ACURITE 02002 Wireless Thermometer with atomic clock Instruction Manual

Contents

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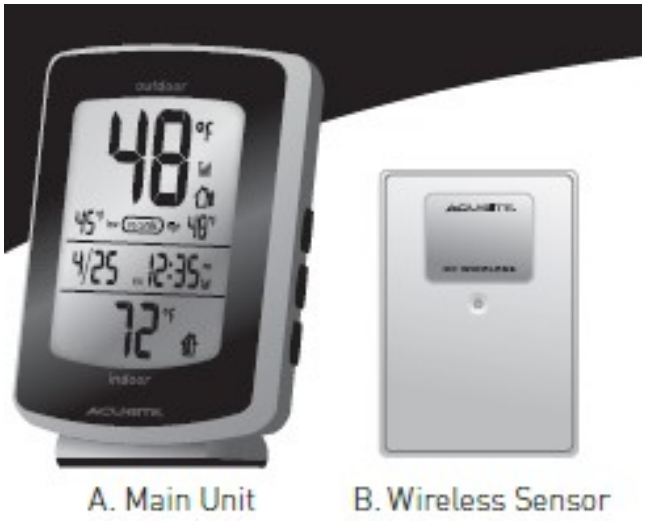
Instruction Manual

Package Contents:
(1) Main Unit (A) with stand
(1) Wireless Sensor (B)
(1) Hardware Bag
(1) Instruction Manual

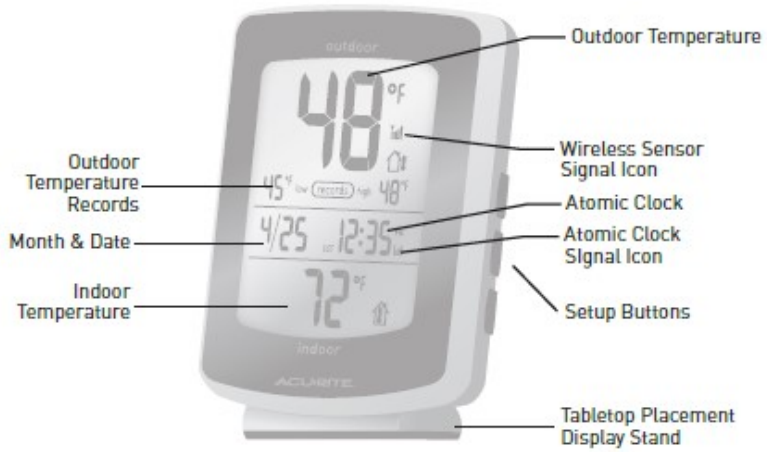
What You Need:

- Philips Screwdriver
- (5) AA batteries -see “Install Batteries” on page 2



Thank You for purchasing this ACURITE® product. Please read this manual in it’s entirety to fully enjoy the benefits and features of this product. Please keep this manual for future reference.
NOTE: A clear film is applied to the LCD at the factory that must be removed prior to using this product. Locate the clear tab and simply peel to remove.

1 • OVERVIEW OF FEATURES



About the Atomic Clock

A clock is considered atomic if it has an accuracy of one second in a million years. Consumer clocks are considered atomic if they attain this accuracy by receiving a signal from an atomic clock. In North America, the National Institute of Standards and Technologies operates an atomic clock in Colorado which transmits the time codes via the the radio station WWVB. The signal is transmitted in a very low frequency (60,000 Hz). The Acurite clock you have purchased includes a built-in receiver which picks up the signal from the WWVB station. For the best possible reception, place the main unit with the back side facing Colorado. NOTE: Due to solar radiation in the atmosphere, the atomic clock signal is weaker during the day. Most synchronization with the WWVB atomic clock signal happens at night when there is less interference.

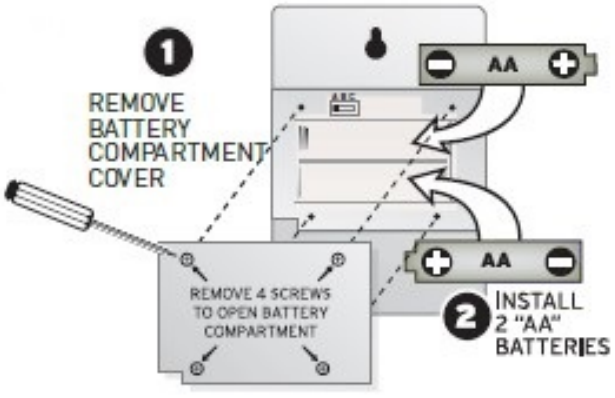
2• SETUP

Install Batteries

NOTE: Install all batteries in both units within a 6 minute period to ensure proper wireless functionality.

1. **Wireless Sensor**

- Remove the 4 battery compartment
- Remove the battery compartment cover and install 2 fresh “AA” batteries as shown here. **Always install batteries into the wireless sensor FIRST** to ensure proper wireless synchronization with the main.



B. Main Unit

Remove the battery compartment cover and install 3 fresh “AA” batteries as shown here.

Operating Range of Batteries

Extended periods of cold temperatures (below -4ºF / -20ºC) can cause alkaline batteries to function improperly. This will cause the outdoor wireless sensor to stop transmitting temperature readings. Use lithium batteries in these low temperature conditions to ensure continued operation for wireless sensors placed outdoors.

PLEASE DISPOSE OF OLD OR DEFECTIVE BATTERIES IN AN ENVIRONMENTALLY SAFE WAY AND IN ACCORDANCE WITH YOUR LOCAL LAWS AND REGULATIONS

BATTERY SAFETY: Follow the polarity (+/-) diagram in the battery compartment. Promptly remove dead batteries from the device.
Dispose of used batteries properly. Only batteries of the same or equivalent type as recommended are to be used. DO NOT incinerate used batteries. DO NOT dispose of batteries in fire, as batteries may explode or leak. DO NOT mix old and new batteries or types of batteries (alkaline/standard). DO NOT use rechargeable batteries. DO NOT recharge non-rechargeable batteries. DO NOT short-circuit the supply terminals.

Main Unit : Basic Setup

After installing batteries, the time zone, time, DST (daylight saving time) and ºF or ºC preferences must be set initially. After the initial manual setting, the atomic clock will maintain it’s accuracy and adjust for DST automatically.

When first entering basic setup mode, the time zone will be flashing. Adjust the time zone using the “ ” or “ ” buttons on the side of the main unit, then press
the “SET” button to confirm your time zone selection and move on.
Now select DST (daylight saving time) “on” or “off” by pressing the “ ” or “ ” buttons on the side of the main unit. Press the “SET” button to confirm your DST selection.

Next, adjust the HOUR by pressing the “ ” or “ ” buttons on the back of the main unit. Press the “SET” button to confirm your HOUR selection and to move on to MINUTE setting. Again, adjust the MINUTE by pressing the “ ” or “ ” buttons. You may press and HOLD the “ ” or “ ” to adjust the minutes at a faster rate. Press the “SET” button again to confirm your time setting.

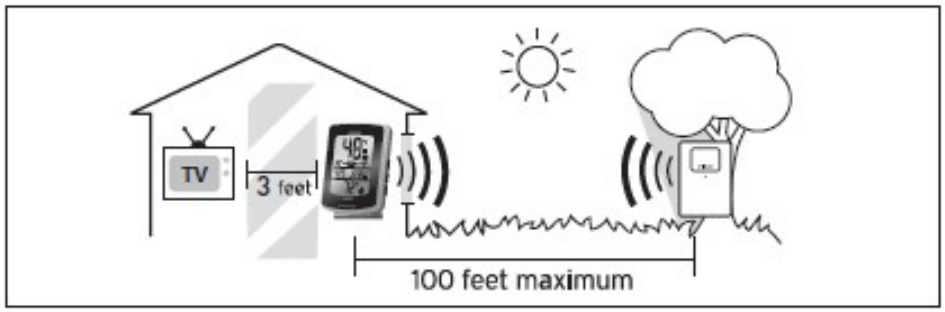
Next, adjust the MONTH and then the DATE in the same manner, using the “ ” and “ ” buttons to adjust and the “SET” button to confirm and move on.
Finally, press the “ ” or “ ” buttons to select between fahrenheit (ºF) or celsius (ºC) temperature display units
Press the “SET” button one more time to exit basic setup mode. You may enter basic setup mode again at any time by pressing the “SET” button.

Basic Setup is Now Complete

The wireless sensor will soon send a signal to the main unit and the two units will be synchronized. It may take a few minutes for synchronization to be complete. If both or one of the units appear to be functioning improperly, refer to the troubleshooting section in this manual.

3 • PLACEMENT

Now that setup is complete, you must choose a location to place the wireless sensor and the main unit. The wireless sensor MUST be placed less than 100 feet away from the main unit.
This wireless thermometer uses radio frequency for communication, which is susceptible to interference from other electronic devices and large metallic items or thick walls. Always place both units at least 3 feet away from appliances (TV, microwave, radios, etc.) or objects (large metal surfaces, thick stone walls, etc.) that may interfere with the wireless communication.



Placement of Main Unit

Place the main unit in a dry area free of dirt and dust. To help ensure an accurate indoor temperature measurement, be sure to place the main unit out of direct sunlight, and away from any heat sources or vents in your home. For the best possible atomic clock reception, place the main unit with the back side facing Colorado.

There are 2 placement options for the the main unit. You may hang the main unit on a wall using the integrated hang holes on the bottom of the tilting display stand. Alternatively, you may place the main unit on a table top or other flat surface.

Placement of Sensor

The wireless sensor MUST BE PLACED OUTDOORS to observe outdoor temperatures and relay the outdoor temperature to the main unit display. The wireless sensor must be placed less than 100 feet from the main unit.

The wireless sensor is water resistant and is designed for outdoor use. However, to extend the life of the product, place the wireless sensor in an area protected from direct weather elements. To ensure an accurate outdoor temperature measurement, be sure the wireless sensor is placed out of direct sunlight and away from any heat sources.

4 • OPERATION

After the main unit and the wireless sensor are both powered on and wirelessly synchronized, no further input is required. The atomic clock will automatically re-synchronize occasionally to ensure the clock is accurate.

Wireless Signal Reception Icons

The main unit has signal reception icons in the outdoor temperature display area and near the atomic clock display. If there are a low number of “bars” present, you may experience no temperature display (“–”) or inaccuracy. In either case, you may need to relocate one or both of the units. If most or all 4 of the bars are present, wireless reception is good and no action is required. If the atomic clock signal bars are low, the clock may be inaccurate or may not automatically adjust for daylight saving time (DST).

Troubleshooting

Problem	Possible Solution

Bad Temperature	Relocate the main unit and/or the wireless sensor. Both units must b e within 100 feet	
Reception		
	from each other. Make sure both units are placed at least 3 feet fro m other electronic appliances and devices that may interfere	
no bars	with the wireless communication (such as TV's, microwaves, computers etc). NOTE: It may tak e up to 20 minutes for the main unit to resynchronize with the sen sor when batteries are replaced.	
Bad Atomic Clock Rec eption no bars	Relocate the main unit. Make sur e the main unit is placed at least 3 feet from other electronic applianc es and devices that may interfere with the wireless communication (such as TV's, microwaves, computers etc). Large metallic sur faces will also interfere with the at omic clock signal. Make sure the back side of the main unit is facin g Colorado.	

No Outdoor Temperatu re or Humidity Display (no communication)	If wireless reception is bad (no ba rs), see “Bad Reception” section above. The wireless ID setting on each unit must match for both unit s to communicate properly. See “ Set Wireless ID” on the next page .	
Main Unit Display Not Working	Make certain that the batteries ar e installed correctly. The batteries may need replacing.	
	Product Registration	
To receive product information, register your product online . It’s quick and easy! Log on to **http://www.chaneyinstrument.com/product_reg.htm**		

Set Wireless ID

This wireless thermometer uses long range 433mhz radio frequency for communication.
In the event that you have reception problems due to interference, both the main unit and the wireless sensor have a selectable wireless ID. The ID switches are located within the battery compartments of the main unit and the wireless sensor.
You may choose A, B or C; but both the main units and the wireless sensors IDs must match for successful synchronization.

5 • PRODUCT SPECIFICATIONS

Measurement Ranges

Temperature
Main Unit: 32ºF to 122ºF / 0ºC to 50ºC
Wireless Sensor: -40ºF to 158ºF / -40ºC to 70ºC

Specifications

Power Requirements
Main Unit: 3 x “AA” alkaline or lithium batteries Wireless Sensor: 2 x “AA” alkaline or lithium batteries
Wireless Communication
Radio Frequency: 433 mhz
Transmission Intervals: every 16 seconds
Atomic Clock Frequency: WWVB 60Khz Synchronizes Daily

Documents / Resources

	ACURITE 02002 Wireless Thermometer with atomic clock [pdf] Instruction Manual 02002, Wireless Thermometer with atomic clock, 02002 Wireless Thermometer with atomic clock

References

- AcuRite Weather Monitoring | #1 Weather Station Brand in North America