RC weather station with BBQ Weather display and Outdoor Sensor

Thank you for purchasing this high quality product.

Unpacking and checking

1. Remove the weather station from the packaging, remove all protective films and keep the packaging materials out of the reach of children.
2. Dispose of the materials separately according to type.
3. Check that all the items that should be included in the delivery are present and whether the weather station displays any damage.

Items included in the delivery

• The weather station, consisting of base station and wireless sensor
• 3 batteries – LR6 type (AA) / 1.5 V ▀▀▀ (base unit)
• 2 batteries – LR6 type (AA) / 1.5 V ▀▀▀ (wireless sensor)
• Operating instructions

Product functions

Weather station

• 12- or 24-hour display
• Date, time and day of week display
• 2 alarms can be set, with snooze function
• Indoor temperature display in °C/°F
• Indoor and outdoor humidity display
• Outdoor temperature display in °C/°F with up to three wireless sensors at different measurement sites (delivery includes one wireless sensor)
• Minimum/maximum display for temperature and humidity
• Humidity and temperature trend display
• Outdoor temperature alert
• Frost warning
• Weather forecast symbols
• Moon phase display
• Sun rise / sun set times display
• Tide display
• Location display
• Air pressure reading with trend
• Air pressure history
• Air pressure unit in hPa and inHg
• Absolute and relative air pressure selectable
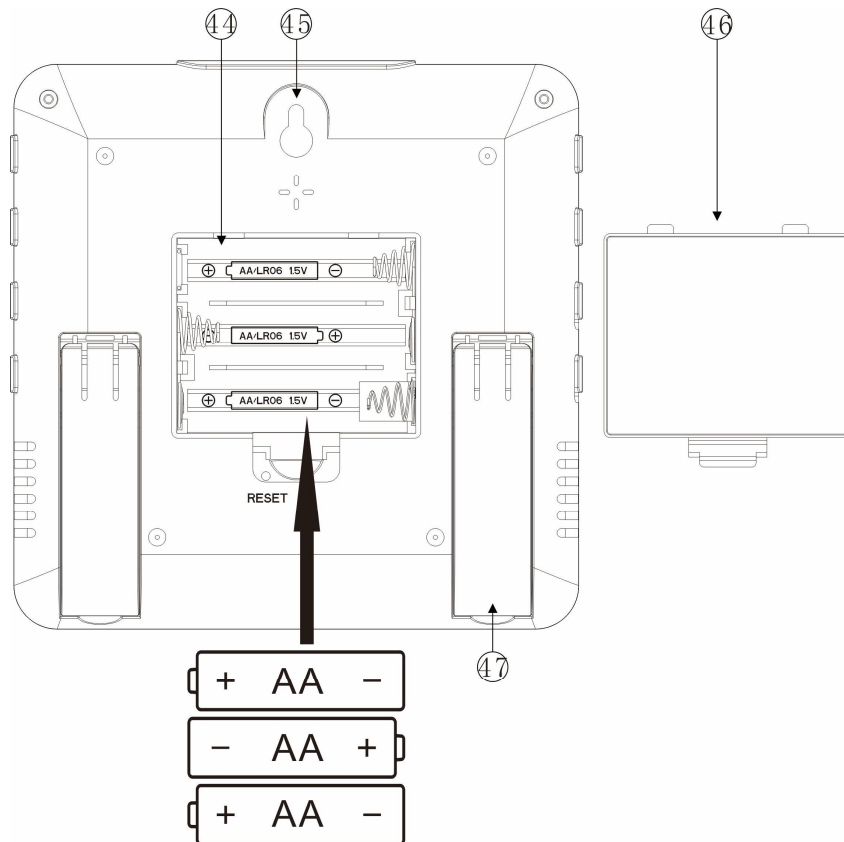• Low battery indicator

• Wall mounting bracket

Wireless sensor

• Temperature display in °C/°F

• Humidity display

• Range of up to 100 meters (in open area)

• Low battery indicator

• Wall mounting bracket

Overview the Weather Station
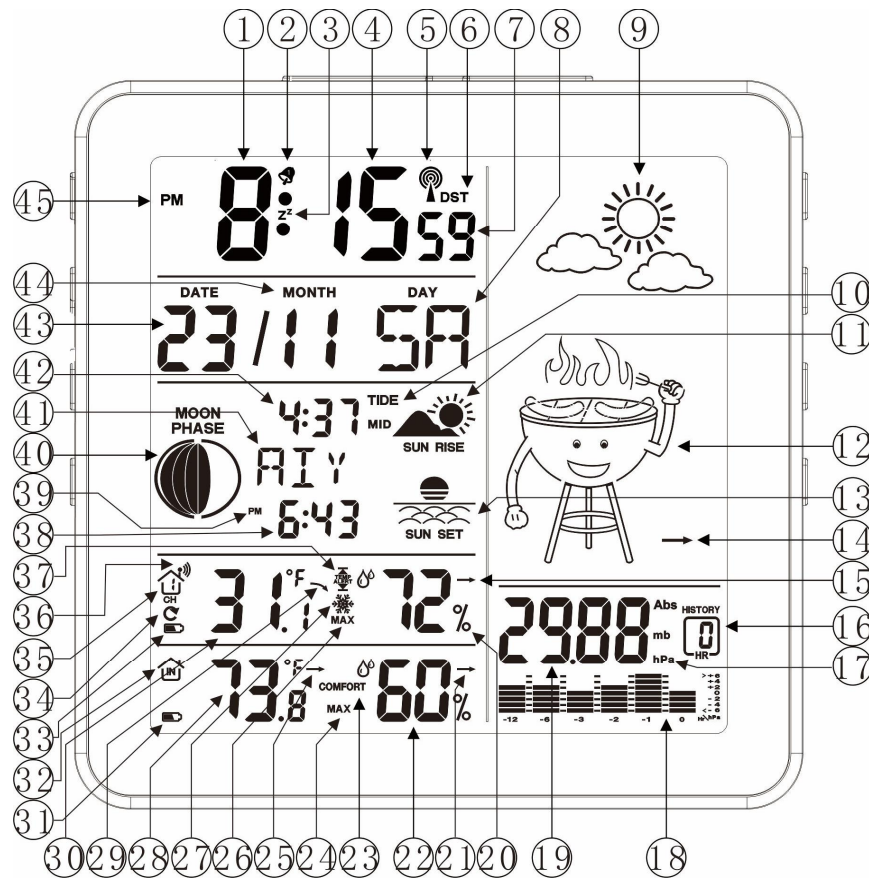
| 1	Hour	25	Indoor temperature trend
2	Alarm symbol	26	Stored outdoor maximum and minimum values
3	Snooze symbol	27	Frost warning
4	Minute	28	Indoor temperature
5	Radio controlled indicator	29	Outdoor temperature trend
6	Daylight saving time (DST)	30	Outdoor temperature
7	Second	31	Low battery indicator (receiver)
8	Day of week	32	Indoor symbol
9	Weather icon	33	Low battery indicator (outdoor sensor)
10	Tide	34	Automatic switching symbol
11	Sun rise	35	Current transmission channel to the base unit
12	BBQ symbol	36	Radio frequency reception symbol
13	Sun set	37	Outdoor temperature alert symbol
14	Air pressure trend	38	Sun set time
15	Outdoor humidity trend	39	Moon phase
16	Air pressure for previous hours	40	Location (City)
17	Air pressure unit	41	Sun rise time
18	Air pressure bar	42	Date
19	Current air history	43	Month
20	Outdoor humidity	44	Battery compartment
21	Indoor humidity trend	45	Loop for hanging
22	Indoor humidity	46	Battery compartment cover
23	Comfort of indoor	47	Fold stand
24	Stored indoor maximum and minimum values		
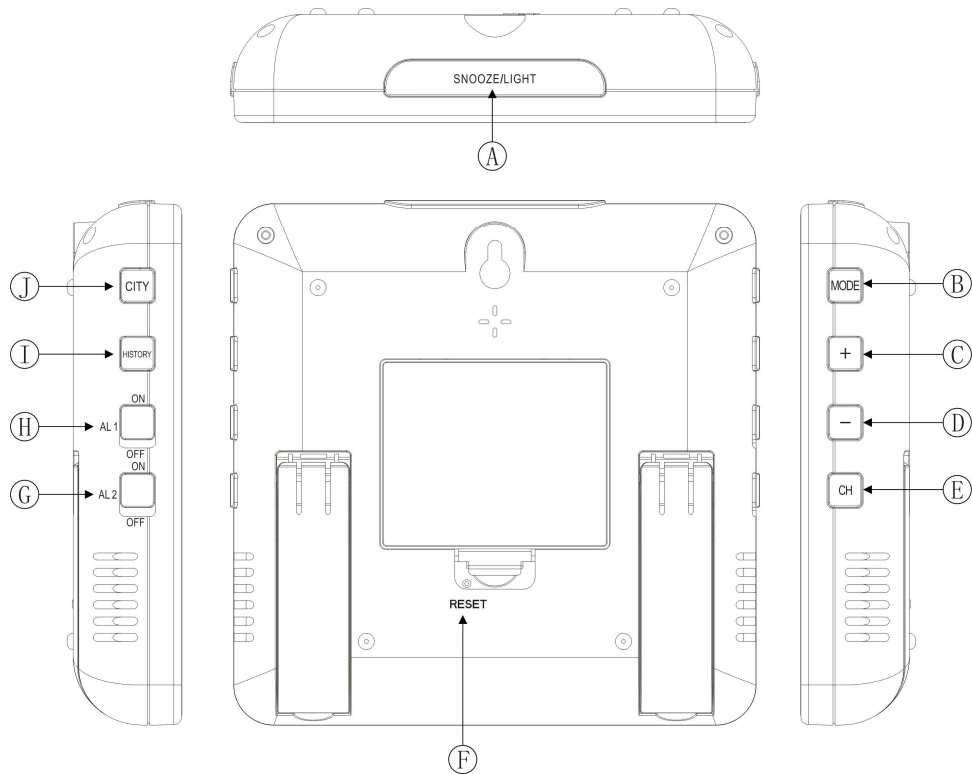
Operating elements and parts of the base unit

Operating buttons	
A	Button SNOOZE/LIGHT * Illumination backlight * Activate snooze function
B	Button MODE * Display alarm time * Activate settings mode * Save changes to settings
C	Button **+** * Set values (increase) * Display stored MAX and MIN values
D	Button **–** * Set values (decrease) * Switching outdoor temperature alert and frost warning on/off * Activate outdoor temperature alert setting mode
E	Button CH * Display weather data from various wireless sensors (channel 1.2.3 and automatic switching ↻ between all the sensors.) * Reconnect wireless sensor connection

F	Button RESET
	* Restart the weather station
G	Alarm 2 on/off switching button
H	Alarm 1 on/off switching button
I	Button HISTORY
	* Display air pressure value of previous hours (0 ~ -12 hours)
	* Activate air pressure setting mode
	* Save changes to settings
J	Button CITY
	* Activate city setting mode

Wireless sensor
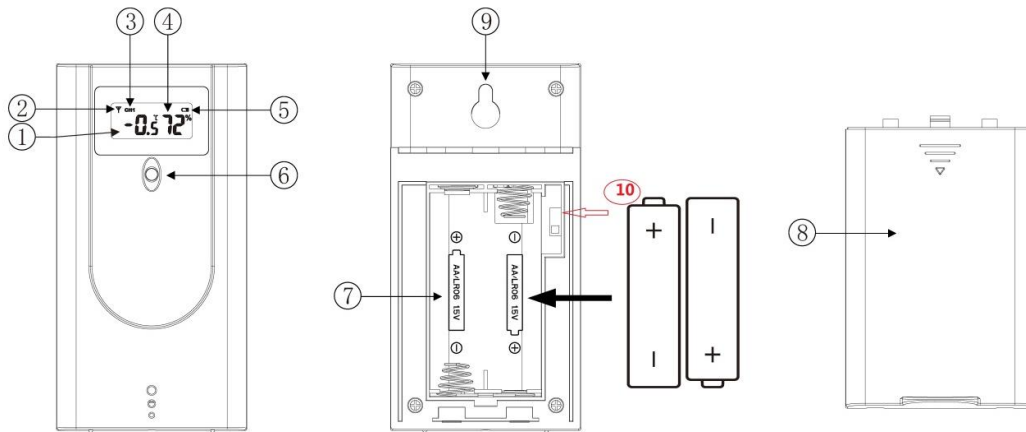
1	Temperature display
2	Radio frequency display
3	Current transmission channel
4	Humidity display
5	Low battery indicator
6	Red pilot light
7	Battery compartment
8	Battery compartment cover
9	Loop for hanging
10	Sliding switch 1 2 3: Set sensor number (transmission channel)

If you wish to use only the wireless sensor included in the delivery, as a general rule, the transmission channel does not need to be changed.

This is only necessary if you wish to use additional wireless sensors; see "Using additional wireless sensors".

Initial setup

Follow the instructions in the order described and first put the batteries in the wireless sensor. This is the only way for the weather station to function without any problems. Do not press any buttons while switching the device on.

Wireless sensor

1. Remove the battery compartment cover on the back of the wireless sensor.
2. Insert 2 LR6 (AA) / 1.5 V batteries facing in the direction indicated on the bottom of the battery compartment. Make sure that the poles of the batteries are correct (+/-). As soon as the wireless sensor is receiving power, the red pilot light will light up and thus display that data is being transmitted to the base unit.
3. Put the battery compartment cover back in place.
  - Do not use batteries that have a voltage that is too low (only 1.2 V instead of 1.5 V). This affects the accuracy of the measurements, among other things.
  - If possible, use alkaline batteries instead of zinc-carbon batteries. Alkaline batteries last longer, particularly outside in low temperatures.

Using additional wireless sensors

The weather station comes with one wireless sensor. However, you can operate the weather station with up to three wireless sensors.
• The wireless sensors can be located in different rooms or outdoors.
• Every sensor must be assigned its own sensor number (= number of the transmission channel) (1 to 3).
• For the snow and frost warning, the weather station only analyses the information from the sensor with the lowest number (by default 1). If only one sensor is connected to channel 1, 2 or 3, the display will function on all 3 channels.

Procedure:
1. Remove the battery compartment cover on the back of the wireless sensor.
2. Set a different sensor number for each wireless sensor with the sliding switches.
3. Put the battery compartment cover back in place on the wireless sensors. If adding another sensor later or after changing the batteries:
4. Press and hold the CH button on the base unit until the radio frequency symbol •⟩⟩ flashes. The base unit will now retrieve the weather information from all available wireless sensors.

Base unit

1. Remove the battery compartment cover.
2. Insert 3 LR6 (AA) / 1.5 V batteries facing in the direction indicated on the bottom of the battery compartment. Make sure that the poles of the batteries are correct (+/-).
3. Put the battery compartment cover back in place and close it.
4. Wait several minutes. The base unit needs this time to collect all the weather data.

Information: The device will lose all information when switching it on again.

Radio frequency connection

After the device turns on, radio frequency symbol •)) will flash on the display and it will start to receive RF signal from wireless sensor for 3 minutes, the corresponding outdoor temperature and humidity values will be displayed.

If NOT received successfully, press and hold the CH button to reconnect.

About the time signal

General

The radio clock built into the weather station receives its wireless signals from the WWVB time signal transmitter.

As soon as the base station has power from the batteries, it begins receiving and searches for the signal from the WWVB transmitter. If the time signal is been received in sufficient strength, the date and time are shown on the display. The base station switches on several times a day and synchronises the time with the wireless signal from the transmitter WWVB. If there is no reception, e.g. in severe thunderstorms, the device continues to run precisely and then automatically switches to receiving at the next scheduled time again.

Starting radio signal reception

After received RF signal for 3 minutes, the device will switch to RC receiving mode; the receiving symbol will flash, and the number of radio waves on display indicates the quality of reception: The more radio waves on display, the better the reception.

As soon as the signal has been received with sufficient strength, the corresponding information is shown on the display and the radio tower symbol is permanently displayed. This process can take 7 minutes.

The weather station will now switch to receive automatically several times a day and compare the time displayed with the time received from the time signal transmitter.

If the signal strength is **not sufficient**, the base unit stops the receiving process and the radio tower symbol is not displayed any more. The receiving process is then carried out again at a later time.

In this case, the time will continue as normal.

• First, check if the base unit is in a suitable location

• You can restart the receiving process manually or

• You can wait for the base unit to automatically switch back to receiving mode at a later time. The reception is usually better at night.

• If reception is not possible at your location, you can set the date and time manually; see the next chapter.

Information: All buttons will be invalid when the weather station is in receiving mode except: 1)

SNOOZE/LIGHT button to illuminate backlight   2) press and hold the + and − button together to exit signal reception manually.

Restarting radio signal reception

Manually restart the radio signal reception by pressing and holding the + and − buttons together for 2 seconds.

Turn off Radio signal permanently

Manually turn off the radio signal reception permanently by pressing and holding the MODE and + buttons together for 2 seconds, the ◎ symbol will be constantly displayed.

Setting the time and date manually

1. Press and hold the MODE on until the display for the hour format (24-hour or 12-hour) begins to flash.

2. Set the hour format with the + and − buttons. (in the 12-hour format, the afternoon hours are shown with "PM" on the display)

3. Press MODE to store the setting.

4. Continue as described:

   - Set a value with + and −.

   - Store a setting with MODE.

5. Set the following settings one after another:
   - Temperature unit (°F or °C)
   - Air pressure unit (inHg or hPa)
   - Time zone
   - DST (ON or OFF)
   - Hours
   - Minutes
   - Year
   - Month
   - Day
   - Language (only refers to how the days of the week are displayed)

6. Then press MODE to store the changed setting.

Choosing the location

ATTENTION
- Protect the base unit and wireless sensor from dust, shocks, extreme temperatures and direct sunlight.
- Protect the base unit from moisture. Only place the base unit in a dry, enclosed space.
- The wireless sensor is protected against moisture but must be protected against water, e.g. rain.

General

The base unit and wireless sensor exchange information over a radio frequency. For this reason, the location is important for the range of the wireless connection. Note:

• The maximum distance between the base station and wireless sensor is 328 ft (100 meters). However, this range is only possible in open area.

• Shielding building materials such as reinforced concrete reduce or prevent the radio reception between the base station and wireless sensor.

• Devices such as televisions, cordless phones, computers and fluorescent tubes can also interfere with the wireless reception.

• Do not place the base unit and wireless sensors directly on the floor. This restricts the range.

• In low temperatures in winter the battery performance of the wireless sensors can be significantly reduced. This reduces the transmitter range.

Base unit

DANGER

When installing the device on a wall, there must be no electrical cables, gas or water pipes in the wall at the installation site. Otherwise there is a risk of electric shock!

• You can put the base unit on the desk or hang it up.

Wireless sensor

• Place or hang the wireless sensor in a place where it is protected from direct weather (rain, sun, wind, etc.). Suitable locations include e.g. under a porch or in a carport.

Alarm function

The base unit allows you to set two different alarm times. For example, you can set an alarm for the morning and for after an afternoon nap by activating both alarm times.

1. Use the MODE button to select the desired alarm time (A1 or A2).

2. Hold and press the MODE button for approx. 3 seconds once you have chosen the desired alarm time. The hour indicator of the alarm time (A1 or A2) will flash.

3. Set the desired hour for the alarm with the + and ▬ buttons.

4. Press MODE to store the setting. The minute indicator will flash on the display.

5. Set the desired minute for the alarm with + and ▬ buttons.

6. Press MODE to store the setting. The alarm time is set.

Switching the alarm on and off

Use the AL1 and AL2 button to switch the alarm on and off.

On ALARM 1:

• switch ON: 🔔 on the display, A1 is activated

• switch OFF: 🔔 disappear, A1 is deactivated

On ALARM 2:

• switch ON: 🔔 on the display, A2 is activated

• switch OFF: 🔔 disappear, A2 is deactivated

Stopping the alarm

You will be woken by the alarm at the set time, and the sound will become more and more intense as the alarm continues.

• *Snooze* - Press the SNOOZE/LIGHT button to stop the alarm for approx. 5 minutes.

• *Switch off the alarm completely* - Press any button on the base unit (apart from SNOOZE/LIGHT), to stop the alarm. The alarm will go off again after 24 hours.

• *Automatic stop function*- If you do not press any buttons, the alarm will automatically switch off after 2 minutes. The alarm will go off again after 24 hours.
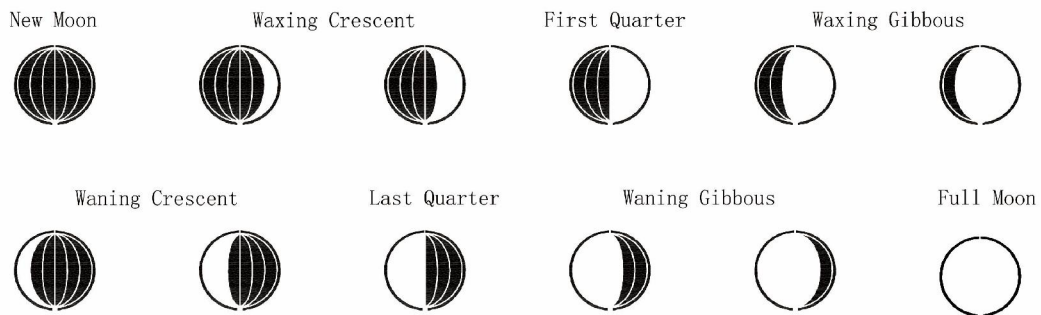
Snooze function

Press the SNOOZE/LIGHT button once when the alarm sounds.

The alarm signal is paused for approx. 5 minutes, the bell symbol and Z^z symbol will flash on the display. Afterwards, the alarm will sound and wake you up again. You can repeat this process multiple times.
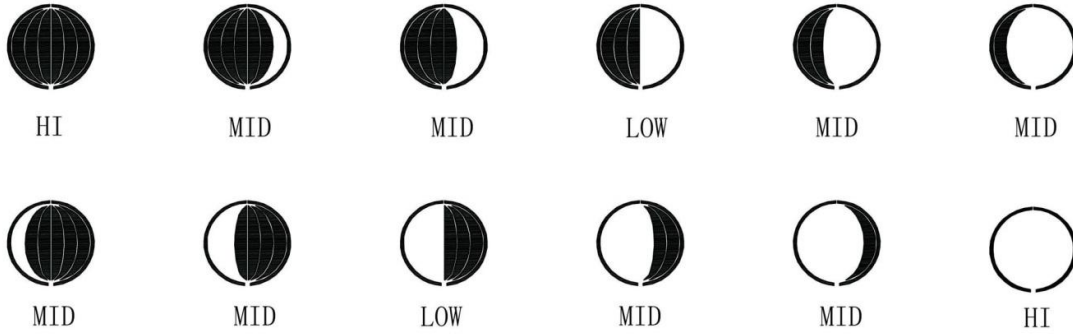
Moon phase

The 12 moon phases are automatically updated with the date.

Tide

Tide indicator possible display: HI, MID, LOW

HI	MID	MID	LOW	MID	MID

MID	MID	LOW	MID	MID	HI

Selecting location

Press and hold CITY button to set your country and city, 150 cities can be selected.

Use the + and – buttons to select.

Press the CITY button to confirm.

Sun rise and sun set times

After setting your country and city, the weather station will display the approximate times for sun rise and sun set.

Maximum and minimum values

The maximum and minimum temperature and humidity values by repeatedly pressing the + button.

• press once: the maximum values are shown
• press again: the minimum values are shown
• press again: returns to normal display

Press and hold the + button to delete the maximum and minimum temperature and humidity values.

The minimum and maximum values are automatically deleted every night at 00:00.

Weather trend

For the temperature and humidity values measured by the base unit and the wireless sensor, the trend is displayed in the form of an arrow:

Trend	rising	constant	falling
Temperature	➚	→	➘
Humidity	➚	→	➘

Outdoor temperature alert and frost warning

Keep pressing the ➖ button to turn on/off the temperature alert and frost warning.

• press once: the temperature alert ⏁ is activate

• press again: the frost warning ❄ is activate

• press again: temperature alert and frost warning are both activated

• press again: temperature alert and frost warning are both deactivated

Temperature alert - Press and hold the ➖ button to set temperature alert values, ⏁ symbol and temperature will flash. Use ➕ and ➖ button to select upper limit, press MODE button to confirm. The ⏁ symbol and temperature will flash at the same time. Use ➕ and ➖ button to select lower limit, press MODE button to confirm.

• Temperature alert setting range is from +50°C to - 20°C

• Alert symbol and temperature value will both flash with beep sounds if the current channel is in the channel which has been set.

• Only Alert symbol will flash with beep sounds if the current channel is not the channel which has been set.

Frost warning - If the wireless sensor measures a temperature between +1°C and -3°C, there is a risk of frost and a snowflake symbol ❄ will flash with beep sounds when it's ON. If the temperature falls below -3°C for an extended period of time, the snowflake symbol will be constantly displayed.

Note: Even if the frost warning is not displayed, when the temperature is around freezing point, there is generally always a risk of frost and/or black ice. The outdoor sensor can only measure the local temperature in the place where it is installed.

Information: Only applies if more than one wireless sensor is in use: For the frost warning, the wireless sensor with the lowest sensor number is always analysed.

Comfort for indoor humidity

3 levels of comfort will show:

|	DRY	COMFORT	WET
Temperature range	0°C ~ 50°C	20°C to 28°C	0°C ~ 50°C
Humidity range	< 40%	40% ~ 70%	>70%

Weather forecast

After setting up initially, the weather forecast can not be used for about 12 hours, as the weather station needs this time to collect and evaluate the weather data.

The weather forecast is a result of the collected data and the measured changes in air pressure.

The forecast refers to the area around the weather station with a radius of about 30 to 50 km for the next 12 to 24 hours.

The accuracy of the weather forecast is around 75 %.
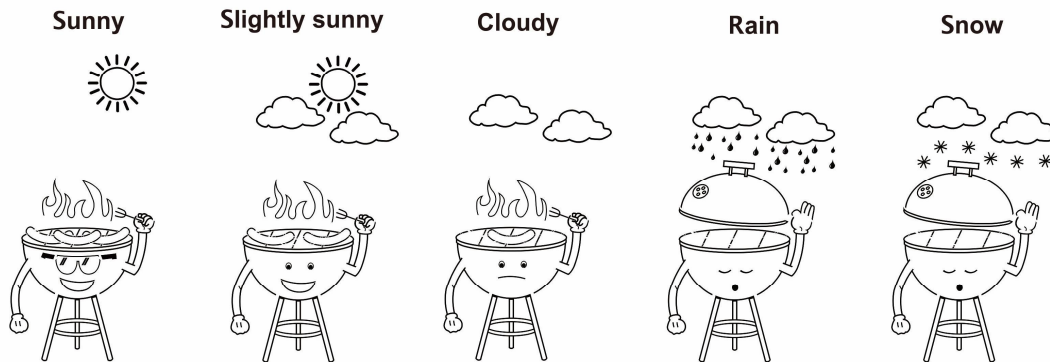
When the symbol for the weather forecast begins to flash and the air pressure falls, this is a sign that the weather is getting worse.

When the air pressure increases again, the symbols display continuously again. An arrow shows the weather tendency.

rising air pressure = weather will improve

constant air pressure = weather will stay the same

falling air pressure = weather will get worse

Air pressure

You can select absolute or relative air pressure by pressing and holding the HIRSTORY button, Rel. or Abs. will flash on the display.

1. Use **+** or **–** buttons to select and press HIRSTORY button to confirm, the air pressure value will flash.

2. Set value with the **+** and **–** buttons.

3. Press HIRSTORY button to confirm.

12- hour air pressure history – Press the HIRSTORY button to display the air pressure history for the last 12 hours.

0 HR = current air pressure

-1 HR = air pressure 1 hour ago

- 2 HR = air pressure 2 hours ago… and so on

The current prevailing air pressure is also displayed in hPa or inHg .

Languages of day of week

The language options are German (GE), English (EN), Italian (IT), French (FR), Spanish (SP), Dutch (DU), Danish (DA) and Russian (RU).

Language / Week	German GE	English EN	Italian IT	French FR	Dutch DU	Spanish SP	Danish DA	Russian RU
Monday	MO	MO	LU	LU	MA	LU	MA	ПН
Tuesday	DI	TU	MA	MA	DI	MA	TI	BT
Wednesday	MI	WE	ME	ME	WO	MI	ON	CP
Thursday	DO	TH	GI	JE	DO	JU	TO	4T
Friday	FR	FR	V'E	V'E	V'R	V'I	FR	ПT
Saturday	SA	SA	SA	SA	ZA	SA	LO	CG
Sunday	SO	SU	DO	DI	ZO	DO	SO	BC

DST function

Weather station will adapt to winter / summer time automatically.
Summer time: the second Sunday of March at 1:59 59' AM changes to 3:00 00' AM.
Winter time: the first Sunday of November at 1:59 59' AM changes to 1:00 00' AM.

Switching the light on

Press SNOOZE/LIGHT button to light up the display for 5 seconds.

Low battery indicator

For the base unit and the wireless sensor, there is a separate low battery indicator.
When the low battery symbol is shown on the display, you have to replace the batteries in the base unit (battery symbol in indoor area) or the wireless sensor (battery symbol in outdoor area) with new batteries.
Note:
• The low battery symbol for the wireless sensor shows that the batteries need changing for the channel number shown.
• When you change the batteries all the settings are lost.
• Always exchange all batteries and only use those listed in the 'Technical Data'.
• Even if the base unit is being powered by the power mains, you should still remove any empty batteries present from the base unit.
• Make sure that the poles of the batteries are correct (+/-) when inserting.
• Clean the battery and device contacts if necessary before inserting.
• Dispose of the old batteries in an environmentally manner
.

Resetting the weather station

Use a sharp object to press RESET button to restart the weather station.

Troubleshooting

Problem	Possible cause and remedy
Device cannot receive WWVB signal for the time.	- Check the chosen location - Start radio reception manually if necessary - Set the time manually
Display screen not working.	Check the batteries in main unit are inserted is plugged in correctly
The temperature from the sensor seems to be too high.	- Check if the sensor is exposed to direct sunlight.
The display shows HH, LL, HH.H or LL.L instead of measured values for temperature or humidity.	- The values are above or below the measuring range, see Technical Data.
The base unit is not receiving any signal from the wireless sensor.	- Make sure that there are no electrical sources of disturbance near the wireless sensor or the base unit. - Check the batteries in the sensor. - Start the search for the wireless sensor manually: Press and hold the CH button on the base unit until the display for the weather information flashes - Move the base unit closer to the sensor or vice versa.
The display is illegible, the function is not clear or the values are clearly wrong.	- Reset the weather station to the factory settings

Cleaning

Wipe the base unit with a slightly damp cloth when required.

Technical Data

Base unit

Model no.: AOLD-5080A

Batteries: 3 x LR6 (AA) / 1.5 V

Temperature measuring range: 0°C ~ 50°C (32°F ~ 122°F)

Resolution: 0.1°C

Accuracy: 0~40°C +/-1°C; other +/-2°C

Humidity measuring range: 20 % to 95 % relative humidity

Resolution: 1 %

Accuracy: 30~80% +/-5%, other +/-8%

Wireless sensor

Model no.: AOLD-2056A

Batteries: 2 x LR6 (AA) 1.5 V

Temperature measuring range: - 20°C ~ 50°C (-4°F ~ 122°F)

Protection type: IPX4

Transmission frequency: 433 MHz

Range: max. 100 meters (in open area)

RF Max power : <6dBm

FCC ID: 2AJOATX2056A

Applicant: AOLD Electronic Limited

Address: Tianxin Industrial District, Dahou Village, Xiegang Town, Dongguan City, Guangdong Province, China.

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation
WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

The RF Exposure Compliance distance is 20 millimeters.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.