TRACEABLE® ANEMOMETER/THERMOMETER INSTRUCTIONS

SPECIFICATIONS

Display: ½″ 4-digit, 2-line LCD
Range: **Air Velocity**
Meters - 0.40 to 30.00 per sec.
Kilometers - 1.4 to 108.0 per hour.
Feet - 80 to 5900 per minute.
Miles - 0.9 to 67.0 per hour.
Knots - 0.8 to 58.0
Temperature
14.0° to 122°F and 10.0° to 50.0°C
Resolution:
Air Velocity
Meters - 0.01 meter
Kilometers - 0.1 km
Feet - 1 foot
Miles - 0.1 mile
Knots - 0.1 knot
Temperature - 0.1° (for both °F and °C)
Accuracy:
Anemometer - ±3% of full scale
Thermometer - ±1°C
Size: 7¼ x 3 x 1¾″ (fan diameter 2¾″)
Weight: 7.3 oz

FEATURES

- ABS plastic case, chemical & shock resistant
- Extra-large digits for easy readings in difficult locations
- Single hand operation
- Display updates instantaneously
- Memory button permits recalling highest and lowest readings
- HOLD button freezes the display at the current reading
- AVERAGE button allows from 2 to 8 readings to be averaged automatically
- Single point air velocity measurement for minimum, maximum and average readings
- Continuous moving average air velocity measurement
- Auto power off function
- Non-sleep mode (bypass auto power off)
- Unit selectable (Imperial/Metric): ft/min, mph, knots / m/s, km/hr, knots
- Supplied with RS-232 serial output jack to connect directly to a computer
- RS-232 interface setting

BUTTONS/DISPLAY/INDICATORS

1. **ON-OFF/RESET** button
2. **HOLD** button - Freezes the display
3. **AVERAGE MULTI-POINT** button - computes average for multi-point readings
4. **SEL: MIL/H KNOT** button - Selects required air velocity units
5. **MN/MX REC SINGLE-POINT** button - Selects minimum, maximum and average air velocity for a single point reading.
6. **Primary display** - Air velocity
7. **Secondary display** - Temperature display or indicator for number of multipoint readings in Multi-Point mode
8. **"vel"** Indicator - always on for air velocity measurement
9. **"Hold"** - Indicates display is frozen
10. **"knots"** - Nautical miles per hour = 1850 meters per hour = 1.15 miles per hour
11. **"ft/m" or "m/s"** - Feet per minute or meters per second
12. **"mil/h"** or **"km/h"** - Miles per hour or kilometers per hour
13. **"°C"** - degrees Celsius
14. **"°F"** - degrees Fahrenheit
15. **"REC"**-Indicates reading is recorded and saved
16. **"MIN"** - Minimum reading indicator
17. **"MAX"** - Maximum reading indicator
18. **"AVG"** - Average reading indicator
19. "–" - Minus temperature reading indicator

OPERATION

Measurement Default (Imperial /Metric)

1. Make sure the unit is OFF by pressing the ON-OFF/RESET button.
2. Press and hold the AVERAGE button. Then press the ON/OFF button once to turn the unit on. When the "ft/m, m/s" and "°C, °F" indicators appear, release the AVERAGE button.
3. To select metric units, press the HOLD button. "m/s and "°C" will show on the display. To select imperial units, press the AVERAGE button. "ft/m" and "°F" will appear on display.
4. Press the MIN/MAX REC button. A "5" will show on the display. Press the HOLD button. A pre-setting of "1200" or "2400" baud will display.
5. Press the MIN/MAX REC button again. The "5" indicator will display again. Press the HOLD button; the unit will revert to the normal measurement display. The default setting is now complete.
6. Press the HOLD button to measure the current air velocity and temperature with the selected units. The "HOLD" indicator should disappear.
NOTE: Not pressing the HOLD button retains the display in freeze mode.

Air Velocity Measurements
ft/min, mph or knots - Set the unit to Imperial measures. Each press of the "SEL: MIL/H KNOT" button will change the reading to ft/min, mil/h or knots.
Km/hr or m/s or knots - Set the unit to metric measures. Each press of the "SEL: MIL/H KNOT" button will change the reading to Km/hr, m/s or knots.

Typical Air Velocity and Temperature Measurement
Place the meter in an air stream. Make sure that the air stream and the sensor are aligned. Allow three seconds for the reading to stabilize.

Measuring Air Velocity (Single Point)

1. Press ON/OFF button to turn on unit. The display will appear after 5 seconds.
2. Unit is ready for use when the "vel" indicator appears at upper left hand corner and "°C" or "°F" appears at the lower right hand corner.

Continuous Moving Average
The unit can display a continuous moving average for up to 2 hours.

1. Power the unit ON.
2. Place the unit in an airflow.
3. Press MIN/MAX REC SINGLE-POINT button once. "REC" and "AVG" appearing in the lower left corner of the display confirms that the meter is in continuous moving average measurement mode. The display will update once per second.

Minimum/Maximum/Average Reading On a Single Point

1. Power the unit ON.
2. Place the unit in an airflow.
3. Press the MIN/MAX REC SINGLE-POINT button. The unit will begin to record the readings. The meter displays the average air velocity by default. Each press of the MIN/MAX button cycles the display through the following readings:
   - No indicator - Real-time readings
   - REC - Unit is recording the reading
   - AVG REC - Unit is recording the average velocity
   - MIN REC - Unit is recording minimum velocity
   - MAX REC - Unit is recording maximum velocity
4. Press the HOLD button to store the readings before moving the meter away from an airflow source.
5. Press ON/OFF RESET to turn the meter OFF.
6. To clear the current MIN/MAX average readings, turn off the power or press and hold MIN/MAX button until the unit beeps twice, then release.

Air Velocity Average for Multiple Points

1. Turn the meter on and place the unit in an airflow at the first point to be measured. As soon as the first measurement is completed, press the HOLD button, (you will hear a single beep) and release. The display will show HOLD above the reading.
2. Press the MIN/MAX button, (a single beep will be heard) and release (the secondary display will show a digit). This number represents the point that is being recorded. Repeat this process until all desired points have been measured and recorded. A maximum of 8 points may be recorded at one time.
3. Once all measurements have been recorded, press the AVERAGE MULTIPOINT button. The unit will display the average air velocity reading and number of points measured.

Auto Power Off
The unit will turn off automatically after 15 minutes of non-use to save the battery. This action is preceded by 3 beeps.

Non-Sleep Mode (Bypass Auto Power Off)
Power the unit off. Press ON and HOLD buttons at the same time. Release the ON button only. An "n" indicator appears on display. Release HOLD button. The unit will remain on and in Bypass Auto Power Off mode until OFF button is pressed.

OPERATIONAL DIFFICULTIES

1. If the display is flashing or there is no display when switched on, change the battery (see Battery Replacement section).
2. If the display indicates an "E6" reading, the related circuits or parts of thermistor have failed (see Warranty, Service, or Recalibration section).
3. If the unit's fan will not turn this indicates that the sensor fan is damaged (see Warranty, Service, or Recalibration section).
4. If the unit does not function properly for any reason, other than those listed above, replace the battery with a new high-quality battery (see Battery Replacement section). Low battery power can occasionally cause any number of apparent operational difficulties. Replacing the battery with a new fresh battery will solve most difficulties.

BATTERY REPLACEMENT

Erratic readings, a faint display, a flashing display or no display are all indicators that the battery must be replaced. To replace the battery, remove the screw from the lower panel on the back of the unit. Lift the panel out and remove the exhausted battery and replace with a new 9-volt alkaline battery and replace the cover. Replacement battery Cat. No. 1112.