Caldwell® Shooting Supplies

CrossWind™

Professional Wind Meter

Usage Instructions | Product #112500 | Instruction #1032104

MAIN FEATURES

- *Wind Speed*
  - *Current Wind Speed*
  - *Average Wind Speed*
  - *Maximum Wind Gust*
- *Rotatable Anemometer Head*
- *Temperature*
- *Station Pressure*
- *Barometric Pressure*
- *Altitude*
- *Density Altitude*

ADDITIONAL FEATURES

- *Water Resistant*
- *Backlight*
- *Automatic Power-Off*
- *Data Hold*
- *Lanyard*
- *Protective Holster Case*
- *Large Buttons for Glove Friendly Use in Cold Conditions*
- *Tripod Mount*

STOP! If you have a problem with this product, **DON'T RETURN IT TO THE STORE WHERE YOU PURCHASED IT. Contact customer service at...**

Battenfeld™ Technologies, Inc.

5885 West Van Horn Tavern Road / Columbia, MO 65203
573-445-9200 / Email: sales@battenfeldtechnologies.com
Or visit our website @ www.battenfeldtechnologies.com

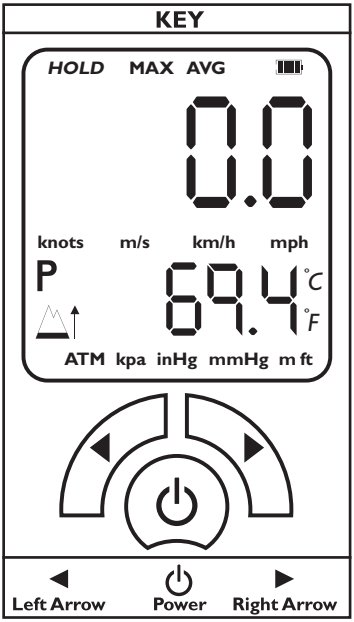
NOT WARRANTED AGAINST MISUSE, ABUSE, OR COMMERICAL USE.

Limited Warranty

Every Caldwell product is warranted to be free of defects in materials and workmanship for a period of one (1) year from the date of original purchase. Caldwell will, at its option, repair or replace without charge, except for transportation costs, parts that fail under normal use and service when operated and maintained in accordance with our Instructions. This warranty does not apply to normal wear or to items whose life is dependent upon their use and care. This warranty is in lieu of all other warranties, expressed or implied and releases Caldwell, its affiliates, and its vendors from all other obligations and liabilities.

FEATURES

- **Wind Speed:** measured in units of **m/s** (meters per second), **km/h** (kilometers per hour), **knots** (nautical miles per hour), **mph** (miles per hour)
- **Settings:** Current Wind Speed, **AVG** (Average Wind Speed), **MAX** (Maximum Wind Gust)
- **Station Pressure / Barometric Pressure:** measured in units of **inHg** (Inches of Mercury), **mmHg** (Millimeters of Mercury), **ATM** (Atmospheres), **kpa** (Kilopascals)
- **Temperature:** measured in units of **°F** (Fahrenheit) or **°C** (Celsius)
- **Altitude:** measured in units of **m** (Meters), **ft** (Feet)
- **Density Altitude:** (Density Altitude is the altitude in the International Standard Atmosphere that has the same air density as the current environment.) measured in units of **m** (Meters), **ft** (Feet)
- **Data Hold:** This wind meter can retain measurements displayed on the screen, so the user can set the unit down without losing the measurement data
- **Battery meter and low battery warning**
- **LCD back-light**
- **Auto/Manual off**



OPERATION

1. **Initial Setup:**
   Remove battery compartment door from the wind meter, install a CR2032 3.0v battery ***(Battery is included)***, and replace battery compartment door. Note: Using a large coin is the easiest method to remove the battery door**.**

2. **Power-On/ Power-OFF:**
   To turn the unit on, press the power button ⏻ . To turn the unit off, press and hold the power button for 3 seconds.

NOTE: **This unit has a built-in automatic 5 minute power-off to maximize battery life.**

3. **Backlight On/Off:**
   To turn the backlight on, press and hold ► for 3 seconds. To turn the backlight off, press and hold ► for 3 seconds.

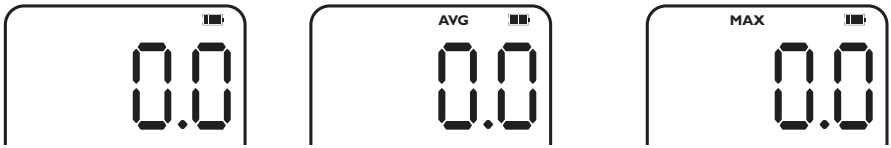
NOTE: **Leaving the backlight on will deplete battery life more rapidly.**

4. **Switching between Wind Speed units:**
   To change between wind speed units, press ►.

5. **Switching between Wind Speed settings:**

To change between wind speed settings, press ◄. There are three different wind speed settings:

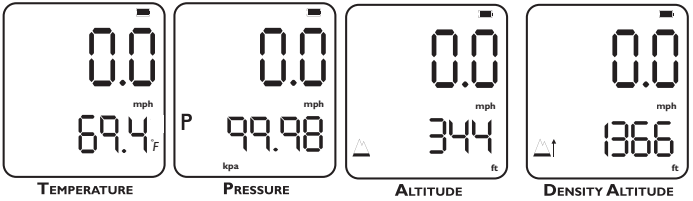
• Current Wind Speed • Average Wind Speed (AVG) • Maximum Wind Gust (MAX)



When in AVG mode, the LCD screen will display the average wind speed over a period of 10 seconds. When in MAX mode, the LCD screen will display the maximum wind speed, which results from the maximum wind gust. If the AVG and MAX symbols are not displayed in the top portion of the LCD screen, then the LCD screen will display the current wind speed, which is the current instantaneous wind speed.

6. **Switching between Measurement Options:**

- **Temperature**
- **Pressure** P
- **Altitude**
- **Density Altitude**

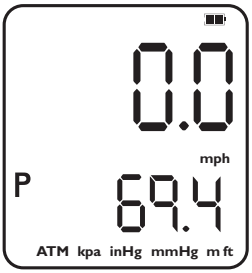


This wind meter allows you to display the wind speed and an alternative measurement simultaneously, and allows the user to select between the alternate measurement displays. To switch between the different measurement displays, simultaneously press ⏻ and ◄.

7. **Switching between Measurement Units:**
After a measurement option is selected ***(See instruction 6)***, the units of the measurement can be changed. To change the units of the measurement, simultaneously press ⏻ and ► . Here are the options for the different measurement's units:

- **Temperature: °F** (Fahrenheit) or **°C** (Celsius)
- **Pressure: inHg** (Inches of Mercury), **mmHg** (Millimeters of Mercury), **ATM** (Atmospheres), **kpa** (Kilopascals)
- **Altitude: m** (Meters), **ft** (Feet)

8. **Calibrating Altitude and Pressure:**
In order to ensure accurate pressure and altitude readings, it is important to calibrate your unit. Small environment variations and changing weather conditions can cause fluctuations in pressure which can affect the accuracy of the wind meter over time, so for optimal measurements you should calibrate your unit before every use. In order to calibrate the altitude and pressure, you must first know the current barometric pressure, or the current altitude:

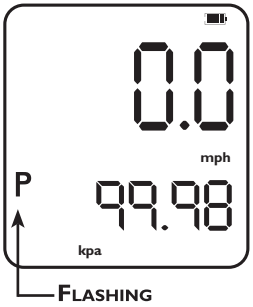


PRESSURE

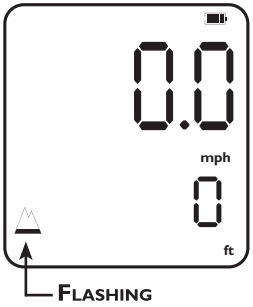
A. Calibrating with the Known Barometric Pressure:

First it is important to understand the difference between Station Pressure (Sometimes referred to as Absolute Pressure) and Barometric Pressure. Station Pressure is the actual pressure measurement from the wind meter's environment. Barometric Pressure is Station Pressure plus a sea level altitude correction,

so Barometric Pressure is actually the Station Pressure if the same environment was at sea level.



Barometric Pressure can be obtained from any weather reporting service ***(Internet, Television, Radio, etc.)***. Once the Barometric Pressure has been obtained, use instruction 6 to set the measurement mode to altitude. While in altitude mode, simultaneously press ◄ and ► to enter the calibration mode for the altitude. Once you enter the calibration mode for the altitude, the pressure symbol will begin to flash and a pressure reading will display. Adjust this pressure to the known Barometric Pressure by pressing ◄ or ► . By holding ◄ or ► you can rapidly adjust the value. Once the pressure reading has been adjusted to the known Barometric Pressure, simultaneously press ◄ and ► to exit the calibration mode. The altitude is now calibrated.



Now that the altitude is calibrated, the user can decide if they would like to change the Station Pressure reading to display the Barometric Pressure reading. If you would like to change to display the Barometric Pressure reading, use instruction 6 to set the measurement mode to pressure. While in pressure mode, simultaneously press ◄ and ► to enter the calibration mode for the pressure. Once you enter the calibration mode for the pressure, the altitude symbol will begin to flash and an altitude reading of 0 should display. To change the Station Pressure reading to a Barometric

Pressure reading, adjust this altitude to the new calibrated altitude reading ***(from the previous step)*** by pressing ◄ or ►. By holding ◄ or ► you can rapidly adjust the value. If you desire to display the Station Pressure and not the Barometric Pressure, simply change the altitude value to 0. After calibration has been completed, simultaneously press ◄ and ► to exit the calibration mode.

B. Calibrating with the Known Altitude:

If you do not know the current Barometric Pressure, you can also calibrate with the known altitude. You can obtain the known altitude from Google earth, other Internet sites, or topographical maps. Once you have your known altitude, change to the pressure measurement mode, enter the calibration mode by simultaneously pressing ◄ and ►, and enter this known altitude by using ◄ or ►. When you exit the pressure calibration mode, by pressing ◄ and ►, the pressure displayed will now be the Barometric Pressure. Using this Barometric Pressure, you can now go to the altitude measurement mode, enter the calibration mode by simultaneously pressing ◄ and ►, and enter this Barometric Pressure by using ◄ or ►. Upon exiting the calibration mode, the altitude is now calibrated.

NOTE: **After you calibrate the altitude, if you would like the Station Pressure to display in the pressure measurement mode, instead of the Barometric Pressure, simply go back to the pressure measurement mode, enter the calibration mode, and change the altitude back to 0. Now your pressure measurement mode will display Station Pressure, while your altitude measurement mode will still be calibrated to the Barometric Pressure.**

If you desire the altitude to be very exact, and you know your current altitude, you can enter the calibration mode for altitude and adjust the pressure as needed until the altitude matches the exact known altitude.

9. **Density Altitude Mode:**

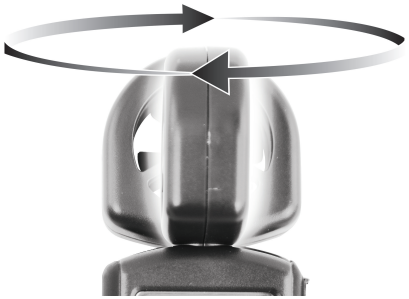
Density Altitude is the altitude in the International Standard Atmosphere that has the same air density as the air being evaluated. This wind meter does not measure humidity, so a dry air assumption is made when the Density Altitude is calculated.

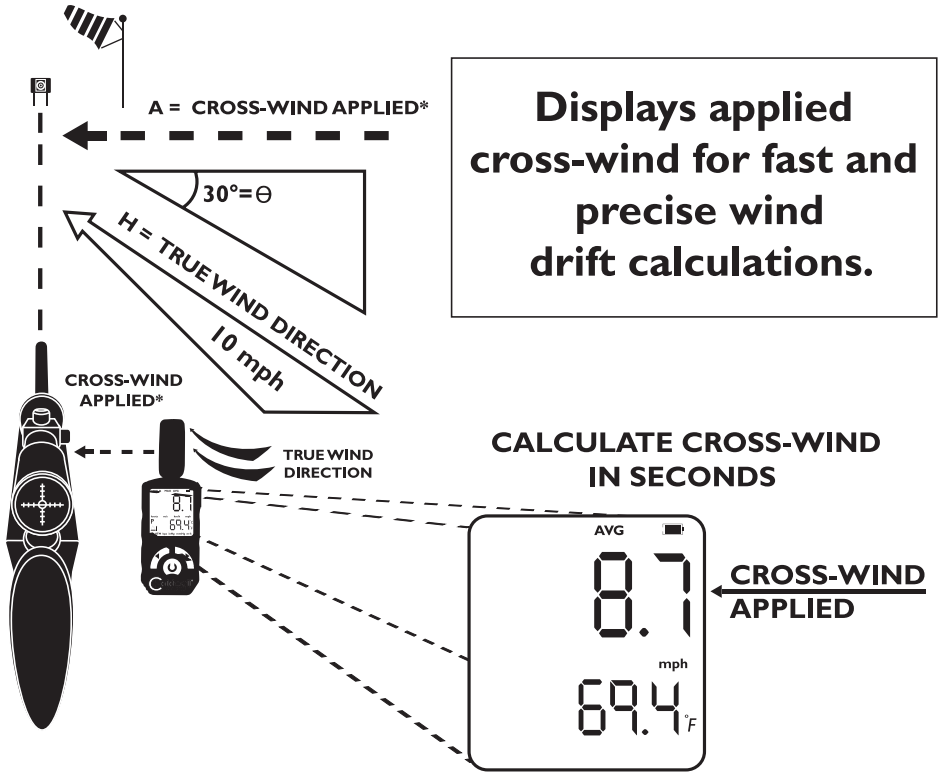
10. **Data Hold:**

This wind meter has the ability to hold data, making it easy to maintain the data on the LCD display, even after removing the wind meter from the environment. To enter the HOLD mode, simply hold ◄ for 3 seconds. Once the wind meter has entered the HOLD mode, "HOLD" will show in the top left corner of the LCD screen, and all of the measurements on the screen will be retained. This allows the user to take measurements and retain them, so the unit can be set down while the measurements are documented.

11. **Rotating Head:**

This wind meter features a rotating head for easy viewing of the LCD screen while measuring wind speed. This allows the user to measure a cross-wind while facing down range (perpendicular to the cross-wind).




A = CROSS-WIND APPLIED*
30°=Θ
H = TRUE WIND DIRECTION
10 mph
CROSS-WIND APPLIED*
TRUE WIND DIRECTION
Displays applied cross-wind for fast and precise wind drift calculations.
CALCULATE CROSS-WIND IN SECONDS
AVG
8.7
mph
69.4 °F
CROSS-WIND APPLIED

12. **Protective Holster Case:**

The Cross Wind Professional Wind Meter includes a protective case that also can be used as a belt holster for the wind meter.

NOTE: **When using the lanyard with the protective holster case, the lanyard can be fed through the hole in the bottom of the case or the lanyard can extend out of the top of the case.**

14. **USB port:**
    This wind meter includes a USB port for factory use only. Do not attempt to charge the wind meter through the USB port. Do not attempt to connect the wind meter to any external device.

15. **Battery:**
    This wind meter uses a CR2032 3.0v battery. When replacing the battery, always use a new battery and ensure that the battery and battery compartment is free from moisture and debris.

16. **Storage:**
    Avoid storing this wind meter in environments under -20°F and over 120°F

17. **Tripod Mount:**
    This wind meter is equipped with a 1/4 - 20 UNC threaded hole, on the bottom of the unit, for mounting the wind meter on a tripod.

DATE	TIME	LOCATION	WIND SPD.	TEMP.	STATION PRESSURE	BARO. PRESSURE	ALTITUDE	DENSITY ALT.

Battenfeld™
Technologies, Inc.

5885 West Van Horn Tavern Road / Columbia, MO 65203
573-445-9200 / Email: sales@battenfeldtechnologies.com