

INSTRUCTION MANUAL

Model BA-116 Electronic Barometer

Thank you for purchasing the Oregon Scientific barometer. This barometer has been designed specificially with performance and ease of use in mind. As with all Oregon Scientific products, this barometer is made to the highest quality standards using precision electronic components and should give you many years of trouble free use.

Please read the User's Guide carefully before use to ensure you get the best out of your new barometer.

Please note that the accuracy of the weather forecasting is about $70 \sim 75$ percent, when manitoring changes in barometric pressure alone, therefore, we cannot be held responsible for any trouble which may come up due to a wrong forecasting with this unit.

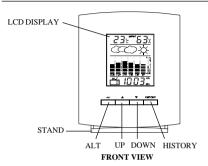
INTRODUCTION

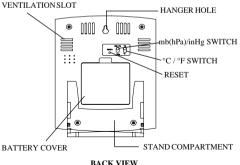
- Thank you for your purchase of this Electronic Barometer
- Your Electronic Barometer is an example of superior design and craftmanship.
- In order to optimize its function, be sure to read this manual carefully and keep it for future reference.

FEATURES

- Electronic Barometer with barometric pressure and trend.
- Weather forecast indication shows sunny, slightly cloudy, cloudy and rainy.
- Displays indoor temperature and indoor relative humidity at the same time.
- With comfort zone indication: shows ideal humidity and temperature for personal comfort.
- User selectable °C or °F units of measure
- User selectable mb / hPa or inHg units of measure.
- Built-in low battery signal indication.
- Wall mounting and table standing features.

DESCRIPTION OF PARTS





INSTALLING AND REPLACING BATTERIES

The unit uses four UM-4 'AAA' size batteries. If the 'BATT' indicator appears, removes the exhausted batteries and follow these steps to install or replace the batteries:

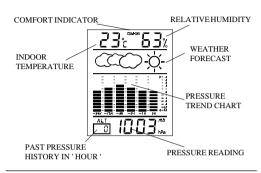
- 1. Lift and pull up the top center edge of the battery compartment cover, then remove the cover.
- 2. Insert the batteries as indicated by the polarity symbols (+ and) marked inside the battery compartment.
- 3. Replace the battery compartment cover.

Note: After replacing the batteries, the whole display will be turned on for about 3 seconds and then show the following:

- a, Indoor temperature shows the current reading.
- b, Indoor relative humidity shows the current reading.
- c, Weather forecast shows slightly cloudy (a sun shows with the cloud indicator)
- d, Pressure trend shows steady.
- e, Barometric pressure shows the current reading.

The unit takes about 24 hours to store the barometric pressure data. Until that time has elapsed, the pressure trend and weather forecast symbols may not reflect actual weather forecast for your area.

DISPLAY AND FUNCTIONS



HOW TO READ THE ILLUSTRATED WEATHER FORECAST SYMBOLS

Your digital Barometer detects barometric pressure changes and the LCD displays the illustrated weather symbols which indicating the weather forecast for 12 to 24 hours ahead, for an area with a radius of about 30-50 km.

Indicator displays on the unit	<u> </u>	₩ <u></u>		
Forecast	Sunny	Slightly Cloudy	Cloudy	Rainy

Important:

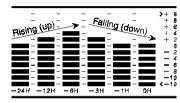
- The accuracy of weather forecasting when using pressure trend alone is about 70 to 75 percent and, therefore, we cannot be held responsible for any inconveniences caused by an inaccurate weather forecast.
- 2. The weather forecast symbols may not reflect the current weather condition. The symbols are forecasting the future.
- 3. A 'Sunny' forecast covering the night-time reflects fine clear weather.

HOW TO READ THE BAR GRAPH PRESSURE TREND

Stored memory of the barometric pressure changes are displayed on the chart, in 5 steps indicating the pressure 1,3,6,12 and 24 hours ago. This chart is plotted by comparing the past barometric pressure to the present pressure. The scale on the right shows the comparison result. The '0' in the middle of the scale means equal to present pressure, '+2'

means the past pressure was higher than the present pressure by $2\ \mathrm{mb}$.

This gives you the pressure trend over the last 24 hours. The weather will be getting better (worse) if this chart shows the bar marks moving up (down) towards the present time 'OH'.



BAR GRAPH PRESSURE TREND

Important:

It is only possible to measure the barometric pressure trend properly if your barometer remains at the same altitude.

When moving around at different altitudes within a short time period, the air pressure changes, the barometric pressure change is not correct, until the barometer has remained at a constant altitude for 24 hours.

However, please note again the accuracy of a weather forecast based on the barometric pressure reading. It is considered to be about 70-75%.

ABOUT THE ALTITUDE SETTING

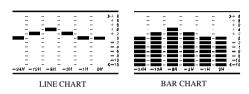
- For monitoring the local barometric pressure reading, the user needs to select the 0 meter (preset value) for the altitude setting.
- For monitoring the Sea Level barometric pressure reading at certain altitude, the user needs to select the local altitude (-100 to 2500 meter) for the altitude setting.

HOW TO SET THE ALTITUDE

- Press and hold the [ALT] button for 2 seconds to set the altitude. The 'ALT' indicator will turn on with the altitude setting flashing (display in meter). Increase/decrease the altitude in steps of 10 meter by pressing [▼] or [▲] button. Press and hold [▲] or [▼] for faster setting.
- Press the [ALT] button again to set the altitude. At this
 time the previous pressure display will reappear. If the
 altitude has been changed, the 'ALT' indicator flashing
 (about 15 minutes) until a new sampling takes place and
 the pressure reading is then compensated with the new
 altitude.

HOW TO SELECT THE BAR OR LINE CHART FOR THE PRESSURE TREND

In bar chart display, press and hold the [ALT] button and then reset the unit by pressing the [RESET] button on the back of the unit simultaneous, to get the line chart display.



In line chart display, reset the unit by pressing the [**RESET**] button once on the back of the unit to get the bar chart display.

Note: Either action will reset the unit and the previous readings / settings will be lost.

HOW TO RECALL THE STORED PRESSURE HISTORY READING

The barometric pressure reading is being stored constantly during the past 24 hours. It can be recalled and displayed for each hour.

- By pressing the [HISTORY] button repeatedly, the barometric pressure readings which have been stored over the past 24 hours, will appear on the display in mb/hPa or inHg with the recording time up to '-24' hour and back to '0' hour. ('0' hour means present time).
- 2. Press and hold the [**HISTORY**] button , for faster advancing.
- If the pressure in one particular history hour has not yet been recorded, it will show '----' for that hour on the past history review display.



HOW TO READ THE RELATIVE HUMIDITY AND THE COMFORT INDICATORS

The unit shows the indoor relative humidity automatically and such reading is temperature compensated. At the same time, the comfort indicators - *COMFORT*, *WET* or *DRY* will tell you if the current environment is comfortable, too wet or too dry.

The comfort indicators will appear on the display when the following conditions are satisfied:

Indicator displays on the unit	Temperature Range	Humidity Range	Shows that the Current Environment
COMFORT (68°F to 77°F humidity and temperature	,	40% RH to both relative	Ideal range for
WET	/ET Full Range		Contain excess moisture.
DRY	5	Below 40%RH	Contain inadequate moisture
No Indicator	Less than 20°C(68°F) or More than 25°C(77°F)	40%RH to 70%RH	No comment

HOW TO SELECT THE TEMPERATURE THE UNITS OF MEASURE

The switch on the back of the Barometer selects between degrees Celsius and Fahrenheit. To select Celsius units, set the switch to °C. To select Fahrenheit units, set the switch to °F.



HOW TO SELECT THE PRESSURE UNITS OF MEASURE

The switch on the back of the Barometer selects between mb /hPa and inHg. To select mb/hPa, set the switch to mb/hPa. To select inHg, set the switch to inHg.

THE RESET BUTTON

If the unit does not operate properly, use a pointed object to push the [RESET] button once, which is located on the back of the unit.

GB

LOW BATTERY SIGNAL INDICATION

If the voltage of the Batteries becomes low, the 'BATT' indicator will be displayed. Please replace the batteries when the 'BATT' indicator is displayed.

FREE STANDING OR WALL MOUNTING

Stand:

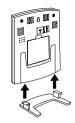
Your Barometer comes with a built-in stand for tabletop use. On the back of the unit, ease the plastic stand from its slot and place the stand in the recess holes on located on the bottom of the case.





1 PUSH DOWN GENTLY

2. PULL AWAY FROM UNIT.



PLACE THE STAND.

Wall Mount:

On the back of the Barometer you'll find a recess holes for wall handing. Place a screw (or whatever device you choose) into the wall until the head extends a little more than 4 mm from the wall. Place your barometer over the screw in the hanger slot, until it locks into place.

MAINTENANCE

The following suggestions will help you care for the Barometer so you can enjoy it for years.

- Keep the Barometer dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.
- 2. Use and store the Barometer only in norma temperature environments. Temperature extremes can shorten

the life of electronic devices, damage batteries, and distort or melt plastic parts.

- Handle the Barometer gently and carefully. Dropping it can damage circuit boards and cause the Barometer to work improperly.
- 4. Keep the Barometer away from dust and dirt, which can cause premature wear of parts.
- Wipe the Barometer with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the Barometer.
- Use only fresh batteries of the required size and type. Always remove old or weak batteries. They can leak chemicals that can destroy electronic circuits.
- Modifying or tampering with the Barometer's internal components can cause a malfunction and might invalidate its warranty.

SPECIFICATION

Operating temperature

: 0°C to +55°C (+32°F to + 131°F)

Temperature measuring range $: 0^{\circ}\text{C to } +55^{\circ}\text{C}$

 $(+32^{\circ}F \text{ to} + 131^{\circ}F)$

Temperature display resolution: 1°C (2°F)

Temperature sampling cycle : 9 seconds

Humidity measuring range : 25% to 95% RH

(at 25°C/77°F)

Humidity display resolution : 1% RH

Humidity sampling cycle : 9 seconds

($23.48\ to\ 31.01\ inHg$)

Altitude compensation

for barometric pressure reading: -100 to 2500 meter

 $Pressure \ display \ resolution \qquad : \ 1 \ mb \ / \ hPa \ \ (0.03 \ inHg \)$

Pressure sampling cycle : 15 minutes

Power source : Four pcs. UM-4 or

'AAA' size batteries

Battery life : Approx. 1 Year

Dimension : 136 x 108 x 26.5mm

 $(H \times W \times D)$

Weight : 200gms

(without battery)

- The content of this manual is subjected to change without further notice.
- Due to printing limination, the displays shown in this manual may differ from the actual displays.
- The manufacturer and its supplies held no respond to you or any other person for any damages, expenses, lost profits, or any other damages arise by using this Barometer.
- The contents of this manual may not be reproduced without the permit of the manufacturer.