Specifications

Wind Speed
Range:
0 – 110 mi/hr (0-177 km/hr)
Accuracy:
±5% or better
Sampling Rate:
About 1 second

Odometer
Resolution:
Resettable: 0.01 miles (or km)
Permanent: 1 mile (or km)
Range:
Resettable: 999.99 miles (or km)
Permanent: 99,999 miles (or km)

Average Speed
Resolution:
0.01 mi/hr (or km/hr)
Note: Average speed is only calculated while cups are moving. However, using the odometer, true average speed can be calculated.

Dimensions
Height: 9", width (cups): 8", depth: 8"

Weight
Approximately 2 lbs.

Power Source
Two 1.5 Volt button batteries (SR44/D357)

Operating Temperature
Display: 32 – 140 °F (0 – 60 °C) recommended

Product Warranty

The Hanson Hand-held Anemometer is warranted for one-year from the date-of-purchase against defective components and workmanship. The warranty covers the wind cup assembly and the display unit but does not cover the battery. The warranty does not cover damage due to misuse or abuse. For full warranty information, contact Thunderhead Technologies.

Service

Contact Thunderhead Technologies to request product service.

Thunderhead Technologies
14 Lilac Way
Taunton, MA 02780-2267
(508) 880-9989, FAX (508) 880-9990
E-mail: DanHanson@ThunderheadTech.com
http://www.ThunderheadTech.com

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Hanson Mast-Mount Anemometer
Reference Guide

Assembly and Installation Instructions

You will need the following tools:
- *1/4" drill bit and drill*
- *Slotted screwdriver*
- *3/8" wrench*
- *Marker*

You will also need the following materials (not supplied):
- *Mast mounting hardware*

Refer to the diagram at right during assembly.
1. Locate the wind cup assembly and the wire.
2. Route the connector end of the wire through the inside of the mast and connect it to the wind cup assembly by firmly joining the connectors.
3. Place the wind cup assembly over the top of the mast and mark the location of the holes on to the mast with a marker. Then remove the wind cup assembly.
4. Drill a 1/4" hole through the mast using the marked holes as a guide.
5. Place the wind cup assembly over the top of the mast and insert the bolt and secure with the hex nut.
6. Install the anemometer at the desired location. For mounting suggestions, refer to the figure on the next page.
7. Route the sensor wire from the mast to the viewing location.
8. Connect the display connector to the wire end connector.
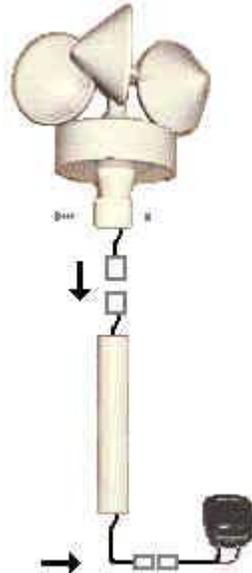
Installation is complete!

Mounting Suggestions and Considerations
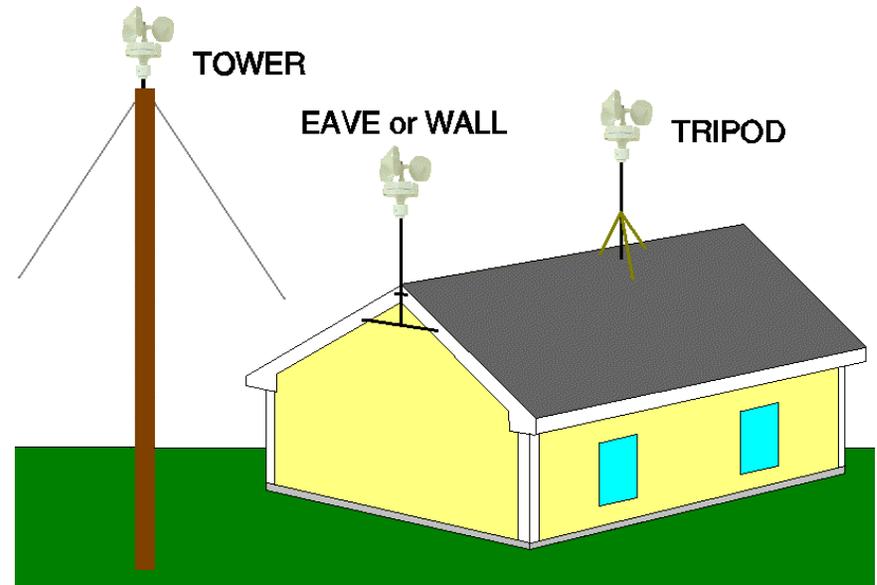
There are several ways to mount the anemometer and shown above are only a few. You need to determine which type of mount to use based on your situation. Consult your local electronics retailer for additional suggestions.

Keep these considerations in mind when mounting the anemometer:

- The standard height for an anemometer is 10 meters or about 33 feet.

- Always ground any mount to protect the dwelling against lightning strike damage. Consult your local electronics retailer for proper grounding methods and supplies. Thunderhead Technologies is not liable for any damages caused by lightning.

- When mounting on a roof the sensor should be at least six feet above the peak of the roof to avoid any aerodynamic effects that may affect the accuracy of the readings. Mounting the sensor too low to the peak of the roof may cause readings that are too high.

- Avoid mounting the unit on a chimney as the corrosive fumes and heat may damage the sensor.

- Mount the anemometer as far away from any obstacle as is practical. Objects such as trees and chimneys will slow the wind and cause reduced readings.

Accessing Display Features

Feature Summary

*To change displayed feature, press the **BOTTOM** bar to advance the display through the following features:*

TRP	Total miles (or kilometers) of wind measured since last reset.
AVS	Average wind speed since last reset. *Note: the average speed function does not account for calm air, i.e., the average speed is only calculated for moving air. Therefore, to determine the average speed during periods with calm air, use total distance (**TRP**) divided by the time since last reset (not **STP** below).*
STP	Elapsed time of moving air since last reset. This does not account for calm air, so do not use for calculating average speed during periods with calm air.
MAX	Maximum wind gust since last reset.
DST	Total miles of wind since last battery replacement. This value can only be changed by removing and replacing the battery.
CLK	Current time.

Resetting Parameters

To reset the parameters, press and hold the *TOP* bar for three seconds. This clears the values in *TRP, AVS, STP* and *MAX*.

Maintenance

The Hanson Hand-held Anemometer requires virtually no maintenance. However, the battery will need to be replaced in about 6 to 12 months. The battery is readily available at most electronics stores. The display unit is weatherproof, however, avoid submerging the display in any liquid or prolonged exposure to rain to prevent possible damage to the display.

Battery Replacement, Calibration, Clock Set

Replacement battery type: (qty. 2)   1.5 Volt type: **SR44/D357**

*When the battery is replaced, you **must** recalibrate the unit. Use the **TOP** bar to increase the flashing number. Use the **BOTTOM** bar to advance to the next digit to the right.*

1. Remove the display from the mounting bracket by pressing on the tab underneath (labeled **PRESS**) and pushing the unit up and away from the tab. (For calibration only, go to step 5; for clock set only, go to step 10.)
2. Remove the two small screws on the underside and remove the cover.
3. Replace the batteries positive side up. Replace the cover and secure.
4. Turn the display over. The 10,000's digit of the total mileage will be flashing. If you wish to restore the mileage to what it was before the replacement, enter it now. When finished entering the mileage, press and hold for one second the small gray button on the underside of the display.

5. Press the **BOTTOM** bar until **TRP** appears in the lower left corner of the display.
6. Using a pencil point, press and hold for three seconds the small gray button on the underside of the display.
7. Change the calibration value to:

0891 for miles/hour (**MPH**)	**1433** for kilometers/hour (**KMH**)
0775 for knots	**0398** for meters/sec

8. Change the units to **MPH** (default) or **KMH** to correspond to the setting in the previous step. (*Pressing the **BOTTOM** bar after the flashing 1's digit will flash **KMH**. Press the **TOP** bar to change the units to **MPH**. The displayed units MPH or KMH will have no effect on the wind speed value.*)
9. Press and hold the gray button for one second to return to the operating mode. (For calibration only, skip to step 14.)
10. Press the **BOTTOM** bar until **CLK** appears in the display.
11. Using a pencil point, press and hold for three seconds the small gray button on the underside of the display.
12. Set the current time.
13. Press and hold the gray button for one second to return to the operating mode.
14. Insert the display back **firmly** into the mounting bracket. You will hear it click when it is fully inserted. Spin the cups to ensure the unit is fully inserted and that a non-zero wind speed value is displayed.

Troubleshooting

Symptom	Solution
Blank display	Replace battery.
Speed is unusually high or low	Recalibrate unit (*go to step 5 above*).
Speed is always 0	Check that the display is firmly seated in the mounting bracket. Check wiring and connectors. Check that the magnet inside the wind cups is still attached.