteries whenever the radio is exposed to daylight.
10. Antenna: Telescopic with 360 degrees turning for FM/TV/AIR/VHF/SW reception. (you have to rotate the radio for optimum AM reception)
11. Earphone jack: To hear the radio privately, plug the earphone into the jack. The speaker will automatically shut off. **The earphone jack also works as a jack for the included wire shortwave antenna.**

12. Super bright LED.

13. LED light switch: Set the switch to ON position, the bright LED will light; set the switch to OFF to turn off the LED light.

14. DC 4.5V jack: The external power source is plugged in via this jack for radio operation or to charge the built-in batteries by DC adapter.

Radio Operation (see diagram for location of controls)

Set the power switch ① to the desired power source: AC/DC adapter, external batteries, internal rechargeable "AA" batteries or solar power.

Band selection:

There are two band selector switches which work in conjunction with each other to allow the selection of FM/TV/AIR/VHF/MW/SW1/SW2/SW3/SW4.

To receive :

Medium Wave: (AM Broadcast Band) 2A should be in AM position and 2B should be in MW position

FM: set 2A to FM, 2B can be on any position.

TV1: set 2A to TV1, 2B can be on any position.

TV2: set 2A to TV2, 2B can be on any position.

AIR: set 2A to AIR, 2B can be on any position.

WB(Weather): set 2A to WB, 2B can be on any position.

Shortwave: 2A must be on AM position, 2B to choose from SW1/SW2/SW3/SW4

Tuning a Station:

Station can be tuned in with rotary knob 4. If a station is accurately tuned in, the Tuning LED lights up unless the signal is very weak.

Antennas:

The telescopic antenna (10) is for shortwave and FM/TV/AIR/VHF/SW stations. A wire antenna is included which can be plugged into the earphone jack to improve shortwave reception. The AM band uses an internal ferrite bar antenna. Rotate or reposition the radio for best reception on the AM (MW medium wave) band.

Four-Way Power Source

1. Battery Power: Insert 3 x "AA" batteries in the battery compartment. Make sure you have the correct polarity. Put the power switch to BATT/DC.

2. Solar: The built-in solar panel can be used to directly power the radio even if the batteries are dead! The solar panel must face direct sunlight to get enough energy to operate the radio's speaker. If you cannot position the radio in direct sunlight try using the earphones. Earphones require less energy to operate than the speaker does. When switching to solar power always start with the volume control at the minimum position. The higher you turn the volume the more light you will need. Even when the main power is switched off, the solar panel will still charge the built-in rechargeable batteries as long as the solar panel is exposed to bright light.

3. Dynamo: Put power switch to DYN, the radio will work on the internal built-in battery. You can crank it to charge the battery while the main power is switched off. For improved charge efficiency, we recommended that you switch off the radio while cranking the generator.

4. Adapter: Plug the AC adapter to a power outlet on selector (13). This adapter can be used to power the radio and charge the internal battery.

Charging the built-in Ni-MH rechargeable batteries

1. Dynamo: Switch main power off, then use crank handle (8), at 2 turns per second, cranking for 90 seconds, you will get about 30 minutes playing.
2. Adapter (110V or 220V): The internal battery will begin charging as soon as the adapter is plugged in. The radio will work on the adapter power when turning the main power switch on. The first time you charge the internal battery, it is recommended that you charge the battery for no less than 10 hours, but no more than 13 hours. Knob 1 can be in any position while the battery is charging.
If fully charged for at least 12 hours, it will produce 24 hours or more of continuous playing on all bands.
3. Solar Panel: If the main power switch is powered off, the solar panel will charge the built-in batteries whenever there is enough light.
4. Regular batteries: it is recommended that you use alkaline "AA" batteries for best performance. It depends on battery capacity for listening time, from weeks to months. If you store your radio for an extended period of time, we strongly recommend that you remove the "AA" batteries from the radio.

Specifications

FM : 88 - 108 MHz

TV1: Channel 2 - 6

AIR: 118-137MHz

NOAA Weather: 162.400/162.425/162.475/162.50/162.525/162.55 (continuous band)

TV2: Channel 7 - 13

AM (MW): 530 -1710 K Hz

SW1: 4.00- 9.00 MHz

SW2: 9.00 – 14.00 MHz

SW3: 14.00 – 19.00 M Hz

SW4: 19.00- 26.00 MHz

Output power: 200 MW peak power using built-in speaker.

Headset jack socket: 3.5 mm

External DC supply socket: 6 mm **(positive center)**

Sensitivity

FM: $\leq 20\mu\text{V}$

MW: $\leq 2.5\text{ mV}$

SW: $\leq 30\mu\text{V}$

Rechargeable batteries: 3 NI-MH batteries 600mAh

Size: 165 x 137 x 70 mm

Weight : 460g (battery not included)

Caution: On the VHF and AIR bands, if there is a strong FM station near you, you might receive interference from that strong station, but when you tune in a used frequency in the VHF/AIR band, you will hear the tuned in station.

Care and Maintenance

- 1 Use soft cloth to clean the radio. Do not use aggressive polish or cleaners.
- 2 Do not expose to moisture or temperature above 130°F
- 3 Take "AA" batteries out of the radio when you do not use the radio for a long period of time.

Frequently Asked Questions:

Q: How long will the radio play when you use the Dynamo cranking to charge the batteries?

A: There are several factors to be taken into consideration to answer this question:

1. When using the crank as your source of power, we recommend that you charge the batteries as soon as the low battery indicator illuminates. If you use the dynamo when the batteries are almost completely dead, your play time will be dramatically shorter. **Important:** if the battery is completely exhausted, we recommend that you use the AC adapter to rejuvenate the battery pack.
2. If you crank from a low battery, it will take approximately 2 minutes of cranking to get 10 minutes play time.
3. The longer you crank, the longer time it will play. Turn the crank smoothly and evenly to avoid damaging the crank handle.

Q: What is the best way to power the radio?

A: 1. The adapter will give you the fastest charge and easiest operation. We recommend that you fully charge the internal battery initially before using any of the other charging methods.

2. 3 "AA" alkaline batteries will run this energy efficient radio for a long time. One set of batteries may last several months.

3. Solar power. If there is sunshine, you can use the solar panel to directly power the radio. If you leave your radio in bright light, the internal battery will always be charged and ready for use.

4. Dynamo: The dynamo is ideal for emergency situations when other power sources are not readily available.

Q. How long will the built-in battery pack last?

A: The rechargeable battery will last as long as a couple of years if you use it properly. The powerful NI-MH batteries are good for at least 500 charge cycles. If the battery pack does need to be replaced, it is recommended that you have a professional do this for you. Any damage incurred for improper replacement will void all warranty.

Q: Which shortwave stations can I hear?

A: This powerful shortwave radio can receive shortwave stations in many languages from all over the world. What stations you will be able to receive depends on numerous factors including the time of day or night and your location. Reception will be best if you use the radio outside. If you are in a building with a lot of metal electrical equipment, your reception will not be as good. Bringing the radio close to a window should improve reception somewhat. Generally speaking, reception is better during the evening than it is during the day.

Q: Will the solar panel charge the internal battery even if it is dead?

A: Whenever the internal battery goes completely dead it is always best to charge it with the AC adapter. Please note that the battery is always charging via the solar panel whenever there is bright light present. The radio does not need to be on and the power source switch

① does not need to be in the SOL position for solar charging to take place.

If you have any further questions about this radio, please call toll free number at 1-888 KAITO76 or visit our website www.kaitousa.com

Appendix

Shortwave Frequencies