

# M82776 FAQs

We are weather enthusiasts like you and know proper running equipment is important. These FAQs provide valuable information on setup, positioning, and troubleshooting your station. We recommend Adobe Reader version 10 or greater available at: <http://get.adobe.com/reader>

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## GENERAL INFORMATION

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

- Good fresh batteries are important for best performance in your sensors and as backup in your station.
- Batteries with an expiration date of 2025, were manufactured in 2015.
- We recommend batteries with an expiration date no more than 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.
- Lithium batteries may be used in outdoor sensors. Alkaline batteries for the station.

### CAN I OPERATE MY STATION ON BATTERY POWER ONLY?

- No, the power cord is required for your color station to work. Batteries are for backup.
- The Mini Display operates on batteries only.

### BATTERIES: WHAT DO THE BATTERY ICONS MEAN?

- When Battery Indicator shows in the outdoor area, replace batteries in your Outdoor Sensor.
- When Battery Indicator shows next to your Time or the Indoor area, replace batteries in your Station.

## SENSOR AND STATION

Your M82776 (308-1416 & 308-1409TH) stations comes with:  
 TX141TH-Bv2 Thermo-hygro sensor 433MHz RF  
 Transmission Range 330 feet (100 meters) open air.

## WHAT ARE THE POWER REQUIREMENTS?

**TX141TH-Bv2:** 2-AA batteries

**308-1416:** 5 volt power cord (required) and 3-AA batteries for optional backup of your time and date. Power cord is required.

**308-1409TH:** 2-AAA batteries

## WILL THESE STATION WORK IN OTHER COUNTRIES?

- No. The color station will only work on 120 volt systems.

## SETUP: HOW DO I SETUP MY STATION?

1. Insert 2-AA batteries into your Outdoor Sensor.
2. Insert the 5 volt power cord into an outlet, then into your Color Display. Optional: Insert 3-AA batteries for backup.
3. Insert 2-AAA batteries into your Mini Display.
4. Adjust time and date settings on each display.
5. Once the Outdoor Sensor is reading to each of your displays, place it outside in a shaded location.

## MOUNTING: WHERE DO I POSITION MY SENSOR & STATION?

- Watch sensor mounting video: [http://bit.ly/TH\\_SensorMounting](http://bit.ly/TH_SensorMounting)
- Place your thermo-hygro sensor at least 6 feet off the ground.
- For accurate temperature readings your sensor needs to be shaded from the sun and in a well ventilated area. Trapped moisture will cause inaccurate readings.
- Mount your sensor vertically to allow moisture to drain out the bottom.
- Preferred location is on a north facing wall under an eave or deck rail.
- Avoid placing near a metal roof that will cause it to read high on sunny days.
- Avoid other sources of heat such as soffit vents, and window or door frames.
- For accurate humidity readings, avoid placement near vegetation and lakes or other bodies of water when possible.
- Maximum transmission distance from your thermos-hygro sensor to your station, in open air is 330 feet (100 meters).
- Insert the mounting screw through the front of the transmitter and into the wall. Tighten the screw to snug (do not over tighten).

## POSITION STATIONS

Your stations are designed for placement on a desk or countertop.

- Position within reach of an outlet that is always active. Some outlets in living rooms and in bedrooms may only be active when the light switch is on.
- This color station must operate with the 5 volt power cord in order to receive sensor updates. Operation on battery power will only maintain time/date settings if you need to move your station.

- Best reception occurs when only one wall is between your station and your sensor outside.
- Position your station six feet from other electronics and wireless devices. If you suspect RF (radio frequency) interference, simply move your weather station a few feet.

## WHAT IS DISTANCE | RESISTANCE | INTERFERENCE?

### Distance:

- The maximum transmitting range in open air is over 330 feet (100 meters) between your sensor and your station.
- Consider the signal path from your station to your 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 your sensor and your station.
- Simple relocation of your sensor 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.

## HOW DO I SET HI AND LO TEMPERATURE/HUMIDITY ALERTS?

### To set alerts:

1. Hold the ALERTS button to enter alert set mode.
2. Outdoor HI temperature alert OFF will show.
3. If you wish to set this alert value, press the + or – buttons to arm this alert (ON).
4. When the alert is armed (ON) the alert value will flash (no additional button press)
5. Press the + or – buttons to change the alert value.
6. Press the ALERTS button to confirm and move to the next alert.
7. If you do not wish to set an alert, press the ALERTS button again to move the next alert. (When the alert is OFF (disarmed) press ALERTS button to skip setting that alert value).
8. Press and release the ALERTS button until you get to the alert you wish to set.
9. To set the alert, first press the + or – buttons to turn the alert ON (armed).
10. When the alert is armed (ON) the alert value will flash (no additional button press)
11. Press the + or – buttons to change the alert value.
12. Press the ALERTS button to confirm and move to the next alert. Or press the LIGHT button to exit.

### When Alert Sounds:

- When armed alert value is reached, station will beep 5 times each minute, until out of alert range.
- The flashing alert icon will indicate if it is a LO or HI alert.
- Press any button to stop the temp alert sound. The alert icon will flash while value is in alert range.

## HOW DO I VIEW MY HI AND LO TEMPERATURE/HUMIDITY READINGS?

The high and low temperature and humidity readings are recorded with time and date of occurrence. Each time a new high or low reading is recorded, that reading with time and date of occurrence will show.

### Color Station:

To view your HI | LO records, simply press and release the TEMP button.

- Outdoor HI Temperature
- Outdoor LO Temperature
- Outdoor HI Humidity
- Outdoor LO Humidity
- Indoor HI Temperature
- Indoor LO Temperature
- Indoor HI Humidity
- Indoor LO Humidity

Mini Display: NONE

## HOW DO I RESET THE TEMPERATURE/HUMIDITY READINGS?

### Color Station

Your temperature and humidity readings are reset individually.

1. Press and release the TEMP button to view the reading you wish to reset.
2. Hold the MINUS (-) button for 5 seconds to reset individual temperature or humidity value to current temperature, humidity, time and date.
3. Press and release the LIGHT button to exit.

## TIME: DO THESE STATIONS HAVE ATOMIC TIME?

- No. The time needs to be set manually on each station.

## HOW DO I MANUALLY SET THE TIME?

### Color Station

It is best to press one button at a time when setting your station.

1. Hold the SET button to enter the Settings Menu.
2. Press the + or - button to adjust the values. Hold to adjust quickly.
3. Press the SET button to confirm and move to the next item.
4. Press the LIGHT button to exit.

**Settings Menu Order:**

- o Language (English, Spanish, French)
- o Beep ON/OFF
- o 12/24 Hour
- o Hour
- o Minutes
- o Year
- o Month
- o Date
- o Fahrenheit or Celsius
- o Pressure units: INHG or HPA
- o Pressure number setting

**Note:** Your weekday will set automatically after year, month, and date are set.

**Note:** When Spanish (Español), or French (Français) are selected, the rest of the instructions will be in that language.

**Full Program Menu:**

1. Hold the SET button for 2 seconds to enter setting mode. ENGLISH will flash. Press the + or - button to select a different language.
2. Press SET to confirm and move to beep sound ON/OFF. BEEP ON will show. ON flashes. Press the + or - button to turn the button beep sound off.
3. Press SET to confirm and move to 12/24 hour. The 12Hr will flash and FORMAT will show. Press the + or - button to choose 12 hour or 24 hour time format.
4. Press SET to confirm and move to the hour. The HOUR will flash. Press the + or - button to choose the hour.
5. Press SET to confirm and move to the minutes. The MINUTES will flash. Press the + or - button to choose the minutes.
6. Press SET to confirm and move to the year. The YEAR will show. 2018 will flash. Press the + or - button to change the year.
7. Press SET to confirm and move to the month. The MONTH will show. Three letter Month will flash. Press the + or - button to change the month.
8. Press SET to confirm and move to the date. DATE will show. Date number will flash. Press the + or - button to change the date.
9. Press SET to confirm and move to the temperature unit. TEMP °F will show. °F will flash. Press the + or - button if you prefer °C (Celsius).
10. Press SET to confirm and move to the pressure unit. PRESSURE will show. INHG will flash. Press the + or - button if you prefer HPA (Hecto Pascal).
11. Press SET to confirm and move to set the pressure number. PRESSURE will show. The pressure number will flash. Press the + or - button to adjust the flashing number to your local pressure.
12. Press SET to confirm and exit.

### Mini Display:

1. Hold the SET/IN-OUT button to enter the Settings Menu.
2. Press and release SET/IN-OUT button to confirm and move to next item or exit.
3. Press and release +/SEARCH button to increase values. Hold +/Search to adjust quickly.

### Settings Menu Order:

- 12/24 Hour
- Hour
- Minutes
- Fahrenheit or Celsius

## BACKLIGHT: DOES THIS STATION HAVE A BACKLIGHT?

Yes, your color station has a backlight with 5 levels of intensity (OFF, 1, 2, 3, 4). Power cord use is required for this station to receive updates from the sensors.

- Press and release the LIGHT button to adjust the backlight intensity or to turn it off.
- Intensity levels: 0% (OFF) | 1.5% | 20% | 50% | 100%

Mini Display-No backlight.

## WHAT IS AUTO DIM BACKLIGHT?

### Color Station:

AUTO DIM allow you to set a time for your backlight to dim to level 1 and then return to level 5. This is a handy feature to dim the backlight at the same time every night for sleep.

### Set Auto Dim (Hour only).

1. Hold the LIGHT button 2 seconds to enter dimmer set mode. **AUTO DIM OFF** will show.
2. Press the + or – buttons to turn dimmer (ON). **AUTO DIM ON** will show.
3. Press the LIGHT button to select start time (Hour) for dimmer. **START TIME** and the **hour** will flash.
4. Press the + or – buttons to change the hour for the dimmer to be low light level.
5. Press the LIGHT button to select start time for dimmer to be on High light level. **STOP TIME** and the **hour** will flash.
6. Press the + or – buttons to change the hour for the dimmer to be high light level.
7. Press the LIGHT button to confirm exit.

**Note:** While Auto Dim is active:

- Press and release the LIGHT button to adjust the backlight for 10 seconds. Intensity Levels: OFF | 1.5% | 20% | 50% | 100%.
- If you change the backlight setting the station will stay on the new setting and will automatically go back to the auto dim on the next start point.

## WEEKDAY: HOW DO I CORRECT THE DAY OF THE WEEK?

- The day of the week will set when the Year, Month, and Date are set. If your day of the week is incorrect, yet the month and date are correct, please go the [program menu](#) and check the YEAR setting.

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

- Yes, you can select 12 hour or 24 hour time format in the [program menu](#) of both stations.

## PRESSURE HISTORY GRAPH & NUMBERS

### WHY DOES THE PRESSURE GRAPH SCROLL?

The graph scrolls to provide visual interest and let you know it is updating. This cannot be turned off.

### WHAT DOES THE GRAPH BARS MEAN?

Read from left to right, the Pressure History Graph indicates the rise and fall in air pressure over the past 24 hours.

- The “0h” on the horizontal axis indicates the current hour, thus the current air pressure also.
- At every full hour the current air pressure is used as a basis for the display of a new graph bar.
- Air pressure trends can be determined by simply glancing at the bar graph.
  - If the bars are rising (higher on the right than the left) then the air pressure has a rising trend, and the weather should improve.
  - If the bars are dropping (lower on the right than the left) then the air pressure has a falling trend, and the weather should worsen.

### WHAT DO THE PRESSURE NUMBERS MEAN?

- The Relative Pressure numbers represent the current Barometric Pressure reading from the pressure sensor inside the weather station.
- This number can be adjusted in the Settings Menu, to match your local reporting station.

## TROUBLESHOOTING

### HOW DO I CHANGE BATTERIES IN MY SENSORS WITHOUT LOSING DATA?

#### Color Station:

We designed this station for convenience, so that a simple change of batteries does not lose data or require you to power down your station.



- When Battery Indicator shows next to the Outdoor Humidity, replace batteries in your Outdoor Sensor.
- Then hold the SENSOR button for 3 seconds and your station will search for your sensor.
- When changing the batteries in the color station, continue using the power cord. After replacing the batteries, no other action is needed. The batteries in the station only maintain time/date in the event of a power outage.

### Mini Display:

Hold the +/SEARCH button to search for the outdoor sensor.

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

- Basically this is a great way to return your station to “out of the box” condition.
- This is more effective than removing all power for clearing out the station.
- All history records will be removed, so write down anything you want to keep.

### To factory either station:

1. Bring your sensor in, and place 5-10 feet from both stations.
2. Remove power (batteries and power cord) from stations and sensor for 15 minutes.
3. With power removed press any button 20 times.
4. Insert power cord and batteries into sensor and stations.
5. Allow 15 minutes for them to connect several times.
6. Place sensor back outside.

## DASHES TEMP/HUMIDITY: WHY DOES MY THERMO-HYGRO SENSOR SHOW DASHES ON THE STATION?

Dashes indicate the connection is lost between your station and the outdoor sensor.

- My first thought is always to check that my [batteries](#) are good. If it has been working and now is not, low batteries are the most common connection problem.
- Next, check your [distance, resistance and interference](#). If everything was working previously at the same location, this is likely not the issue. However sometimes there is new growth on trees or bushes that causing another barrier. Radio Frequency (RF) signal does not travel well through foliage due to the moisture content.
- Occasionally adding a new wireless electronic device to the home will cross the signal path for the sensor. If this occurs try moving your station a few feet or turning the station 90 degrees for a better angle to receive the sensor signal.
- When you have good batteries, and good location, hold the SENSOR button (Color Station) or +/SEARCH button (Mini Display) for three seconds to search for your sensor. If you regain connection while the sensor is mounted, great. If you do not regain connection, bring the sensor within 10 feet of the station and complete a factory reset.

## WHY DON'T MY 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 may differ.

## TEMP ACCURACY: WHY DOES MY THERMO-HYGRO SENSOR READ INACCURATELY?

- The thermo-hygro sensor reads the environment. If your sensor reads high during the day but not at night it is a [mounting](#) problem.
- **Side-by-side test:** Bring the thermo-hygro sensor in the house and place it next to your station for 2 hours.
- Compare indoor and outdoor temperature. The temperatures should be within 4 degrees to be within tolerance. The humidity should be within 14% to be within tolerance.
- If the sensor reads correctly when next to your station then try a different location outside.
- Look for heat sources such as sunlight, door or window frames, or reflected heat that may cause inaccurate readings.
- If your temperature is reading low, and location is not an issue, you may have a bad sensor.

## 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.

## TEMPERATURE INTERMITTANT: 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 dashes 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 by holding the SENSOR or +/-SEARCH button for three seconds.

#### 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](#).

### WHY AM I GOING THROUGH BATTERIES QUICKLY?

- Test a new set of [batteries](#). Write down the date of installation and the voltage of the batteries.
- When the batteries fail, please note the date and voltage again. This is helpful in determining the problem.
- Check for leaking batteries, which may damage the sensor.

### HOW DO I CHANGE BETWEEN FAHRENHEIT AND CELSIUS?

- On your station enter the [program menu](#) to select Fahrenheit or Celsius temperature display on the station.

### WHY IS MY PRESSURE NUMBER DIFFERENT THAN MY LOCAL WEATHER REPORT?

- Your weather station, not the outdoor sensor, reads the Barometric Pressure.
- The numeric pressure value adjusts automatically as the forecast station reads changes in air pressure.
- In the [program menu](#) the unit can select the pressure unit of measure (InHg is common in the USA) and set the actual pressure number on your station.
- La Crosse Technology products will not read pressure correctly above 6200 ft. in elevation.
- Loss of Pressure is often a power-related problem, and it can be resolved by following these steps:
  - Remove power from the display for 2 hours. Press any button 20 times with power removed.
  - Install fresh batteries into the display unit. After 5 minutes, check to see if the pressure and indoor temperature are working correctly.
  - Overpowered and underpowered [batteries](#) can cause problems.