## 513-63867 FAQS

We are weather enthusiasts like you and know proper running equipment is important. TheseFAQS provide valuable information on setup, positioning, and troubleshooting your clock.We recommend Adobe Reader version 10 or greater available at: http://get.adobe.com/readerCONTENTS
513-63867 FAQS ..... 1
CONTENTS ..... 1
BATTERIES: What do I need to know about batteries? ..... 1
What are the power requirements for this clock? ..... 2
SETUP: How do I setup my clock? ..... 2
How do I manually set the time? ..... 2
Does this clock have 12 hour and 24 hour time options? ..... 3
What do the Daylight Saving Time (DST) Settings mean? ..... 3
How do I select Fahrennheit or Celsius? ..... 3
TIME: Does this clock have Atomic Time? ..... 4
What is Desired Hour (Time Adjust) and how do I set it? ..... 4
Can I change the Calender Display? ..... 5
How do I select where Time and Temperature are Display? ..... 5
Why doesn't the temperature/humidity reading on my station match the weather report? ..... 5
What does a reading of "HI" or "LO" mean? ..... 5
What does "NO" mean? ..... 6
Why does my Temp/Humidity reading come and go? ..... 6
What is Distance I Resistance I Interference? ..... 7
FACTORY RESET: How do I factory reset my clock? ..... 7

## BATTERIES: WHAT DO I NEED TO KNOW ABOUT BATTERIES?

- Good fresh batteries are important for best performance in your clock and sensor.
- Batteries with an expiration date of 2028, were manufactured in 2018.
- We recommend batteries with an expiration date 6 years in advance of the current year for best performance.
- A minimum voltage of 1.48 v per battery is required for best performance.

513-63867: 6 "AA" batteries.
TX141TH-Bv3" 2 "AA" batteries

## SETUP: HOW DO I SETUP MY CLOCK?

1. Install 2 "AA" batteries into your Outdoor Sensor.
2. Install 6 "AA" batteries into your Atomic Clock.
3. Once the sensor is reading to your clock, place it outside in a shaded location to protect it from the sun's heat.

See our mounting information: bit.ly/temp_mounting

## HOW DO I MANUALLY SET THE TIME?

IMPORTANT: Only press or hold one button at a time.

1. Hold the button 2 seconds to enter settings mode.
2. Press the + or - button to adjust the flashing values.
3. Hold the + or - buttons to adjust quickly.
4. Press the button to confirm adjustments and move to the next item.
5. Press the F/C button at any time to exit.

## Settings order:

- Language (English, Spanish, French, German)
- Beep ON/OFF
- Atomic ON/OFF
- DST AUTOMATIC/ DST OFF / DST ON
- Time Zone
- 12/24 Format
- Hour
- Minutes
- Year
- Month
- Date
- Month/Date or Date/Month


## Notes:

- The language selected in this menu will adjust the Weekday readout and menu items.
- If "Atomic OFF: is selected, menu will skip DST and Time Zone settings and move straight to the 12/24 Hour Format setting.
- Weekday sets automatically when Year, Month and Date are set..


## Settings Menu

1. Hold the button for 2 seconds to enter setting mode. ENGLISH will show. Press the + or button to change to another language (Español, or Français or Deutsch). Press the button to select Beep ON/OFF.
2. BEEP ON will show. Press the + or - button to turn beep sound OFF. Press the button to move to Atomic Time ON/OFF.
3. Press to confirm and move to the atomic time ON/OFF. ATOMIC ON will show. ON flashes. Use the + or - button if you do not want Atomic Time signal (OFF).
4. Press to confirm and move to the Daylight Saving Indicator. DST AUTO ON will show. USE the + or - button to Select DST ALWAYS ON (DST all year) or DST ALWAYS OFF (Standard Time all year).
5. Press to confirm and move to the Time Zone. EASTERN will flash. Use the + or - button to select your time zone.
6. Press to confirm and move to $12 / 24$ hour time. 12/24 FORMAT will show. 12HR flashes. Press the + or - button to turn select 24 hour time format.
7. Press to confirm and move to the hour. HOUR will show. The hour flashes. Press the + or button to choose the hour.
8. Press to confirm and move to the minutes. MINUTES will show. Minutes flash. Press the + or - button to choose the minutes.
9. Press to confirm and move to the year. The YEAR 2020 will show. Year will flash. Press the + or - button to change the year.
10. Press to confirm and move to the month. The MONTH will show. The Month will flash. Press the + or - button to change the month.
11. Press to confirm and move to the date. DATE will show. Date will flash. Press the + or button to change the date.
12. Press to confirm and select MONTH/DATE or DATE/MONTH. MONTH/DATE will show. Press the + or - button to select DATE/MONTH.
13. Press to confirm and exit.

Note: After 10 seconds with no button press, station returns to normal time display.

## DOES THIS CLOCK HAVE 12 HOUR AND 24 HOUR TIME OPTIONS?

- Yes. You can select 12 -hour or 24 -hour time in the Settings Menu.


## WHAT DO THE DAYLIGHT SAVING TIME (DST) SETTINGS MEAN?

DST AUTOMATIC: Clock gains 1 hour in spring and loses 1 hour in the fall (default).
DST ALWAYS OFF: Clock remains in Standard Time all year long. DST ALWAYS ON: Clock remains in Daylight Saving Time all year long.

## HOW DO I SELECT FAHRENNHEIT OR CELSIUS?

- Press the F/C button to select Fahrenheit or Celsius Temperature display.

Yes:

- The clock will search for the WWVB Atomic Time Signal when powered on. If no reception is made, it will search or automatically at UTC: 7:00, 8:00, 9:00, 10:00, and 11:00.
- If there is no WWVB reception, the clock will search for the atomic time signal every 2 hours until the WWVB time is received.
- The atomic time signal icon will flash while searching. The tower icon will be solid when it has connected.
- From normal time display, press the button to search for the WWVB time signal.
- Please be sure you have selected your time zone from the list in the Settings menu.
- When the Atomic time signal is received, the clock will set to the time zone selected. Default is Eastern Time.


## Reception:

- The WWVB time signal can be received up to 2,000 miles away from Boulder Colorado. However, due to the nature of the Earth's Ionosphere, reception is very limited during daylight hours. The Radio-controlled display will search for a signal every night when reception is best.
- Allow up to 5 nights for the change from Daylight Savings Time to Standard Time and viceversa to occur, depending on your location and atmospheric conditions.


## Loss of WWVB signal, follow these steps:

1. Check for a Tower Icon showing on the display near the time. The tower icon indicates successful reception of the WWVB signal in the past 24-hours.
2. Check that the Clock is in the correct Time Zone.
3. Check that ATOMIC is ON. This must be ON to receive a WWVB atomic time signal.
4. Check that the DST indicator is ON. If the indicator is OFF the clock will not change into or out of Daylight Saving Time.
5. Position clock with front or back facing Fort Collins, Colorado so the widest part of the antenna is positioned to receive.

For information about WWVB visit: http://bit.Iy/AtomicTime

## WHAT IS DESIRED HOUR (TIME ADJUST) AND HOW DO I SET IT?

Have your clock match other times around the world by setting a Desired Hour, kept accurate by the Atomic Time Signal. Note: Only the hour can be changed.

## Set Desired Hour:

1. Hold the $\mathrm{C}_{+}$button until the Hour flashes, "Desired Hour" will show.
2. Press the + (PLUS) button to adjust the hour. Press the - (MINUS) button to reset hour to "current hour".
3. Press the $\underset{+}{ }$ button to confirm and exit.

## Switch between Desired Time and Local time:

- Press the $\mathrm{C}+$ button to switch between Desired Time and Local Time.
- Desired Time is indicated with the $C+$ icon.


## CAN I CHANGE THE CALENDER DISPLAY?

Press the 雨 button to change how the Calendar is displayed.

- Full Weekday
- Month/Date/Year
- Weekday/Month/Date.


## HOW DO I SELECT WHERE TIME AND TEMPERATURE ARE DISPLAY?

Press the button to adjust the data displayed on screen.

- Current Time/Indoor Temp
- Current Time/Outdoor Temp
- Desired Time/Indoor Temp
- Outdoor Temp/Desired Time
- Indoor Temp/Desired Time
- Auto-Scroll

When the Auto-scroll Icon is showing, the clock will switch between these options every 5 seconds. Continue to press the button to stop the auto-scroll. Your clock will stay on the last selection.

## WHY DOESN'T THE TEMPERATURE/HUMIDITY READINGS ON MY STATION MATCH THE WEATHER REPORT?

- Your temperature and humidity readings are from your sensor at your location. Your local reporting station can be miles away so readings will differ.


## WHAT DOES A READING OF "HI" OR "LO" MEAN?

- If your outdoor temperature reading shows "HI" or "LO", check that your batteries are good.
- Overpowered or underpowered batteries can cause this reading.
- If batteries are good, replace the outdoor sensor.
- If your temperature is fine but your humidity is reading "HI" or "LO" or dashes, your humidity may be below 10\% Relative Humidity. Your sensor does not read below 10\% humidity.

If you are seeing NO or dashes for your outdoor readings, please try the following steps:

1. Hold the PLUS (+) button to search for your outdoor sensor. The Reception Indicator will begin to animate.
2. If after 3 minutes the sensor still is not connected, bring the sensor inside next to the display and remove batteries from both the sensor and clock.
3. Press any button on the clock 20 times and leave the parts sit for a few moments with the power off.
4. Install a new set of alkaline batteries into the sensor, then into your clock.

For additional help visit: bit.ly/basic_restart

## View Sensor:

- Press the button to view Add-on Sensor readings, Time, Desired Time, or Indoor Temperature \& Humidity.


## WHY DOES MY TEMP/HUMIDITY READING COME AND GO?

- RF (radio frequency) communication may come and go occasionally. This can be normal in some environments (e.g., moister climates).
- If a sensor goes out, please wait 2-4 hours for it to reconnect on its own. Please be patient - these stations can reconnect on, after many hours out.
- RF (radio frequency) communication is not always 100\% on. Certain temporary conditions can cause it to go out for a time (e.g., $100 \%$ humidity).


## If a miss happens:

- If sensor loses connection to the station for any reason, the station will show NO after 30 minutes.
- The station will search for 5 minutes every hour to reconnect with sensor.
- Be sure you have good batteries. Manually search for your sensor.


## Try this:

- Bring your sensor within 10 feet of your station and make sure it is connected to the station.
- After 15 minutes move the sensor into the next room with a wall between the sensor and the station for 1 hour.
- If there is no loss of signal in that hour, move the sensor just outside.
- Continue moving the sensor back to its original location.
- If you lose connection, look for sources of interference.


## Distance:

- The maximum transmitting range in open air is over 330 feet ( 100 meters) between each sensor and your station.
- Consider the signal path from your station to each sensor as a straight line.
- Consider the distance the station is from other electronics in the home.


## Resistance:

- Each obstacle: walls, windows, vegetation, stucco, concrete, and large metal objects will reduce the effective signal range by about one-half.
- Mounting your sensors on a metal fence can significantly reduce the effective signal range.


## Interference:

- Consider electronics in the signal path between the sensors and your station.
- Simple relocation of the sensors or the station may correct an interference issue.
- Windows can reflect the radio signal.
- Metal will absorb the RF (radio frequency) signal.
- Stucco held to the wall by a metal mesh will cause interference.
- Transmitting antennas from: ham radios, emergency dispatch centers, airports, military bases, etc. may cause interference.
- Electrical wires, utilities, cables, etc. may create interference if too close.


## FACTORY RESET: HOW DO I FACTORY RESET MY CLOCK?

## To factory reset your clock:

1. Remove batteries from clock and sensor and press any button 20 times.
2. Leave unpowered for 15 minutes.
3. Reinsert batteries in sensor and clock.
