

The Unofficial Radio Shack WX-200 Electronic Weather Station Support Page.

Updated: 01/03/2003

This web page and other services are dedicated to the installation, use and application development for this weather station.

Available services are:

- This web site.
- If you have something to contribute please [e-mail me](#) and I'll add it. If the file is large please notify me first for me to respond with a OK. Thanks.
- And a mailing list which is no longer available.

This weather station provides the following information:

- Temperature: indoors and outdoors (in Fahrenheit or Celsius)
- Relative Humidity: indoors and outdoors in %
- Dew Point: indoors and outdoors (in Fahrenheit or Celsius)
- Barometric Pressure (in inches, millimeters, millibars or HPA) and trend (Raising, falling or Steady)
- Rainfall: rate, yesterday's total and total since last reset (in inches or millimeters)
- Wind speed: average, gust and max. (in MPH, KPH, meters/sec. or Knots) and direction (16 point compass rose and degrees)
- Wind Chill
- These include recorded highs and lows since last reset and the date and time in which they occurred.

Also features a green LED back light, user selectable units of measure and user defined alarm conditions.

All sensors are included!

Related WEB Pages:

[Link to Radio Shack's web site. This is the text of the manual for the WX-200.](#)

[Radio Shack WX-200 Weather Station](#) which includes a software page for many different weather stations.

<http://www.ambientsw.com/> has software called Virtual Weather Station for Windows 95/98/NT.

[Oregon Scientific](#) has a unit like the WX-200 called the [WM918](#). [Huger Electronics](#) in Germany is the OEM for these units.

[WX200 / WM918 Sensor Information Page](#) An excellent site with information on the internal workings of this weather station.

Other weather stations can be found at [Davis Instruments](#), [Maximum](#), [Peet Bros.](#) and [Texas Weather Instruments](#).

Software:

Y2K!

Important note: Because the software that comes with the WX-200 is a Windows 3.1 16-bit application. There may be Y2K issues. I have not extensively tested the app. But have encountered a lockup while testing Y2K compliance with my system. Note: If you don't know what your are doing you can have problems adjusting your clock for year 2000. I don't suggest you try this even though it does sound simple.

Update: There seems to be a fix for the Y2K issues. Appairently AccuWeather & RadioShack did not feel we needed to know this. As Accuweather does not list the software as being an update but it is newer then the one shipped with my system. You can get it [here](#).

Update: A newer version with Y2K fixes is at [The RadioShack WX-200 Help Page](#).

Click [here](#) to get the status of a Visual BASIC program I'm working on to work with the WX-200. This project has stalled for some time now. <sigh>

Click [here](#) to download a program by [Mike Wingstrom](#) for Linux and Xwindows that displays some of the WX-200 data.

Includes source code. Requires xforms 0.87 and is included in this archive.

Click [here](#) to download a program by [Tim Witham](#) for Linux that is a client/server for reading data from the WX-200.

Or make your own software:

Below is the format of the weather station's data stream. The vast majority of this info was decoded by [Mike Wingstrom](#). The data is sent at 9600 baud 8n1 (8 data bits, no parity, one stop bit). For an interface cable to a PC 9 pin serial port use a serial mouse extension cable. This PC text document may be viewed or [downloaded](#). It is tab delimited ASCII so it will load easily into a spreadsheet or database document. For Netscape you'll have to right-click and select "Save Link As...". For Internet Explorer right-click and select "Save Target As...".

I have removed the Protocol from the main page to help this page load faster. You can still view it with the link above. Perhaps XLS and PDF versions may be available in the near future.

Here are some programming tips:

- Note some alarms are in a different unit of measure from the sensors.
- You can find a BASIC programs for Sun Rise/Set, Moon Rise/Set and Moon Phase from [Sky & Telescope's](#).
- You'll likely need the following formulas for converting units of measure. Most of these are in the manual for the Weather Station software.
 - Temp:
 - Degrees F= (Degrees C* 1.8) + 32
 - Degrees C = (Degrees F - 32) / 1.8
 - Wind:
 - Miles Per Hour = 2.237 * Meters Per Second
 - KNOTS = 1.943 * Meters Per Second

- Kilometers Per Hour = $3.6 * \text{Meters Per Second}$
 - Pressure:
 - Inches of Mercury = $0.02953 * \text{Millibars}$
 - Millimeters of Mercury = $0.7500616 * \text{Millibars}$
 - Rain:
 - Millimeters = Inches/ 25.4
 - Inches = $0.03937 * \text{Millimeters}$
 - Here is a site that more then one person has pointed me to for more weather-related formulas:
[Weather Algorithms Index](#).
 - These links below are BROKEN and I'm searching for their forwarding address and/or new sites with similar information:
 - Here is a site with Perl scripts: nwselp.epcc.edu/elp/wxcalc.html.
- Anybody found better sites for Sun/Moon Rise/Set formulas?
 How about tidal calculations?

Web page hosting services provided by Planetfall Communications with thanks to [Jeff](#)!

Sorry for the slow updates. Not much has changed and my interest in the project has lowered since my WX200 got hit by a near by lightening strike.

This web page and other related services maintained by [Glynne](#).