

OPERATION MANUAL

MINI POCKET THERMO-ANEMOMETER WITH COMPASS



Model: 8996

INTRODUCTION

Congratulations on your purchase of this unique Thermo-Anemometer, the meter features in measuring **Air Velocity, Temp., Relative Humidity with Dew Point, Wet-Bulb Temperature, and compass function.**

Simple and easy to operate, 6 wind units selectable.

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

Read thoroughly before using the meter, the unit was calibrated before shipment. There are several models of mini anemometer and weather meter available, please contact with your store for more detail information.

FEATURES

- **Windspeed** : displays real time windspeed
- **Max. Windspeed** : display the Max. windspeed
- **Avg. Windspeed**: display 10-sec average windspeed
- **Compass**
- **Temperature**
- **Windchill**
- **Humidity**(sensor is pre-calibrated)
- **Wet Bulb Temp.**
- **Dew Point Temp.**
- **Delta Temperature**

MATERIAL SUPPLIED

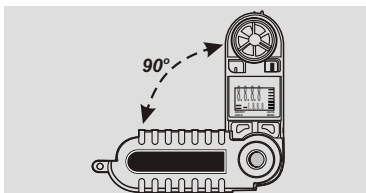
This package contains:

- ✓ The meter x 1
- ✓ Battery x 1 CR 2032
- ✓ Operation manual
- ✓ Strap
- ✓ Paper box

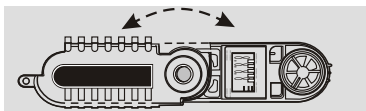
RANGE / RESOLUTION

"RS" stands for Resolution.

Unit		Range	RS
MPS	Meter per second	1.1~20.0	0.1
FPM	Feet per minute	60~3937	2
KNT	Knot	0.4~38.8	0.1
KPH	Kilometer per hour	0.8~72.0	0.1
MPH	Mile per hour	0.5~44.7	0.1
BF	Beaufort	1~8	1
RH%	Relative Humidity	0.1~99.9	0.1
DP	Dew Point	-20~50	0.1
WBT	Wet Bulb Temp.	-5~50	0.1
WCI	Windchill	-20~50	0.1
°C	Centigrade	-15~50	0.1
°F	Fahrenheit	-5~122	0.1



- Detended at 90° for tripod mountable.



- Detended at 180° for fully opened.

POWER SUPPLY

The meter is powered by 1 pc CR 2032 Lithium battery. To check the battery when:

1. First time use
2. The low battery symbol appears on LCD
3. The meter can not power on

To install the battery:

1. Turn off the meter.
2. Turn the battery compartment cover in a **CLOCKWISE** direction to remove it.
3. Replace the old battery with one new CR 2032 lithium battery

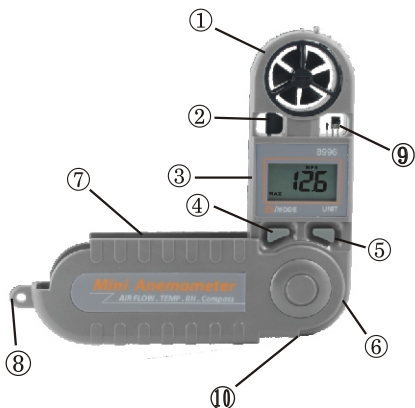


4. Make sure the battery is in place and the polarity is correct.
5. Affix the battery compartment cover by turning it in a **COUNTER-CLOCKWISE** direction.

NOTE:

- 1. Dispose the lithium battery in accordance with local / state / or national waste disposal codes.**
- 2. Remove battery from instruments that you do not plan to use for a month or more. Do not leave battery in instrument.**

1. Vane impeller
2. Wind direction indicator
3. LCD display
4. **ON/OFF** and **MODE** key
5. **UNITS** key
6. Battery compartment(on rear)
7. Swivel handle and storage case
8. Lanyard holder
9. Precision thermistor & Humidity sensor
10. Tripod mount (on the bottom)





FULL DISPLAY:


Though you have seen CI(Comfort Index) in below drawing, it is not available for this model 8996.



POWER ON / OFF

To monitor the air velocity measurement, always position the meter to the air source from the rear of the meter .i.e. the display face to the user .

Press the “” key to turn on the meter. Auto power off in 5 minutes, or press “” key for 3 seconds to turn the power off.

To disable the auto power off, before power on, pressing “” + **UNIT** key until a “n” appeared on the screen and then release keys to return to normal mode.

SELECT MODE

Press mode key to change the mode. The sequence is **Current windspeed** → **Max. Windspeed** → **10 sec average wind-speed** → **Compass** → **Temperature** → **Windchill** → **Humidity** → **Wet Bulb** → **Dew Point** → **Delta T**

Delta T means the difference between the ambient air temperature and the dew point temperature.

SELECT UNIT

To switch temperature unit, press **UNIT** key under temperature mode.

To switch windspeed unit, press **UNIT** key under windspeed mode.

WIND DIRECTION / COMPASS

Turn on the meter, press mode key to select and enter into Compass mode.

Point the meter in the direction of travel or target and get a steady compass reading.

Press and hold **UNIT** key until “**Headtailcross**” appear on LCD, compass reading will then flash three times.

Release **UNIT** key and point the meter into the wind until you have a steady compass reading. Press and hold **UNIT** key until “**Compass reading**” start flashing.

It flashes three times, and the wind meter will then display head or tail wind.

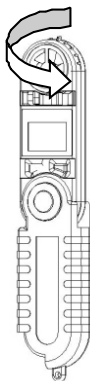
Press **UNIT** key to see the crosswind.

To exit, press **MODE** key.

COMPASS CALIBRATION

To calibrate the compass, under compass mode, press **MODE + UNIT** key until 30 seconds countdown appears on LCD.

Rotate the meter twice slowly according to the direction as below drawing, each turn takes 15 seconds.



After 2 turns (30 seconds), the LCD show "**End**" to indicate the calibration is completed.

NOTE:

- 1. Calibrate the compass after a new battery is installed.**
- 2. To get an accurate compass reading, it is suggested to run this simple calibration procedure before use.**

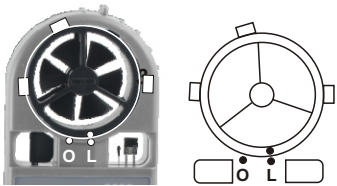
UNITS CONVERSION TABLE

	1 MPS	1 FPM	1 KNT	1 KPH	1 MPH
MPS	1	0.00508	0.5144	0.2778	0.4464
FPM	196.87	1	101.27	54.69	87.89
KNT	1.944	0.00987	1	0.54	0.8679
KPH	3.6	0.01829	1.8519	1	1.6071
MPH	2.24	0.01138	1.1523	0.6222	1

VANE REPLACEMENT

NOTE: 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. Then 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. Install a new impeller by following these instructions in reverse.

SPECIFICATION

Wind speed range	0.5~44.7M/H, 60~3937FT/M, 0.4~38.8KNT, 1.1~20.0M/S, 0.7~72.0KMH, 1~8BF
Wind speed accuracy	±(3% of reading + 0.2 m/s)
Air temp. Range	-15.0~50.0°C
Air temp. Resolution	0.1°C/°F
Air temp. accuracy	±1°C
Air RH% range	0.1%RH~99.9%RH
Air RH% resolution	0.1%RH
Air RH% accuracy	± 3%RH (at 25°C, 10~90%RH, Others ±5%RH)
Temp. response time	60 seconds (typical)
Air RH% response time	60 seconds (typical)
LCD update	every second
Windchill display	YES, -20.0~50.0°C
Dew Point temp. display	YES, -20.0~50.0°C
Wet bulb display	YES, -5.0~50.0°C
Compass display	YES, 0~360 degree
Compass accuracy	±2 degree
LCD size	16(H) x 28(W)mm
Operating temp.	-15~50°C
Operating RH%	Humidity < 80%
Storage temp.	-20~50°C
Storage RH%	Humidity < 90%
Dimension(mm)	140x45x25 (90° folded) ; 235x45x25 (180° full opened)
Weight	~90g
Battery	CR 2032x1pc
Standard Package	Meter / Battery / Manual / Strap / Paper box

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.

**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

More products available !