

Weather Radios for the Prepared Citizen

Background

- Weather Radio reception from the source antenna is great (25-300 miles) and the cost to own a weather radio is low (various options from \$30 to about \$100)
- Weather radios are easy to use and no license is required
- Primary purpose is to listen to weather alerts as well as public safety announcements

NOAA Weather Radios

- A National Oceanic and Atmospheric Administration (NOAA) Weather Radio (NWR) is an automated 24-hour network of 100+ radio stations across the U.S. that broadcast weather information directly from local National Weather Service stations
- A broadcast cycle lasts about 3-8 minutes, feature weather forecasts, and local observations. It can be interrupted when severe weather advisories/warnings/watches are issued.
- It occasionally broadcasts other non-weather related events such as national security statements, natural disaster information, environmental and public safety statements (such as an AMBER Alert) sourced from the Federal Communications Commission's (FCC) Emergency Alert System.

NOAA Weather Radios

- There are many “Weather Only” radios and standard radios that offer NOAA channels and have other features that manufacturers add as they see fit, but not all-weather radios are created equal. Always look for a NOAA Public Alert certified radio.
- NOAA Public Alert Certified All Hazards Weather Radio must meet listed requirements to earn the NOAA Public Alert certification.

Radio Features

- **Tone Alarm** – The National Weather Service sends a tone alarm before most warnings and watch messages are broadcast. This tone will turn on radios equipped with a tone alarm even if they're turned off to ensure that you get important alerts. Without this feature, users tend to sleep through important warnings.
- **SAME Technology** – Same Area Message Encoder (SAME) enabled radios are programmable. SAME enables the user to program the radio to only alert them about severe weather hazards that occur in the County programmed.
- **Selectable Alerting of Events** – Further allows operator to turn off alarms for events that they don't apply to them
- **External Antenna or Device Jack** – Add an antenna to improve reception or other appliance for added features

Radio Recap

- These radios are essential for warning you and your family during sleeping hours of weather and other hazards. The radios stay silent until activated by a special signal issued by the National Weather Service. The radio then sounds an alarm and displays the hazard information. You may also find an additional benefit by turning the radio portion on (see manufacturer instructions) to receive the weather forecast for the day. Once the radio is purchased, it doesn't cost any additional amount, except for purchasing new batteries for the backup battery feature.
- Receiving warning information is only one part of being safe during weather emergencies. Knowing what to do when the weather watch or warning is issued is just as important, if not more. Practice with your family what you will do for weather watches and warnings. We encourage you to practice your plan at least quarterly, just as you should do with home fire drills.

Maintenance

- The radios are low-maintenance and do not require much attention to continue working properly. It is important to check the radio's functionality and signal during the weekly test that takes place every Wednesday between 10:00 am and 12:00 pm.
- You should refer to the instructions provided by the manufacturer on how to check and change the backup batteries and replace them at least twice a year or more frequently if needed, especially in the case of a prolonged power outage lasting more than 48 hours.
- If you follow the manufacturer's instructions, the radio should provide reliable service for a long time

Basic Weather Preparedness

- Stay up-to-date on weather patterns and conditions by monitoring weather reports and warnings issued by your local authorities and the National Weather Service
- Be prepared with an emergency kit that includes enough food, water, medication, flashlights, extra batteries, a first aid kit, and a radio to last for at least three days (5-7 ideal)
- Develop a plan for severe weather emergencies that outlines what you will do and where you will go, and make sure to communicate the plan with family and friends
- Prepare your home for severe weather by trimming trees, securing outdoor items, and reinforcing windows and doors
- If local authorities recommend evacuation, follow their instructions and evacuate immediately
- Stay informed during and after the storm by monitoring weather reports and warnings, and be aware of post-storm hazards like flooding and downed power lines.

NOAA Weather Radio Frequencies

- There are 7 frequencies used by NOAA Weather Radio for the entire CONUS, these change based on location. If you have an amateur or GMRS radio capable of 162 MHz band reception (not all are) you can program these in to listen to the NOAA weather stations anywhere in the CONUS.
- Some of these radios already have preprogrammed NOAA weather channels and will even offer automatic weather alerts when the tone alarm signal is sent.

NOAA Weather Radio (NWR) Frequencies Seven Frequencies in the VHF Public Service Band	
162.400 MHz	162.500 MHz
162.425 MHz	162.525 MHz
162.450 MHz	162.550 MHz
162.475 MHz	
Note: Channel numbers, e.g., WX1, WX2, etc. have no special significance but are often designated this way in consumer equipment. Other channel numbering schemes are also possible.	

NOAA Weather Radio Options

- The Midland WR120B – NOAA Emergency Radio is the quintessential Home Weather Radio. They are widely available from multiple online and in-store vendors, typically for \$30-\$40. Many accessories can be bought for them to improve reception, give non-audio alerts such as pillow shakers, or improve the backup power for the radio.



The image shows a white Midland WR120B NOAA Emergency Radio. It features a blue LCD screen displaying '12:00' and '12.00'. The radio has several buttons: 'WARNING', 'TEST', 'MUTE', 'SELECT', 'WEATHER / SNOOZE', and 'BATT'. Red numbered callouts point to specific features: 1. 'SELECT' button, 2. 'WARNING' button, 3. 'TEST' button, 4. 'MUTE' button, 5. 'WEATHER / SNOOZE' button, 6. LCD screen, and 7. 'BATT' button.



The image shows the back of the Midland WR120B NOAA Emergency Radio. It features a telescopic antenna, an 'EXTERNAL ANTENNA' port, a 'POWER' port, and a 'BATT' port. A red numbered callout points to the 'BATT' port.

LOADED WITH EMERGENCY ALERTS + FEATURES

- 1 NOAA Weather Channels & Snooze
- 2 Color-Coded Alert Level Indicators
- 3 Alert Type
- 4 Trilingual: English, Spanish or French
- 5 Time & Alarm Clock
- 6 Continuous Backlighting Option
- 7 Powered by an A/C wall adapter

POWER OUTAGE BATTERY BACKUP

3 AA

Batteries not included

MIDLAND

PRODUCT SIZE
6.1"L x 1"H x 5.3"D

PACKAGE INCLUDES
All Hazards Weather Alert Radio, AC Power Adapter, Owner's Manual

NOAA Weather Radio Options

- Various Brands, including Midland, Raynic, FosPower, Eton and others – Handheld NOAA Emergency radios ranging from \$30-75
- These radios all have various features, but typically run off AA or AAA batteries and can be plugged in to charge an internal battery
- Some radios also have optional solar panels or hand-crankers to charge the internal battery which makes them even more versatile
- Features to look for: Weather/Water Proofing, built-in flashlights, power bank that can be used to charge your phone, SOS Strobes or Dog Whistles



5 WAYS TO POWER YOUR RADIO



LOADED WITH EMERGENCY + RESCUE FEATURES

- 1 Bright LED flashlight with SOS strobe
- 2 Flashlight dimmer to conserve battery
- 3 Ultrasonic dog whistle
- 4 Digital clock
- 5 AM/FM Radio
- 6 Weather alerts and info
- 7 Headphone jack
- 8 USB port to charge devices
- 9 Micro USB to charge radio
- 10 Crank or solar backup power

PRODUCT SIZE
8"L x 3.4"H x 2.4"D

PACKAGE INCLUDES

Radio with rechargeable battery, micro USB charging cable, Owner's Manual

