DIGITAL WEATHER FORECASTER WITH REMOTE THERMO-SENSOR AND RADIO CONTROLLED CLOCK

MODEL: BAR112
USER'S MANUAL

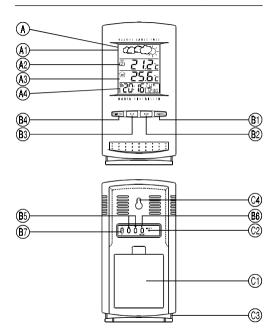
INTRODUCTION

Congratulations on your purchase of the Weather forecaster with cable free sensor and radio-controlled calendar clock (BAR112).

A multifunction device, this unit has a large four-line liquid crystal display (LCD) for displaying weather forecast information, in/outdoor temperatures, a radio frequency (RF) controlled calendar clock, time zone adjusted time, and dual daily alarms. Also, it can display temperature readings from up to three wireless remote thermo-sensors.

Other features include a day-of-the-week display in four abbreviated languages, a four-step crescendo alarm, and interchangeable clock display modes.

MAIN FEATURES: MAIN UNIT



A. FRONT DISPLAY

A four line easy-to-read LCD each with specific purposes that relate to weather forecasting, temperature, or clock / calendar / alarm functions.

A1. WEATHER FORECAST WINDOW

- Graphically illustrates a weather forecast

A2. REMOTE TEMPERATURE WINDOW

- Displays current temperature, remote sensor unit
- Indicates the minimum / maximum remote temperature
- Displays remote temperature as Fahrenheit (°F) or Celsius (°C)
- Indicates when the remote sensor battery is low
- Indicates the remote sensor channel

A3. INDOOR TEMPERATURE WINDOW

- Displays current indoor temperature
- Indicates minimum / maximum indoor temperature
- Displays indoor temperatures as Fahrenheit (°F)/ Celsius (°C)
- Indicates when main unit battery is low

A4. TIME/DATE/ALARM WINDOW

- Displays the current time, date (day, month, and day-of-theweek), or alarm times
- Current time and date in another time Zone
- Radio Frequency (RF) status indicator [
- "ALARM ON" icon indicates when the alarm is active [>]
- Alarm indicator [((·))]

B. CONTROL BUTTONS

B1. CHANNEL BUTTON

B2. [MEM] BUTTON

Displays minimum and maximum temperature readings, and erases memory data

B3. ALARM [((·))] BUTTON

Displays the alarm time, or changes the alarm set time

B4. MODE/SET BUTTON

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

B5. UP[▲]DOWN[▼]BUTTONS

Sets the remote sensor channel

Sets the increase or decrease in the value of a setting.

B6. [ALON/OFF] BUTTON

Activates and deactivates the alarm

B7. °C/°F SLIDE SWITCH

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

C. OTHER FEATURES

C1. BATTERY COMPARTMENT

Accommodates four UM-3 or "AA" size alkaline batteries

C2. RESET SLOT

Resets the unit by returning all setting to their default values

C3. REMOVABLE TABLE STAND

For mounting the remote sensor on a flat horizontal surface.

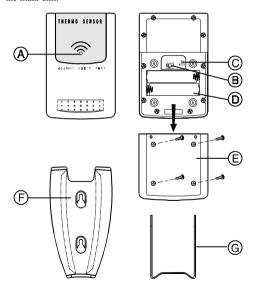
C4. RECESSED WALL-MOUNT HOLE

For mounting to a wall or vertical surface

MAIN FEATURES:

REMOTE SENSOR UNIT

The remote sensor is a wireless independent component. Its function is to monitor temperatures at a location other than the location of the main unit



A LED INDICATOR

Flashes when the remote sensor transmits a reading

B CHANNEL SLIDE SWITCH

Designates the remote sensor Channel

C. RESET BUTTON

Returns all settings to default values

D. BATTERY COMPARTMENT

Accommodates two (2) UM-4 "AAA" size batteries

E. BATTERY DOOR

F. WALL-MOUNT HOLDER

Supports the remote unit in wall-mounting

G. REMOVABLE TABLE STAND

For standing the remote unit on a flat surface

BEFORE YOU BEGIN

For best operation:

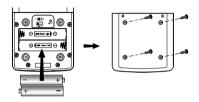
Insert batteries for the remote unit first. Then proceed with inserting the batteries for the main unit.

Position the remote unit and the main unit within effective transmission range. In usual circumstances, the effective range is 30 meters.

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

BATTERY INSTALLATION: REMOTE UNIT

The remote unit uses two UM-4 or "AAA" size alkaline batteries.



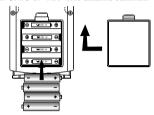
Installation:

- 1. Remove the screws on the battery compartment.
- Select the desired temperature scale by switching the °C/°F switch located inside the battery compartment.
- Select the channel number on the CHANNEL slide switch. Note that once a channel is assigned to a remote unit, you can only change it by removing the batteries or resetting the unit.
- Insert the batteries strictly according to the polarities shown inside the battery compartment.
- 5. Replace the battery compartment door and secure the screws.

Note: Disposed of improperly, batteries can be harmful. Protect the environment by taking exhausted batteries to authorized disposal stations.

BATTERY INSTALLATION: MAIN UNIT

- 1. Gently lift the tab on the battery compartment door.
- 2. Insert four UM-3 or "AA" size alkaline batteries.



3. Replace the battery compartment door.

Note: For both the remote sensor and the main unit, replace batteries when they are low. The low battery indicator [[] in the indoor or / and outdoor temperature window will be displayed when the batteries are low.

HOW TO READ THE KINETIC WAVE DISPLAY

The kinetic wave display shows the signal receiving status of the main unit. There are three possible forms:

The unit is in searching mode.		0	س. س
Channel registered in search mode.	•	<u></u>	<u></u>
No signal received in search mode.		•	

MAXIMUM AND MINIMUM TEMPERATURES

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

Press **MEM** again to alternate between the maximum, minimum, and current temperatures. The respective MAX or MIN indicator will be displayed.

To clear the memory, press **MEM** button and hold for three seconds. The maximum and minimum-recorded temperatures will be erased. Subsequently, if you press **MEM** after the memory has been erased, the maximum and minimum temperature will have the same values as the current reading.

DISCONNECTED SIGNALS

If without obvious reasons the display for a particular channel goes blank, press **CHANNEL** and **MEM** simultaneously to enforce an immediate search. If that fails, check:

- 1. The remote unit of that channel is still in place
- The batteries of both the remote unit and main unit. Replace if necessary.

Note: When the temperature falls below freezing point, the batteries of outdoor units will freeze lowering their voltage supply and the effective range.

The transmission is within range and the path is clear of obstacles and interference

Shorten the distance when necessary.

TRANSMISSION COLLISION

Signals from other household devices, such as door bells, home security systems and entry controls, may interfere with those of this product and cause temporarily reception failure. This is normal and does not affect the general performance of the product. The transmission and reception of temperature readings will resume once the interference recedes.

NOTE ON °C AND °F

The unit of temperature display is selected on the °C/°F slide switch. Select °C for Centigrade or °F for Fahrenheit.

Note: The remote temperature display on the main unit is dominated by the selection on the °C/°F slide switch of the main unit. Whatever the display units of the remote sensors, they will be automatically converted to the choice of the main unit.

WEATHER FORECAST FUNCTION

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 30 to 50 km.

Indicator displays on the unit	ф.	œæ¢	B	
Forecast	Sunny	Slightly Cloudy	Cloudy	Rainy

NOTE:

- The accuracy of a general pressure-based weather forecast is about 70% to 75%.
- 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 nighttime, implies clear weather.

CALENDAR CLOCK DISPLAY MODES

The BAR112 supports four time display modes in the sequence of:

 $\begin{tabular}{ll} \textbf{MODE 1.} & \underline{\textbf{Hour-Minute-Second (of local time)}} \\ \end{tabular}$

Day-Month (of local time)



MODE 2. Hour-Minute-Day of the Week (of local time)

Day-Month (of local time)



MODE 3. Hour-Minute-Day of the Week (of local time)

Hour-Minute (of alternate time zone)



MODE 4. Hour-Minute-Day of the Week (of second time zone)

Day-Month (of alternate time zone)



Each press on the MODE button will toggle the display in the above order

Note: The bottom line of the display will be replaced by the alarm time if the **ALARM SET** [((·))] button is pressed.

ABOUT RADIO RECEPTION

The BAR112 is designed to automatically synchronize its calendar clock once it is brought within range of the Frankfurt DCF77 radio signal.

When the BAR112 is within range, its radio-control mechanism will override all manual settings.

When the unit is receiving radio signal, the RADIO RECEPTION signal will start to blink. A complete reception generally takes about two 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 will remain until the next scanning cycle backs place.

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

M-	- Strong
(i	- Weak
1	- No signal
\	- Receiving

If you wish to disable the auto-reception feature, press the \blacktriangledown button for three seconds. The radio reception signal [] will disappear. The unit will not respond to radio signals.

To enable the feature again, press the \triangle button for three seconds. The radio reception signal $\begin{bmatrix} 3 \end{bmatrix}$ will start blinking to initiate reception automatically.

HOW TO SET THE CLOCK MANUALLY

To set the clock manually, hold **MODE/SET** for three seconds. The hour digits will blink.

Press \triangle or ∇ select the hour. Keep pressing the button to increase or decrease the value rapidly.

Press MODE/SET to confirm. The minute digits will blink.

Repeat the same procedure to set the minutes, hour, current date, month, display language, day-of-week and offset for the alternate time zone.

Note: The time and date are displayed in 24-HOUR clock format. For the language display, you can choose among English (E), German (D), French (F) and Italian (I). Day-of-week is in the usual sequence of Monday through Sunday.

For the alternate time zone, which is indicated by the ZONE icon, enter the hour offset using the \triangle and \blacktriangledown buttons and the BAR112 will calculate the second time accordingly.

If there is an item you do not wish to change, simply press **MODE/ SET** to bypass the item.

When you are done, press MODE/SET to exit. The display will return to the mode last chosen.

HOW TO SET AND ARM THE ALARMS

The BAR112 has two alarms, ALARM 1 and ALARM 2. They can be invoked together or independently.

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To set an alarm:

- 1.Press [((·))] once to select ALARM 1 or again to select ALARM 2 the last selected time of the alarm will be displayed. If you have never set the alarm before, the time will be displayed as 0:00.
- 2.Press [((·))] for three seconds. The hour digits will blink.
- 3.Enter the hour using \triangle and ∇ .
- 4. Press [((·))]. The minute digits will blink.
- 5.Enter the minutes using \triangle and ∇ .
- 6.Press [((·))] to exit. The [) icon for the alarm chosen will be displayed indicating the alarm set above is now armed.

You can also arm or disarm an alarm by pressing the $[AL\ ON/OFF]$ button.

When an alarm is armed, it will go off at the set time.

The four-step crescendo function allows the alarm to start off gently and step up its intensity every 20 seconds for four times. Without interruption, the alarm will go off for a total of two minutes.

If a second alarm goes off when the first alarm is sounding off, the first alarm will be disabled automatically.

HOW TO STOP AN ALARM

To stop an alarm, you can use either press [((·))] button or [AL ON/OFF] button.

Pressing [((·))] will stop the alarm, which is still armed and will activate at the set time the following day.

If [AL ON/OFF] button is pressed instead, the alarm will be stopped and deactivated all together.

NOTE ON OUTDOOR-REMOTE TEMPERATURE

Once batteries are in place in the remote unit, it will start transmitting samplings at 30-second intervals.

If no signals are received when the outdoor-remote temperature is selected, "----" will be displayed. To force the main unit to search for remote sensor signals, press **MEM** and **CHANNEL** buttons simultaneously.

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.

NOTE ON SETTING REMOTE SENSOR CHANNELS

The unit has an auto-scan function that sequentially displays temperature readings of up to three remote sensors. In order to function properly, each remote sensor must be set to different channels.

THE RESET BUTTON

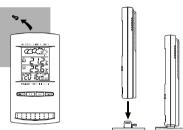
The button is only used when the unit is operating in an unfavorable way or malfunctioning. Use a blunt stylus to hold down the button. All settings will return to their default values.

HOW TO WALL-MOUNT OR USE THE TABLE STAND

The unit can be wall-mounted using its recessed screw holes or place on a flat surface by attaching the table stand.

Main Unit:





Remote Sensor:

The sensor comes with a wall-mount holder and a removable stand. Use either to hold the unit in place.

Wall-mount



Table Stand

Table Stand



MAINTENANCE

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

- Do not immerse the unit in water. If the unit comes in contact with water, dry it immediately with a soft lint-free cloth.
- Do not clean the unit with abrasive or corrosive materials. Abrasive cleaning agents may scratch the plastic parts and corrode the electronic circuit.
- 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.
- 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.
- Only use new batteries as specified in this instruction manual. Do not mix new and old batteries as the old batteries may leak.
- 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)

 $Temperature \ resolution \qquad \qquad :0.1^{\circ}C \ \ (0.2^{\circ}F)$

Remote unit

Proposed operating range : -20.0°C to +60.0°C

(-4.0°F to 140.0°F)

Temperature resolution : $0.1^{\circ}C$ ($0.2^{\circ}F$)

RF Transmission Frequency : 433 MHz

RF Transmission Range : Maximum 30 meters

Temperature sensing cycle : around 30 seconds

Power

Main unit : use four (4) UM-3 or "AA"

1.5V alkaline battery

Remote sensing unit : usetwo(2)UM-4or"AAA"

1.5V alkaline battery

Weight

Main unit : 189gm (without battery)

Remote sensing unit : 70 gm

Dimension

Main unit : 161 x 87 x 28 mm

(LxWxD)

Remote sensing unit : 92 x 60 x 21mm

(LxWxD)

NOTE ON COMPLIANCE

This product complies to standards and specifications of BZT, FCC and article number 334 of PTT.

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 needed.
	Consult the dealer of an experienced radio/TV technician for help. $% \label{eq:consult} % \begin{subarray}{ll} \end{subarray} % \begin{subarray}$

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 manufacturer and its suppliers held no responsibility to you or any other person for any damage expenses, lost profits, or any other claim arise by using this product.
- The contents of this manual may not be reproduced without the permission of the manufacturer.

MODEL: BAR112

DIGITAL WEATHER FORECASTER WITH REMOTE THERMO - SENSOR AND RADIO CONTROLLED CLOCK

Instruction Manual

Mode D'emploi

Bedienungsanleitung

Manuale di Istruzioni

Instrucciones de Funcionamiento