

# Wireless Indoor / Outdoor Thermometer with Indoor Humidity

Model: WH0280



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## 1. Introduction

Thanks for your purchasing of the WH0280 Wireless Indoor/Outdoor Thermometer with Indoor Humidity. To ensure the best product performance, please read this manual and retain it for future reference.

## 2. Get Started

**Note:** Power up sequence must be performed in the order shown in this section (insert batteries in the Remote Sensor first, Display Console second).

**Attention:**

- Do not mix old and new batteries
- Do not mix Alkaline, Standard, Lithium or Rechargeable batteries
- Ensure batteries are installed correctly with regard to polarity +/-

### 2.1 Parts List

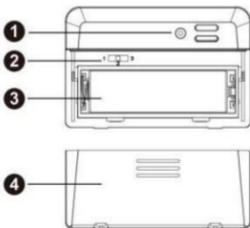
One Display Console (Receiver)  
One remote sensor (Transmitter)  
One User Manual

## 2.2 Recommend Tools

Hammer for hanging remote thermometer transmitter.

## 2.3 Thermometer Sensor Set Up

1. Remove the battery door on the back of the sensor by sliding the compartment door down, as shown in Figure 1.
2. Set RF sensor channel.



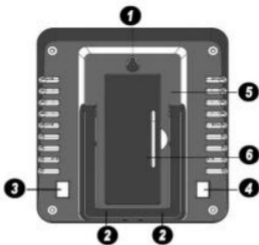
**Figure 1**

- 1 Wireless transmitter LED
- 2 1, 2, 3 RF Channels
- 3 AA Battery
- 4 Battery Compartment Cover

3. Insert one AA battery.
4. After inserting the battery, the remote sensor LED indicator will light for 4 seconds, and then flash once per 60 seconds thereafter. Each time it flashes, the sensor is transmitting data.
5. Close the battery door.

## **2.4 Display Console Set Up**

1. Move the remote thermometer(s) about 2 to 3m away from the display console (if the sensor is too close, it may not be received by the display console).
2. Remove the battery door on the back of the display, as shown in Figure 2. Insert one AA (alkaline, lithium or rechargeable) battery in the back of the display console.



**Figure 2**


1. Integrated Hang Hole
2. Stand Mount
3. CH/+ Button
4. Mode Button
5. Battery Compartment
6. Battery Compartment Cover

All of the LCD segments will light up for a few seconds to verify all segments are operating properly.

3. Replace the battery door, and fold out the

desk stand and place the console in the upright position.

The console will instantly display indoor temperature and humidity. The remote temperature will update on the display within a few minutes.

While in the search mode, the reception search icon  flash.

If the remote does not update, please contact our Customer Service for support.

### 2.4.1 Display Console Layout



Figure 3



1. Alarm Clock Icon
2. Current Indoor Temperature
3. RF Channels
4. Time
5. Current Indoor Humidity
6. Outdoor Reception Icon
7. Current Outdoor Temperature

### **2.4.2 Sensor Operation Verification**

Verify the indoor and outdoor temperature match closely with the console and sensor array in the same location (about 2 to 3m apart). The sensors should be within 2°F (the accuracy is  $\pm 1^\circ\text{F}$ ). Allow about 30 minutes for both sensors to stabilize.

## **3. Wireless Sensor Installation**

It is recommended you mount the remote sensor in a shaded area. Direct sunlight and radiant heat sources will result in inaccurate temperature readings. Although the sensor is water resistant, it is best to mount in a well-protected area, such as under an eave.

### 3.1 Mounting with Zip Tie

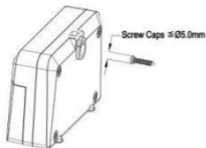
Mounting the sensor with a zip tie will result in better accuracy when mounting outside, since it is not touching another object. Other objects will store and radiate heat (or cold).



**Figure 4**

### 3.2 Mounting with Nail or Screw

To mount the sensor with a nail or screw, the cap must be less than or equal to 5.0 mm in diameter.



**Figure 5**

## **4. Console Operation**

**Note:** The console has two buttons for easy operation: **【CH/+】** button (on the left), and **【MODE】** button (on the right).

If no operation for 30s, display will return back to normal mode.

### **4.1 Setting for 12/24hr Switch, Time and °C/°F Switch**

Long press **【MODE】** button 2s, step into setting mode.

- Short press **【CH/+】** switch 24/12hr display
- Short press **【MODE】**, step into Hour setting, Short press **【CH/+】** to adjust the number from

1-12 or 0-23.

c. Short press **【MODE】**, step into Minute setting, Short press **【CH/+】** to adjust the number from 0-59.

d. Short press **【MODE】**, step into temperature unit setting, short press **【CH/+】** to select °C/°F display.

e. Short press **【MODE】**, to complete setting mode and back to normal mode.

## 4.2 Setting for Alarm Clock

Short press **【MODE】** button, step into alarm clock display setting mode, short press **【CH/+】** to enable ( speaker icon is lit) or disable alarm function.

a. Long press **【MODE】** button 3s, step into alarm Hour setting, Short press **【CH/+】** to adjust the number from 1-12 or 0-23.

b. Short press **【MODE】**, step into alarm Minute setting, Short press **【CH/+】** to adjust the number from 0-59.

Note: When the alarm clock is ringing, you can stop it by pressing any button.

## 4.3 Setting for Min/Max Record

### 4.3.1 Min value mode


- Short press **【MODE】** for twice, step into Min value display mode.
- Short press **【CH/+】** to select other available outdoor sensor Min value (if no extra outdoor sensor available, it will display "--." instead).
- Long press **【CH/+】** 2s, reset the Min value of indoor temperature/humidity and the current displayed Min value of outdoor RF channel.

### 4.3.2 Max value mode

- Short press **【MODE】** for three times step into Max value display mode.
  - Short press **【CH/+】** to select other available outdoor sensor channel Max value (if no extra outdoor sensor available, it will display "--." instead).
- Long press **【CH/+】** for 2s, reset the Max value of indoor temperature and the current
- Long press **【CH/+】** 2s, reset the Max value of indoor temperature/humidity and the current displayed Max value of outdoor RF channel.


## 4.4 Setting for RF Channels

During normal display mode, press 【CH/+】 to select outdoor sensor display in the following sequence:

CH1 – CH2 – CH3 – 

## 5.Sensor Resynchronization

when the remote sensor lost reception or extra sensors to be added, press both the 【CH/+】 and 【MODE】 buttons at the **same time** for **five seconds**.

While in the search mode, the reception search icon  flash.

## 6.Best Practices for Wireless Communication

**Note:** To insure proper communication, mount the remote sensor on a vertical surface, such as a wall. **Do not lay the sensor flat.**

Keep the console several feet away from computer monitors and TVs.

## 7. Specifications

### 7.1 Wireless Specifications

- Line of sight wireless transmission (in open air): 300feet(100meters)
- Frequency: 433 MHz
- Update Rate: 60 seconds

### 7.2 Measurement Specifications

The following table provides specifications for the measured parameters.

Measurement	Range	Accuracy	Resolution
Indoor temperature	14 to 140 °F	± 1 °F	0.1 °F
Outdoor Temperature	-40 to 140 °F	± 1 °F	0.1 °F
Indoor Humidity	1 to 99 %	± 3% (20% to 90%)	1%

### 7.3 Power Consumption

- Base station (display console) : 1 x AA Alkaline or Lithium batteries (not included)
- Remote sensor : 1 x AA 1.5V Alkaline or

Lithium batteries (not included)

## 8. FCC Statement

### **Statement according to FCC part 15.19:**

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

### **Statement according to FCC part 15.21:**

Any changes or Modifications not expressly approved by this company could void the user's authority to operate the equipment.

### **Statement according to FCC part 15.105:**

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.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be

installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and consider removing the no-collocation statement.



## 9. Warranty Information

**We disclaim any responsibility for any technical error or printing error, or their consequences.**

**All trademarks and patents are recognized.**

We provide a 1-year limited warranty on this product against manufacturing defects in

materials and workmanship.

This limited warranty begins on the original date of purchase, is valid only on products purchased and only to the original purchaser of this product. To receive warranty service, the purchaser must contact us for problem determination and service procedures.

This warranty covers only actual defects within the product itself, and does not cover the cost of installation or removal from a fixed installation, normal set-up or adjustments, claims based on misrepresentation by the seller or performance variations resulting from installation-related circumstances.