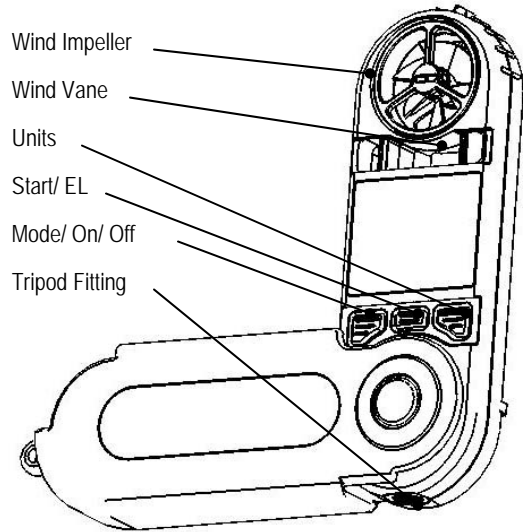


**WindMate™ 100, 200, 300**  
**User Instruction Manual** (Ver. 12/06)



**Getting Started**

Open your *WindMate™* to 180° as shown. If using a tripod, open your *WindMate™* to a 90° angle as shown above to access the tripod fitting.

To turn the unit on or off, press and hold **Mode** key for about 3 sec. You can turn off the unit at any mode. If the unit is idle for 5 minutes it will auto shut down to preserve battery life.



When taking wind measurements by hand, make sure to keep the *WindMate™* at arm's length from the body with the display facing towards you so the wind will enter the wind impeller through the rear. Use the wind vane to orient the wind meter so you are on the wind's axis. This will give you the most accurate measurement.

**CAUTION:** The *WindMate™* is very accurate at low and mid-range air speeds. Consistent use at very high speeds, such as from a fast-moving car, will damage

the impeller's bearing and reduce its accuracy. See below for impeller replacement.

**Using the Windmeter functions**

When the unit is turned on for the first time or a hard reset, the default mode is wind speed. Going to other modes or features is simply done by pressing the **Mode** button.

Pressing **Units** Key at any mode, except Compass and Humidity (WM 200, 300 only), changes the unit to your preferred measurement unit. Units of measurement sequence is shown below for each model.

**Sequence for WM 100**

- Wind Speed – displays real time wind speed
- Max. WindSpeed – displays the max. wind speed
- Avg. WindSpeed – 5 sec
- Avg. WindSpeed – 10 sec
- Avg. WindSpeed – 13 sec

**Max. / Avg. / Wind Speed**

MPH---->KMPH---->MPS---->FPM---->BF---->KNT

**Average Wind Speed (WM 100 only)**

The WM 100 is equipped with 3 average wind speed options 5, 10 and 13 sec. Select the desired time duration in which the unit will calculate the average wind speed. Press the **Start/ EL** key to start the count down. When the count down reaches zero the average wind speed will be shown. To take another average wind speed press **Start/EL** key.

**Sequence for WM 200**

- Wind Speed – displays real time wind speed
- Max. WindSpeed – displays max. wind speed
- Avg. WindSpeed – displays 10-sec average
- Compass
- Temperature
- WindChill

**Max. / Avg. / Wind Speed**

MPH---->KMPH---->MPS---->FPM---->BF---->KNT

**Temp. / Wind Chill**

°F---->°C

**Sequence for WM 300**

- Wind Speed – displays real time wind speed
- Max. WindSpeed – displays the max. wind speed
- Avg. WindSpeed – displays 10-sec average
- Compass
- Temperature
- WindChill
- Humidity (Sensor is self-calibrating)
- Wet Bulb
- Dewpoint
- Comfort Index
- Delta Temperature

**Max. / Avg. / Wind Speed**

MPH---->KMPH---->MPS---->FPM---->BF---->KNT

**Temp. / Wind Chill/ Wet Bulb/ Dew Point/ Comfort Index/ Delta T**

°F---->°C

**Compass Calibration (WM 200, 300)**

If necessary, to correct for the presence of ferrous metals, the compass can be calibrated. Go to compass mode press and hold **Set/ EL** key till display shows "COMPASS CAL" (blinking). Continue holding **Set/EL** while turning the unit in a vertical position as shown. Turn the unit around twice, 15 sec per turn, as shown. After completing the 2 turns release **Set/ EL** key then immediately press again to confirm calibration. If the display shows "END" the calibration is successful. If the display shows "ERR" redo the calibration process.



**Digital Wind Direction (WM 200, 300)**

**Determine Wind Direction:**

- Point the *WindMate™* directly into the wind and select Compass mode. The edge of the wind vane will point directly towards you.
- Wind direction is displayed digitally and in compass points.

**Determine Cross Wind:**

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

- Press and hold **Units** key until MARK stops blinking.
- Release **Units** key and point the meter into the wind until you have a steady compass reading.
- Press and hold **Units** key until MARK stops blinking. The cross wind is displayed.

#### **Determine Head or Tail Wind:**

- Follow the “Determine Cross Wind” instructions above.
- When the cross wind is displayed, press the **Units** Key.
- To exit, press **Mode**.

**NOTE:** The computed cross and head/tail wind may display a – sign. The – sign indicates that the wind is coming from the back. If no – sign appears, the wind is coming from the front.

#### **Setting the Comfort Index™ (WM 300)**

Accuweather.com® Comfort Index™ is the effect of temp, relative humidity, wind speed & sun intensity on the human body. You can adjust the formula based on sun intensity. The solar factor has a range of 0 to 3.0 with a default setting of 1.5 (medium sun intensity). Example: Full sun = 3.0; Heavy clouds = 0. To change, press and hold **Set/ EL** key. Press **Units** key to adjust the current value of the solar factor and press **Set/ EL** to confirm and exit the setting mode.

#### **Replacing the Battery (All models)**

When you see the battery icon on the left side, the battery is low and must be replaced or accuracy is affected. The unit uses a CR2032 Lithium battery. Turn the unit to the back. Use a coin to turn battery cover as indicated by the arrow. Insert the battery with the printed side facing you and close the battery door.

#### **Changing the Wind Impeller (All models)**

**WindMate™** impellers can be replaced. Contact your dealer or distributor for parts and instructions.



## Wind Meter Impeller Replacement Procedure

Updated: April 27, 2011

This procedure describes the removal and replacement of the WeatherHawk wind meter impeller. It applies to the handheld wind devices, SM-18, SM-19, SM-28, WM-100, WM-200, WM-300 and the WM-350.

This procedure does not require training, special tools, or test equipment. There is no personal electrical hazard involved, and this procedure can be accomplished by anyone possessing basic mechanical skills. Please read this entire procedure before beginning work.

Tools required:

- ✓ Small Flat blade screw driver or cross point screw driver

Components required or supplied (per fig.1)

- ✓ Replacement impeller

1. On the back side of the WeatherHawk wind meter there is a small screw located to the lower left of the impeller and it could be covered by a small rubber cover. (See Fig. 1)
2. Remove the rubber cover to expose the screw and loosen the screw 3 to 4 turns but do not remove the screw. (See Fig. 2)



*Figure 1*

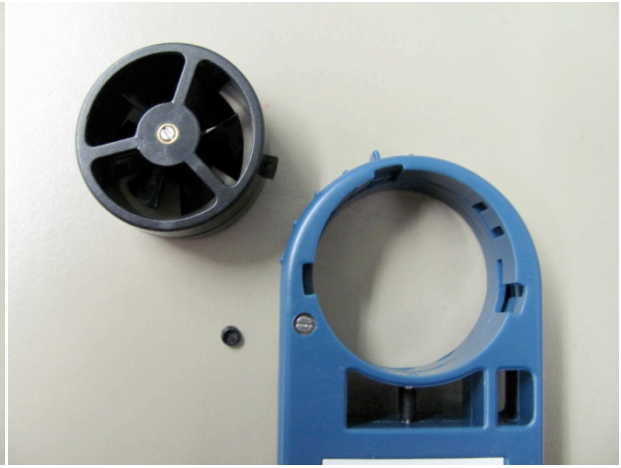


*Figure 2*

3. Turn the impeller 1/8 of a turn clock-wise to align the keyed stubs. (See fig. 3)
4. Slide the impeller out the back side. (See fig. 4)



*Figure 3*



*Figure 4*

5. Insert the new impeller into the main body of the instrument and gently turn the impeller 1/8 of a turn counter clock-wise and tighten the small screw until it is snug. Be careful not to over tighten the screw it could cause damage to the device. Once the screw is tight replace the existing rubber screw cover.

Contact WeatherHawk Technical Support if you have problems or questions.

Telephone: 435-750-1840    Toll Free USA 866-670-5982    FAX: 435-750-1749

[support@weatherhawk.com](mailto:support@weatherhawk.com)

<http://www.weatherhawk.com>