Handheld Anemometer

Instruction Manual

1. Introduction
Congratulations on purchasing this pocket-sized anemometer. This innovative product provides wind speed, wind chill and temperature information for any outdoor activity. The operation of this product is simple and straightforward and by reading this operating manual, users will receive the optimum benefits of all its features.

2. Inventory of contents
1) 1x Anemometer
2) 1x Tripod
3) 1 x 3V (CR2032) lithium cell
4) 1x Instruction manual

3. Features
1) Wind speed measure in mph, Km/h, m/s, ft/min or Knots
2) Wind speed in Beaufort wind scale bar graph
3) Wind chill display
4) Temperature display in degrees Fahrenheit or Celsius
5) Comfort level
6) LED backlight
7) Low battery detection and display
8) Landyard included
9) Unit can be tripod mounted
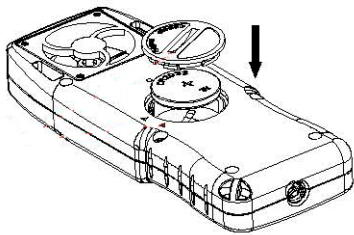
4. Setting up

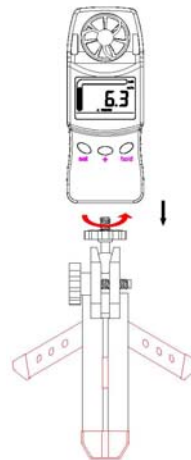Figure 1   Figure 2

1) First use a large coin to open the battery cover at the back of the anemometer as indicated above.
2) Checking the correct polarization, insert 1 x 3V (CR2032) lithium cell, positive (+) pole up into the battery compartment and replace the cover as figure 1.
3) When the battery is inserted, all the segments of the LCD and backlight will light up briefly.

The anemometer can be tripod mounted as figure 2

5. Function keys:
The anemometer uses the following keys:
5.1 SET key:
- In normal mode, press this key to toggle between wind speed and temperature/wind chill display.
- In setting mode, press this key can change set item, if now set the last item, then press this key to out of setting mode.
- Press the key for 2s to turn on the backlight for 8s.
- Press the key for 3s to power on/off the unit.

- Press the key for 4s to clear the history data.
- Press the key for 6s to enter the setting mode (default set item is wind speed unit).

*5.2 **+** key :*
- In the wind speed mode, press to change the display "WIND →ΔWIND →ΦWIND".
- In the temperature mode, press to switch temperature to wind chill.
- In the setting mode, press to change the setting value.
- Press the key for 2s to turn on the backlight for 8s.

5.3 HOLD key:
- In wind speed mode, press this key to hold the display for current speed which just measured (in the hold mode, the system do not fresh the display until out of this mode).
- In hold mode, press this key to out of hold mode and back to the speed mode.

6. Selection of operation mode

There are two modes, one is **wind speed**, and the other is **temperature**. By pressing the **"set"** key the display will toggle between the two modes.

6.1 Wind Speed Mode

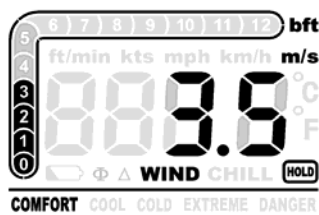| Current wind speed | maximum wind speed | average wind speed |

The wind speed mode can be selected to 3 different display modes at any time.
To toggle between current wind speed, maximum wind speed (ΔWIND) and average wind speed(ΦWIND), simply press the "+" key

Wind speed measuring range

The wind speed measuring range is 0.4mph(0.2m/s) ~ 67mph(30m/s), if the speed between 0.0m/s and 0.2m/s,the wind speed will show 0m/s,and if the speed over 30m/s,the wind speed will show "--.-".

In the wind speed mode user can press the HOLD key to hold on the display for the speed that just measured as below picture. System does not fresh the display until user press the HOLD key to back to the normal mode

Beaufort wind scale (bft)

The Beaufort scale is displayed in bar graph (0-12). This is a system for estimating wind force without the use of instruments based on the visible effects of the wind on the physical environment.
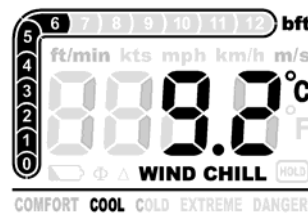
Beaufort scale				
	m/s	kts	mph	km/h	ft/min
0	0-0.2	0-1	0-1	0-1	0-58
1	0.3-1.5	1-3	1-3	1-5	59-314

2	1.6-3.3	4-6	4-7	6-11	315-668
3	3.4-5.4	7-10	8-12	12-19	669-1082
4	5.5-7.9	11-16	13-18	20-28	1083-1574
5	8.0-10.7	17-21	19-24	29-38	1575-2125
6	10.8-13.8	22-27	25-31	39-49	2126-2735
7	13.9-17.1	28-33	32-38	50-61	2736-3385
8	17.2-20.7	34-40	39-46	62-74	3386-4093
9	20.8-24.4	41-47	47-54	75-88	4094-4822
10	24.5-28.4	48-55	55-63	89-102	4823-5609
11	28.5-32.6	56-63	64-72	103-117	5610-6417
12	〉32.6	>63	>72	>117	>6417

6.2 Temperature mode

Temperature   **Wind chill**

In temperature mode, press the + key to toggle between the temperature and wind chill display,

Temperature measuring range

The unit measure the temperature every 10s ,and the measure range is from -29.9 centigrade to +59 centigrade. If the temperature out of range, it display "- -.-". and the wind chill also display "--.-".

Wind chill

The anemometer calculates automatically wind chill, which can provide useful information for preparing outdoor activities in cold weather. "Wind chill" provides an indication of how cold it feels given the combined effects of the actual air temperature and the wind speed. Wind chill temperature is only defined for temperatures at or below 50 °F(10 °C) and wind speeds above 4.8 kilometers per hour. Wind chill temperature will be the same as current temperature above 50 °F(10 °C).

Comfort level

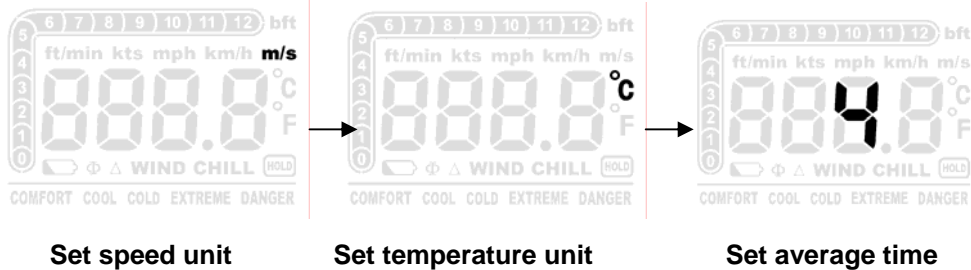The bottom of the display will show you the comfort level:

Levels	Temperature
Danger	-25 C or colder (-13F or colder)
Extreme	-10 C to -24 C (14F to -11F)
Cold	10 C to -9 C (50F to 15F)
Cool	11 C to 19 C (52F to 67F)
Comfort	20 C to 26 C (68F to 79F)

7. Manual setting

Press the "set" key for 6s to enter the setting mode. After enter the setting mode, other display will be empty except the set item, the icon will flash at 2Hz .

In the setting mode, press the "set" key to set the following setting in sequence, press "+" key to select the unit :

(1)Wind speed unit in m/s, Km/h, mph, Knots or ft/min

(2)Temperature display unit in degree Celsius or Fahrenheit

(3)The sample time for average data (2 to 10 for choose, default is 4)

| **Set speed unit** | **Set temperature unit** | **Set average time** |

If no key operation in 15s, the unit will return to the normal mode automatically.

8. Low battery display

The unit will detect the voltage of battery just after power on. In normal mode, the unit detects low battery every 1 minute. In power off mode do not detect it, if the battery voltage is low, the icon ⬛ will be displayed.

9. Power ON/OFF

Press and hold down the "set" key for 3 seconds to switch the unit ON or OFF. In power off mode the unit will sleep and do not detect the wind speed and temperature data, all the history data will be cleared too.

Note: The anemometer is automatically switched OFF when no key is pressed and the wind speed is 0 in 10 minutes.

10. Specification

Recommended operating temperatures   : -29.9°C to +59°C with 0.1°C resolution

(-21.8 °F to 138.2 °F with 0.2° resolution)

("---"displayed if outside this range)

Temperature checking interval   :   every 10 seconds

Wind speed measuring range   : Minimum 0.3 m/s (1 mph)

(Show 0 if wind speed <0.3m/s

Maximum 30 m/s (67 mph)

(Show --.- if wind speed>30m/s)

Power source   : 1 x 3V lithium cell (CR2032)

Battery life   : Approximately 12 months

Dimensions (L x W x H)   : 50 x 18 x 140 mm (2" x 0.7" x 5.5")