

## SPECIFICATIONS

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**Frequency Range** 902 - 928 MHz, unlicensed ISM Band

**Transmit Power** Mid-Range: 100 mW  
Short-Range: 4 mW

**Operating Range** Mid-Range: 2 miles  
Short-Range: 1000 feet

**Operating Temperature** -40 °F to 185 °F (-40 °C to 85 °C)

### Warranty

This product is warranted to be free from defects in material or workmanship for 1 year from the date of purchase. During the warranty period Spectrum will, at its option, either repair or replace products that prove to be defective. This warranty is void if the Spectrum products have been damaged by customer error or negligence, or if there has been an unauthorized modification.

### Returning Products to Spectrum

Before returning a failed unit, you must obtain a Returned Goods Authorization (RGA) number from Spectrum. You must ship the product(s), properly packaged against further damage, back to Spectrum at your expense. Clearly mark the RGA number on the **outside of the package**. Spectrum is not responsible for any package that is returned without a valid RGA number or for the loss of the package by any shipping

Spectrum Technologies, Inc.  
12360 S Industrial Dr East  
Plainfield, IL 60544  
(800) 248-8873 or (815) 436-4440  
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# WatchDog Wireless Modem

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## OPERATION MANUAL

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### Catalog Numbers

3391B, 3391W, 3391M, 3392B, 3392W, 3392M



*Spectrum*  
*Technologies, Inc.*


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# OPERATION

## Weather Station Monitor (Get Current Conditions)

After the initial launch of the weather station, the software's weather station monitor feature will be available. The wireless modem allows you to contact your weather station at any time to obtain real-time weather data. There are two methods of bring up the real-time bulletin.

1. First-generation stations only: Click on the **Weather Station Monitor** icon in the SpecWare toolbar or select **Weather Station Real-Time Monitor** from the **Logger** menu. 
2. Click on the **Get Current Conditions** button on the **Connect to Remote Weather Stations** screen (Fig. 3).

Both methods will bring up the **Real-Time Monitor** screen (Fig. 4). However, the **Repeat Refresh** option will not be available if the screen is brought up via option 2. Refer to the **WatchDog Weather Station Operation Manual** for details on the **Real-Time Monitor**.

This manual will familiarize you with the features and operation of your new Wireless Modem. Please read this manual thoroughly before using your instrument. For customer support, or to place an order, call Spectrum Technologies, Inc. at (800)248-8873 or (815) 436-4440 between 7:30 am and 5:30 p.m. CST, FAX at (815)436-4460, or E-Mail at info@specmeters.com.

Spectrum Technologies, Inc  
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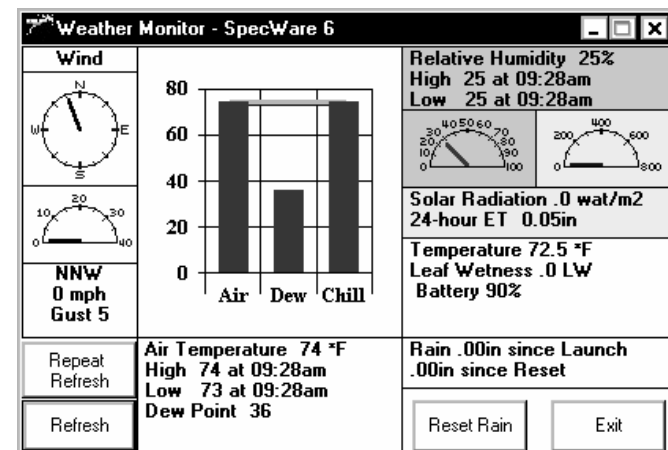


Figure 4. Real-Time Monitor screen

# OPERATION

## Contacting the Weather Station

**WatchDog Manager** must be used to communicate with stations via the wireless modem. The communication options on the **WatchDog Manager** screen (Fig. 3) are:

1. **Readout** or **Readout and Relaunch** - Downloads the station (and immediately relaunches first-generation stations).
2. **Relaunch Only** - (First-generation stations only) Launches the weather station but does not download data.

When launching the weather station, the **Launch Options** screen is not activated. Therefore, the station is launched with same configuration as when it was downloaded. To access the **Launch Options** screen, connect your computer to the display module with the gray PC interface cable. Refer to the **SpecWare Software User's Guide** for details on downloading WatchDog data loggers. Remember, the station must be initially launched directly from a PC.

3. **Get Current Conditions** - Activates **Weather Station Monitor** (see pg. 7).

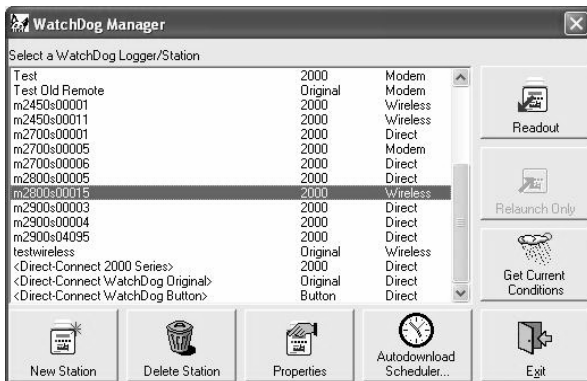


Figure 3. WatchDog Manager screen

## General Overview

The WatchDog Wireless Modem system will allow you to extend the range of your WatchDog Weather Station up to 2 miles with line of sight. The transceiver in the field is equipped with a solar panel that maintains battery power indefinitely under most climatic conditions. The wireless connection allows the user to download data, as well as remotely observe real-time weather conditions using the weather station monitor on a PC.

## Components

The midrange system (communicating up to 2 miles, line-of-sight) consists of the following:

A Base Station (catalog number 3391B), and one or more remote stations:

Catalog #3391W for the full size Weather Stations

Catalog #3391M for the Mini Weather Stations.

The short-range system (communicating up to 1000 feet, line-of-sight) consists of the following:

A Base Station (catalog number 3392B), and one or more remote stations:

Catalog #3392W for the full size Weather Stations

Catalog #3392M for the Mini Weather Stations.

Note: Spec8 Pro or Spec7 Pro is required for multipoint wireless communications.

## Installation

Refer to the customized installation instruction sheet provided with each component type (Base Station, Weather Station, Mini Station)

# SETTING UP A WEATHER STATION IN SPECWARE

**Note:** First-generation weather stations (Models 900ET, 800, 700, 600, 550, 525) **MUST** be launched initially with the gray PC interface cable (Refer to the **SpecWare Software User's Guide** for details on launching WatchDog data loggers).

For SpecWare (Spec8 Pro or Spec7 Pro) to communicate with the wireless modem, the station must be set up in the **WatchDog Manager** screen (Fig. 1). If the station has already been established, select the station and click the **Properties** button to bring up the **WatchDog Properties** screen (Fig. 2).

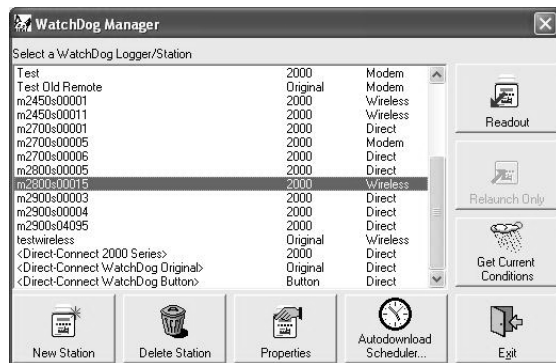


Figure 1. WatchDog Manager screen

To set up a new, remotely connected weather station, click the **New Station** button on the **WatchDog Manager** screen. This will bring up the **WatchDog Properties** screen (Fig. 2).

# SETTING UP A WEATHER STATION IN SPECWARE

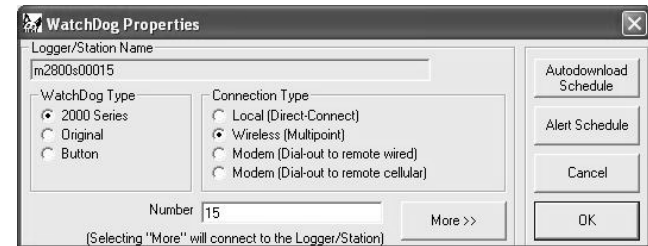


Figure 2. WatchDog Properties screen

1. If this is a new entry, enter a **Logger/Station Name** in the top text field. If the station has been previously used, the name entered in this field must exactly match the name entered into **Data Identification** field when the weather station was previously launched.
2. Select the **WatchDog Type** (**2000 Series** or **Original** (for first-generation stations))
3. For **Connection Type** select **Wireless (Multipoint)**.
4. Enter the **Radio Address** into the **Number** field. For 2000 Series stations, the radio number is the station's serial number. For first-generation stations, the number will be printed on a sticker on the side of the transceiver or mounting bracket.

Once a weather station is set up in SpecWare, it can be launched, downloaded and queried for current conditions by a PC connected to the base station transceiver (refer to **Operation**, pg. 6).