110-WS-25N Quick Start

Hardware Installation

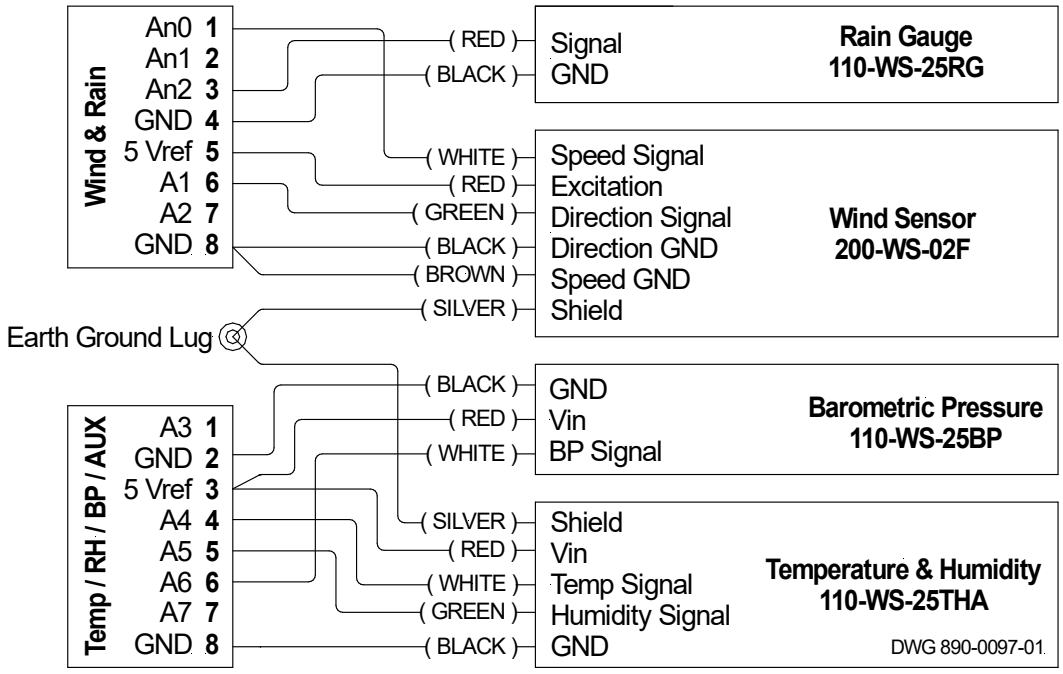
Select a level area on firm ground that will support the tripod. The area should be away from buildings or trees that block air movement. A grassy area is preferred as sunlight reflected from gravel or pavement could elevate the temperature readings. If high winds are expected the legs of the tripod must be secured to prevent tipping over.

1. Open the tripod to the fullest extent and secure it.
2. Assemble the wind sensor on the swaged end of the 5' mast. Secure it with the two screws on the base of the sensor. Notice the NORTH label on the base of the wind sensor.
3. Assemble the mast to the tripod. Rotate the mast until the NORTH label points north. Tighten the mounting screws on the tripod.
4. Mount the temperature/humidity sensor on the mast, leaving room for the remaining equipment. *Note: the barometric pressure sensor is pre-installed in the NEMA enclosure.*
5. Install the rain gauge on the opposite side of the mast.
6. Mount the NEMA data logger enclosure just above the top of the tripod or on a leg of the tripod, as desired.

110-WS-25N Weather Station

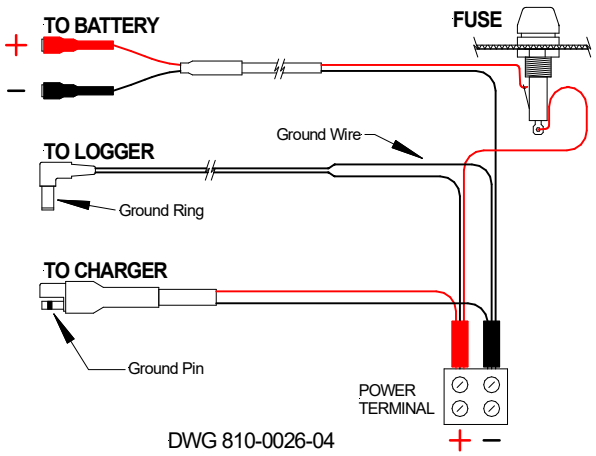
Wiring

Route each sensor wire into the NEMA enclosure through the conduit fitting on the bottom. Attach an earth grounding wire to the copper lug on the bottom of the enclosure. Connect the other end of the wire to an earth grounding rod (NovaLynx 190-110 Grounding Kit, sold separately).



Power

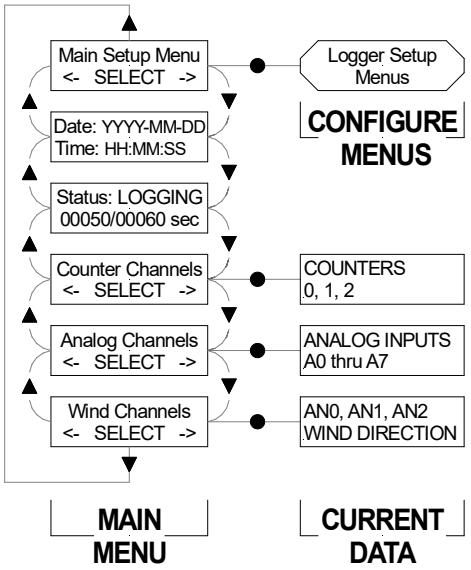
1. To turn on the logger, simply connect the red battery lead to the positive terminal of the battery. The system can run for up to 10 days from a fully charged battery.
2. To charge the battery using the internal AC charger, first locate the 2-pin in-line connectors in the NEMA enclosure and connect them. Locate the power cord, extend it, and connect it to a GFCI protected power outlet (100-240 VAC). Make sure the connection is weatherproof. RED LED = charging, GREEN = charged.
3. To charge the battery using a solar panel, route the panel's 2-pin in-line connector into the conduit fitting and connect it to the matching connector inside the enclosure.



Logger Status

Use the up and down buttons below the display to toggle through the Main Menu.

1. Check the Date and Time.
2. Check the logging interval, which is expressed in seconds.
3. If correct, insert the memory card to begin logging. Otherwise consult the instruction manual.



Current Data

Scroll to Counter Channels, Analog Channels or Wind Channels and then press the SELECT button. Within the sub-menus, press the up and down buttons to view sensor data.

- Counter Channels — 2: Rain Today
- Analog Channels — A0: Input Voltage, A4: Temperature, A5: Humidity, A6: Barometric Pressure
- Wind Channels — AN0: Wind Speed/Max, Wind Direction

Download Data

1. Press inwards on the data card to release it.
2. Insert the data card into the USB card reader (included). Connect the card reader to a computer.
3. Open File Explorer to access the contents of the memory card. Copy any files you want to keep.
   Note: The logger creates a new file every day, with the date code as the name (YYYYMMDD.csv)
4. Open the file in a spreadsheet. It may be necessary to invoke "Text to Columns" to get the data to fall into separate columns. The logger does not pre-pend column headings, so you will need to create headings and copy/paste them into the spreadsheet to make it easier to interpret the data.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	Wind Speed, Wind Gust, Direction, and Pulses														Analog Voltages from a Variety of Inputs								
2		Anemometer 0			Anemometer 1			Anemometer 2			Counter	Counter	Counter	Wind	A0,	A1,	A2,	A3,	A4,	A5,	A6,	A7,	
3	Date Time	Speed	Gust	Pulse-Count	Speed	Gust	Pulse-Count	Speed	Gust	Pulse-Count	0	1	2	Direction	10bits	10bits	10bits	10bits	12bits	12bits	12bits	12bits	CRC
4	9/17/2019 0:00	0	0	0									0	58	12.18				12.9	28	5.569		53
5	9/17/2019 0:01	0	0	0									0	58	12.18				11.8	27.4	5.53		25
6	9/17/2019 0:02	0	0	0									0	58	12.14				10.9	27	5.498		190