Ambient Weather RC-8465 ClearView Projection Radio Controlled Alarm Clock with Color Changing Indoor Temperature User Manual

Table of Contents

1. Introduction

Thank you for your purchase of the Ambient Weather RC-8465 ClearView Projection Alarm Clock with Color Changing Indoor 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/rc8465

2. Warnings

⚠ **Warning**. Never look directly into the time and temperature projector for a prolonged period of time. This can cause temporary blindness.

⚠ **Warning.** Only use approved AC adapter.

3. Getting Started
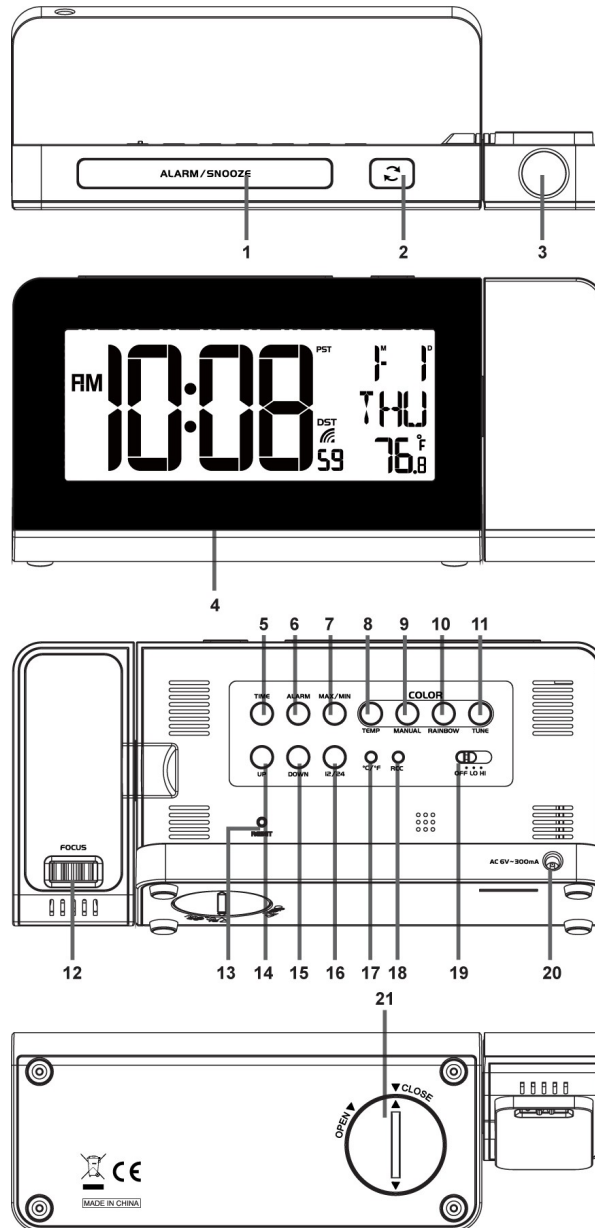
3.1 Product Features

3.1.1 Display Clock

Figure 1

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No	Description	No	Description
1	**Alarm/Snooze Button** - Stop the current alarm when sounding and enter into snooze mode. - Press and hold for two seconds to stop the current alarm when sounding for 24 hours.	12	**FOCUS Knob** - Adjust the focus of the projected time and temperature.
2	**Reverse Button** Press to reverse the projection 180 degrees.	13	**RESET Button** - Press to reset all values to default values. - In case of malfunction, the unit can be reset.
3	**Projector** - Projects the time and indoor temperature	14	**UP Button** - In set mode, press to increase the values (press and hold to change rapidly).
4	**LCD Display**	15	**DOWN Button** - In set mode, press to decrease the values.(press and hold to change rapidly).
5	**Time Button** - Press to switch between Month/Date and alarm time mode (Alarm 1 and 2). - 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.	16	**12/24 Button** - In normal time display mode, press to switch between 12 and 24 hour time.
6	**ALARM Button** - In normal time display mode, Press TIME button to display ALM1 & ALM2. Press **ALARM** to turn on/off ALM1 & ALM2. - 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.	17	**°F/°C Switch** - Select switch between °F and °C units of measure.
7	**MAX / MIN Button** - Press to display the maximum and minimum temperature.	18	**RCC Button** - Press to search for Radio Controlled Clock (RCC) - Press and hold for 8 seconds to permanently turn ON and OFF Radio Controlled Clock Reception.
8	**TEMP Button** - Press it to enter TEMP mode, and the backlight will change color according to the indoor temperature. There are 13 backlight colors for the different temperature ranges.	19	**OFF / LO / HI Slide Switch** - Slide to the OFF position to turn off the backlight. - Slide to the HI position to brighten the backlight. - Slide to the LO position to dim backlight.
9	**MANUAL Button**	20	**AC Jack**

No	Description	No	Description
	- Press **MANUAL** button and the backlight color will change automatically (256 colors); Press it again, and the backlight color will stop at the color you prefer.		- AC 6V 300mA.
10	**RAINBOW Button** Press **RAINBOW** button, and the backlight will change color as follows: white>red>orange>yellow>green>cyan>blue>purple	21	**Battery door** - Accommodates lithium battery CR2032 for back-up.
11	**TUNE** Button Press and hold the TUNE button to fine tune the color. The backlight will automatically display 256 colors. Let go of the TUNE button to stop at the color you prefer.		

3.2 Parts List

QTY	Item
1	Clock Frame Dimensions 6.42" W x 3.19"H x 2.24"D (163W x 81H x 57D mm)
1	UL Rated AC Adapter
1	User Manual

3.3 Powering Up

1. Energize the battery by releasing the pull tab on the bottom of the clock.
2. Plug the AC adaptor into the DC jack of the clock.

Note: If no display is present after powering up the clock, press the reset button on the back of the clock.

3.3.1 Radio Controlled Clock (RCC)

After power up, the clock begin radio controlled clock (RCC) reception and the RCC search icon will turn on.   The RCC will continue to search for six minutes. It will try again at 2:00am, 8:00am, 2:00pm and 8:00pm.

RCC Icon	Description	RCC Icon	Description
	No signal		Acceptable signal
	Weak signal (flashes between two icons). Cannot be interpreted.		Excellent signal

Figure 2

If the time is incorrect by increments of an hour, or does not change on your radio controlled clock (RCC), please reference Section 7, Troubleshooting Guide.

4. Clock Display

4.1 Normal Time Display Mode
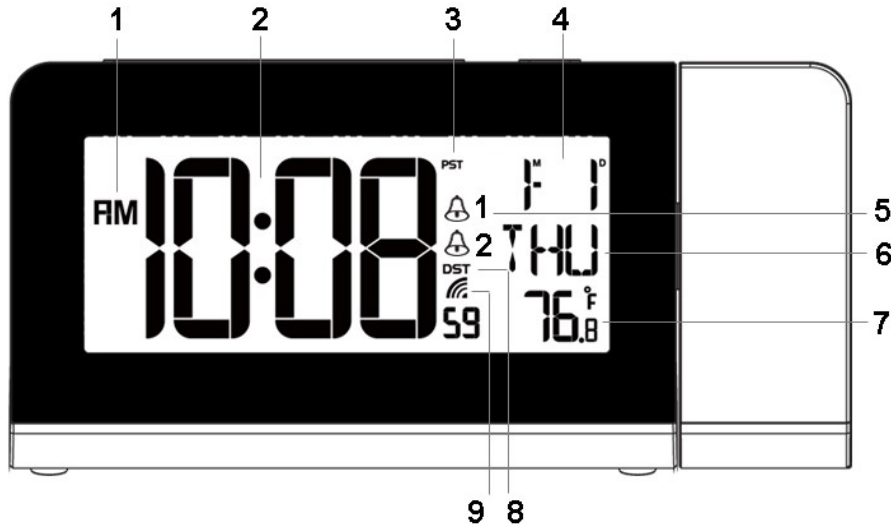
No	Description	No	Description
1	AM / PM	6	Day or Week
2	Time	7	Indoor Temperature
3	Time Zone	8	Daylight Savings Time
4	Date / Time Alarm	9	Radio Controlled Clock Icon
5	Alarm 1 and Alarm 2		

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 12 hour / 24 hour format	Press [**UP**] to change between 12H and 24H format.
[TIME]	Time Zone	Press [**UP**] to change between Pacific (PST), Mountain (MST), Central (CST), Eastern (EST), Atlantic (AST) and Newfoundland (NST) Time Zones
[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]	Year	Press [UP] to increase, [DOWN] to decrease.
[TIME]	Month / Day Format	Press [UP] to change between Month/Day (M-D) and Day/Month (D-M).
[TIME]	Month	Press [UP] to increase, [DOWN] to decrease.
[TIME]	Day	Press [UP] to increase, [DOWN] to decrease.
[TIME]	00H	Allows you to offset the time zone for locations outside the Continental USA (from -23 hours to 23 hours). Leave at 00H if you live inside the continental USA. Press [UP] to increase, [DOWN] to decrease.
[TIME]	Language	Press [UP] to change between EN (English), FR (French), DE (German), ES (Spanish), IT (Italian), NL (Dutch) and RU (Russian)
[TIME]	Daylight Savings Time	Press [UP] to change between **auto** (most of the USA and Canada) and **OFF** (Arizona and Hawaii).
[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   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

5.2.1   Using the Alarm and Snooze Functions

1. Set the alarm time as described in Section 5.2. While in normal time mode:

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 sound.   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.

If 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 Hour Offset Adjustment for Outside of Continental USA

The clock allows you to set six time zones: PST (Pacific), MST (Mountain), CST (Central), EST (Eastern), AST (Atlantic) and NST (Newfoundland).   If you live outside of these time zones, you will need to set an hour offset adjustment as defined in Section 5.1.

The following table provides the hour offset from Pacific Standard Time (which is the default time zone):

Hours from PST	Time Zone	Cities
-4	IDLW: International Date Line West	---
-3	NT: Nome	Nome, AK
-2	AHST: Alaska-Hawaii Standard CAT: Central Alaska HST: Hawaii Standard	Honolulu, HI
-1	YST: Yukon Standard	Yukon Territory
5	---	São Paulo, Brazil
6	AT: Azores	Azores, Cape Verde Islands
7	WAT: West Africa	---
8	GMT: Greenwich Mean WET: Western European	London, England
9	CET: Central European	Paris, France
10	EET: Eastern European	Athens, Greece
11	BT: Baghdad	Moscow, Russia
12	---	Abu Dhabi, UAE
13	---	Tashkent
14	---	Astana
15	---	Bangkok
16	CCT: China Coast	Bejing
17	JST: Japan Standard	Tokyo
18	GST: Guam Standard	Sydney
19	---	Magadan
20	IDLE: International Date Line East NZST: New Zealand Standard	Wellington, New Zealand

5.4 Projector and Backlight

Note: The projector only operates while plugged into AC power.

5.4.1 Projector Rotation

Press the **REVERSE** button ⟳ on the top of the clock to reverse the projected data 180 degrees.

Figure 6

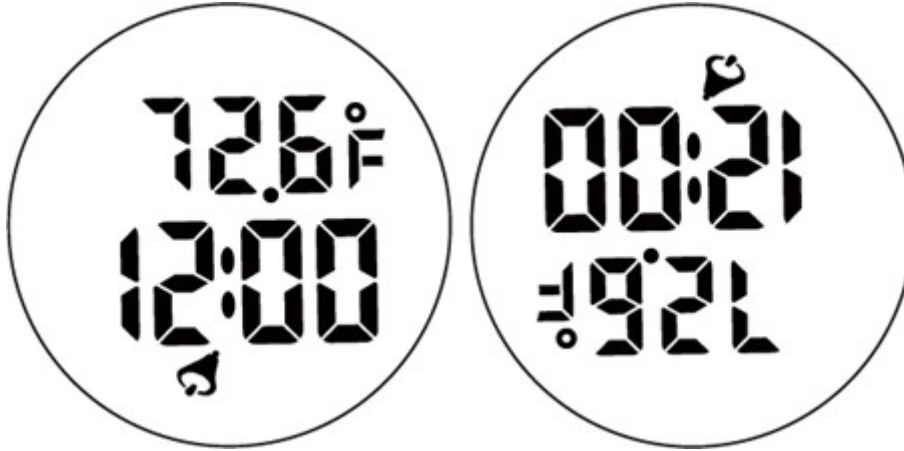### 5.4.2 Adjusting Projector Focus

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

5.5 Viewing Minimum and Maximum Records (Memory Mode)

While in normal time mode, perform the following operations to view the minimum and maximum values since the last time they were reset.

Command	Mode	Settings
[MAX/MIN]	Displays Indoor Maximum Temperature and the associated date and time.	Press and hold [MAX/MIN] for two seconds to reset the maximum indoor temperature to the current value.
[MAX/MIN]	Displays Indoor Minimum Temperature and the associated date and time.	Press and hold [MAX/MIN] for two seconds to reset the minimum indoor temperature to the current value.
[MAX/MIN]	Exit memory mode.	

Figure 7

5.6 Color Changing Feature

This display has two color modes for the LCD backlight.

- **Manual Color Preference** based on your personal preference. Press **MANUAL, RAINBOW,** or **TUNE** buttons.
- **Temperature Color**, based on indoor temperature. Press **TEMP** button.

5.6.1 Manual Color Preference

1. **MANUAL Button**. Press **MANUAL** button and the backlight color will change automatically; Press it again, and the backlight color will stop at the color you prefer.
2. **RAINBOW Button**. Press **RAINBOW** button, and the backlight will change color as follows: white>red>orange>yellow>green>cyan>blue>purple
3. **TUNE Button**. Press and hold the TUNE button to fine tune the color. The backlight will

automatically display 256 colors. Release the **TUNE** button again to stop at the color you prefer.

5.6.2 Indoor Temperature Color

Press the **TEMP** button to automatically change the backlight as a function of temperature. The display color will automatically change based on the color chart below:

#	Temperature Range (°F)	Color
1	< 58	White
2	58-61	Violet
3	61-64	Dark Blue
4	64-67	Light Blue
5	67-70	Dark Aqua
6	70-73	Light Aqua
7	73-76	Green
8	76-79	Light Green
9	79-82	Yellow
10	82-85	Orange
11	85-88	Red
12	88-91	Light Red
13	> 91	Gray

Figure 8

5.7 Back Light Off/Lo/Hi

- Slide the Back Light Off/Lo/Hi switch to the OFF position to turn off the backlight.
- Slide the Back Light Off/Lo/Hi to the HI position to brighten the backlight.
- Slide the Back Light Off/Lo/Hi to the LO position to dim backlight.

6. Specifications

6.1 Measurement Specifications

The following table provides specifications for the measured parameters.

Measurement	Range	Accuracy	Resolution
Indoor Temperature	32 to 113 °F	± 2 °F	0.1

6.2 Power Consumption

- 1 x CR2032 Battery
- DC 6V, 300mA adaptor

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 clock does not respond to commands.	• Press the reset button on the back of the clock with an open ended paper clip or sharp tool.
The projection is fuzzy	• Adjust the focus setting.

8. 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.

9. 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.

10. 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.