

SA8 Instruction Manual



Scan to
Watch
Installat



Package

Includes:

- Integrated Outdoor Transmitter
- Display Console
- Mounting Brackets and

● Indoor and outdoor unit connection steps:

Step 1: Plug in the display console using the power adapter.



 **Note:** A single outdoor unit supports connecting multiple indoor units.

Step 2: Insert 3 new AA batteries and close the battery door as shown. Before closing the battery door and tightening the set screws, make sure the washers (around the inside perimeter of the battery door) are properly secured in their tracks.



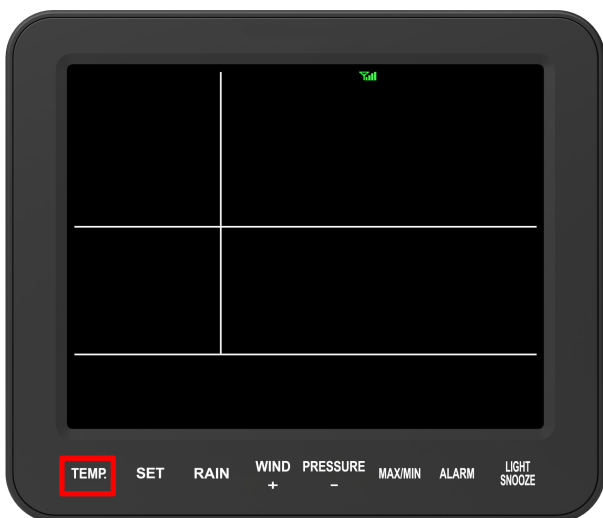
Power Supply Principle (Solar + Capacitor + 3*AAA)

- **Solar:** Charges capacitor first; directly powers the device on sunny days.
- **Auto-Switch:** Automatically powered by whichever source has higher voltage.
- **Capacitor Mode:** Operates when **Capacitor V > Battery V**.
- **Battery Mode:** Operates when **Capacitor V < Battery V** (even in daytime).

Step 3: Pairing the indoor and outdoor units:

Press and hold the **TEMP** button for at least 3 seconds, then press the **Reset** button on the outdoor unit once.

At this point, the display will re-receive the signal from the outdoor sensor, and the search icon  will start flashing. Once the signal is reacquired, all data will be displayed, the remote search icon  will remain lit, and the screen will show the current values.



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1.Introduction

Thank you for purchasing the Wireless Weather Station. The following user guide provides detailed instructions on installation, operation, and troubleshooting. This product is continually evolving and improving, particularly in its online services and associated applications.

To download the latest manuals and other information, please contact Customer Support.

Customer Support E-mail: info@sainlogic.com

Website: www.sainlogic.com

Customer Support Phone: +1 (888) 513-9823 (Mon-Fri 10 a.m. - 6 p.m., Eastern Standard Time)

Facebook: <https://www.facebook.com/sainlogicweather>

YouTube: <https://www.youtube.com/@sainlogicbrand>

2.Warning and Cautions

 **WARNING:** Lightning strikes can be caused by any metal object, including your weather station mounting pole. Mounting your weather station during a storm is prohibited.

 **WARNING:** Installing a weather station in an elevated location may result in injury or death, so perform as many preliminary checks and operations as possible on the ground and inside a building or house.

 **WARNING:** Install the weather station on a clear, dry day.

3.Quick Start Guide

The following Quick Start Guide provides the necessary steps to install and operate the weather station.

1	Assembling and Activating the Outdoor Sensor Array	4
2	Installing and Activating the Display Console to Connect to the Outdoor Sensors	5-6
3	Display Function Setup	7
4	Calibration Functions	7.3
5	Troubleshooting	10

4.Assembly of Sensor Arrays

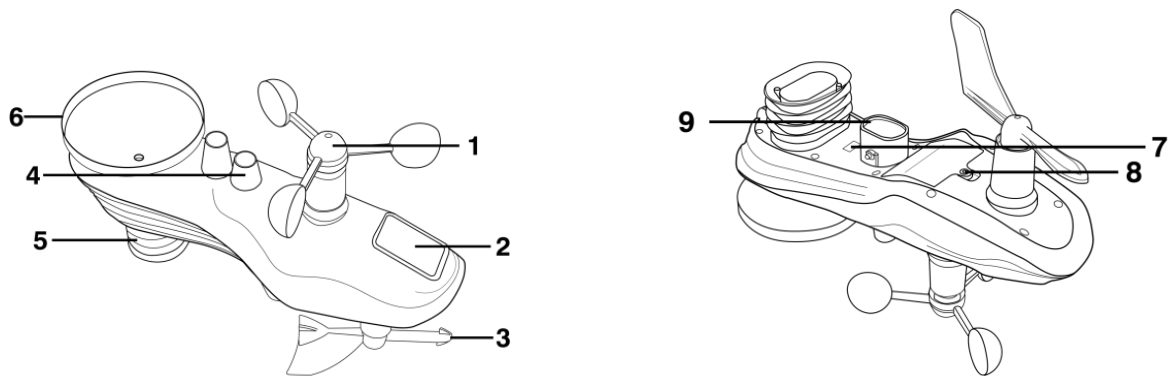


Figure 1

NO	Description	NO	Description
1	Wind Cup	6	Rain Collector
2	Solar Panel	7	Reset Button/LED Indicator
3	Wind Vane	8	Battery Door
4	Bubble Level	9	Mounting Pole Socket
5	Thermometer-Hygrometer Sensor		

5. Button Operation

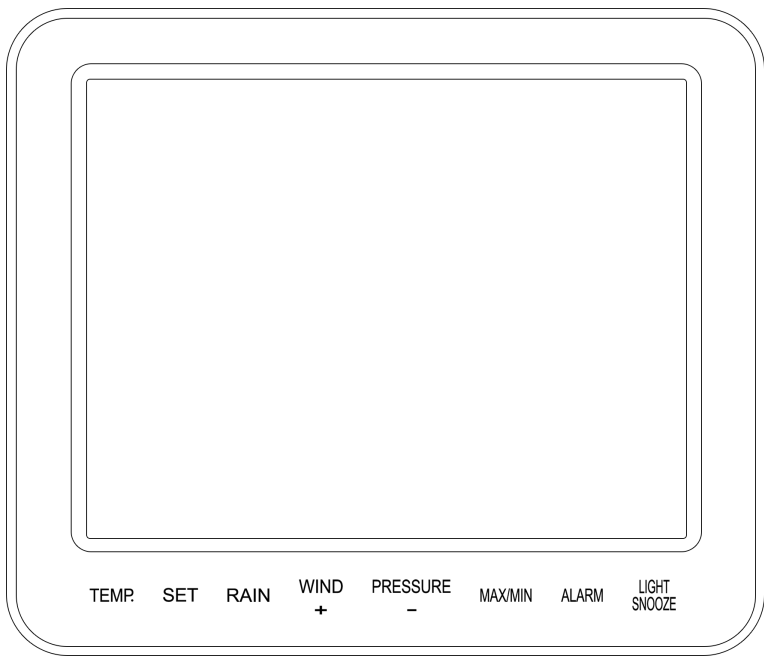


Figure 2

There are the following 8 keys on the console (from left to right), which are used to set the display functions by click, long press.



Key	Description
TEMP	1. Long press to pair the indoor and outdoor units 2. Click to switch (dew point, feels like, temp)
SET	1. Click to switch the displayed time (year, month, day, second, week) 2. Long press to enter the settings interface and click to switch to the next item
RAIN	1. Long press to clear rainfall 2. Click to switch rainfall display (1h, 24h, week, month, total)
WIND +	Click once to increase the value when setting parameters
PRESSURE -	1. Click to switch to display pressure (REL/ABS) 2. Reduce the value when setting parameters
MAX/MIN	1. Click to enter the maximum/minimum value interface 2. Long press to enter the calibration mode
ALARM	1. Long press to set alarm information 2. Click to enter the high alarm information interface, low alarm interface 3. Set calibration parameters, click to clear
LIGHT SNOOZE	1. In normal mode, click to adjust the backlight brightness 2. In setting mode, click to return to normal mode 3. Long press to turn on or off the constant light mode

5.1. Display Console

The following figure shows the layout of all the data on the display.

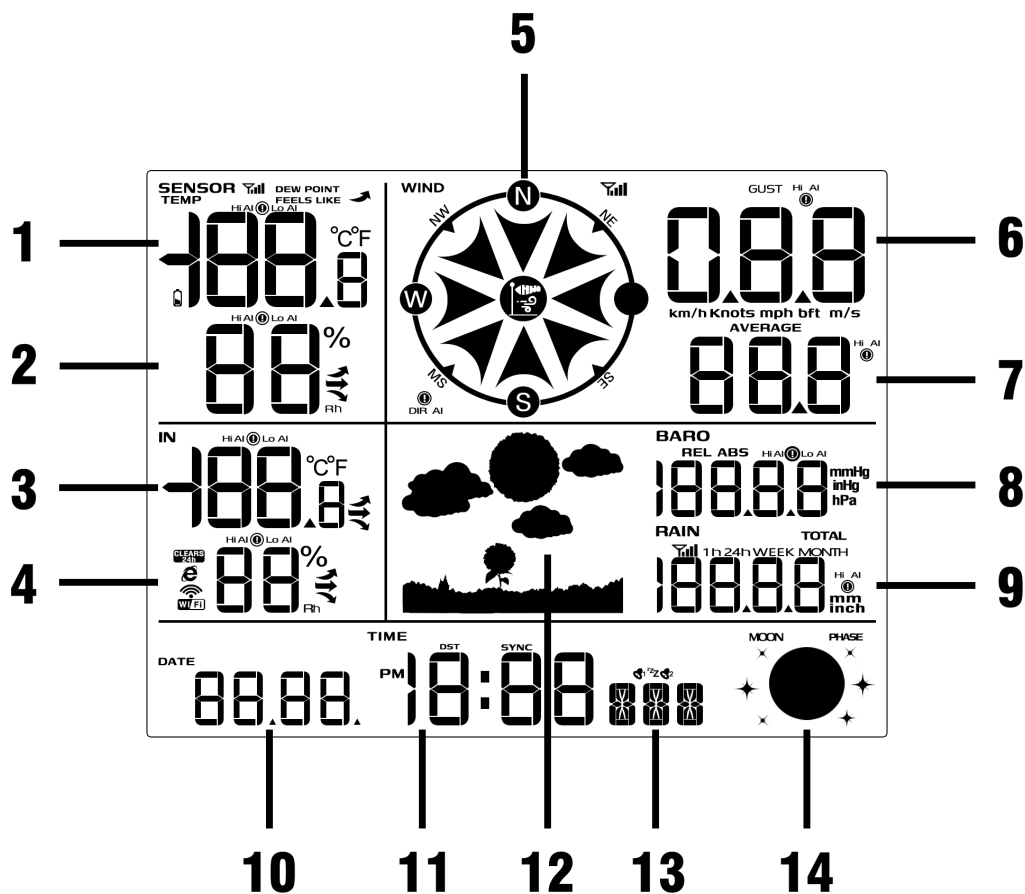


Figure 3

No	Description	No	Description
1	Outdoor Temperature	8	Barometric Pressure
2	Outdoor Humidity	9	Rainfall
3	Indoor Temperature	10	Date
4	Indoor Humidity	11	Time
5	Wind Direction	12	Weather Icon
6	Wind Gust	13	Week/Second
7	Average Wind Speed	14	Moon Phase

5.2. Backlight Operation

The display will remain on only when the power adapter is connected. The display backlight has 3 levels of brightness.

When the backlight is on, short press the LIGHT SNOOZE button to switch between the 3 levels of backlight.

When the backlight is off, press and hold the LIGHT SNOOZE button for 3 seconds and the backlight will turn on permanently. The BL ON icon will be displayed in the date area for 3 seconds.

To turn off the display backlight at any time, press and hold the LIGHT SNOOZE button for two seconds. The BL OFF icon will appear in the date area for 3 seconds.

We recommend viewing the console at a 20-degree to 30-degree angle from above for the best display of the screen.

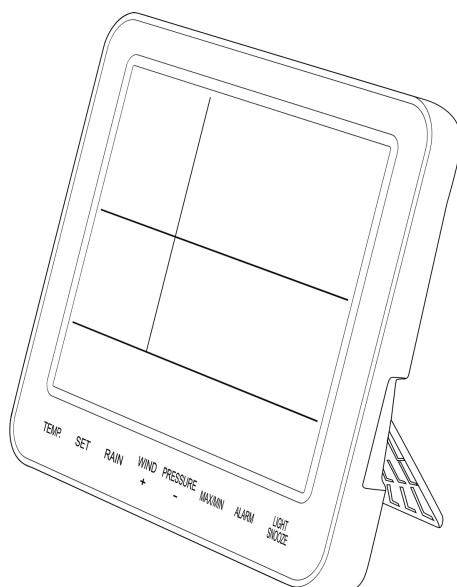


Figure 4

 **Warning: Please use the adapter to power the device! The battery is for emergency use only! The battery only lasts for a maximum of two hours!**

6. Install Outdoor Unit

Locate the battery door at the bottom of the transmitter, as shown in Figure 5.

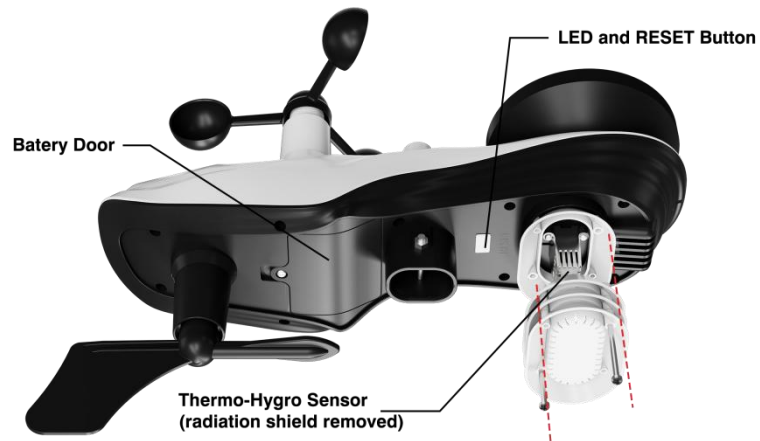


Figure 5

Remove the battery door on the back of the sensor by removing the set screw, as show in Figure 6.



Figure 6

Insert 3 new AA batteries and close the battery door as shown. Before closing the battery door and tightening the set screws, make sure the washers (around the inside perimeter of the battery door) are properly secured in their tracks.

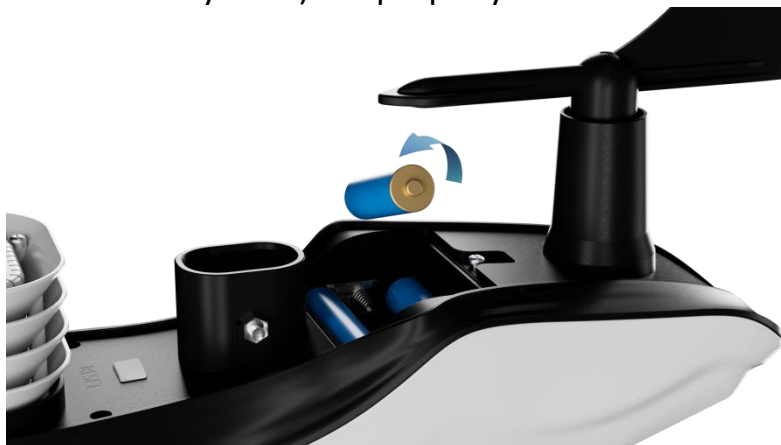


Figure 7

 **Note:** We recommend installing AA lithium batteries for the Outdoor Sensor in cold weather environments.

Once the battery is installed, the Integrated Outdoor Sensor LED indicator will illuminate for 3 seconds and then blink every 60 seconds. The sensor is transmitting data each time it blinks.

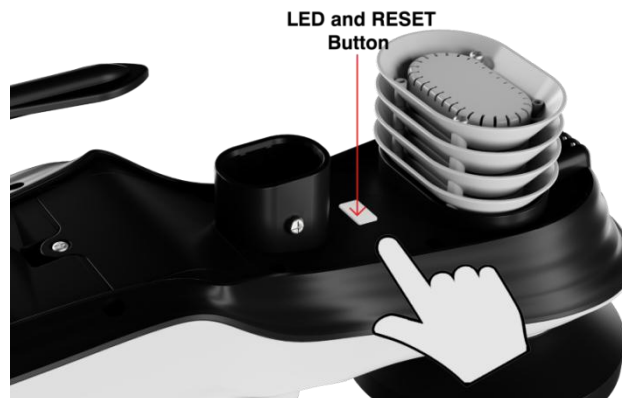


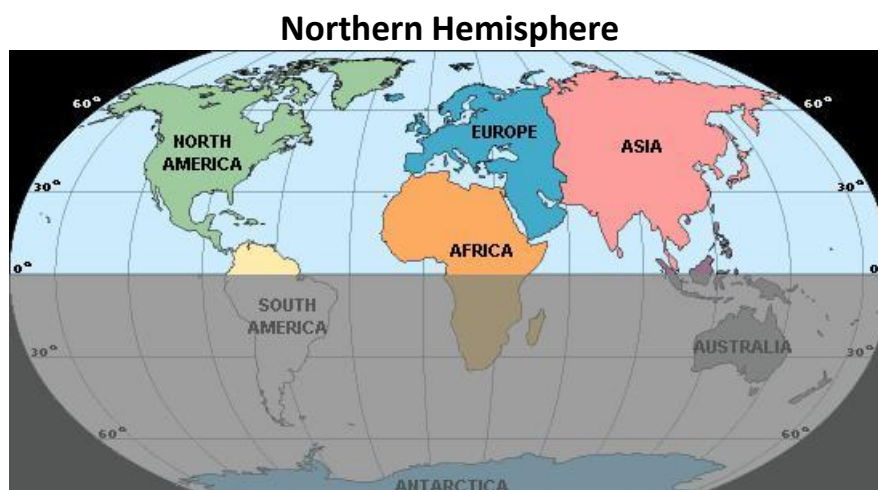
Figure 8

 **NOTE:** If the sensor LED does not flash after inserting the batteries, press the reset button located at the bottom of the sensor, as shown in Figure 8.

6.1. Adjusting the Sensor Mounting Direction

This professional weather station is suitable for use in both the Northern and Southern Hemispheres. To ensure the accuracy of the wind direction display, please secure the direction of the integrated outdoor sensor before installation.

 **Note:** Wind direction is indicated by the letters N, E, S, and W. (N is north, E is east, S is south, W is west)



Southern Hemisphere

Figure 9

6.1.1. Northern Hemisphere Reference

The body of the outdoor sensor is embossed with the four cardinal directions: N, E, S, W, which are applicable only in the Northern Hemisphere.

Step 1: As shown in the diagram, there is an "S" indicator on the wind vane representing south.

Using a compass, check the direction and adjust the orientation of the entire sensor to ensure the "S" mark on the sensor aligns with the south.

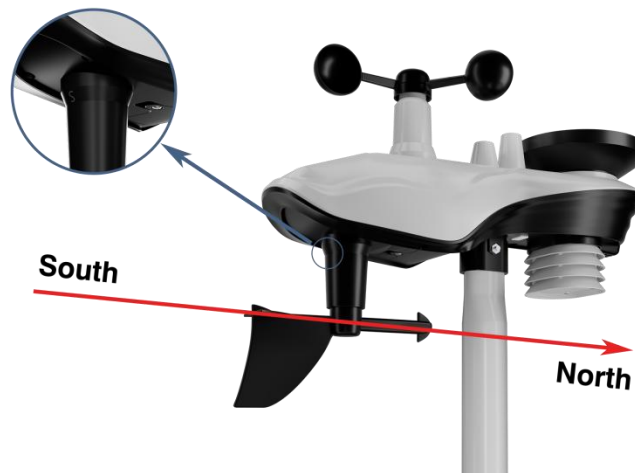


Figure 10

Step 2: On the display console, set the location region to the Northern Hemisphere (NOR will appear in the time zone).
(For detailed steps on setting the location region, see Step 18 in section 7.1).

6.1.2. Southern Hemisphere Reference

When installing, adjust the orientation of the entire outdoor sensor to ensure the solar panel faces north (and is positioned to receive maximum sunlight), as shown in the diagram.

Step 1: Install the Integrated Outdoor Sensor
Ensure the solar panel is positioned to face north.

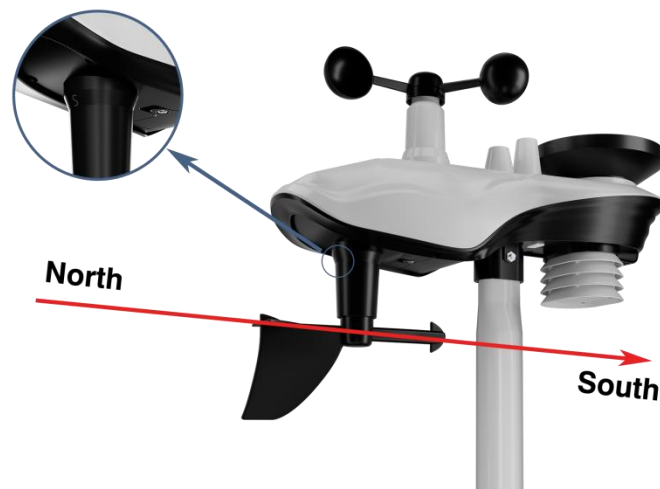


Figure 11

Step 2: Set the Location Region on the Display Console

Set the location region to the Southern Hemisphere (SOU will appear in the time zone).

(For detailed steps on setting the location region, please refer to Step 18 in section 7.1).

 **Note:** The location region (NOR or SOU) on the display console and the sensor direction must be adjusted according to your actual location.

If the integrated outdoor sensor is not positioned correctly during installation, it will result in permanent wind direction errors.

6.2. Securing the Mounting Pole

Observe the bubble level next to the rain gauge to ensure the bubble is stable within the circle, keeping the sensor array completely level. If the sensor array is not level, the rain gauge will not measure accurately.

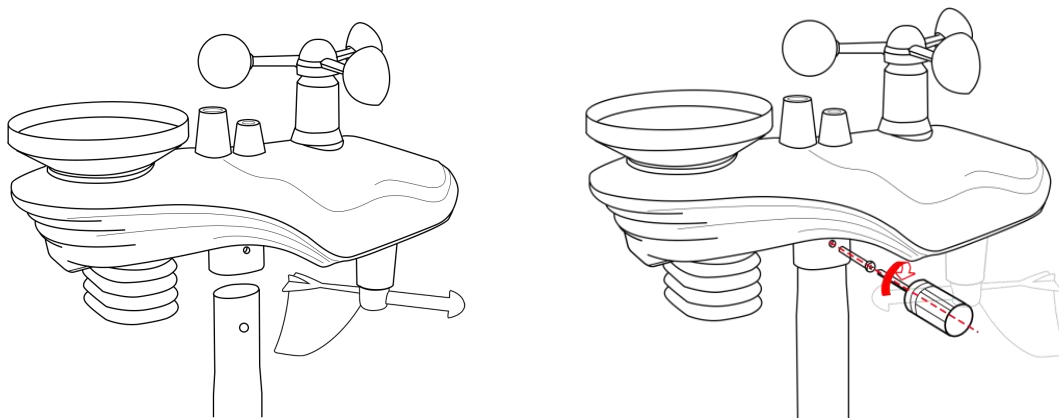


Figure 12

 **NOTE:** If the bubble level cannot be read due to mounting limitations, a horizontal line or level can be placed across the top of the rain gauge for easier viewing.

6.2.1. Horizontal Mounting And Fixing Sensors

Fasten the integrated outdoor sensor to the mounting bar bracket with two mounting bolts ($\varnothing 4$)/nuts (M3). Then, tighten the mounting bar to your existing mounting bar using four bolts ($\varnothing 5$) and nuts (M5), or secure it to a flat surface with four self-tapping screws, as shown. (Figure 13)

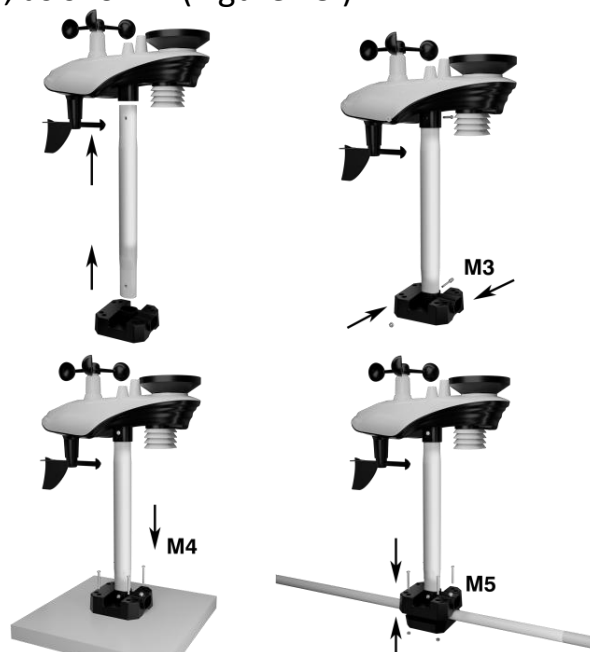


Figure 13

6.2.2. Vertical Mounting And Fixing Sensors

Fasten the integrated outdoor sensor to the mounting bar bracket with two mounting bolts ($\varnothing 4$)/nuts (M3). Then, tighten the mounting bar to your existing mounting bar with four bolts ($\varnothing 5$) and nuts (M5), or secure it to a flat surface with four self-tapping screws, as shown. (Figure 14)

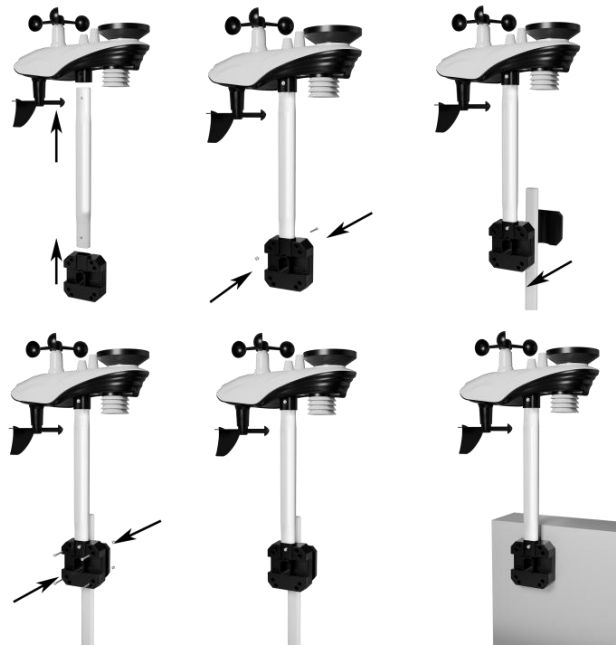


Figure 14

7. Display Console Operation

7.1. Set Mode

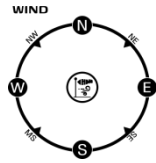
 Note: In Set Mode, press the WIND+ key or the PRESSURE- key to change or scroll the setup value. Press and hold the WIND+ key or PRESSURE- key for three seconds to quickly increase or decrease.

 Note: To exit Set Mode at any time, press the LIGHT SNOOZE key on the display console.

The sequence and commands for the Set mode are summarized in the following charts:

NO	Command	Mode	Settings	Image
1	[SET]+3 sec	Enter Set Mode, Beep On or Off	Press [WIND +] or [PRESSURE/-] to switch OFF and ON. This will prevent the beep from sounding when pressing any button	 

2	[SET]	12/24-Hour Format	Press the [WIND +] or [PRESSURE/-] key to toggle between 12-hour and 24-hour.	12H
3	[SET]	Hour	Press the [WIND +] or [PRESSURE/-] key to adjust the hours up or down. The PM icon will be displayed during the afternoon hours.	TIME PM 5:43
4	[SET]	Minute	Press the [WIND +] or [PRESSURE/-] key to adjust the minutes up or down.	
5	[SET]	Date Format	Press the [WIND +] or [PRESSURE/-] key to toggle between M-D and D-M.	M-D
6	[SET]	Month	Press the [WIND +] or [PRESSURE/-] key to adjust the calendar month.	DATE 11.30
7	[SET]	Day	Press the [WIND +] or [PRESSURE/-] key to adjust the calendar day.	
8	[SET]	Year	Press the [WIND +] or [PRESSURE/-] key to adjust the calendar year.	2025
9	[SET]	Max/Min Clearing	The maximum/minimum value can be set to daily (midnight) or manually cleared. Press the [WIND +] or [PRESSURE/-] key to toggle between ON (24-hour clearing) and OFF (manual).	CLEARs 24h ON
10	[SET]	Temperature Measurement Unit	Press the [WIND +] or [PRESSURE/-] keys to toggle between °F and °C measurement units.	°C °F

11	[SET]	Barometric Pressure Unit	Press the [WIND +] or [PRESSURE/-] key to toggle the pressure unit between mmhg, inHg or hPa.	BARO inHg
12	[SET]	Rainfall Measurement Unit	Press the [WIND +] or [PRESSURE/-] key to toggle the rainfall unit between mm and inch.	RAIN inch
13	[SET]	Wind Speed Measurement Unit	Press the [WIND +] or [PRESSURE/-] key to toggle the wind speed unit between m/s, km/h, mph, knots bft or ft/s.	WIND  mph
14	[SET]	Pressure Threshold Setting	Press the [WIND +] or [PRESSURE/-] key to change the pressure threshold from 2 hPa to 4 hPa.	BARO 2 hPa
15	[SET]	Weather Icon Settings	Press the [WIND +] or [PRESSURE/-] key to select the initial weather icon for a sunny, less cloudy, cloudy, or rainy day .	
16	[SET]	Location Area	Press the [WIND +] or [PRESSURE/-] key to toggle the geographic location of the Northern Hemisphere (NOR) or Southern Hemisphere (SOU).	NOR
17	[SET]	Exit Set Mode	Press the SET or LIGHT SNOOZE key to exit setup mode.	

*[SET] + 3 seconds means press and hold the SET button for three seconds.

*[SET] means press the SET button.

7.2. Viewing Max/Min Mode

In normal mode, press the MAX/MIN key once briefly, the MAX icon will be shown in the date area, and the display will show the maximum values for rainfall rate, gust and average wind speed, ABS barometric pressure, outdoor temperature, humidity, and indoor temperature, humidity. As shown in Figure 15(a).

To view the MIN values, press the [MAX/MIN] button again, and the minimum values will be displayed, as shown in Figure 15 (b).

To clear the minimum values, press and hold the [MAX/MIN] button while the minimum values are displayed.

Press the LIGHT SNOOZE key to exit the Max/Min View and Reset mode and return to the normal display mode.

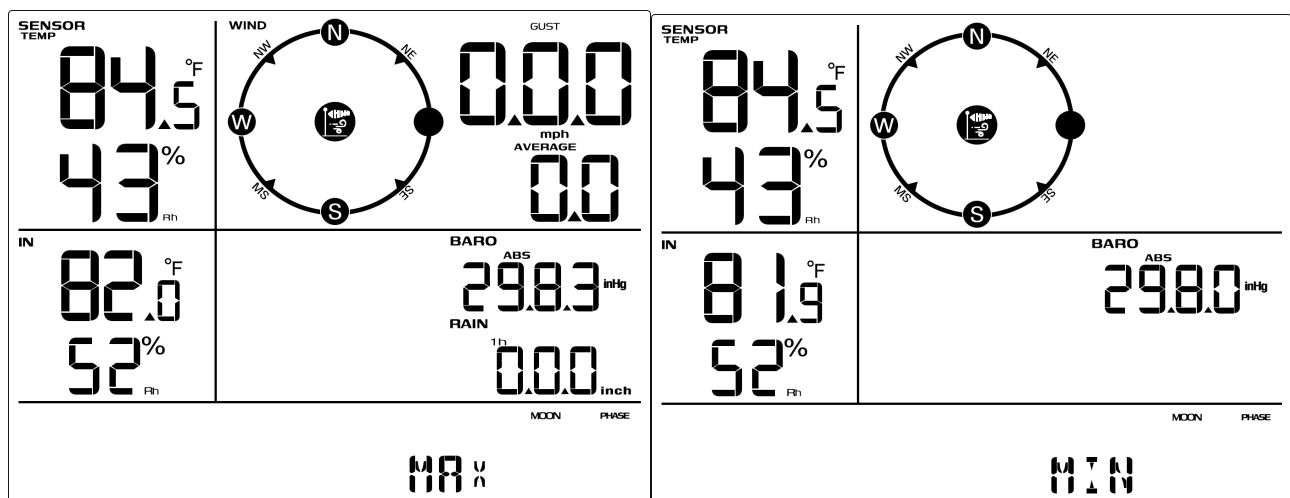


Figure 15(a)

Figure 15 (b)

7.2.1. Alarm Trigger

If the current value reaches the alarm condition, the alarm icon will flash (visual) and the alarm buzzer will sound (audible).

To turn off the buzzer, press any key.

7.2.2. Viewing High/Low Alarm Values

To view the high alarm settings, press (do not hold) the [ALARM] button, and the high alarms will be displayed, as shown in Figure 16 (a).

To view the low alarm settings, press the [ALARM] button again, and the low alarms will be displayed, as shown in Figure 16 (b).

To return to normal mode, press the [ALARM] button again.

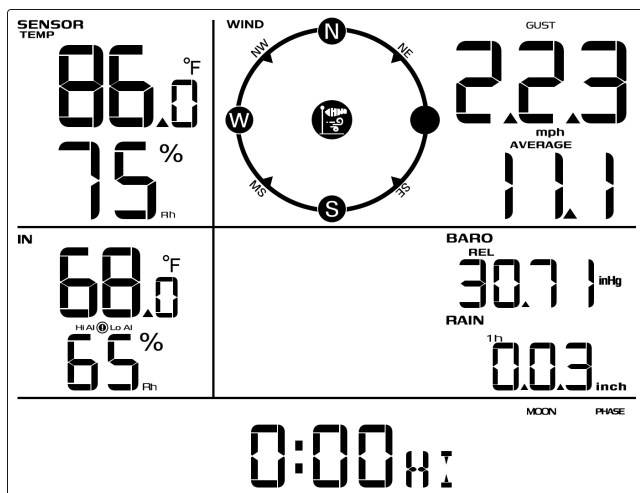


Figure 16 (a)

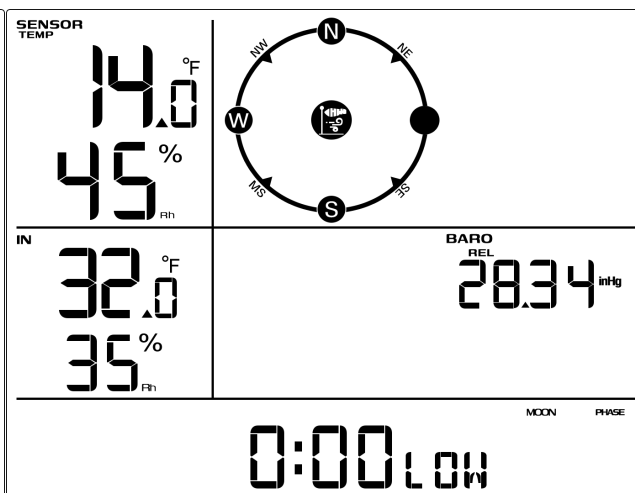


Figure 16(b)

7.2.3. Setting Alarms Value

Please follow the steps below to set the alarm value.

1. Press ALARM key at least 3 seconds to enter the alarm mode.
 2. Next, press the SET key once, the first alarm parameter will begin flashing (alarm hour). (Note: Press the SET key to switch parameters.)
 3. Press the [+] or [-] key to increase or decrease the alarm settings.
 4. Press the ALARM key to turn on (the alarm icon will appear) and off the alarm.
 5. Press the SNOOZE/LIGHT key once at any time to return to the normal mode.
- After 30 seconds of inactivity, the alarm mode will time out and return to normal mode.

7.3. Calibration Mode

7.3.1. Calibration Settings

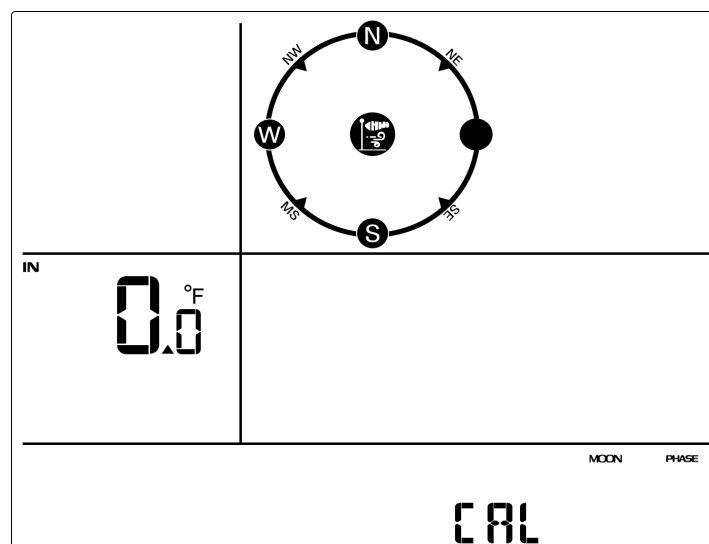


Figure 17

1. Press and hold the [MAX/MIN] buttons at least for 3 seconds to enter calibration mode. The CAL icon will be displayed.

2. Press the SET key to switch.

3. Press the WIND+ key or PRESSURE- key to increase or decrease the temperature reading.

Press and hold the WIND+ key or PRESSURE- key for three seconds to quickly increase or decrease the temperature reading.

(After setting the data, please press the "SET" button to proceed to the next parameter setting. This will save the settings.)

4. Press the ALARM key to reset the current value.

5. Press the LIGHT SNOOZE to exit the mode.

7.3.2. Calibration Ranges

The following chart summarizes the calibration ranges allowed for weather stations.

Parameter	Range
Indoor Temperature	$\pm 9\text{ }^{\circ}\text{F}$ ($\pm 5\text{ }^{\circ}\text{C}$)
Outdoor Temperature	$\pm 9\text{ }^{\circ}\text{F}$ ($\pm 5\text{ }^{\circ}\text{C}$)
Indoor Humidity	$\pm 9\%$
Outdoor Humidity	$\pm 9\%$
Absolute Pressure	$\pm 0.27\text{ inHg}$ ($\pm 6.8\text{ hpa}$)
Relative Pressure	$\pm 0.27\text{ inHg}$ ($\pm 6.8\text{ hpa}$)
Wind Speed	0.5-1.5
Rainfall	0.5-1.5

8. Moon Phase

The following moon phases are displayed according to the calendar date.

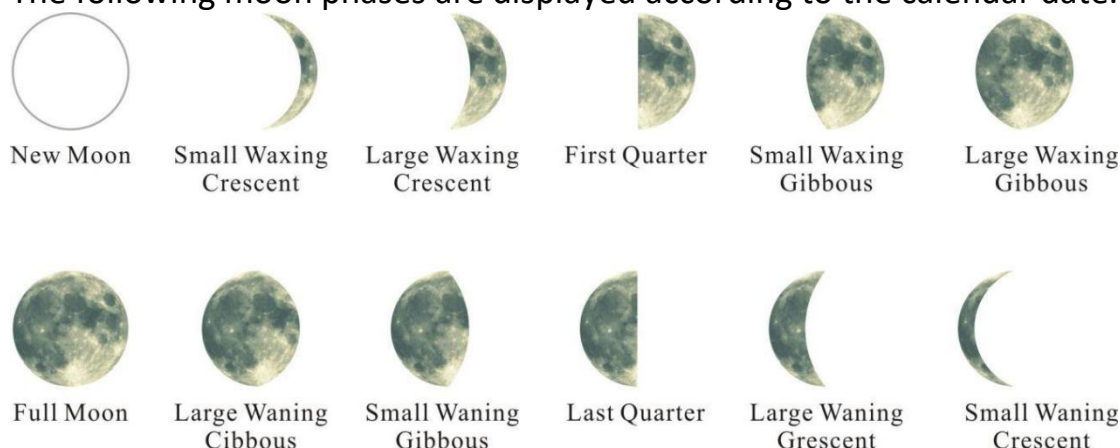


Figure 18

 **Note:** The new moon does not show the phases of the moon.

9. Specifications

The table below provides the specifications of the measured parameters.

Measurement	Range	Accuracy	Resolution
Indoor Temperature	0 to 60 °C (32 to 140°F)	± 1 °C (± 2°F)	0.1 °C(°F)
Outdoor Temperature	-40 to 60 °C (-40 to 140°F)	± 1 °C (± 2°F)	0.1 °C(°F)
Indoor Humidity	10 to 99 %	± 5% (only guaranteed between 20 to 90%)	1%
Outdoor Humidity	10 to 99 %	± 5% (only guaranteed between 20 to 90%)	1%
Rainfall	0 to 9999mm	<15mm: ±1 mm, 15mm to 9999mm: ±7%	<1000mm (0.3mm) >1000mm (1mm)
Wind Direction	0 - 360°	± 10° (16 point compass)	± 1° (16 point compass)
Wind Speed	0 to 50 m/s	2 m/s ~10 m/s:±0.3m/s	0.1 m/s

		, 10m/s ~50 m/s: $\pm 10\%$ (whichever is greater)	
Barometric Pressure	300 to 1100 hpa	± 3 hpa	0.1 hpa

10. Troubleshooting Guide

If your question is not answered here, you can contact us by E-mail, Phone, and on our Website:

Customer Support E-mail: info@infisync.net

Website: <https://www.infisync.net/>

Customer Support Phone: +1 (888) 513-9823 (Mon-Fri:10 a.m. - 6 p.m. EST)

Problem	Solution
The wireless remote control is not reporting to the console. The display console has dotted lines; dashes (--.-).	If any sensor communication is lost, dashes (--.-) will appear on the screen. To reacquire the signal, press and hold the TEMP button for 3 seconds, select the lost sensor, and the remote search icon will display continuously. When the signal is reacquired, the remote search icon will turn off and the current value will be displayed. You can also press the reset button. After the transmitter is powered on, if the indicator light blinks every 60 seconds it means the outdoor unit is working properly. Also, you can replace the batteries in the transmitter with new ones. Install a new set of batteries for the remote sensor. In cold weather environments, install lithium batteries. Make sure the remote sensor is not transmitting through solid metal (as an RF shield) or earth barriers (under a mountain). Keep the display console away from devices that

	generate electrical noise, such as computers, televisions, and other wireless transmitters or receivers.
Outdoor temperature inaccurate	Please check if the outdoor temperature display shows dew point data. If it does, please press the TEMP button to switch the data.
Display Restore Factory Settings	To reset the console to factory default settings (including weather server and display settings), follow these steps: 1. Remove the battery and disconnect the power adapter to power off the console. 2. Connect the power adapter and power on. 3. When all layouts are displayed on the screen, press and hold the WIND + key at the same time, which will prompt two beeps until the console boot process is completed. 4. Replace the battery.
Indoor temperature and humidity data is incorrect/the display shows incomplete data	You can reset the display console to factory defaults by pressing and holding the PRESSURE- key for at least three seconds while plugging in the power supply. Then unplug the display and plug it back in. (Remove the batteries before doing this). If any data is not displayed, press and hold the WIND+ key for three seconds until a click is heard and all data is displayed as dashed lines. The display will reacquire the signal from the transmitter. Once the signal is reacquired, all data will be displayed.
Display brightness is very dim	Adjust the backlight: If the brightness cannot be adjusted, it means that the power adapter or the display interface has a poor contact problem.
Weather forecast is inaccurate	Weather Forecast icon predicts conditions for the next 12 to 24 hours, not current conditions. If you are just starting to use the weather station, wait for about a week for the pressure sensor to slowly adapt to the environment, and then adjust

	the data and weather forecast. After using it for a while, if the weather forecast is still inaccurate, you can follow the steps in the manual to manually set the weather icon to show the actual weather.
Rainfall display is incorrect/zero	Please check and verify the following points when you find you rainfall is not working or inaccurate: 1. Make sure that the level bubble is seated in the small black circle in the installation. Sloping installation might cause incorrect reading or even not working. 2. Shake the sensor array back and forth. After hearing the click sound inside the sensor array, observe whether the rainfall reading in the console changes. 3. Check whether the funnel in the rain collector was blocked by tree leaves or debris. Remove the rain collector to check whether the rain tip was blocked by insects or debris. 4. Check whether different rainfall histories are correct. Check the Quick Mode part in the instruction manual to know how to get rainfall histories in different periods.

11. Warranty Information

We provides a 1-year limited warranty against manufacturing defects in materials and workmanship on this product.

This limited warranty takes effect on the date of original purchase and is valid only for the product purchased and only for the original purchaser of this product. To obtain warranty service, the purchaser must contact us to determine the problem and service procedure.

Warranty service is provided solely by us. Please provide the original sales invoice (with the date shown) as proof of purchase if required.

Our warranty covers all defects in materials and workmanship except:

- (1) Damage caused by accident, unreasonable use or neglect (lack of reasonable and necessary maintenance);
- (2) Damage caused by failure to follow the instructions in the user's manual;
- (3) Damage caused by self-repair or alteration;
- (4) Equipment not intended for personal use;
- (5) Applications and uses of this product that do not correspond to the intended use;
- (6) The product is unable to receive signals due to any source of interference or metal obstruction;

FCC Statement

1. 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, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.