LA CROSSE®
TECHNOLOGY

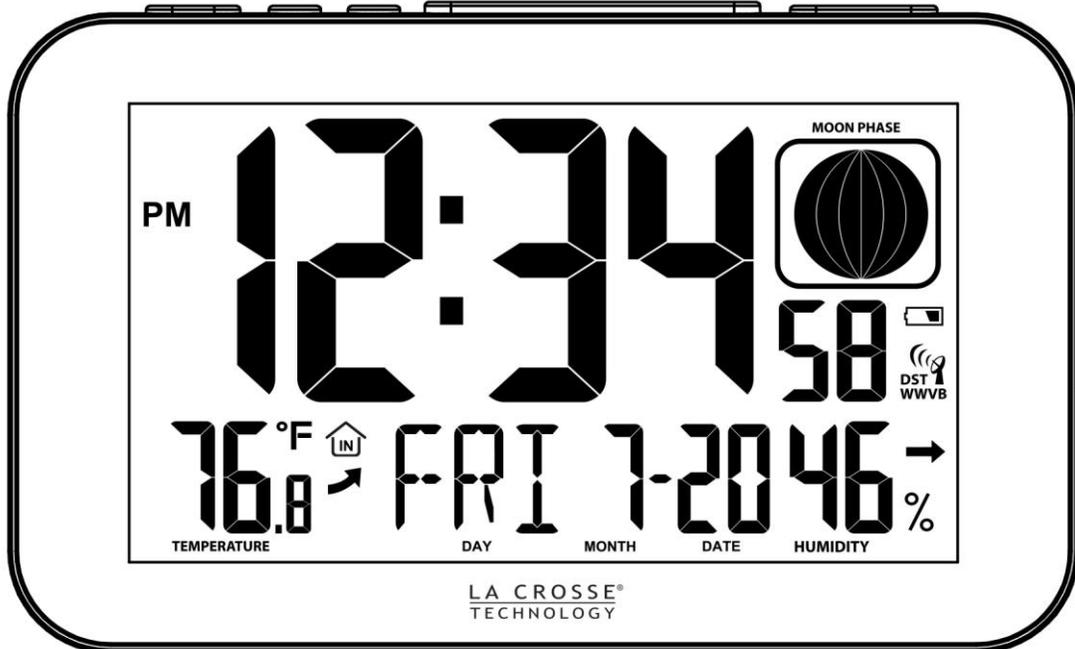## Multi-Color Atomic Alarm Clock
with USB Charging + Snooze
Model: K84292 | Instruction Manual

Introduction

The atomic alarm clock features radio-controlled time, indoor temperature, humidity and moon phase on a colorful, and easy to read display. Includes backlight with dimmer, calendar with month, date, weekday display and alarm with snooze. Use the integrated USB charging port to charge your smartphone, camera or other devices while you sleep.

Multi-Color Atomic Alarm Clock

Features

- Atomic time and date auto sets
- Time display: hour/minutes
- 12/24 hour time and 10 minutes snooze alarm
- 7 time zones: AST, EST, CST, MST, PST, AKST, HAST
- Calendar: month, day, date
- USB charging port (0.5A output) for mobile devices (charging cord not included)
- Indoor temperature with trend arrow
- Indoor humidity with trend arrow
- Moon phase
- Multi-color display
- Continuous illuminated backlight using AC power
- Backlight dimmer (high, low, off)
- Low battery icon

Table of Contents

Setup Instructions Step-by-Step

STEP 1:
- Insert the power adapter plug into a wall outlet
- Insert the 5 volt A/C power adapter into the back of the atomic alarm clock for a continuous backlight.
- The atomic alarm clock will light up and display indoor temperature and time (12:00).

IMPORTANT: When operating on A/C power, the backlight and USB charging port will turn off while the atomic alarm clock searches for the WWVB to avoid interference. The backlight will return after 4-8 minute search (which occurs during the late night or early morning hours). The USB charging port will then resume working.

STEP 2: (Optional battery operation)
- Remove the battery cover from atomic alarm clock. Slide tab up and pull out to remove the battery cover.
- Insert 2 NEW AAA batteries (included) into the back of the atomic alarm clock. Observe the correct polarity (see markings inside the battery compartment).

Note: When operating on battery power only, the backlight will come on for 10 seconds when the LIGHT button is pressed.

- **Do Not Mix Old and New Batteries**
- **Do Not Mix Alkaline, Standard, Lithium or Rechargeable Batteries**
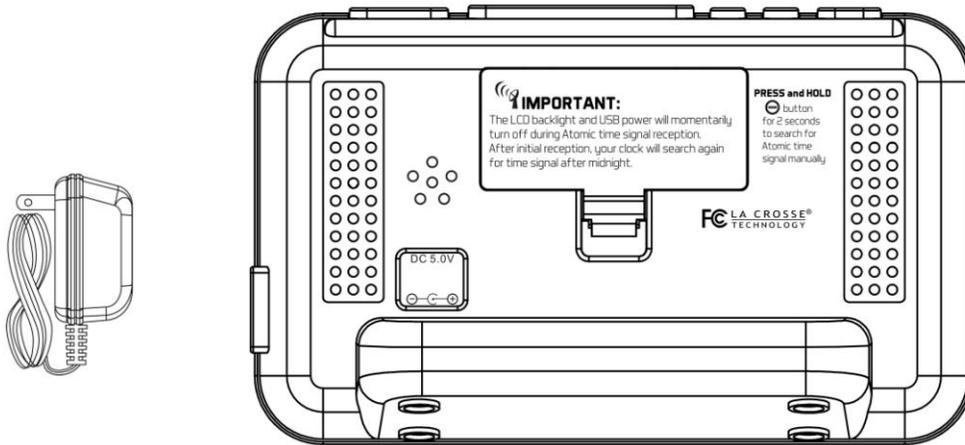
Troubleshooting

- If the atomic alarm clock does not display the indoor temperature after 30 seconds, remove the A/C power adapter (batteries) and start the setup process again.

Power the Atomic Alarm Clock

The atomic alarm clock can be powered by the 5-volt A/C adapter or batteries.

A/C Power Adapter

- Insert enclosed 5-volt a/c power adapter into a wall outlet, then into the atomic alarm clock.

Batteries

1. Slide tab up and pull out to remove battery cover.
2. Install two NEW AAA batteries (included) according to the polarity markings.
- **Do Not Mix Old and New Batteries**
- **Do Not Mix Alkaline, Lithium, Standard or Rechargeable Batteries**

If the atomic alarm clock does not display indoor temperature after 60 seconds, remove adapter and batteries and wait for at least 60 seconds before repeating the setup process.

WWVB Radio-Controlled Time

The NIST radio station, WWVB, is located in Ft. Collins, Colorado and transmits the exact time signal continuously throughout the United States at 60 kHz. The signal can be received up to 2,000 miles away through the internal antenna in the atomic alarm clock. However, due to the nature of the Earth's Ionosphere, reception is very limited during daylight hours.

The WWVB reception icon with full signal strength will appear on screen if the reception of atomic time is successful.
- When powered up, the atomic alarm clock will automatically try to receive the WWVB signal every three hours, for example: 0:00, 3:00, 6:00......18:00, 21:00, but if at any of the above times it receives the signal, it won't search again until next day at UTC 7:00, 8:00, 9:00. 10:00, 11:00. When it successfully receives a time update at UTC 7:00, 8:00, 9:00. 10:00, or 11:00, it will not look for an update again until the next day.
- In normal mode, push the **-** button for three seconds to enter manual searching for the signal.
- In reception mode, push the **-** button for three seconds to exit searching for the atomic signal.
Note: During WWVB reception, all buttons will work. When in time set or alarm set mode, the WWVB search will stop. When alarm rings, it will stop the WWVB search.

IMPORTANT: To limit interference, the LCD backlight & USB charging functions are suspended during WWVB atomic signal synchronization, which occurs after midnight. They will resume after a 4-8 minute signal search.

Note: In case the atomic alarm clock is not able to detect the WWVB-signal (disturbances, transmitting distance, etc.); the time can be manually set in the program menu.

Function Buttons

°F/°C SET   ⊖   ⊕   LIGHT (HI-LOW-OFF) SNOOZE   ALARM

Button	Press and Release Functions	Hold 3 seconds
°F/°C SET	Move through program menu (setup) Select temperature in °F/°C	Enter program menu, set time, date, etc. (setup)
ALARM	**Once:** View Alarm **Twice:** Activate or Deactivate Alarm	Alarm set
+	1 step forward (setup)	Fast advance (setup)
–	1 step backward (setup)	Fast backward (setup) WWVB Search
LIGHT (HI-LOW-OFF) SNOOZE	**Once:** Backlight low (A/C) **Twice:** Backlight OFF (A/C) **3rd time:** Backlight ON (A/C) **Activate** backlight for 10 seconds (battery power) **Trigger snooze** (alarm active)	

Program Menu

The program menu allows you to select your preferences:
- WWVB Reception ON/OFF
- Time Zone
- Daylight Saving Time Indicator ON/OFF
- 12/24-Hour Time Format
- Hour
- Minutes
- Year
- Month
- Date

WWVB Reception ON/OFF

The °F/°C SET button will move through the program menu. The **+** or **-** buttons will change a value.

1. Hold the °F/°C SET button 5 seconds. **WWVB** and the word **ON** will flash.
2. Press and release the **+** or **-** buttons to turn this to OFF if you do not wish WWVB reception.
3. Confirm with the °F/°C SET button and move to the time zone.

ON

WWVB

Time Zone

The time zone is defaulted to Eastern Time (EST). Select your time zone and the atomic alarm clock will set the time correctly after receiving the WWVB time signal.

EST

1. **EST** will flash.

2. Press and release the **+** or **-** buttons to select a different Time Zone: AST=Atlantic, EST= Eastern, CST= Central, MST= Mountain, PST= Pacific, AKT= Alaska, HAT=Hawaiian time zone.
3. Confirm with the °F/°C SET button and move to the daylight saving time indicator.

Daylight Saving Time Indicator ON/OFF

The Daylight Saving Time indicator should be ON if you live in an area that observes DST. The indicator allows automatic time adjustments when we are into and out of daylight saving time.

1. **DST** will flash and the word **ON**.
2. Press and release the **+** or **-** buttons to turn this to OFF if you do not observe DST.
3. Confirm with the °F/°C SET button and move to the 12/24-hour time.

ON

DST

12-hour or 24-hour Time Format

The Time may be displayed in 12-hour or 24-hour format. Default is 12-hour time.
Note: When in 12-hour format, AM or PM will show in front of the hour.

12H

1. Hold the °F/°C SET button for three seconds to enter time set mode.
2. **12H** will flash.
3. Use the + or - buttons to choose 12-hour or 24-hour time format.
4. Press the °F/°C SET button to confirm and move to hour.

Set Time

To set the time manually:

1. The **Hour** digit will flash.
2. Use the + or - buttons to choose the hour.
3. Press the °F/°C SET button to confirm and move to minutes.
4. The **Minutes** will flash.
5. Use the + or - buttons to choose the minutes.
6. Press the °F/°C SET button to confirm and move to the year.

Set Calendar

To set the calendar:

1. The **Year** will flash.
2. Use the + or - buttons to choose the year.
3. Press the °F/°C SET button to confirm and move to the month.
4. The **Month** will flash.
5. Use the + or - buttons to choose the month.
6. Press the °F/°C SET button to confirm and move to the date.
7. The **Date** will flash.
8. Use the + or - buttons to choose the date.
9. Press the °F/°C SET button to confirm and exit.

Note: The day of the week will set automatically once the year, month and date are set.

Fahrenheit/Celsius

- From the time display mode, press and release the °F/°C SET button to switch from Fahrenheit to Celsius.

Alarm Time

Set Time Alarm

In normal mode, press and release the ALARM button once to show alarm time. The letters "**AL**" will show in the seconds display. Hold the ALARM button for three seconds to enter alarm set mode.

1. The **Hour** will flash.
2. Use the + or - buttons to set the hour.
3. Press the ALARM button to confirm and switch to minutes.
4. The **Minutes** will flash.
5. Use the + or - buttons to set the minutes.
6. Press ALARM button to confirm.
7. Press the °F/°C SET button to return to normal mode

Note: When no buttons are pressed for ten seconds, the atomic alarm clock will save the last change and default back to normal mode.

Activate/Deactivate Time Alarm

Press and release the ALARM button once to show Alarm Time.
- **Activate:** With the Alarm Time showing, press and release the ALARM button to activate the alarm. The alarm icon 🔔 appears when alarm is active.
- **Deactivate:** With the Alarm time showing, press and release the ALARM button to deactivate the alarm. The alarm icon will disappear when alarm is inactive.

Note: When the alarm sounds, it will continue for two minutes then shut off.

Snooze

- When the alarm sounds, press the SNOOZE button to trigger snooze alarm for 10 minutes. The snooze icon **Zz** will flash when the snooze feature is active.
- To stop alarm for one day, press the ALARM button, while in snooze mode. The alarm icon 🔔 will remain solid.
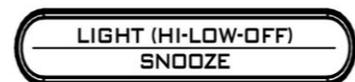
Note: When the alarm sounds, press any button **except** the ALARM button to turn the alarm off.

Backlight

A/C Adapter

The backlight is on continuously when operating the atomic alarm clock with the 5-volt A/C adapter. The backlight has three settings: High, Low and OFF for your viewing comfort.

Operating on A/C power: The backlight is displayed constantly unless it is turned off. Press and release the LIGHT (HI-LOW-OFF) button to adjust the backlight intensity.

- **ON High intensity:** The backlight is defaulted to HI when the adapter is in use.
- **ON Low intensity:** Press and release LIGHT (HI-LOW-OFF) button once
- **OFF:** Press and release LIGHT (HI-LOW-OFF) button
- **ON:** Press and release LIGHT (HI-LOW-OFF) button again
  Note: When the adapter is NOT in use, the High-Low-On-Off features are not available.

Battery Power

Operating on battery power: Press the LIGHT (HI-LOW-OFF) button to display the backlight for 10 seconds.
Note: The backlight will not stay on when operating on battery power.

USB Charge Port

The integrated USB charging port (on side) will charge your smart phone, camera or other devices when the atomic alarm clock is plugged into a power outlet with the included 5V A/C adapter.
Note: This is a power-output charging port. The charging port does not supply power to the atomic alarm clock.

Begin charging your external device by connecting the device's USB charging cable (not included) to the USB charging port on the side of the atomic alarm clock. Charging times will vary.
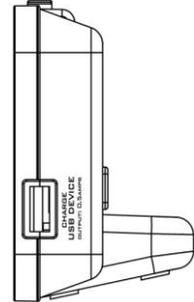**Note:** Some USB cables are for data transfer only and cannot be used for charging.
- Make sure that the USB cable you use will charge your device.
- Most USB cables included with mobile devices will work for charging.
  USB Power Output: 0.5A maximum current.
  DO NOT overload the USB port. Charge 0.5A devices or less only

IMPORTANT: When operating on A/C power, the backlight and USB charging port will turn off while the atomic alarm clock searches for the WWVB to avoid interference. The backlight will return after 4-8 minute search (which occurs during the late night or early morning hours). The USB charging port will then resume working.

Temperature Trend Arrows

The indoor and outdoor temperature trend indicators will update every 30 minutes or less. These trends represent temperature changes over the past three hours.

Example: At 1:00pm, the arrow indicates the change in temperature since 10:00am. At 1:30pm, the arrow will indicate the temperature change since 10:30am.

↗ Temperature rose more than 1°C/ 2°F in the past three hours

→ Temperature has **not changed** more than 1°C/ 2°F in the past three hours

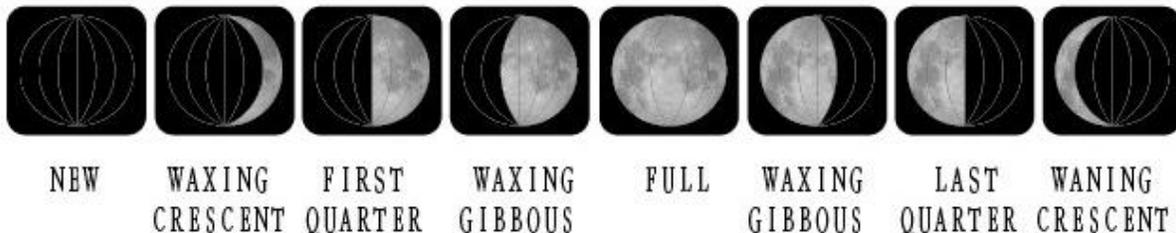↘ Temperature fell more than 1°C/ 2°F in the past three hours

Humidity Trend Arrows

The indoor humidity trend indicators are updated every 30 minutes. These trends arrows represent humidity changes over the past three hours.

↗ Humidity rose more than 1% RH in the past three hours

→ Humidity has **not changed** more than 1% RH in the past three hours

↘ Humidity fell more than 1% RH in the past three hours

Moon Phase

The moon phase is based on the year, month and date set (manually or by the WWVB signal). These are the moon phases displayed by the atomic alarm clock

NEW   WAXING   FIRST   WAXING   FULL   WAXING   LAST   WANING
       CRESCENT QUARTER GIBBOUS   GIBBOUS QUARTER CRESCENT

- **Waxing** indicates growing or expanding illumination and happens after a new moon.
- **Waning** indicates decreasing illumination and occurs after a full moon.
- **Crescent** refers to the moon being less than half illuminated. Crescents can be waning or waxing.
- **Gibbous** describes a moon phase when more than half is illuminated. Gibbous can be waxing or waning.
- **New Moon** occurs when the moon is between the earth and sun, so the illuminated portion of the moon is on the back side facing the sun and we cannot see it. After a new moon, the illuminated portion will increase or wax until the full moon occurs.
- **Full Moon** occurs when the earth, moon and sun are in approximate alignment, with the moon and the sun on opposite sides of the earth. The illuminated portion of the moon faces the earth, giving us complete visibility of one side of the entire moon. After a full moon, the illuminated portion will decrease or wane until the new moon occurs.
- **First Quarter** and **Last Quarter** moons occur when the moon is at a 90 degree angle to the earth and sun. We see half of the moon illuminated and the other half is in shadow.

Position the Atomic Alarm Clock

The atomic alarm clock should be placed near an exterior wall with the front or back facing toward Ft. Collins, Colorado for best WWVB reception. Choose a location 6 feet or more from electronics such as cordless phones, gaming systems, televisions, microwaves, routers, baby monitors, etc., which can prevent signal reception.

Specifications

Indoor

Temperature Range:	+32°F to +122°F (0°C to 50°C)
Humidity Range:	3% to 99% RH

Power

Atomic Alarm Clock:	5-volt A/C power adapter (included)
Battery backup;	2-AAA, IEC, LR3 batteries (included)
USB Charge Port:	Output 0.5 amp (charging cable not included)

Battery Life

Atomic Alarm Clock Battery Backup:	Battery life is over 24 months when using the AC adapter for primary power.

Dimensions

Atomic Alarm Clock:	5.56" L x 2" D x 3.33 " H (141.22 x 50.8 x 86.36 mm)

Low Battery Icon

- When this low battery icon ⊟ appears, replace the batteries and/or check the A/C adapter in the atomic alarm clock.

Care and Maintenance

- **Do Not Mix Old and New Batteries**
- **Do Not Mix Alkaline, Lithium, Standard or Rechargeable Batteries**
- Do not expose the atomic alarm clock to extreme temperatures, vibration or shock. Keep dry.
- Clean atomic alarm clock with a soft damp cloth. Do not use solvents or scouring agents.
- The atomic alarm clock is not a toy. Keep it out of reach of children.

- The atomic alarm clock is not to be used for medical purpose or for public information. It is determined for home use only.
- The specifications of this atomic alarm clock may change without prior notice.
- Improper use or unauthorized opening of housing will void the warranty.
- If the atomic alarm clock does not work properly, change the batteries and/or check the A/C cord connection.

Warranty Information

La Crosse Technology, Ltd 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 used in North America and only to the original purchaser of this product. To receive warranty service, the purchaser must contact La Crosse Technology, Ltd for problem determination and service procedures. Warranty service can only be performed by a La Crosse Technology, Ltd authorized service center. The original dated bill of sale must be presented upon request as proof of purchase to La Crosse Technology, Ltd or La Crosse Technology, Ltd's authorized service center.

La Crosse Technology, Ltd will repair or replace this product, at our option and at no charge as stipulated herein, with new or reconditioned parts or products if found to be defective during the limited warranty period specified above. All replaced parts and products become the property of La Crosse Technology, Ltd and must be returned to La Crosse Technology, Ltd. Replacement parts and products assume the remaining original warranty, or ninety (90) days, whichever is longer. La Crosse Technology, Ltd will pay all expenses for labor and materials for all repairs covered by this warranty. If necessary repairs are not covered by this warranty, or if a product is examined which is not in need or repair, you will be charged for the repairs or examination. The owner must pay any shipping charges incurred in getting the La Crosse Technology, Ltd product to a La Crosse Technology, Ltd authorized service center. La Crosse Technology, Ltd will pay ground return shipping charges to the owner of the product to a USA address only.

The La Crosse Technology, Ltd warranty covers all defects in material and workmanship with the following specified exceptions: (1) damage caused by accident, unreasonable use or neglect (including the lack of reasonable and necessary maintenance); (2) damage occurring during shipment (claims must be presented to the carrier); (3) damage to, or deterioration of, any accessory or decorative surface; (4) damage resulting from failure to follow instructions contained in the owner's manual; (5) damage resulting from the performance of repairs or alterations by someone other than an authorized La Crosse Technology, Ltd authorized service center; (6) units used for other than home use (7) applications and uses that this product was not intended or (8) the products inability to receive a signal due to any source of interference.. 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.

LA CROSSE TECHNOLOGY, LTD WILL NOT ASSUME LIABILITY FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR OTHER SIMILAR DAMAGES ASSOCIATED WITH THE OPERATION OR MALFUNCTION OF THIS PRODUCT. THIS PRODUCT IS NOT TO BE USED FOR MEDICAL PURPOSES OR FOR PUBLIC INFORMATION. THIS PRODUCT IS NOT A TOY. KEEP OUT OF CHILDREN'S REACH.

This warranty gives you specific legal rights. You may also have other rights specific to the State. Some States do not allow the exclusion of consequential or incidental damages therefore the above exclusion of limitation may not apply to you.

For warranty work, technical support, or information contact:

La Crosse Technology, Ltd
2817 Losey Blvd. S.
La Crosse, WI 54601

Online at:
www.lacrossetechnology.com/k84292

Contact Support: 1-608-782-1610
Product Registration:
www.lacrossetechnology.com/support/register

Protected under U.S. Patents:
5,978,738
6,076,044
6,597,990