

Weather Station Dial-Up Modem

OPERATION MANUAL

Catalog No. 3387



Spectrum
Technologies, Inc.

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This manual will familiarize you with the features and operation of your new Dial-Up 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.

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General Overview

The dial-up modem gives you the ability to communicate with your WatchDog Weather Station through a standard telephone land line. With the dial-up modem, you can download and relaunch the station's data logger from your office computer as well as view current conditions in real-time.

Components

The components of the dial-up modem are as follows:

1. Modem module.
2. Two 40 foot, 4-wire telephone cables.
3. A/C adaptor.

100 and 200 ft. cables (item #'s 3660-100 and 3660-200) are available that allow you to extend the distance between the weather station and the modem or between the modem and the telephone wall jack.

Note: SpecWare Pro Software is required to use the dial up modem.

Specifications

| | |
|--|---|
| Voltage Range | 8 - 15 Volts DC |
| Current | 30 mA |
| Baud Rate | 1200 bps |
| Maximum Recommended Cable Lengths | modem to station - 100 ft. modem to jack - 200 ft. |

INSTALLATION

A schematic for connecting the dial-up modem to your weather station is shown in figure 1. The WatchDog weather stations are configured with 2 communication ports (**Computer** and **Aux**). Use one of the 40 ft. cables to connect the dial-up modem to the weather station through the **Aux** port. The other 40 ft. cable is used to connect the modem to a telephone wall jack. The modem is powered via a DC power jack that is plugged into an A/C power adaptor. The A/C adaptor plugs into the modem's DC power jack.

Plug the phone line in the port marked line,
Nothing is plugged into the port marked phone.

Note: The modem is not waterproof. If it cannot be located indoors, it should be housed in a waterproof enclosure.

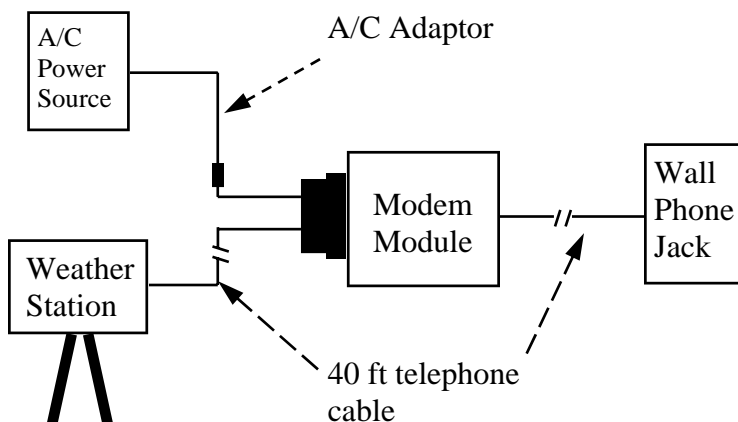


Figure 1. Connection diagram for the dial-up modem

OPERATION

Setting up a Weather Station in SpecWare



Before SpecWare can communicate with a weather station via the dial-up modem, the contact information for that station must be entered into the software. To input details about a new weather station, click the **WatchDog Manger** button from the SpecWare toolbar or select **WatchDog Manger** from the **Logger** menu. This will bring up the **WatchDog Manager** screen (fig. 2).



Figure 2: WatchDog screen

Click the **New Station** button in the lower left corner to create a new station or select an existing station. Click on **Properties** to bring Up the **WatchDog Properties** Screen. (fig. 3).

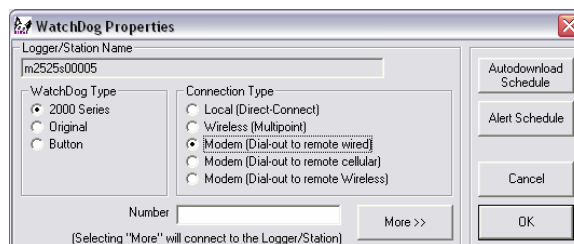


Figure 3: Remote Weather Station Properties screen

OPERATION (CONT.)

Select 2000 Series and Modem Dial to Remote Wired as the connection type. Finally, enter the weather station phone number exactly as it would be dialed from a telephone, including 1+ area code. **If there is a digit required to acquire an outside line, it should be typed in as the first number followed by a comma (i.e. 9,555-1234). The modem will pause 2 seconds after dialing the 9 before dialing the rest of the number. The dash can be included for clarity but is not necessary.** After clicking the “OK” button, this station will be available in the **WatchDog Manager** screen and can be read out and/or launched from your computer.

Contacting the Weather Station

To connect to a station that has already been set up on your computer (see previous section), Select the station from the list of available stations in **WatchDog Manager**.

If you need to change any of the existing contact information, click the **Properties** button in the **WatchDog Manager** screen (fig. 3). This will bring up the **WatchDog Properties** screen. In this screen you can modify the phone number and the name of the weather station.

OPERATION (CONT.)

Launching/Downloading the Weather Station

When connected via a dial-up modem, the weather station data logger is launched with the same configuration as when it was last downloaded. From the **WatchDog Manager** screen (fig. 2), you can opt to download the station's data logger (**Readout**)

To modify the data logger configuration in the **Launch Options** screen, click on the more button. Refer to the **SpecWare Software User's Guide** for details on launching WatchDog data loggers.

MODEM INITIALIZATION STRING

In order for SpecWare to communicate with the weather station via the dial-up modem, your computer's modem needs to be initialized (the dial-up modem is initialized prior to shipment). To adjust how SpecWare communicates with the computer modem, select the **Preferences** option in the **File** menu. On the **Communications** tab (see fig. 4) are the Modem Dial-out options. The Com Port selected must be the one associated with your computer modem (on many computers this will be Com 2). Most computers communi-

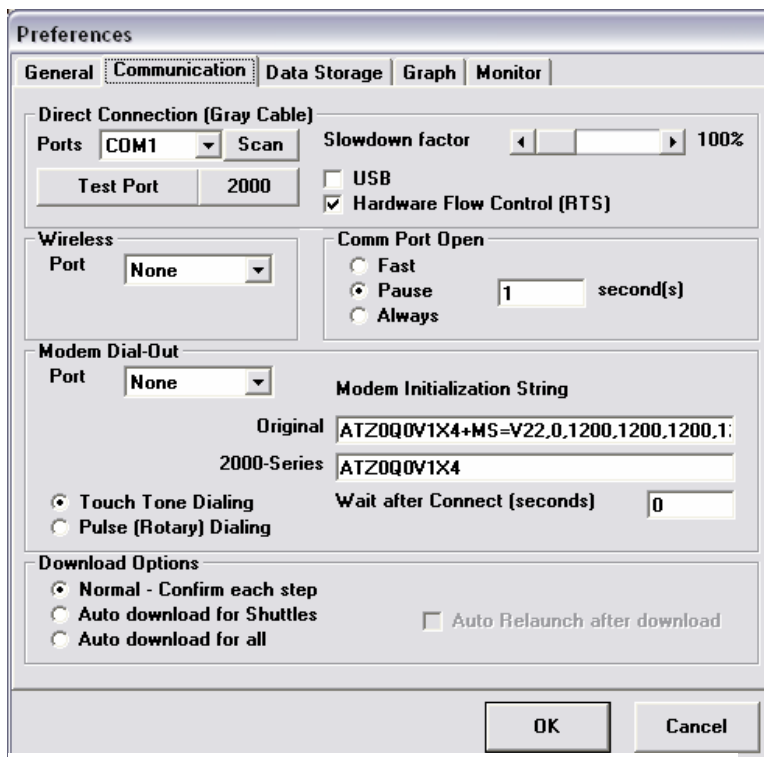


Figure 4: Communications tab of Preferences screen.

MODEM INITIALIZATION STRING (CONT.)

cate through touch-tone dialing so this option should be selected. Within SpecWare, the default modem initialization string is:

```
ATZ0Q0V1X4+MS=V22,0,1200,1200,1200,1200
```

However, if this string does not work for your modem, contact Spectrum Technologies for technical support. Finally, there should be some time allowed between when a connection is established and when SpecWare begins communicating with weather station. Therefore, the **Wait after Connect** field should not read 0 seconds. A wait time of 3 seconds should be sufficient.

WEATHER STATION BULLETIN

The dial-up modem allows you to contact your weather station at any time to obtain real-time weather data. Simply click on the **Get Current Conditions** button in the **WatchDog Manager** screen (fig. 2). Refer to the **SpecWare Software User's Guide** for details on the Weather Monitor screen.

Note: There is a button for the Weather Monitor screen in the SpecWare toolbar. .

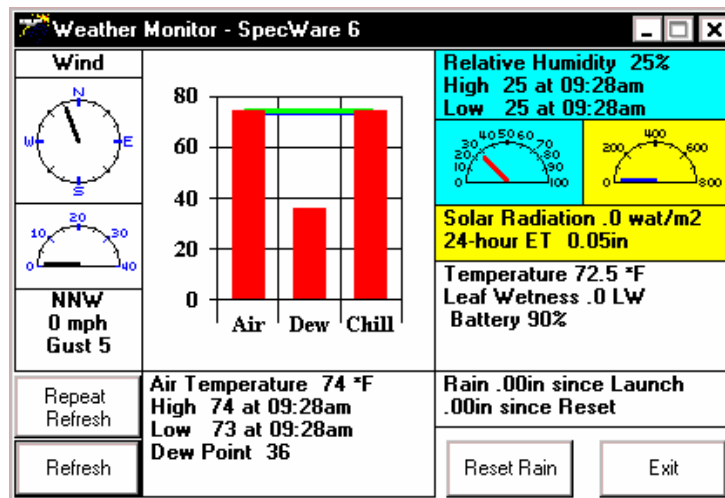


Figure 5: Weather Bulletin information screen

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 company.

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