with Temperature measurement **ANEMONETER** Model : AM-4202

iviodel : Alvi-4202



Your purchase of this ANEMOMETER THERMOMETER marks a step forward for you into the field of precision measurement. Although this METER is a complex and delicate instrument, its durable structure developed. Please read the following instructions carefully and always keep this manual

OPERATION MANUAL

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1. FEATURES

- * The portable anemometer provides fast, accurate readings, with digital readability and the convenience of a remote sensor separately.
- * Multi-functions for air flow measurement: m/s, km/h, ft/min, knots.
- * Build in temperature 蚓, 蚌 measurement.
- * Thermistor sensor for fast temp. response time.
- * Low-friction ball-bearing design allows free vane movement, resulting in accuracy at both high & low velocities.
- * A sensitive balanced vane wheel rotates freely in response to air flow.
- * Conventional twisted vane arms, always a source of unreliability have been eliminated.
- * DATA HOLD function for stored the desired value on display. Large LCD display, easy to read.
- * LCD display for low power consumption & clear read-out even in bright ambient light condition.
- * Used the durable, long-lasting components, including a strong, light weight ABS-plastic housing case.
- * Compact housing cabinet, easy to carry out.
- * Built-in low battery indicator.
- * Wide applications: use this anemometer to check air conditioning & heating systems, measure air velocities, wind speeds, temperature...etc.

2. SPECIFICATIONS

2-1 General Specifications

Display	18mm(0.7")LCD(Liquid Crystal Display),			
	3 1/2 digits.			
Measurement	m/s (meters per second),			
	km/h (kilometers per hour),			
	ft/min (feet/per minute),			
	knots (nautical miles per hour),			
	Temp 蚓, 蚌,			
	Data hold.			
Operating	0 蚓 to 50 蚓 (32 蚌 to 122 蚌).			
Temperature				
Operating	Less than 80 % RH.			
Humidity				
Air Velocity	Conventional twisted vane arms and			
Sensor	low-friction ball-bearing design.			
Structure				
Temp. Sensor	Precision thermistor sensor.			
Power Supply	006P DC 9V battery (heavy duty type).			
Power	Approx. DC 9 mA.			
Consumption				
Weight	325 g/0.72 lb (including battery).			
Dimension	Instrument 168 x 80 x 35mm			
	(6.6 x 3.2 x 1.2 inch)			
	Sensor Head Round, 72 mm Dia.			
Standard	Instruction Manual 1 PC.			
Accessories	Sensor probe 1 PC.			
	Carrying case 1 PC.			

2-2 Electrical Specifications (23 \pm 5 $^\circ\!C$)

A. Air velocity

Measurement	Range	Resolution	Accuracy			
m/s	0.4 - 30.0 m/s	0.1 m/s	± (2%+0.2m/s)			
km/h 1.4 - 108.0 km/h		0.1 km/h	± (2%+0.8km/h)			
knots 0.8 - 58.3 knots		0.1 knots	± (2%+0.4knots)			
ft/min	t/min 80 - 5901 ft/min		± (2%+40 ft/min)			
m/s - meters per second km/h - kilometers per hour						
ft/min - feet/per minute knots - nautical miles per hour						
mph - mil	es per hour	(interr	national knot)			

B. Temperature

Measuring Range	0 ℃ to 60 ℃/32 ℉ to 140 ℉
Resolution	0.1 °C/0.1 °F
Accuracy	± 0.8 ℃/1.5 °F

Remark :

Above specification are tested under the environment RF Field Strength less than 3 V/M & frequency less than the 30 MHz only.

3. FRONT PANEL DESCRIPTION

Fig. 1

- 3-1 Display
- 3-2 Off/On/Hold Switch
- 3-3 Function Switch
 - (ANEMOMETER, 蚓, 蚌)
- 3-4 Range (m/s, km/h, ft/min, knots/Temp) Switch
- 3-5 Battery Compartment/Cover
- 3-6 Vane Probe Head
- 3-7 Vane Probe Handle

4. MEASURING PROCEDURE

4-1 Air velocity measurement

- 1) Select the "Off/On/Hold Switch " (3-2, Fig. 1) to the "On " position.
- 2) Select the "Function Switch " (3-3, Fig. 1) to the "ANEMOMETER " position.
- Select the "Range Switch "(3-4, Fig. 1) to the "m/s", "km/h", "ft/min " or "knots " position according to the measuring requirement.
- 4) Hold the "Vane Probe Handle " (3-7, fig. 1) by hand & let the "Vane Probe Head " (3-6, Fig. 1) is opposite to the measuring air flow source, then the "Display " (3-1, Fig. 1) will show air velocities directly.

Measuring Consideration :

The yellow dot mark on the sensor head indicates the " yellow dot mark " need to face against the direction of air flow.

 During the measurement, it will hold the display values if select the "Off/On/Hold Switch " (3-2, Fig. 1) to the "Hold " position.

4-2 Temperature measurement

- 1) Select the "Off/On/Hold Switch " (3-2, Fig. 1) to the "On " position.
- 2) Select the "Function Switch "(3-3, Fig. 1) to the "蚓" or "蚌" position. Select the "Range Switch "(3-4, Fig. 1) to the "Temp " position.

 The meter is designed intend to measure the environment air temperature. There is built one temp. sensor (precision thermistor) into the center of the "Sensor Head " (3-6, Fig. 1).

When do the temperature measurement, it is necessary to hold the Sensor Handle (3-7, Fig. 1) by hand & let the Sensor Head is opposite to the measuring air source, then the display will show air temperature directly.

 4) During the measurement, it will hold the display values, if slide the "Off/On/Hold " selector (3-2, Fig. 1) to the " Hold " position.

5. REPLACEMENT OF BATTERY

 When the left corner of LCD display show "BAT ", it is necessary to replace the battery. However, in-spec. measurement may still be made for several hours after

low battery indicator appears before the instrument become inaccurate.

- 2) Loose the "Battery Cover Screw" (3-5, Fig. 1), slide the battery cover away from the instrument and remove the battery.
- 3) Replace with 9V battery (heavy duty type) and reinstate the cover.
- 4) Make sure the battery cover is secured with the screw after changing battery.