EN TE93WIFI
Professional smart WIFI weather station

SOLIGHT

Thank you for purchasing our equipment. Please read this manual carefully and heed the safety warnings and instructions before installing, using or repairing the equipment. This will ensure not only the protection of persons, but also the long life of the equipment.

TECHNICAL PARAMETERS

Luminous flux	120lm
Chromaticity temperature	3000K, 5000K, RGB
Batteries	Li-Ion 3,7V 1200mAh
Battery life (min./max.)	4/8 h.
Charging duration	3 h
Power	USB-C
Dimensions	73 x 38 mm

GENERAL INFORMATION

- Calendar to 2099
- Automatic time calibration from the network
- Days of the week in 15 user-selectable languages: English, German, French, Spanish, Italian, Dutch, Danish, Portuguese, Norwegian, Swedish, Polish, Finnish, Czech, Hungarian and Slovak.
- Two alarm clocks
- Auto-repeat wake-up function (OFF or 5~60min)
- Temperature:
  Maximum display range of internal temperature detection: -20°C to 50°C
  Maximum outdoor temperature display range: -40°C to 70°C
- Humidity:
  Maximum display range for indoor and outdoor humidity detection: 20% to 95%
  Level 5 indoor and outdoor comfort display - temperature and humidity data source
- Air pressure:
  Maximum display range of atmospheric pressure measurement: 600 to 1100 hPa (17.72 to 32.48 inHg or 450 to 825.1 mmHg
- Rain:
  Maximum rainfall measurement display range: 0 to 9999 mm (0-393.6 inches)
- The wind:
  Maximum range displayed for wind speed measurement: 0 to 180 km/h (0 to 111 mph)
  Maximum range displayed for wind direction measurement: 0 to 359 degrees (0.5 m)
  Display of 12 Beaufort wind scales
- Light and UV index
  Maximum display range for light intensity measurement: 0 to 128 klux (0 to 1378 kfc)
  Maximum UV index display range: 0 to 15 degrees
  Level 5 Indication of UVI exposure level to sunlight
- Wireless outdoor sensor
  Transmitting frequency 433.92 MHz
  Transmission range 100 meters in open space, without walls or floors
- Record temperature, humidity, wind speed, precipitation and light intensity
- Display sensations such as temperature, wind chill temperature, heat index, dew point temperature
- Connection directly to wifi network, connection via Tuya Smart app
- Upload the detected meteorological data (temperature, humidity, wind speed, etc.) to the graffiti intelligence, display it in the APP and perform the data statistics curve display
- Level 4 display backlight
- Power supply for the weather station:
  Input voltage: DC 5V more than 1A (power cord or power adapter).
  Battery: 2 x LR6 AA 1,5V
- Wireless sensor:
  Battery: 3 x LR6 AAA 1.5V
- Wireless Additional Temperature Sensor| Humidity (Sensor not included, can be purchased with TE9S-WiFi)
  Battery:2 x LR6 AAA 1.5V

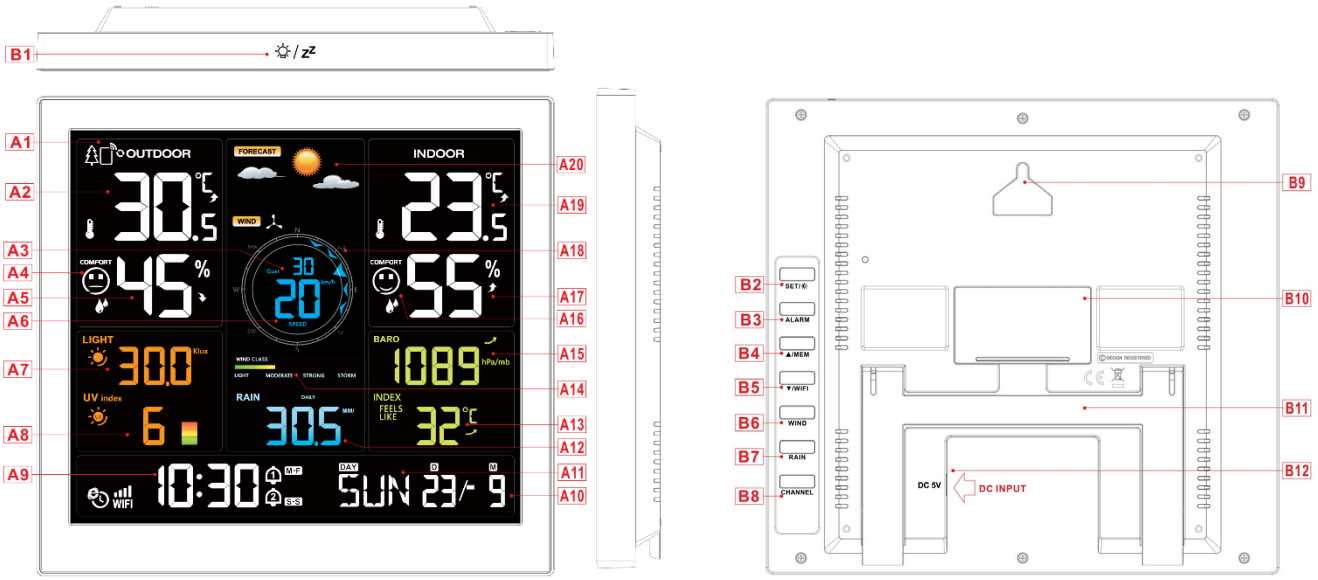
NOTE:
The operating temperature of the main unit of the weather station can operate at temperatures from 0°C to 50°C. When temperatures are exceeded, the device may show measurement inaccuracy. Use only within the specified range.

The wireless remote sensor can operate at temperatures from -30 °C to +70 °C. Select the correct battery according to the temperature limit of the wireless sensor

- The alkaline zinc-manganese battery can operate at -20°C to +60°C.
- The polymer lithium-ion rechargeable battery can operate at temperatures from -40°C to +70°C.

DESCRIPTION OF EQUIPMENT

Weather station description:



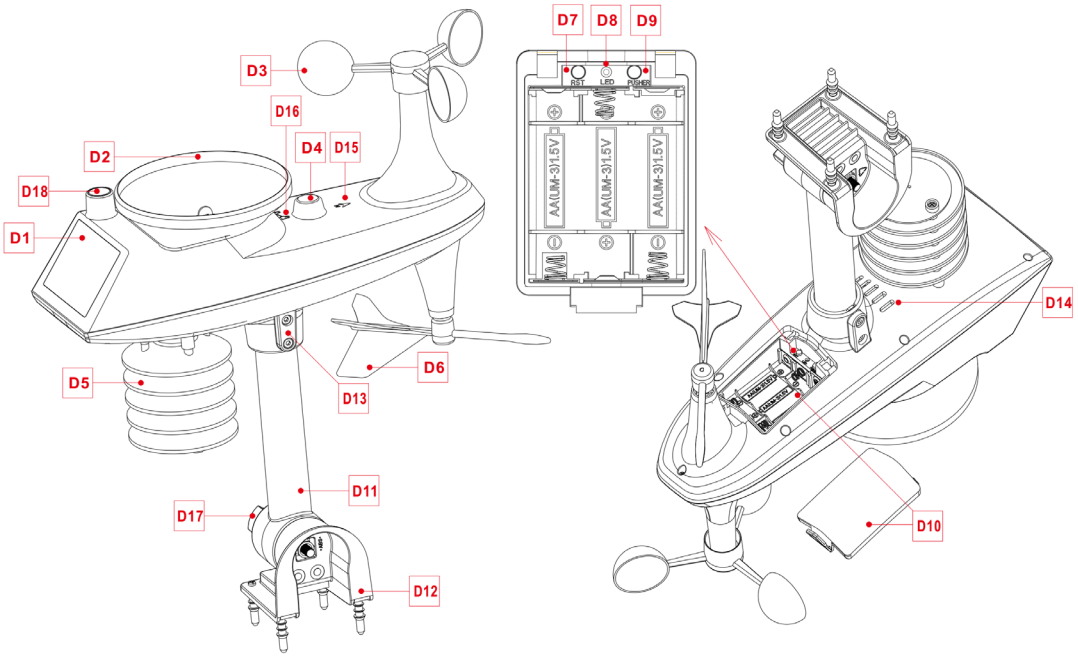
A1	Outdoor wireless channel
A2	Outdoor temperature
A3	Wind direction / wind gusts / average wind speed
A4	An icon of outdoor comfort
A5	Outdoor humidity
A6	Wind speed value
A7	Light intensity
A8	UV index
A9	Time
A10	Calendar
A11	Day of the week
A12	Precipitation
A13	Feeling temperature
A14	Beaufort scale
A15	Air pressure
A16	An icon of indoor comfort
A17	Indoor humidity
A18	Wind direction wheel
A19	Indoor temperature
A20	Weather forecast

	Network time icon
	Low battery icon
1	Alarm icon 1
2	Alarm clock icon 2
M-F	Repeat wake-up icon from: Monday to Friday
S-S	Repeat wake-up icon from: Saturday-Sunday
Z^{Z}	Alarm snooze icon
	Multi-Combination Wireless Sensor Icon

	Wireless reception icon
	Wireless channel loop icon
WIFI	WIFI icon
	WIFI signal strength indicator
	Temperature | humidity | pressure upward trend arrow
	Temperature | humidity | pressure constant trend arrow
	Temperature | humidity | pressure downward trend arrow
1 2 3	3 channels of wireless remote temperature | humidity sensor

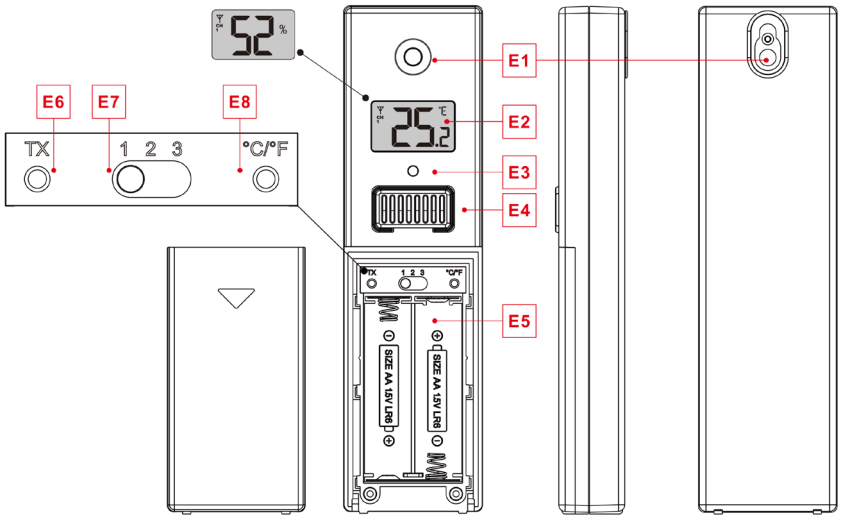
B1 - / Z^{Z}	Snooze/Backlit button
B2 - SET/	Time, unit and brightness setting button
B3 - ALAM	Alarm setting button
B4 - /MEM▲	Scroll "up" and memory button
B5 - /WIFI▼	Scroll button "down" and WIFI pairing
B6 - WIND	Wind speed related control button
B7	Rain related operation button
B8	Channel switching button
B9	Hanging hole
B10	Battery compartment
B11	Supporting frame
B12	Power socket-TYP-C

Description of the Multi-Combination Wireless Remote Sensor:



D1	Solar panel Wind blades Temperature | humidity induction box	**D2**	Rain Funnel
D7	Reset button	**D4**	Bubble level
D9	Manual signal transmission button	**D6**	Directional wind vane
D11	Carrier rod	**D8**	LED indicator
D13	Socket head cap screws	**D10**	Battery compartment
D15	Northbound marker	**D12**	Fixed base
D17	Large nut for fixing the support rod and base	**D14**	Drain holes for rain sensor
		D16	Rain Funnel Rotation Mark
		D18	Light and UV sensors

Wireless additional humidity | temperature sensor (to be purchased):



E1	Hanging hole LED indicator Battery compartment	**E2**	LCD display
E7	Channel switcher (1, 2, 3 channels)	**E4**	Temperature | Humidity sensing aperture
		E6	Manual transmit signal button "TX"
		E8	Reset button

INSTALLATION AND START-UP

Items that you will be installing and are not included in the package:

- Phillips head screwdriver with hexagon socket
- Batteries:
  2 alkaline or lithium AA batteries for the weather station
  3 alkaline or lithium AA batteries for multi sensor

COMMENT:
After installing the batteries, keep the sensors and weather station at a distance of 0.15-0.3 meters or 5-10 feet for at least 15 minutes to allow the sensors and station to reconnect.

1. Insert 3xAA batteries into the Multi-Combination Wireless Sensor.
2. Plug the power cord into the weather station.
3. Download the Tuya mobile app and register. (When installing, enable the app to access location, network and Bluetooth)
4. Insert 2 x AA batteries into the weather station (the settings will not be lost if the power adapter is unexpectedly switched off).
5. After 5 minutes, relocate the multicombined sensor to the selected outdoor location.

DEVICE PAIRING

- When the weather station is started, it automatically enters the pairing mode (AP) and "00 AP" is displayed on the time bar. After a few seconds it switches to "01 AP" and now the pairing can start.

1. Open the Tuya app. Click the + in the top right corner, select Add Device - Fig. 1
2. Once the app finds the device, click Go to add - Fig. 2.
3. Enter the name and password of your WiFi network - Fig. 3.
4. Now the pairing process will take place - Fig. 4.
5. When pairing is complete, click Next - Fig. 5.
6. The pairing is completed, the data from the weather station is displayed - Fig. 6.

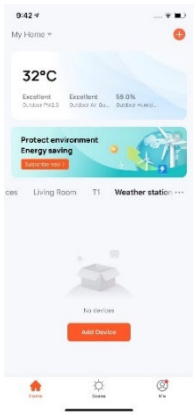


Fig. 1

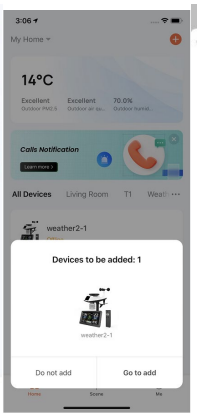


Fig. 2

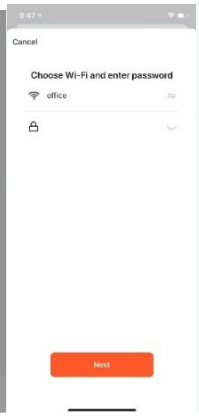


Fig. 3

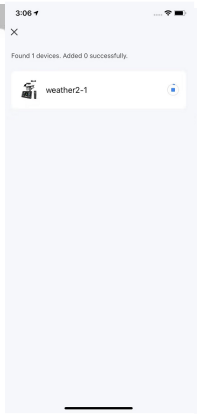


Fig. 4

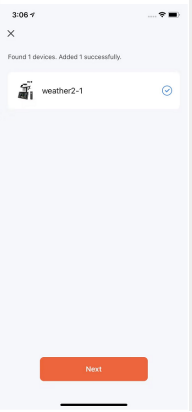


Fig. 5

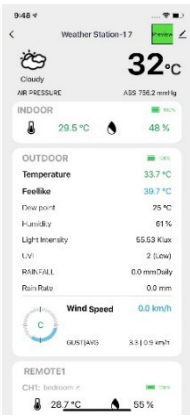
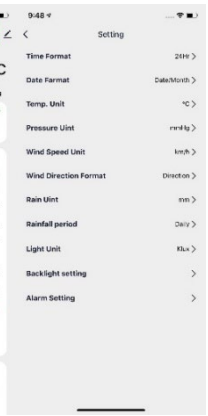


Fig. 6
Main interface



Secondary interface

COMMENT:

- The device can only be connected to a 2.4GHz network.
- If the device does not enter pairing mode automatically when you first turn it on, you can press and hold the "-" button for more than 3 seconds to enter pairing mode manually, or disconnect and connect the power supply.
- Once pairing is complete, the weather station automatically connects to the WLAN, automatically updates the time and starts searching for signals from remote wireless sensors. The icon flashes for approximately 3 minutes. During this time, if the outdoor wireless sensor is operating normally, the weather station will start searching for the remote wireless sensor signal in about 1-2 minutes. When the signal is received, the display will show the outdoor temperature and humidity.

WIRELESS SENSOR CONNECTION

- The weather station can be connected to 1 wireless sensor Multi Combination sensor and 3 different channels of wireless temperature | humidity sensor (not included)
- The weather station automatically finds all wireless sensors within 3 minutes of switching on and registers the sensor ID. Each sensor will generate a random ID to distinguish the sensors when powered on.
- Press the "CHANNEL" button on the main unit to switch between sensors. It will appear in the OUTDOOR section of the display.

Remark

- The channel icon (where A1 is displayed) shows the number of channels (wireless sensors) | CH1 | CH2 | CH3 (represents the three channels of wireless temperature and humidity sensors).
- In loop mode, switches to one channel in the OUT column every 5 seconds in the sequence | CH1 | CH2 | CH3. If a channel has no signal, it is automatically skipped during the loop.
- In loop mode, only the temperature and humidity values are transferred and the wind speed, wind direction, precipitation, etc. are not transferred and the values are still obtained from the multi-combined wireless sensor.
- If the weather station loses signals from the sensor or the sensor is not connected to the channel, the channel value is displayed as "--".

Adding/replacing a sensor

- If you need to add a new sensor or replace a sensor, press the "CHANNEL" button to switch to the appropriate communication and then press and hold the "CHANNEL" button for more than 3 seconds. The weather station will again search for a signal for 3 minutes and connect the new sensor.

COMMENT:

- When the low battery icon appears on the channel icon (display position A15), replace the battery. Then follow the above steps to reconnect the wireless sensor to the weather station.

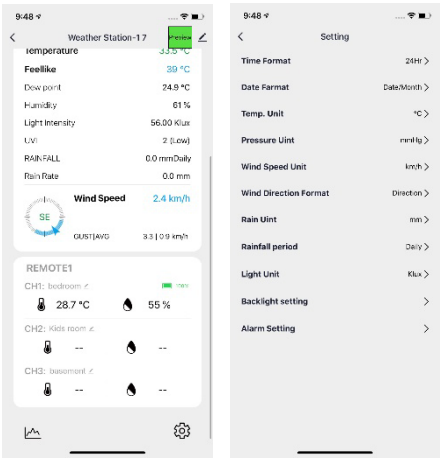
TIME AND UNITS SETTINGS

- Press and hold the SET/☼ button for 3 seconds to enter setup mode.
- Use the▲ and▼ buttons to change the setting values. Confirm the settings and move to the next setting parameter by pressing the SET/☼ button.

Order of settings and their parameters:

1. Temperature unit: °C | °F
2. Pressure unit: hPa| inHg | mmHg
3. Air pressure setting: absolute or relative
4. Wind speed unit: km/h | mph | m/s | knots
5. Selecting the degree (angle) or direction (letter) of the wind
6. Precipitation unit: mm| inch
7. Light unit: Kfc | (W/m2
8. Clock format: | 12Hr Clock format: 24Hr
9. Hours
10. Minutes
11. Calendar display format: Date/Month | Date/Month
12. Year
13. Moon
14. Date
15. Language of the week display: 15 countries in total
16. Weather forecast

NOTE: If the device is connected to a mobile app, the time is set automatically. Click ⚙ in the mobile app to set additional units and parameters. See about.



ALARM

Alarm settings:

- Press and hold the ALARM button until the HOURS button starts flashing.
  Use the▲ and▼ buttons to set the hour.
- Press the ALARM button to confirm the previous settings and go to the MINUTE settings.
  Use the▲ and▼ buttons to set the minutes.
- Press the ALARM button to confirm the previous settings and move on to the wake-up day settings.
  Use the▲ and▼ buttons to set M-F / M-S / S-S (Alarm active: Mon-Fri / Mon-Sun / Sat-Sun).
- Press the ALARM button to confirm the previous settings and go to the ALARM SUSPEND setting.
  Use the▲ and▼ buttons to set the snooze minutes (05-60) or OFF (Snooze Off).

  Press the ALARM button to confirm the previous settings and go to the Alarm 2 settings. Follow the previous steps to set the parameters for Alarm Clock 2.

COMMENT:

- Press the "ALARM" button to display Alarm 1, another press to display Alarm 2, another press to exit the display mode.
- In the Alarm1 or Alarm2 time display mode, press the▲ /MEM button to turn the alarm off/on.
- If Alarm1 or Alarm2 is running, the corresponding icon① or② will be displayed. The icons M-F | S-S (Monday-Friday | Sunday-Saturday | or both at the same time: NO-Friday) will also be displayed.
- Alarm sounds for 2 minutes. To turn it off, press any button except the☼ / zz button. If you don't turn it off, it will automatically turn itself off after 2 minutes and will ring again in 24 hours.
- During wake-up, the alarm will increase the volume of the tone 4 times.
- To postpone, press the **SET/**☼ button.

Setting the alarm in the mobile app

Click on the " ⚙ " icon (Fig.1) on the main screen of the application, switch to the settings (Fig.2). Then click on "Alarm Setting" to set the alarm times (Fig. 3; Fig. 4).

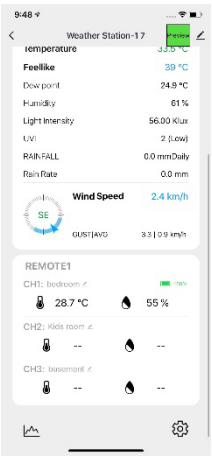


Fig. 1

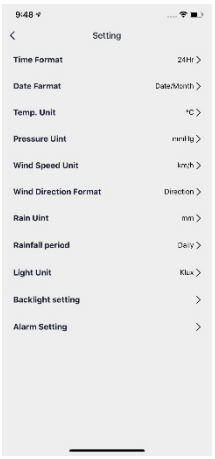
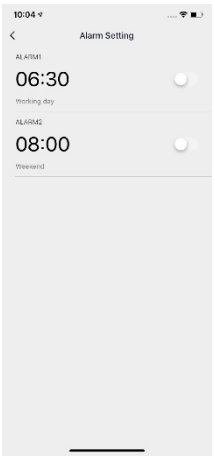
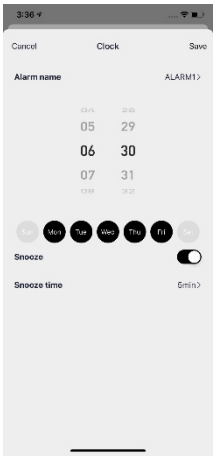


Fig. 2





TEMPERATURE | HUMIDITY| LIGHT INTENSITY| UV INDEX| AIR PRESSURE| RECORD| TREND

Press the▼ /WIFI button to toggle the Feels like, Dew point, Heat index, Wind chill.

- The sensible temperature, dew point temperature, heat index, and wind sensible temperature refer to the value detected by the multi-combined wireless remote sensor.
- The device will always return to the sensible temperature display after 20 seconds of viewing the other parameters.
- When switching parameters, you can use the▲ /MEM button to display the maximum and minimum measured values (MIN and MAX are displayed).
- You can clear the maximum and minimum measurement values by pressing and holding the▲ /MEM button for approx. 3 seconds. After deleting the measurement, the - will be displayed and then the current values will be saved.
- Indoor Temperature, Humidity and Outdoor Remote Temperature, Humidity, Light Intensity, Sensible Temperature and Air Pressure will have the trend change displayed:

  ↗ The value increases
  → The value remains the same
  ↘ The value is decreasing

- There are 5 status indications for the UV index:
  LOW (0 to 2), MODERATE (3 to 5), HIGH (6 to 7), VERY HIGH (8 to 10), EXTREME (11+)

WIND | HISTORY

In the main display interface, press and hold the WIND button for 3 seconds to convert the display to wind direction, wind gusts or average wind speed (press the WIND button again for 3 seconds to switch between the readings).

WIND SPEED: average speed over the last 30 seconds
GUST WIND SPEED: maximum average wind speed every 3 seconds for 30 seconds.
AGE WIND SPEED:10 minute average wind speed
WIND DIRECTION: in letters or degrees

View history

- Press and release the WIND button to view a history of maximum wind and gust values:

One hour (default): the elapsed 60-minute period (default record of the highest speed already displayed)
24 hours: the elapsed 24-hour period since the last record.
7 days: the last 7-day period since the last record.
Month: January: defined by the calendar month, i.e. 1 January - 31 January.
Year: defined by the calendar year, i.e. 1 January - 31 December.

In wind history viewing mode, press and hold the **SET/☼** button for 3 seconds to clear the entire wind history.

RAIN | HISTORY

In the main display interface, press and hold the RAIN button for 3 seconds to switch the display to cumulative rainfall or rainfall intensity.

- **Precipitation (RAIN):** displays precipitation from the current to the previous period:
  event | hourly | daily | weekly | monthly | yearly | total
  (*event | hourly | daily | weekly | monthly | annual | total*). To toggle, press the RAIN button repeatedly

  EVENT: The cumulative value of the current precipitation period. If it does not rain for more than 30 minutes, it means the end of the current rainfall period.
  HOURLY: Total precipitation for the current hour.
  DAILY: Total precipitation for today.
  WEEKLY (weekend): total rainfall for the current week.
  MONTHLY: Total precipitation for the current month.
  YEARLY: Total rainfall for the current year.
  TOTAL: The cumulative value of the total running time since the weather station was started.

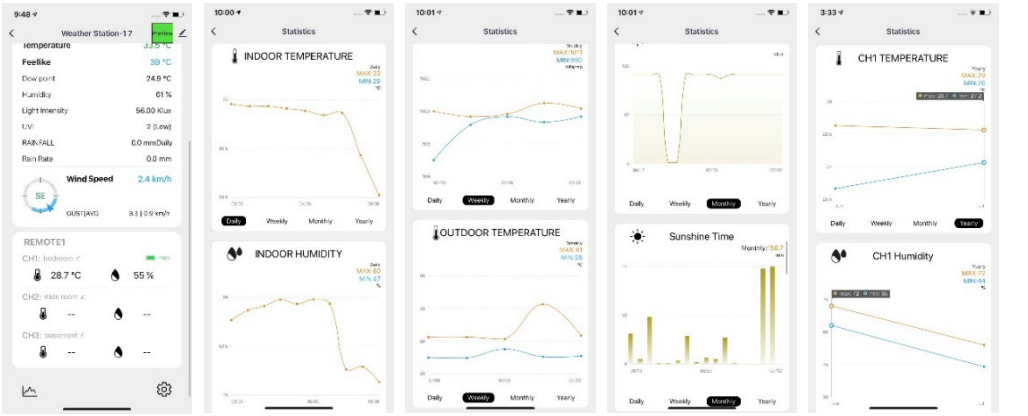
- **Rainfall intensity (RAIN RATE):** indicates the average hourly rainfall intensity during current or daily rainfall events.

COMMENT:

- In rain history viewing mode, press and hold the SET/☀ button for 3 seconds to clear the entire rain history. The rain history is reset to 0 mm (in).
- Wait 20 seconds without pressing any button, or double tap the "☀ / zz " touch area to exit the display mode. The weather station will return to the normal time display and show the last rainfall record you viewed. If the rainfall intensity was displayed before entering the observation mode, the rainfall intensity will still be displayed after returning to the normal time display mode.

TEMPERATURE | HUMIDITY | ATMOSPHERIC PRESSURE | WIND | PRECIPITATION | LIGHT INTENSITY | UV INDEX IN THE MOBILE APP

Through the mobile app, you can view the historical changes of the various measurements reported by the weather station and display them in the form of a curve chart. Click on the " " icon on the home screen to enter this view, where you can view a curve chart of daily | weekly | monthly | yearly changes.



Main view in the app | Daily Chart | Weekly chart | Monthly Chart | Annual chart

WEATHER FORECAST

The weather station calculates the weather forecast for the next 12 hours or so based on the atmospheric pressure trend. Of course, this forecast cannot be compared with professional weather services that use satellites and powerful computers. It provides only an approximate indication of the weather trend on a small local scale.
Always take into account the weather forecast from your local weather service together with the forecast from your weather station. If the information from your device differs from that of your local weather service, please follow the advice of that service.

COMMENT:

- After 7-10 days of air pressure calibration, the weather forecast will be stable with 70-75% accuracy.
- The Snowfall icon will only appear if the outside temperature (refers to the temperature detected by multiple combined sensors) is below -4°C and the forecast would be Rain or Thunder showers.

The weather station displays the following weather icons:

Sunny	Polar	Overcast	Rain	Storm	Snowfall
FORECAST	FORECAST	FORECAST	FORECAST	FORECAST	FORECAST

DISPLAY BACKLIGHT

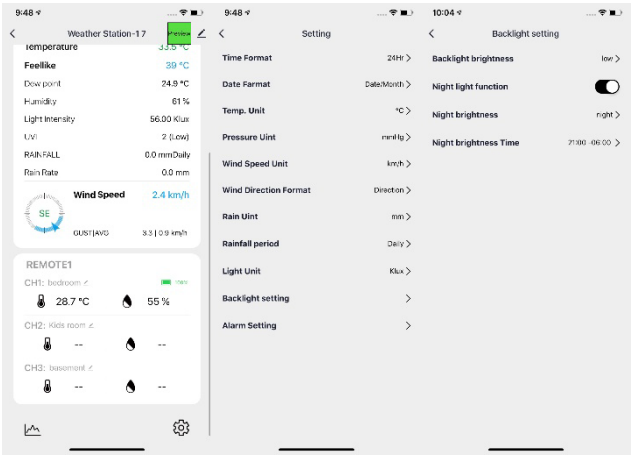
- If the product is powered by batteries, press the "☼/ᶻᶻ " button. The backlight is on for 15 seconds. When powered by an adapter, the batteries are automatically disconnected from the power supply and the backlight will always be on (depending on the setting).
- Press the "SET/☼ " button to adjust the backlight brightness, you can set 5 states: 4 backlight levels and off backlight. When the backlight brightness is not at the maximum brightness, press the "☼/ᶻᶻ " button. The backlight will change to maximum brightness for 20 seconds.
- It can also set the backlight to dim automatically at night. Press and hold the "☼/ᶻᶻ " button for about 5 seconds to enter the night mode settings.

▶ The weather station can automatically dim the backlight at night. Press and hold the " SET/☼ " button for more than 3 seconds to enter the night mode setting.
▶ Use the up and down arrow keys to select on or off for night mode.
▶ Press the "SET/☼ " button to access the backlight level settings (L1, L2, L3), use the arrow keys to select an option and press "SET/☼ ".
▶ You get to the time settings, the first one is the time to turn on the night mode (ENT), here you set the hours and minutes. Press the "SET/☼ " button to get to the night mode off time setting (EXI), here you set the hours and minutes. Press the "SET/☼ " button to exit the settings.

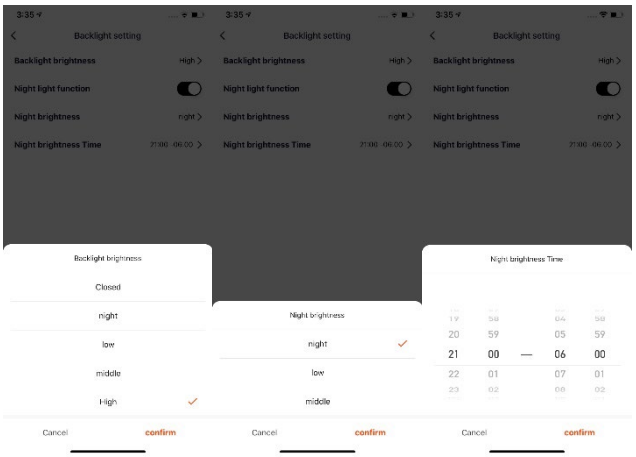
Note: If you do not press any buttons for 20 seconds, or tap the "SET/☼ " touch area twice, the setup mode will exit

Setting the backlight via the mobile app:

- On the main screen, click on the " ⚙ " setting and then click on Backlight setting. Follow the application's instructions.



Main screen Settings Backlight settings



Settings options

COMMENT:

- If the night backlight is activated, the◔ icon will be displayed. When the time for entering night mode is reached, the backlight will automatically switch to the night mode brightness setting, and when the time for exiting night mode is reached, the backlight will return to its original brightness.
- In night mode, the backlight can be switched to the highest brightness for 15 seconds by pressing and releasing the "☼/ᶻᶻ " button.

LOW BATTERY

If the battery icon "▭ " is displayed in the "Indoor sensor" column, the weather station battery must be replaced as soon as possible.

ASSEMBLY

Multi-Combined Wireless Remote Sensor

- Install in an open area at a distance of 15 metres in all directions
- The sensor must be mounted on a stable platform or bracket that is placed 1.5 m above the ground.
- The sensor base is bolted to the platform and support frame. Tighten the large nut that secures the support bar to the base.
- When installing, adjust the sensor body so that the solar panel faces south, otherwise the wind direction will be wrong. Note the embossed north "N" mark on the top of the sensor (a compass is required for correction and the embossed north "N" mark is the same as the compass "N").
- When installing the sensor, use the top bubble level to secure the sensor level, otherwise the accuracy of the precipitation reading will be affected.
- After completing the above two steps, secure the two hexagon socket head screws on the side of the sensor body.
- When installing, the fixing screws of the wind bowl and wind direction indicator must be tightened and retightened.
- The rain sensor structure should be cleaned regularly (recommended cycle 1-3 months depending on the frequency of rain):
  1. Remove the rainwater funnel (rotate the funnel according to the illustrated direction of rotation on the console).
  2. Carefully remove dirt or insects from the rain sensor.
  3. Remove debris from the rainwater funnel itself, especially debris from the funnel drain.
  4. Remove debris from the drain.
  5. Reinstall the rainwater bucket.

Remark:

- Do not apply oil to the rain sensor.
- Make sure that the wireless sensor is installed within 100 meters of the weather station (empty, free of obstacles). Depending on the thickness of the obstacle between the wireless sensor and the weather station, the distance should be shortened as much as possible (the distance after the wireless signal has passed through the obstacle is shortened), otherwise the data transmission may be disturbed.

Wireless sensor Temperature | Humidity
(Not included, must be purchased)

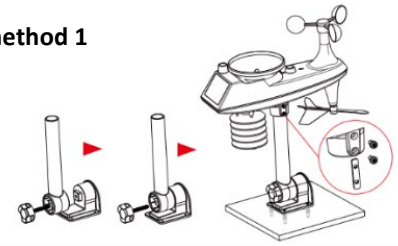
Option 1:

- Fasten the mounting screws to the wall.
- Attach the wireless sensor to the screw.

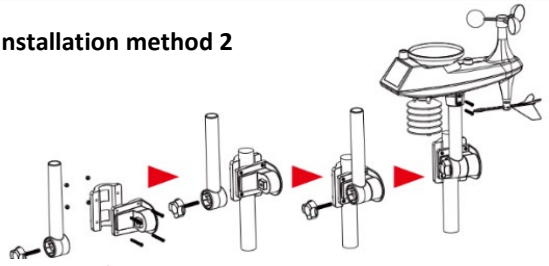
Option 2

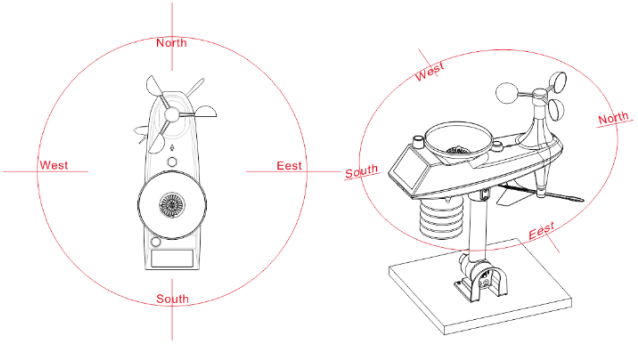
- Insert the mounting screws through the front of the wireless sensor into the wall.
- Tighten the screws so that they fit snugly (do not overtighten).
- If the wireless sensor is located outdoors, install the wireless temperature | humidity sensor on a north-facing wall or in any shade. The sunlight will make it even higher.
- A railing under the eaves or under the terrace is preferred.
- Make sure that the wireless sensor is installed vertically to vent moisture.

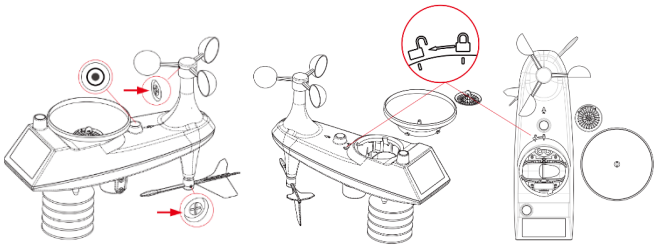
Installation method 1



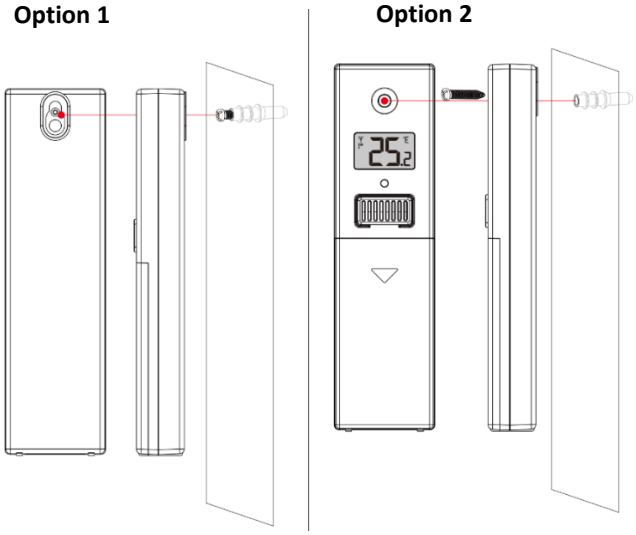
Installation method 2







Option 1 **Option 2**



The product has been issued with a CE declaration of conformity in accordance with the applicable regulations.
On request from the manufacturer: info@solight.cz, or downloadable from www.solight.cz/en.

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