



**NOAA Weather Monitor  
Model WR-300**

***“SAME Digital Weather/All-Hazard Alert  
With AM/FM Alarm Clock Radio”***

**OWNER'S MANUAL**



**[www.midlandradio.com](http://www.midlandradio.com)**

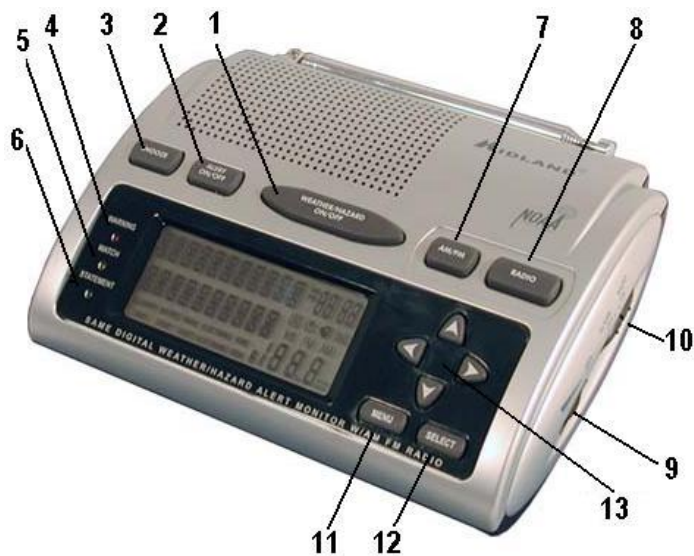
**Your new MIDLAND Weather Monitor (WR-300)** is the latest advance in Weather monitoring technology providing you with the information you need for your greatest safety from the effects of weather and other external hazards. The Midland Weather Monitor has a special receiver that tunes to the 24/7 broadcasts 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 instantaneously to the public, in advance of TV and radio bulletins.

This **MIDLAND Weather Monitor** has an innovative automatic alert system. In the event of special warning broadcasts, the radio is automatically activated along with a loud tone, a flashing LED indicator, and an “alert” message in the LCD. Emergency weather bulletins include alerts about: Tornadoes, Hurricanes, Floods, Ice/Snow Storms and other Severe Weather. Other emergencies might include: Amber Alert, Hazardous Explosions, Fires, Chemical Spills, and other civil emergencies.

**We encourage you** to read this Owner’s Manual thoroughly before operating this unit. This manual is a valuable part of your new Midland Weather Monitor. See the “Quick Start” section of this manual for the initial Weather Monitor setup and programming. The quick & easy programming menus are designed to meet your radio operation needs. After this Weather Monitor is programmed and operating properly, store the manual in a safe place.

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(See “Controls” & “Quick Start” sections in this manual.)

### **DIAGRAM OF THE WEATHER MONITOR:**

1. **WEATHER/HAZARD ON/OFF** standby mode button
2. **ALERT ON/OFF** button
3. **SNOOZE** clock alarm snooze button
4. **“WARNING”** Alert Status light
5. **“WATCH”** Alert Status light
6. **“ADVISORY”** Alert Status light
7. **AM/FM** radio AM or FM selector button
8. **RADIO** AM/FM radio on/off button
9. **OFF** Weather Monitor unit on/off dial & volume control
10. **ALARM OFF/ON** switch
11. **MENU** (programming) menu mode activation button
12. **SELECT** (programming) select & confirm option button
13. **Arrows** (programming) buttons – up, down, right & left

*Note: This unit programs with menus similar to a TV remote control.*

Features located on back of unit are not shown: DC jack (also for AC Power Adapter), and jacks for optional external alert, external antenna & earphone.

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## **PRODUCT INFORMATION:**

The WR-300 N.W.R./ S.A.M.E. (National Weather Monitor/Specific Area Message Encoding) Weather / All Hazard Monitor provides you with constant monitoring of your local National Weather Service broadcast for messages warning you of hazardous conditions. The NWR/SAME decoding allows you to hear only messages concerning the area concerning you. You now have a choice as to what information will be brought to you. No more will you be awakened to hear of a problem many miles from your home that will not affect you. A clock with alarm and AM/FM radio are also featured.

The WR-300 has an emergency battery backup system for use if you lose power. It will provide up to thirty hours of operation if power fails.

The WR-300 NWR/SAME Weather / All Hazard Monitor is the latest advance in Weather monitoring technology providing you with the information you need for your greatest safety from the effects of weather and other external hazards.

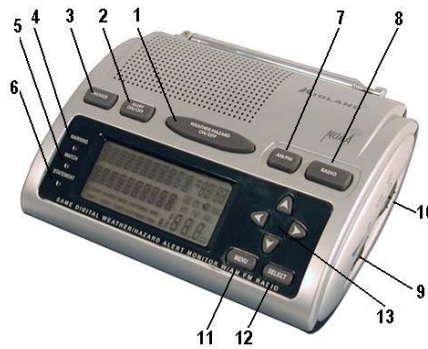
## **FEATURES:**

- VHF Weather Monitor with seven different National Weather Service channels in the 162 MHz FM band – Provides 24-hour-a-day National Weather Service information from seven different channels for maximum reception possible (in areas where available)

- Alert monitor system receives NWR/SAME codes transmitted by National Weather Service stations warning of dangerous weather conditions and other general hazards. The SAME codes designate which counties or parts of counties are affected by the individual message. When the alert feature is activated, the receiver remains in a standby mode. As SAME coded messages are received, the receiver automatically activates to warn you of dangerous weather conditions.
- User-selectable warning system – Your choice of siren alarm, voice or visual flasher.
- Weather Command Button – large touch bar turns unit from alert mode to full time monitoring.
- High Performance Chassis – Receives weather broadcasts up to 50 miles from transmitter.
- Large Top-Firing Speaker – Directs alerts and audio toward listener.
- Eleven-character LCD display for viewing alert type.
- Clock displays time and date and has alarm and snooze functions.
- AM/FM radio for listening or wake-up alarm.
- Emergency Powered from 4 type AA batteries (optional).
- Telescopic Antenna – Provides maximum range reception-up to 50 miles. Antenna folds down for easy transport.
- Fully Variable Volume Control – Adjusts audio output.
- Alert siren volume adjustable for maximum flexibility.



- External Alert jack to operate external warning devices. (optional)
- Earphone Jack – Allows private listening or remote speaker location. (optional)
- External Antenna Jack – Permits use of an optional extended range base antenna or a mobile antenna.
- External Power Jack – Allows use of AC adapter (included) or DC cigarette lighter power cord (optional) to run off a car or boat battery.
- Compact, Ultra Modern Styling – Small enough to take along – looks good anywhere.



## CONTROLS:

**Note:** The MIDLAND Weather Monitor volume control and the main power switch (# 9 above) must be turned on to activate the following controls unless otherwise noted by an asterisk.

1. **WEATHER/HAZARD ON/OFF** standby mode button. The Weather/Hazard broadcast & alert receiver is active whenever the Weather Monitor unit is turned on. Press this button to put the weather/hazard receiver into standby mode (alert monitor mode.) Press button again to return to hearing National Weather Service weather/hazard reports.
2. **ALERT ON/OFF** button. Press this button to cancel alert siren sounds and any external alert features when alert active. Press and hold button to enable and disable alert siren and external alert signals (see Page 20). When Alert is off, only the LED indicator lights (“Warning”, “Watch”, & “ADVISORY”) are active.
3. **SNOOZE** clock alarm snooze button. Press to advance the clock alarm time by 9 minutes each time the clock alarm sounds.
4. **“WARNING”** Alert Status light. This red LED Indicator light tells you that a warning has been issued for your area by the National Weather Service.
5. **“WATCH”** Alert Status Light. This orange LED Indicator

light tells you that a watch has been issued for your area by the National Weather Service.

6. **“ADVISORY”** Alert Status Light. This yellow LED Indicator light tells you that a statement or emergency has been issued for your area by the National Weather Service.
7. **AM/FM** radio Am or FM selector button. Switches between AM & FM bands of the broadcast radio. (Weather Monitor and AM/FM radio must both be turned on.)
8. **RADIO** AM/FM radio on/off button. Turns FM/AM (broadcast) radio on & off. (The weather service channel is monitored for alerts whether or not the FM/AM radio is on.)
9. **OFF** Weather Monitor unit on/off dial & volume control. This is the MIDLAND Weather Monitor volume control and the main power switch. Click unit on & adjust to desired listening level. (Only the clock is active when this dial is set to off.)
10. **ALARM OFF/ON** switch. Enables and disables clock alarm function.
- 11.\* **MENU** (programming) menu mode activation button. Press to activate programming mode. (Use directional arrows to move through programming menu options.)
- 12.\* **SELECT** (programming) select & confirm option button. Press to confirm your selection.
- 13.\* **Arrows** (programming) buttons – up, down, right & left. Use directional arrows to program the MIDLAND Weather Monitor menus. (This unit programs with menus similar to a TV remote control.) Note: you can also use the arrows to review previous alerts when in normal display mode.

## **QUICK START INSTRUCTIONS:**

*After reading the “Features” & “Controls” sections in this manual set up your MIDLAND Weather Monitor as follows:*

- 1. BATTERIES.** This Weather Monitor operates on AC power or 4 AA battery backup. (Batteries are not included.) It is recommended that you install emergency backup batteries: (4) type AA alkaline batteries (not supplied). First, be sure the unit is disconnected from the AC power adapter. Then, remove the battery compartment cover on the underside of the unit by pressing the battery compartment door latch in the direction of the arrow and lifting. Observe the battery polarity indicators (+ and -) as you install the batteries. Replace the battery compartment cover. (Rechargeable batteries are not recommended because the WR-300 will not charge the batteries.)
- 2. AC POWER ADAPTER.** Plug the AC Power Adapter into a 110-115 Volt AC power outlet (standard house current). Plug AC Power Adapter into DC jack on back of the Weather Monitor.
- 3. ANTENNA.** Position telescoping antenna vertical and extend to its full length above the Weather Monitor. In most cases, this antenna will provide good reception. In some remote areas an external antenna may be used to improve weak reception.

#### **4. SETTING THE AM/FM CLOCK RADIO.**

**a. Set the TIME.** *First turn on the Weather Monitor unit, then:*

Press and release the “MENU” button. Press the “DOWN” arrow button until “SET UP TIME” is displayed in the left side of the display. Press the “SELECT” button, hour setting will begin flashing. (Note and adjust A.M./P.M. indicator located to left of the flashing hour setting.) Press and release the “UP” buttons to adjust the hour setting. Press and release the “RIGHT” arrow to adjust minutes. Press and release the “UP” buttons to adjust the minute setting. Press the “SELECT” button to store the time setting.



**b. Set the DATE.** *First turn on the Weather Monitor unit, then:*


Press and release the “MENU” button. Press the “DOWN” arrow until “SET UP DATE” is displayed in the left side of the display. Press and release “SELECT”. Press and release the “UP” arrow to adjust the day. Press and release the “RIGHT” arrow to choose setting the month. Press and release the “UP” arrow to adjust the month. Press and release the “RIGHT” arrow to select the year. Press and release the “UP” arrow to adjust the Year. Press and release the “SELECT” button to store DAY/MONTH/YEAR.

**c. Set the ALARM (for the AM/FM Clock Radio).** *First turn on the Weather Monitor unit, then:*

Press and release the “MENU” button. Press the “DOWN” arrow until “SET UP ALARM” is displayed in the left side of the

display. Press and release the SELECT button. The alarm hour setting will begin flashing. (Note and adjust A.M./P.M. indicator located to left of the flashing alarm hour setting.) Press and release the “UP” arrow to adjust the alarm hour setting. Press and release the “RIGHT” arrow to choose setting alarm minutes. Press and release the “UP” arrow to adjust the alarm minute setting. Press the “SELECT” button to store the Alarm settings.

Choose type of alarm. Press and Release “MENU”. Use “UP” arrow to choose radio  or sound  for clock alarm. (The icons are located below the clock display.) Press “SELECT” to store the type of alarm setting.

To activate the alarm, set the “ALARM OFF/ON” switch to the “ON” position. The clock face  icon will appear. To cancel the alarm when sounding, press a button other than “SNOOZE”.

The “SNOOZE” button on the top of the WR-300 is for advancing the alarm time by 9 minutes each time the alarm sounds. The “SNZ” icon will be displayed.

(Turn alarm off with the ”ALARM OFF/ON” switch on side of unit.)

**5. PROGRAM THE WEATHER CHANNEL FOR YOUR AREA.** After you select the weather channel in your area, your Weather Monitor will receive all alerts issued by the National Weather Service. Program your Weather Monitor with the weather channel in your area as follows:

- a. Turn on Weather Monitor unit.
- b. Press “MENU”.
- c. Press up (or down) directional arrow until “WEATHER CHANNEL” is displayed on the LCD.
- d. Press “SELECT”.
- e. Press up (or down) directional arrow until you hear the broadcast of your station. Be Sure Weather Monitor Unit volume is turned up sufficiently for you to hear broadcast.
- f. Press “SELECT”.

## **5. ABOUT S.A.M.E. & THE COUNTY CODES.**

**S.A.M.E.** - Is a feature in MIDLAND Weather Monitors that allows you to program in your county code or counties codes. This will eliminate any Alerts that are not within your programmed Specific Area. For example, if you only want to be informed for alerts within your county just program in your county code. But, if you want to be informed about counties that are North, South, East and West of you, you can do so. Find the county codes you want on the internet web site of National Weather Radio-County by County Coverage @ [www.nws.noaa.gov/nwr/indexnw.htm](http://www.nws.noaa.gov/nwr/indexnw.htm).

You can also restrict what you hear on your Weather Monitor to alerts in which you have an interest. Program your Weather Monitor as explained in the “Programming” section in this manual.

## **PROGRAMMING YOUR WEATHER MONITOR.**

### **NWR, NOAA, NWS, & SAME:**

NOAA Weather Monitor (NWR) is a service of the National Oceanic and Atmospheric Administration (NOAA). As the "Voice of the National Weather Service", it provides continuous broadcasts of the latest weather information from your local National Weather Service (NWS) office.

In 1994, the National Oceanic and Atmospheric Administration began broadcasting coded emergency signals that identify the specific geographic area (such as a county) affected by an emergency. Until that time such specific emergency weather information was sent in other ways to broadcast stations and others then relayed to the public.

NOAA transmits the coded weather emergency signals using a technique called SAME (Specific Area Message Encoding). The Midland WR-300 7-channel weather/ all hazards monitor is designed to receive these SAME transmissions.

Your Midland WR-300 can be programmed with up to 30 predefined state/county codes that will determine which notices broadcast by your NOAA weather station will cause the radio to alert you. Warnings, watches and advisories of weather and other area emergencies, about 50 different types- will activate the radio if one or more location code programmed into your unit is included in the SAME message.



Also included in the SAME message is the amount of time for which the message is effective. The WR-300 will continue to display the alert until its time expires.

You don't need to wait for the WR-300 to give you an alert. Just find the NWR station broadcasting to your area from the 7 available channels. You can listen at any time, day or night to the latest weather information from the National Weather Service.

## **EMERGENCY POWER**

### **Connecting power –**

The AC power adapter is required for normal operation if the radio is to be in service for more than a few hours. Plug the wall adapter into a 110-115 Volt AC (standard house current) outlet. Connect the cord end to the DC JACK12Volt power jack on the back of the unit.

A backup battery as stated above is also recommended. The condition of the battery is monitored by the radio. When BATTERY icon flashes on the display, the battery has been discharged and should be replaced. Do not leave a dead or weak battery in the radio. Do not leave a battery in the radio when it is not in use. The battery may leak and possibly damage your unit. Dispose of batteries properly.

- ☐ The clock will run for at least 10 days on batteries when the radio is turned off with the VOLUME / OFF control.

## **Reception -**

**NOTE: The National Weather Radio service operates Weather Broadcast systems covering a large area of the United States. A very few areas are not currently included.**

Your WR-300 can receive broadcasts from the Weather Stations up to 50 miles. Hills and certain terrain can reduce reception. An external antenna can improve range. If your city is listed as having a Weather Service Station but you do not receive it please call your local Weather Service to confirm they are broadcasting (Sometimes these stations are shut down for maintenance). If your local Weather Service is transmitting and you are not receiving the broadcasts, you may need an outdoor antenna.

### **What is a FIPS Code:**

The NWR divides the United States and territories by state and county (or parish) and assigns a six digit code number called a FIPS (Federal Information Processing System) code or also known as a NWR/SAME county code. The first digit identifies subdivision. The next two identify the state or territory, and the last three identify the county. For example the code for Clay county Missouri is 029047. The "047" indicates the county, the "29" indicates the state, and the "0" indicates the subdivision of the county. In this case and most cases the code will have a zero for the first digit, indicating that no subdivision is in use. The NWS plans to introduce subdivisions of some counties in the future, assigning digits 1 through 9 to the parts resulting in codes like 529047. You may also program your WR-100 with a code that will alert to any code for a state. That code is 0ss000 where "ss" designates the two digits used for all codes in the state.

### **Acquiring FIPS codes for Your Area:**

The FIPS codes can be found by calling the NWS toll free number

**1-888-NWS-SAME**

**(1-888-697-7263)**

**Automated instructions will guide you to the numbers you need.**

**The FIPS codes and much more information can be found by way of the Internet at [www.nws.noaa.gov/nwr/indexnw.htm](http://www.nws.noaa.gov/nwr/indexnw.htm)**

**Note: You might want to obtain the codes for other counties close to you or those you might frequently travel through. The counties still must be within the coverage area of your NWS broadcast.**

This is what to expect when you call the NWS number.

You will be prompted to enter your state. We suggest entering the entire state to expedite the process. Next you will be prompted to enter the county. Again spell the entire county. We suggest you locate several counties surrounding you especially the county in the direction most of the storms will be coming from. When you have entered the county, the system will ask you to confirm what you entered is correct. Be ready to write the number. The system tells you the number fairly quick but you have the option to have it

read back to you so you can get the whole number.  
Remember the number will be six digits long.

### **Adjusting the Weather Frequency**

Adjust your Weather Monitor for the weather frequency for your local area as follows:

Go to the Internet web site of NOAA Weather Radio - County by County Coverage @ [www.nws.noaa.gov/nwr/indexnw.htm](http://www.nws.noaa.gov/nwr/indexnw.htm).

Note the frequency for your local area. Find the channel number that corresponds to your frequency. Turn on the WR-300 unit. Press and release the “MENU” button. Press the “UP” arrow until “WEATHER CHANNEL” is displayed. (This will temporarily switch the WR-300 from standby to listen for Weather Transmissions.)

To set the frequency channel. Press and release “SELECT” to make the channel display flash, then press the “UP” button until the channel of your NOAA Weather Radio station shows on the display. You should now hear the voice of the broadcast. If you find there is more than one broadcast station in your area, be sure that station will broadcast your county code. To confirm this listen to the broadcast associated with the weekly test. During the broadcast they will give a list of counties covered by the transmitter.

Channel	Frequency (MHz)
1	162.400
2	162.425
3	162.450
4	162.475
5	162.500
6	162.525
7	162.550

When you have selected the correct frequency channel, press and release the SELECT button to continue programming. Press and release the MENU button to end programming.

**NOTE:** If no program keys are pressed for about one minute the WR-300 will exit the menu mode.

### **Changing the Alert Pattern**

The alert tone is a high low alternating sound. The speed of the tones depends on if the WR-300 received a watch or warning.

The alert pattern has two options available through the program button, VOICE and SIREN. If VOICE is chosen, the alert will sound for about 8 seconds then the voice weather broadcast will be heard for about 5 minutes when an alert message is received. If you desire to listen to the broadcast longer, press the “WEATHER/HAZARD” bar on the front the WR-300.

If SIREN is chosen, alert tones will sound for five minutes or until the ALERT ON/OFF button is pressed. To change the

pattern, press and release “MENU” button. Press the UP or DOWN arrow button until “ALERT MODE ” is displayed in the left side of the display. Press and release the “SELECT” button then “UP or DOWN arrows” to display the choice of alert pattern. Press and release the “SELECT” button to keep that pattern and continue with programming. Press and release the “MENU” button to return the radio to alert mode.

**NOTE:** Remember if there are no buttons pressed for one minute the WR-300 will exit menu mode.

Voice and siren alerts can be turned off for all events leaving only the text message and LED light to indicate the event. Press and hold the ALERT ON/OFF button for 5 seconds to see the display “ALERT ON(OFF)”. While continuing to hold the ALERT ON/OFF button, press the up or down arrow key to change the setting. Release the buttons then press the ENTER key to confirm.

#### **FIPS Code programming:**

**NOTE:** The WR-300 has enough memory to store 30 “FIPS” codes. To store or change the codes, press and release “MENU” button. Press the UP or DOWN arrow button until “COUNTY CODE ” is displayed in the left side of the display. Press and release the “SELECT” button then “UP or DOWN arrows to choose from three options in how your radio responds to the county (FIPS) codes is receives. Choose “SINGLE” if you want to hear only alerts sent to one county or FIPS code. Choose “MULTIPLE” if you want to hear alerts from all FIPS codes you have programmed. Select “ALL” to listen to all alerts your station sends without regard to FIPS codes. If you chose

“SINGLE” or “MULTIPLE”, press SELECT to proceed to programming codes. The next display will display “CODExx” above six numbers or dashes for numbers. If “SINGLE” was chosen, only the CODE01 setting will be used. These numbers will determine the areas or counties that your WR-300 will be set to respond to SAME messages. See “Acquiring FIPS Codes for Your Area” for how and where to find the codes for your area.

To change the first code displayed, press and release the SELECT button to change the code displayed or the UP arrow key to select another code position. If you pressed SELECT the display will now flash the first digit of the six digit code. Press and release the UP or DOWN buttons to set the FIPS code digit you want. Use the LEFT and RIGHT arrow buttons to change digits. When the display shows the correct number press and release the SELECT button. This accepts the code you entered. The code number now will flash. If you wish to program another county code, press the UP button to go to the next code location. When you have entered all the desired codes, press and release the “MENU” button to store your settings.

#### **Reviewing stored “FIPS” codes**

Enter the program mode as described earlier. press and release “MENU” button. Press the UP or DOWN arrow button until “COUNTY CODE ” is displayed in the left side of the display. When the “FIPS” codes are displayed, press and release the “UP or DOWN arrow” keys repeatedly to review all memory locations you desire. All empty memory locations will be “-----”. When finished reviewing the “FIPS” codes press and release the MENU button.

#### **ALL County Codes option**

To cause the WR-300 to receive all SAME messages without regard to area, choose ALL when COUNTY CODE is selected in the programming menu. If you have not selected a weather

channel frequency for your local area, follow the instructions in “Adjusting Weather Frequency”. To listen to the weather broadcast, press and release the “WEATHER” bar on the front of the WR-300. Adjust the volume for your best listening level. Press and release the “WEATHER” bar again to mute the voice broadcast.

### **USING THE ALERT FUNCTION:**

#### **Setting the Alert Volume**

To store or change the siren volume, press and release “MENU” button. Press the UP or DOWN arrow button until “SIREN LEVEL HI or LO ” is displayed in the left side of the display. Press and release the “SELECT” button then “UP or DOWN arrows to choose HI or LO volume. You will hear beeps at the volume you select.

#### **Connecting the External Alert Output to an External Device**

You may need to turn on or off another device when an alert is received. The WR-300 provides both a switch closure to signal other devices at the EXT. ALERT jack when the radio receives an alert. The output is compatible with home automation devices from suppliers like X-10 and others. Connect the positive lead of the interface to the tip of the  $\frac{1}{8}$  inch (3.5mm) phone plug and the negative lead to the body of the plug.

A DC powered device using 12 Volts or less and requiring less than 200mA of current can be switched directly using the EXT.



ALERT jack. Observe the polarity of the jack so that the negative side of the external power source is connected to the body of the 1/8 inch (3.5mm) phone plug and the device is connected to the positive source and to the tip of the phone plug.

The internal switch is closed when an alert is received. Pressing the ALERT ON/OFF button on the front of the radio will open the switch.

**Testing Siren and External Alert devices**

If you need to test the sound of the siren alert or the function of an external alerting device press MENU then the UP/down arrows until you see SIREN TEST on the display. Press SELECT to sound the siren and close the switch controlling the external alert device. The siren will sound and the external device will be active until SELECT key is pressed again.

**NWR Alert Descriptions**

This table contains the NWR descriptions of all the types of alerts that your WR-300 will display. The display text and type of alert sound are shown for each type of alert

<b>What You See</b>	<b>Alert Description</b>	<b>Alert Sound</b> *(see Defeat Siren)
<b>TORNADO WATCH</b>	Tornado watch	<b>Fast siren *</b>
<b>TORNADO WARNING</b>	Tornado warning	<b>Very fast siren</b>
<b>SEVERE THUNDERSTORM WATCH</b>	Severe thunderstorm Watch	<b>Fast siren *</b>
<b>SEVERE THUNDERSTORM WARNING</b>	Severe thunderstorm warning	<b>Very fast siren *</b>
<b>FLASH FLOOD WATCH</b>	Flash flood watch	<b>Fast siren *</b>

<b>FLASH FLOOD WARNING</b>	Flash flood warning	<b>Very fast siren *</b>
<b>FLOOD WATCH</b>	Flood watch	<b>Fast siren *</b>
<b>FLOOD WARNING</b>	Flood warning	<b>Very fast siren *</b>
<b>WINTER STORM WATCH</b>	Winter storm watch	<b>Fast siren *</b>
<b>WINTER STORM WARNING</b>	Winter storm warning	<b>Very fast siren *</b>
<b>BLIZZARD WARNING</b>	Blizzard warning	<b>Very fast siren *</b>
<b>FREEZE WARNING</b>	Freeze warning	<b>Very fast siren *</b>
<b>HIGHWIND WARNING</b>	High wind warning	<b>Very fast siren *</b>
<b>HIGH WIND WATCH</b>	High wind watch	<b>Fast siren *</b>
<b>DUST STORM WARNING</b>	Dust storm warning	<b>Very fast siren *</b>
<b>HURRICANE WATCH</b>	Hurricane watch	<b>Fast siren *</b>
<b>HURRICANE WARNING</b>	Hurricane warning	<b>Very fast siren</b>
<b>TROPICAL STORM WARNING</b>	Tropical storm warning	<b>Very fast siren</b>
<b>TROPICAL STORM WATCH</b>	Tropical storm watch	<b>fast siren *</b>
<b>COASTAL FLOOD WATCH</b>	Coastal flood watch	<b>Fast siren *</b>
<b>COASTAL FLOOD WARNING</b>	Coastal flood warning	<b>Very fast siren *</b>
<b>SPECIAL MARINE WARNING</b>	Special marine warning	<b>Very fast siren *</b>
<b>AVALANCH WATCH</b>	Avalanche watch	<b>Fast siren *</b>
<b>AVALANCH WARNING</b>	Avalanche warning	<b>Very fast siren *</b>
<b>VOLCANO WARNING</b>	Volcano warning	<b>Very fast siren</b>
<b>EARTHQUAKE WARNING</b>	Earthquake warning	<b>Very fast siren</b>

<b>TSUNAMI WATCH</b>	Tsunami watch	<b>Fast siren</b>
<b>TSUNAMI WARNING</b>	Tsunami warning	<b>Very fast siren</b>
<b>IMMEDIATE EVACUATION</b>	Immediate evacuation warning	<b>Very fast siren</b>
<b>SHELTER IN PLACE WARNING</b>	Shelter in place warning	<b>Very fast siren</b>
<b>CIVIL DANGER WARNING</b>	Civil danger warning	<b>Very fast siren</b>
<b>CIVIL EMERGENCY MESSAGE</b>	Civil emergency message	<b>Very fast siren</b>
<b>RADIATION HAZARD WARNING</b>	Radiation hazard warning	<b>Very fast siren</b>
<b>HAZARDOUS MATERIALS WARNING</b>	Hazardous materials warning	<b>Very fast siren</b>
<b>NUCLEAR POWERPLANT WARNING</b>	Nuclear power plant warning	<b>Very fast siren</b>
<b>LAW ENFORCEMENT WARNING</b>	Law enforcement warning	<b>Very fast siren</b>
<b>FIRE WARNING</b>	Fire warning	<b>Very fast siren *</b>
<b>CHILD ABDUCTION EMERGENCY</b>	Amber Alert-Child abduction emergency	<b>Low siren *</b>
<b>911 TELEPHONE OUTAGE EMERGENCY</b>	911 Telephone service outage emergency	<b>Low siren *</b>
<b>TUNE TV WATCH</b>	Other Watch message not defined	<b>Fast siren *</b>
<b>TUNE TV WARNING</b>	Other warning message not defined	<b>Very fast siren</b>
<b>ADMINISTRATIVE MESSAGE</b>	Administrative message	<b>Low siren *</b>
<b>LOCAL AREA EMERGENCY</b>	Local area emergency	<b>Low siren</b>

<b>EMERGENCY ACTION NOTIFICATION</b>	Emergency action notification	<b>Very fast siren</b>
<b>EMERGENCY ACTION TERMINATION</b>	Emergency action termination	<b>Low siren</b>
<b>SEVERE WEATHER STATEMENT</b>	Severe weather statement	<b>Low siren *</b>
<b>SPECIAL WEATHER STATEMENT</b>	Special weather statement	<b>Low siren *</b>
<b>FLASH FLOOD STATEMENT</b>	Flash flood statement	<b>Low siren *</b>
<b>FLOOD STATEMENT</b>	Flood statement	<b>Low siren *</b>
<b>HURRICANE STATEMENT</b>	Hurricane statement	<b>Low siren *</b>

The SAME message the NWR sends contains information, which tells the radio the time period for which the alert is valid. The time can be set from 15 minutes up to 6 hours. When the designated time has passed the display message and light will be reset to their normal state.

Environment Canada is developing a warning system using SAME technology. Some added events not currently used by NWS are used in the Canadian system. These are also decoded according to this table.

<b>What You See</b>	<b>Alert Description</b>	<b>Alert Sound</b> *(see Defeat Siren)
BIOLOGICAL HAZARD WARNING	Biological Hazard Warning	Very fast tone
BOIL WATER WARNING	Boil Water warning	Very fast tone *
CHEMICAL HAZARD WARNING	Chemical Hazard warning	Very fast tone
DAM WATCH	Dam Break Watch	Fast tone *
DAM BREAK WARNING	Dam Break Warning	Very fast tone
CONTAGIOUS DISEASE WARNING	Contagious Disease Warning	Very fast tone

FOOD CONTAMINATION WARNING	Food Contamination Warning	Very fast tone
FLASH FREEZE WARNING	Flash Freeze Warning	Very fast tone *
ICEBERG WARNING	Iceberg Warning	Very fast tone *
INDUSTRIAL FIRE WARNING	Industrial Fire Warning	Very fast tone
LAND SLIDE WARNING	Land Slide Warning	Very fast tone
POWER OUTAGE ADVISORY	Power Outage Warning	Low tone *
WILD FIRE WARNING	Wild Fire Warning	Very fast tone
WILD FIRE WATCH	Wild Fire Watch	Fast tone *

### **Reviewing Overlapping Alerts**

The WR-300 radio can store up to TEN different alerts (with overlapping effective times) in its memory. If the radio receives a new alert while a previous alert is still in effect, it automatically displays the alert description and sounds the alert for the new alert message. To scroll backward and forward through the radio's memory and review all the effective alerts, press the UP arrow key to view the latest alert or the DOWN key to review the last 10 active alerts. Those alerts which have expired will be shown with "EXP" below the alert name.

### **When a Test or Demo Alert Occurs**

NWR sends out weekly test and occasional demonstration signals to let everyone with weather monitor receivers verify the operation of their equipment.

To find out the test schedule of for your area, contact the local NOAA or NWS office. Look for the number under US Government, Department of Commerce.

The following alert descriptions are for testing only.

What You See	What You Hear
<b>REQUIRED WEEKLY TEST</b>	<b>Beeps *</b>
<b>REQUIRED MONTHLY TEST</b>	<b>Beeps *</b>
<b>SYSTEM DEMO</b>	<b>Beeps *</b>
<b>NATIONAL PERIODIC TEST</b>	<b>Beeps *</b>

As the NWS adds new alert capabilities your radio is set to receive them and alert you automatically with no modifications.

### **Defeat Siren Alert Option**

This function is to set the Weather Monitor, when receiving some types of weather emergency messages, not to generate the siren or voice alert but only display the message in order not to annoy you. The responses followed by an asterisk in the above table can be silenced.

To choose message types to be silenced press the MENU key and the up or down arrow keys to find “DEFEAT SIREN” displayed. Press SELECT key and use up or down arrow keys to find the event type you wish to silence. Press the left or right arrow key to change the status of the event. The status is shown by the “ALERT ENABLE” or “ALERT DISABLE” icons at the bottom of the display. Press the up or down key to find another event type or press MENU key to exit this function.


### **Adding Future SAME Event Codes**

If the NWS finds it necessary to add alert codes in the future your WR- 300 will allow you to add five new SAME message

codes. The new SAME message code is divided into three (3) categories. They are:

- a). Event code (PIL code);
- b). Display text message on LCD
- c). severity status.

You must enter all of them to make the new SAME message function correctly.

 Remember that this is for future needs. No additional codes exist at press time. To add the new SAME message code, follow the steps below:

To add an event type press the MENU key and the up or down arrow keys to display “ADD ALERTS”. Press SELECT to display “NEW ALERT 1”. Press up or down arrow keys to choose a different number new alert or press ENTER key to activate the first of three characters below “NEW ALERT”. Use the up and down arrow keys and left and right arrow keys to select the alphabet characters to spell the three character event code of the new alert. Press SELECT key to display the line which will be shown on the display when this message is received. Eleven character spaces are available. Use the arrow keys to choose the letters and move from one space to the next on the line. The character selection which shows all segments of the display will make a blank in the spot where it is placed. When you have completed the description line press SELECT key to choose the level of the event. All event codes ending in A should be entered as WATCH. Those codes ending in W should be entered as WARNING. Those codes ending in S or E should be entered as ADVISORY.

### **Backlight of the Display**

Pressing and releasing a button will turn on the back light for about 5 seconds. For continuous backlight, press MENU, then select LIGHT. After pressing the “Select” button, press the Up or Down arrows to change from “Normal” to “Continuous” and press select to save your changes.

### **AM/FM radio use**

The AM/FM radio built into the WR-300 can be used for listening any time without interrupting the Weather Monitor functions. If an alert is received, the unit automatically switches off the AM/FM sound and operates the Weather Monitor alert functions you have programmed. Press the RADIO button to turn on or off the radio. Press the AM/FM button to switch between AM and FM.

### **AM/FM memory channels**

You can program 3 AM and 3 FM memories for your favorite stations. Use the UP and DOWN buttons to move between memory channels. To tune to another station, use the LEFT or RIGHT arrow buttons while the radio is on. You will see the frequency display change as you hold the button or press it once for each step of frequency.

### **Programming memory channels**

To set the channel frequency of a memory channel, turn on the radio and use the LEFT or RIGHT arrow buttons to adjust the frequency to the channel you desire. Next, press the MENU button. The MEMORY # will flash on the display. Use the UP or DOWN buttons to find the memory channel you wish to



program. Press SELECT button to set the memory channel to the frequency you selected.

**Button press Beeps**

When a button is pressed with the “Max / Volume / Off” switch ON, the WR-300 emits a beep sound. One beep represents that the WR-300 has received a command and has taken effective action. Two beeps represents the command is not valid (wrong button pressed) and no action is taken.

**TROUBLESHOOTING & HELP:**

<b>Problem</b>	<b>Suggestion(s)</b>
No power.	Ensure that the wall power adapter is connected to AC power, that the cord to the radio is securely seated in the radio and that a fresh back-up battery is installed (if AC power has failed).
No sound.	Check VOLUME setting
No weather broadcast when you press WEATHER	Ensure that telescoping antenna is fully extended.
	If you are using an external antenna, ensure that it is connected properly.
	Ensure that the radio is set to the NOAA weather channel in

	use in your area. Contact NOAA to ensure they are presently broadcasting.
The radio is not responding properly to NWS weather alert broadcasts	Ensure that you have programmed the correct FIPS code(s) into the radio's memory.
	If you desire to hear the alert or operate a device from EXT.ALERT jack ensure that display shows SIREN or VOICE icon.

For **HELP**, contact Midland Radio Corporation.  
(See the "Service" section in this manual for return instructions.)

**Midland Radio Corporation**  
**1120 Clay Street**  
**North Kansas City, Missouri 64116**  
**Phone: (816) 241-8500**  
**Fax: (816) 241-5713**  
**E-mail: [mail@midlandradio.com](mailto:mail@midlandradio.com)**  
**URL: [www.midlandradio.com](http://www.midlandradio.com)**

**NOTES AND MAINTENANCE:**

1. The typical weather (162MHz) reception distance will range from 25-50 miles depending on your location and conditions of weather, terrain, etc. Also, some Weather Stations operate at much higher power levels than others and have their

transmitting towers on the top of high buildings or hills. For better reception from greater distances, an external antenna can be used. To use an external antenna, you must have an antenna with an RCA phono plug or an adapter to RCA phono plug to connect into the back of the WR-300. If reception in your area is not good, check with your local dealer for assistance and ask about typical reception range in your area. Also try different locations in your home or office to find a place of good reception. A location near a window is a good starting place.

2. If Weather Stations cannot be heard on any channel, contact your local National Weather Service office to verify that the station is on the air and also verify the CHANNEL (Frequency) and location of the weather station.

3. All National Weather Service stations periodically transmit an Alert test signal. Some broadcast only once a week and others more often. You can always find out when the test signal is broadcast by calling the U.S. Weather Service's phone number for your local NOAA station.

4. Mobile home reception is difficult due to the metallic structure preventing reception. Put your WR-300 near a window. If this doesn't provide reasonable reception, an outside antenna must be used. One suggested antenna is the Midland 18-259W VHF through-glass antenna. This antenna works best on single pane windows but can improve reception when applied to double pane windows as well.

## **12 VOLT OPERATION**

Your WR-300 can be powered from any 12-Volt CAR-TRUCK-RV or BOAT battery. An optional (Model 18-235) power cord adapter is available from Midland or your local dealer.

## **FCC COMPLIANCE INFORMATION:**

**Midland NWR-SAME Weather Monitor**

**Model WR-300**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference.

This device must accept any interference received including interference that may cause undesired operation.

For compliance information contact:

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E-mail: [mail@midlandradio.com](mailto:mail@midlandradio.com)  
URL: [www.midlandradio.com](http://www.midlandradio.com)

**FIPS CODE FORM:**

Use this space to record the FIPS codes you have programmed into your WR-300-weather monitor.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

14. \_\_\_\_\_

15. \_\_\_\_\_

## **SERVICE:**

If your **MIDLAND Weather Monitor** 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
3. For warranty service include a photocopy of the bill of sale or other proof of purchase showing the date of sale.
4. You do not need to return accessory items (AC/DC Adapter, 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 cashiers check, money order or Master Card or Visa card number.

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## **ONE YEAR LIMITED WARRANTY:**

**MIDLAND Radio Corporation** will repair or replace, at its option without charge, your **WR-300** weather alert 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, Warranty Service Department, 1120 Clay St., N. Kansas City, Missouri 64116.

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.

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## **SPECIFICATIONS:**

Specifications are nominal and subject to change.

### **GENERAL**

Frequency Range                    AM 520-1710KHz  
    FM 87.5-108.5MHz  
    WX 162MHz  
(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    ..... 180MM W x 65MM H x 140MM D  
                                  (7 1/8 x 2 1/2 x 5 1/2 in.)

### **RECEIVER**

20 dB Quieting Sensitivity.....0.5 uV  
FIPS Code Sensitivity @5kHz Dev.....0.5uV  
Channel Selectivity                .....±25kHz, 60dB  
Speaker Impedance                .....8 ohms  
Power Output @10% THD.....250 mW max.

### **EXT. ALERT OUTPUT**

Sinking Current.....200mA DC max.  
States.....Alarm: pull down,.....Normal: open



## **GLOSSARY:**

- AM/FM..... Amplitude Modulated / Frequency Modulated.
- Band..... A specific range of wavelengths or frequencies where radio stations are located. The AM band is 530-1600 kHz, the FM band is 88-108 kHz.
- dB ..... Decibel. A unit used to express relative difference in power or intensity.
- FCC..... Federal Communications Commission  
Agency charged with regulating interstate and international **communications** by radio, television, wire, satellite and cable. [www.fcc.gov](http://www.fcc.gov)
- FIPS ..... Federal Information Processing System.
- kHz ..... Kilohertz. A unit of frequency equal to 1000 hertz.
- LCD ..... Liquid Crystal Display.
- LED ..... Light Emitting Diode.
- NOAA..... National Oceanic and Atmospheric Administration.  
**Environmental** data services, and provides a reference library for students, teachers, and researchers. [www.noaa.gov](http://www.noaa.gov)
- NWR/ SAME.. National Weather Radio / Specific Area Message Encoding.
- NWS ..... National Weather Service.  
Current **weather** conditions, forecasts, warnings, and weather safety. Offers maps, radar and satellite images, numerical models, and educational resources. [www.nws.noaa.gov](http://www.nws.noaa.gov)
- ohm..... A unit of electrical resistance equal to that of a conductor in which a current of one ampere is produced by a potential of one volt across its terminals.
- SAME..... Specific Area Message Encoding.
- WR-300 ..... Weather Alert Radio 300.
- WX channels .. Weather channels.



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