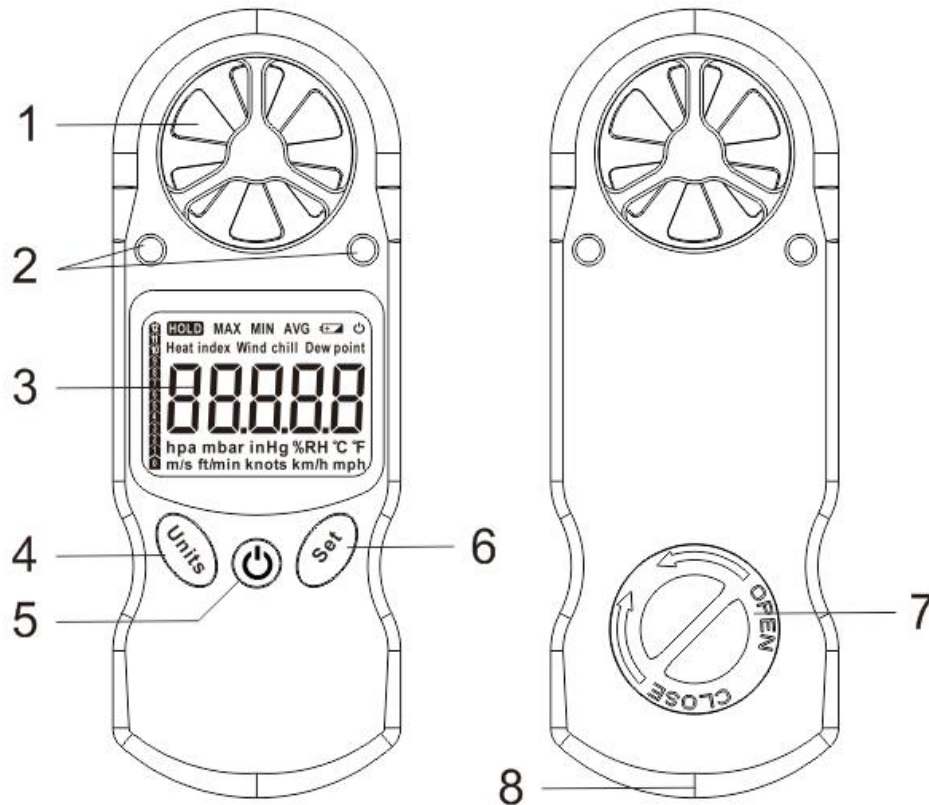# 8 in 1 Digital Anemometer

User Manual

Features:

- Air Velocity Measurement Range
- Temperature Measurement Range
- Humidity Measurement Range
- Air Velocity Unit Selection: m/s, ft/min, knots, km/h, mph
- Wind Chill
- Heat Index
- Dew Point
- Barometric Pressure
- Altitude (Relative & Absolute/Density)
- LCD with White Backlight
- Beaufort scale
- °C / °F selection
- Max/Min/Avg Reading Selection
- Hold Function
- Air Velocity Unit Selection: m/s, ft/min, knots, km/h, mph
- Low Battery Warning
- Auto Power Off (with override function)
- Calibration Function ***Use with caution, please read the instructions carefully**
- Resolution: 0.1m/s, 1%,0.1℃
- CE Certified & RoHS Compliant

Specifications:

Measurement	Units	Range	Resolution	Accuracy
Wind speed	m/s	0 to 30	0.1	±5%
	ft/min	0 to 5860	19	
	knots	0 to 55	0.2	
	km/h	0 to 90	0.3	
	mph	0 to 65	0.2	
Wind chill	ºC	0 to 30m/s, -45 to 10	0.1	1
	ºF	0 to 65 mph, -49 to 50	0.1	1.8

Temperature	ºC	-29 to 70	0.1	1
	ºF	-20 to 158	0.1	1.8
Relative humidity	%RH	0 to 100	0.1	±3%
Heat index	ºC	0 to 100%RH,21.1 to 54.4	0.1	2
	ºF	0 to 100%RH,70 to 130	0.1	3.6
Dew point	ºC	-29 to 70	0.1	2
	ºF	-20 to 158	0.1	3.6
Barometric pressure	hpa	10 to 1100	0.1	1.5
	mbar	10 to 1100	0.1	1.5
	inHg	0.29 to 32.48	0.01	0.05
Altitude	m	-700 to 9000	1	12
	ft	-6000 to 30000	1	50
Operation temperature	0 to 50ºC(32 to 122ºF)			
Operation humidity	10 to 90%RH			
Storage temperature	-10 to 60ºC(14 to 140ºF)			
Storage humidity	10 to 75%RH			
Size	110*45*20mm			
Weight	60g(included battery)			

Product description:

1. Vane Impeller
2. Temperature & Humidity Sensors
3. LCD with White Backlight
4. **Unit** Button
5. **Power** Button
6. **Set** Button
7. Battery Cover
8. Lanyard Attachment Point

Operation:

1. Turning On and Off your Meter

a. Press the **Power Button** for over 2 seconds to turn on your meter.

After 10 minutes without any operation the meter will power off.

b. **To override the Auto Power Off** hold down the **Set Button** then press the **Power Button**

to turn on. You will see the Power Symbol appear on the LCD. **Warning**, the meter will stay on until

the battery runs out unless you **turn off by holding down the Power Button**.

2. Max/Min/Avg Value Measurement Function

In any measurement mode quickly press the **Power Button** to choose Maximum Reading, a second

press will display the Minimum Reading, a third press will display the Average reading and a forth

press will return the meter to the standard current readings.

Max: When is this mode the meter will display the maximum value reached

Min: When is this mode the meter will display the minimum value reached

AVG: When is this mode the meter will display the average value reached

Once the meter is switched on it will start to record the Max/Min/Avg values

3. Units Switch Function

In any measurement mode quickly press the **Units Button** to change the measurement units displayed. i.e. ºC or ºF units display.

4.Hold Function

Press the **Units Button** over 2 seconds to freeze current readings displayed.

Press this button over 2 seconds again to exit this mode.

NOTE: In Altitude Mode press Units Button for over 2 seconds switch to Relative Altitude Mode (See Mode 8). There is not hold function in the Altitude Mode

5. Switching Operating Modes

Press **Set button** to change the required mode.

6. Backlight function

Press **Set button** over 2 seconds to turn on/off the backlight.

7.Beaufort scale

The Beaufort scale is always displayed according to current wind speed in all modes

Operating mode introduction

Press **SET Button** to change the display modes:

Wind Speed -> Wind Chill ->Temperature ->Relative Humidity -> Heat Index -> Dew Point -> Barometric Pressure -> Pressure Altitude
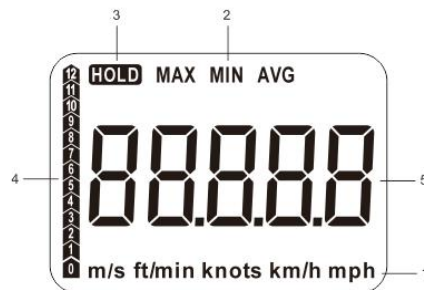
Mode 1: Wind speed

1. Wind Speed Units: **m/s, ft/min, knots, km/h, mph**

2. Max/Min/Avg Wind Speed Reading Display

3. Hold Current Wind Speed Reading

4. Beaufort Scale

5. Wind Speed Readout

Wind Speed Full Display

Mode 2: Wind chill

Wind chill means the effect that air temperature combined with wind speed has on human skin or an object.
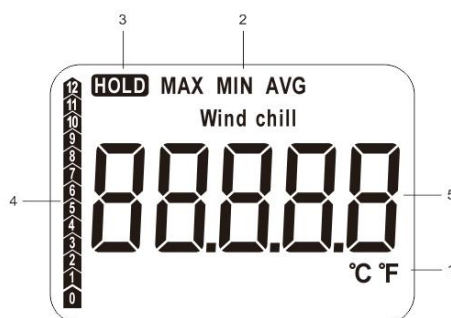
1. Wind Chill Units: ºC or ºF

2. Max/Min/Avg wind chill reading display

3. Hold Current Wind Chill Reading

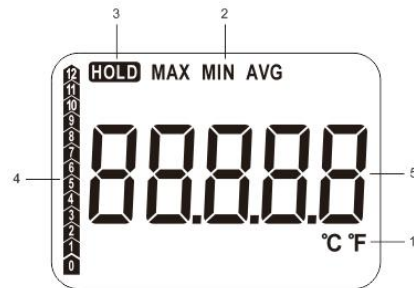4. Beaufort Scale

5. Wind Chill Readout

Wind Chill Full Display

Mode 3: Temperature

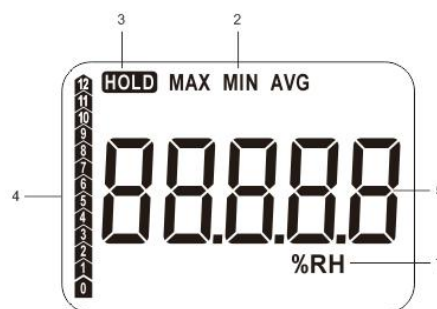1. Temperature Units: ºC or ºF

2. Max/Min/Avg Temperature Reading Display

3. Hold Current Temperature Reading

4. Beaufort Scale

5. Temperature Readout

Temperature Full Display

Mode 4: Relative Humidity

1. Relative Humidity Units: %RH

2. Max/Min/Avg Relative Humidity Reading Display

3. Hold Current Relative Humidity Reading

4. Beaufort Scale
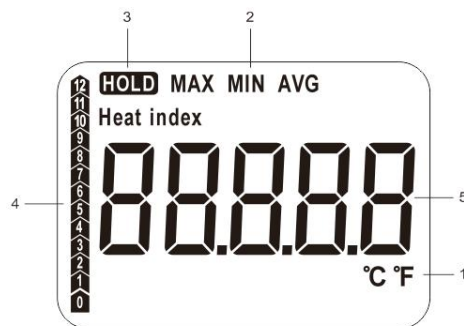
5. Relative Humidity Readout

Relative Humidity Full Display

Mode 5: Heat index

The heat index also known as apparent temperature is what the temperature feels like to the human body when relative humidity is compared with air temperature. The heat index is higher than the normal air temperature unless out of range.

1. Heat Index Units: ºC or ºF

2. Max/Min/Avg Heat Index Reading Display

3. Hold Current Heat Index Reading
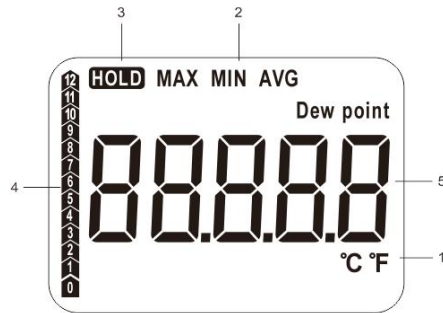
4. Beaufort Scale

5. Heat Index Readout

Heat Index Full Display

Mode 6: Dew point temperature

Dew point temperature means the temperature at which air becomes saturated with moisture.

1. Dew Point Temperature Units: ºC or ºF

2. Max/Min/Avg Dew Point Temperature Reading Display

3. Hold Current Dew Point Temperature Reading

4. Beaufort Scale

5. Dew Point Temperature Readout

Dew Point Temperature Full Display

Mode 7: Barometric pressure

1. Barometric Pressure Units: hpa, mbar, inHg

2. Max/Min/Avg Barometric Pressure Reading Display

3. Hold Current Barometric Pressure Reading

4. Beaufort Scale

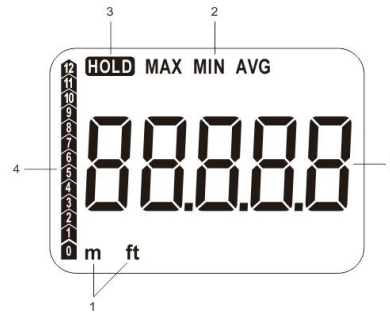5. Barometric Pressure Readout

Barometric Pressure Full Display

Mode 8: Pressure Altitude (Absolute/Density & Relative Altitude)

1. Altitude Units: m, ft (Meters or Feet)

2. Max/Min/Avg Altitude Reading Display

3. Hold Current Altitude Reading

4. Beaufort Scale

5. Altitude Readout

Altitude Full Display

Relative Altitude Measurement:

To view the relative altitude, or the change in altitude since last calibration (referred to as climb or ascent / descent), press and hold the **Units Button** for two seconds, the LCD will then display the **REL** interface on screen and then relative altitude (Defaulted value 0m). The value on the screen will change as the Anemometer is moved higher or lower than its current position. Press and hold the **Units Button** again for two seconds to change back to **Absolute (Density) Altitude**. Please see below picture:

Density Altitude Display   Relative Altitude Display

Calibration function:

Step 1.Hold **Units Button** then **turn on** meter to enter calibration mode.

Step 2: Press **Units button** choose the mode "**see table below**", then press **Power Button** to enter the calibration mode;

Step 3: Press **Units Button** to choose the unit you wish to change (the selected unit will flash quickly) and press **Set Button** to adjust to the correct value,

Step 4: Press **Power Button** for over 2 seconds to store the setting and exit.

Number	Calibration Function Mode

1	Wind Speed
2	Temperature
3	Relative Humidity
4	Barometric Pressure
5	Absolute (Density) Altitude

Battery Replacement:

If the meter does not power on as usual or the low battery icon ▭ appears on the LCD, replace with a new CR2032 Lithium Battery. To do this, turn the battery compartment cover in a counterclockwise direction to remove it. Remove the old battery and insert a new battery face up, with the bottom side in contact with the two pins. Dispose of the battery in an environmentally safe and sound manner at a recycling point.

DO NOT DISPOSE OF IN YOUR BIN!

Caution:

1. This meter is accurate at low and mid-range air speeds. Consistent use at very high speeds, i.e. from the window of a fast moving car will damage the impeller's bearing and reduce accuracy.

2. This meter is not a personal safety device.

Trouble Shooting:

1. The Meter is displaying the wrong readings

Enter the calibration mode and correct using a known trusted source such as a reputable internet source for Barometric and Altitude Readings. Or a known accurate stable air flow will need passing through the meter vane in working mode (an accredited wind flow tunnel is strongly recommended), to assist in calibrating the wind speed.

2. Power on but no display or the display disappears

   a. Check the battery is in place with good contact to the pins and the correct way up.

   b. Remove battery for one minute and re-install.

   c. Replace the battery.

3. For all other issues please contact your supplier.

Warranty:

This meter has a one year warranty for a period of one year from date of purchase.

This warranty covers normal operation and does not cover batteries (including leaks), misuse,

abuse, alteration, tampering, neglect, improper maintenance or improper calibration. Nor can

the warranty be used as an excuse for a false claim simply because you have changed your mind

after the initial 14 day period.

Proof of purchase is required for warranty repairs.