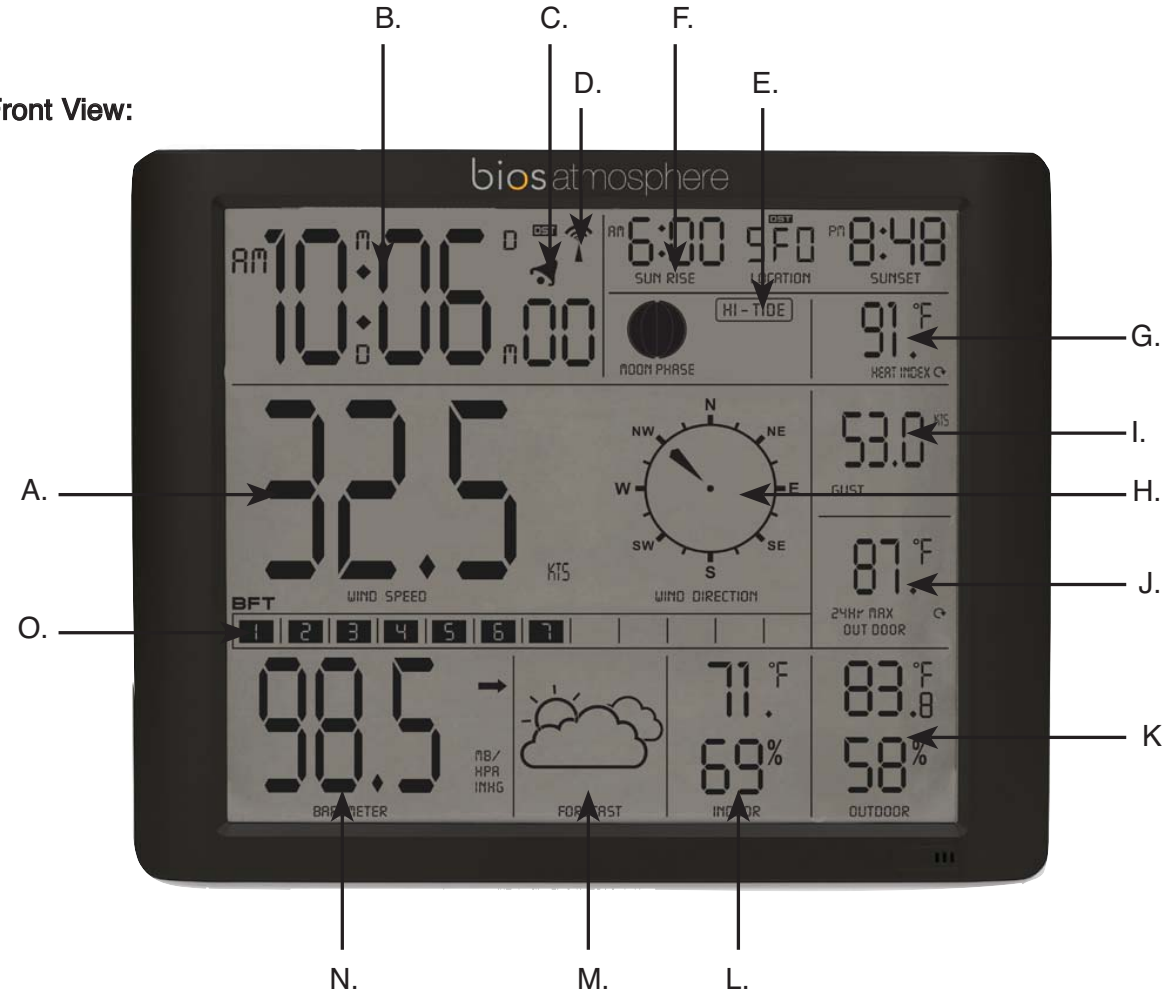
bios atmosphere 2.0

Jumbo Weather Monitor
Moniteur Météorologique Géant

Instruction Manual / Mode d'emploi

Thank you for purchasing the BIOS Atmosphere 2.0 Jumbo Weather Monitor

Front View:



Back View:

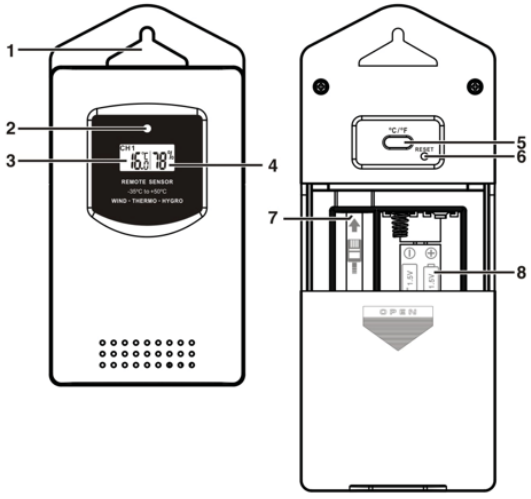
Jumbo Weather Monitor
Instruction Manual

Monitor Front

A. Wind Speed
B. Time and Date
C. Alarm
D. Radio Controlled clock with auto DST
E. Tide Indicator
F. Sunrise and Sunset
G. Heat Index / Wind chill
H. Wind Direction
I. Wind Gust
J. 24 Hour Maximum Outdoor Temperature
K. Outdoor Temperature and Humidity
L. Indoor Temperature and Humidity
M. Weather Forecast Icon
N. Barometric Pressure
O. Beaufort Wind Scale

Monitor Back

1. Clock Button
2. C/F Button
3. Mode/Set Button
4. Alarm/Weather Set Button
5. Gust/Wind Max Button
6. Snooze Button
7. Temperature/Max/Min Button
8. DST On/Off/ RF Search Button



1: Wall Mount Hole
2: Transmission Indication LED
3: Temperature
4: Humidity
5:"C/F" button
6:"RESET" button
7: Wind Sensor Plug
8: Battery Compartment

Included:

1 - Jumbo Weather Monitor
2 - Remote Sensor
3 - Wind Sensor with Cable
4 - Wind Sensor accesories

1.1 Radio Control Clock (RCC)

RCC has the most accurate time within the continent. This unit receives the time signal transmitted by the National Institute of Standards and Technology (NIST) which is regulated by 3 atomic clocks and in average deviates less than 1 second in 3000 years.
NIST transmits the time signal (WWVB, 60kHz) continuously from Fort Collins, Colorado. This signal can be received in the USA and parts of Canada, however some environmental effects may affect the transmitting distance.

For more information please see **www.boulder.nist.gov/timefreq/**

2.0 Getting Started:
2.1 BIOS Atmosphere 2.0:

- Open the main unit battery compartment cover
- Insert 3 x C size batteries observing the polarity ["**+**" and " **–**" marks]
- Replace the main unit battery compartment cover
- Use a pin to press the **RESET** button located at the rear of the main unit, the main unit is now ready for use

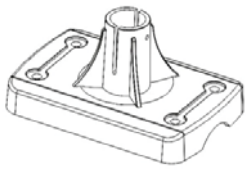
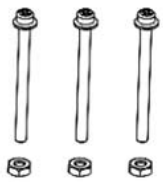
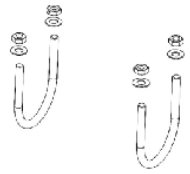
2.2 Outdoor Remote Sensor

- Slide open the battery compartment (8) of the outdoor remote sensor.
- Insert 2 x AA batteries observing the polarity ["**+**" and "**–**" marks]
- Plug the Wind Speed sensor into the remote sensor (7)

3.0 Installation
3.1 BIOS Atmosphere 2.0
The main unit can be placed onto any flat surface , or wall mounted by the hanging hole at the back of the unit.

3.2 BIOS Atmosphere 2.0 sensor
The remote sensor should be securely mounted onto a horizontal surface.
NOTE: Transmission between the receiver and transmitter can reach up to 80m in an open area without any interfering obstacles such as buildings, trees, vehicles, high voltage lines, etc.

3.3 Wind Sensor
Accessories

Plastic Base	Screws and Washes	Pole	Washes & Screws, X2 Round U-shape bolts
			

NOTE: The remote sensor should be placed in a shaded area for accurate readings.

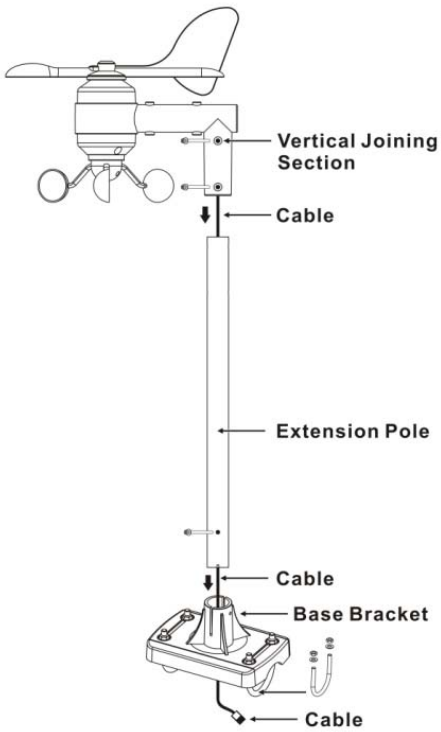
3.4 Mounting and Setup for the Wind Sensor
First, choose whether the wind sensor will be mounted vertically or horizontally (on a mast). Make sure that you position the wind sensor in a free, open area that is not protected by objects, which may distort or interfere with the wind (e.g. large buildings, trees, chimney, etc.).

NOTE: The following contents have been included with your BIOS Atmosphere 2.0 for mounting the wind sensor:

- 2 x U-bolts to secure to a mast
- 8 x washers
- 4 x nuts
- 8 x 0.25" screws (to fix mast to main unit and base bracket)
- 4 x 2.75" screws (to fix base bracket to a flat surface)

Cable Preparation for Vertical Mounting

1. Run the cable that is already fastened to the wind sensor through the vertical joining section (see right).
2. Run the cable through the extension pole but do not secure the pole to any sections yet.
3. Now run the cable through the top of the base-bracket and then through the small rectangular section found on one side of the base-bracket.



NOTE: Make sure that you completely pull the cable through the wind sensors extension pole and base-bracket to reduce the amount of slack on the cord.

Vertical Mount

1. Make sure that the wind vane can rotate freely before fastening the unit permanently into position.
2. Insert one end of the extension pole provided into the base-bracket.
3. Secure the connection point of the extension pole and base-bracket using the 0.25" metal screws provided to prevent rotation at the joining point. (Use 4 x 0.25" screws to ensure stability).
4. Insert the vertical joining section on the bottom of the wind sensor into the top of the extension pole. (Ensure that you pull all cable slack through the side of the base-bracket to prevent creasing or cutting the cable).
5. Secure the wind sensor to the extension pole using the 0.25" screws provided to make sure that the pole connection does not rotate. (Use 4 x 2.75" screws to ensure stability).

IMPORTANT: For accurate readings, it is important to mount the wind sensor so that the "N" (north) on the casing is facing the correct direction (north). If necessary, use a standard compass to determine north.

6. Using 4 x 2.75" screws provided, secure the wind sensors base-bracket to a flat surface. **NOTE:** Make sure that when you are securing the base bracket with the 2.75" screws, you are aware of the cable. Prevent driving a screw through the cable!

NOTE: For proper wind speed measurement ensure the vertical joining section is at 90° the horizon
(Fig.A).

Horizontal Mounting

Cable Preparation for Horizontal Mounting

1. Run the cable that is already fastened to the wind sensor through the horizontal joining section (see below).
2. Run the cable through the extension pole but do not secure the pole to any sections yet.
3. Now run the cable through the top of the base-bracket and then through the small rectangular section found on one side of the base-bracket.

NOTE: Make sure that you completely pull the cable through the wind sensor's extension pole and base-bracket to reduce the amount of slack on the cord.

Horizontal mount - using a mast/antenna/pole

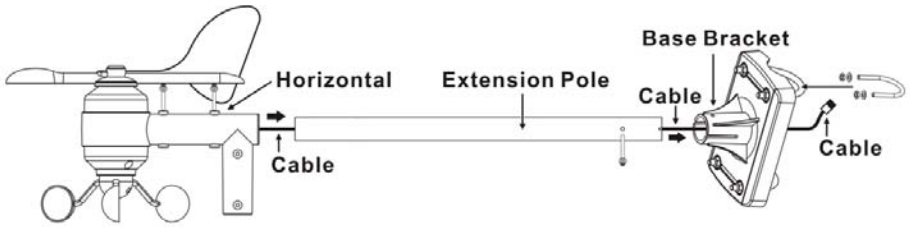
NOTE: It is not recommended to secure the wind sensor horizontally from a wall or chimney because doing so will interrupt the flow of wind from at least one direction.

MOUNT WITH "N" FACING NORTH:
For accurate readings , it is important to mount the wind sensor so that the "**N**" (north) on the casing is facing the correct direction (north). If necessary, use a standard compass to determine north.

1. Make sure that the wind vane can rotate freely before fastening the unit permanently.
2. Using the 2 x U-bolts, 4 x nuts and 4 x washers, secure the base-bracket of the wind sensor to a stable mast/antenna/pole. (Masts made of magnetic materials, such as lead or other dense metals will cause faulty readings).

IMPORTANT: Make sure that the pole insert of the base-bracket is facing north (N) and pilot holes are on the top AND bottom.

3. Use the extension pole provided to distance the wind sensor from the stable mast/ antenna/pole. Insert one end of the extension pole into the base-bracket.
4. Secure the connection point of the pole extension and base-bracket using the 0.25" screws provided to prevent rotation at joining point. (Use the 4 x 0.25" screws to ensure stability).
5. Insert the pole extension into the horizontal joining section. (Ensure that you pull all cable slack through the side of the base-bracket to prevent creasing or cutting the cable).
6. Secure the horizontal joining section to the mount pole using the 0.25" screws provided to make sure that the pole connections does not rotate.



4.0 Weather Forecast Function
4.1 Operation

- After Batteries are inserted or by holding the "**WEATHER SE**T" button for 3 seconds, the weather icon will flash on the LCD. Enter the current weather condition by pressing "**-**" or "**+** " button. Press the "**WEATHER SET**" utton to confirm the setting. The weather forecast may not be accurate if the current weather entered is not correct.
- The current weather status should be entered again if the altitude of the Main Unit is changed. The weather station will start the first forecast at 6 hours later after the current weather status is entered.

4.2 Weather Conditions
There are 5 different weather conditions in the weather forecast.

NOTE: The Freezing or snow icon will only appear if the weather forecast is Rainy and the outdoor temperature is below 0°C.

5.0. Barometric Pressure Reading
Barometric Trend Pointer
The trend pointer displayed on the LCD beside the Barometric Pressure reading indicates the trend of the Barometric pressure.

 Indicates the barometric pressure trend is rising	 Indicates the barometric pressure trend is steady	 Indicates the barometric pressure trend is falling

6.0 Thermometer
6.1 RF Transmission Procedure:
- The main unit will automatically receive transmissions from the outdoor sensor for outdoor temperature; humidity & wind information after the batteries have been inserted.
- The outdoor sensor will automatically transmit a signal to the main unit after batteries have been inserted.
- If the main unit fails to receive a transmission from the outdoor sensor, "**- - . –**" will be displayed on the LCD, hold the "**RF SEARCH**" button until flashing to receive transmissions manually

6.2 Temperature & Humidity
(1) Celsius / Fahrenheit
- Press "**°C /°F**" button to select indoor & outdoor temperature in Celsius or Fahrenheit mode.
- Press the "**°C /°F**" button on the rear of the BIOS Atmosphere 2.0 remote sensor, inside the battery compartment, to select the temperature to be displayed in Celsius or Fahrenheit mode
- If the temperature is out of the measurable range, LL.L (beyond the minimum temperature) or HH.H (beyond the maximum temperature) will be shown on the LCD.

(2) Max/Min Outdoor Temperature
- Press "**MAX/MIN**" button to select the desired view: past 24 hours maximum outdoor temperature or past 24hrs minimum outdoor temperature.

(3) Humidity
If the humidity is lower than 20%, the LCD would display  , and display 99% if the humidity is higher than 99%

7.0. Wind
- Plug the wind sensor into the BIOS Atmosphere 2.0 remote sensor.
- Press the "**GUST/WIND MAX**" button to select the desired view; gust: past 24 hrs maximum, wind speed: past 24hrs maximum wind speed
- Wind speed bar: displays wind speed with a 1-12 Beaufort unit

8.0 Time and Alarm Setting

8.1 Radio Controlled Clock:

- After batteries are inserted and the Bios Atmosphere 2.0 finishes receiving the transmission from the outdoor sensor, the clock automatically starts to scan the WWVB time signal and the Radio Control Icon flashes. Initial set up may take several minutes to synchronize. It is possible not to receive the signal due to interference, or the area where we you live. Accurate adjustment of the clock based on time signal is supported in the continental USA. The clock automatically synchronizes with the WWVB every day at 2:00 am to maintain accurate time keeping.

 (flashing)		 (disapears)
Indicates unit is receiving the WWVB signal	Indicates signal has been received successfully	Indicates signal reception has failed

- The clock automatically synchronizes with the WWVB radio signal every day at 2:00 a.m. to maintain accurate time keeping. If synchronization with the WWVB radio signal fails, "  " icon on the LCD will disappear and the clock then attempts to synchronize with the WWVB radio signal at 3 am and 4am. Initial setup may take several minutes to synchronize.
- The clock can be set to scan the radio signal manually by holding "**-/ (C/F)**" button until flashing. Each reception takes several minutes. If the WWVB signal reception fails, scanning stops ("  " icon will disappear from the LCD) and the clock will then attempt to scan the radio signal again on the next full hour. E.g. if scanning failed at 8:20a.m., it will scan again at 9:00a.m.
- Stop scanning WWVB radio signal by holding "**-/ °C /°F**" button until flashing.
- Press the "**DST ON/OFF**" button selects to turn on or off DST (Daylight Saving Time) function for current time and sunset/sunrise time. If DST is turned ON, "DST" will be displayed on the LCD, and the current sunset/sunrise time would be adjusted (+ 1 hour) accordingly.

8.2 Manual Time Setting

- Hold the "**MODE**" button until flashing to enter Clock/Calendar setting mode.
- Press the "**+**" or "**-**" button to adjust the setting and press "**MODE**" button to confirm each setting.
- The setting sequence is shown as follows: **RCC ON/OFF**, Country, City, Hour, Minutes, Second, Year, Month, Day, Day of Week Language, Temperature Unit, Pressure Unit, Wind Speed Unit.
- 3 languages can be selected in Day-of-week, they are: English, Spanish, French. .
- The languages and their selected abbreviations for each day of the week are shown in the following table.

Language	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
English, EN	SU	MO	TU	WE	TH	FR	SA
Spanish, ES	DO	LU	MA	MI	JU	VI	SA
French, FR	DI	LU	MA	ME	JE	VE	SA

NOTE: The Time Setting Mode will automatically exit in 15 seconds without any adjustment.

8.3 12/24 Hour Display mode:
Press the "**12/24**" button to select 12 or 24 hours mode.

8.4 Daily Alarm Function:
- Press the "**MODE**" button to select to view

Time → Day of Week → Date → Alarm Time (AL Display on LCD)

- When viewing Alarm Time, hold the "**MODE**" button until flashing to enter Alarm Time setting. Press the "**+**" or "**-**" button to adjust the alarm time, press the "**MODE**" button to confirm the setting.
- Press the "**AL ON/OFF**" button to switch that alarm **ON** or **OFF**. If it is on, the alarm icon " " will be shown on the LCD.
- When alarming, press any button to stop the alarm. Otherwise, the alarm will alert for 2 minutes, and stop automatically.
- When Alarming, press the "**SNOOZE**" button to activate the snooze function, the alarm icon " " flashes on the LCD. The alarm will snooze for approximately 5 minutes, then it alarms again. This snooze function can be enabled for a maximum of 7 times.

9.0. Sunrise/Sunset Display Function
- After setting the Calendar, Local Country and city in the Time Setting Mode, the main unit calculates the time of Sunrise/Sunset. The Sunrise & Sunset time display is just for reference only. For exact Sunrise & Sunset time, please refer to your Local Weather Station

10. Moon Phase Display

A: New Moon
B: Waxing Crescen
C: First Quarter
D: Waxing Gibbous
E: Full Moon
F: Waning Gibbous
G:Last Quarter
H: Waning Crescent

11.0 Low Battery Indication
The low battery icon " "will appear indicating that the outdoor remote sensor is in a low battery status. The batteries should be replaced.

12.0 Battery Disposal
Replace only with the same or equivalent type recommended by the manufacturer.
Dispose of old, defective batteries in an environmentally friendly manner in accordance with the relevant legislation.

IMPORTANT: Warning! The BIOS Atmosphere 2.0 and the outside sensors contain sensitive electronic components. Radio waves transmitted e.g. from mobile telephones, walkie talkies, radios, WiFi, remote controls or microwaves may influence the transmission distance of the weather station and the outside sensor and lead to a shorter reception range. It is therefore important to keep as great distance as possible between the devices of the weather station and the outside sensor and

the devices which send out radio waves. We do not guarantee the maximum specified transmission range between the weather station and the outside sensors due to the radio frequency interference in the environment.

13.0 Product Specifications

Indoor Temperature:	-10°C to 50°C (14°F to 122°F)
Outdoor Temperature:	-50°C to 70°C (-58°F to 158°F)
Temperature Resolution:	0.1°C
Indoor & Outdoor Humidity:	20% - 99% RH
Humidity Resolution:	1% RH
Wind speed range:	0 – 56m/s
	0 – 201 km/h
	0 – 125 mph
	0 – 108 knot
	0 - 12 Beaufort
	0 – 100 inch
Transmission (Anemometer):	up to 100 meters (328 feet) in open area
Clock:	WWVB Radio-Controlled, Quartz back-up
Power:	C x 3 pieces for the monitor
	AA x 2 pieces for outdoor sensor

14.0 Precautions

- Use a pin to press the reset button if the Unit does not work properly.
- Avoid placing the clock near interference sources/metal frames such as computers or TV sets.
- The clock loses its time information when the battery is removed.
- Do not expose it to direct sunlight, heavy heat, cold, high humidity or wet areas
- To prevent temperature interference, place the remote sensor outside away from direct sunlight and rain
- Never clean the device using abrasive or corrosive materials or products. Abrasive cleaning agents may scratch plastic parts and corrode electronic circuits
- If there is any inconsistency of weather forecast between Local Weather Station and this unit, the Local Weather Station's forecast should prevail. The manufacturer will not take responsible for incorrect forecasting from this unit

15.0 Industry Canada/FCC Statement

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B

digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Lithium batteries are recommended to use during colder temperatures (-20℃ / -4°F)

16.0 One Year Warranty

If this product proves to be defective in material or workmanship within one year of purchase, please return it to the address below. It will be repaired or replaced without charge upon receipt of the unit prepaid with $5.00 to cover handling, packaging and return postage. Please include proof of purchase, your full name, address, daytime phone number or email address.

This warranty does not apply if the defect or malfunction is a result of user abuse, misuse, alteration, modification or damages in transit.

Thermor Ltd.
16975 Leslie Street
Newmarket, ON L3Y 9A1
www.biosbrands.com
1-800-387-8520