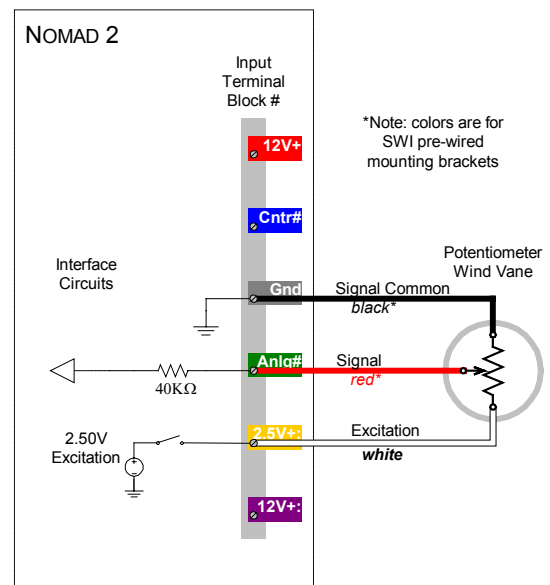


USING THE SECOND WIND PV1 WIND VANE WITH NOMAD 2

The Second Wind PV1 wind vane is based on a potentiometer (pot), or variable, resistor. With this three-terminal device, the ratio of the wiper voltage to the applied excitation voltage indicates the device position. To wire to a pot wind vane, connect 2.5V excitation (2.5V+) to the "+" terminal of the potentiometer and Gnd to the "-" terminal. The pot wiper terminal is connected to Anlg#.

If connected properly, the signal increases as the vane moves clockwise as viewed from above. If the "deadband" (the small gap between the beginning and end of the resistor element) is pointed North, then due East is a quarter of the excitation voltage (0.625 V), South is half (1.25 V), and West is three quarters of excitation (1.875 V). Slightly west of North is 2.5 V, slightly east of North is 0 V. This is all easily verifiable using Nomad 2's Signal QuickView display.

Try to position the vane so that the deadband is pointed to the less likely wind directions for the site. This will minimize the time that the pot wiper is in the deadband. It is important to observe and write down the apparent deadband direction after installation to properly configure the input.



Configuring in Nomad Desktop

Device Information

Type:

Name: Serial Number:

Units: 360°: Deadband:

Full Range: 0 to 2.5V 0 to 5.0V

Station Height: Meters Azimuth: