GETTING STARTED GUIDE

WeatherLink[®] for Mac[®]



For Davis weather stations including Vantage Pro2[™], Vantage Pro2 Plus[™], Vantage Vue[®], Weather Envoy,[™] and Vantage Pro[®]

Product Number 6520



Davis Instruments, 3465 Diablo Avenue, Hayward, CA 94545-2778 U.S.A. • 510-732-9229 • www.davisnet.com

FCC Part 15 Class B Registration Warning

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. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna
- · Increase the separation between the equipment and receiver
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- · Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved in writing by Davis Instruments may void the user's authority to operate this equipment.

EC EMC Compliance

This product complies with the essential protection requirements of the EC EMC Directive 2004/108/EC; Low Voltage Directive 2006/95/EC; and Eco-Design Directive 2005/32/EC> 0.5 watt no-load adapter.

Product Number: 6520

Part Number: 7395.280

Rev. F February 6, 2014

WeatherLink[®] for Vantage Pro, Vantage Pro2, & Vantage Vue, Mac OS X Version Vantage Vue, Vantage Pro and WeatherLink, are registered trademarks of Davis Instruments Corp. Vantage Pro2, Vantage Vue and Weather Envoy are trademarks of Davis Instruments Corp. Hayes is a registered trademark of Hayes Microcomputer Products, Inc. Macintosh is a trademark of Apple Computer Corporation.

© 2014 Davis Instruments Corp. All rights reserved.Information in this document is subject to change without notice. Davis Instruments Quality Management Systemis ISO 9001 certified.



3465 Diablo Avenue, Hayward, CA 94545-2778 U.S.A. 510-732-9229 • Fax: 510-732-9188 E-mail: info@davisnet.com • www.davisnet.com

Welcome to WeatherLink!

The WeatherLink[®] software and data logger allow you to connect your Apple Macintosh computer running OSX to a Davis weather station so you can store, view, plot, analyze, export, print, and put on the Internet the weather data collected by your station.

This *Getting Started Guide* will guide you in installing and setting up your new WeatherLink software. It is not meant to be a user manual; the software's Help files contain much more information about the program's functions and features.

Once you have completed these steps and have WeatherLink running, click on Help on the top bar for more extensive information about how to use WeatherLink.



Contents of Package

- USB Data Logger
- 8' (2.4 m) cable with connector to link your station to your computer.
- WeatherLink software CD ROM

Hardware Installation

You can connect a computer directly to your weather station using the WeatherLink data logger.

Hardware Requirements

• Macintosh computer running OS X v10.1 or later with at least 5 MB of free disk space.

The amount of space necessary for the data files depends on the archive interval. Database files containing data stored at a 30 minute archive interval require approximately 36K of disk space per month of data. The file size changes in a linear fashion depending on the archive interval. For example, data stored at a 1-minute interval requires approximately 1 MB/month while the data stored at a 2-hour interval requires approximately 9K/month.

• One free USB port

Connect a Console

- Note: For Weather Envoy, see your *Envoy Manual* for instructions on how to install the data logger and connect to the computer.
 - 1. Enter the console's Setup Mode by pressing and holding DONE, then pressing the down arrow (-). Entering Setup Mode ensures that the station is not writing any data and saves the current daily weather information to memory.
 - 2. Remove the battery cover from the console and remove all power by removing the batteries and the AC-power adapter, if present.

Note: Failure to remove power to the console before installing the data logger may cause damage to the data logger or console. Plugging or unplugging the data logger while power is applied can lock up or damage the logger.

- 3. Firmly insert the USB data logger into the large receptacle marked **EXPANSION** inside the battery compartment.
- 4. Guide the data logger cable through the square slot below the receptacle.
- Restore power to the console by reinstalling the batteries and reattaching the power adapter, if present. The console beeps three times in Vantage Pro and Pro2, four times in Vantage Vue, two times in Envoy; each beep occurs within one second of the others.
- 6. Replace the battery cover so that the data logger cable exits through the square slot.
- 7. Connect the USB connector cable to the USB port on your computer. Connect the other end of the cable to the data logger cable.



- 8. Check the Baud rate settings on the console.
 - Enter the console Setup Mode by pressing and holding the DONE key, then pressing the DOWN arrow (-) key on your console.
 - The "Receiving From" (Active Transmitters) screen appears. Press BAR to go to the Baud Rate Screen. This screen only appears if the data logger is plugged into the console. The Baud Rate setting here on the console must be same as that set in the WeatherLink software.
 - Use the UP (+) and DOWN (-) keys to change the baud rate setting, if needed.
 - Press and hold DONE to exit Setup Mode.
 - The default setting is 19200 Baud.

Software Installation and Setup

It is easy to install and setup WeatherLink on your computer once the connection to your console has been configured. Walk through the following section to setup and configure your WeatherLink software and the connection to your console.

Install the Software

- 1. Place the Install Disk in your CD ROM drive.
- 2. Double click on the package file, "WeatherLink 5.1.mpkg."

Note: Your version number may be different.

3. Follow the on-screen prompts to complete the installation.

Install USB drivers

Specialized USB drivers must be installed when you connect a Vantage Pro, Vantage Pro2, Envoy, or Vantage Vue to your Mac via a USB connection. Once you have installed WeatherLink, but before you open the program, install the specialized drivers that come on the Installation CD.

- 1. Open the USB installer package (the folder marked **Davis USB Datalogger Drivers**) located on the Install disk.
- 2. Run "SLAB_USBtoUART Installer". The necessary USB drivers install and you are prompted to restart your computer.
- 3. Restart your computer.

Note: When the **Communications Configuration** dialog box displays, select **SLAB_USBtoUART** as your port.

Set Your Computer to Run WeatherLink in 32-Bit Mode

WeatherLink for Mac must be run in 32-bit mode. Before running the software:

1. Open the Finder. Navigate to the Applications folder, then the Mac OSX WeatherLink folder, then highlight the executable called Weather link



2. In the File Menu, select Get Info.



3. In the window that opens, check the box labeled "Open in 32 bit mode. Close the finder.

WeatherLink	2.2 MB
Modified: Nov 25, 2013,	2:01 PM
Add Tags	
▼ General:	
Kind: Application	
Size: 2,212,206 bytes (2.2	MB on disk)
Where: /Applications/Mac O	SX
Greated: September 29, 2009	at 5-15 PM
Modified: November 25, 2009	at 2:01 PM
Veria Data Washe birth	11. v 5.10
Open in 32-bit mode	2
— Frevent App Nap	
▼ More Info:	
Last opened: Yesterday, 3:08 P	м
▼ Name & Extension:	
WeatherLink.app	
\checkmark Hide extension	

Run the Software

To run the software, double-click the **WeatherLink** icon. If no stations have been assigned in the program directory, the software prompts you to add a station (see below for details). If there is more than one station in the program directory when the application opens, the last station that was displayed is automatically opened.

Station Setup

Each station connected to the computer must have its own station within the software. This tells the software in which database to store the new data, provides the necessary communication settings (serial port, baud rate, etc.), and explains other station-specific information.

Add a Station

- 1. Select New Station from the File menu. The New Station dialog box displays.
- 2. Type the desired station name (up to 40 characters/spaces) into the Station Name text box. The software uses the first eight characters of the name (not counting spaces or punctuation marks) as the name of the directory into which it saves this station's database and configuration files, so the first eight characters of each station name must be unique.
- Click OK to save the new station or click Cancel to exit without saving. The software saves the new station, creates a directory and a configuration file for the station, and prompts you to enter the walk-through procedure.

About the Walkthrough

The software includes a station setup walkthrough that steps you through the weather station configuration procedures. After adding a new station, the **Walkthrough** dialog box automatically displays. By selecting **Yes**, the walkthrough process begins. By selecting **No**, the Walkthrough process is exited. You can set up and configure your station by separately selecting all of the necessary setup options from the **Setup** menu. A Walkthrough option is included in the **Setup** menu that allows you to access the Walkthrough at any time. By selecting the Walkthrough process, the software displays a series of dialog boxes. At each step in the Walkthrough process, confirmation boxes are provided to perform or skip the next step in the Walkthrough. To continue, select **OK**. To skip this step and move to the next step, select **Skip**. To cancel the entire walkthrough process, select **Cancel**.

Note: Please refer to the WeatherLink Help for more information about the Walkthrough and about the different setup options.

Communication Configuration Settings

WeatherLink contains a dialog box for locating the communications port that the data logger and console are connected to. Use the **Communications Configuration** dialog box to select the communications port that is used to communicate with the console.

 Select Communications Port from the Setup menu or use the Walkthrough to display the dialog box. The Communications Configuration dialog box displays.

The correct driver should display automatically in the Port drop down box.

- Note: If the correct driver does not automatically display, select **SLAB_USBtoUART** as your port.
 - 2. Click **OK** to save the correct communications configuration setting.

Troubleshooting Guide

Please consult this guide and the on-line help files before contacting Technical Support.

Communications Problems

If you are having trouble establishing communication between the weather station and WeatherLink, start by checking the console's own diagnostics. Remove all power to the console and restart it by restoring power (with the data logger still attached).

Note: The data logger uses non-volatile memory, so you won't lose any data you've already recorded. However, make sure to put the console in Setup Mode by pressing and holding the [DONE] key, then pressing the [-] key before removing the batteries. This ensures the station will not try to write any data as the power goes off.

- The console will emit a series of beeps. (Two for Envoy, three for Vantage Pro and Pro2, four for Vantage Vue). Each beep indicates that the weather station has passed one of its diagnostic tests.
- Make sure the data logger is plugged in firmly. If you hear one fewer beep than you Note: should, this indicates that the console or Envoy does not sense the data logger.
 - If the console or Envoy emits the correct number of beeps, but you are still having trouble, see "Check the Communications Port" on page 7 for instructions on checking standard port settings.
 - Check the Baud Rate setting on the console (see page 3) and in the **Communication Port** dialog box in the software. Make sure they are the same.

Check the Communications Port

WeatherLink includes a procedure for testing the communications port to which your station is connected. Using the Test command will help you determine whether the communications port or the data logger is causing a communication problem.

1. Select Communications Configuration from the Setup menu.

The **Communications Configuration** window displays.

000		Serial Port		2
5	Serial Port S	ettings SB 🔻	Ok	
	19200	T	Cance	
	🔲 Dial Up	Connec	Test	
Dial Up Co	nnection			
Station Ph	one Number:	2933547		
Mode	em Str	AT E Q V X4 S7=6	0 S37=9 M0	Default
After C	onnect	2	s	iec.
O R	otary	Modem	Test	

2. In the upper drop-down list of the Port section of the window, select the port you want to test.

The port shown in the pull-down list should be "SLAB USBtoUART."

- 3. Click Test.
- 4. If WeatherLink cannot find the data logger, an error message displays, stating "No station could be found."

If this error message window displays, contact Davis Technical Support (see "Contacting Davis Technical Support" on page 9 for more information).

Troubleshooting FAQs

? When I click Get Info, there is no check box for opening in 32-bit mode.

If the check box does not appear, you have highlighted the wrong file, or the WeatherLink shortcut, instead of the actual application from the Mac OSX WeatherLink folder. The check box will only appear if you have opened the correct file. See these steps and screenshots: *Set Your Computer to Run WeatherLink in 32-Bit Mode (page 4)*.

? The barometer graph on the Bulletin does not "fill in" completely.

When you first load the bulletin, the barometer graph will only fill in completely when you have data in your database for the last six hours.

Make sure:

- There is data in your database for the span of the barometer graph.
- The time and date of the stored barometer data is correct in your database.
- The time and date on the PC is correct.
- The time and date on the weather station are correct.

? I have duplicate records in my database. Why?

If you do not download from the data logger prior to changing the weather station's time and date, you may get duplicate records. Make sure to download before setting the time and date.

Midnight records are duplicated so they appear in each consecutive day. For example, a midnight record would appear at the end of the data for November 22 and at the start of the data for November 23. Using the record editor to change the record in one day *does not* change the record in the other day.

Note: Do not delete duplicate midnight records; it may affect the rain database or NOAA monthly summary.

? No wind direction reading (or dashes instead of a reading) appears in my database.

If there is no wind speed when the direction is being sampled, wind direction is not recorded. So during a time of little wind speed, no direction may be recorded.

Note: Since high wind speed is sampled more often, it is possible to have a high wind speed but no wind speed or direction.

? WeatherLink says "No new data to download" but I know there's data there. What can I do? Your weather station is "smart enough" to send only data it hasn't already sent to the computer. So, when you initiate a new download, the program will retrieve the first record after the last record shown in the WeatherLink's Browse Window. Older data is stored in the logger as a backup. To see how many of these backup records are stored in the logger, create a new station and download the data into this new database. Because there are no records stored in the station you just created, WeatherLink will download everything it has stored.

Next, try clearing the archive memory using the clear dialog box. You will lose any data not already downloaded in your archive memory, but all of your calibration

numbers and alarm settings will remain intact. If this doesn't work, reboot your weather station (that is, remove, then restore all power to the station).

Note: Make sure to put the console in Setup Mode (by pressing the DONE and DOWN arrow keys) before repowering. This ensures the station will not try to write any data while the power is off.

After successfully downloading, recent or new data does not appear to be in my database. Where is it?

Check to see if the time and date on your station are incorrect. (This can happen if you have a power outage and your battery backup is dead.) If so, the data was written into the wrong month, day, and/or time. Reset the time and date.

It is also possible, if you have multiple stations, that you downloaded data into the wrong station's database. Make sure you've opened the correct station before downloading.

Your data logger may be not be operating properly. If this is the case, you can restore proper operation by repowering the data logger:

- 1. Remove power from the data logger by removing power from the weather station console.
- 2. Remove or disconnect the data logger from the console.
- 3. Wait at least one minute.
- 4. Connect the data logger to the weather station console.
- 5. Apply power to the console.
- 6. If you can now download and see the data in WeatherLink you have fixed the problem. If not, please contact Technical Support for assistance.

When viewing data, dashes appear in place of a value for functions other than wind direction. Why?

If no data was recorded by a sensor (for example, the sensor was disconnected or radio interference blocked reception) or if bad data was recorded for a sensor (for example, the sensor was malfunctioning), the software dashes out the entry rather than showing invalid data. You can use the record editor to correct these entries.

Contacting Davis Technical Support

If you have questions about the software, or encounter problems installing or operating the WeatherLink software, please contact Davis Technical Support.

(510) 732-7814 - Monday - Friday, 7:00 a.m. - 5:30 p.m. Pacific Time.

support@davisnet.com - E-mail to Technical Support.

(510) 732-9229 – For callers outside the USA or Canada.

(510) 670-0589 - Fax.

www.davisnet.com – Copies of User Manuals are available on the "Support" page. Watch for FAQs and other updates.

info@davisnet.com - General e-mail.



Hot Keys

Main Program Window

Ctrl-A	Set Alarms
Ctrl-B	View Bulletin
Ctrl-C	Station Configuration
Ctrl-G	Degree-Days Report
Ctrl-H	Hang Up
Ctrl-I	Serial Port Settings
Ctrl-J	Automatic Download
Ctrl-K	Walkthrough
Ctrl-L	Download
Ctrl-O	Open Station
Ctrl-P	Print Active Window
Ctrl-Q	Open Plot Window
Ctrl-R	Yearly Rain Report
Ctrl-S	Open Strip Charts
Ctrl-T	Set Time
Ctrl-U	Select Units
Ctrl-V	View Download Log
Ctrl-W	Browse Database
Ctrl-X	Auto Fax Settings
Ctrl-Y	View Summary
Ctrl-Z	Close Window
F1	Context-Sensitive Help
F2	Sunrise/Sunset Report
F7	NOAA This Month
F8	NOAA This Year

Strip Chart Window

-	
ESC	Halt redraw
Ctrl-M .	Make Default
Ctrl-P	Print Strip Chart
F1	Context-Sensitive Help
F3	Zoom In
F4	Zoom Out
Plot Wind	ow

ESC Halt redraw Ctrl-D.... Choose Date Ctrl-M Make Default

- **Ctrl-P**..... Print Plot
- **F1**..... Context-Sensitive Help
- **F3** Zoom In
- **F4** Zoom Out
- F9..... Overlay Plots
- **F10**..... Last Year Plot

Database Window

- Ctrl-D..... Choose Date
- Ctrl-N..... Add Note
- Ctrl-P Print Records
- Enter Edit Record
- Delete Delete Record
- F1 Context-Sensitive Help

Yearly Rainfall Window

Enter Edit Year Delete Delete Year