

Brannan instruction manual

HEAVY DUTY WIND SPEED METER (13/490/0)



Please read this manual carefully
and keep it for reference before operating
the wind speed meter.



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Measurement for life.



1. Safety

Read all safety information and instructions for use before using the product. Use the product only as specified.

Do not use the product around explosive gas, vapor, or in damp or wet environments.

Environment conditions:

- Operating humidity: $\leq 90\%RH$ (non-condensation)
- Operating temperature: -10 to $60^{\circ}C/F$

Maintenance

Repairs or servicing not covered in this manual should only be performed by qualified personnel.
Wipe the unit with a dry soft cloth. Do not use abrasives or solvents on this instrument.

2. Introduction

This wind speed meter (anemometer) has a large, easy to read, backlit LCD display, designed for measuring air velocity, air flow, humidity and temperature simultaneously. It is widely used in the measurement of quality control, health prevention and various environmental applications, such as ventilation systems, wind tunnel tests, construction engineering, railway engineering, navigation, outdoor sports and education.

3. Features

- 2.8" colour LCD display
- Green-Yellow-red LED light indication
- Audible alarm
- Air velocity and air volume measurement
- Air velocity level indication
- Measurement of temperature, humidity and wind (THW)
- MAX/MIN/AVG/HOLD function
- Low battery indication
- Auto power off

Measurement for life.



4. Specification

Air velocity:

Measuring range:	0.4 to 35 m/s 1.4 to 122.5 km/h 78.9 to 6889.6 ft/min 0.77 to 68.0 knots 0.89 to 78.2 MPH 150 to 10500 CMM (cubic meter per minute) 692.9 to 55117.4 CFM (cubic feet per minute)
Accuracy:	$\pm 3\%$ of reading ± 0.3
Sampling rate:	1 times/sec
Area set:	0.1 to 9999 CM ² , M ² or ft ²
Visual LED indication:	3 colour LED indication (refer to colour and air speed correspondence table in section 8)
Overrange indication:	"OL" display when wind speed exceeds 40 m/s
Alarm:	The alarm will beep for 20 secs when wind speed reaches 10.8m/s (yellow on LED colour chart), pause for 1 min, then beep for 20 secs again. This will repeat. (Alarm can be turned on or off.)

Temperature:

Measurement range:	-30 to $60^{\circ}C$ (-22 to $140^{\circ}F$)
Accuracy:	$\pm 1.5^{\circ}C$ ($2.7^{\circ}F$)
Resolution:	0.1
Overrange indication:	Displays "LO" below range and "HI" above range

Apparent temperature (THW):

Measuring range:	-20 to $60^{\circ}C$ (-4 to $140^{\circ}F$)
Accuracy:	$\pm 1.0^{\circ}C$ ($1.8^{\circ}F$)

Humidity:

Measurement range:	10 to 100%RH
Accuracy:	35 to 75%RH: $\pm 5\%RH$, otherwise: $\pm 7\%RH$
Resolution:	1.0

General:

MAX / MIN:	The maximum / minimum value in this measurement
AVG:	Average value of the latest 10 measurements
Data hold:	Freezes the current measured reading
Auto power off:	After 15 mins inactivity.
Power supply:	3 x AA or USB cable with type C connect
Battery life:	Approx 30 hours
Operating condition:	-20 to $60^{\circ}C/F$, $<90\%RH$ (non-condensing)
Storage condition:	-30 to $60^{\circ}C/F$, $<80\%RH$
Weight / dimensions:	254g / 231 x 68 x 30mm

5. Operating Instructions

- 1. Open battery compartment cover and install 3 x AA batteries.
- 2. Replace the battery cover and lock the screw.
- 3. Power the meter on.

Notes:
When the low battery icon  appears, replace the meter's battery.

5.1 Power ON/OFF

Turn the meter on by pressing button  for 1 second.
Turn the meter off by pressing and holding  for at least 3 seconds

5.2 Disable auto power off

When the meter is turned on, short press  button to enable or disable the auto-power-off function. When the function is enabled, the  icon appears in the top left of the screen.
The function defaults to being on, whenever the meter is turned on.

5.3 THW mode and ambient temperature mode

After powering the meter on, press [MODE], the ambient temperature mode can be switched to apparent temperature mode, "THW" symbol will be displayed on the screen. When THW is displayed the ambient temperature will display the apparent temperature which is the 'feels like' temperature, caused by the combined effects of air temperature, relative humidity and wind speed.
The instrument defaults to ambient temperature mode when powered on.

5.4 Turn on/off alarm

In measurement mode, press and hold [MODE] key for 3 seconds to turn on/off the alarm, the related symbol displays on LCD.

5.5 Unit conversion

In measurement mode, press [UNITS] key to switch between m/s, km/h, ft/min, knots, Mph, CMM and CFM.
Hold key for 3 seconds to switch °C/°F.

5.6 Data hold / AVG (average) functions

In measuring mode, press [HOLD] key to enter into HOLD mode, HOLD icon will be displayed on the screen; press it again to enter into AVG mode, AVG icon will be displayed on the screen; press it a third time to return to normal measurement.
Note: Average value is the average of the last 10 values of measurement

5.7 Max/Min functions

In measuring mode, press [MAX] key, "MAX" icon will appear on the LCD and current maximum reading with display. Press [MAX] key again, "MIN" icon will appear and current minimum reading will display. Press [MAX] key once more to exit the MAX/MIN mode. Hold [MAX] key for 3 seconds, the "MAX" and "MIN" icons will flash on the LCD at the same time, all the MAX/MIN records will clear.

5.8 Air area set

In measurement mode, press [SET] key to enter into air area set mode.

5.8.1. After entering into area set mode, hold [SET] button for 3 seconds to switch area units cm², m², ft² (see below fig.)

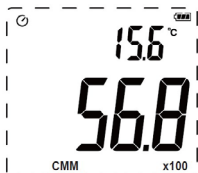


5.8.2. After the area unit is selected, press [HOLD] key to decrease the value, press and hold [HOLD] key to quickly decrease the value. Press [MAX] key to increase the value, press and hold [MAX] key to quickly increase the value.

5.8.3 After entering into area set mode, press [MODE] key to decrease the value by 10 times, press [UNITS] key to increase the value by 10 times. After finishing area setting, press and hold [MODE] key for 3 seconds to save the setting and return to normal measuring.

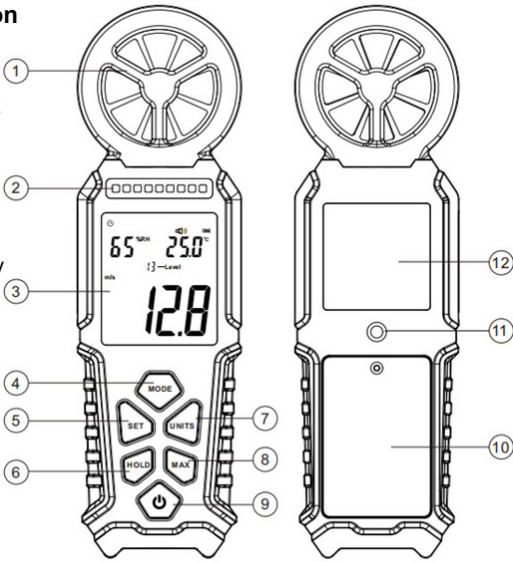
Air area display illustration

If the set area is above 9999, the actual area = displayed data *100



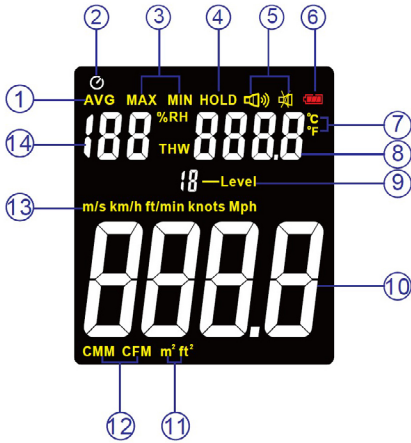
6. Meter description

- 1. Air speed sensor
- 2. LED indication light
- 3. LCD display
- 4. Mode key
- 5. Set key
- 6. Hold key
- 7. Unit conversion key
- 8. MAX/MIN key
- 9. ON/OFF key
- 10. Battery cover
- 11. Tripod nut
- 12. Nameplate



7. LCD description

- 1. AVG icon
- 2. Auto power off icon
- 3. MAX/MIN icon
- 4. Data hold icon
- 5. Alarm ON/OFF icon
- 6. Battery level icon
- 7. °C/°F units icon
- 8. Temperature readings
- 9. Air velocity level
- 10. Air velocity reading
- 11. Air area units
- 12. Air flow units
- 13. Air velocity units
- 14. RH% reading



8. Correspondence table for LED colour and air speed

Wind level	Light breeze	Gentle breeze	Moderate breeze	Strong breeze	Moderate gale	Fresh gale	Strong gale	Whole gale	Storm
Wind Speed (m/s)	0 to 3.3	3.4 to 6.7	6.8 to 10.7	10.8 to 13.9	14.0 to 17.2	17.3 to 20.8	20.9 to 24.5	24.6 to 28.5	Above 28.5
LED light colour									

9. Notes

- 1. This meter has already been calibrated before delivery. Do not revise the calibration parameters without professional personnel and device. The recommended calibration period is one year.
- 2. Repairs or servicing not covered in this manual should only be performed by qualified personnel.
- 3. Do not store or operate the meter in high temperature or humidity.
- 4. Remove the battery when meter is to be stored for long periods of time to avoid battery leakage.
- 5. Wipe the unit with a dry soft cloth. Do not use abrasives or solvents on this instruments.
- 6. When the low battery icon  appears, replace the meter's battery.

9. Accessories

- 1. User manual
- 2. Environmental meter
- 3. Canvas bag
- 4. Calibration certificate
- 5. Type-C charging cable
- 6. 3 x AA battery