
Ambient Weather WS-8365 ClearView Projection Alarm Clock with Indoor Temperature and Outdoor Temperature User Manual



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1. Introduction

Thank you for your purchase of the Ambient Weather WS-8365 ClearView Projection Alarm Clock with Indoor Temperature and Outdoor Temperature. The following user guide provides step by step

instructions for installation, operation and troubleshooting. To download the latest full sized manual and additional troubleshooting tips, please visit:

<http://ambientweather.wikispaces.com/ws8365>

2. Warnings

- ⚠ **Warning.** Never look directly into the time and temperature projector. This can cause temporary blindness.
- ⚠ **Warning.** Only use approved AC adapter.

3. Getting Started

3.1 Product Features

3.1.1 Display Clock

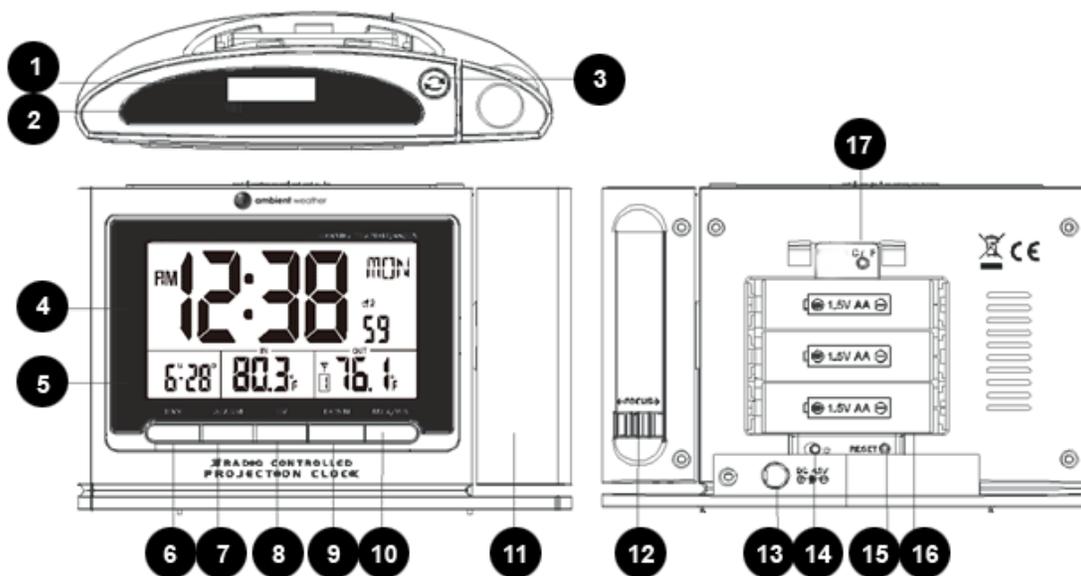


Figure 1

No	Description	No	Description
1	SNOOZE/LIGHT Button - Turn on the projector and backlight for 5 seconds. - Stop the current alarm when sounding and enter into snooze mode.	10	MAX/MIN Button Press to display the min and max values since reset.
2	NIGHT LIGHT SENSOR - The night light will turn on automatically when dark and the feature is activated.	11	PROJECTOR - Projects the time and indoor/outdoor temperature (automatically scrolls between indoor and outdoor temperature every 5 seconds).
3	REVERSE Button - Press to reverse the projected time and	12	FOCUS Knob - Adjust the focus of the projected time and

No	Description	No	Description
	temperature.		temperature.
4	TIME WINDOW - Displays time and day of the week. - Displays time zone	13	DC POWER JACK
5	DATE AND TEMPERATURE WINDOW - Displays indoor/outdoor temperature, alarm time and the date	14	NIGHT LIGHT FUNCTION ON/OFF Switch - Slide to turn on/off the night light function (remove battery door).
6	TIME Button - Press to switch between Month/Date and alarm time mode. - Press and hold for 2 seconds to enter time set mode. - In time set mode, press to step through the different time and date settings.	15	RESET Button - Press to reset all values to default values. - In case of malfunction, the unit can be reset.
7	ALARM button - In normal time display mode, press to turn on/off ALM1 & ALM2. - In ALM1 / ALM2 mode, press to turn on/off alarm and pre-alarm function. - Press to stop the current alarm when the alarm is ringing and turn off the alarm and snooze function. - In alarm time mode, press and hold for 2 seconds to enter alarm time setting mode. - In alarm time setting mode, press to step through the different time and date settings.	16	BATTERY COMPARTMENT - Accommodates 3 x AA batteries (alkaline recommended).
8	UP Button - In set mode, press to increase the values. - In normal time display mode, press to switch between Channels 1, 2 and 3.	17	°F/°C Button - Press to switch between °F and °C units of measure.
9	DOWN Button - In set mode, press to decrease the values. - In normal time mode, press to switch between 12/24 hour format. - In normal mode, press and hold for 5 seconds to resync with sensor(s) if communication is lost.		

3.1.2 Wireless Transmitter

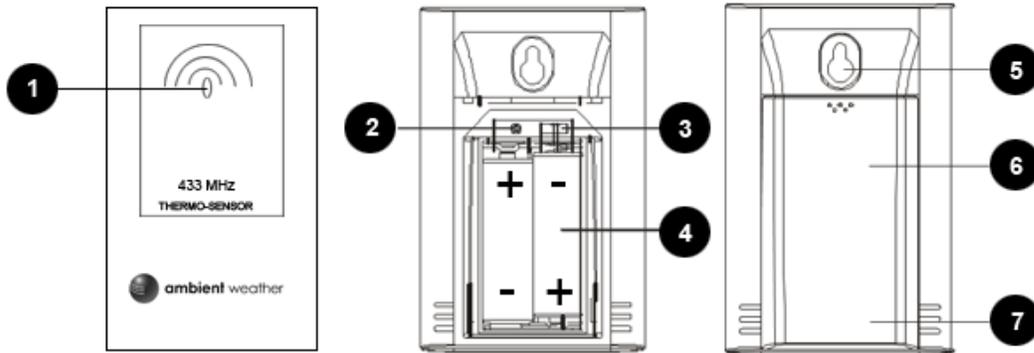


Figure 2

No	Description	No	Description
1	Transmitter LED (flashes when the remote is transmitting)	5	Wall hanger
2	Reset button (press reset to restart the transmitter)	6	Battery cover
3	Transmitter channel (assign the transmitter to 1,2 or 3, default = 1)	7	Table stand
4	2 x AA batteries		

Note: The WS-8365 supports three wireless channels. If you have one sensor, leave the transmitter channel at Channel 1. If you have more than one sensor, refer to Section 5.9.

3.2 Parts List

QTY	Item
1	Clock Frame Dimensions (LxWxH): 5.25" L x 1.5"D x 3.5"H
1	Wireless Transmitter (LxWxH): 4.0" L x 2.5" W x 1.5" D
1	UL Rated AC Adapter
1	User Manual

3.3 Powering Up

 **Note:** The power up sequence must be performed in the order shown in this section (remote transmitter **FIRST**, Display Clock **SECOND**) to avoid the Clock synchronization time out.

The Transmitter:

1. Remove the battery door on the back of the transmitter and insert 2 new AA batteries, according to the polarity information marked on the battery compartment, and replace the battery door, as shown in Figure 2. Place the transmitter about 5 feet from the clock.

The Clock:

1. Plug the AC adaptor into the DC jack of the clock.
2. Remove the battery door on the bottom of the clock and insert 3 new AA batteries, according to the polarity information marked on the battery compartment, and replace the battery door.
3. Once the batteries are inserted, all of the LCD segments will light up briefly before entering the sensor search mode.

4. Once the wireless transmitter has synced up to the clock, you can place the sensor outside.

 **Note:** If no display is present after powering up the clock, press the reset button on the back of the clock with an open ended paper clip or sharp tool.

3.4 Siting the Wireless Transmitter Outside

It is recommended you place the remote sensor in a shaded area.

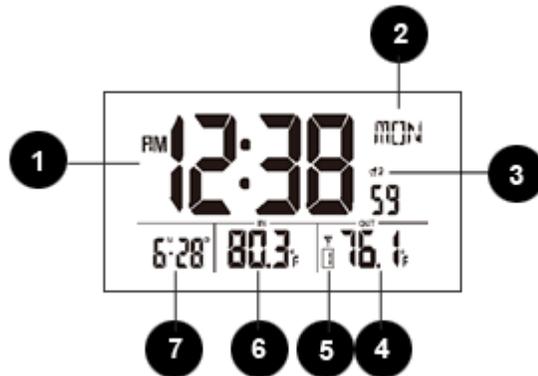
Direct sunlight and radiant heat sources will result in inaccurate temperature readings. Although the sensor is weatherproof, it is best to mount in a well-protected area, such as an eave. Do not place in standing water or snow.

Wireless signals are impacted by distance, interference (other wireless devices, wireless phones, wireless routers, TVs and computer monitors), and transmission barriers, such as walls. In general, wireless signals will not penetrate solid metal and earth (down a hill, for example).

The following is a table of reception loss vs. the transmission medium. Each “wall” or obstruction decreases the transmission range by the factor shown below.

Medium	RF Signal Strength Reduction
Glass (untreated)	5-15%
Plastics	10-15%
Wood	10-40%
Brick	10-40%
Concrete	40-80%
Metal	90-100%

4. Clock Display



No	Description	No	Description
1	Time	5	Channel Number (default = 1) and Reception Icon (on when searching, flashes when updates)
2	Day of Week	6	Indoor Temperature
3	Alarm 1, Alarm 2 On Icons	7	Date, Alarm 1 or Alarm 2
4	Outdoor Temperature		

Figure 3

5. Settings

5.1 Time, Date, and Language Settings

While in normal time mode, perform the following operations to set date, time and language:

Command	Mode	Settings
[TIME] + 2 seconds	Enter Time and Date Settings Year	Press [UP] to increase, [DOWN] to decrease.
[TIME]	Month	Press [UP] to increase, [DOWN] to decrease.
[TIME]	Day	Press [UP] to increase, [DOWN] to decrease.
[TIME]	Hour	Press [UP] to increase, [DOWN] to decrease.
[TIME]	Minute	Press [UP] to increase, [DOWN] to decrease.
[TIME]	Second	Press [UP] to reset to 0.
[TIME]	Language	Press [UP] to change between GB (English), FR (French), DE (German), ES (Spanish) and IT (Italian).
[TIME]	Exit Time and Date Settings	

[TIME] + 2 seconds

means press and hold the TIME button for two seconds.

[TIME]

means press but do not hold the TIME button.

Figure 4

5.2 12 Hour/ 24 Hour Time

To switch between 12 hour time (AM/PM) and 24 hour time (Military or European), press the [DOWN] button to toggle.

5.3 Alarm Settings

While in normal time mode, press the **TIME** button once to set **ALARM1**. Press the **TIME** button again to set **ALARM2**. Once ALARM1 or ALARM2 are displayed in the date field (see Figure 3, No. 10), perform the following:

Command	Mode	Settings
[ALARM] + 2 seconds	Enter Alarm Settings Alarm Hour	Press [UP] to increase, [DOWN] to decrease.
[ALARM]	Alarm Minute	Press [UP] to increase, [DOWN] to decrease.
[ALARM]	Exit Alarm Settings	

[ALARM] + 2 seconds means press and hold the ALARM button for two seconds.

[ALARM] means press but do not hold the ALARM button.

Figure 5

5.3.1 Using the Alarm and Snooze Functions

1. Set the alarm time as described in Section 5.2.
2. Press the ALARM button once to turn on ALARM1  1.
3. Press the ALARM button again to turn on ALARM2  2.
4. Press the ALARM button again to turn on  1 and  2.
5. Press the ALARM button again to turn off  1 and  2.

 **Note:** Press the **ALARM** button to turn off the alarm. If no button is pressed during the alarm period, the alarm will turn off automatically in two minutes. To temporarily silence the alarm, press the **SNOOZE/LIGHT** button on the top of the clock. The alarm bell icon will keep flashing.

Once the snooze function is turned on, the 4-step crescendo alarm will sound every five minutes. Press the **ALARM** button to silence the alarm.

5.3.2 Setting the Pre-Alarm

The purpose of the pre-alarm is to allow extra time for preparation when the temperature is below 26 °F (-3 °C). The pre-alarm will sound 30 minutes before the alarm setting. To set the pre-alarm:

1. Press the TIME button to display the ALARM1 or ALARM2 time.
2. Press the ALARM button once to turn on the ALARM .
3. Press the ALARM button again to turn on the pre-alarm. The icon **LO** will appear next to the alarm time.
4. Press the ALARM button again to turn off both the alarm and pre-alarm.

5.4 Projector and Backlight

5.4.1 Using the Projector and Backlight

 **Note:** The projector and backlight are temporary when operating on batteries only, to save battery life.

1. When the clock is powered by the battery. Press the **SNOOZE/LIGHT** button to turn on the projector and backlight for 5 seconds.

2. When the clock is powered by the AC adapter, the projector is always on.

5.4.2 Projector Backlight Rotation

1. Press **SNOOZE/LIGHT** button to turn on the projector and backlight if currently off.
2. Press the **REVERSE** button  to reverse the projected data 180 degrees.

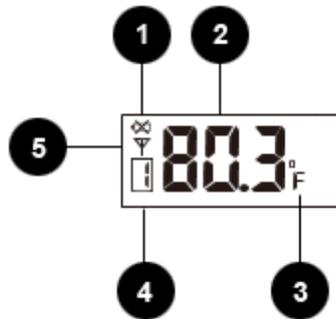


Figure 6

5.4.3 Adjusting Backlight Focus

Adjust the focus of the projected data by rotating the focus knob on the projector.

5.5 Wireless Sensor Display



No	Description	No	Description
1	Low Battery Indicator	4	Temperature Channel Number
2	Temperature	5	Channel Number (default = 1) and Reception Icon (on when searching, flashes when updates)
3	Temperature Units of Measure (°F or °C)		

Figure 7

5.6 Wireless Sensor Low Battery Indicator

When the battery is full, no battery icon will be displayed. When the battery is low, the low battery indicator  will be displayed. Replace with 2 new AA size batteries. Pay attention to the polarity.

5.7 Viewing the Wireless Sensor Channels

In normal time mode, press the **UP** button to view wireless channels 1, 2 and 3.

To automatically scroll through channels 1, 2 and 3, press and hold the **UP** button for 2 seconds (the beep will sound). The wireless channels will scroll on the screen every 5 seconds.

5.8 Resyncing the Wireless Sensor

If you lose synchronization from the remote wireless sensor for an extended period of time or you replace the batteries in the wireless sensor, you may need to resync or reset the sensor to the console.

To resync the sensor(s), press and hold the DOWN key for 5 seconds and the sensor display will show dashes (--.-). Wait several minutes for resynchronization.

To reset the console, disconnect from AC power and remove the batteries for 10 seconds, then reinsert the batteries and reconnect AC power. Alternately, you can press the reset button on the back of the console. The sensor display will show dashes (--.-). Wait several minutes for resynchronization.

5.9 Adding Multiple Wireless Sensors

If you introduce additional sensors into the system, you will need to reset the console.

1. Set the Channel number on the wireless sensor per Figure 2. Power down and up the sensor after you have changed the channel number for the change to take effect.
2. Resync the console. Reference Section 5.8.

5.10 Min and Max Records

Select the appropriate channel to view the min and max records as outlined in 5.7.

3. Press the MAX/MIN button once to view the maximum values:



4. Press the MAX/MIN button again to view the minimum values:



5. Press and hold the MAX/MIN button for three seconds (the console will beep) to clear the min and max values.

6. Specifications

6.1 Wireless Specifications

- Line of sight wireless transmission (in open air): 150 feet
- Frequency: 433 MHz
- Update Rate: 60 seconds

6.2 Measurement Specifications

The following table provides specifications for the measured parameters.

Measurement	Range	Accuracy	Resolution
Indoor Temperature	32 to 140 °F	± 2 °F	0.1 °F
Outdoor Temperature	-4 to 140 °F alkaline batteries -40 to 140 °F LiIon e2 Energizer batteries	± 2 °F	0.1 °F

6.2 Power Consumption

- Clock: 3 x AA Alkaline batteries recommended.
- Wireless Transmitter: 2 x AA Alkaline batteries recommended, LiIon e2 Energizer for cold weather.

7. Troubleshooting Guide

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

1. Email Support: support@ambientweather.com
2. Technical Support: 480-346-3380 (M-F 8am to 4pm Arizona Time)

Problem	Solution
The wireless sensor communication has been lost or is intermittent or will not sync up.	<ul style="list-style-type: none"> • Make sure the transmitter is powered up and the LED is flashing about once per minute. For cold weather environments, install lithium batteries. If the transmitter is not flashing, replace the batteries. • Resync the console. Reference Section 5.8. • The maximum line of sight communication range is 150'. Move the sensor closer to the clock. • If the sensor assembly is too close (less than 5-10'), move the sensor away from the clock. • Make sure the remote sensors are not transmitting through solid metal (acts as an RF shield), or earth barrier (down a hill). • Move the clock away from electrical noise generating devices, such as computers, TVs and other wireless transmitters or receivers. • Move the remote sensor to a higher location. Move the remote sensor to a closer location. • Radio Frequency (RF) Sensors cannot transmit through metal barriers (example, aluminum siding) or multiple, thick walls.
The clock does not respond to commands.	<ul style="list-style-type: none"> • Press the reset button on the back of the clock with an open ended paper clip or sharp tool.
The projection is fuzzy	<ul style="list-style-type: none"> • Adjust the focus setting.
The clock is dim when running on batteries only.	<ul style="list-style-type: none"> • Replace the batteries in the clock.

8. Accessories

Accessory	Description
TX-8300	Additional wireless sensor.

9. 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.

10. 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.

11. 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.

