

**WIND SPEED MONITOR ( ANEMOMETER )**

The wind speed monitor function is an optional feature. It allows connecting an external wind speed sensor, like the 3 cup type for example, that has internal dry contact or active output preferably with one contact closure per revolution. The monitor function will sense the contact closure events.

To enable the wind speed monitor enable the function **Fn 96** and **Fn 7**.

The hardware option # 738WND should also be installed in the clock.

If any other functions between Fn 0 thru Fn 6 are also enabled, the display will alternate between the corresponding other screens as well ( see the **List of Functions** ).

NOTE, that when the wind speed monitor is enabled, the timer functions will not operate.

The wind speed is calculated using the following formula:

$$V = V0 + M \times G \times F$$

Where:

V = Wind speed indication in [meters/second] within the range from 0.0 to 136.0 M/s

V0 = User adjustable wind speed Offset value in [meters/second] ( default = 0.0 M/s )

M = User adjustable system Gain Multiplier ( default = 1.0 )

G = System Gain factor in [meters] ( = 0.45 M )

F = Wind sensor revolution frequency in [Hz]

Note, that the wind speed test results will be displayed as rounded up to one decimal point resolution.

Two additional features for the wind speed monitor are also available:

**1. User adjustable wind speed Offset and system Gain Multiplier.**

This feature is enabled by enabling the function **Fn 97**. The functions **Fn 31, 38 and 39** should also be enabled.

Press the SET key on the IR remote control. The display will show : XX YY , where XX is the Offset value and YY is the Multiplier value. Although the display will not show the decimal points, both values are in fact adjustable with one decimal point resolution.

The Offset range is from 0.0 to 2.5 M/s.

The Multiplier range is from 0.0 to 3.0 .

Use the UP and DN keys to alter the values on the display. To move the cursor press the NXT key.

Note, that even if the system allows to input higher values than the above range, the accepted maximum will be limited as specified above. So, please try to limit the values accordingly during the adjustment procedure.

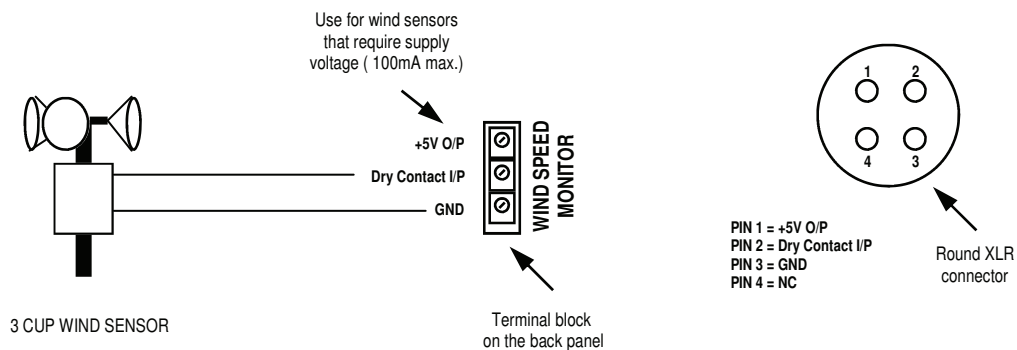
To quit the adjustment screen don't press any keys for several seconds and the display will go back to the normal mode. The wind speed monitor will execute the new settings immediately.

Note, that after the adjustments have been made, the function Fn 97 may be disabled. The settings are stored in the internal permanent memory.

**2. Averaging of the wind speed test results.**

This feature is activated by enabling the function **Fn 98**.

When enabled, this option will cause the system to calculate and display an arithmetic average of each group of 8 readings.



Wiring for wind speed monitor system using wind sensor with dry contact