

Tech Note

Wind110 Wind Speed Recorder Quick Setup Guide

Installation of the Wind110 (Pulse110-2 pos. terminal block)

The anemometer should be mounted vertically in an open area, as high up as possible. It should be mounted on a pole so that the Wind110 is unobstructed and clear of debris. It can be mounted using a cotter pin on a 13 mm (0.5 in.) diameter mast with a #35 hole, 11 mm (0.35 in.) from the top. The anemometer is non-directional, and will measure wind blowing in any horizontal direction. To ensure the most accurate readings, adjust the position of the **anemometer on the bracket so that it is level. Run the 25' (ft.) of provided cable to the location** where the data logger will be mounted, securing it roughly every 2 feet. There are 4 mounting holes (0.2 in. diameter spaced 2.5 in. square) on the watertight enclosure.

PC and Interface Cable Set-up

A computer running Windows with the MadgeTech software v2.00.58a (or higher) is required. Once the software is installed, a MadgeTech IFC110 interface cable is required to communicate with the logger. To install the software and interface cable, consult the "QuickStart Guide" (pages # 7 to 11) on the MadgeTech web site: http://www.madgetech.com/ quickstart.php

Once the software is installed and the interface cable (or IFC200) is connected to the PC, you are ready to communicate with the Wind110 data logger. To establish communications, the first step is to unscrew the stainless steel plug from the enclosure. The second step is to insert the 3.5mm plug of the interface cable through the hole in the enclosure and completely into the datalogger. The third step is to ensure that a 57600 baud rate is checked under the "Communications" -> "Select Baud Rate" menu bar option within the MadgeTech software.

🎢 Start Device		X
Start Method Start Now Delay Start Pushbutton Start	Now •	
Start Parameters		
Device Type:	Pulse110	
Serial Number:	M33815	
User ID:	Pulse	Alarm
Extended ID:		settings
Reading Rate:	10 Seconds	∐hermocouple Type
🗖 Wrap Around		Engineering Units
C Log Time		
Days:	1 Day ov. Usum	Cancel
Minutes:	21 Hours 30 Minutes	
Seconds:	40 Seconds	<u>S</u> tart Device

Launch the Wind110

The Wind110 is programmed to record wind speed (mph) every 10 seconds, but can be changed when starting the device. To start the device, select the **"Device"** -> **"Start Device" menu option** in the software, and the screen on the left should appear.: MadgeTech, Inc. (603) 456-2011 Phone (603) 456-2012 Fax www.madgetech.com support@madgetech.com

If a 10 second reading rate is acceptable, click the "Start Device" menu bar option to start the

device. Wait for a dialog box to appear that indicates the device has been started successfully. Unplug the interface cable, and replace the stainless steel watertight plug.

Changing the Reading Rate

If a different reading rate is desired, for example to extend the logging time, or to more accurately record gust values, the engineering units gain will have to be reprogrammed on the device.

Setting Device Units for the Wind110

Using M/Ss

- 1. Connect the Wind110 to the PC that has the MadgeTech software installed.
- 2. Go to Device->Identify and Read Status.
- 3. In the Device Detail window click on the Device Detail tab and then click the Engineering Units button on the lower right of the window.

evice Status Device E	etail	
Pulse110 Pulse Recorder		
Revision Subtype	REV2 (64K) 0x0000000	
Channel 1: Pulses		
Measurement Unit	Pulses	
Measurement Range	0 4294967295	
Measurement Resoluti	on 1	
Wraparound		
Enabled:	No	
		Engineering Units.
Engineering Units		
Enabled:	Yes	Calibration
Prompt:	No	
Pulses:	[Pulses]	Print
		Euric

4. When the Engineering Units window opens, click on the Device Units Wizard button.

	onits wizard	0	hange device settings		Save changes to dev	rice
	Device Units		Device Units List Po	rtable Units		
All Channel	s	-	Channel		Unit	
[Default Un	its]	*	1: Pulses		[Default Units]	
E Cashia a		device				
Promot f	ingineering units on this or unit selections on dow					
Coloct on or	aning with for anothe	hannal				
Select an er from the lists	ngineering unit for each o . If the units you need ar	channel re not				
Select an er from the lists defined, swil to define the	ngineering unit for each o . If the units you need ar toh to the 'Engineering U ym first.	channel re not Inits' tab				
Select an er from the lists defined, swil to define the	ngineering unit for each o s. If the units you need ar toh to the "Engineering U am first.	channel re not Inits' tab				
Select an er from the lists defined, swil to define the gineering Ur	ngineering unit for each o . If the units you need ar toch to the 'Engineering U m first.	channel re not Inits' tab			Show	all unit:
Select an er from the lists defined, swil to define the gineering Ur Init ID	ngineering unit for each o s. If the units you need at tch to the 'Engineering U am first. nits List Standard Units Reference Unit	channel re not Inits' tab	n Label	Ref Low	Show	all unit:
Select an er from the lists defined, swit to define the igineering Ur Init ID	ngineering unit for each o . If the units you need an toh to the "Engineering U em first. nits List Standard Units Reference Unit	channel re not inits' tab	n Label	Ref Low	Show RefHigh	all unit:
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Select an er from the lists defined, swit to define the ngineering Ur Init ID	ngineering unit for each c I fi the units you need a tch to the 'Engineering U m first. nits List Standard Units Reference Unit	channel re not inits' tab	n Label	Ref Low	Show Ref High	all unit:

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- 5. Click "Next" in the windows that opens.
- 6. Check the box next to "Use portable units on this device" and click 'Next'.



7. In the next window type a description in the top field and then a label. In the example in thescreen shot Wind was used for the description and the m/s of the label. (m/s will appear in the graph view when downloading your data) Click 'Next'.

The combined len eave the label fiel	gth of the description and label of the description and label of definition and the description and the de	cannot exceed 10 characters. But, you may s both.
Enter the desc	ription and label for your p	ortable units below. Scaled Engineering Units
Description:	Pulses	-> Wind
Label:	Pulses	-> m/s

8. In the next window you will enter the gain that corresponds to your reading rate and desired units from the table below *(figure A)*. In this example m/s (meters per second) and 5 second reading rate is used. Click 'Next'.

ne combined le ave the label fi	ngth of the description and label eld blank to use the description a	cannot is both.	exceed 10 characters. But, you may
nter the des	cription and label for your p	portabl	e units below.
	Recorder Units		Scaled Engineering Units
Description:	Pulses	->	Wind
Label:	Pulses	->	m/s

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9. In this window make sure "Enable engineering units for this device" is selected and unselect "Ask me for my unit selections when I download data". Click 'Next'.

he settings below ettings.	are optional, so you may leave them at the default or select your preferred
Uncheck the bo engineering unit programmed inte	ux below if you would like to disable the automatic display of ts from this device. The units you have selected will still be o the device, and you may enable the display at any time.
🔽 Enable engine	ering units for this device
Check the box I proper units wh	selow if you would like the software to ask you to select the en you download data from the device:
🗖 Ask me for my	unit selections when I download data
Ask me for my	unit selections when I download data

10. Click "Finish"

Engineering Units Quick Reference (1 pulse/reading rate)						
Engineering Units Gain						
Reading Rate	МРН	КРН	M/S	KNOTS		
2 sec	0.425	0.68397	0.18999	0.36931		
5 sec	0.17	0.27359	0.075997	0.14773		
10 sec	0.085	0.13679	0.037998	0.073863		
30 sec	0.028333	0.045598	0.012666	0.024621		
1 min	0.014167	0.022799	0.0063331	0.0123100		
5 min	0.0028333	0.0045598	0.0012666	0.0024621		
10 min	0.0014167	0.0022799	0.00063331	0.0012310		

Figure A

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