WeatherHawk™

Quick Start Guide Series 600 - Models 610/611/620/621

Computer Requirements
- Available Serial Port or USB Port (Serial-to-USB onverter required)

WeatherHawk Setup Procedure

1. Remove the top foam packing from the WeatherHawk box and verify you have all ordered equipment. Your system may have a wireless receiver (Model 620/621), and/or a solar panel (P/N 16851). Figure 1 below shows a wireless Model 620 with solar panel. Unpack all equipment and check for physical damage.

    a. Lift the WeatherHawk by the main body of the weather station. Removing the station by lifting on the sensors may damage the sensors (see Figure 1).

    b. Avoid striking or resting the WeatherHawk on the domed top of the weather station.

    c. Report missing or damaged equipment to WeatherHawk Customer Service before installing your system.

Figure 1 Model 620 with solar panel

    d. A black rubber mast shim is inside the WeatherHawk Integral mast mount. This shim reduces the diameter to accommodate a 1 ¼ inch OD mast. Discard the shim if using a 1 ¾ inch mast. Fully seat the shim on the mast, with the flange down, before sliding the WeatherHawk over the shim/mast.

2. Install your application software on your computer.

3. Connect the serial cable male connector to the WeatherHawk RS-232 port and the serial cable female connector to a computer serial port (Figure 2).
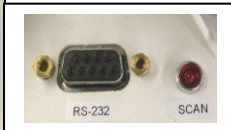

Figure 2: Serial cable (left) and the WeatherHawk serial port in which the serial cable male connector connects. A dust cover must be removed from the WeatherHawk RS-232 port before connecting the cable.

4. On the underside of the WeatherHawk, turn the on/off switch to the on position (Figure 3), and observe that the circular red Scan light will briefly flash.

Figure 3: The power switch and Scan/Receive light is located on the bottom of the WeatherHawk station.

5. Start the application software and monitor the sensor displays. Within a couple of minutes, numerical values should appear confirming that the WeatherHawk is functioning. The light labeled Scan on the underside of the weather station should also faintly blink every ten seconds.

6. Using your PC and weather station software, enter the setup parameters for the station. Refer to the set-up or Quick Start section of your software manual for third party software applications. If you are using WeatherHawk XP/X software, please refer to the software manual in the WeatherHawk folder that was created on your computer when the software was installed.

7. If your WeatherHawk is wireless, change the *Logger Address* to your WeatherHawk station's serial number. The serial number of your WeatherHawk is located on the underside of the station.

8. Set the date and time for your physical location.

9. Enter the Longitude and Latitude of your station. These can be determined using a GPS system, or a topographical map.

   The latitude and longitude must be entered as decimal numbers. To convert the values to decimal, ignore the seconds, divide the minutes by 60, then add that value to the degrees.

   Example:
   Latitude of 41 degrees, 46 minutes, 58 seconds
   Decimal value = 41 + (46/60) = 41.78

   Remember that South Latitudes, and Longitudes West of Greenwich, England, are negative numbers. For example, in North America all Latitudes are positive numbers and all Longitudes are negative numbers.

10. Enter the Altitude of your station. Don't forget to add the height above ground if mounting the station on a mast, tower, or rooftop. This value is critical for accurate Barometric Pressure measurements, and if entered directly into the WeatherHawk it must be in meters. If your application software does the necessary conversion, you may be able to enter it in feet.

11. Disconnect the serial cable from the WeatherHawk and place the dust cover back on the serial port.

12. If your WeatherHawk is wireless (Model 620/621), setup the radio (see "*Radio Setup*" section below).

13. Install the WeatherHawk weather station at the site. Refer to the Site Installation Guide shipped with your station for siting information and installation procedures.

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Radio Setup (For wireless Model 620 and 621 systems only)

1. Attach the antenna or cable to the radio connector labeled Antenna (Figures 4 and 5) on the RF4xx.

Figure 4: The WeatherHawk antenna may be a flat surface mount antenna (left), or a whip antenna(right) that connects directly to the radio, or a tri-band surface mount antenna (not shown).

Figure 5: RF4xx antenna connector

2. Connect the serial cable male connector to the radio connector labeled RS232 and the female connector to a computer serial port.

3. Plug the RF4xx AC Adapter into a grounded AC wall outlet.

4. Connect the other end of the AC adapter to the RF4xx connector labeled DC Pwr input. The red Pwr/Tx status light should illuminate.

5. Confirm that the WeatherHawk weather station has an antenna installed on the connector marked Antenna on the bottom side of the weather station (Figure 3 above).

6. Start your application software.

7. Monitor the sensor displays. After a few minutes, numeric values should appear if the WeatherHawk and radio are communicating. Also indicator lights on both the RF4xx radio and the WeatherHawk will occasionally blink.

If the radio is not communicating properly, you may be experiencing interference from nearby equipment such as wireless phones, other spread spectrum radios, or another WeatherHawk. Changing some settings on your radio and WeatherHawk station should rectify this situation. The procedure for changing these settings is provided in the WeatherHawk Advanced Radio Settings.

8. If your radio is working properly, close the software and turn the key to the off position. You are now ready to install your WeatherHawk station at the site (see Site Installation Guide).

Figure 6: Radio connections. The serial cable (left) connects to the port labeled RS232 and the AC adapter connects to the port labeled DC Pwr input.

Help and Support

For product support, specifications, and installation troubleshooting, refer to the WeatherHawk Site Installation Guide or the Frequently Asked Questions (FAQ) on our website (www.WeatherHawk.com). Customers may also call us at 866-670-5982 (toll-free in US) or 435-227-9802 (international) or email us at service@weatherhawk.com.

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