

## 810-163TWR FAQs

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### Weather Radio

#### Setup

- 1- Insert the included 6-volt AC power adapter into the wall outlet then into the weather radio.
- 2- Optional: Insert 3 new "AAA" batteries (not included) into the radio. Observe the correct polarity
- 3- The radio turns on automatically and searches for the first available weather band channel for 30 seconds.
- 4- Press button 6 (TORNADO ONLY / ALL ALERTS) to confirm the channel.  
**Note:** If the radio does not immediately turn on, press the POWER button one time.

#### ON/OFF

- ✓ The weather radio will automatically come on when powered up.

- ✓ Press and release the POWER button to turn ON or turn OFF the radio  
**Note:** The radio saves the last channel you are listening to, mode and volume used, when turned off.
- ✓ When the radio is on, hold the POWER button to enter setting menu.

## Volume

- ✓ In any radio mode, press and release the -VOL+ button to adjust the volume to a desired level. Levels 1-16 are available.
- ✓ Hold the -VOL+ button to change faster.

## Restart

- 1- Remove batteries and AC cord for 15 minutes.
- 2- Insert the included 6-volt AC power adapter into the wall outlet then into the weather radio.
- 3- Insert 3 new "AAA" batteries (not included) into the radio. Observe the correct polarity
- 4- The radio turns on automatically and searches for the first available weather band channel for 30 seconds.
- 5- Press button 6 (TORNADO ONLY / ALL ALERTS) to confirm the channel.

## Alert Status Lights

- ✓ During an active advisory, watch, or warning the corresponding status indicator will be lit until the alert time expires.

## Tornado Only Alerts or All Alerts

- ✓ The NOAA Weather Radio will default to All Alerts when first powered on.
  - ✓ One button activates the TORNADO ONLY OPTION.
  - ✓ No programming required.
  - ✓ This filters out unwanted alerts when you want to sleep.
- 1- Press the TORNADO ONLY / ALL ALERTS button to toggle between Tornado Only Alerts and All NOAA Alerts.
  - 2- Hold the TORNADO ONLY / ALL ALERTS button to enter (or exit) standby mode for either alert selection.
  - 3- The blue **Armed** light will flash every 5 seconds in standby mode.

## Tornado Only Alerts Active

The radio will alert you to Tornado watches and warnings only. Other types of alerts will be ignored.

- ✓ Backlight flashes red for watches and warnings.
- ✓ The alert message will scroll across the top of the LCD.
- ✓ The volume level will increase to level 16 (the maximum sound) automatically.
- ✓ Press the -VOL+ button to adjust the volume as needed.
- ✓ The radio will stop broadcasting when the final tone of the message is received.
- ✓ If a tone or audio alert is automatically activated it must remain active for at least 8 seconds.

## All Alerts Active

Receive every advisory, watch and warning including tornadoes. Be fully prepared for any weather situation.

- ✓ Backlight flashes red for watches and warnings.
- ✓ The alert message will scroll across the top of the LCD.
- ✓ The volume level will increase to level 16 (the maximum sound) automatically.
- ✓ Press the -VOL+ button to adjust the volume as needed.
- ✓ The radio will stop broadcasting when the final tone of the message is received.
- ✓ If a tone or audio alert is automatically activated it must remain active for at least 8 seconds.

## Standby Mode

- ✓ Hold the TORNADO ONLY / ALL ALERTS button) for 5 seconds to enter or exit standby mode.
- ✓ The blue ARMED light will flash every 5 seconds.
- ✓ When an alert happens, the radio will unmute and play the alert message.
- ✓ The message will scroll across the top of the LCD.
- ✓ Once the message is complete, the radio will return to standby mode.

## Weather Band Channels

The IC chip supports weather band reception from 162.4 to 162.55 MHz. The highly integrated IC chip meets NOAA specification, receives all seven NOAA specified frequencies, implements narrowband FM de-emphasis, and supports 1050 Hz alert tone detection. In addition, this IC chip provides advanced features not available on conventional radios, such as an AFC and a dynamic channel bandwidth filter

The weather alert radio can receive 7 weather band (WB) frequencies:

- Channel 1: 162.400MHz
- Channel 2: 162.425MHz
- Channel 3: 162.450MHz
- Channel 4: 162.475MHz
- Channel 5: 162.500MHz
- Channel 6: 162.525MHz
- Channel 7: 162.550MHz

In WB mode the radio will continually broadcasts weather radio.

## Tuning

- ✓ Use the TUNING wheel to select a station.

## Optional Professional Settings: FIPS Codes | Alerts

- ✓ The optional Pro-Settings provide allow you to select specific alerts only.
- ✓ You can customize the alerts to up to 4 specific FIPS codes.  
**Note:** The FIPS county code is a five-digit Federal Information Processing Standard (FIPS) code (FIPS **6-4**) which uniquely identifies counties and county

equivalents in the United States, certain U.S. possessions, and certain freely associated states.

- ✓ **These settings are not required for the alerts to function.**
- ✓ **Note:** If you turn off specific alerts, you must turn them back on again if you want to receive them.

1. With the radio on, hold the POWER button to enter the setting menu.
2. Press the TUN> button to select Scroll Speed (1-3).
3. Press the TORNADO ONLY / ALL ALERTS button and a number from 1-3 will appear.
4. Use the -VOL+ button to adjust the scroll speed.
5. Press the TORNADO ONLY / ALL ALERTS button) to confirm the setting.
6. Press the TUN> button to select FIPS Codes.
7. Press the TORNADO ONLY / ALL ALERTS button) and the first FIPS Code will appear as 000000. The first number will flash.
8. Use the -VOL+ button to adjust the first number in the FIPS code.
9. Press the TUN> button to move through the next numbers and the -VOL+ button to adjust.
10. Press the TORNADO ONLY / ALL ALERTS button) to confirm and move to the next FIPS Code. Repeat steps 8-10 to set up to four FIPS Codes.
11. Press the TORNADO ONLY / ALL ALERTS button) to confirm.
12. Press the TUN> button to move to Alerts Selection.  
**Note:** Alerts selection list is at the back of this manual.
13. Press the TORNADO ONLY / ALL ALERTS button to view the first alert (3 letter event code). ON will flash.
14. Use the -VOL+ button to change to NO if you do not want that alert.
15. Press the TUN> button to move to the next alert. Repeat steps 13-15 to view and select all the alerts.  
**Note:** Some alerts are mandatory and cannot be turned off.
16. Press the TORNADO ONLY / ALL ALERTS button) to confirm your selections.
17. Press the POWER button once to exit the setting menu.

#### Optional Alerts (events) to enable or disable

- ✓ Not all alerts can be disabled.
- ✓ **Note:** If you turn off specific alerts, you must turn them back on again if you want to receive them.

| Event Codes | Description               | Enable or Disable | Default  | Level    |
|-------------|---------------------------|-------------------|----------|----------|
| ADR         | Administrative message    | Yes               | Disabled | Advisory |
| AVA         | Avalanche Watch           | Yes               | Enabled  | Watch    |
| AVW         | Avalanche Warning         | Yes               | Enabled  | Warning  |
| BHW         | Biological Hazard Warning | No                | Enabled  | Warning  |
| BWW         | Boil Water Warning        | Yes               | Enabled  | Warning  |
| BZW         | Blizzard Warning          | Yes               | Enabled  | Warning  |
| CAE         | Child Abduction Emergency | Yes               | Enabled  | Advisory |

|     |                               |     |          |          |
|-----|-------------------------------|-----|----------|----------|
| CDW | Civil Danger Warning          | No  | Enabled  | Warning  |
| CEM | Civil Emergency Message       | No  | Enabled  | Warning  |
| CFA | Coastal Flood Watch           | Yes | Enabled  | Watch    |
| CFW | Coastal Flood Warning         | Yes | Enabled  | Warning  |
| CHW | Chemical Hazard Warning       | No  | Enabled  | Warning  |
| CWW | Contaminated Water Warning    | No  | Enabled  | Warning  |
| DBA | Dam Watch                     | Yes | Enabled  | Watch    |
| DBW | Dam Break Warning             | No  | Enabled  | Warning  |
| DEW | Contagious Disease Warning    | No  | Enabled  | Warning  |
| DMO | Practice/Demo                 | Yes | Disabled | Advisory |
| DSW | Dust Storm Warning            | Yes | Enabled  | Warning  |
| EAN | Emergency Action Notification | No  | Enabled  | Warning  |
| EAT | Emergency Action Termination  | No  | Enabled  | Advisory |
| EQW | Earthquake Warning            | No  | Enabled  | Warning  |
| EVI | Immediate Evacuation          | No  | Enabled  | Warning  |
| EVA | Evacuation Watch              | Yes | Enabled  | Watch    |
| FCW | Food Contamination Warning    | No  | Enabled  | Warning  |
| FFA | Flash Flood Watch             | Yes | Enabled  | Watch    |
| FFS | Flash Flood Statement         | Yes | Enabled  | Advisory |
| FFW | Flash Flood Warning           | Yes | Enabled  | Warning  |
| FLA | Flood Watch                   | Yes | Enabled  | Watch    |
| FLS | Flood Statement               | Yes | Enabled  | Advisory |
| FLW | Flood Warning                 | Yes | Enabled  | Warning  |
| FRW | Fire Warning                  | Yes | Enabled  | Warning  |
| FSW | Flash Freeze Warning          | Yes | Enabled  | Warning  |
| FZW | Freeze Warning                | Yes | Enabled  | Warning  |
| HLS | Hurricane Statement           | Yes | Enabled  | Advisory |
| HMW | Hazardous Materials Warning   | No  | Enabled  | Warning  |
| HUA | Hurricane Watch               | Yes | Enabled  | Watch    |
| HUW | Hurricane Warning             | No  | Enabled  | Warning  |
| HWA | High Wind Watch               | Yes | Enabled  | Watch    |
| HWW | High Wind Warning             | Yes | Enabled  | Warning  |
| IBW | Iceberg Warning               | Yes | Enabled  | Warning  |
| IFW | Industrial Fire Warning       | No  | Enabled  | Warning  |

|     |                                |     |          |          |
|-----|--------------------------------|-----|----------|----------|
| LAE | Local Area Emergency           | No  | Enabled  | Advisory |
| LEW | Law Enforcement Warning        | No  | Enabled  | Warning  |
| LSW | Landslide Warning              | No  | Enabled  | Warning  |
| NAT | National Audible Test          | Yes | Disabled | Advisory |
| NIC | National Information Center    | Yes | Disabled | Advisory |
| NMN | Network Notification           | Yes | Disabled | Advisory |
| NPT | National Periodic Test         | Yes | Disabled | Advisory |
| NST | National Silent Test           | Yes | Disabled | Advisory |
| NUW | Nuclear Power Plant Warning    | No  | Enabled  | Warning  |
| POS | Power Outage Advisory          | Yes | Enabled  | Advisory |
| RHW | Radiological Hazard Warning    | No  | Enabled  | Warning  |
| RMT | Required Monthly Test          | Yes | Disabled | Advisory |
| RWT | Required Weekly Test           | Yes | Disabled | Advisory |
| SMW | Special Marine Warning         | Yes | Enabled  | Warning  |
| SPS | Special Weather Statement      | Yes | Enabled  | Advisory |
| SPW | Shelter-in-Place Warning       | No  | Enabled  | Warning  |
| SVA | Severe Thunderstorm Watch      | Yes | Enabled  | Watch    |
| SVR | Severe Thunderstorm Warning    | Yes | Enabled  | Warning  |
| SVS | Severe Weather Statement       | Yes | Enabled  | Advisory |
| TOA | Tornado Watch                  | Yes | Enabled  | Watch    |
| TOE | 911 Telephone Outage Emergency | Yes | Enabled  | Advisory |
| TOR | Tornado Warning                | No  | Enabled  | Warning  |
| TRA | Tropical Storm Watch           | Yes | Enabled  | Watch    |
| TRW | Tropical Storm Warning         | No  | Enabled  | Warning  |
| TSA | Tsunami Watch                  | No  | Enabled  | Watch    |
| TSW | Tsunami Warning                | No  | Enabled  | Warning  |
| TXB | Transmitter Backup On          | Yes | Disabled | Advisory |
| TXF | Transmitter Carrier Off        | Yes | Disabled | Advisory |
| TXO | Transmitter Carrier On         | Yes | Disabled | Advisory |
| TXP | Transmitter Primary On         | Yes | Disabled | Advisory |
| VOL | Volcano Warning                | No  | Enabled  | Warning  |
| WFA | Wild Fire Watch                | Yes | Enabled  | Watch    |
| WFW | Wild Fire Warning              | No  | Enabled  | Warning  |
| WSA | Winter Storm Watch             | Yes | Enabled  | Watch    |

|     |                      |     |         |         |
|-----|----------------------|-----|---------|---------|
| WSW | Winter Storm Warning | Yes | Enabled | Warning |
|-----|----------------------|-----|---------|---------|

### Optional Codes

The definitions below explain how a receiver should react to future alert messages that at the time this standard was published were not identified.

It is expected that all future watch codes will end in **A**, that all future emergency codes will

end in **E**, that all future statement codes will end in **S** and all future warning codes will end in **W**.

Implementation of an algorithm using these wildcard event codes would enable the receiver to respond to any additional event codes that might be transmitted in the future.

Devices that implement the functionality described in this standard, and that include an option for the user to turn this functionality on or off, must have ALERT ENABLED (i.e. functionality turned on) as the default mode, and must be shipped from the factory in that mode.

For items marked ENABLED the device must provide audible, visual or external indication of the alert.

|             |                        |     |         |          |
|-------------|------------------------|-----|---------|----------|
| ?? <b>A</b> | Unrecognized Watch     | Yes | Enabled | Watch    |
| ?? <b>E</b> | Unrecognized Emergency | Yes | Enabled | Advisory |
| ?? <b>S</b> | Unrecognized Statement | Yes | Enabled | Advisory |
| ?? <b>W</b> | Unrecognized Warning   | Yes | Enabled | Warning  |

## AM or FM Radio

### AM Radio:

The highly integrated IC chip supports worldwide AM band reception from 520 to 1710 kHz using a digital low-IF architecture with a minimum number of external components and no manual alignment required. This digital low-IF architecture allows for high-precision filtering offering excellent selectivity and SNR with minimum variation across the AM band.

- ✓ With the radio ON press and release the AM/FM button to select AM or FM radio.
- ✓ Press the <TUN> button to increase or decrease the radio frequency.
- ✓ Hold the <TUN> button to search for the next available station.

### FM Radio:

The FM receiver is based on the proven FM tuner. The receiver uses a digital low-IF architecture allowing the elimination of external components and factory adjustments. The IC chip integrates a low noise amplifier (LNA) supporting the worldwide FM broadcast band (64 to 108 MHz).

- ✓ With the radio ON press and release the AM/FM button to select AM or FM radio.
- ✓ Press the <TUN> button to increase or decrease the radio frequency.
- ✓ Hold the <TUN> button to search for the next available station.

## Bright LED Light

- ✓ Press the LIGHT button on the side of the radio to operate the very bright 0.5 watt LED flashlight.

#### Optional Earphones (not included)

- ✓ Plug in a set of 3.5mm earphones (not included) into the 3.5mm earphone jack to privately listen to the radio.