

# DIGITAL WEATHER FORECASTER WITH IN-OUT THERMO- HYGROMETER AND RF CLOCK

**MODEL : BAR913HGA**

*USER'S MANUAL*

## INTRODUCTION

Congratulations on your purchase of the **BAR913HGA** Digital Weather Forecaster with In-Out Thermo-Hygrometer and RF Clock. The **BAR913HGA** is an all-in-one weather forecasting device and clock.

The **BAR913HGA** is a weather forecasting device, which has several weather related functions. Main feature is that it takes and records temperatures and humidities in more than one location. Using wireless remote thermo-hygro sensor, it can simultaneously monitor temperatures and humidities in three remote locations. The unit will show temperature and humidity trends as well as record maximum and minimum temperature and humidity readings. **BAR913HGA** is able to receive and display readings from up to 3 remote sensors.

As part of the weather forecasting function, the unit has a built-in barometer that displays atmospheric pressure. Using kinetic-movement graphic illustrations the unit displays atmospheric pressure trends and displays forecasts as sunny, partly cloudy, cloudy, rainy and snowy.

The **BAR913HGA** is also a Radio Frequency (RF) controlled clock. It can automatically synchronize its current time and date when it

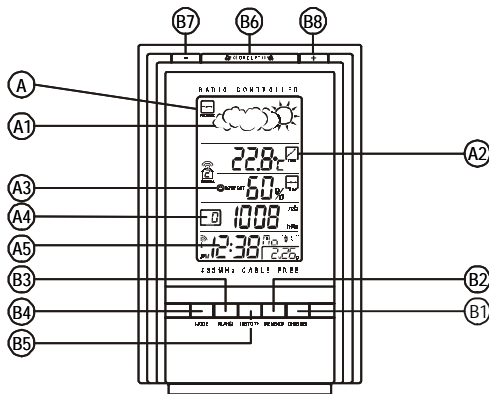
is brought within range of the radio signal generated from the U.S. Atomic Clock.

Other features of the **BAR913HGA** include backlight, extra-large liquid crystal display (LCD) and a daily crescendo alarm with an eight minute snooze function.

No wire installation is required between the main and remote units as the **BAR913HGA** operates at 433 MHz, it can be used in the USA and most places in Continental Europe.

However, please note that the atomic clock function cannot be used outside the U.S.

## MAIN FEATURES: MAIN UNIT



**A. FRONT DISPLAY**

The LCD is divided into five easy-to-read sections. Each section has a specific purpose that relates to weather forecasting, temperature, humidity, pressure and clock / calendar / alarm functions.

**A1. WEATHER FORECAST WINDOW**

- Graphically illustrates weather forecast
- Indicates trends in atmospheric pressure
- Indicates when main unit battery is low

**A2. TEMPERATURE WINDOW**

- Displays current, minimum or maximum indoor and remote temperature
- Indicates temperature trend

**A3. HUMIDITY WINDOW**

- Displays current, minimum or maximum indoor and remote humidity
- Indicates humidity trend
- Displays the Comfort Level
- Indicates when the battery of the remote sensor in display is low

**A4. ATMOSPHERIC PRESSURE**

- Displays the current or historical (last 24 hours) barometric reading

**A5. TIME/DATE/ALARM WINDOW**

- Displays the current time, date (month and day) or daily alarm function
- Radio Frequency (RF) status indicator [📶]

**B. CONTROL BUTTONS****B1. [CHANNEL] BUTTON**

Displays the temperature and humidity readings of the indoor or remote sensor

**B2. [MEMORY] BUTTON**

Displays minimum and maximum temperature and humidity readings, and erases memory data

**B3. [ALARM] BUTTON**

Displays the daily alarm time **or** changes the corresponding alarm time

**B4. [MODE] BUTTON**

Changes the display mode of the clock, and alters time/date setting

**B5. [HISTORY] BUTTON**

Displays the barometric reading for the last 24 hours, or **sets** the altitude compensation setting

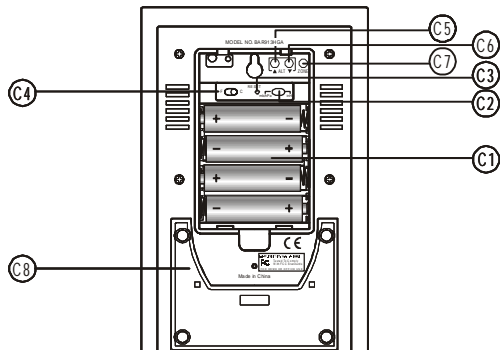
**B6. [🔔 ((SNOOZE)) 🔔] BAR**

Activates the snooze function or turn on the backlight

**B7 & B8. UP(+) DOWN(-) BUTTONS**

**Increases (+) or decreases (-) the value of clock-time and alarm-time.**

## C. BACK PANEL



### C1.BATTERY COMPARTMENT

Accommodates four UM-3 or "AA" size batteries

### C2.mb / hPa - inHg SLIDE SWITCH

Selects between "mb / hPa" or "inHg" pressure unit

### C3.RESET SLOT

Resets the unit by returning all setting to their default values

### C4.°C/°F SLIDE SWITCH

Selects between Centigrade (°C) or Fahrenheit (°F) temperature unit display

### C5 & C6.ALT (▲) or ALT (▼) BUTTON

Increases or decreases the value in compensational altitude setting mode

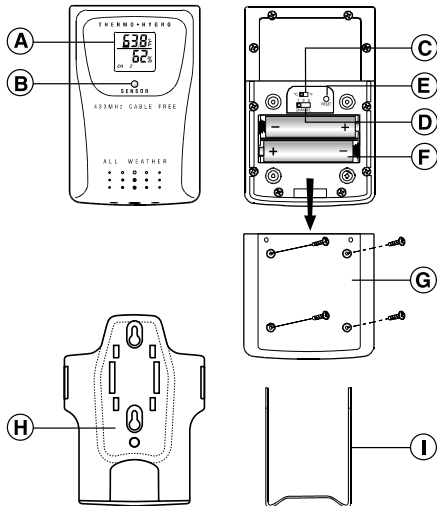
### C7.[ZONE] BUTTON

Press to select among the 4 U.S. time-zones: Pacific(P), Mountain(M), Central (C) or Eastern (E)

### C8. RETRACTABLE TABLE STAND

Easily opened table stand with lock

## FEATURES: REMOTE THERMO-HYGRO SENSOR



**A. TWO-LINE LCD**

Displays the current temperature and humidity monitored by the remote unit

**B. LED INDICATOR**

Flashes when the remote sensor transmits a reading

**C. °C/°F SLIDE SWITCH**

Selects between Centigrade (°C) and Fahrenheit (°F)

**D. CHANNEL SLIDE SWITCH**

Select the remote sensor Channel 1, Channel 2 or Channel 3

**E. RESET**

Returns all user programmed settings to original factory set values

**F. BATTERY COMPARTMENT**

Accommodates two (2) UM-3 or AA-size batteries

**G. BATTERY DOOR****H. WALL-MOUNT HOLDER**

Supports the remote unit in wall-mounting

**I. REMOVABLE TABLE STAND**

For standing the remote unit on a flat surface

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## BEFORE YOU BEGIN

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For best operation:

1. Insert batteries for the remote unit first. Then proceed with inserting the batteries for the main unit.
2. Position the remote unit and the main unit within effective transmission range. In usual circumstances, the effective range is **100 feet (30 meters)**.

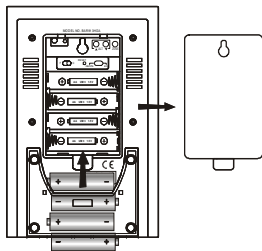
3. Though the remote unit is weather **resistant**, it should be placed away from direct sunlight, rain or snow.

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## BATTERY INSTALLATION: MAIN UNIT

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1. The unit uses four AA-sized (UM-3) 1.5V batteries which is installed in the factory for you. Please remove the plastic cover before usage. Should you need to change the battery, Gently lift the tab on the battery compartment door.
2. Insert four UM-3 or “AA” size batteries.



3. Replace the battery compartment door.

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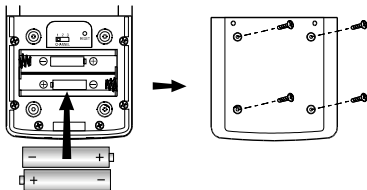
## BATTERY AND CHANNEL INSTALLATION: REMOTE UNIT

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The remote thermo-hygro sensor unit uses two (2) **UM-3** or “AA” size batteries.

Follow these steps to install / replace batteries:

1. Remove the screws **from** the battery compartment.
2. Select the channel number on the [CHANNEL] slide switch.
3. Select the temperature display unit on the °C/°F slide switch.





4. Insert the batteries strictly according to the polarities shown therein.
5. Replace the battery compartment door and secure its screws.

Replace the batteries when the low-battery indicator of the particular channel lights up on the display. (Repeat the steps described in section “BEFORE YOU BEGIN”)

**Note** that once a channel is assigned to a remote unit, you can only change it by removing the batteries or resetting the unit.

## HOW TO USE THE BACKLIGHT

Press [  (( S N D Z E ))  ] bar once. The backlight will be activated for five seconds.

## ABOUT RADIO RECEPTION

The **BAR913HGA** is designed to automatically synchronize its calendar clock once it is brought within range of the **US Atomic**

**Clock** radio signal. However, please note that when the unit is new and just out of the box, auto-synchronization with the U.S. Atomic clock can take up to 72 hours.

When the **BAR913HGA** is within range, its radio-control mechanism will override all manual settings **unless the auto-reception function is manually disabled**.

When the unit is receiving radio signal, the RADIO RECEPTION signal will start to blink. A complete reception generally takes about **2** to 10 minutes, depending on the strength of the radio signal.




When the reception is complete, the RADIO RECEPTION signal will stop blinking. The strength of the reception for the last full hour will be indicated.

For better reception, place the clock away from metal objects and electrical appliances to minimize interference.

**Should you wish to deactivate the RF controlled function, press and hold the [ZONE] button.**

**To reactivate the RF control function, press and hold the [UP] button.**

### Chart indicating Radio Signal Strength

	- Good
	- No signal
	- Receiving

## HOW TO MANUALLY SET THE CLOCK

It is unlikely that you will want or need to manually set the RF Clock.

Should the need or desire to manually set the clock arise, please follow the directions below.

Press **[MODE]** and hold for three seconds. The hour will flash. Use the **[UP(+)]** or **[DOWN(-)]** button to enter the hours. Holding down either the up or down **button** will increase or decrease the value rapidly.

Press **[MODE]** again, the minute **digits** will flash. Again, use the **[UP(+)]** or **[DOWN(-)]** button to change the minutes.

**Note:** When changes are made to this setting, the seconds **setting** will start from zero.

Press **[MODE]** again, the calendar settings are displayed and the year **digits will flash**. Use the **[UP(+)]** or **[DOWN(-)]** button to change the year.

Press **[MODE]** button and the month **digits** will flash. Enter the appropriate month using the **[UP(+)]** or **[DOWN(-)]** button.

Press **[MODE]** button and the day settings will flash. Enter the appropriate day using the **[UP(+)]** or **[DOWN(-)]** button.

Press **[MODE]** again and the language setting **for the day of the week** will flash. Use the **[UP(+)]** or **[DOWN(-)]** button to select **E** for English, **F** for French or **S** for Spanish.

Press **[MODE]** to complete and exit the setting.

The weekday can be expressed as an abbreviation in **three** different languages. The languages and their selected abbreviations for each day of the week are shown in the language chart below.

Language	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
English	Mo	Tu	We	Th	Fr	Sa	Su
French	Lu	Ma	Me	Je	Ve	Sa	Di
Spanish	Lu	Ma	Mi	Ju	Vi	Sa	Do

To toggle among the 4 us time-zones, press the zone button.

## HOW TO SET AND ACTIVATE THE ALARM

### To set the Alarm

Press **[ALARM]** button to display the daily alarm time (the icon "**(.)**" will be displayed)

Press **[ALARM]** and hold for three seconds, the value for the hour **setting** will flash.

Press **[UP(+)]** or **[DOWN(-)]** buttons to make changes to the alarm hour setting.

Press **[ALARM]** again and the minute **digits** will flash. Enter the value for the minute **setting** by using **[UP(+)]** or **[DOWN(-)]** buttons.

Press **[ALARM]** to exit.

The alarm is automatically activated. The **ALARM ON** icon [**⏰**] is visible and the alarm will **be activated** at the specified time.


To deactivate the daily alarm function, press the **[ALARM]** button when the alarm time is displayed. **The ALARM ON icon will disappear.**

To activate, press the **[ALARM]** button again.


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## ALARM AND SNOOZE FUNCTION

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When the daily alarm goes off, the backlight will be on for five seconds and the **ALARM ON**  icon will flash.

The alarm is a crescendo alarm with 3 stage increase in intensity. Without interruption, the unit will sound for two minutes.

To stop the alarm, press the **[ALARM]** button. However, if the **[SNOOZE]**  bar is pressed, the **SNOOZE** function will be triggered. Though the alarm will stop the **ALARM ON** icon will blink for eight minutes. After that the alarm will go off again.

To deactivate the **SNOOZE** function, press the **[ALARM]** button.

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## CHECKING INDOOR AND REMOTE TEMPERATURES & HUMIDITIES

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To display the indoor and outdoor temperature and humidity readings, press the **[CHANNEL]** button to toggle among the indoor, Channel 1, 2 and 3 displays.

The temperature can be shown in Centigrade (°C) or Fahrenheit (°F). Select the appropriate reading by using the °C/°F slide switch (located in the battery compartment). Slide the switch to °C for Centigrade or °F for Fahrenheit.

This unit has an auto-scan function that can sequentially display the indoor and remote readings.

To activate this function, press and hold the **[CHANNEL]** button for 3 seconds. To deactivate press the **[CHANNEL]** button again.

If the reading goes above or below the specific measuring range, the display will show a flashing “HHH” or “LLL”.

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## NOTE ON REMOTE READINGS

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Once batteries are in place in the remote unit, it will start transmitting samplings at 40 second intervals.

If no signals are received when the remote sensor display is selected, “- - -” will be displayed. To search for remote sensor signals, press together the **[MEMORY]** and **[CHANNEL]** buttons on the main unit.

If the unit still displays “- - -” re-insert the batteries or remove the back panel of the remote unit and press reset.”

If that fails, check that the remote sensor is still in place. Make sure the transmission is within range and the path is clear of obstacles and interference.

Repeat this procedure whenever you find discrepancies between the display on the main unit and the display on the remote sensor.

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## NOTE ON °C AND °F

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The outdoor temperature display on the main unit is dominated by the selection on the °C/°F slide switch of the main unit. Whatever the display unit of the remote sensor is, it will only apply to the remote sensor itself and the temperature will be automatically converted to the chosen one of the main unit.

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## MAXIMUM AND MINIMUM TEMPERATURES & HUMIDITIES

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The maximum and minimum recorded temperatures and humidities will be automatically stored in memory. To display them, press

[MEMORY]. Press [MEMORY] again to alternate between the maximum, minimum and current readings. The respective MAX or MIN indicator will be displayed.

To clear the memory, press [MEMORY] and hold for three seconds. The maximum and minimum recorded readings will be erased. If you press [MEMORY] after the memory has been erased, the maximum and minimum readings will have the same values as the current ones.

## TEMPERATURE & HUMIDITY TREND

The temperature and humidity trend indicator shows the trend of temperatures and humidities collected at that particular sensor in the past. Three trends: rising, steady, and falling will be shown.

Arrow indicator			
Temperature Trend	Rising	Steady	Falling

Arrow indicator			
Humidity Trend	Rising	Steady	Falling

## ATMOSPHERIC PRESSURE

The atmospheric pressure indicator in the weather forecast window, uses arrows to indicate if the atmospheric pressure has increased, remained stable, or decreased.

Arrow indicator			
Pressure Trend	Rising	Steady	Falling

## WEATHER FORECAST

The unit is capable of detecting atmospheric pressure changes. Based on collected data, it can predict the weather for the forthcoming 12 to 24 hours. The effective range covers an area of 18 to 30 miles (30 to 50 km).

Indicator displays on the unit					
Forecast	Sunny	Partly Cloudy	Cloudy	Raining	Snowy

### NOTE:




1. The accuracy of a general pressure-based weather forecast is about 70% to 75%.
2. The weather forecasts from this unit are predictions that cover the next 12 to 24 hours. It may not necessarily reflect the current situation.
3. The "Sunny" icon, as applies to night time, implies clear weather.



## COMFORT LEVEL INDICATORS

The comfort level indicators COMFORT, WET or DRY will tell you if the current environment is comfortable, too wet or too dry.

The comfort indicator 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
 <b>COMFORT</b>	20°C to 25°C (68°F to 77°F)	40%RH-70%RH	Ideal range for both relative humidity and temperature
 <b>WET</b>	-5°C to +50°C (23°F - 122°F)	OVER-70%RH	Contains excess moisture.
 <b>DRY</b>	-5°C to +50°C (23°F - 122°F)	Below 70%RH	Contains inadequate moisture
<b>No Indicator</b>	Less than 20°C (68°F) or More than 25°C (77°F)	40%RH to 70%RH	No comment

## HOW TO CHECK THE BAROMETRIC PRESSURE

The current and historical barometric pressure is shown on the atmospheric pressure window.

For users staying at a higher altitude such as in the mountain area, sea-level barometric pressure applies. In this case, press and hold **[HISTORY]** button to enter the altitude compensation setting mode. Use the **ALT (▲)** or **ALT (▼)** button to select from **-328 to 8200 feet** (-100 to 2500 meters) (whichever appropriate). Press **[HISTORY]** button to confirm and exit.


**The BAR913HGA requires entry of elevation in meters not feet. to convert feet to meters multiply feet by .30.**

To determine your location elevation, please either contact your local library, TV/radio weather forecaster, or via Internet at <http://www.worldatlas.com/aatlas/infopage/elvation.htm>

The atmospheric pressure can be displayed in mb/hPa or inHg. The pressure unit is selected on the atmospheric pressure slide switch inside the battery compartment.

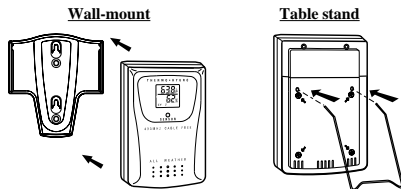
If you want to check the pressure history for a particular hour during the past 24 hours, press the **[HISTORY]** button. Each press on the button will go back by an hour. Holding down the button will increase the value rapidly.

## LOW BATTERY INDICATION

When it is time to replace batteries, the respective low battery indicator  will show up when the corresponding channel is selected. **If the battery level of the main unit is running low it will show up on the weather forecast window.**

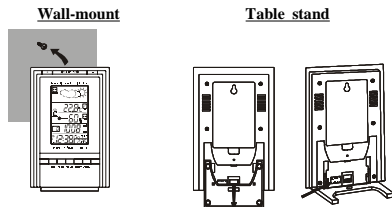
## HOW TO WALL MOUNT OR USE THE TABLE STAND (REMOTE UNIT)

The unit can be wall-mounted using its recessed screw holes or placed on a flat surface using the fold out table stand.



## HOW TO WALL MOUNT OR USE THE TABLE STAND (MAIN UNIT)

The unit can be wall-mounted using its recessed screw holes or placed on a flat surface using the collapsible table stand. Gently pull the table stand from it's collapsed position. Position the lock to secure the stand.



## HOW TO RESET THE UNIT

The **RESET** slot allows you to return all settings to factory values. Accessing the slot is required only when the unit is not operating in a favorable way such as in the rare case of a malfunction.

The **RESET** slot is located inside the battery compartment door. To use the button,

1. Lift open the battery compartment door.
2. Place a blunt stylus into the slot and press.
3. Replace the battery compartment door.

## MAINTENANCE

When handled properly, this unit is engineered to give you years of satisfactory service. Here are a few product care instructions:

1. Do not immerse the unit in water. If the unit comes in contact with water, dry it immediately with a soft lint-free cloth.
2. Do not clean the unit with abrasive or corrosive materials. Abrasive cleaning agents may scratch the plastic parts and corrode the electronic circuit.
3. Do not subject the unit to excessive: force, shock, dust, temperature, or humidity. Such treatment may result in malfunction, a shorter electronic life span, damaged batteries, or distorted parts.
4. Do not tamper with the unit's internal components. Doing so will terminate the unit's warranty and may cause damage. The unit contains no user-serviceable parts.
5. Only use new batteries as specified in this instruction manual. Do not mix new and old batteries as the old batteries may leak.
6. Read this instruction manual thoroughly before operating the unit.

## **SPECIFICATIONS**

### **Temperature Measurement**

#### **Main unit**

#### Indoor Temperature measurement

Proposed operating range	: -5.0°C to +50.0°C (23.0°F to 122.0°F)
Temperature resolution	: 0.1°C (0.2°F)

#### Relative Humidity measurement

Measuring Range	: 25% RH to 95% RH at 25°C (77°F)
Resolution	: 1% RH

#### **Remote unit**

#### Temperature measurement

Proposed operating range	: -20.0°C to +60.0°C (-4.0°F to 140.0°F)
Temperature resolution	: 0.1°C (0.2°F)
RF Transmission Frequency	: 433 MHz
No. of Remote unit	: Up to 3 units
RF Transmission Range	: 100 feet (30 meters)
Temperature sensing cycle	: around 40 seconds

#### Relative Humidity measurement

Measuring Range	: 25 to 95%RH at 25°C (77°F)
Resolution of Humidity	: 1% RH

#### Barometric Pressure measurement

Pressure measuring range	: 795 to 1050mb / hPa (23.48 to 31.01 inHg)
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#### **- Power**

Main unit	: use four (4) UM-3 or “AA” 1.5V batteries
Remote sensing unit	: use two (2) UM-3 or “AA” 1.5V batteries

#### **- Weight**

Main unit	: 6.6 ounces (without battery)
Remote sensing unit	: 2.6 ounces (without battery)

#### **- Dimension**

Main unit	: 6.44" x 3.48" x 1.12" (LxWxD)
Remote sensing unit	: 4.2" x 2.8" x 0.84" (L x W x D)

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## NOTE ON COMPLIANCE

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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operations.

**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.

### FCC:

**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.

**Company Name:** Oregon Scientific, Inc.

**Address:** 19861 SW 95th Place, Tualatin, Oregon 97062, USA

**Name and model number of the product:** DIGITAL WEATHER FORECASTER WITH IN-OUT THERMO-HYGROMETER AND RF CLOCK BAR913HGA

## CAUTION

- The content of this manual is subject to change without further notice.
- Due to printing limitation, the displays shown in this manual may differ from the actual display.
- The contents of this manual may not be reproduced without the permission of the manufacturer.

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## CUSTOMER ASSISTANCE

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Should you require assistance regarding this product and its operation, please contact our customer care department at 800-853-8883 or via email at [helpme@oscientific.com](mailto:helpme@oscientific.com).

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## WARRANTY

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This product is warranted to be free of manufacturing defects for a period of 3 months from date of retail purchase. Defective product should be directed to the place of retail purchase for exchange. Should this not be possible, contact our customer care department for assistance and a return material authorization. No returns may be made without a return authorization. Please retain your retail receipt as you may be asked to provide a copy of it for proof of date purchased.

This warranty does not cover product subjected to abuse, misuse, accidental damage or tampering.

Upon return of the defective product, Oregon Scientific will at its discretion, replace the product with either a new or a tested reconditioned product. Should the product be out of warranty, the consumer may purchase directly from Oregon Scientific a replacement at reasonable cost plus shipping and handling.

*MODEL: BAR913HGA*

# **DIGITAL WEATHER FORECASTER WITH IN-OUT THERMO-HYGROMETER AND RF CLOCK**

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**Instruction Manual**

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**Mode D'emploi**

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**Bedienungsanleitung**

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**Manuale di Istruzioni**

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**Instrucciones de Funcionamiento**