

INSTRUCTION MANUAL

MINI TYPE THERMO-ANEMOMETER



Model:8908

INTRODUCTION

Congratulations on your purchase of the unique 3 in one Anemo-Thermometer, the meter features dual display of Air Velocity and Temperature , simple and easy to operate, 7 units of scale to be switchable .

A pocket-knife design makes it convenient and portable , easy to use and to get a precision reading.

Though you might have seen RH%, td (Dew Point)..these are not available for the meter model number 8908 but for advanced model "Pocket size Anemo-Hygro-Baro-Thermometer, model : 8909& 8910, please contact the store you purchased for above advanced models.

FEATURES/FUNCTIONS

- * **Temp./Windchill** : Averaging & LCD display is updated every second.
- * **Windspeed** : Moving 2-sec average with Maximum 2-second average. LCD is updated every second.
- * **Temperature sensor** : Sealed precision thermister.
- * **Water resistant and shock proof housing.**
- * **One button Data Hold operation.**
- * **Records Maximum reading.**
- * **Unit °C/°F switchable.**
- * **Replaceable lithium battery.**
- * **Safety wrist strap makes it carry around and avoids falling over.**
- * **Material supplied** : Meter, Battery **CR2032**, lanyard and instruction manual.

DESCRIPTION

1. Vane impeller
2. Precision thermister temp. sensor
3. LCD display
4. **POWER** and **HOLD** key
5. **UNITS** and **MODE** key
6. Battery compartment(on rear side)
7. Swivel handle and storage case
8. Lanyard holder



Accessory included:
Lanyard. Battery (CR2032). Manual

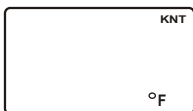
OPERATION

Select units

For air velocity and temperature by momentarily pressing the **UNITS/MODE** key from a powered down condition.

The LCD will show temperature units ($^{\circ}\text{C}$ or $^{\circ}\text{F}$) and Air Velocity units. The meter defaults at KNT $^{\circ}\text{F}$ unit (See Fig.1)

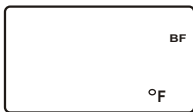
Press the **UNITS/HOLD** key repeatedly until the desired units are displaying. The unit cycles through **KNT °F** ,**KNT °C** ,**BF °F**, **BF °C**, **FPM °F**, **MPH °F**, **MS °C**, **KMH °C** (See Fig.2 & 3) , press the **ON/OFF/HOLD** key momentarily, display will show "1" at the right corner in one second (See Fig.4), and back to the normal display (See Fig.5) with the desired units.



⬆ **Fig.1**



⬆ **Fig.2**



⬆ **Fig.3**



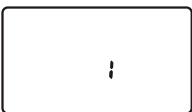
⬆ **Fig.4**

POWER ON

By pressing the **ON/OFF/HOLD** key momentarily. The Dual Display will illuminate. The top (larger) display indicates air speed and the lower display indicates temperature.(See Fig. 7)



⬆ **Fig.5**



⬆ **Fig.6**

Fig.7 →



DATA HOLD

(To freeze the most recent display), by pressing and holding the **ON/OFF/HOLD** key while taking measurements. To return to normal operation release the key and restart the meter.

MAX. OPERATION

After a measurement session, press and hold the **UNITS/MODE** key until the **MAX** icon appears on the lower left-hand side of the LCD. (See Fig. 8). Both the Air Velocity and Temperature indication will represent the highest readings measured since the meter was last powered.



↑ *Fig.8*



↑ *Fig.9*



↑ *Fig.10*



↑ *Fig.11*

AVERAGE MODE

Normally the meter averages wind speed readings every 2 seconds (but LCD display is updated every second). To select **5**, **10** or **13** second averaging, first press the **UNITS/MODE** key repeatedly until the **AVG** icon appears. (See Fig.9). The 13 second average mode is now selected.

Press **UNITS/MODE** key once more for 5 second average mode, display shows as Fig.10.

Press one more time for 10 second average mode , display now shows as Fig 11. To return to normal operation press the **UNITS/MODE** key repeatedly until all lower left-hand icons disappear.

While meter is in 13 or 10 or 5 second average mode but it is powered on less than above time period, the displayed value is counted since the meter is on.

Example:

When the meter is in 13 second average mode but the meter is powered on for only 8 seconds, then, LCD will display 8 second average value.

WIND CHILL INDICATOR

Press the **UNITS/MODE** key repeatedly until the **WCI** icon appear. (See Fig.12) The temperature display will now factor in the wind chill.

To return to normal operation, press the **UNITS/MODE** key again and the **WCI** icon will disappear.



 **Fig.12**

AUTO POWER OFF

The meter will automatically shut down to preserve battery life after 15 minutes of inactivity.

BATTERY REPLACEMENT

If the meter will not power up as usual or the display contrast becomes weak and difficult to read, replace the lithium battery. To do so, turn the battery compartment cover in a **CLOCKWISE** direction to remove it. (See Fig.13)

The battery will be visible in the battery compartment, observe the position of the battery and replace the new one in the same position. Affix the battery compartment cover by turning it in a **COUNTER-CLOCKWISE** direction.

Dispose of the lithium battery in accordance with local, state, or national waste disposal codes.

➡ Fig.13



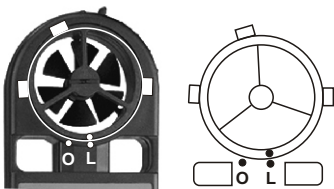
VANE REPLACEMENT

The anemometer is very accurate at low and mid-range air speeds. Constant use at very high speeds, such as measurements out a fast-moving car window, may damage the impeller's bearing and reduce over-all accuracy.

To replace the impeller, use a small screwdriver to loosen the set-screw found on the back of the windmeter.

The remove the impeller by twisting the impeller assembly clockwise (if you are facing the back of the windmeter) to the "O" position marked on the rear of the meter. (See Fig.14)

Install a new impeller by following above instructions in reverse.

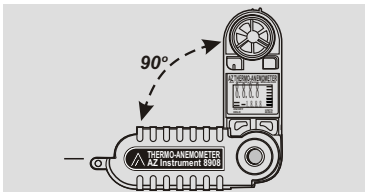


↑ **Fig.14**

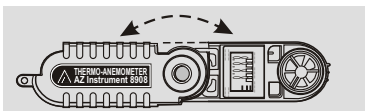
RANGE / RESOLUTION

"RS" stands for Resolution.

Unit		Range	RS
m/s	meter per second	1.1~20.0	0.1
Ft/Min	Feet per minute	60~3937	2
KNT	Knot	0.4~38.8	0.1
KMH	Kilometer per hour	0.8~72.0	0.1
MPH	Mile per hour	0.5~44.7	0.1
BF	Beaufort	1~8	1



↻ Detented at 90° for tripod mountable.



Detended at 180° for fully opened.

UNITS CONVERSION TABLE

	1 m/s	1 ft/min	1 knot	1 km/hr	1 mph
m/s	1	0.00508	0.5144	0.2778	0.4464
ft/min	196.87	1	101.27	54.69	87.89
knots	1.944	0.00987	1	0.54	0.8679
km/hr	3.6	0.01829	1.8519	1	1.6071
mph	2.24	0.01138	1.1523	0.6222	1

SPECIFICATION

Min/Max.Windspeed	0.5~44.7 MPH
Min/Max.Windspeed	60~3937 FTM
Average readings	5/10/13 second
Dimension	(180° fully opened) 235 x 45 x 25mm
Dimension	(90° folded) 140 x 45 x 25mm
Impeller Dia.	33 x 16 mm (T)
Unit in Imperial	°F ,FTM ,MPH
Unit in Metric	°C ,m/s ,KMH
Unit	KNT, BF
Power off	Automatic shut off after 15 minutes
Operating Temperature	-15°C~50°C
Power Supply	CR2032 battery x 1

Note :The meter can measure precision readings with no air flow to get the same temperature as the surrounding air .
The meter turns off automatically after about 15 minutes of no button presses.

WARRANTY

The meter is warranted to be free from defects in material and workmanship for a period of one year from the date of purchase. This warranty covers normal operation and does not cover batteries, misuse, abuse, alteration, tampering, neglect, improper maintenance, or damage resulting from leaking batteries. Proof of purchase is required for warranty repairs.

RETURN AUTHORIZATION

Authorization must be obtained from the supplier before returning items for any reason. When requiring a RA (Return Authorization), please include data regarding the defective reason, the meters are to be returned along with good packing to prevent any damage in shipment and insured against possible damage or loss .

CE CERTIFICATION

The meter conforms to the following standards:

- * **EN 50081-1/1992** : EN 55022
- * **EN 50082-1/1997** : EN 55024
(EN 61000-4-2/-3/-8,ENV 50204)

, the meter complies with the essential protection requirements of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

OTHER RELATED PRODUCTS

Other related wind speed meters:

Handheld Type

a.8901: Anemometer w/remote fan

b.8902/11/12: Anemometer w/remote fan
&RH

c.8903/04/06: Anemometer w/integral fan

Mini Type

a.8918: Anemometer w/RH

b.8909: Anemometer w/RH,barometric

c.8910: Anemometer w/RH,barometric,
altitude.

Accuracy, the Zenith of Measuring / Testing Instruments !

Hygrometer/Psychrometer
Thermometer
Anemometer
Sound Level Meter
Air Flow meter
Infrared Thermometer
K type Thermometer
K.J.T. type Thermometer
K.J.T.R.S.E. type Thermometer
pH Meter
Conductivity Meter
T.D.S. Meter
D.O. Meter
Saccharimeter
Manometer
Tacho Meter
Lux / Light Meter
Moisture Meter
Data logger
Temp./RH transmitter
Wireless Transmitter

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