WIRELESS WEATHER STATION
WITH BAROMETRIC PRESSURE & BONUS DISPLAY
INSTRUCTION MANUAL

MODELS: 308-1416 / TX141TH-BV2 / 308-1409TH
DC: 091018

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POWER UP

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.


OUTDOOR SENSOR
TX141TH-Bv2

WEATHER STATION
308-1416

BONUS DISPLAY
308-1409TH

SETTINGS MENU

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:
• Language (English, Spanish, French)
• Beep ON/OFF
• 12/24 Hour
• Hour
• Minutes
• Year
• Month
Settings Menu Continued:

• Date
• Fahrenheit or Celsius
• Pressure units: INHG or HPA
• 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.

To begin:

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.
Language
Beep ON/OFF
12 or 24 Hour Format

Hour
Minutes

Year
Month
Date

Farhenheit/Celsius
Pressure Units INHG/HPA
Pressure Number
ADJUSTABLE BACKLIGHT

Your Backlight may be turned OFF and adjusted to 4 levels of brightness.

To adjust brightness:
1. Press and release the LIGHT button to adjust backlight brightness.
2. The word BACKLIGHT and the setting will show.
3. Once you have the desired backlight brightness, stop pressing buttons.

AUTO DIM BACKLIGHT

This station allows you to program a time for the backlight to automatically Dim to level one setting. This way the station will not interfere with your sleep.

Setup Auto Dim:
1. Hold the LIGHT button to set Auto Dim Start and Stop times.
2. Use the + or - button to turn the Auto Dim feature ON. Press the LIGHT button to confirm and move to next item.
3. START TIME will flash. Use the + or - buttons to select your Auto Dimmer’s starting hour. Press the LIGHT button to confirm and move to next item.
4. STOP TIME will flash. Use the + or - buttons to select your Auto Dimmer’s ending hour. Press the LIGHT button to confirm and exit.

Note: While the Auto Dim is active, if you press the LIGHT button, the backlight will change to the brightness level selected and stay there. Auto Dim will resume at the next scheduled time.
Read from left to right, the Pressure History Graph indicates the rise and fall in air pressure over the past 24 hours.

- The “Oh” 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.
  A. 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.
  B. 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.

- The bar chart will constantly scroll to provide visual interest. This cannot be turned off.

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.

The Weather Forecast Icons are determined by the station’s barometric pressure reading. Please allow 7-10 days for barometric calibration.

- This is your pressure at your stations’ location and may vary slightly from your local reporting station.

- Six forecast icons use changing atmospheric pressure to predict weather conditions for the next 12-hours with 70-75% accuracy.

- When Outdoor temperature is below 32˚F and the forecast is RAIN or T-STORM, the station will display SNOW.
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 to 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.
HI/LO TEMPERATURE & HUMIDITY RECORDS

The HI & LO temperature and humidity readings are recorded with time and date of occurrence. This provides a running history of records since you first power up the station. Each time a new high or low reading is recorded, that reading with time and date of occurrence will show.

Press and release the TEMP button to view:
- Outdoor HI Temperature with Time/Date
- Outdoor LO Temperature with Time/Date
- Outdoor HI Humidity with Time/Date
- Outdoor LO Humidity with Time/Date
- Indoor HI Temperature with Time/Date
- Indoor LO Temperature with Time/Date
- Indoor HI Humidity with Time/Date
- Indoor LO Humidity with Time/Date
- Indoor/Outdoor Heat Index
- Indoor/Outdoor Dew Point

Note: Heat Index & Dew Point are not Time/Date stamped.

Reset:
- While viewing individual values, hold the MINUS (-) button for 3 seconds to reset the individual record.
  - Value, time and date stamp will reset to current.
TEMPERATURE & HUMIDITY TREND ARROWS

• The UP and DOWN arrows indicate changes in temperature and humidity over the past hour.
• The arrows will update every 15 minutes and compare data from exactly one hour prior.

Temperature: arrow changes every 2 degrees Fahrenheit.
Humidity: arrow changes every 3% RH

SENSOR SEARCH

• If you are seeing dashes in place of outdoor temperature, first check your sensor batteries.

• Hold the SENSOR button for 3 seconds to search for the sensor. Sensor Reception icon will flash while searching and be solid when sensor signal is received.

• 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 search again.

Note:
• If the signal is lost, the RX will display the last data recorded from sensor for 10 minutes.
• After that 10 minutes if the signal does not come back then you will see dashes “--”.
• After 30 minutes, start looking for the sensor signal automatically.

CHANGE BATTERIES

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

Sensor:
1. When Battery Indicator shows next to the word Outdoor, replace batteries in your Outdoor Sensor.

2. Then hold the SENSOR button for 3 seconds and your station will search for your sensor.

Station:
1. When Battery Indicator shows next to the Indoor Humidity, change batteries in the station.

2. When changing the batteries in the 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.
Press and release the SET/IN-OUT button to view Indoor Temp/Humidity or Outdoor Temp/Humidity.

**SETTINGS MENU MINI DISPLAY**

1. Press and release SET/IN-OUT button to move to next item

2. Press and release +/SEARCH button to increase settings

3. Hold +/Search to adjust quickly

**Setting order:**
- 12/24 Hour Time
- Hour
- Minutes
- Fahrenheit/Celsius
1. Hold the SET/IN-OUT button for 3 seconds. 12Hr will flash. Press and release the +/-SEARCH button if you want 24 hour time.

2. Press and release SET/IN-OUT to confirm and the hour will flash. Press and release the +/-SEARCH button to set the hour.

3. Press and release SET/IN-OUT to confirm and the minutes will flash. Press and release the +/-SEARCH button set the minutes.

4. Press and release SET/IN-OUT to confirm and °F (Fahrenheit) will flash. Press and release the +/-SEARCH button if you want Celsius.

5. Press and release SET/IN-OUT to confirm and exit.

**CHANGE BATTERIES MINI DISPLAY**

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

**Sensor:**
1. When Battery Indicator shows in the Outdoor section, replace batteries in your Outdoor Sensor.

2. Then hold the +/-SEARCH button for 3 seconds and your station will search for your sensor.

**Station:**
1. When Battery Indicator shows next to the Time, change batteries in the station.

2. When changing the batteries in the 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.
SENSOR SEARCH MINI DISPLAY

- If you are seeing dashes in place of outdoor temperature, first check your sensor batteries.
- Hold the +/-SEARCH button for 3 seconds to search for the sensor. Sensor Reception icon will flash while searching and be solid when sensor signal is received.
- 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 search again.

Note:
- If the signal is lost, the RX will display the ast data recorded from sensor for 10 minutes.
- After that 10 minutes if the signal does not come back then you will see dashes “--”.
- After 30 minutes, start looking for the sensor signal automatically.

SENSOR WEATHER SHIELD-NOT INCLUDED
The Sensor Weather Shield is designed to protect your outdoor sensor from rain and snow. This shield will offer limited protection from the sun’s heat. Purchase at: http://bit.ly/925-1418

WE’RE HERE TO HELP!
If you require additional support, call or customer support team based out of La Crosse, Wisconsin.
Phone: 1.608-782-1610
Or fill out our online support request form here: bit.ly/contact_techsupport

Our knowledgeable support team is available: Monday-Friday, 8am-6pm CST

JOIN THE CONVERSATION
Ask questions, watch detailed setup videos, and provide feedback on our social media outlets!
SPECIFICATIONS

INDOOR:
Temperature Range:
308-1416: 32°F to 99°F (0°C to 37°C)
308-1409TH: 32°F to 122°F (0°C to 50°C)

Humidity Range:
308-1416: 10% to 99% RH
308-1409TH: 10% to 99% RH

OUTDOOR:
Temperature Range:
308-1416: -40°F to 140°F (-40°C to 60°C)
308-1409TH: -40°F to 140°F (-40°C to 60°C)

Humidity Range:
308-1416: 10% to 99% RH
308-1409TH: 10% to 99% RH

Transmission Range: over 330 feet (100 meters) in open air RF 433MHz

POWER REQUIREMENTS:
308-1416: AC6: GPU280500150WA00 (required) Optional: 2 “AA” LR6 Batteries (not included)
308-1409TH: 2 “AAA” LR3 Batteries (not included)
TX141TH-Bv2: 2 “AA” LR6 Batteries (not included)

BATTERY LIFE
308-1416: over 24 months with reputable batteries
308-1409TH: over 24 months with reputable batteries
TX141TH-Bv2: over 24 months with reputable batteries

DIMENSIONS:
308-1416: 7.80” L x 1.23” W x 6.44” H (19.81cm L x 3.12 cm W x 16.35cm H)
308-1409TH: 2.64” L x 1.32” W x 3.62” H (6.7cm L x 3.35cm W x 9.19cm H)
TX141TH-Bv2: 1.57” L x 0.82” W x 5.11” H (3.98cm L x 2.08cm W x 12.98cm H)

CARE AND MAINTENANCE

• Do not mix old and new batteries.
• Do not mix Alkaline, Standard, Lithium, or Rechargeable batteries.
• Always purchase the correct size and grade of battery most suitable for intended use.
• Replace all batteries of a set at the same time.
• Clean the battery contacts and also those of the device prior to battery installation.
• Ensure the batteries are installed with correct polarity (+ and -).
• Remove batteries from equipment which is not to be used for an extended period of time.
• Promptly remove expired batteries.
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.

This device must not be co-located or operating in conjunction with any other antenna or transmitter.

**Operation is subject to the following two conditions:**
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

**Caution!**
The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

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⚠️ **WARNING:** This product can expose you to chemicals including styrene, which is known to the State of California to cause cancer. For more information go to: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)