

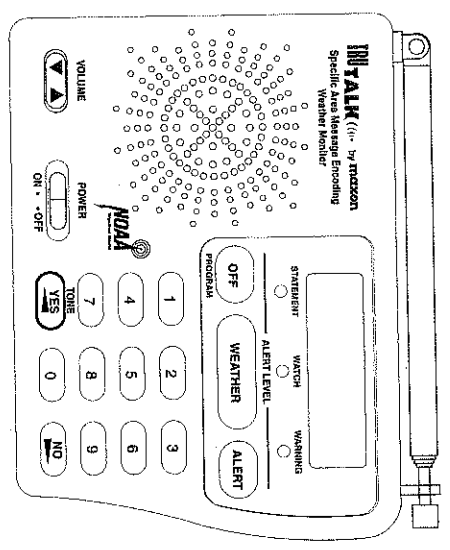
OFFICE COPY

**IRI TALK** by **maxon**

**WX-80**

**SAME**

**Weather Monitor**



**Operating Instructions**

## Table of Contents

|       |   |    |
|-------|---|----|
| I.    | FCC Information.....                                  | 1  |
| II.   | About Topaz3.....                                     | 2  |
| III.  | About Your WX-80.....                                 | 2  |
| IV.   | Unpacking and Checking Equipment.....                 | 4  |
| V.    | Getting to Know Your WX-80.....                       | 4  |
| VI.   | Powering the Weather Monitor.....                     | 6  |
|       | Installing the Backup Battery.....                    | 6  |
|       | Connecting the Weather Monitor to AC Power.....       | 6  |
|       | Using the Built-In Antenna.....                       | 7  |
| VII.  | Listening to a Weather Broadcast.....                 | 8  |
| VIII. | Programming Your WX-80.....                           | 8  |
|       | Factory Default Programming.....                      | 9  |
|       | Setting the Alert Type.....                           | 9  |
|       | Setting the Backlight.....                            | 12 |
|       | Understanding SAME Geographic (FIPS) Codes.....       | 14 |
|       | Monitoring Single or Multiple Locations.....          | 15 |
|       | Entering FIPS Location Codes.....                     | 17 |
| IX.   | Alert Tones.....                                      | 19 |
| X.    | Finding the Best Location for Your WX-80 Monitor..... | 21 |
|       | Testing the Alert Tone.....                           | 26 |
| XI.   | Using the Alert Function.....                         | 26 |
|       | Setting the Alert Tone Volume.....                    | 27 |
|       | Setting the WX-80's "All Signals" Code.....           | 28 |
|       | Reviewing Overlapping Alerts.....                     | 29 |
|       | When a Test or Demo Alert Occurs.....                 | 30 |
|       | Undefined Weather Descriptions.....                   | 31 |
|       | Test Mode.....  | 31 |
| XII.  | NWS Weather Event Descriptions.....                   | 32 |
| XIII. | Specifications.....                                   | 34 |
| XIV.  | Maintenance.....                                      | 38 |
| XV.   | Warranty Service Instructions.....                    | 39 |
| XVI.  | Warranty Statement.....                               | 40 |

## I. FCC INFORMATION

The FCC (Federal Communications Commission) requires that you be advised of certain requirements involving the use of this device. This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC Rules and Regulations. These rules are designed to provide reasonable protection against harmful interference in a residential environment.

This equipment uses and can generate radio frequency (RF) energy. If not used in accordance with the instructions, it may cause interference to other radio communications. However, there is no guarantee that the interference will not occur in another device's reception (which can be determined by turning the equipment off and on). The user is encouraged to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the radio and other devices
- Consult the manufacturer for technical assistance

**FCC Warning:** This equipment generates or uses radio frequency (RF) energy. Changes or modifications not expressly approved in writing may cause harmful interference and void the user's authority to operate this equipment.

1

## II. ABOUT TOPAZ3

Topaz3 is the exclusive supplier of Maxon®, Legacy and TruTalk brand communication products.

Our product line ranges from two-way radios suitable for Business and Industry (B&I) markets like farm, government, law enforcement, utility, etc. to consumer communications equipment for recreational and light-duty business markets.

Product offerings include a variety of UHF and VHF handheld and mobile radios, repeaters and RF link modules, as well as FRS (Family Radio Service), GMRS (General Mobile Radio Service) radios, MURS (Multi User Radio Service) radios, Citizen's Band radios and weather monitors.

Available accessory items include a variety of carrying cases, spare batteries, desktop and mobile chargers, earbud speaker microphones and more for each radio model.

For additional information on our product line, visit our website: [www.topaz3.com](http://www.topaz3.com)

## III. ABOUT YOUR WX-80

The WX-80 SAME Weather Monitor "hears" weather alert broadcasts from the National Weather Service, and announcements from the Emergency Alert System to keep you aware of ever-changing conditions.

SAME (Specific Area Message Encoding) technology lets you program the monitor to receive forecasts, updates

2

### III. ABOUT YOUR WX-80, Continued

targeted to your area. The unit stores up to 15 SAME geographic codes, allowing you to hear weather events in the counties you choose - not those far away from you.

Other features of the TruTalk WX-80 include:

- Provides instant weather information anytime night or day - up to 50 miles from nearest transmitter
- Stores up to 15 SAME geographic codes - allowing you to hear weather events in the counties you choose
- Meets EAS (Emergency Alert System) standards
- LED Indicators identify alert types: Statement, Watch and Warning
- Keypad selects weather channel, enters SAME geographic codes and chooses alert type
- Backlit 8-character LCD shows specific emergency messages
- Variable alert tone and audio broadcast volume levels
- Built-in "test mode" confirms operation and resets to factory default settings
- Separate alert "off" control button
- Telescopic antenna
- AC Power operation (AC power adaptor included)
- 9V Battery backup keeps you advised during power outage (battery not included)
- Compact monitor can be used on counter or wall-mounted
- One Year Warranty

3

### IV. UNPACKING AND CHECKING EQUIPMENT

Carefully unpack the monitor and any accessories. Use the item list below to identify the components included in the product packaging, to ensure that no items are discarded in the packing materials.

WX-80 Weather Monitor  
AC Power adaptor  
Wall mounting hardware

If any items are missing or damaged, you should contact the Topaz3 Customer Service Department. Dial 1-800-821-7848, Ext. 499 for assistance.

### V. GETTING TO KNOW YOUR WX-80

- A) Speaker - announces event messages and alert tones
- B) Telescopic antenna - extends for maximum radio reception
- C) 8-Character LCD - displays event message, radio alert status and low battery condition
- D) Statement, Watch, Warning LED's - visually confirms weather event status condition
- E) ALERT Button - used to turn alert on or off
- F) WEATHER Button - used to obtain NWS weather announcements anytime night or day
- G) OFF / PROGRAM Button - used to turn off weather alert siren and enter programming mode
- H) Numeric keypad - used to enter SAME geographic codes

4

## V. GETTING TO KNOW..., Continued

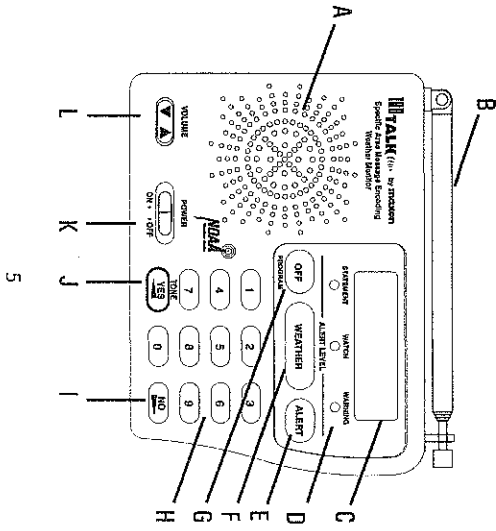
- I) NO Function selection button - declines function during programming
- J) YES / Tone Function button - selects function during programming; adjusts alert siren tone
- K) Power On / Off switch
- L) Volume up / down switch

### Monitor base (not shown):

Battery compartment door, Wall mounting keyholes

### On Monitor side (not shown):

External antenna jack, DC Power jack



## VI. POWERING THE WEATHER MONITOR

Your WX-80 weather monitor uses standard 12V DC power for normal operation and one 9V battery (not supplied) for backup power when standard power fails or is temporarily disconnected. For the best performance and longest life during power failure, we recommend an alkaline battery. A fresh backup battery will power the weather monitor for up to 1 hour with the weather broadcast turned on or up to 8 hours in alert standby mode. However, we recommend you always connect the weather monitor to AC power for normal use.

**Remember, when the unit is powered OFF, no alert signal will be received, even with a backup battery installed!** The unit must be "ON" to receive alerts and broadcasts.

### Installing the Backup Battery

1. Place the monitor's power on / off switch into the "OFF" position by sliding it to the right.
2. Press the tab on the battery compartment cover, lift the cover up and set it aside.
3. Using a fresh 9V alkaline battery, "snap" the terminal connector onto the battery, and place the battery into the compartment, taking care not to crimp or damage the wiring.
4. Replace the cover.
5. Power ON the WX-80 by sliding the power switch to the left ("ON" position).

## VI. POWERING THE WEATHER..., Continued

### Installing the Backup Battery, Continued

**NOTE:** Do NOT use a rechargeable-type battery in your weather monitor. Use standard alkaline batteries only.

**NOTE:** If the backup battery becomes weak, your weather monitor might not sound a tone when an emergency or test alert is broadcast. Check the monitor's reception periodically, and replace the battery as needed.

**CAUTION:** Dispose of an old or weak battery promptly and properly. Do not burn or bury it. Batteries can leak chemicals that can cause personal injury and/or damage to the monitor unit.

When "REPLACE BATTERY" appears on the radio display or the weather monitor stops operating (while under battery-only power), replace the battery with a fresh one. "REPLACE BATTERY" will also appear on the radio display if no backup battery is installed and the weather monitor is connected to AC power and then turned on. **This is to remind you that the battery backup capability will not work in times of AC power outages without a battery installed!**

### Connecting the Weather Monitor to AC Power

1. Place the monitor's power on / off switch into the "OFF" position by sliding it to the right.

7

## VI. POWERING THE WEATHER..., Continued

### Connecting the Weather Monitor..., Continued

2. Plug the AC power adaptor into the power jack on the left side of the monitor.
3. Plug the power adaptor into a standard, household 110V AC outlet.

### Using the Built-In Antenna

The weather monitor's built-in telescoping antenna lets you receive strong local signals. Lift the antenna to a vertical position, then full extend it for optimum reception.

To improve reception in remote areas, you can connect an external 50 Ohm antenna to your weather monitor using an optional adapter cable with an RCA plug connected to the side panel EXT ANT (External Antenna) jack. Your local electronics store sells a wide variety of antennas. Follow the installation instructions provided with the antenna to connect to the WX-80 monitor.

## VII. LISTENING TO A WEATHER BROADCAST

Your weather monitor is pre-programmed with the 7 NOAA weather broadcast frequencies (Channels 1-7). To select a frequency broadcast for your area, follow steps outlined on the next few pages.

8

### VII. LISTENING TO A WEATHER..., Continued

1. With the WX-80 powered ON, push the "WEATHER" button to activate the monitor audio circuitry.
2. Adjust the audio volume to the desired listening level using the Volume Up / Down bar. Volume settings range from 1 - the lowest setting, to 8 - the highest setting. The audio volume control has a mute setting (volume setting 0) that will allow you to temporarily mute all audio.
3. To turn off the weather broadcast, press the WEATHER button again.

### VIII. PROGRAMMING YOUR WX-80

#### Factory Default Programming

Your weather monitor is preprogrammed to receive broadcasts for ALL area broadcasts and ALL weather alert types. This is called "All Signals Code", (refer to Table of Contents for page number). The first time you use your weather monitor, you will find that it is automatically set to use the NOAA weather broadcast frequency 162.550 MHz (Channel 1).

Depending on your location, you may need to select a different channel, determined by your local area NWS transmitter frequency. Follow these steps to select your local broadcast frequency.

**IMPORTANT:** During all programming modes, if there

### VIII. PROGRAMMING YOUR WX-80, Continued

#### Factory Default Programming, Continued

is a pause of 40 seconds without a key press, the WX-80 will store current settings and return to operations mode. This will ensure that the WX-80 is operational, should there be any interruptions during your programming setup.

The following programming instructions are broken down by specific function. Each programming topic ends by terminating the programming and returning to standby or operating mode.

All programming functions can be set in one session should you desire to program multiple functions before returning to operations mode. The YES key is used to accept the current display setting and will continue to advance you to the next programming step, allowing you to skip options that you do not wish to change.

1. Power the WX-80 weather monitor "on" by sliding the on/off switch to the left. You will hear a tone to confirm power is ON.
2. Press the OFF/PROGRAM button for 2 seconds to begin the programming mode. The display will show the last selected weather channel (possibly the default setting frequency).
3. Press the WEATHER button to activate the weather audio, then push the volume up or down key to

## VIII. PROGRAMMING YOUR WX-80, Continued

### Factory Default Programming, Continued

adjust the broadcast volume to desired level.

4. Press the number keys, in sequence, from 1 through 7 to find the broadcast channel for your area, by listening for the strongest signal. Re-adjust the volume level if necessary, then listen briefly to the announcement message to ensure information about your local area is being broadcast. If another channel seems strong, go to that channel and listen to its broadcast. Choose the channel which best represents information for your location.

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

5. When you have selected the best channel for your location, push the YES button to store your selection and advance to the next programming step, "Setting the Alert Type", or push the OFF / PROGRAM key for 2 seconds to store the selection and set mode to operate. The current alert status (WEATHER ALERT ON or WEATHER ALERT OFF) appears.

## VIII. PROGRAMMING YOUR WX-80, Continued

### Setting the Alert Type

You can set the WX-80 weather monitor to respond to an NWS alert broadcast in one of two ways. When the monitor is powered on and activated by an alert signal, the following will occur (by setting selection):

**VOICE** - when activated by an alert signal, the weather monitor sounds an alert beep or siren for about 8 seconds, then automatically broadcasts the weather for 5 minutes. Then it returns to standby operation. The display shows the alert description (such as TORNADO WARNING) until the alert's effective time expires. An alert could be in effect for several hours.

**ALERT** - when activated by an alert signal, the weather monitor sounds an alert beep or siren continuously and displays an alert description until the alert's effective time expires. To turn off the alert sooner, press the OFF button. To hear the NWS voice broadcast, press the WEATHER button.

**NOTE:** When the weather monitor's alert expires or you turn it off, you hear the NWS alert termination tone (three bursts) for a few seconds before you hear the voice broadcast. The NWS alert termination tone has a different sound than the weather monitor's alert tone.



### VIII. PROGRAMMING YOUR WX-80, Continued

#### Setting the Alert Type, Continued

The weather monitor is set to the ALERT setting as the factory default. To change the alert type setting to VOICE (or to check the current selection), follow these steps:

1. With the WX-80 powered on, push the OFF/PROGRAM button for 2 seconds to set mode to program.
2. Press the YES button once to advance to the Alert Type setting. The current alert pattern selection (VOICE or ALERT) appears on the display.
3. To select the alternate setting (choosing VOICE instead of ALERT or choosing ALERT instead of VOICE) press the NO button. The alternate setting appears. To toggle between settings, press the NO button more than once. Your selection is saved by pressing the YES button.

**NOTE:** Pressing the NO button repeatedly will alternate or toggle between the selection of ALERT and VOICE.

4. When your selection appears on the display, push the YES button to store the selection and advance to the next programming step, (Setting the Backlight) or push the OFF/PROGRAM button for 2 seconds to store the selection and set mode to operate. The current alert status

### VIII. PROGRAMMING YOUR WX-80, Continued

#### Setting the Alert Type, Continued

(WEATHER ALERT ON or WEATHER ALERT OFF) will appear in the display.

#### Setting the Backlight

Your weather monitor's display backlight automatically turns on for about 10 seconds each time you press a key. For extended use in low light situations, you can set the backlight so it remains on continuously until you turn it off. **NOTE:** The monitor must be connected to AC power to have a continuous backlight setting.

Follow these steps to turn the backlight on or off.

1. With the WX-80 powered on, push the OFF/PROGRAM button for 2 seconds to set mode to program.
2. Press the YES button twice so "CONTINUED" (continuous) and "BACKLITE" alternately flash on the display.
3. Press the YES button to accept the continuous backlight setting, or press the NO button to turn off the continuous backlight. **NOTE:** If you choose NO, the backlight setting will turn off 10 seconds after the last button press. The display will advance to the next programming step, "Single or Multiple Location Monitoring".
4. Push the OFF/PROGRAM button for 2 seconds to

## VIII. PROGRAMMING YOUR WX-80, Continued Setting the Backlight, Continued

store the selection and set mode to operate. The current alert status (WEATHER ALERT ON or WEATHER ALERT OFF) appears.

### Understanding SAME Geographic Codes

**NOTE: In the following text, SAME Geographic Codes are also known as FIPS Codes.** The National Oceanic and Atmospheric Administration (NOAA) began broadcasting coded weather alert signals able to identify specific areas where the weather emergency is forecasted to occur. These Specific Area codes are called FIPS (Federal Information Processing System) codes. A unique FIPS code is assigned to every county or parish throughout the United States and all US territories.

Example: The 6-digit FIPS code to identify Kansas City, Missouri (Jackson County) is 029095.

The first digit in a FIPS code identifies the county subdivision, used only for extremely large counties or counties with geographically unusual shapes such as a long, narrow county. The next two digits identify the state, and the last three digits identify the county or parish.

## VIII. PROGRAMMING YOUR WX-80, Continued Understanding SAME Geographic..., Continued

**NOTE:** Most FIPS codes begin with 0, which means that FIPS code represents an entire county. The NWS has future plans to subdivide some large counties. When that happens, each subdivision will be assigned a digit from 1 - 9, resulting in codes such as 129059, 229059, and so on.

**Event Codes** - Emergency events, such as weather emergencies or civil emergencies, are also assigned a code known as an Event Code. These event codes are used to identify an emergency by type.

Example: (TOW) for Tornado Warning.

**SAME** - (Specific Area Message Encoding) combines the FIPS Code to identify a specific area and an Event Code to specify the particular emergency event for that area. The area and event identification data is followed by a voice message pertaining to the emergency situation for that area. This data is then digitally encoded and broadcast by your local NOAA Weather Radio (NWR) station.

Your WX-80 weather monitor can receive all SAME alert signals broadcast within about a 40 to 50 mile radius of the NWR transmitter tower. To receive SAME alerts about weather emergencies occurring only

### VIII. PROGRAMMING YOUR WX-80, Continued

#### Understanding SAME Geographic..., Continued

In particular counties of interest, you can program up to 15 FIPS codes into the weather monitor's memory. This allows you to avoid hearing an alert that applies to an area that is possibly several counties from you.

#### Obtaining Your Area's FIPS Code(s)

To obtain the FIPS code for your current location, call the National Weather Service toll free at 1-888-NWR-SAME (1-888-697-7263). Follow the instructions as prompted to enter your state and county location. The system will respond with the FIPS code for that county. If you are close to a county line, you might want to obtain the codes for the neighboring county or other nearby counties of interest to you.

#### Monitoring Single or Multiple Locations

Your WX-80 Weather Monitor will monitor either a single location or up to 15 locations, determined by the number of SAME Geographic Codes you enter, or choose to monitor.

To set the weather monitor to single or multiple locations, use the following steps:

1. With the WX-80 powered on, push the OFF/PROGRAM button for 2 seconds to set mode to program.

### VIII. PROGRAMMING YOUR WX-80, Continued

#### Monitoring Single or Multiple..., Continued

2. Press the YES button three times so the word SINGLE or MULTIPLE appears on the display.
3. To select the opposite setting (MULTIPLE rather than SINGLE), press the NO button. The setting you selected appears. Pressing the NO button repeatedly will alternate the selection between SINGLE and MULTIPLE until the YES button is pressed.
4. Press the YES button to select the option of your choice. The display will advance to the next programming step, "Entering the FIPS Location Codes". Whether you choose the SINGLE or MULTIPLE location option, the first memory location (LOC 1) and the FIPS Code stored will now alternately flash on the display.
5. Push the OFF/PROGRAM key for 2 seconds to store the selection and set mode to operate. The current alert status (WEATHER ALERT ON or WEATHER ALERT OFF) appears.

\*055085 FIPS Code Omaha

NOTE:  
IF ONLY WANT  
ALERTS FOR ONEIDA COUNTY,  
SELECT SINGLE

## VIII. PROGRAMMING YOUR WX-80, Continued

### Entering FIPS Location Codes

Your weather monitor is preset to use a default "All Signals" code (code 99), this lets the WX-80 receive any weather alert broadcast within its reception range (about a 50-mile radius in most locations). This code is preset in the weather monitor's first memory location (LOC 1 - 99).

To change the FIPS code in any of the memory location cells (LOC 1 through LOC 15), press the NO button while the LOC and code are flashing alternately. Pressing "NO" tells the WX-80 that you do not want the existing code and intend to change it to another code.

**NOTE:** This flashing code may be the default code of '99'. This code value sets the WX-80 to monitor ALL broadcasts within the area regardless of location code.

Follow these steps to program the weather monitor to the FIPS code for your local county or counties that you would like to monitor.

1. With the WX-80 powered on, push the OFF/PROGRAM button for 2 seconds to set mode to program.
2. Press the YES button four times so the word "LOC 1" (location 1) and "99" (the default code or an existing programmed FIPS code) flashes on the display. If you choose to monitor multiple

19

## VIII. PROGRAMMING YOUR WX-80, Continued

### Entering FIPS Location Codes, Continued

locations, this will be the first of fifteen FIPS codes (LOC 1 - LOC 15) that can be stored and monitored.

3. If you do NOT want to retain the existing FIPS code in this location cell, press the NO button. Proceed to Step 5 to enter the new FIPS code.

4. If you DO want to retain the FIPS code currently in this location cell, press the YES button. The WX-80 will advance to the next location cell (2 - 15). At each location cell, you must make the same choice to either keep the existing FIPS code or to enter a new FIPS code.

5. To add or change a code in a different location, press the YES button repeatedly until you see the first unused memory location or the code you want to change, then press the NO button to clear the existing code. Six dashes (-----) will appear allowing you to enter a new FIPS code for that location cell. Use the number keys (0-9) to enter the 6-digit FIPS code you want to store.

**NOTE:** If you make a mistake while entering the code press NO to clear all digits. The dashes (-----) will reappear and allow you to enter the correct code.

6. Press the YES button to store the desired codes in memory.

**VIII. PROGRAMMING YOUR WX-80, Continued**

**Entering FIPS Location Codes, Continued**

**Reminder:** If you set the weather monitor to its multiple location mode, the code (if any) stored in the next memory position appears. Repeat Steps 3-6 for each code (up to 15) you want to change or add.

To reset the weather monitor to receive **ALL SAME** signals within a 50-mile radius, simply enter 99 in the first memory location. The display will read: LOC 1 99.

When you press the YES button to store a code in the last location cell (LOC 15), the display will advance to the next programming step, Alert Tones.

7. Push the OFF/PROGRAM button for 2 seconds to store the selection and set mode to operate. The current alert status (WEATHER ALERT ON or WEATHER ALERT OFF) appears on the display.

**IX. ALERT TONES**

You have the option to activate or turn off various types of "geographically confined" weather event alert tones received by your weather monitor. Optional alerts such as "Avalanche Watch", "Coastal Flood Warning" and "Volcano Warning" are naturally confined to their geographical restrictions.

**IMPORTANT NOTE:** Weather alerts for unpredictable

**IX. ALERT TONES, Continued**

weather hazards such as "Tornado Warning" can **NOT** be turned off by the user, and do not appear as options on the chart below.

You can set the weather monitor so it sounds or does not sound an alert tone during the following types of events. **NOTE:** The weather monitor still detects and displays information about alerts even after you disable the tone for those alerts. Use this table to note the status of each alert setting as you are programming.

| Event Type                | Alert: | On | Off |
|---------------------------|--------|----|-----|
| Severe Thunderstorm Watch |        |    |     |
| Severe Weather Statement  |        |    |     |
| Special Weather Statement |        |    |     |
| Flash Flood Watch         |        |    |     |
| Flash Flood Warning       |        |    |     |
| Flash Flood Statement     |        |    |     |
| Flood Watch               |        |    |     |
| Flood Warning             |        |    |     |
| Flood Statement           |        |    |     |
| Winter Storm Watch        |        |    |     |
| Winter Storm Warning      |        |    |     |
| Blizzard Warning          |        |    |     |
| High Wind Watch           |        |    |     |
| High Wind Warning         |        |    |     |

**IX. ALERT TONES, Continued**

| Event Type                | Alert: | On | Off |
|---------------------------|--------|----|-----|
| Hurricane Watch           |        |    |     |
| Hurricane Statement       |        |    |     |
| Coastal Flood Watch       |        |    |     |
| Coastal Flood Warning     |        |    |     |
| Special Marine Warning    |        |    |     |
| Avalanche Watch           |        |    |     |
| Avalanche Warning         |        |    |     |
| Volcano Watch             |        |    |     |
| Volcano Warning           |        |    |     |
| Monthly Test              |        |    |     |
| Test Message              |        |    |     |
| Unknown Statement Tune TV |        |    |     |
| Demo Message              |        |    |     |

Your WX-80 uses three LED's to give you visual distinction between the type of event (Statement, Warning or Watch) being broadcast. **Statement** means "A statement contains follow-up information to a warning, watch or emergency message. Statements emphasize short term forecast information, making use of observations and reports to heighten public perception of personal risk. Stay informed of the latest conditions and information by AM/FM radio, NOAA weather radio, television or other means." **Watch** means "There is potential for hazardous weather or flood event, but its occurrence, location, and/or timing

**IX. ALERT TONES, Continued**

is still uncertain. Stay informed of the latest conditions and information by AM/FM radio, NOAA weather radio, television or other means." **Warning** means "A hazardous weather or flood event is imminent or occurring. The severe weather event poses a significant threat to public safety and/or property and the probability of occurrence and location is high. Use safety procedures according to the type of event (ie: tornado; move to the lowest level of home or building, away from glass or windows, etc.). Stay informed of the latest conditions and information using battery operated AM/FM radio or battery operated NOAA weather radio - both can move easily with you to your place of safety." When the term Emergency displays, it means "An event that by itself would not kill or injure persons, or result in property damage but indirectly may cause other things to happen that may result in a hazard. For example, a major power or telephone loss in a large city alone is not a direct hazard, but disruption to other critical services could create a variety of conditions that could directly threaten public safety."

As you proceed through the list of event types, you will be shown the current status for each alert tone (On or Off). Toggle between on and off settings by pressing the NO button. After confirming the desired status of tone (On or Off) for specific warning(s), save your selection for by pressing the YES button.

## IX. ALERT TONES, Continued

*(Example)* Alert tone for "Winter Storm Warning". The eight character LCD will scroll through and display the message in up to three steps followed by the Alert Status (On or Off) as shown:

WINTER  
STORM  
WARNING  
TONE ON

To accept and store current alert status (Tone On), press the YES button.

To change current alert status to (Tone Off), press the NO button. The display will change to read:

WINTER  
STORM  
WARNING  
TONE OFF

Again, continually pressing the NO button will toggle between On and Off settings.

Press the YES button to store your selection. The display will advance to the next optional alert type.

## X. FINDING THE BEST LOCATION FOR YOUR

### WX-80 MONITOR

For your weather monitor to be effective, you must place it where it can receive an emergency alert broadcast and where you can hear its alert tone.

In the United States, the NWS broadcasts a weekly Test Alert each Wednesday between 11 AM and 1 PM. To find out the specific test schedule in your area, contact your local NOAA or NWS office. These offices are usually listed in the telephone book under "US Government, Department of Commerce."

**Important:** The fact that you get clear reception of a weather broadcast audio signal does NOT guarantee that an emergency alert tone will trigger your weather monitor's alert function. Be sure you choose the proper location for the weather monitor and regularly check the weather monitor to be sure it is operating properly.

### Testing the Alert Tone

To manually test the weather monitor's alert tone and select a suitable location, perform the following.

1. Turn on the WX-80 weather monitor while holding down the OFF/PROGRAM button. All LED indicators will glow and "TESTMODE" will display on the LCD.
2. Press the ALERT button to test the alert tone function. The weather monitor will sound the alert tone. As the tone sounds, walk around the area where

## X. FINDING THE BEST LOCATION ..., Continued

### Testing the Alert Tone, Continued

you keep the weather monitor to make sure you can hear the tone from other nearby rooms.

#### IMPORTANT NOTES:

- To make sure your weather monitor will sound the alert tone when it receives an emergency signal always keep the built-in antenna fully extended.
- Testing the alert tone only ensures that the weather monitor's alert tone can be heard. It does not test the weather monitor's receiver or guarantee you will receive an emergency alert!
- An emergency alert broadcast might not trigger your weather monitor's alert tone, even if it receives voice transmission clearly or if the alert tone sounds when you manually test it. Also, if you are in a fringe area, your weather monitor might be triggered by a broadcast when it is placed in one area, but not be triggered if you place it somewhere else (even close by).

## XI. USING THE ALERT FUNCTION

The WX-80 alert function, using the ALERT button, is what determines whether or not the WX-80 will sound the alarm when alert signals are detected. With the monitor powered on, read the display for the Alert status message. To change the alert status press the

## XI. USING THE ALERT FUNCTION, Continued

"ALERT" button for 2 seconds. The WX-80 will sound two beeps for "Alert Off" or one beep for "Alert On". Release the "Alert" button and re-view the screen to confirm your chosen setting.

**IMPORTANT NOTE:** If you programmed more than one FIPS code into memory, be sure the weather monitor is set to its multiple mode. Otherwise, the weather monitor will only receive broadcast for the FIPS code you stored in the first memory position (LOC 1).

**IMPORTANT: IF SEVERE WEATHER THREATENS,** DO NOT wait for an alert signal to trigger the alarm; turn on the weather broadcast and monitor the weather information.

### Setting the Alert Tone Volume

The Alert Tone (siren or beep) has a separate adjustment than that of the audio volume. To set the alert volume (Alert Audio Tone), perform the following:

1. With the WX-80 powered on, push the YES button for 2 seconds. The WX-80 will sound a beep indicating that the Alert Tone is now adjustable.
2. Press the volume Up / Down switch to adjust the alert tone from setting 1 being the lowest to 6 being the loudest. Unlike the audio volume, there is no mute setting on the alert tone adjustment.



## XI. USING THE ALERT FUNCTION, Continued

### Setting the WX-80's "All Signals" Code

To set the weather monitor to respond only to specific FIPS codes you select, choose the codes you want to program (up to 15 total codes), program those codes into memory, and set the weather monitor to its multiple location mode.

To operate the weather monitor using the "All Signals" code and quickly switch to specific area monitoring, perform the following steps:

1. Set the weather monitor to "single" as explained in the "Monitoring Single or Multiple Locations" section.
- \*2. Program the first location cell (LOC 1) with the code "99" as explained in the "Entering the FIPS Location Codes" section.

\* With the All Signals code (99) stored in the first memory location code and operating the WX-80 in the single location mode, you will receive all alert signals -- regardless of location. You can quickly switch between "All Signals" and "Specific Area" monitoring.

With FIPS Codes / SAME Geographic codes stored in any of the other memory location codes (LOC 2 - LOC 15) and operating the WX-80 in multiple location mode, you will receive only the alert signals directed to the counties you have specified with the FIPS Codes.

29

## XI. USING THE ALERT FUNCTION, Continued

### \* Setting the WX-80's "All Signals" Code, Continued

By quickly switching the WX-80 from single to multiple mode, you change the operation from "All Signals" to "Specific Area" monitoring.

#### Reviewing Overlapping Alerts

Your weather monitor can store up to three different alerts (with overlapping effective times) in its memory. If the weather monitor receives a new alert while a previous alert is still in effect, it automatically displays the alert description and sounds an alert for the new alert.

To scroll forward or backward through the weather monitor's memory and review all effective alerts, press the YES button (to scroll backward).

**NOTE:** The weather monitor sounds a high-pitched tone if you try to scroll past the first or last alert in memory. To continue, press the YES button to begin scrolling in the opposite direction.

**NOTE:** If the weather monitor receives a new alert while three previous alerts are still in effect, it stores the newest alert and clears the oldest alert from memory -- always keeping the most recent three events in memory.

30

## XI. USING THE ALERT FUNCTION, Continued

### When a Test or Demo Alert Occurs

The NWS sends out weekly test signals that you can use to confirm that your WX-80 weather monitor is working properly. To find out the specific test schedule in your area, contact your local NOAA or NWS office. Those offices are usually listed in the telephone book under "US Government, Department of Commerce".

When the weather monitor's alert function is turned on and the monitor receives a test broadcast for a FIPS code you programmed into its memory, it responds in one of these ways:

| NWS Alert Type                         | You See      | You Hear |
|--|--------------|----------|
| Demo Message<br>(sent at random times) | DEMO MESSAGE | No sound |
| Required Weekly<br>SAME Test           | WEEKLY TEST  | Beeps    |
| Required Monthly<br>SAME Test          | MONTHLY TEST | Beeps    |

### Undefined Weather Descriptions

The NWS might occasionally broadcast several types of weather information intended for commercial or other non-private use. This information could include, for example, messages intended for automated weather services (such as those used by radio or TV stations).

31

## XI. USING THE ALERT FUNCTION, Continued

### Undefined Weather Descriptions, Continued

Your weather monitor's memory does not contain a specific event code or corresponding description for the event signals related to these commercial weather types.

Additionally, your weather monitor is designed to recognize all common weather alert types currently used by the NWS. The NWS could, however, eventually create and broadcast new alert types (for which the weather monitor's memory does not contain a specific, corresponding description).

If your weather monitor receives a signal for a new alert type, it is programmed to display UNKNOWN, the alert description (EMERGENCY, STATEMENT, WARNING, or WATCH), and TUNE TV, then sound a Siren Alert. The display will show:

UNKNOWN  
WARNING  
TUNE TV

### Test Mode

You can test basic functionality of the WX-80 weather monitor by performing the following:

1. Turn on the WX-80 weather monitor while holding down the OFF/PROGRAM button. All LED

32

## XI. USING THE ALERT FUNCTION, Continued

### Test Mode, Continued

indicators will glow and "TESTMODE" will display on the LCD.

- Refer to the chart on next page, then press a number key to test the desired function. The weather monitor tunes to the corresponding channel, and one of the following appears:

#### You Press: The weather monitor displays:

- CH. 1 (with Audio open)
- CH. 2 (with Audio open)
- CH. 3 (with Audio open)
- CH. 4 (with Audio open)
- CH. 5 (with Audio open)
- CH. 6 (with Audio open)
- CH. 7 (with Audio open)
- DEFAULT (reset to factory settings)
- DEMO ON or DEMO OFF  
(the weather monitor's demo mode)
- 9

**NOTE:** If you pressed 9 in this step, your weather monitor can also perform these test functions while TEST MODE appears.

If you press ALERT, the weather monitor continuously sounds its alert siren. Press ALERT again to turn off the siren.

If you press YES, the STATEMENT, WATCH, and WARNING LEDs light at the same time.

## XI. USING THE ALERT FUNCTION, Continued

### Test Mode, Continued

If you press NO, the STATEMENT, WATCH, and WARNING LEDs turn off at the same time.

If you press WEATHER, all display characters (segments) appear at the same time.

Turn off the weather monitor and store your selection. Then turn it back on to begin using the new setting.

## XII. NWS WEATHER EVENT DESCRIPTIONS

Your weather monitor can display these NWS Weather Event descriptions. For easy reference, this list also shows the type of alert (siren or beep) that sounds during each alert.

| Weather Event Type    | You See  | You Hear |
|-----------------------|--|----------|
| Avalanche Warning     | AVALANCH WARNING   | Siren    |
| Avalanche Watch       | AVALANCH WATCH   | Siren    |
| Blizzard Warning      | BLIZZARD WARNING   | Siren    |
| Civil Danger Warning  | CIVIL DANGER WARNING   | Siren    |
| Civil Danger Watch    | CIVIL DANGER WATCH   | Siren    |
| Civil Emergency       | TUNE TV (power on your TV for available information; call your local NWS office) | Siren    |
| Coastal Flood Warning | COASTAL FLOOD WARNING  | Siren    |
| Coastal Flood Watch   | COASTAL FLOOD WATCH  | Siren    |

XII. NWS WEATHER EVENT ..., Continued

| Weather Event Type           | You See                   | You Hear |
|------------------------------|---------------------------|----------|
| Emergency Action Warning     | EMERGENC ACTION WARNING   | Siren    |
| Emergency Action Termination | EMERGENC ACTION TERMINAT  | Siren    |
| Evacuate Immediately         | EVACUATE IMMEDIAT         | Siren    |
| Fire Warning                 | FIRE WARNING              | Siren    |
| Flash Flood Statement        | FLASH FLOOD               | Beeps    |
| Flash Flood Warning          | FLASH FLOOD WARNING       | Siren    |
| Flash Flood Watch            | FLASH FLOOD WATCH         | Siren    |
| Flood Statement              | FLOOD                     | Beeps    |
| Flood Warning                | FLOOD WARNING             | Siren    |
| Flood Watch                  | FLOOD WATCH               | Siren    |
| Hazardous Material Warning   | HAZARD MATERIAL WARNING   | Siren    |
| Hazardous Material Watch     | HAZARD MATERIAL WATCH     | Siren    |
| High Wind Warning            | HIGH WIND WARNING         | Siren    |
| High Wind Watch              | HIGH WIND WATCH           | Siren    |
| Hurricane Statement          | HURRIACN                  | Beeps    |
| Hurricane Warning            | HURRIACN WARNING          | Siren    |
| Hurricane Watch              | HURRIACN WATCH            | Siren    |
| Immediate Evacuation Warning | IMMEDIAT EVACUATE WARNING | Siren    |
| Law Enforcement Warning      | LAW ENFORCE WARNING       | Siren    |

35

XII. NWS WEATHER EVENT ..., Continued

| Weather Event Type            | You See                  | You Hear |
|-------------------------------|--------------------------|----------|
| Local Area Emergency          | LOCAL AREA EMERGENC      | Siren    |
| National Information Center   | NATIONAL INFO CENTER     | Siren    |
| Periodic National Test        | NATIONAL PERIODIC TEST   | Siren    |
| Practice / Demo               | DEMO MESSAGE             | Nothing  |
| Radiological Hazard Warning   | RADIOLOG HAZARD WARNING  | Siren    |
| Radiological Hazard Watch     | RADIOLOG HAZARD WATCH    | Siren    |
| Required Monthly Test         | MONTHLY TEST             | Beeps    |
| Required Weekly Test          | WEEKLY TEST              | Beeps    |
| Severe Thunderstorm Warning   | SEVERE THUNDER WARNING   | Siren    |
| Severe Thunderstorm Watch     | SEVERE THUNDER WATCH     | Siren    |
| Severe Thunderstorm Statement | SEVERE WEATHER           | Beeps    |
| Shelter In-place Warning      | SHELTER IN-PLACE WARNING | Siren    |
| Special Marine Warning        | SPECIAL MARINE WARNING   | Siren    |
| Special Weather Statement     | SPECIAL WEATHER          | Beeps    |
| Test Message                  | TEST MESSAGE             | Nothing  |
| Tornado Warning               | TORNADO WARNING          | Siren    |

36

### XII. NWS WEATHER EVENT ..., Continued

| Weather Event Type   | You See              | You Hear |
|----------------------|----------------------|----------|
| Tornado Watch        | TORNADO WATCH        | Siren    |
| Tsunami Warning      | TSUNAMI WARNING      | Siren    |
| Unrecognized Event   |                      |          |
| Ending in S          | UNKNOWN STATEMENT TV | Siren    |
| Unrecognized Event   | UNKNOWN WARNING      |          |
| Ending in W          | TUNE TV              | Siren    |
| Unrecognized Event   | UNKNOWN WATCH        |          |
| Ending in A          | TUNE TV              | Siren    |
| Unrecognized Event   | UNKNOWN EMERGENC     |          |
| Ending in E          | TUNE TV              | Siren    |
| Volcano Warning      | VOLCANO WARNING      | Siren    |
| Volcano Watch        | VOLCANO WATCH        | Siren    |
| Winter Storm Warning | WINTER STORM WARNING | Siren    |
| Winter Storm Watch   | WINTER STORM WATCH   | Siren    |

NOTE: TUNE TV might also indicate that the weather monitor has received a signal for a new event code not defined in the weather monitor's memory.

### XIII. SPECIFICATIONS

Number of Channels: 7

Receiver Frequencies (MHz):

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

Receiving Sensitivity  
(at 12 dB SINAD)

0.3µV

FIPS Code Sensitivity  
@ +/- 3KHz Deviation /  
90% Success Rate

0.3µV

Battery Back-up  
Antenna

One 9-Volt Battery  
Telescoping Rod  
Antenna

Dimensions (H x W x D)  
1.75" x 5.375" x 4.375"  
(45 x 137 x 110mm)

Weight (without battery)

9.3 oz

#### XIV. MAINTENANCE

Your WX-80 Weather Monitor is designed to be maintenance free. To keep your radio in good working condition:

- Unplug your WX-80 from the AC power outlet before cleaning.
- Clean external surfaces with a clean cloth dampened in a solution of dishwashing detergent diluted in water. Apply the solution sparingly to avoid any moisture leaking into cracks and crevices. Do not submerge the weather monitor! Use a non-metallic brush to dislodge stubborn particles, if necessary. Dry the surface thoroughly with a soft, lint free cloth.
- DO NOT use solvents or spirits for cleaning - they may permanently damage the housing.

#### XV. WARRANTY SERVICE INSTRUCTIONS

Refer to these Operating Instructions for proper operation and adjustments. If the problem cannot be corrected by reference to this document, return the product with proof of purchase (the sales receipt) to the place of purchase, or call the Topaz3 Customer Service Department for return instructions, toll-free: 1-800-821-7848, Ext. 499.

Purchase Date: \_\_\_\_\_

Purchased From: \_\_\_\_\_

Serial Number: \_\_\_\_\_

39

#### XVI. WARRANTY STATEMENT

Topaz3, LLC (herein Topaz3), warrants each new radio product manufactured or supplied by it to be free from defects in material and workmanship under normal use and service for the time period listed below, provided that the user has complied with the requirements stated herein. The Warranty period begins on the date of purchase from an Authorized Topaz3 Sales and Service Outlet. This Warranty is offered to the original end user and is not assignable or transferable. Topaz3 is not responsible for any ancillary equipment which is attached to or used in conjunction with Maxon, Legacy and TruTalk products.

Topaz3 offers to the original end user a Two (2) Year Limited Warranty on all Maxon and Legacy Business and Industrial Radio Products. TruTalk products carry a One (1) Year Limited Warranty. Maxon and Legacy accessories carry a One (1) Year Limited Warranty. TruTalk accessories carry either a One (1) Year Limited Warranty, or a Ninety (90) Day Limited Warranty, dependent on model.

During this period, if the product fails to function under normal use because of manufacturing defect(s) or workmanship, it should be returned to the Authorized Topaz3 Sales and Service Outlet from which it was purchased. The Sales and Service Outlet will repair the product, or return the product for repair to Topaz3 or its Authorized Repair Depot. The user is responsible for the payment of any charges or expenses incurred for the removal of the defective product from the vehicle or other site of its use; for the transportation of the product to the Sales and Service Outlet; for the return of the repaired / replacement product to the site of its use and for the reinstallation of the product.

Topaz3 shall have no obligation to make repairs or to cause

*continued*

40

**XVI. WARRANTY STATEMENT, Continued**

replacement required which results from normal wear and tear or is necessitated in whole or in part by catastrophe, fault or negligence of the user, improper or unauthorized alterations or repairs to the Product, incorrect wiring, use of the Product in a manner for which it was not designed, or by causes external to the Product. This warranty is void if the product serial number is altered, defaced or removed.

Topaz3's sole obligation hereunder shall be to replace or repair the Product covered in this Warranty. Replacement, at Topaz3's option, may include a similar or higher-featured product. Repair may include the replacement of parts or boards with functionally equivalent reconditioned or new parts or boards. Replaced parts, accessories, batteries or boards are warranted for the balance of the original time period. All replaced parts, accessories, batteries or boards become the property of Topaz3.

**THE EXPRESS WARRANTIES CONTAINED HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED OR STATUTORY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

**FOR ANY PRODUCT WHICH DOES NOT COMPLY WITH THE WARRANTY SPECIFIED, THE SOLE REMEDY WILL BE REPAIR OR REPLACEMENT. IN NO EVENT WILL TOPAZ3 BE LIABLE TO THE BUYER OR ITS CUSTOMERS FOR ANY DAMAGES, INCLUDING ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES, OR THE LOSS OF PROFIT, REVENUE OR DATA ARISING OUT OF THE USE OF OR THE INABILITY TO USE THE PRODUCT.**

This Warranty is void for sales and deliveries outside of the U.S.A. or Canada.