
Ambient Weather F007PF 8-Channel Wireless Water Thermometer User Manual



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1 Introduction

Thank you for your purchase of the Ambient Weather F007PF 8-Channel Wireless Water Thermometer. The following user guide provides step by step instructions for installation, operation and troubleshooting. To download the latest manual and additional troubleshooting tips, please visit:

<http://ambientweather.wikispaces.com/F007PF>

The thermometer allows you to measure the temperature a water, this product is intended be used as a comfort and convenience solution, it is not intended as a pool or SPA safety device. Follow your pool or SPA manufacturers instructions for safe use of your pool or SPA.


2 Getting Started

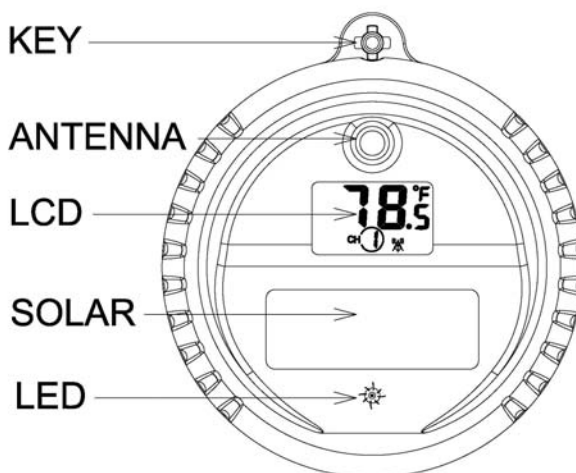
 **Note:** The power up sequence must be performed in the order shown in this section (insert batteries in the remote transmitter(s) first, Display Console second).

Parts List

QTY	Item
1	Thermometer transmitter (F007PF) for pool/SPA Dimensions (LxHxW): 8.5" x 4.2" x 3.7" 216*106*95mm LCD Dimensions (LxW): 1.1 x 0.62" 27*16mm Remote sensor into the water: 7.1" 180mm Remote sensor waterproof: Up to 3.28 ft 1 m
2	User Manual

2.1 Water Thermometer Sensor Set Up

 **Note:** Can use rechargeable batteries. We recommend fresh alkaline batteries for temperature ranges between -4 °F and 140 °F and fresh lithium batteries for temperature ranges between -40 °F and 140 °F.



1. Twist the KEY lid to unlock, and twist the main of the sensor by removing the top cover, as shown in Figure 1 .

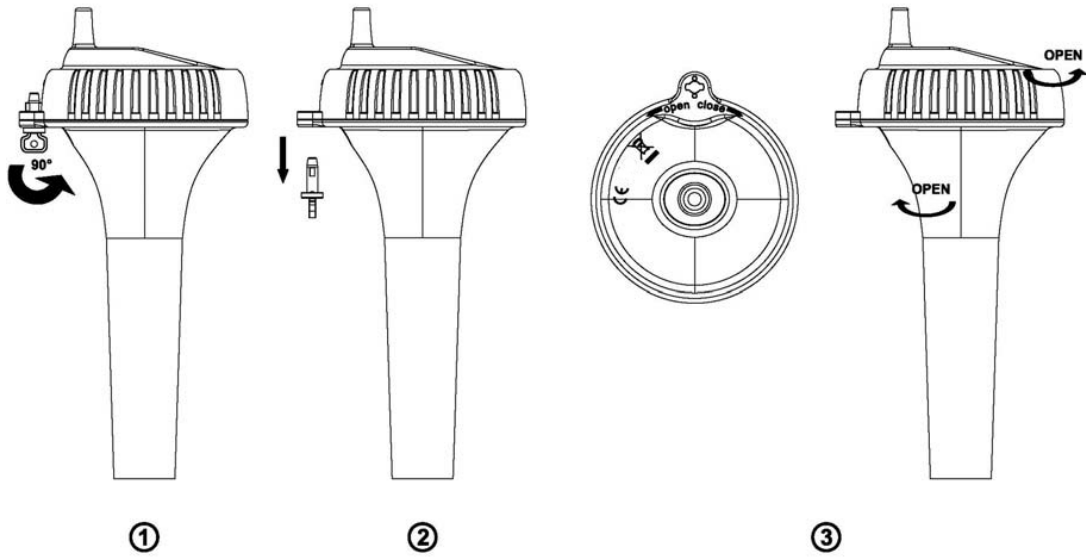


Figure 1

2. **BEFORE** inserting the batteries, locate the dip switches on the inside cover of the lid of the transmitter.
Figure 2 displays all four switches in the OFF position (factory default setting).

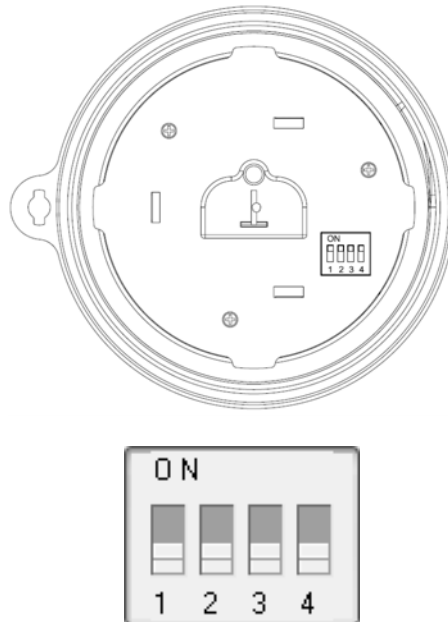


Figure 2

Channel Number: **The F007PF supports up to eight transmitters. To set each channel number (the default is Channel 1), change Dip Switches 1, 2 and 3, as referenced in**

3. Table 1.

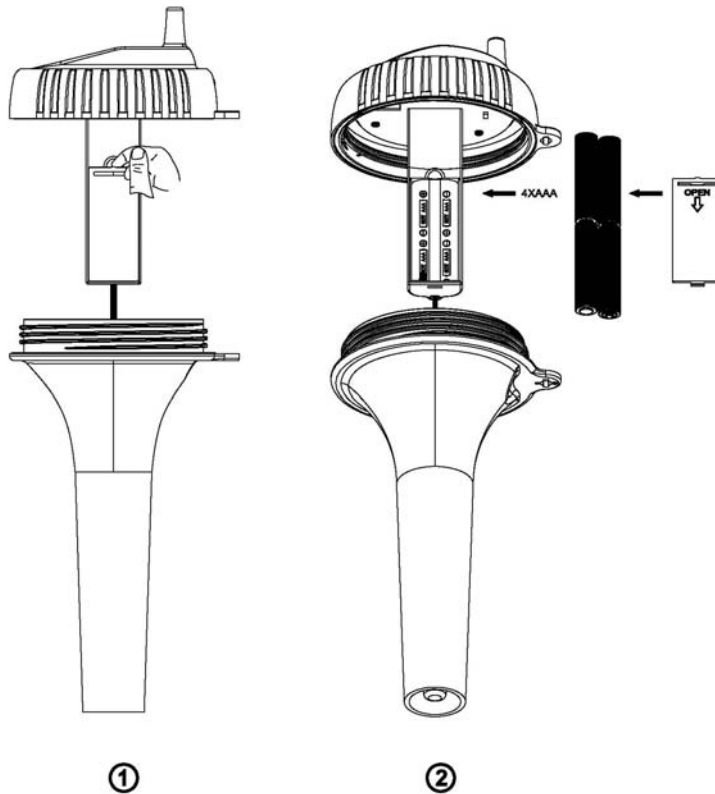
Temperature Units of Measure: **To change the transmitter display units of measure (°F vs. °C), change Dip Switch 4, as referenced in**

4. Table 1.

DIP SWITCH				FUNCTION
1	2	3	4	
DOWN	DOWN	DOWN	---	Channel 1 (pool)
DOWN	DOWN	UP	---	Channel 2 (SPA)
DOWN	UP	DOWN	---	Channel 3 (optional)
DOWN	UP	UP	---	Channel 4 (optional)
UP	DOWN	DOWN	---	Channel 5 (optional)
UP	DOWN	UP	---	Channel 6 (optional)
UP	UP	DOWN	---	Channel 7 (optional)
UP	UP	UP	---	Channel 8 (optional)
---	---	---	DOWN	°F
---	---	---	UP	°C

Table 1

5. Insert four AAA batteries.



- 1) Open the battery compartment of the transmitters;
- 2) Insert 4XAA 1,5V Alkaline batteries into the battery compartment of the Remote, observing the correct polarity.

Note: The upper cover and lower connection lead has a sensor cover ,when the operation must be

careful not to pull the connecting line, to prevent the breaking point.

6. After inserting the batteries, 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.
7. Verify the correct channel number (CH) and temperature units of measure ($^{\circ}\text{F}$ vs. $^{\circ}\text{C}$) are on the display, as shown in Figure 3.

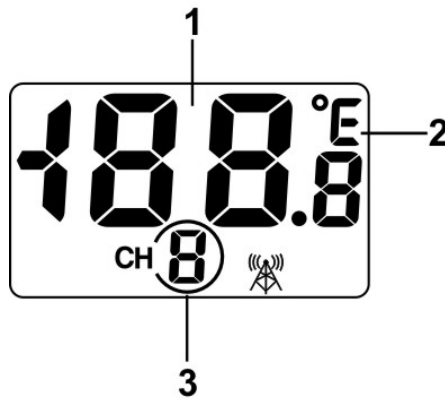


Figure 3

- (1) temperature
- (2) temperature units ($^{\circ}\text{F}$ vs. $^{\circ}\text{C}$)
- (3) channel number

8. Close the battery door. Make sure the gasket (around the battery compartment) is properly seated in its trace prior to closing the door. Focus on maintenance of two RED waterproof map are in place, otherwise it will cause not waterproof ,and damage the remoter sensor. as shown in Figure 34.

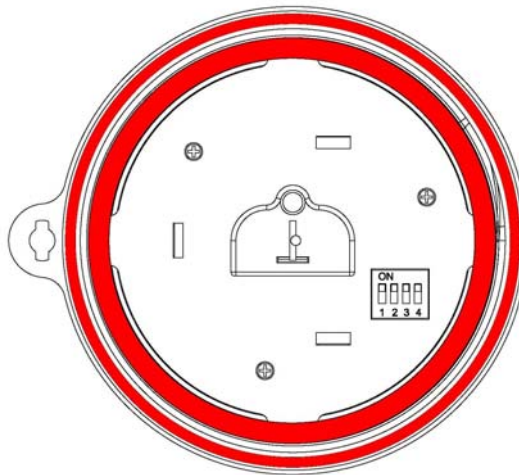


Figure 4

Note: Should be more careful, outermost o-waterproof off easily

9. Twist the main of the sensor by lock the top cover, and twist the KEY lid to lock, as shown in Figure 15.

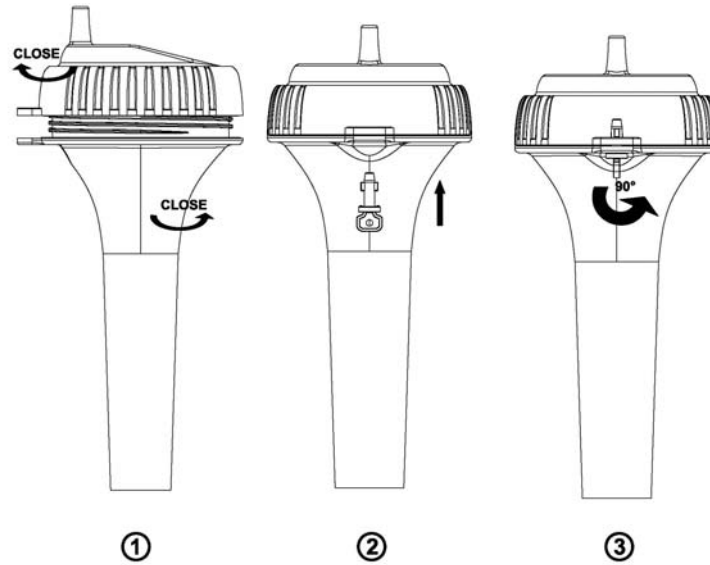


Figure 15

10. The sensor has a string to loop through the hole on KEY at the base of the tubular casing. This can allow you to hang the unit while you immerse it in water, as shown in Figure 16.

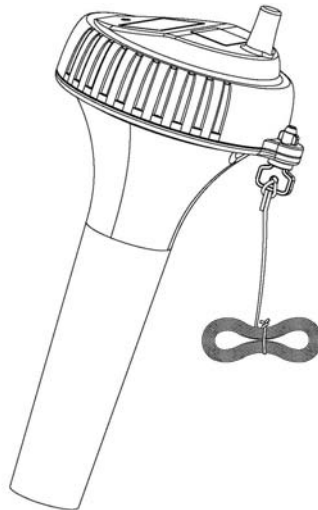


Figure 16

Note: Place the sensor in the water and make sure that it is within the effective transmission range from the main unit

3 Glossary of Terms

Term	Definition
Accuracy	Accuracy is defined as the ability of a measurement to match the actual value of the quantity being measured.
Range	Range is defined as the amount or extent a value can be measured.

4 Specifications

4.1 Wireless Specifications

- Line of sight wireless transmission (in open air): 150 feet, 100 feet under most conditions.
- Frequency: 433.92 MHz
- Update Rate: 60 seconds

4.2 Measurement Specifications

The following table provides specifications for the measured parameters.

Measurement	Range	Accuracy	Resolution
Channel 1-8 Temperature	-40 to 140 °F	± 1 °F	0.1 °F

4.3 Power Consumption

- Remote sensor : 4 x AAA 1.5V Alkaline or Lithium batteries (not included)
- Battery life:
Minimum 24 months for water thermometer sensor (use lithium batteries for temperatures less than -4 °F)

5 Troubleshooting Guide

If your question is not answered here, you can contact us as follows:

1. Email Support: support@ambientweather.com
2. Live Chat Support: www.ambientweather.com/chat.html (M-F 8am to 4pm Arizona Time)
3. Technical Support: 480-283-1644 (M-F 8am to 4pm Arizona Time)

Problem	Solution
Wireless remote (water thermometer) not reporting in to console. There are dashes (--.-) on the display console.	The maximum line of sight communication range is 150' and 100' under most conditions. Move the sensor assembly closer to the display console. If the sensor assembly is too close (less than 5'), move the sensor assembly away from the display console. Make sure the remote sensor LCD display is working and the transmitter light is flashing once per 60 seconds. Install a fresh set of batteries in the remote thermometer.

Problem	Solution
	<p>For cold weather environments, install lithium batteries.</p> <p>Make sure the remote sensors are not transmitting through solid metal (acts as an RF shield), or earth barrier (down a hill).</p> <p>Move the display console around electrical noise generating devices, such as computers, TVs and other wireless transmitters or receivers.</p> <p>Move the remote sensor to a higher location. Move the remote sensor to a closer location.</p>
Temperature sensor reads too high in the day time.	<p>Make sure the water thermometer is mounted in water. Consider the following radiation shield if this is not possible: http://www.ambientweather.com/amwesrpatean.html</p>
Indoor and Water Temperature do not agree	<p>Allow up to one hour for the sensors to stabilize due to signal filtering. The indoor and water temperature sensors should agree within 2 °F (the sensor accuracy is ± 1 °F).</p> <p>Use the calibration feature to match the indoor and water temperature to a known source.</p>
Display console contrast is weak	Replace console batteries with a fresh set of batteries.

6 Accessories

The following software and hardware accessories are available for this weather station at www.AmbientWeather.com.

Accessory	Description
Ambient Weather F007PF Wireless Probe thermometer for Reciever Weather Stations	Add additional remote probe thermometers. Supports up to eight remote sensors.
Ambient Weather F007PF Wireless Thermometer for Reciever Weather Stations	Add additional pool/SPA temperature sensors. Supports up to eight remote sensors.
Energizer AAAS Lithium Battery (2-pack) - Batteries for Long Life and Cold Climates	AAA lithium batteries for cold weather climates.

7 Liability Disclaimer

Please help in the preservation of the environment and return used batteries to an authorized depot. The electrical and electronic wastes contain hazardous substances. Disposal of electronic waste in wild country and/or in unauthorized grounds strongly damages the environment.



Reading the “User manual” is highly recommended. The manufacturer and supplier cannot accept any responsibility for any incorrect readings and any consequences that occur should an inaccurate reading take place.

This product is designed for use in the home only as indication of weather conditions. This product is not to be used for medical purposes or for public information.

The specifications of this product may change without prior notice.

This product is not a toy. Keep out of the reach of children.

No part of this manual may be reproduced without written authorization of the manufacturer.

Ambient, LLC WILL NOT ASSUME LIABILITY FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR OTHER SIMILAR DAMAGES ASSOCIATED WITH THE OPERATION OR MALFUNCTION OF THIS PRODUCT.

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:

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.

9 Warranty Information

Ambient, LLC provides 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 Ambient, LLC for problem determination and service procedures.

Warranty service can only be performed by a Ambient, LLC. The original dated bill of sale must be presented upon request as proof of purchase to Ambient, LLC.

Your Ambient, LLC warranty covers all defects in material and workmanship with the following specified exceptions: (1) damage caused by accident, unreasonable use or neglect (lack of reasonable and necessary maintenance); (2) damage resulting from failure to follow instructions contained in your owner's manual; (3) damage resulting from the performance of repairs or alterations by someone other than an authorized Ambient, LLC authorized service center; (4) units used for other than home use (5) applications and uses that this product was not intended (6) the products inability to receive a signal due to any source of interference or metal obstructions and (7) extreme acts of nature, such as lightning strikes or floods.

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.

