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All Hazards Weather Alert Radio WR-100

Owner's Manual

www.midlandradio.com

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Quick Start Instructions:
Please see pg. 5 for important buttons and controls

1. Place 3 AAA alkaline batteries (not supplied) into the compartment on underside of radio. (Note: Batteries are important because they provide emergency power for the radio in case of a power outage.)
2. Plug the AC Adapter into a standard house outlet. Plug the other end of the adapter into the DC jack on the back of the radio.
3. Pull out antenna and extend to its full length above the weather radio.
4. Ensure the radio's weather mode is on by clicking the switch on the right side of the radio to "ON".
5. Program the Weather/Hazard Channel for your Area-
   (A). Turn switch on side of radio to "ON".
   (B). Press "MENU".
   (C). Press "UP" arrow until "CHANNEL" is displayed.
   (D). Press "SELECT".
   (E). Press "UP" arrow until you hear the broadcast of your station.
   (F). Press "SELECT" to save station selection.
   (G). Press "MENU" to close menu mode. To turn Weather/Hazard broad-
        cast on again, press "WEATHER/SNOOZE".

6. Press the WEATHER/SNOOZE button to turn on the weather radio. Then press the "UP" or "DOWN" volume button to select desired listening level. (Note: Turning the volume all the way down [where no bars show] puts the radio into silent mode.)

You are now able to receive weather alerts for your area and surrounding areas. To narrow the alerts to just your county, see page 8 to program the S.A.M.E. code for your county into the radio.

Weather Channel Frequencies:

Preset 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

To get the S.A.M.E. code for your area, call
1-888-697-7263 or go to www.nws.noaa.gov/nwr/indexnw.htm

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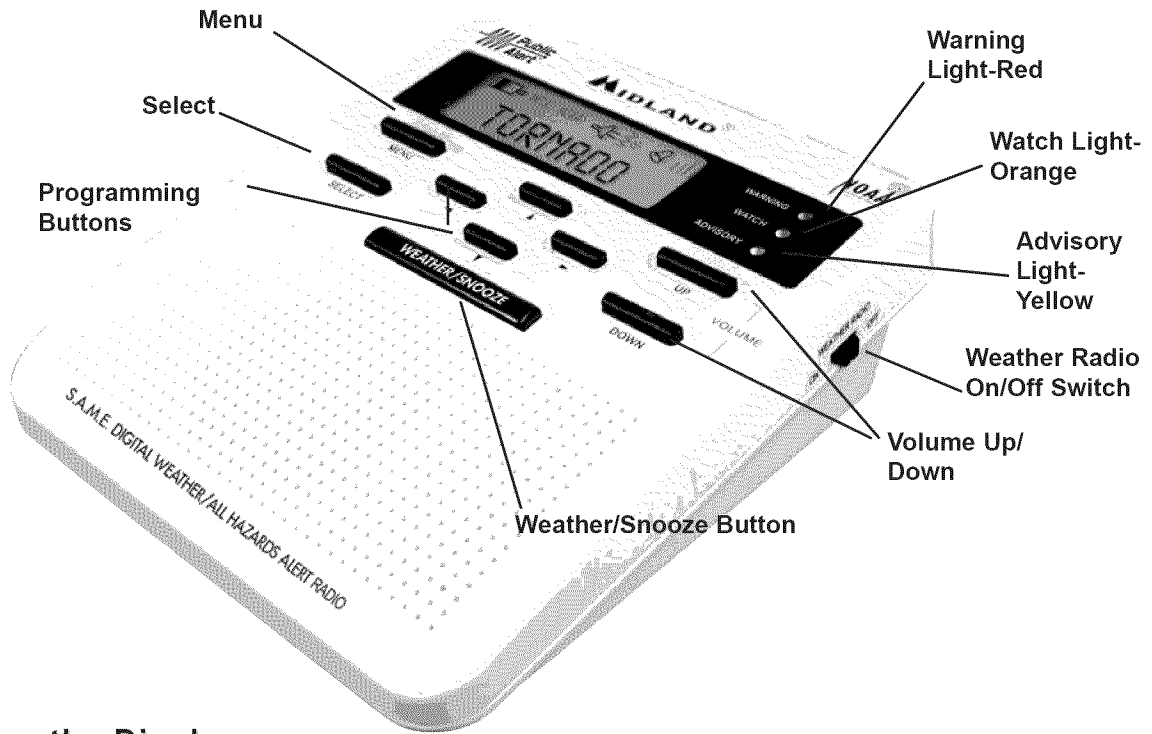
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Product Information:

Thank you for choosing Midland! Your new WR-100 weather radio is the latest in weather and hazard alert monitoring technology, providing you with the information needed to keep you safe. Your WR-100 weather radio has a special receiver that tunes to the 24/7 broadcast issued by the National Weather Service. The combined All Hazards/Weather Alert broadcast network is the single, most immediate source for comprehensive weather and emergency information available to the public.

This WR-100 weather radio has an innovative, automatic alert system. In the event of special warning broadcasts, the radio is automatically activated along with a loud tone, an LED indicator and an "alert" message on the LCD. Emergency weather bulletins include alerts about: tornadoes, hurricanes, floods, ice/snow storms, and other severe weather. Other emergencies might include: Amber alerts, hazardous explosions, fires, chemical spills, and other civil emergencies.

In addition, the WR-100 weather radio has the "S.A.M.E. Digital Weather/Hazard Alert" feature, providing you with constant monitoring of your local NWS broadcast. The S.A.M.E. decoding receiver allows you to hear only messages for the area(s) concerning you. You now have a choice as to what information will be brought to you.
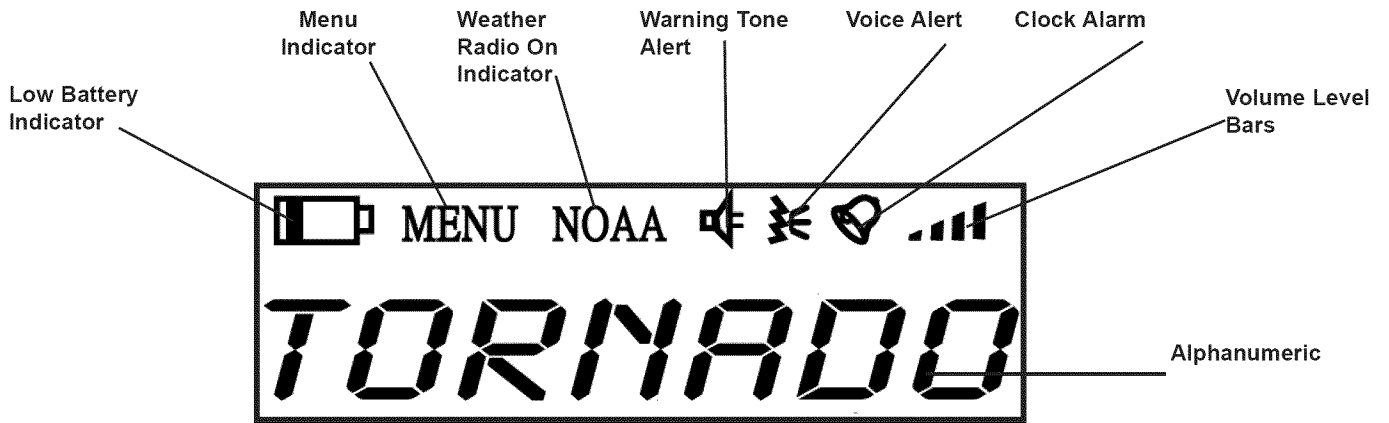
We encourage you to read this owner's manual thoroughly before operating this radio. This manual is a valuable part of your new Midland weather radio. See the "Quick Start Instructions" section of this manual for the initial weather radio setup and programming. After this weather radio is programmed and operating properly, store the manual in a safe place.

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WR- 100 Features and Controls:

Menu

Select

Programming
Buttons

Warning
Light-Red

Watch Light-
Orange

Advisory
Light-
Yellow

Weather Radio
On/Off Switch

Volume Up/
Down

Weather/Snooze Button

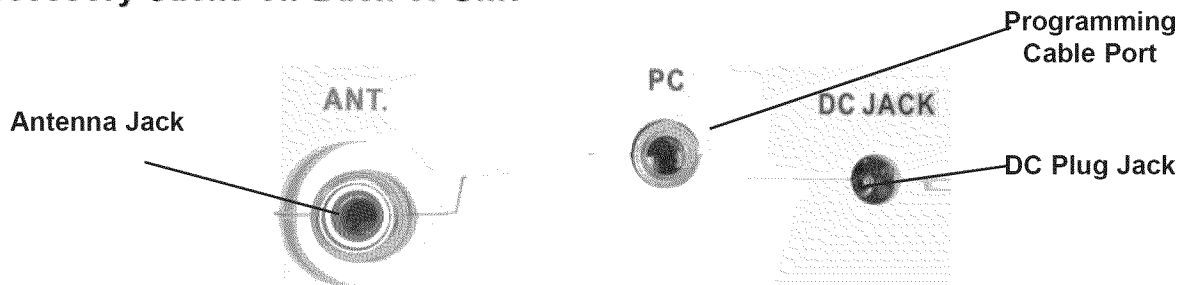## ICONS on the Display:

The following icons appear on the weather radio display to indicate radio functions that are active:

Low Battery
Indicator

Menu
Indicator

Weather
Radio On
Indicator

Warning Tone
Alert

Voice Alert

Clock Alarm

Volume Level
Bars

MENU NOAA

TORNADO

Alphanumeric

Accessory Jacks on Back of Unit

Programming
Cable Port

Antenna Jack

ANT.

PC

DC JACK

DC Plug Jack

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Programming The Clock:

(A). Press "MENU" to open menu options.
(B). Press "UP" arrow to scroll through menu until you see "TIME"
(C). Press "SELECT" (hour option will begin flashing)
(D). Press "UP" arrow until current hour is displayed. (Note: AM/PM changes as you scroll through the hours).
(E). Press "RIGHT" arrow to save current hour and advance to minute settings.
(F). Program the minutes the same way.
(G). Press "SELECT" to store the current time. Press "MENU" to exit menu mode.

Programming The Sleep Alarm:

(A). Press "MENU" to open menu options.
(B). Press "UP" arrow to scroll through menu until you see "ALARM", then press "SELECT".
(C). Press "UP" arrow to display "ON". Press "SELECT" (This activates the alarm time options. You will see the alarm hour begin flashing.)
(D). Press "UP" arrow until the hour you want is displayed. (Note: AM/PM changes as you scroll through the hours).
(E). Press "RIGHT" arrow to save alarm hour and advance to alarm minutes. Program minutes the same way.
(F). Press "SELECT" to save the alarm time. (The display will show "ON" and the alarm icon will be displayed.
(G). Press "MENU" to exit menu mode.

To temporarily silence the sleep alarm, press the weather/snooze button. This will advance the alarm time by 9 minutes. To silence the alarm for the remainder of the day, press the "MENU" button.

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Programming Notes:
Button Press Beeps- For silent programming, turn the weather radio off before programming the WR-100 weather radio.
Start Over- If you want to start over while programming, press the "MENU" button continuously until it "backs out" of programming mode.
If no program buttons are pressed for about one minute the weather radio will exit the menu mode.

Getting the S.A.M.E. County Codes:

A. First, determine the counties you are interested in. Then do one of the following three steps to get the codes:

1. The National Weather Service Toll-Free Number provides S.A.M.E. County Codes at: 1-888-NWS-S.A.M.E or (1-888-697-7263)

This is what to expect when you call the NWS number. When you call the NWS toll-free number, automated instructions will guide you to the S.A.M.E. County Code(s) you need. The number will be six digits long.

- You will hear, "Welcome to the National Weather Service. You have reached the Specific Area Message Encoding Program Service."
- If you select "touch-tone" to make your entries, you will be prompted to enter the name of your state using the telephone keypad.
- Next you will be prompted to enter your county name.
- Then you will hear, "Your geographic code is xxxxxx." (This is your S.A.M.E. County Code.) Be sure to write it down for future reference.

The system will then give you the option to enter "another combination": This enables you to get additional S.A.M.E. Codes for surrounding counties.

2. The Internet Web Site of National Weather Service- www.nws.noaa.gov/nwr/indexnw.htm.

This is what to expect when you go to the website.

- The link above takes you directly to the list of states.
- Click on (your state).
- Find your county, and record the "S.A.M.E. #" (the S.A.M.E. County Code) that is listed to the right of your county, and for any other counties in which you are interested.

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3. Go to the Midland Radio Corporation website at www.midlandradio.com
- Click on the weather radio link at the top of the page.
- At the top of the weather radio page will be the link to the NWS list of states and corresponding county codes. Click on the link.
- Click on your state and a list of counties and codes will be listed. Locate your county and then find your code.

Programming S.A.M.E. Codes into the WR-100:

Helpful Tip: The S.A.M.E. code is created using the following method:
- The first digit is the subcounty code-currently 0 in most areas.
- The second two digits represent the state code.
- The last three digits represent the county code.

"ANY" S.A.M.E. County Codes is the Default Factory Setting: Your WR-100 weather radio comes preprogrammed to receive NWS weather and hazard alert transmissions for all S.A.M.E. county codes within range. If this is what you want, leave the radio set to "ANY."

A Single S.A.M.E. County Code:
Press "MENU" button to open menu options.
- Press the "UP" arrow to scroll through menu options until "S.A.M.E. SET" is displayed, then press "SELECT" button.
- Press the "UP" arrow to scroll through: "SINGLE", "MULTIPLE", or "ANY."
- Display "SINGLE", then press "SELECT." "S.A.M.E.01" will be displayed. (Note if you are programming a single S.A.M.E. County Code, only the "01" setting will be used.) Press "SELECT".
- Using the "UP" arrow, find the first digit of your S.A.M.E. County Code. Press the "RIGHT" arrow to save the digit and automatically advance to the next digit.
- Program all digits of your S.A.M.E. County Code in the same way.
- Press "SELECT" to store your S.A.M.E. County Code. Press "MENU" to close the programming menu.

Multiple S.A.M.E. County Codes:

Press "MENU" button to open menu options.
- Press the "UP" arrow to scroll through menu options until "S.A.M.E. SET" is displayed, then press "SELECT" button.
- Press the "UP" arrow to scroll through: "SINGLE", "MULTIPLE", or "ANY."
- Display "MULTIPLE" as explained, then press "SELECT". "S.A.M.E.01" will be displayed, indicating you will be programming your first S.A.M.E. County Code at weather radio menu location "01."
- After programming your first S.A.M.E. County Code, press "SELECT" then the "UP" arrow to advance to "S.A.M.E. 02." Program all of your S.A.M.E. County Codes in the same way as above.
- When finished entering all your codes, press "MENU" to close the programming menu.

Choosing an Alert Type (DISPLAY, VOICE, OR TONE):

1. Press "MENU" button to open menu options.
2. Press "UP" arrow to scroll through menu options until "ALT TYPE" (Alert Type) is displayed, then press "SELECT" button.
3. Press "UP" arrow to scroll through the following (3) alert types: "DISPLAY", "VOICE", or "TONE".
4. Press "SELECT" to choose the Alert Type you want.
5. Press "MENU" to exit menu programming mode.

Alert Type	Description of Tone Pattern
DISPLAY	When the DISPLAY alert type is chosen, only a text alert will scroll on the display. There will be no audible alarm.
VOICE	When the VOICE alert type is chosen, the alert will sound for 8 seconds, then you will hear the voice of the weather broadcast for 5
TONE	When the TONE alert type is chosen, the alert tone will sound for 5 minutes, or until you press any button except the "WEATH-ER/SNOOZE" button which toggles to the voice weather broadcast.

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Reviewing Recent Alerts:

The weather radio can store up to 10 different Weather/Hazard alerts (with over-lapping effective times) in its memory. If the weather radio receives a new alert while any previous alert is still in effect, it automatically displays the new alert. You can review all alerts still in effect by pressing the "UP" arrow to scroll through the weather radio's active alert memory. A double beep indicates the end of the list. "NO MESSAGE" will be displayed if no alerts are active.

Test Signals Broadcast by NWS:

All National Weather Service stations periodically transmit test signals. You can find out when your local NWS station broadcasts test signals by calling the NOAA National Weather Service Forecast Office (listed under 'Weather" in the Federal Government section of the telephone book.)
During the weekly test signal, the local NWS station will give a list of counties covered by their transmitter. The NWS test signal allows everyone with weather radio receivers to verify the operation of their equipment.
The following test signals may be sent by the NWS during testing: required week-ly test, required monthly test, system demo, and national periodic test.

During a test, the yellow advisory LED will light up and the "Weekly Test" or "Monthly Test" message will be visible on the display. The radio will not sound an audible alert tone to avoid giving the impression of an actual alarm. The visual response to the test is confirmation that your radio is working properly. **Please note: If your advisory light is on and continues to stay on, the radio will reset this function within 6 hours.**

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Troubleshooting:

Problem	Suggestion
No power	Make sure the AC Power Adapter is securely plugged into both DC jack on back of weather radio and into wall outlet. Make sure batteries are installed in case AC power fails.
No sound	Check VOLUME control to ensure volume is turned up to an audible level.
No weather broadcast when you press WEATHER/ SNOOZE button	Ensure that telescoping antenna is up and fully extended. If you are using an external antenna, ensure that it is connected properly. Ensure that the radio is set to the NWS weather channel in use in your area. Contact NWS to ensure they are presently broadcasting. If in a metal structure, make sure you are close to a window. If in a weak signal area, you will need an external antenna.
The radio is not responding properly to NWS weather alert broadcasts	Check to see that you have programmed in the correct S.A.M.E. County Code(s). Check with the NWS that the tower is broadcasting.

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Reception:

The National Weather Service operates a system of weather and hazard alert broadcasts covering a large area of the United States. Currently, only a few areas are not covered. Typical broadcasts are within reception distance of 25-50 miles of the weather station. Your WR-100 weather radio can receive broadcasts from up to 50 miles from the weather station depending on your location and conditions of weather, terrain, etc... If you find reception is not good in your area, try different locations in your home or office to find a spot of improved reception. Placement near a window usually improves reception.

If a weather broadcast cannot be heard on any of the 7 channels, contact you local NWS office and verify the closest station is on air. Also verify the channel frequencies the station is broadcasting. **If your NWS is transmitting and you are not receiving the broadcasts, you may need an external antenna.** Please visit our website at www.midlandradio.com to view our suggested antenna, the 18-259W VHF Through-Glass Antenna.This antenna improves reception when applied to a window.

Please note: Metal structures are more difficult to receive reception in, because metal interferes with the signal. If you live in a metal structure, you may need an external antenna.

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About NOAA, NWS, & S.A.M.E. County Codes:

In 1994, NOAA began broadcasting coded emergency signals that identify the specific geographic area (such as the county within a state) that is affected by an emergency. Until that time such specific emergency weather information was not available directly to the public. NOAA transmits the coded emergency signals using a technique called Specific Area Message Encoding (S.A.M.E.) The WR-100 weather radio is designed to receive these S.A.M.E. county code transmissions.

The National Weather service divides the United States by state and county (or parish) and assigns a six digit code number called a FIPS (Federal Information Processing System) code, also known as a S.A.M.E. county code.
You can program the weather radio with up to 25 S.A.M.E. county codes. The weather radio allows you to receive broadcast alerts for either your own county, or for up to 25 counties. This will eliminate any alerts that are not within your area of interest.

When you program your S.A.M.E. county code(s) into the WR-100 weather radio, you eliminate any alerts that are not within those counties. Warnings, watches and statements of weather and other area emergencies, about 50 different types, will activate the weather radio for only your programmed specific area. The S.A.M.E. message the NWS sends contains information pertaining to the period for which the alert is valid. NWS can set the active time of the alert from 15 minutes up to 6 hours. When the designated time has passed, the weather radio display message and light will automatically reset to their normal appearance.

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S.A.M.E. County Code Record:

Use this space to keep a record of the S.A.M.E. county codes that you program into your WR-100 Weather Radio.

County Name	S.A.M.E. County Code	NWS Channel

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Specifications:

Specifications are nominal and subject to change.

General	
Frequency Range	(162.40, 162.425, 162.45, 162.475, 162.50, 162.525, 162.55MHz)
Number of WX Channels	7
Input Voltage	9-14 Volts DC
Dimensions	(51/2 x 2 x 6 in.)
20 dB Quieting Sensitivity	0.5 uV
FIPS County code Sensitivity at5kHz Dev	0.5uV
Channel Selectivity	±25kHz, 60dB
Speaker Impedance	8 ohms
Speaker Output at10%THD	200 mW max.

FCC Compliance Information:

MIDLAND (NOAA) Weather Radio Model WR-100, "S.A.M.E. Digital Weather/Hazard Alert Radio". 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; (2) This device must accept any interference received including interference that may cause undesired operation.

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One Year Limited Warranty:

MIDLAND Radio Corporation will repair or replace, at its option without charge, your WR-100 weather radio which fails due to a defect in material or workmanship within one year following the initial consumer purchase.

This warranty does not include any antennas, which may be a part of or included with the warranted product, or the cost of labor for removal or re-installation of the product in a vehicle or other mounting.

Performance of any obligation under this warranty may be obtained by returning the warranted product, freight prepaid, along with a copy of the original sales receipt to Midland Radio Corporation at the address provided below.

This warranty gives you specific legal rights, and you may also have other rights, which vary, from state to state.

Note: The above warranty applies only to merchandise purchased in the United States of America or any of the territories or possessions thereof, or from a U.S. Military exchange. For warranty coverage on merchandise purchased elsewhere ask your dealer.

Midland Radio Corporation
Warranty Service Department
5900 Parretta Drive
Kansas City, Missouri 64120
Phone: (816) 241-8500
Fax: (816) 241-5713
E-mail: mail@midlandradio.com
Website:www.midlandradio.com

Service:

If your MIDLAND Weather Radio fails to operate properly, check the "Troubleshooting" section in this manual before returning it for service. If necessary, return as follows:

1. Pack the unit in its original box and packing. Then pack the original box in a suitable shipping carton. Caution: Improper packing may result in damage during shipment.

2. Include the following:
   a. full description of any problems
   b. money order for $7.50 to cover shipping and handling (this may not be required in some states)
   c. daytime telephone number, name & address

3. For warranty service include a photocopy of the bill of sale from an authorized dealer or other proof of purchase showing the date of sale.

4. You do not need to return accessory items (AC/DC Adapter, batteries, Owners Guide) unless they might be directly related to the problem.

5. A flat rate of $45.00 will apply to repairs not covered by warranty or units that are over one year old. Send only cashier's check, money order or Master Card or Visa card number.

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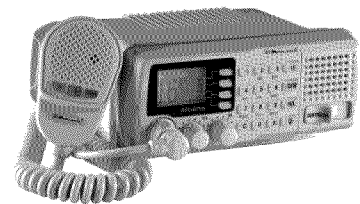
GMRS   Weather   CB   Marine

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