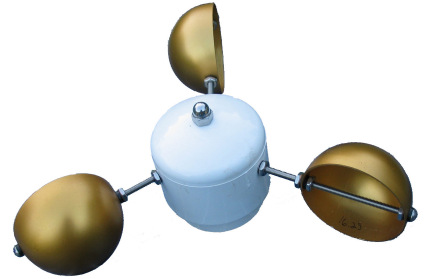


Wind Speed Monitor & Datalogger

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Getting Started

Installing the Anemometer

The anemometer should be installed according to Fascinating Electronics' instructions. Two wires should be run to where the wind monitor is located. The length of wire is not critical, but should not exceed 500 feet. In your package you will find two clear and yellow or clear and red crimp connectors. These are called UY or UR connectors and they will make a weatherproof connection between your anemometer pigtail and the long wires that connect it to your wind monitor. Simply insert the one black anemometer wire in one hole of the connector and one long wire in the other hole, then using a pair of pliers squish the colored part into the clear part. Repeat for the other wire.

Connecting the Anemometer

You should connect the anemometer to the blue connector closest to the LED displays. The anemometer has two wires. Put one wire in each hole on the connector and then tighten the setscrews using a small screwdriver.

Applying Power

You will need a source for DC power in the range of 7 to 28 volts to power your wind monitor. A small "wall-wart" power supply, a 12 volt battery, or a 12 volt or 24 volt home electrical system will work well. The DC power should be connected to the blue connector label J2. Be sure to observe the polarity marked on the wind monitor circuit board! It is possible to power the wind monitor for short periods of time off of 3AA cells. Please contact support for details.

Ready to go!

Once the anemometer is connected, and powered is applied, the wind monitor is ready to go! If the anemometer is spinning you will see the current wind speed in MPH shown on the display. For most wind monitoring applications this is as far as you need to go. If you wish to use the datalogger feature, please continue reading.

Installing Datalogger Configuration and Download Software

In your package you will find a 3.5" floppy disk that contains DOS and Windows 95/98/ME/2000/XP software for the datalogger. Using this software you can set the datalogger log interval, download logs, and set the datalogger mode.

If you do not have a floppy drive then you can download this software from:

<http://www.winddatalogger.com/documents/>

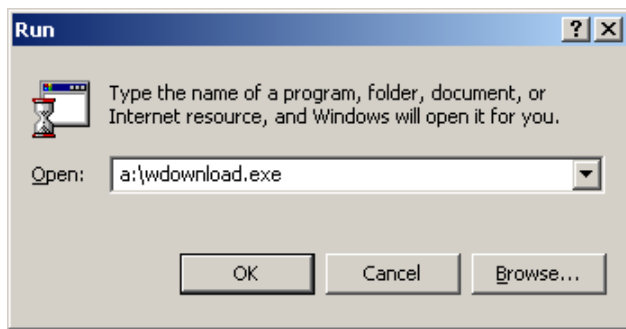
To start the DOS software type the following:

A:

Datalog

And then follow the on-screen directions and prompts.

To start the Windows software use the run command on the start menu and type:



Using the Configuration and Download Software

Before using the software you will need to attach the datalogger to the computer. You can do this by using a DB-9 male to DB-9 female serial extension cable. The datalogger needs to be powered while using the software.

Both programs will prompt you for the serial port that the datalogger is connected to. The DOS software will allow you to choose COM1 or COM2. The Windows software will list all of the available serial ports and let you choose the appropriate port.

After the appropriate serial port has been selected, you will be prompted with a series of menu selections. The important menu items for datalogging are the log interval and device mode.

Log Interval

Log Interval		Maximum Run Time Days
Seconds	Minutes	
1	0.02	0.38
10	0.17	3.8
30	0.50	11.4
60	1.00	22.8
300	5.00	114
600	10.00	228
900	15.00	342

The log interval is the period between wind speed records. The datalogger can store up to 32,767 data points. The shorter the log interval the faster the memory will fill up. The table to the left shows approximate run times. For values not listed you can estimate the run time in days by multiplying the log interval by **0.38**.

Device Mode

There are two important modes useful for datalogging wind speeds; *Download Mode* and *Datalog Mode*.

In *Download* mode the Wind Monitor can be attached to computer for setup and downloading of previously logged data. The Wind Monitor is in Download mode when it flashes ‘O’ ‘O’ on the LED display upon start-up.

In *Datalog* mode the Wind Monitor will record the wind speed at the specified log interval. Upon selecting *Datalog* mode from the configuration software the device will immediately start logging as signified by ‘L’ ‘L’ flashing across the LED display. The wind monitor will continue logging until power is removed, at which point it will return to download mode.

Start Datalogging (!)

At this point you are ready to actual record data. Do record data you will want to perform the following steps:

- 1) Set log interval using configuration software.
- 2) Set device to *Datalog* mode using configuration software. It will flash ‘L’ ‘L’ and then return to displaying current wind speed. You will see the LED display briefly flicker as it records a data point.
- 3) Record start time and date on provided index card. You will need this date and time when you go to download data, so don't lose it!

Once datalogging is started you can disconnect the Wind Monitor from your computer.

Finishing Datalogging

To stop datalogging, simply remove power from the Wind Monitor for a few seconds. Record the time and date at which you removed power using the provided index card.

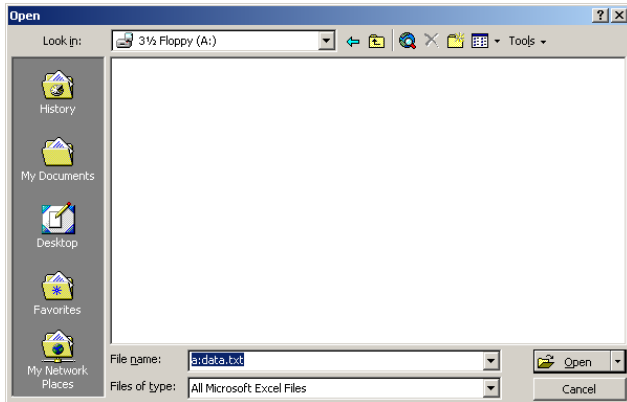
Downloading Recorded Data

- 1) Connect Wind Monitor to computer using serial cable.
- 2) Run configuration software, specifying the correct serial port.
- 3) Select “Download Log” from configuration software menu.
- 4) Enter the start and stop dates and times that you recorded on the index card.
- 5) Software will start downloading data from Wind Monitor. Be patient, it may take up to 15 minutes to download the data! While download is in progress the LED display on the Wind Monitor will be blank.

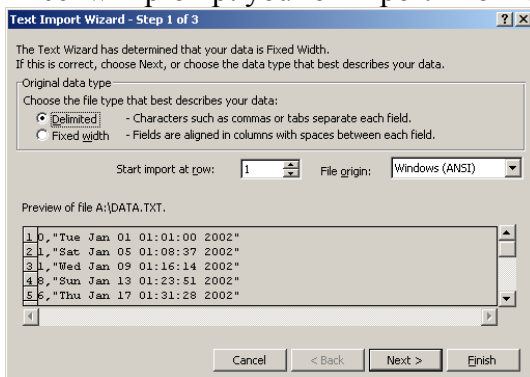
Plotting Recorded Data Using Microsoft Excel

Your data will be stored in a file named *data.txt* in the same folder as the configuration software. The data is stored in Comma Separated Vertical (CSV) format. CSV data can easily be imported in to all spreadsheet or database software.

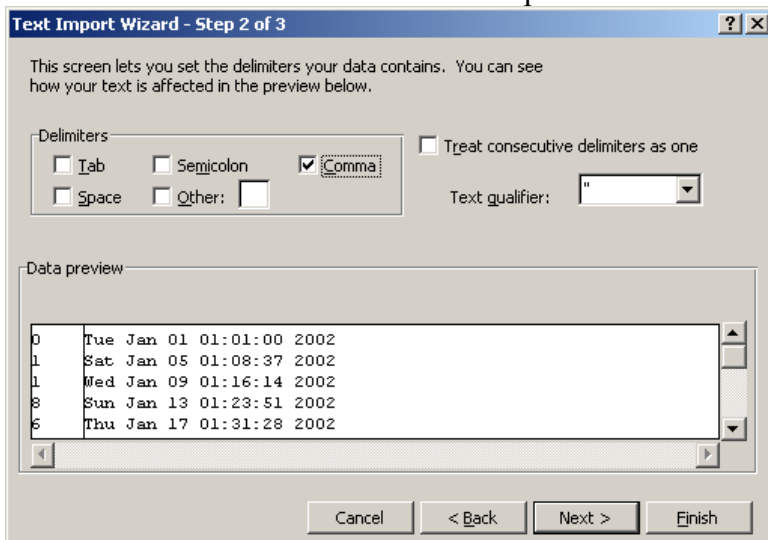
Using the open command, select the location of your *data.txt* file. Most likely it will be on your floppy drive, in which case it can be accessed as *a:data.txt*.



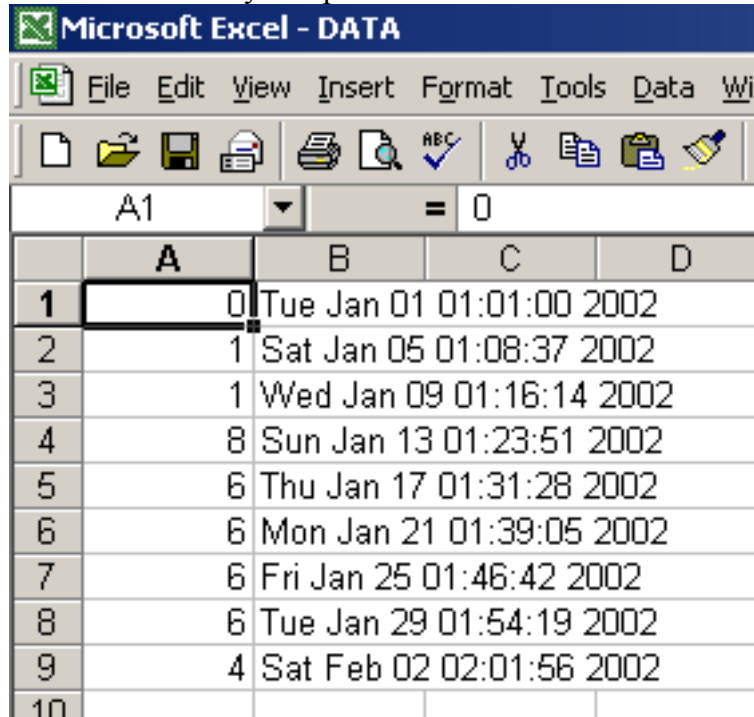
Excel will prompt you for import information. In the first step you should select **Delimited**.



Select **Comma** delimiters in the next step of the Wizard.



Select **Finish** and your spreadsheet will now contain the logged wind measurements.



The screenshot shows the Microsoft Excel interface with the title bar "Microsoft Excel - DATA". The menu bar includes File, Edit, View, Insert, Format, Tools, Data, and Windows. The toolbar contains icons for New, Open, Save, Print, Find, Spelling, Cut, Copy, Paste, and Undo. The active cell is A1, containing the formula "= 0". The spreadsheet data is as follows:

	A	B	C	D
1	0	Tue Jan 01	01:01:00	2002
2	1	Sat Jan 05	01:08:37	2002
3	1	Wed Jan 09	01:16:14	2002
4	8	Sun Jan 13	01:23:51	2002
5	6	Thu Jan 17	01:31:28	2002
6	6	Mon Jan 21	01:39:05	2002
7	6	Fri Jan 25	01:46:42	2002
8	6	Tue Jan 29	01:54:19	2002
9	4	Sat Feb 02	02:01:56	2002
10				

At this point all of your data is in Excel and you can plot it or perform statistics on it as you would any other spreadsheet.