



BRESSER 9080600 7 in 1 Weather Station with Color Display Installation Guide

[Home](#) » [BRESSER](#) » BRESSER 9080600 7 in 1 Weather Station with Color Display Installation Guide 

Contents

- [1 BRESSER 9080600 7 in 1 Weather Station with Color Display](#)
- [2 Product Usage Instructions](#)
- [3 Introduction](#)
- [4 Pre installation](#)
- [5 Getting started](#)
- [6 Display console functions and operation](#)
- [7 Connect console to WI-FI](#)
- [8 Create accounts for weather server](#)
- [9 View WUnderground & Weathercloud live data](#)
- [10 Maintenance](#)
- [11 Troubleshoot](#)
- [12 Specifications](#)
- [13 CE Declaration of Conformity](#)
- [14 Warranty & Service](#)
- [15 Documents / Resources](#)
 - [15.1 References](#)
- [16 Related Posts](#)



BRESSER 9080600 7 in 1 Weather Station with Color Display



Specifications

- Product Name: WLAN WETTER CENTER 7-IN-1 WIFI WEATHER CENTER 7-IN-1
- Model Number: 9080600
- Compatible with: AWEKAS, Wunderground, Weathercloud, PWSweather
- App Download: WSLINK

Product Usage Instructions

Quick Start Guide

The following quick start guide provides the necessary steps to install, operate, and upload data to the internet using the weather station.

1. Turn on the 7-in-1 wireless multisensor
2. Turn on the base station and pair it with the multisensor
3. Manually set date and time (not required if connected to the internet with time synchronization function)
4. Create an account and register the weather station with WUunderground and/or Weathercloud
5. Connect the weather station to the WSLink APP via Wi-Fi

Pre-installation

Before installation, familiarize yourself with the components of the 7-in-1 multisensor

- Antenna
- Rain gauge
- UV/Light sensor
- Mounting rod and base
- Wind cups and vane

- Radiation shield
- Red LED indicator
- Reset button
- Battery compartment
- Mounting clamp
- Installation instructions for the wireless 7-in-1 multisensor

Installing the Wireless 7-in-1 Multisensor

1. Ensure the waterproof O-ring is properly in place
2. Align towards the North
3. Mount the wireless 7-in-1 multisensor with the wind measurement end facing North to align the wind vane correctly

FAQs

- **Q: How can I register my weather station with online platforms like WUnderground and Weathercloud?**
 - A: To register your weather station, follow the steps outlined in the quick start guide to create an account and register your device on the respective platforms.
- **Q: Is it necessary to manually set the date and time if my weather station is connected to the internet?**
 - A: If your weather station is connected to the internet and has the time synchronization function enabled, manual setting of date and time is not required.

WLAN WETTER CENTER 7-IN-1

WIFI WEATHER CENTER 7-IN-1

Operating instructions

Visit our website via the following QR Code or web link to find further information on this product or the available translations of these instructions.

WARRANTY



www.bresser.de/warranty_terms

RECYCLAGE (TRIMAN/FRANCE)



www.bresser.de/P9080600

www.quefairedemesdechets.fr

WORKS WITH



- <https://awekas.at>
- <https://www.wunderground.com>
- <https://weathercloud.net>
- <https://pwsweather.com>

APP DOWNLOAD

WSLINK



Weather Underground is a registered trademark of The Weather Channel, LLC. both in the United States and internationally. The Weather Underground Logo is a trademark of Weather Underground, LLC. Find out more about Weather Underground at www.wunderground.com

Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc., registered in the U.S. and other countries. Google Play and the Google Play logo are trademarks of Google Inc.

About this user's manual



This symbol represents a warning. To ensure safe use, always adhere to the instructions described in this documentation.



This symbol is followed by a user's tip.



Precautions

- Keeping and reading the “User manual” is highly recommended. The manufacturer and supplier cannot accept any responsibility for any incorrect readings, export data lost and any consequences that occur should an inaccurate reading take place.
- Images shown in this manual may differ from the actual display.
- The contents of this manual may not be reproduced without the permission of the manufacturer.
- Technical specifications and user manual contents for this product are subject to change without notice.
- This product is not to be used for medical purposes or for public information
- Do not subject the unit to excessive force, shock, dust, temperature or humidity.
- Do not cover the ventilation holes with any items such as newspapers, curtains etc.
- Do not immerse the unit in water. If you spill liquid over it, dry it immediately with a soft, lint-free cloth.
- Do not clean the unit with abrasive or corrosive materials.
- Do not tamper with the unit’s internal components. This invalidates the warranty.
- Placement of this product on certain types of wood may result in damage to its finishing for which manufacturer will not be responsible. Consult the furniture manufacturer’s care instructions for information.
- Only use attachments / accessories specified by the manufacturer.
- This product is not a toy. Keep out of the reach of children.
- The console is intended to be used only indoors.
- Place the console at least 20cm from nearby persons.
- **Console working temperature:** -5°C ~ 50°C

Warning

- Do not ingest the battery. Chemical Burn Hazard.
- Keep new and used batteries apart. If battery door does not close securely, stop using the product and keep it away from children.
- If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.
- An appliance is only suitable for mounting at height $\leq 2\text{m}$. (Equipment mass $\leq 1\text{kg}$)
- This product is intended for use only with the adaptor provided:
 - **Manufacturer:** Dong Guan Shi Jie Hua Xu Electronics Factory
 - **Model:** HX075B-0501000-AX and HX06B-0501000-CG
- When disposing of this product, ensure it is collected separately for special treatment.
- The AC/DC adaptor is used as disconnect device.
- The AC/DC adaptor of apparatus should not be obstructed OR should be easily accessed during intended used.
- To be completely disconnect the power input, the AC/DC adaptor of apparatus shall be disconnected from the mains.

Caution

- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
- Battery cannot be subjected to high or low extreme temperatures, low air pressure at high altitude during use, storage or transportation.
- Replacement of a battery with an incorrect type can result in an explosion or the leakage of flammable liquid or

gas.

- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, can result in an explosion.
- Leaving a battery in an extremely high temperature surrounding environment can result in an explosion or the leakage of flammable liquid or gas.
- A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.

Introduction

Thank you for selecting WI-FI weather station with 7-in-1 professional sensor. This system gathers and automatically uploads accurate and detailed weather data to Weather Underground, Weathercloud website and 3rd party weather platform which you can access and upload your weather data freely. This product offers professional weather observers and with exclusive app for easy setup. You will get your own local forecast, high / low, totals and averages for virtually all-weather variables without using a PC / Mac. This Weather Station which transmits wireless sensor array's temperature, humidity, wind, rain UV and light intensity data to the console. This sensor array is fully assembled and calibrated for your easy installation. It can send data at a low power radio frequency to the console from up to 150m / 450 feet away (line of sight).

In the console, a high-speed processor is embedded to analyze the received weather data and these real time data can be published to the weather platforms through your home WI-FI router.

The console can also synchronize with Internet time server to keep the time and weather data time stamp of high precision. The color background LCD display shows informative weather readings with advanced features, such as high/low alert alarm, different weather index, and MAX / MIN records. With calibration and moon phase feature, this system is truly a remarkably personal yet professional weather station for your own backyard.

Quick start guide

The following Quick Start Guide provides the necessary steps to install and operate the weather station, and upload to the Internet, along with references to the pertinent sections.

Step	Description	Section
1	Power up the 7-in-1 wireless sensor array	3.2.1
2	Power up the display console and pair with sensor array	3.4
3	Manually set date and time (This part is unnecessary if the weather station is connected to internet and time synchronize function is on)	4.4
4	Create account and register weather station at WUnderground and/ or Weathercloud	6
5	Connect weather station to WI-FI using WSLink APP	5.1 to 5.5

Pre installation

Checkout

Before permanently install your weather station, we recommend the user to operate the weather station at a location which is easy to access to. This will allow you to get familiar with the weather station functions and calibration procedures, to ensure proper operation before installing it permanently.

Site selection

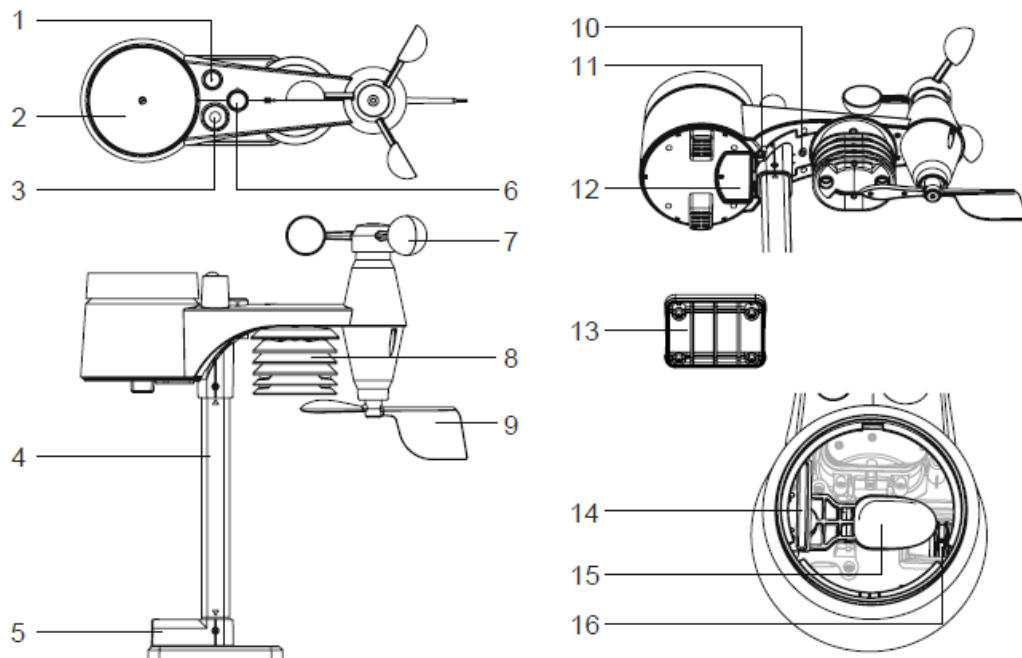
Before installing the sensor array, please consider the followings

1. Rain gauge must be clean every few months
2. Batteries must be changed every 2 to 2.5 years
3. Avoid radiant heat reflected from any adjacent buildings and structures. Ideally, the sensor array should be installed at 1.5m (5') from any building, structure, ground or roof top.
4. Choose an area of open space in direct sunlight without any obstruction of rain, wind, and sunlight.
5. Transmission range between sensor array and display console could reach a distance of 150m (or 450 feet) at line of sight, providing there are no interfering obstacles in between or nearby such as trees, towers, or high voltage line. Check the reception signal quality to ensure good reception.
6. Household appliance such as fridge, lighting, dimmers may pose Electro-magnetic interference (EMI), while Radio Frequency Interference (RFI) from devices operating in the same frequency range may cause signal intermittent. Choose a location at least 1-2 meter (3-5 feet) away from these interference sources to ensure best reception.

Getting started

Wireless 7-in-1 sensor

1. Antenna
2. Rain collector
3. UVI / light sensor
4. Mounting pole
5. Mounting base
6. Balance indicator
7. Wind cups
8. Radiation shield
9. Wind vane
10. Red LED indicator
11. [RESET] key
12. Battery door
13. Mounting clamp
14. Rain sensor
15. Tipping bucket
16. Drain holes



Install Wireless 7-in-1 sensor

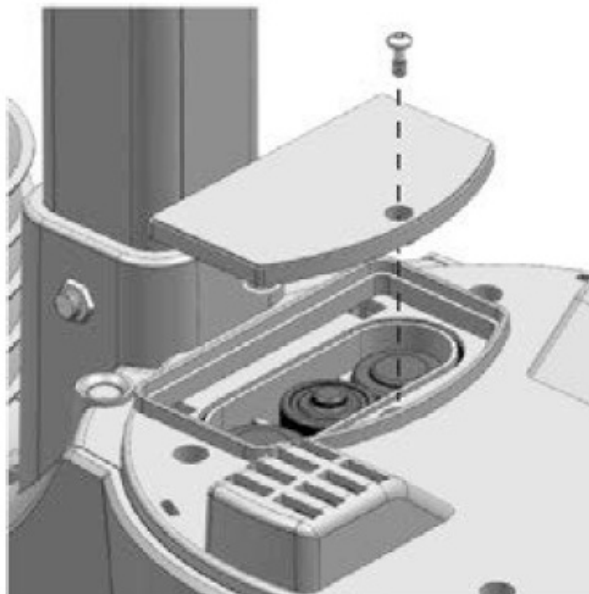
Your wireless 7-IN-1 sensor measures wind speed, wind direction, rainfall, UV index, light intensity, temperature and humidity for you. It's fully assembled and calibrated for your easy installation.

Battery and installation


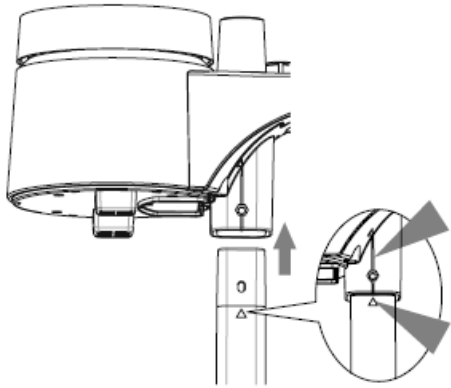
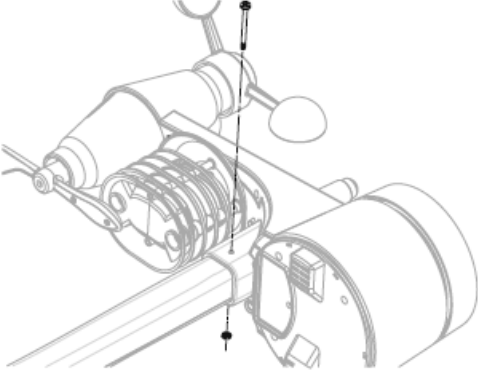

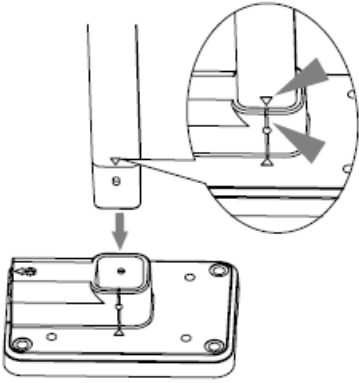
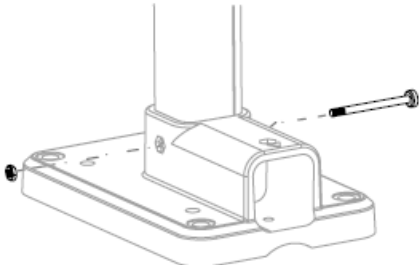
Unscrew the battery door at bottom of unit and insert the batteries according to the +/- polarity indicated. Screw the battery door compartment on tightly.

Note

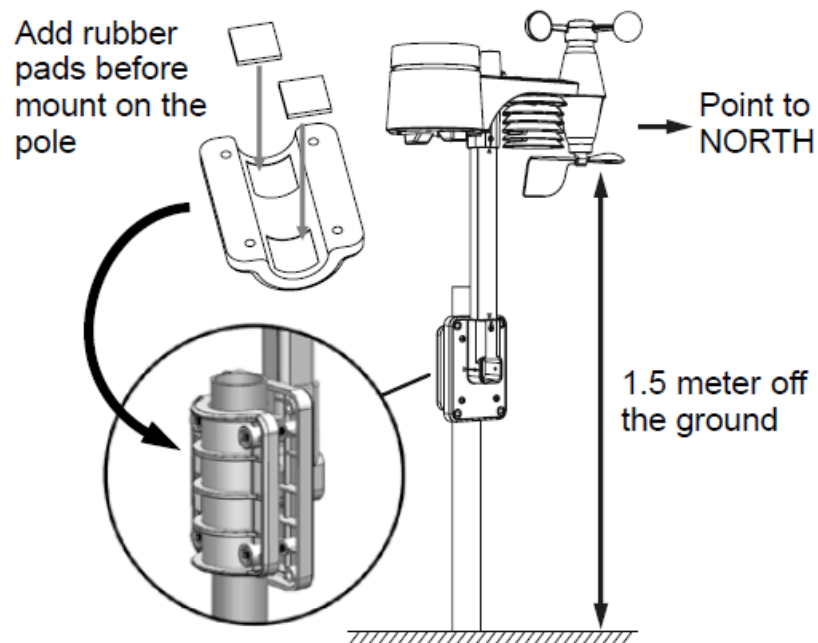
- Ensure the water tight O-ring is properly aligned in place to ensure water resistant.
- The red LED will begin flashing every 12 seconds.



Assembly the stand and pole

<p>Step 1 Insert the top side of the pole to the square hole of the weather sensor.</p> <p> Note: Ensure the pole and sensor's indicator align.</p>	
<p>Step 2 Place the nut in the hexagon hole on the sensor, then insert the screw in other side and tighten it by the screw driver.</p>	
<p>Step 3 Insert the other side of the pole to the square hole of the plastic stand.</p> <p> Note: Ensure the pole and stand's indicator align.</p>	
<p>Step 4 Place the nut in the hexagon hole of the stand, then insert the screw in other side and then tighten it by the screw driver.</p>	

- Install the wireless 7-in-1 sensor in an open location with no obstructions above and around the sensor for accurate rain and wind measurement. Install the sensor with the smaller end facing the North to properly orient the wind direction vane.
- Secure the mounting stand and clamps (included) to a post or pole, and allow minimum 1.5m off the ground.



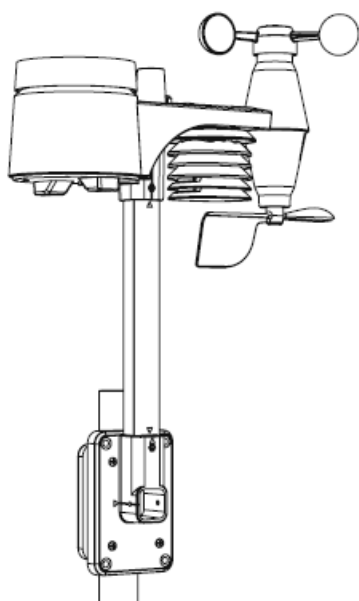
Mounting guidelines

1. Install the wireless 7-in-1 sensor at least 1.5m off the ground for better and more accurate wind measurements.
2. Choose an open area within 150 meters from the LCD console.

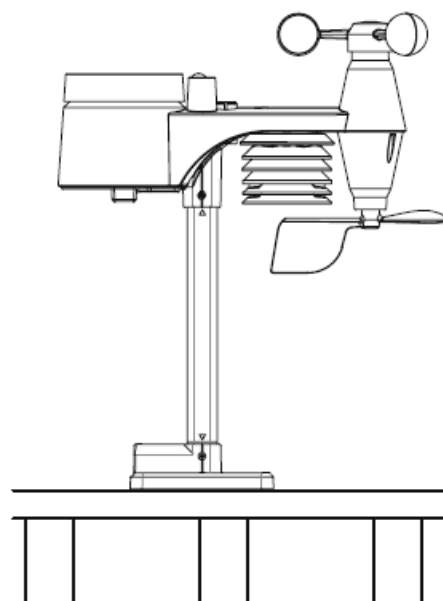
Note

Effective wireless communication is susceptible to ambient noise, distance, and barriers between the sensor transmitter and the console. Make sure the area between both devices is free from such sources of interference (e.g. TVs, electromagnetic and/or metal objects).

3. Install the wireless 7-in-1 sensor as level as possible to achieve accurate rain and wind measurements.
4. Mount the wireless 7-in-1 sensor with the wind meter end pointing to the North to correctly orient direction of the wind vane.



A. Mounting on pole (Pole Diameter 1"~1.3")
(25~33mm)




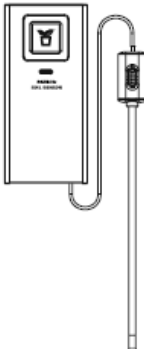

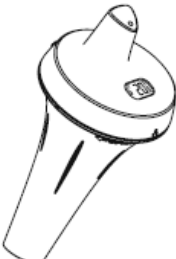


B. Mounting on the railing

Synchronizing additional sensor(s) (optional)

The console can support up to 7 optional wireless thermo-hygro sensors. Please contact your local retailer for details of different sensors.

Thermo-hygro sensors

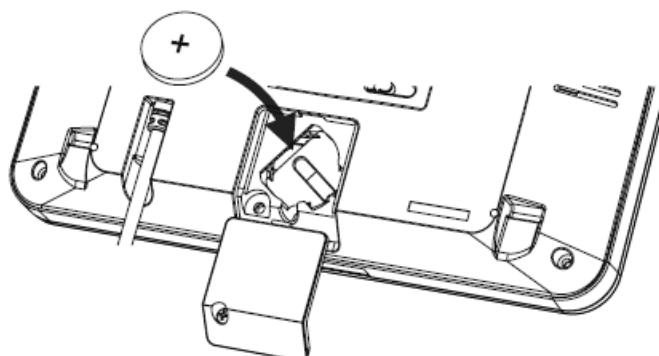
Model	No. of sensor supported	Description	Image
7009971 	Up to 7 sensors	Thermo-Hygro sensor Sensor data: CH7~1 temperature and humidity	
7009972 		Soil Moisture and Temperature sensor Sensor data: CH7~1 soil moisture and temperature	
7009973 		Pool sensor Sensor data: CH7~1 water temperature	

Setup the Console

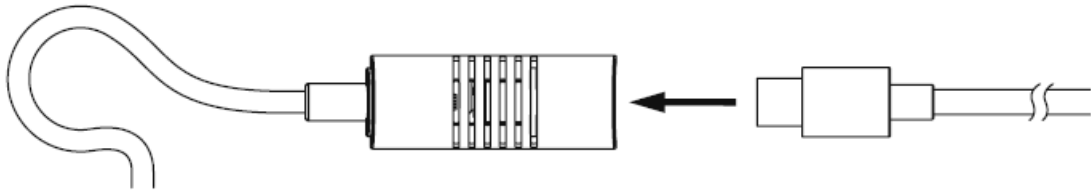
Follow the procedure to setup the console connection with wireless sensor array and WI-FI.

Power up the display console

1. Install the back-up CR2032 battery



2. Connect the display console power jack to 5V 1A USB power with USB type-C cable included.



Note

- The backup battery can backup: Time & Date & Max/Min weather records, history, rainfall records and alert setting values / status.
- The built-in memory can backup: WI-FI setting, Hemisphere setting, Calibration values, and Sensor ID.
- Please always remove the back-up battery if the device is not going to be used for a while. Please keep in mind that even when the device is not in use, certain settings, such as the clock, alert settings and records in its memory, will still drain the back-up battery.

Setup display console


1. Once the console power up, all the segments of the LCD will be shown.
2. The console will automatically start AP mode and show the “AP” icon on the screen, you can follow Section 5.2 to setup the WI-FI connection.



Note

If no display appears when power up the console, you can press [RESET] key by using a pointed object. If this process still not work, you can remove the backup battery and unplug the adapter then re-power up the console again.

Synchronizing wireless 7-in-1 sensor array

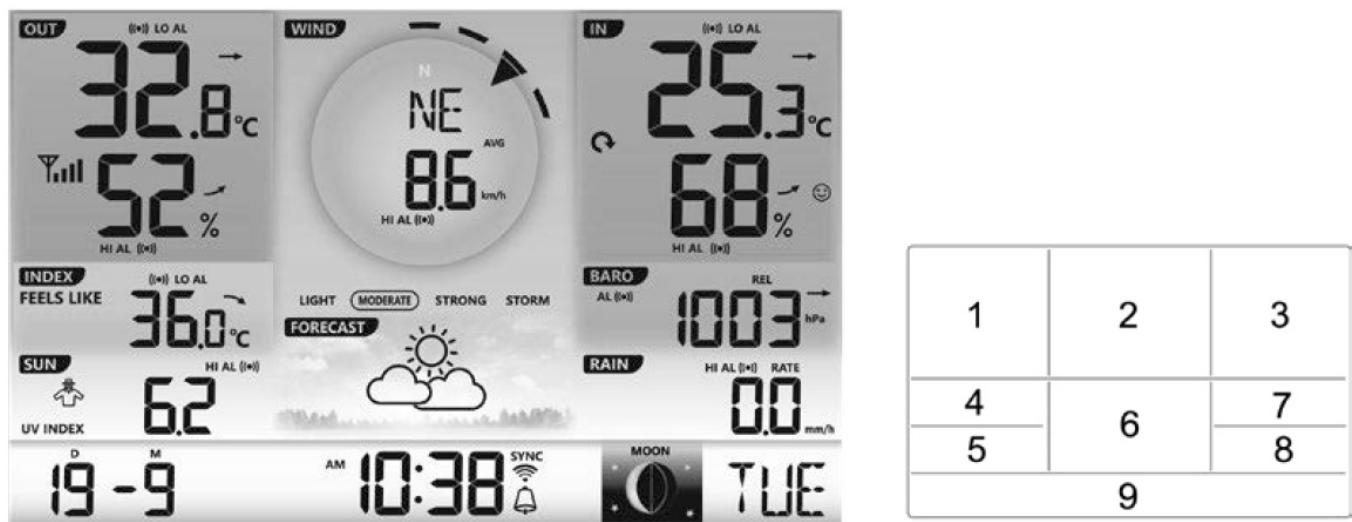
Immediately after power up the console, while still in synchronization mode, the 7-in-1 sensor can be paired to the console automatically (as indicated by the flashing antenna ). User may also manually restart the synchronization mode by pressing the [SENSOR / WI-FI] key. Once they are paired up, the sensor signal strength indicator and weather reading will appear on your console display.

Data clearing

During installation of the wireless 7-in-1 sensor, the sensors were likely to be triggered, resulting in erroneous rainfall and wind measurements. After the installation, user may clear out all the erroneous data from the display console. Simply press the [RESET] key once to re-start the console.

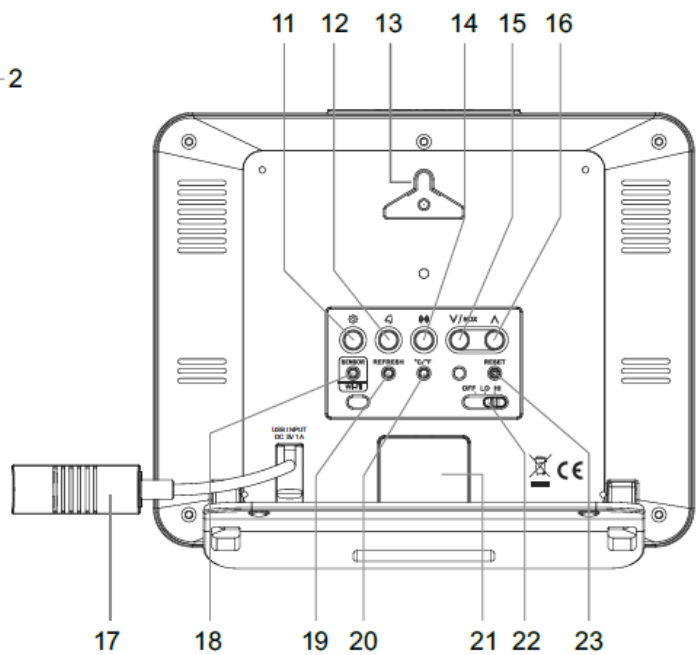
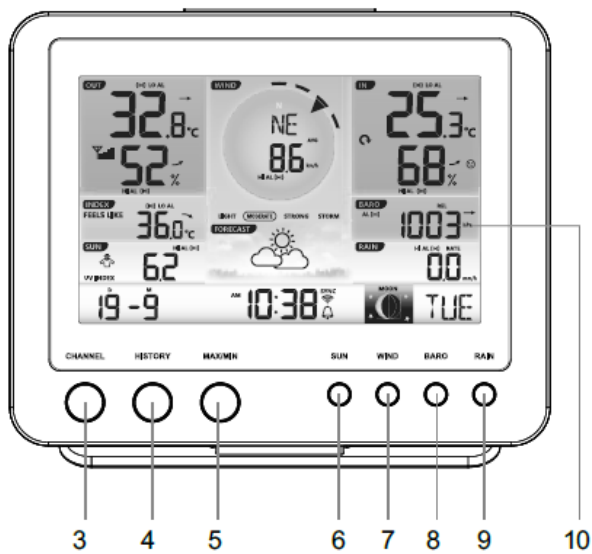
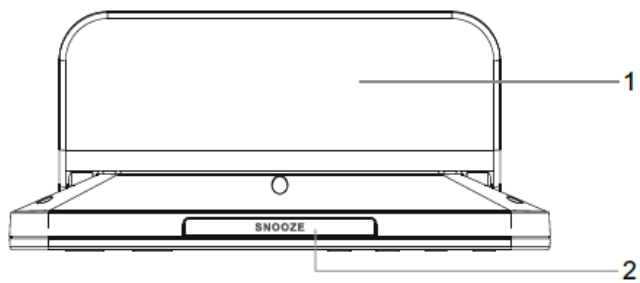
Display console functions and operation

Screen Display



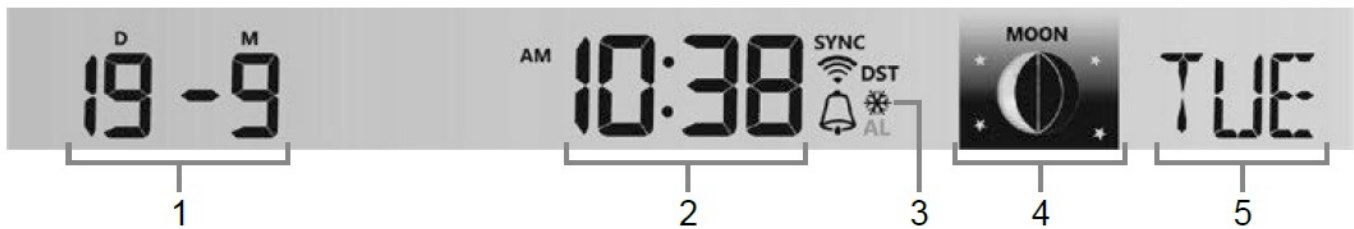
- 1. Outdoor temperature & humidity
- 2. Wind direction & speed
- 3. Indoor / Ch temperature & humidity
- 4. Weather index
- 5. UV index & light intensity (SUN)
- 6. Weather forecast
- 7. Barometer
- 8. Rainfall & Rain rate
- 9. Time, calendar & moon phase

Display console keys



No.	Key / Part Name	Description
1	Table stand	
2	SNOOZE	Press to stop alarm sound
3	CHANNEL	Press to switch between indoor and Ch 1~7 temperature and humidity
4	HISTORY	Press to view the past 24 hours records
5	MAX / MIN	To switch between maximum and minimum values since last reset
6	SUN	Press to change between sunlight intensity, UV index and sunburn time
7	WIND	Press to change between average, beaufort and gust wind speed
8	BARO	Press to change between relative and absolute pressure
9	RAIN	Press to switch between rain rate and rainfall of different periods
10	Display screen	
11	SET	Hold 2 seconds to enter time, date and other setting
12	ALARM	Press to view alarm time
13	Wall mount hole	
14	ALERT	Press to show the alert setting values
15	INDEX /	<ul style="list-style-type: none"> • To switch between Feels Like, Dew point, Heat Index and Wind Chill • Set the value decrease
16		– Set the value increase
17	USB type-C power jack	
18	SENSOR / WI-FI	<ul style="list-style-type: none"> • Press to start sensor synchronization (pairing) • Hold 6 seconds to enter or exit AP mode
19	REFRESH	Press to update the upload data and time synchronization
20	°C / °F	To switch temperature unit between °C or °F
21	Battery door	
22	OFF / LO / HI	To select backlight mode
23	RESET	<ul style="list-style-type: none"> • Press to reset the console • Hold 6 seconds to factory reset the console

Time and date



1. Date
2. Time with Daylight saving time (DST) indication
3. Alarm and ice pre-alarm
4. Moon phase
5. Day of week

Time synchronize status

After the console has connected to the time server, it can get the UTC time. The “ ” icon will appear on the LCD.



The time will automatically synchronize per hour. You can also press the [REFRESH] key to get the Internet time manually within 1 minute.

Wi-Fi connection

Wi-Fi icon on the console display indicates the console's connection status with Wi-Fi router.



Stable: Console is in connection with Wi-Fi router



Flashing: Console is scanning to connect to Wi-Fi router

Wireless sensor signal receiving

















1. The console display signal strength for the wireless sensor(s), as per table below:

	No signal	Weak signal	Good signal
Outdoor 7-in-1 sensor			
Sensor channel			



2. If the signal has discontinued and does not recover within 15 minutes, the signal icon will disappear. The temperature and humidity will display “Er” for the corresponding channel.
3. If the signal does not recover within 48 hours, the “Er” display will become permanent. You need to replace the batteries and then press [SENSOR / WI-FI] key to pair up the sensor again.













Moon phase








The moon phase is determined by time and date of the console. The following table explains the moon phase icons of the Northern and Southern Hemispheres. Please refer to section 4.4 about how to setup for the Southern Hemisphere.

Northern Hemisphere	Moon Phase	Southern Hemisphere
	New Moon	
	Waxing Crescent	
	First quarter	
	Waxing Gibbous	
	Full Moon	
	Waning Gibbous	
	Third quarter	
	Waning Crescent	

Time, Date, Unit and other setting

Press and hold the [SET] key for 2 seconds to enter the setting mode. Press [] or [INDEX / ] key to adjust, and press [SET] key to proceed with next step of the setting. Please refer to following setting procedures.



Step	Mode	Setting procedure		
[SET] +2s	DST (Daylight Saving Time)	Press [] or [INDEX / ] key to select AUTO / ON / OFF. AUTO is to adjust the daylight saving time automatically based on time zone entered. ON is to add one hour on current default time. OFF is to completely turn off the DST function.		
[SET]	Time	Press []	or [] INDEX] key to adjust the minute / hour
[SET]	12/24 hour format	Press []	or [] INDEX] key to select 12 or 24 hour format
[SET]	Year	Press []	or [] INDEX] key to adjust the year
[SET]	Date	Press []	or [] INDEX] key to adjust the day / month
[SET]	MD / DM display format	Press [] or [] INDEX] key to select “Month / Day” or “Day / Month” display format	

[SET]	Time sync On / off	Press [] or [INDEX / ] key to on / off Time Sync function. If you want to set the time manually, you should set Time Sync off		
[SET]	Hemisphere	Press [] or [INDEX / ] key to select North / South hemisphere for moon phase and wireless sensor array point to direction.		
[SET]	Weekday language	Press [] or [ INDEX] key to select weekday display language	
[SET]	Temperature unit	Press []	or [INDEX / ]	key to select °C or °F
[SET]	Wind speed unit	Press []	or [INDEX / ]	key to select m/s, knots, mph or km/h
[SET]	Wind direction display format	Press [] or [ INDEX] key to select 360 deg or 16 directions	
[SET]	Light unit	Press []	or [INDEX / ]	key to select Klux, Kfc or W/m2
[SET]	Baro pressure unit	Press []	or [INDEX / ]	key to select hPa, mmHg or inHg
[SET]	Rain unit	Press []	or [INDEX / ]	key to select mm or in
[SET]	Exit setting mode			

Note

- In normal mode, press [SET] key to switch between year and date display.
- During the setting, you can back to normal mode by press and hold [SET] key for 2 seconds.

Setting alarm time

1. In normal time mode, hold [ALARM] key for 2 seconds until the alarm hour and minute digit flashes to enter alarm time setting mode.
2. Press [] or [INDEX / ] key to change the value. Press and hold the key for quick-adjust.
3. Press [ALARM] key to save and exit the setting.

Activating alarm and temperature pre-alarm function

1. In normal mode, press [ALARM] key to show the alarm time for 5 seconds.
2. When the alarm time displays, press [ALARM] key again to activate the alarm function. Or press [ALARM]

key twice to activate the alarm with ice pre-alarm function.

Alarm off	Alarm on	Alarm with ice-alert
		

Note

Once the ice pre-alert activated, the alarm will sound 30 minutes earlier if it detects outside temperature is below -3°C.


Alarm operation

When the time reaches the alarm time, the alarm sound will beep.

The alarm beeping can be stopped by following operation

- Auto-stop after 2 minutes if without any operation and the alarm will activate again in the next day.
- By pressing [ALARM / SNOOZE] key to enter snooze, and the alarm will sound again after 5 minutes.
- By pressing and hold [ALARM / SNOOZE] key for 2 seconds or press [ALARM] key to stop the alarm and the alarm will activate again in the next day.

Note









During the snooze, the alarm icon "  " will keep flashing.

Setting high / low weather alert

In normal time mode, follow the below step to view and set the alert.

Step	View Mode	Setting procedure
[ALERT]	OUT temperature high alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [] or [INDEX / ∇] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	OUT temperature low alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [^] or [INDEX / ∇] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	OUT humidity high alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [^] or [INDEX / ∇] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	OUT humidity low alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [^] or [INDEX / ∇] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	IN / CH temperature high alert	<ul style="list-style-type: none"> • Press [CHANNEL] key to select the IN and CH 1~7 • Hold [ALERT] key for 2 secs to enter setting mode, than press [^] or [INDEX / ∇] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	IN / CH temperature low alert	<ul style="list-style-type: none"> • Press [CHANNEL] key to select the IN and CH 1~7 • Hold [ALERT] key for 2 secs to enter setting mode, than press [^] or [INDEX / ∇] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	IN / CH humidity high alert	<ul style="list-style-type: none"> • Press [CHANNEL] key to select the IN and CH 1~7 • Hold [ALERT] key for 2 secs to enter setting mode, than press [^] or [INDEX / ∇] key to adjust alert value. • Press [ALARM] key to on / off the alert.

[ALERT]	IN / CH humidity low alert	<ul style="list-style-type: none"> • Press [CHANNEL] key to select the IN and CH 1~7 • Hold [ALERT] key for 2 secs to enter setting mode, than press [\wedge] or [INDEX / \vee] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	Wind speed high alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [\wedge] or [INDEX / \vee] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	Feels like high alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [\wedge] or [INDEX / \vee] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	Feels like low alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [\wedge] or [INDEX / \vee] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	Dew point high alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [\wedge] or [INDEX / \vee] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	Dew point low alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [\wedge] or [INDEX / \vee] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	Heat index high alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 seconds enter setting mode, than press [\wedge] or [INDEX / \vee] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	Wind chill low alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [\wedge] or [INDEX / \vee] key to adjust alert value. • Press [ALARM] key to on / off the alert.

[ALERT]	UV high alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [] or [INDEX / ] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	Light intensity high alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [] or [INDEX / ] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	Pressure drop alert (drop in 30 minutes)	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [] or [INDEX / ] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	Rain rate high alert	<ul style="list-style-type: none"> • Hold [ALERT] key for 2 secs to enter setting mode, than press [] or [INDEX / ] key to adjust alert value. • Press [ALARM] key to on / off the alert.
[ALERT]	Exit setting mode	







Weather alert operation

If you set the weather alert, and this value out of the setting range, alarm sound will start and the related weather reading will flash.

Where it can be stopped by following operation

- Auto-stop once the value back to the range.
- By pressing the [ALARM / SNOOZE] or [ALARM] key to stop the sound.







Note

- When you turn on the time alarm, the "  " icon will display on time section.
- When you turn on the ice pre alarm, the "  " and "  " icon will display on time section.
- When you turn on the weather alert, the "  " icon will display near the reading.
- During the setting, hold the [] or [**INDEX** / ] key for quick-adjusting the value.
- The alarm function(s) will turn on automatically once you set the alarm time.
- During the setting, you can return back to normal mode by press and hold [SET] key for 2 seconds.

Console features

Weather forecast

The built-in barometer continually monitor atmosphere pressure. Based on the data collected, it can predict the weather conditions in the forthcoming 12~24 hours within a 30~50km (19~31 miles) radius.

Sunny	Partly cloudy	Cloudy	Rainy	Rainy / Stormy	Snowy
					

Note

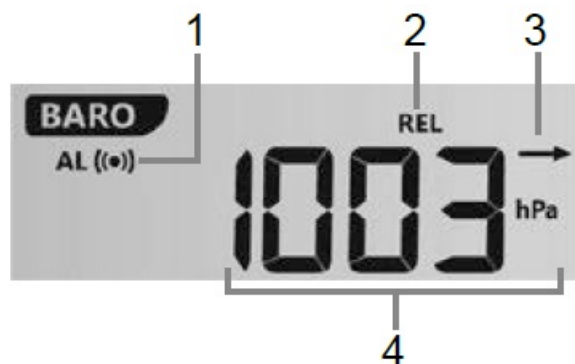
- The accuracy of a general pressure-based weather forecast is about 70% to 75%.
- The weather forecast is reflecting the weather situation for next 12~24 hours, it may not necessarily reflect the current situation.
- The SNOWY weather forecast is not based on the atmospheric pressure, but based on the temperature of outdoor. When the temperature is below -3°C (26°F), the SNOWY weather icon will be displayed on the LCD.

Barometric pressure

The atmospheric pressure is the pressure at any location of the earth caused by the weight of the column of air above it. One atmospheric pressure refers to the average pressure and gradually decreases as altitude increases. Meteorologists use barometers to measure atmospheric pressure. Because absolute atmospheric pressure decreases with altitude, meteorologist correct the pressure relative to sea-level conditions. Hence, your ABS pressure may read 1000 hPa at altitude of 300m, but the REL pressure is 1013 hPa.

To obtain accurate REL pressure for your area, consult your local official observatory or check weather website on internet for real time barometer conditions, and then adjust the relative pressure in configuration app (Section 5.6).

1. Pressure drop alert indicator
2. Absolute / Relative pressure indicator
3. Barometric pressure trend
4. Barometric pressure reading



Absolute or relative barometric pressure

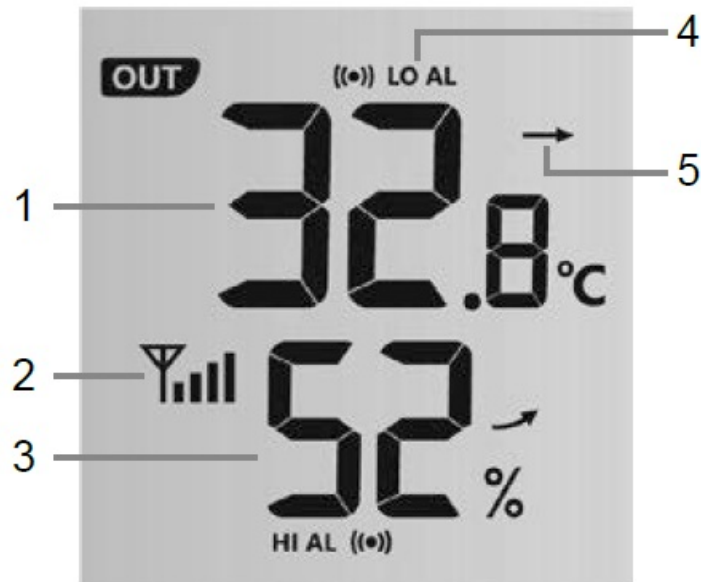
In normal mode, press [BARO] key to switch between ABSOLUTE and RELATIVE barometric pressure.

Outdoor temperature, humidity

1. Outdoor temperature reading
2. Signal indicator to show the signal receiving strength
3. Outdoor humidity reading
4. High / Low alert indicator
5. Trend indicator

Note

If temperature / humidity is below or above the measurement range, the reading will show “LO” or “HI” respectively.

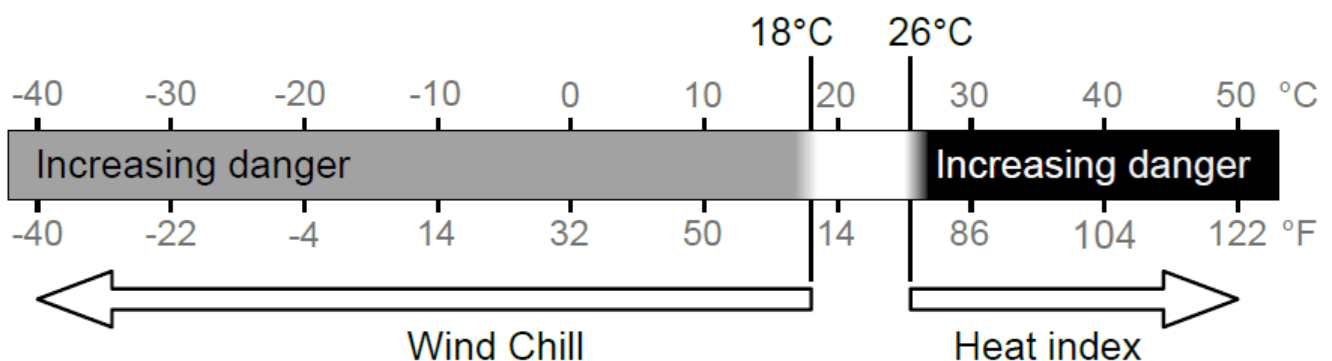


Weather index

Press [INDEX] key to switch display between FEELS LIKE, DEW POINT, HEAT INDEX and WIND CHILL readings in weather index section.

Feels like

Feels Like Temperature shows what the outdoor temperature will feel like. It's a collective mixture of Wind Chill factor (18°C or below) and the Heat Index (26°C or above). For temperatures in the region between 18.1°C to 25.9°C where both wind and humidity are less significant in affecting the temperature, the device will show the actual outdoor measured temperature as Feels Like Temperature.



Dew point

Dew point is the temperature below which the water vapor in air at constant barometric pressure condenses into liquid water at the same rate at which it evaporates. The condensed water is called dew when it forms on a solid surface.

Heat index

The heat index which is determined by the wireless 7-in-1 sensor's temperature & humidity data when the temperature is between 26°C (79°F) and 50°C (120°F).


Heat Index range	Warning	Explanation
27°C to 32°C (80°F to 90°F)	Caution	Possibility of heat exhaustion
33°C to 40°C (91°F to 105°F)	Extreme Caution	Possibility of heat dehydration
41°C to 54°C (106°F to 129°F)	Danger	Heat exhaustion likely
≥55°C (≥130°F)	Extreme Danger	Strong risk of dehydration / sun stroke

Wind chill

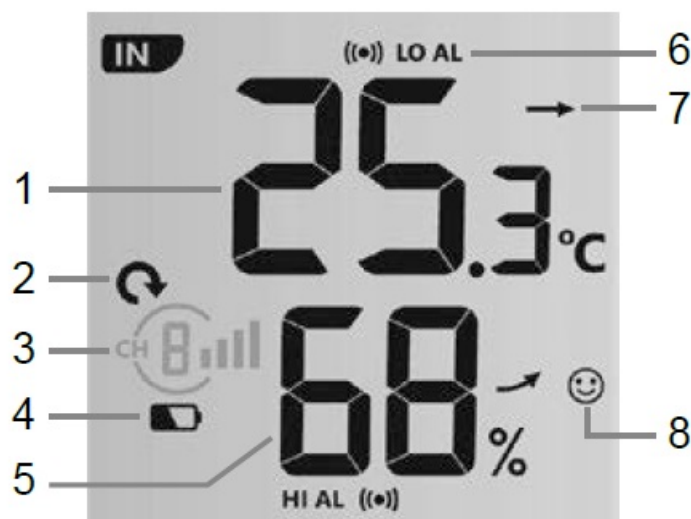
A combination of the wireless 7-in-1 sensor's temperature and wind speed data determines the current wind chill factor. Wind chill number are always lower than the air temperature for wind values where the formula applied is valid (i.e. due to limitation of formula, actual air temperature higher than 10°C with wind speed below 9km/h may result in erroneous wind chill reading).

Indoor and optional CH1 ~ 7 temperature and humidity

This console can display Indoor and CH1~7 optional thermo-hygro sensor readings. In normal mode, press [CHANNEL] to switch between indoor and different wireless channels.

For auto-loop function, just press and hold the [CHANNEL] for 2 seconds and the  icon will appear. The console will scroll the readings of all the sensors every 4 seconds.

1. Indoor / CH 1 ~ 7 temperature reading
2. CH 1 ~ 7 auto loop icon
3. CH 1 ~ 7 icon and signal strength indicator
4. CH 1 ~ 7 low battery indicator
5. Indoor / CH 1 ~ 7 humidity reading
6. High / Low alert indicator
7. Trend indicator
8. Comfort index icon



Comfort Indication

The comfort indication is a pictorial indication based on indoor air temperature and humidity in an attempt to determine comfort level.

		
Too cold	Comfortable	Too hot

Note

Comfort indication can vary under the same temperature, depending on the humidity. There is no comfort indication when temperature is below 0°C (32°F) or over 60°C (140°F).

Wind

- 1. Wind direction reading (16 point or 360 degrees)
- 2. High wind speed alert indicator
- 3. Wind speed level indicator
- 4. Real time wind direction indicator (16 points)
- 5. Past wind directions indicator of last 5 minutes
- 6. Average / gust wind speed reading or Beaufort scale



To select the wind display mode

In normal mode, press [WIND] key to switch between BEAUFORT scale, AVERAGE and GUST wind speed.

Beaufort scale table

The Beaufort scale is an international scale of wind velocities ranging from 0 (calm) to 12 (Hurricane force).

Beaufort Scale	Description	Wind Speed	Land Condition
		< 1 km/h	

0	Calm	< 1 mph	Calm. Smoke rises vertically.
		< 1 knots	
		< 0.3 m/s	
1	Light air	1.1 ~ 5km/h	Smoke drift indicates wind direction. Leaves and wind vanes are stationary.
		1 ~ 3 mph	
		1 ~ 3 knots	
		0.3 ~ 1.5 m/s	
2	Light breeze	6 ~ 11 km/h	Wind felt on exposed skin. Leaves rustle. Wind vanes begin to move.
		4 ~ 7 mph	
		4 ~ 6 knots	
		1.6 ~ 3.3 m/s	
3	Gentle breeze	12 ~ 19 km/h	Leaves and small twigs constantly moving, light flags extended.
		8 ~ 12 mph	
		7 ~ 10 knots	
		3.4 ~ 5.4 m/s	
4	Moderate breeze	20 ~ 28 km/h	Dust and loose paper raised. Small branches begin to move.
		13 ~ 17 mph	
		11 ~ 16 knots	
		5.5 ~ 7.9 m/s	
5	Fresh breeze	29 ~ 38 km/h	Branches of a moderate size move. Small trees in leaf begin to sway.
		18 ~ 24 mph	
		17 ~ 21 knots	
		8.0 ~ 10.7 m/s	
6	Strong breeze	39 ~ 49 km/h	Large branches in motion. Whistling heard in overhead wires. Umbrella use becomes difficult. Empty plastic bins tip over.
		25 ~ 30 mph	
		22 ~ 27 knots	
		10.8 ~ 13.8 m/s	
7	High wind	50 ~ 61 km/h	Whole trees in motion. Effort needed to walk against the wind.
		31 ~ 38 mph	
		28 ~ 33 knots	
		13.9 ~ 17.1 m/s	
		62 ~ 74 km/h	<ul style="list-style-type: none"> Some twigs broken from trees.
		39 ~ 46 mph	

8	Gale	34 ~ 40 knots	• Cars veer on road. Progress on foot is seriously impeded
		17.2 ~ 20.7 m/s	
9	Strong gale	75 ~ 88 km/h	Some branches break off trees, and some small trees blow over. Construction / temporary signs and barricades blow over.
		47 ~ 54 mph	
		41 ~ 47 knots	
		20.8 ~ 24.4 m/s	
10	Storm	89 ~ 102 km/h	Trees are broken off or uprooted, structural damage likely.
		55 ~ 63 mph	
		48 ~ 55 knots	
		24.5 ~ 28.4 m/s	
11	Violent storm	103 ~ 117 km/h	Widespread vegetation and structural damage likely.
		64 ~ 73 mph	
		56 ~ 63 knots	
		28.5 ~ 32.6 m/s	
12	Hurricane force	≥ 118 km/h	Severe widespread damage to vegetation and structures. Debris and unsecured objects are hurled about.
		≥ 74 mph	
		≥ 64 knots	
		≥ 32.7 m/s	

Rain

The RAIN section shows the rainfall or rain rate information.

1. Period of rainfall indicator
2. Rain rate high alert indicator
3. Rain rate indicator
4. Rainfall or rain rate reading



The rain display mode

Press [RAIN] key to toggle between

1. **HOURL** – the total rainfall of the current hour

2. **DAY** – the total rainfall from midnight (default)
3. **WEEK** – the total rainfall of the current week
4. **MONTH** – the total rainfall of the current calendar month
5. **TOTAL** – the total rainfall since the last reset
6. **RATE** – current rainfall rate (base on 10 min rain data)

Light intensity, UV index & Sunburn time

1. Sunburn time indicator
2. Exposure level indicator
3. Light intensity indicator
4. UV index indicator
5. UV high alert indicator
6. UV index, Light intensity or Sunburn time reading



In normal mode, press SUN key to change between sunlight intensity, UV index and sunburn time

Light intensity mode

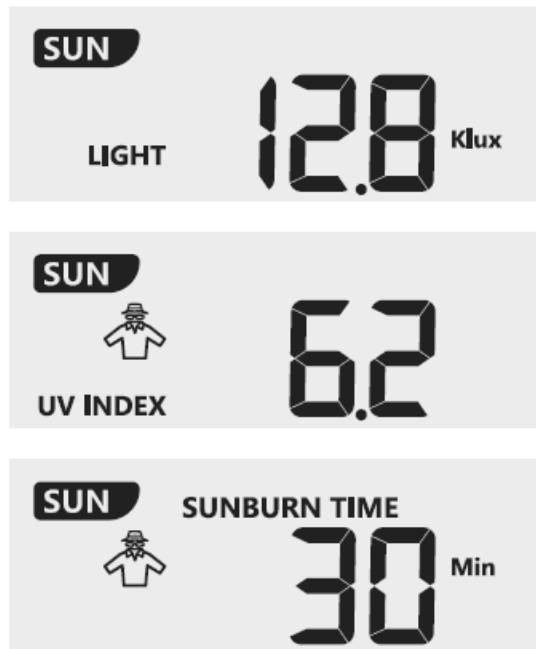
To show the current Light intensity detected by the outdoor sensor.

UV index mode




To show the current UV index detected by the outdoor sensor. Corresponding exposure level and suggested protection indicator are also displayed.

Sunburn time mode

To show the recommended sunburn time according to current UV level.



UV index vs exposure table




Exposure level	Low		Moderate			High		Very high			Extreme	
UV index	1	2	3	4	5	6	7	8	9	10	11	12~16
Sunburn time	N/A		45 minutes			30 minutes		15 minutes			10 minutes	
Recommended protection	N/A		Moderate or high UV level!! Suggest to wear sunglasses, broad brim hat and long-sleeved clothing.					Very high or Extreme UV level! Suggest to wear sunglasses, broad brim hat and long-sleeved clothing. If you have to stay outdoors, make sure to seek shade.				 

Note

- The sunburn time is based on normal skin type, it is just a reference of UV strength. In general, the darker one's skin is, the longer (or more radiation) it takes to affect the skin.
- The light intensity function is for sunlight detection.

Trend indicator

The trend indicator shows the temperature, humidity and barometric pressure trends of changes in the forthcoming few minutes.

		
Rising	Steady	Falling

Maximum / Minimum records

The console can record the accumulated MAX / MIN weather data with the corresponding time stamp for your easy review.



MAX record mode



MIN record mode

MAX / MIN records

In normal mode, press [MAX / MIN] key to check MAX / MIN records in the following display sequence is: outdoor MAX temperature → outdoor MIN temperature → outdoor MAX humidity → outdoor MIN humidity → indoor or current channel MAX temperature → indoor or current channel MIN temperature → indoor or current channel MAX humidity → indoor or current channel MIN humidity → MAX average wind speed → MAX gust → MAX FEELS LIKE → MIN FEELS LIKE → MAX dew point → MIN dew point → MAX heat index → MIN heat index → MAX wind chill → MIN wind chill → MAX UV index → MAX light intensity → MAX relative pressure MIN relative pressure → MAX absolute pressure → MIN absolute pressure → MAX rain rate.

To Clear the MAX / MIN records

Press and hold [MAX / MIN] key for 2 seconds to reset all the MAX and MIN records.

Past 24 hours history data

The console automatically stores the weather data of the past 24 hours.

- Press [HISTORY] key to check the beginning of the current hour's weather data, e.g. the current time is 7:25 am, March 8, the display will show the data of 7:00am, March 8.
- Press [HISTORY] key repeatedly to view older readings of the past 24 hours, e.g. 6:00am (Mar 8), 5:00am (Mar 8), ..., 10:00am (Mar 7), 9:00am (Mar 7), 8:00am (Mar 7)

Back light

Use the [HI / LO / OFF] slide switch to select backlight mode.

Connect console to WI-FI

Download WSLink configuration app



To connect console to WI-FI, you need to download the “WSLink” configuration app from one of the following links by scanning the QR code or search “WSLink” in App Store or Google Play.



App Store




Google Play

WSLink app is required for the console to connect to WI-FI and Internet, setup weather server, perform sensor calibration and firmware update.

Note

- WSLink app is only for configuration. It is not used to remotely view your weather data.
- WSLink app may subject to change and update.

Console in access point mode

When you power up the console for the first time, the console LCD will show flashing “AP” and “” icon to signify that it has entered AP (Access Point) mode, and is ready for WI-FI settings. User can also press and hold the [SENSOR / WI-FI] key for 6 seconds to enter AP mode manually.

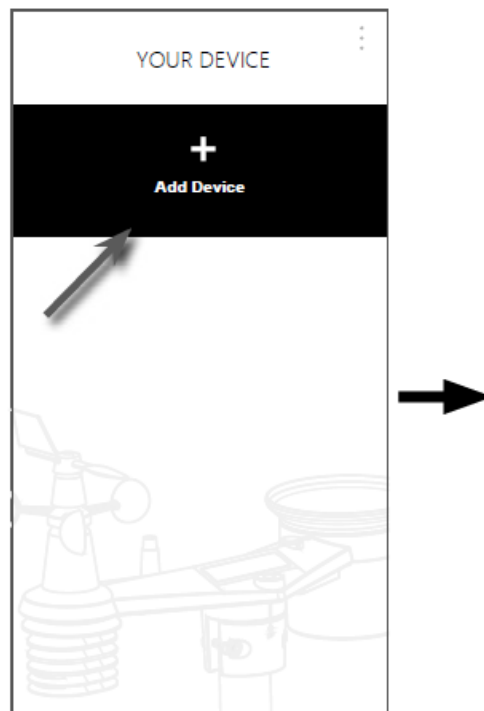


AP mode of the console

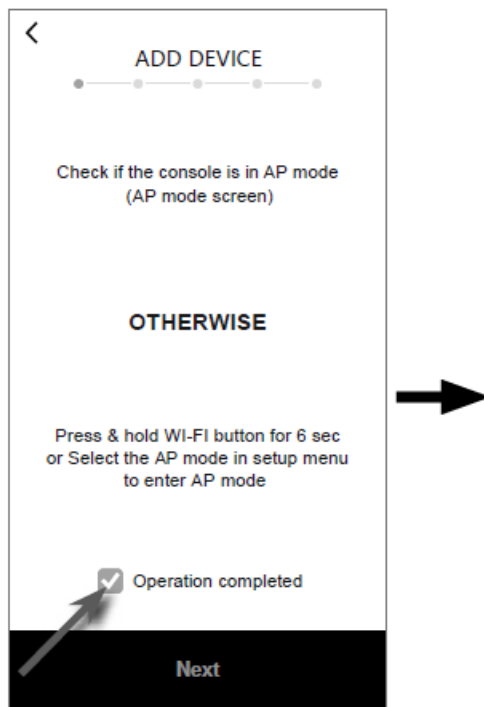
Add your console to WSLink

Open the WSLink app and follow the steps below to add your console to WSLink.

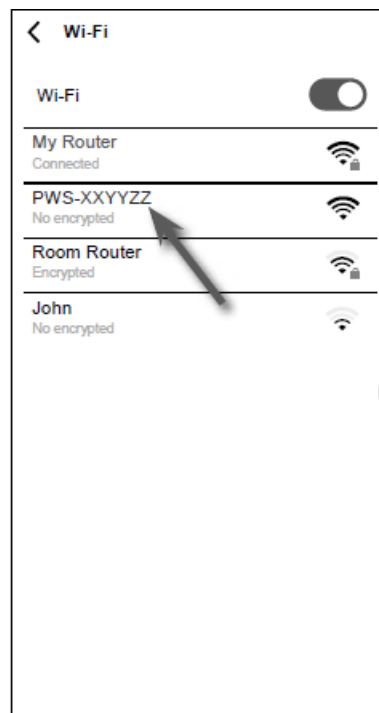
- Your Device page Tap “Add Device” icon.



- Ensure the console is in AP mode and check the “Operation completed” box, then tap “Next” to go to system WI-FI network page of your smart phone.



- Select the console WI-FI network name (the name always begin with PWS-) to connect your smart phone to the console. Then tap back to WSLink app.



- Once the console is added to WSLink, the console icon will appear on your device list. Tap it to continue the setup.

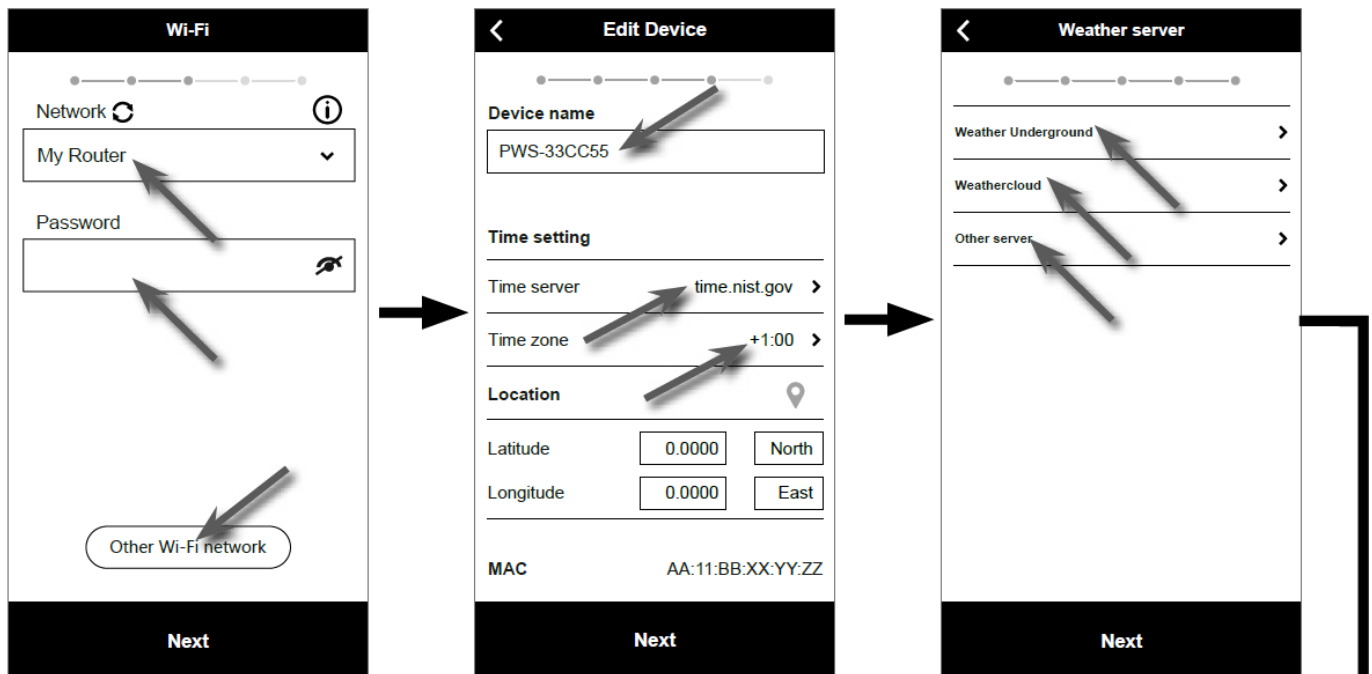
Section 5.4

Setup new console with WSLink



Setup new console with WSLink

The app will follow the steps below to guide you through the setup.



- **Wi-Fi page**

Network: select WI-FI network (router SSID) for connection. Password: enter WI-FI password. Other WI-FI network: setup to hidden WI-FI network.

Next: go to “Edit Device” page.

- **Edit device page**

Device name: Create a name for your device.

Time server: select time server

Time Zone: select the time zone

Location: input you location if need.

Next: go to “Weather server” page.

- **Weather server page**

Weather Underground: please refer to section 5.5 (c1).

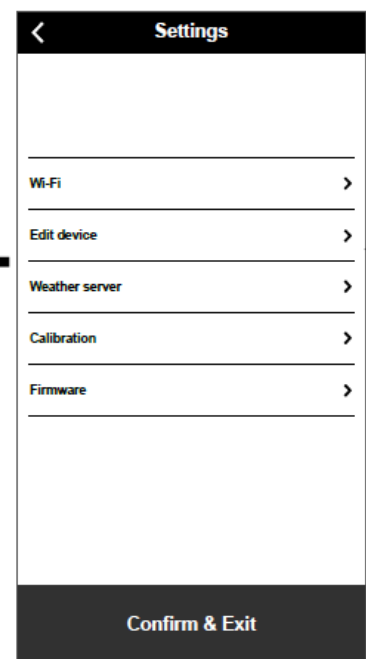
Weathercloud: please refer to section 5.5 (c2).

Other server: please refer to section 5.5 (c3).

Next: go to “Settings” page.

(j) Delete your console

To remove device from the app, swipe the console icon left and tap the bin.



1. Your Device page

Your setup is now completed. You can tap the console icon and follow the procedure to do the console settings anytime if necessary.

- **Settings page**

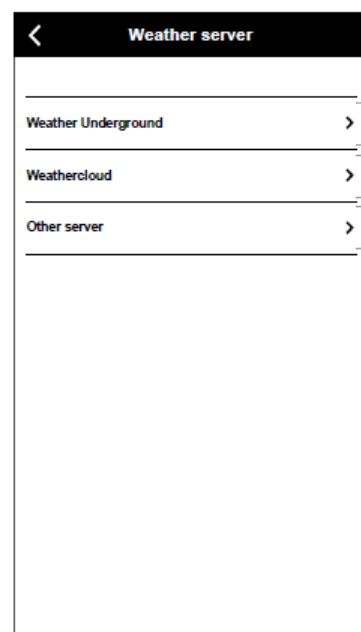
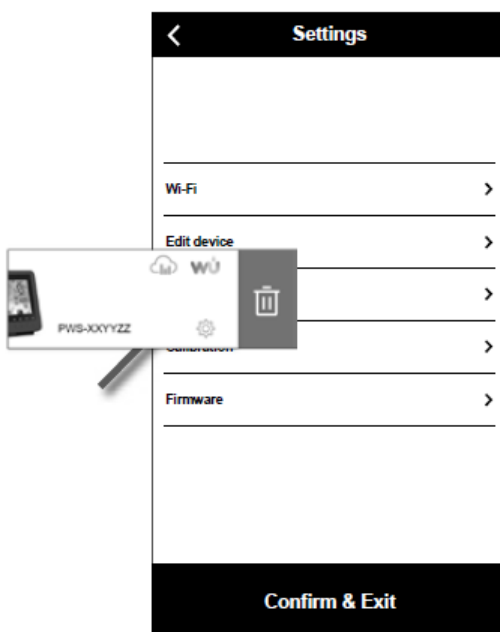
This is main page of the console, you can enter different setup page to setup your console. Once you complete the setup, tap “Confirm & Exit” to exit AP mode.

Weather server setting

- **Settings page**

At the settings page, tap “Weather server”.

- Select the Weather server



c1

c2

c3

NOTE: For Awegas,
PWS select option 'c3'

- **Upload your weather data to Weather Underground**

1. Register an account and weather station at wunderground.com per section 6.1
2. Enter the Station ID and Station key obtained from wunderground.com
3. Enable (or disable) the upload.

4. Tap "Save".

- **Upload your weather data to Weathercloud**

1. Register an account and weather station at Weathercloud.net per section 6.2
2. Enter the Station ID and Station key obtained from Weathercloud.net
3. Enable (or disable) the upload.
4. Tap "Save".

The screenshot shows a mobile app interface titled "Weather server" with a back arrow. Below the title is the heading "Weather Underground". There are two input fields: "Station ID" and "Station key", each with a text label and a toggle visibility icon. Below these is an "Upload" toggle switch, which is currently turned on. At the bottom, there is a "Save" button. A disclaimer text at the bottom reads: "*You need to first register your device at Weather Underground (wunderground.com). Then enter the Station ID and Key obtained and tap 'Save'".

The screenshot shows a mobile app interface titled "Weather server" with a back arrow. Below the title is the heading "Weathercloud". There are two input fields: "Station ID" and "Station key", each with a text label and a toggle visibility icon. Below these is an "Upload" toggle switch, which is currently turned on. At the bottom, there is a "Save" button. A disclaimer text at the bottom reads: "*You need to first register your device at Weathercloud (weathercloud.net). Then enter the Station ID and Key obtained and tap 'Save'".

- **Upload to customized server (optional)**

- Prepare your customized server based on WUnderground or WSLink API
- Enter the URL address, Station ID and Station key of the customized server.
- Select upload interval and API type
- Enable (or disable) the upload.
- Tap "Save".

- **Settings page**

At the settings page, tap “Calibration”.

- **Calibration page**

1. Tap “Unit” to change the unit if necessary before entering the calibration value.
2. Tap the box and enter the calibration required.
3. Tap “Save”.

Note

- Calibration of most parameter is not required, with the exception of Relative Pressure, which must be calibrated

to sea-level to account for altitude effects.

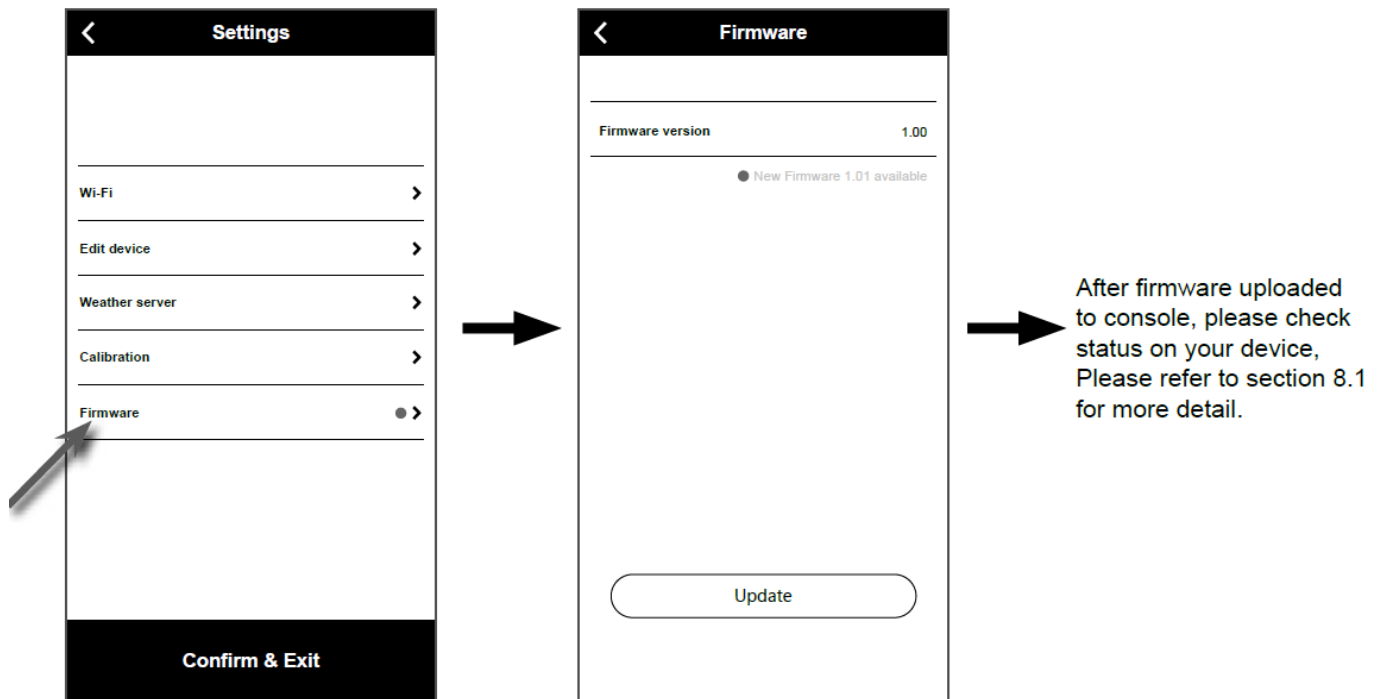
- For temperature and pressure, the app will always calculate & convert the calibration value in °C and hPa respectively.

Firmware

• Settings page

At the settings page, tap “Firmware”.

- Your current firmware version will be shown. Tap “Update” if new firmware is available (indicated by a red dot)



Create accounts for weather server

The console can upload weather data to Weather Underground, Weathercloud or 3rd party cloud server through WI-FI router, you can follow the step below to setup your device.

Note

Add the cloud server website and app are subjected to change without notice.

For Weather Underground (WU)

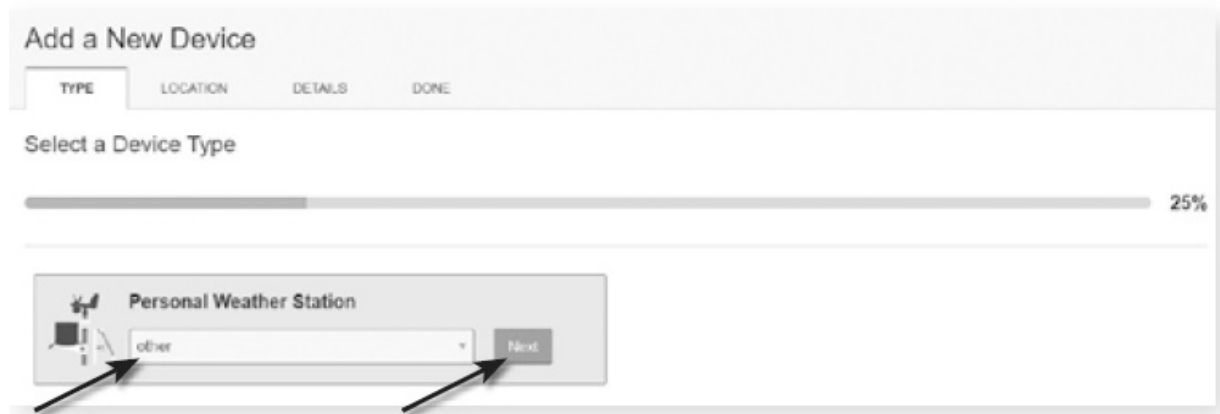
1. In <https://www.wunderground.com> click the “Join” on the top right corner to open the registration page.
Follow the instructions to create your account.
- 2.



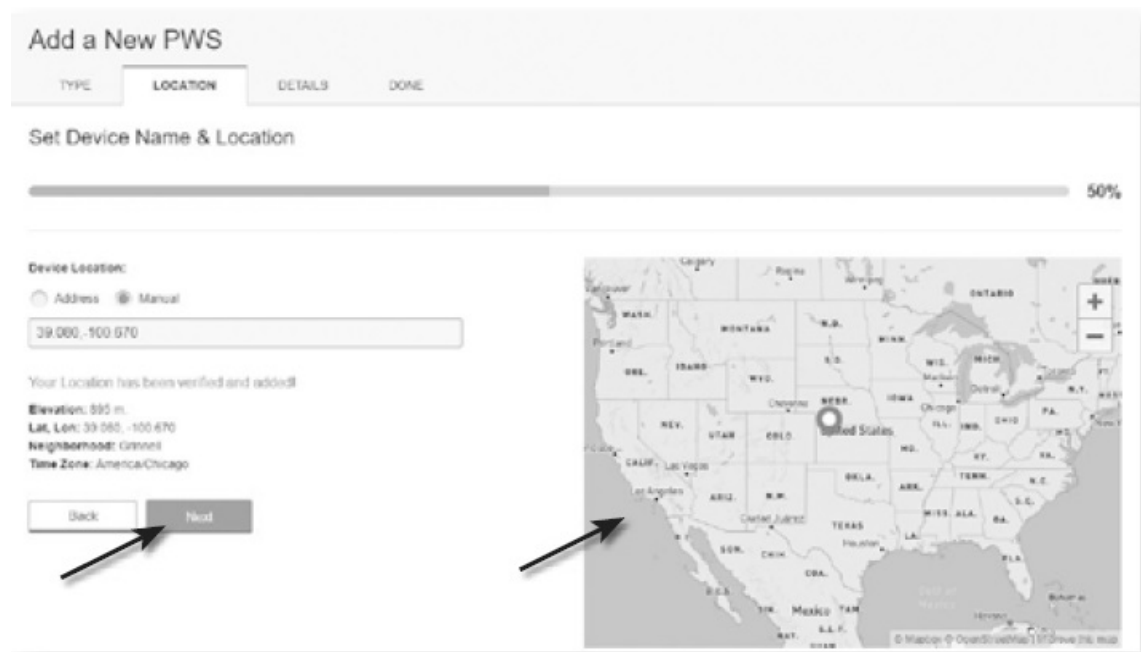
Once you have created your account and completed the Email validation, please go back to the WUnderground web page to login. Then, click “My Profile” on the top to open the drop-down menu and click “My Weather Station”.



3. In "My Weather Station" page bottom, click the "Add New Device" to add your device.
4. In step "Select a Device Type", choose "Other" in the list, then press "Next".



5. In step "Set Device Name & Location", select your location on the map, then press "Next".



6. Follow their instruction to enter your station information, in the Step "Tell Us More About Your Device", (1) enter a Name for your weather station. (2) fill in the other information (3) select "I Accept" to accept Weather Underground's privacy terms, (4) click "Next" to create your station ID and key.

TYPE LOCATION DETAILS DONE

Tell Us More About Your Device

75%

Name (Required)
Give Your Device a Name

Elevation (Required)
895

Device Hardware (Required)
other

Surface Type

Height Above Ground
11. Above Ground

You Make Our Forecasts More Accurate, We Respect Your Privacy
Contribute to the Weather Underground community by sharing some information about yourself and your sensor. We use this information to manage your account and to improve the experience from the Weather Underground community. We may also share certain data for commercial purposes, such as your sensor location.
Learn more about how we take your privacy seriously

(Required)
☒ I Accept ☐ I Deny

Email Preferences:
☐ I would like to receive PWS notifications

Back Next

Annotations: (1) points to 'Give Your Device a Name'; (2) points to 'Elevation' and 'Surface Type'; (3) points to 'I Accept'; (4) points to 'Next'.

7. Jot down Your “Station ID” and “Station key” for the further setup step.

Registration Complete!

100%

Congratulations! Your personal weather station is now registered with Weather Underground.
Enter the information below to your weather station software.

Your Station ID: KCOARVAD281

Your Station Key: s1kgFvGZ

View Devices

Configure Your Software

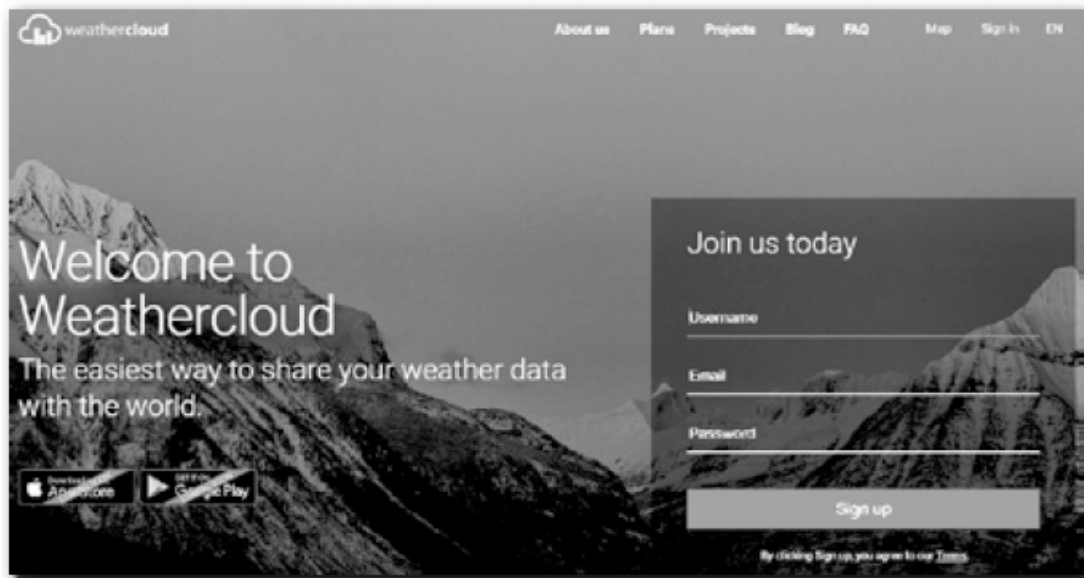
Arrows point to the Station ID, Station Key, and View Devices button.

8. In the setup UI that mention in section 5.5, select the Weather Underground in first row of the Weather server setup section then key-in the Station ID and key that assigned by Weather Underground, follow the steps to complete setting.

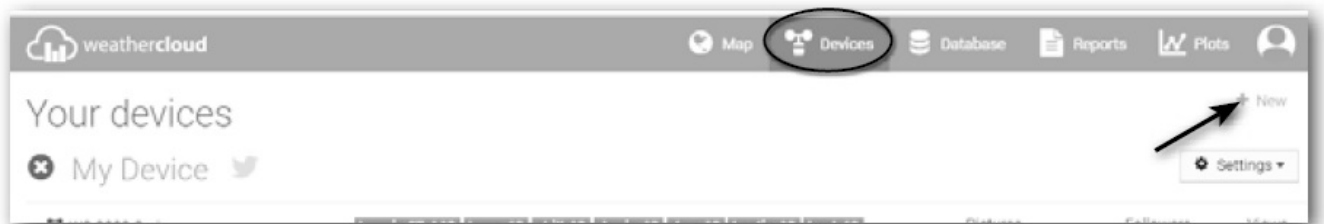
9. Your data is now being uploaded to Weather Underground.

For Weathercloud (WC)

1. In <https://weathercloud.net> enter your information in “Join us today” section, then follow the instructions to create your account.



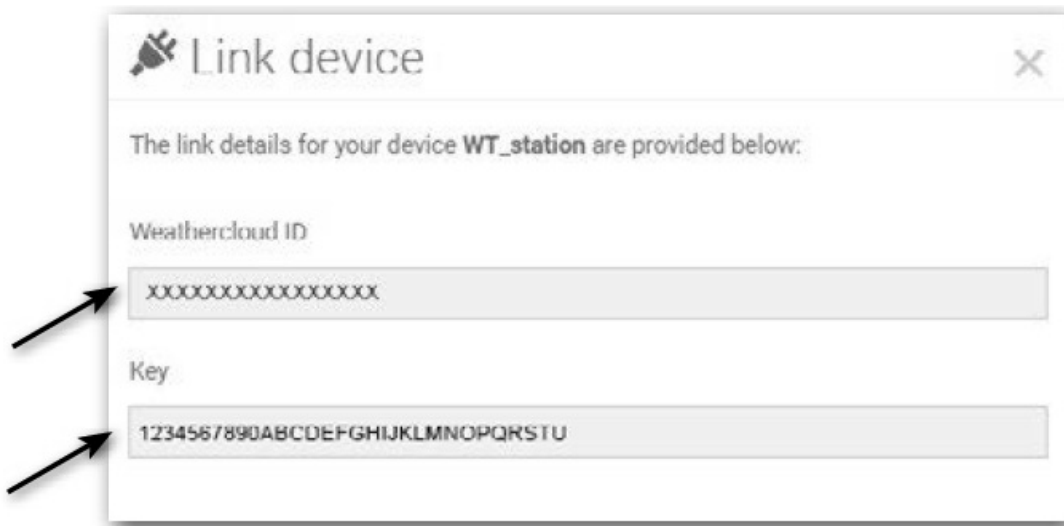
2. Sign in Weathercloud and then you will go the "Devices" page, click "+ New" to create new device.



3. Enter all the information in Create new device page, for the Model* selection box select the "W100 Series" under "CCL" section. For the Link type* selection box select the "SETTINGS", Once you have completed, click Create.

The image shows the "Create new device" form. It has two main sections: "Basic information" and "Location". In the "Basic information" section, there are fields for "Name*" (with the value "My device"), "Model*" (a dropdown menu showing "Select model"), "Link type*" (a dropdown menu showing "Select link type"), "Website" (with the value "www.example.com"), and a "Description" text area. In the "Location" section, there are fields for "Country*" (a dropdown menu showing "Select country"), "State / Province*" (a dropdown menu showing "Select state / province"), "City*" (a text field), "Time zone*" (a dropdown menu showing "(UTC+00:00) UTC"), "Latitude*" (a text field), "Longitude*" (a text field), "Altitude" (a text field with the value "0" and a unit "m"), and "Height" (a text field with the value "0" and a unit "m"). There is a "Get coordinates" button between the "Time zone*" and "Latitude*" fields. At the bottom right of the form, there is a "Create" button with a checkmark icon. An arrow points to the "Create" button.

4. Jot down your ID and key for the further setup step.



5. In the setup UI that mention in section 5.5, select the Weathercloud in second row of the Weather server setup section then key-in the Station ID and key that assigned by Weathercloud, follow the steps to complete setting.

For PWSWeather account

Please read the detailed additional instructions, which you can download from the following weblink:

<http://archive.bresser.de/download/pwsweather/manual>

NOTE! For the registration a valid e-mail address, to which you must have access, is mandatory, otherwise the setup and use of the service is not possible!

After completing the registration with “PWSWeather”, set up the WI-FI connection for your weather station (see chapter “Configuration/Setting up a WI-FI connection”) and make the settings described in the additional instructions for “Setting up the base station to transmit weather data to pwsweather.com”.

For AWEKAS account

Please read the detailed additional instructions (german language only), which you can download from the following weblink: <http://archive.bresser.de/download/awekas/manual>

NOTE! For the registration a valid e-mail address, to which you must have access, is mandatory, otherwise the setup and use of the service is not possible!

After completing the registration with “AWEKAS”, set up the WI-FI connection for your weather station (see chapter “Configuration/Setting up a WI-FI connection”) and make the settings described in the additional instructions for “Setting up the base station to transmit weather data to awekas.at”.

View WUnderground & Weathercloud live data

Viewing your weather data in WUnderground Login your account.

To view your weather station live data in a web browser (PC or mobile version), please visit <http://www.wunderground.com> , and then enter your “Station ID” in the searching box. Your weather data will show up on the next page. You can also login your account to view and download the recorded data of your weather station.



Another way to view your station is use the web browser URL bar, type below in the URL bar:

<https://www.wunderground.com/dashboard/pws/XXXX>

Then replace the XXXX by your Weather Underground station ID to view your station live data.

Viewing your weather data in Weathercloud

1. To view your weather station live data in a web browser (PC or mobile version), please visit <https://weathercloud.net> and sign in your own account.

2. Click the  icon inside the  pull down menu of your station.



3. Click “Current”, “Wind”, “Evolution” or “Inside” icon to view the live data of your weather station.



Viewing weather data via WSLink app

With WSLink app, user may tap the WUnderground and/or Weathercloud icon in “Your Device” to directly access live weather data on their dashboard respectively.



Maintenance

Firmware update

The console supports OTA firmware update capability. Its firmware may be updated over the air anytime (whenever necessary) through WSLink app.

Firmware update step


1. The latest firmware will download to you smart phone automatically, just connect you console to check the firmware version (refer to section 5.7).
2. Follow the app step to transfer the OTA file from smart phone to console
3. Once file transferred, the console will start to update, the update time is around 5 ~ 10 minutes. While updating, the progress will be displayed (i.e. 100 is completion).
4. The console will restart once the update is completed.
5. The console will stay in AP mode for you to check the firmware version and all the current setting. Simply press and hold [SENSOR / WI-FI] key for 6 seconds to exit AP mode.



Important note

- Please keep connecting the power during the firmware update process.
- Please make sure your WI-FI connection is stable.
- When the update process start, do not operate the smart phone and console until the update finished.
- During firmware update the console will stop upload data to weather server. It will reconnect to your WI-FI router and upload the data again once the firmware update succeed. If the console cannot connect to your router, please enter the WSLink app to setup again.
- After the firmware update, If the setup informations are missing, please input the setup information again.
- Firmware update process have potential risk, which cannot guarantee 100% success. If the update fail, redo the above step to update again.

Battery replacement

When low battery indicator  appear near the sensor antenna icon, it indicates that the current sensor battery power is low respectively. Please replace with new batteries.

Re-pairing the sensor array manually

Whenever you changed the batteries of the 7-in-1 weather sensor array or other additional sensors, re-synchronization must be done manually.

1. Change all the batteries to new ones of the wireless sensor array.
2. Press [SENSOR / WI-FI] key on the console to enter sensor synchronization mode (as indicated by the flashing antenna).

Reset and factory reset

- To reset the console and start again, press the [RESET] key once or remove the backup battery and then unplug the adapter.
- To resume factory settings and remove all data, press and hold the [RESET] key for 6 seconds.

Wireless 7-in-1 sensor array maintenance



REPLACE THE WIND CUP

1. Remove rubber cap and Unscrew
2. Remove the wind cup for replacement

CLEANING THE UV SENSOR AND CALIBRATION

- For precision UV measurement, gentle clean the UV sensor cover lens with damp micro-fiber cloth.
- Over time, the UV sensor will naturally degrade. The UV sensor can be calibrated with a utility grade UV meter, please refer to Calibration section in previous page for about the UV sensor calibration.

REPLACE THE WIND VANE

Unscrew and remove the wind vane for replacement

CLEANING THE RAIN COLLECTOR

1. Rotate the rain collector by turning it 30° anti-clockwise.
2. Gently remove the rain collector.
3. Clean and remove any debris or insects.
4. Install the collector when it is clean and fully dried.

CLEANING HYGRO-THERMO SENSOR

1. Remove the 2 screws at the bottom of the radiation shield.
2. Gently pull out the bottom 4 shields.
3. Carefully remove any dirt or insects on the sensor (do not let the sensors inside get wet).
4. Clean the shield with water to remove any dirt or insects.
5. Install all the parts back when they are clean and fully dried.

In general, if the regular maintenance schedule in the owner's manual is followed, the user can expect a lifetime in excess of 3 years before the sensor array is completely replaced. The life expectancy of a weather station is largely influenced by its environment, see the following examples

- Coastal, swampy or wetland environments. Salt air, salt spray, and acidification are the most difficult environments for a weather station to live long. These can corrode bearings, sensor plates (temperature, humidity, etc.), mounting hardware, and other moving parts. In this environment, the expected product life is 1-3 years. Our boards are conformal coated to prevent this corrosion. Digital thermometer and hygrometer sensors rely on the changing nature of the metal's resistance, allowing corrosion to occur faster
- Long-term exposure to high humidity environment. Prolonged exposure to high humidity, whether salty or acidic, can easily cause premature failure of metal parts. In a hot and dry environment, the lifespan of a

weather station is known to last up to 5 years.

- Hurricanes and tropical storms can also shorten the lifespan of weather stations.

Troubleshoot

Problems	Solution
7-in-1 wireless sensor array is intermittent or no connection	<ol style="list-style-type: none">1. Make sure the sensor array is within the transmission range2. If it still does not work, reset the sensor pair with console again
No WI-FI connection	<ol style="list-style-type: none">1. Check the WI-FI icon on the display, it should be on if connectivity is successful2. In the console SETUP page, make sure the WI-FI settings (router's name, security type, password) are correct3. Make sure you connect to 2.4G band of the WI-FI router (5G not supported)
Not able to add the device to WSLink	<ol style="list-style-type: none">1. Make sure your WSLink is the latest version2. Make sure your device is in AP mode3. Make sure no other smart phone connected your device.
After first time setup, data is not showing at WUunderground or Weathercloud	<ol style="list-style-type: none">1. Please note it make a few minutes to a few hours for WUunderground or Weathercloud to validate your upload data.2. Try to refresh the WUunderground or Weathercloud website.
Data not reporting to WUunderground or Weathercloud	<ol style="list-style-type: none">1. Make sure the WI-FI connection of the console is good.2. In the console SETUP page, ensure your Station ID and Station Key are correct
Rainfall is not correct	<ol style="list-style-type: none">1. Make sure the rain collector is clean for the tipping bucket to tip smoothly2. Make sure the sensor has stable and level mounting to ensure correct tipping
Temperature reading too high in the day time	<ol style="list-style-type: none">1. Place the sensor in open area and at least 1.5m off the ground.2. Ensure that the sensor is placed away from heat generating sources or structures, such as buildings, pavement, walls or air conditioning units.
Some condensation beneath the UV sensor may occur overnight	This will disappear when temperature rises up under the sun and will not affect the performance of the unit.

Specifications

Console

General specification	
Dimensions (W x H x D)	168 x 142 x 23.5mm (6.6 x 5.6 x 0.9 in)
Weight	353g (without battery)
Main power	DC 5V, 1A (USB type C input)
Backup battery	CR2032
Operating temperature range	-5°C ~ 50°C
Operating Humidity range	RH 10~90% non-condensing
Support sensor	<ul style="list-style-type: none"> • 1 Wireless 7-in-1 weather sensor array • 7 Wireless thermo-hygro sensor (optional)
RF frequency (Depend on country version)	868Mhz (EU or UK version)

Time related function specification	
Time display	HH : MM
Hour format	12hr AM / PM or 24 hr
Date display	DD / MM or MM / DD
Time synchronize method	Internet time server
Weekday languages	EN / DE / FR / ES / IT / NL / RU

Setup app

App name	WSLink
App download platform	Google play and Apple Store
Support platform	Android smart phone or iPhone

WI-FI communication specification

Standard	802.11 b/g/n
Operating frequency :	2.4GHz
Supported router security type	WPA / WPA2, WPA3, OPEN, WEP (WEP only support Hexadecimal password)

Barometer (Note: Data detected by console)

Barometer unit	hPa, inHg and mmHg
Measuring range	540 ~ 1100hPa
Accuracy	(700 ~ 1100hPa \pm 5hPa) / (540 ~ 696hPa \pm 8hPa) (20.67 ~ 32.48inHg \pm 0.15inHg) / (15.95 ~ 20.55inHg \pm 0.24inHg) (525 ~ 825mmHg \pm 3.8mmHg) / (405 ~ 522mmHg \pm 6mmHg) Typical at 25°C (77°F)
Resolution	1hPa / 0.01inHg / 0.1mmHg

Indoor temperature (Note: Data detected by console)

Temperature unit	°C and °F
Accuracy	$\leq 0^{\circ}\text{C} \pm 2^{\circ}\text{C}$ ($\leq 32^{\circ}\text{F} \pm 3.6^{\circ}\text{F}$) $> 0^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ($> 32^{\circ}\text{F} \pm 1.8^{\circ}\text{F}$)
Resolution	°C / °F (1 decimal place)

Indoor humidity (Note: Data detected by console)

Humidity unit	%
Accuracy	<ul style="list-style-type: none"> 1 ~ 9% RH \pm 8% RH @ 25°C (77°F) 10 ~ 90% RH \pm 5% RH @ 25°C (77°F) 90 ~ 99% RH \pm 8% RH @ 25°C (77°F)
Resolution	1%

Outdoor temperature (Note: Data detected by 7-in-1 sensor)

Temperature unit	°C and °F
Feels like display range	-65 ~ 50°C
Heat index display range	26 ~ 50°C
Wind chill display range	-65 ~ 18°C (wind speed > 4.8km/h)
Dew point display range	-20 ~ 80°C
Accuracy	<ul style="list-style-type: none"> 0.1 ~ 60°C \pm 0.4°C (32.2 ~ 140°F \pm 0.7°F) -19.9 ~ 0°C \pm 0.7°C (-3.8 ~ 32°F \pm 1.3°F) -40 ~ -20°C \pm 1°C (-40 ~ -4°F \pm 1.8°F)
Resolution	°C / °F (1 decimal place)

Outdoor humidity (Note: Data detected by 7-in-1 sensor)	
Humidity unit	%
Accuracy	<ul style="list-style-type: none"> • 1~9% RH \pm 5% RH @25°C (77°F) • 10~90% RH \pm 3.5% RH @25°C (77°F) • 91~99% RH \pm 5% RH @25°C (77°F)
Resolution	1%

Rain (Note: Data detected by 7-in-1 sensor)

Unit for rainfall	mm and in
Unit for rain rate	mm/h and in/h
Accuracy	\pm 7% or 1 tip
Range	0 ~ 19999mm (0 ~ 787.3 in)
Resolution	0.254mm (3 decimal place in mm)

UV index (Note: Data detected by 7-in-1 sensor)

Display range	0 ~ 16
Resolution	Integer

Light intensity (Note: Data detected by 7-in-1 sensor)

Light intensity unit	Klux, Kfc and W/m ²
Display range	0 ~ 200Klux
Resolution	Klux, Kfc and W/m ² (2 decimal place)

Wireless 7-in-1 sensor

Dimensions (W x H x D)	343.5 x 393.5 x 136mm (13.5 x 15.5 x 5.35in) installed mounting
Weight	665g (not include batteries)
Main power	3 x AA size 1.5V batteries (Non-rechargeable Lithium batteries recommended)
Weather data	Temperature, humidity, wind speed, wind direction, rain, UV and light intensity
RF transmission range	150m
RF frequency (depend on country version)	868Mhz (EU, UK)
Transmission interval	12 seconds
Operating temperature range	-40 ~ 60°C (-40 ~ 140°F) Non-rechargeable Lithium batteries required for low temperature
Operating humidity range	1 ~99% RH

Disposal



Dispose of the packaging materials properly, according to their type, such as paper or cardboard. Contact your local waste-disposal service or environmental authority for information on the proper disposal.



Do not dispose of electronic devices in the household garbage!

As per Directive 2002/96/EC of the European Parliament on waste electrical and electronic equipment and its adaptation into German law, used electronic devices must be collected separately and recycled in an environmentally friendly manner.



In accordance with the regulations concerning batteries and rechargeable batteries, disposing of them in the normal household waste is explicitly forbidden. Please make sure to dispose of your used batteries as required by law — at a local collection point or in the retail market. Disposal in domestic waste violates the Battery Directive. Batteries that contain toxins are marked with a sign and a chemical symbol. “Cd” = cadmium, “Hg” = mercury, “Pb” = lead.

CE Declaration of Conformity

Hereby, Bresser GmbH declares that the equipment type with article number 9080600 is in compliance with directive 2014/53/EU. The full text of the CE declaration of conformity is available at the following internet address:
www.bresser.de/download/9080600/CE/9080600_CE.pdf

Warranty & Service

The regular warranty period is 2 years and begins on the day of purchase. To benefit from an extended voluntary warranty period as stated on the gift box, registration on our website is required.

You can consult the full warranty terms as well as information on extending the warranty period and details of our services at www.bresser.de/warranty_terms.

Service

Please contact the service centre first for any questions regarding the product or claims, preferably by e-mail.

- E-Mail: service@bresseruk.com

- **Telephone***: +44 1342 837 098

BRESSER UK Ltd.

- Suite 3G, Eden House
- Enterprise Way
- Edenbridge, Kent TN8 6HF
- Great Britain

Number charged at local rates in the UK (the amount you will be charged per phone call will depend on the tariff of your phone provider); calls from abroad will involve higher costs.

Every purchase helps support the global nonprofit National Geographic Society in its work to protect and illuminate our world through exploration, research, and education.

TO LEARN MORE, VISIT [NATGEO.COM/INFO](https://www.natgeo.com/info)

© National Geographic Partners LLC.


All rights reserved. NATIONAL GEOGRAPHIC and Yellow Border Design are trademarks of National Geographic Society, used under license.

Visit our website: www.nationalgeographic.com

- Bresser GmbH Gutenbergstraße 2 46414 Rhede · Germany
- www.bresser.de
- @BresserEurope
- Bresser UK Ltd.
- Eden House, Enterprise Way Edenbridge, Kent TN8 6HF Great Britain










Errors and technical changes reserved. Manual_9080600_WIFI-Weather-Center-7in1_de-en_NATGEO_v102024a

Documents / Resources

	<p>BRESSER 9080600 7 in 1 Weather Station with Color Display [pdf] Installation Guide 9080600 7 in 1 Weather Station with Color Display, 9080600, 7 in 1 Weather Station with Color Display, Weather Station with Color Display, Station with Color Display, Color Display</p>
---	--

References

- [index - powered by h5ai v0.30.0 \(https://larsjung.de/h5ai/\)](https://larsjung.de/h5ai/)
- art.no
- [AWEKAS – Automatic Weather Map System](#)
- [PWSWeather - Bring Your Weather to Life](#)
- [Weathercloud | Global network of weather stations](#)
- ws.awekas.at

-  [Local Weather Forecast, News and Conditions | Weather Underground](#)
-  [Bresser](#)
-  [National Geographic](#)
-  [PWSWeather - Bring Your Weather to Life](#)
-  [Local Weather Forecast, News and Conditions | Weather Underground](#)
-  [AWEKAS – Automatic Weather Map System](#)
-  [PWSWeather - Bring Your Weather to Life](#)
-  [Weathercloud | Global network of weather stations](#)
-  [Local Weather Forecast, News and Conditions | Weather Underground](#)
- [User Manual](#)

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.