SENCOR®

SWS 12500

EN ▪ User Manual — **WI-FI weather station with 7-In-1 professional sensor and Thermo-Hygro Sensor**

CZ ▪ Uživatelská příručka — **Wi-Fi meteorologická stanice s profesionálním snímačem 7-v-1 a snímačem teploty a vlhkosti**

SK ▪ Používateľská príručka — **Wi-Fi meteorologická stanica s profesionálnym snímačom 7-v-1 a snímačom teploty a vlhkosti**

HU ▪ Felhasználói kézikönyv — **Wi-Fi meteorológiai állomás professzionális 7 az 1-ben érzékelővel és hőmérséklet- és páratartalom-érzékelővel**

PL ▪ Podręcznik użytkownika — **Stacja meteorologiczna Wi-Fi z profesjonalnym czujnikiem 7-w1 i czujnikiem temperatury i wilgotności**

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ABOUT THIS USER'S MANUAL

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

ℹ This symbol is followed by a user's tip.

PRECAUTIONS

⚠ ℹ

– Keep 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.
– 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 fresh batteries. Do not mix new and old batteries.
– Only use attachments / accessories specified by the manufacturer.
– Images shown in this manual may differ from the actual display.
– When disposing of this product, ensure it is collected separately for special treatment.
– Dispose of used batteries according to the instructions.
– This product is intended for use only with the adaptor provided: Manufacturer: HUAXU Electronics Factory, Model: HX075-0501000-AG-001.
– CAUTION! Risk of explosion if battery is replaced by an incorrect type.
– Battery cannot be subjected to high or low extreme temperatures, low air pressure at high altitude during use, storage or transportation, if not, it may 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, that can result in an explosion.
– Do not ingest the battery, Chemical Burn Hazard.
– This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
– Keep new and used batteries away from children.
– If the battery compartment 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.
– The socket-outlet shall be installed near the equipment and easily be accessible.
– 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.
– When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer that have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.
– 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.
– This device is only suitable for mounting at height < 2m.

INTRODUCTION

Thank you for selecting WI-FI weather station. This system gathers and automatically uploads accurate and detail weather data to Weather Underground and Weathercloud website - the famous weather service which allows weather observers to upload their local weather data with automated personal weather stations (PWS) - at which you can access and upload your weather data freely. This product offers professional weather observers or serious weather enthusiasts robust performance with a wide range of options and sensors. You will get your own local forecast, high/lows, totals and averages for virtually all weather variables without using a PC/Mac.

The 7-in-1 sensor which measures outdoor temperature, humidity, wind, rain UV and Light together with up to 7 individual temperature humidity sensors, which can add to a sensor array of maximum 7 units continually, transmits weather data to the console. Both sensors are fully assembled and calibrated for your easy installation. They send data at a low power radio frequency to the console from up to 150m/450 feet away (line of sight).

In the console, high-speed processors are embedded to analyze the received weather data and these real-time data can be published to _Wunderground.com_ and _weathercloud.net_ through your home WI-FI router. The console can also synchronize with Internet time server to show high precision time and for its weather data time stamp. The color LCD display shows informative weather readings with advanced features, such as high/low alert alarm, different weather index, and MAX/MIN records. With calibration, sunrise / sunset and moon phase features, this system is truly a remarkably personal yet professional weather station for your own backyard.


NOTE:
This instruction manual contains useful information on the proper use and care of this product. Please read this manual through to fully understand and enjoy its features, and keep it handy for future use.

CONSOLE

1. **[ALARM/SNOOZE]** key
2. **[CHANNEL]** key
3. **[HISTORY]** key
4. **[MAX / MIN]** key
5. **[WIND]** key
6. **[SUN]** key
7. **[BARO]** key
8. **[RAIN]** key
9. LCD display
10. **[CLOCK]** key
11. **[ALARM]** key
12. Wall mounting hole
13. **[ALERT]** key
14. **[NDX /√]** Index key
15. **[/\/◑]** key
16. **[SENSOR / WI-FI]** key
17. **[REFRESH]** key
18. **[°C / °F]** key
19. **[RESET]** key
20. Power jack
21. **[HI / LO / AUTO]** slide switch
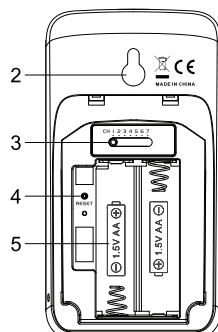22. Battery door
23. Table stand
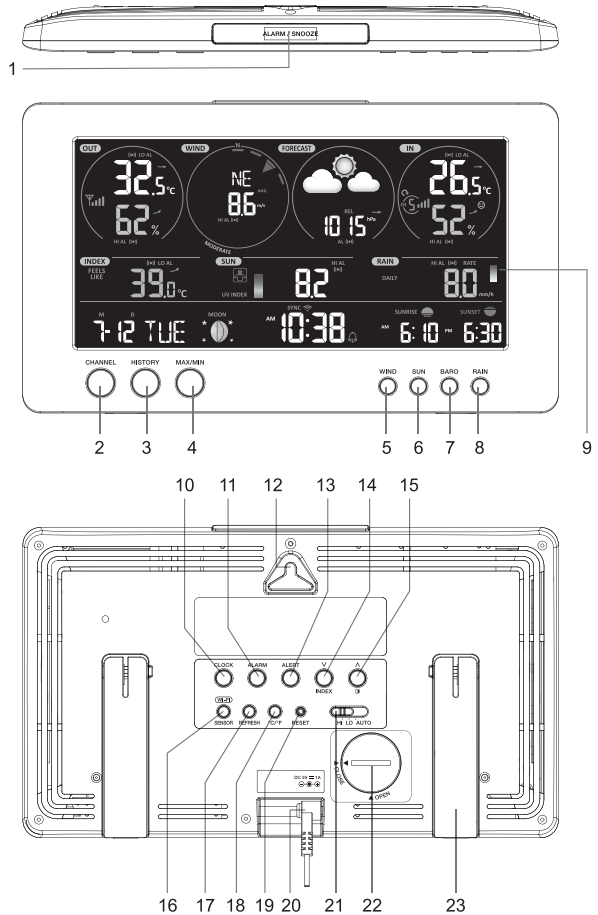
LCD DISPLAY

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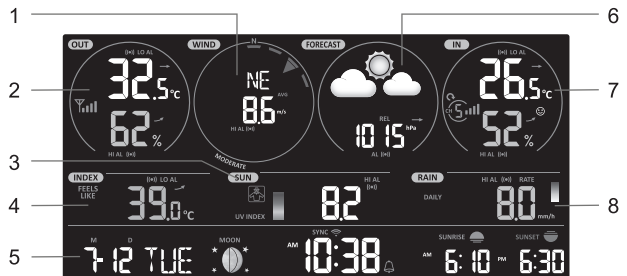
WIRELESS HYGRO-THERMO SENSOR

1. Transmission status LED
2. Wall mounting holder
3. Channel slide switch
4. **[RESET]** key
5. Battery compartment

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
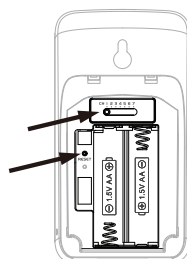14. Rain sensor
15. Tipping bucket
16. Drain holes
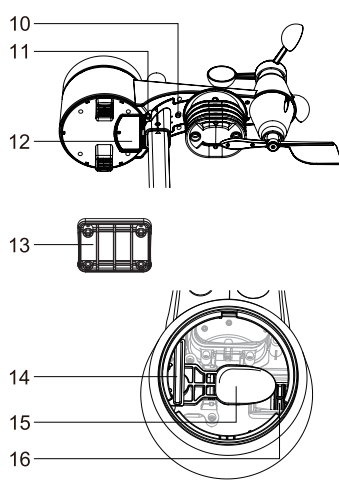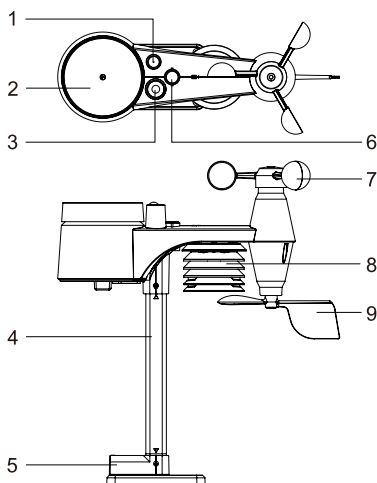
INSTALLATION AND SETUP

Your console can pair up with one wireless 7-in-1 outdoor sensor and up to 7 wireless sensors.
(1pc Wireless 7-in-1 outdoot sensor and Thermo-Hygro Sensor included)

INSTALL WIRELESS SENSOR

1. Remove the battery door of the sensor.
2. Use the channel slide switch to set the channel number for the sensor
   (e.g. Channel 1)
3. Insert 2 × AA size batteries into the battery compartment and close the
   battery door according to the polarity information marked on the battery
   compartment.
4. The sensor is in synchronization mode, and can be registered to the
   console within the next few minutes. The transmission status LED will begin
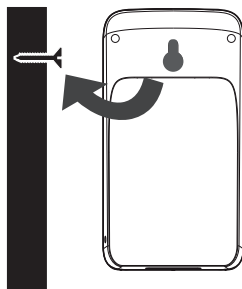   to flash every 1 minute.

PLACING THE WIRELESS SENSOR

Place a screw on the wall that you wish to hang the sensor on.
Hang the sensor onto the screw by the wall mounting holder. You can also place the sensor on a table by itself.

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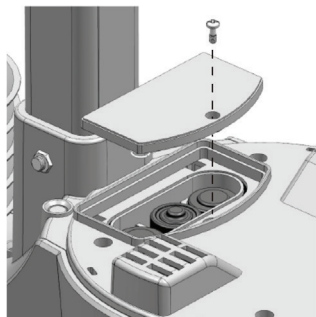
NOTE:
– Ensure the water tight O-ring is properly aligned in place to ensure water resistant.
– The red LED will begin flashing every 12 seconds.

ASSEMBLY THE STAND AND POLE

Step 1

Insert the top side of the pole to the square hole of the weather sensor.

NOTE:
Ensure the pole and sensor's indicator align.

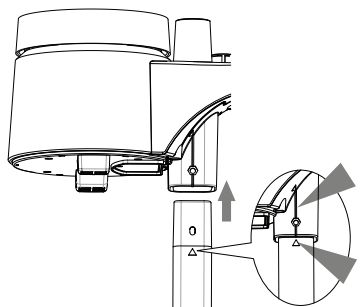| **Step 2**	
Place the nut in the hexagon hole on the sensor, then insert the screw in other side and tighten it by the screw driver.	
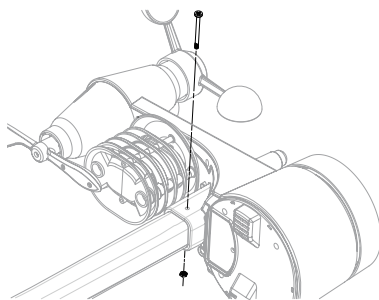
Step 3	
Insert the other side of the pole to the square hole of the plastic stand. **NOTE:** *Ensure the pole and sensor's indicator align.*	
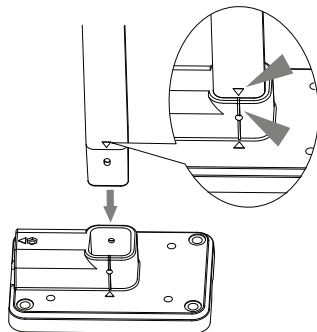
Step 4	
Place the nut in the hexagon hole of the stand, then insert the screw in other side and then tighten it by the screw driver.	
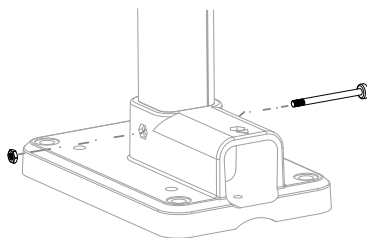
Install the wireless 7-IN-1 sensor in an open location with no obstructions above and around the sensor for accurate rain and wind measurement. Install the sensor with the smaller end facing the North to properly orient the wind direction vane. Secure the mounting stand and clamps (included) to a post or pole, and allow minimum 1.5m off the ground.

Add rubber pads before mount on the pole

Point to NORTH

1.5 meter off the ground
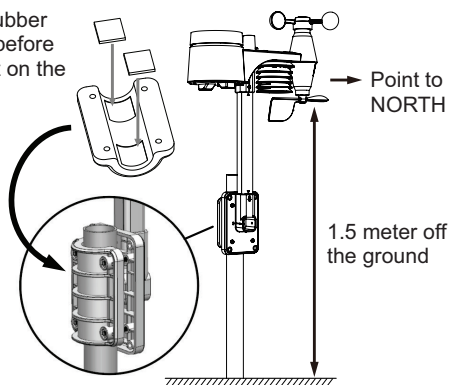
MOUNTING GUIDELINES

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.
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)
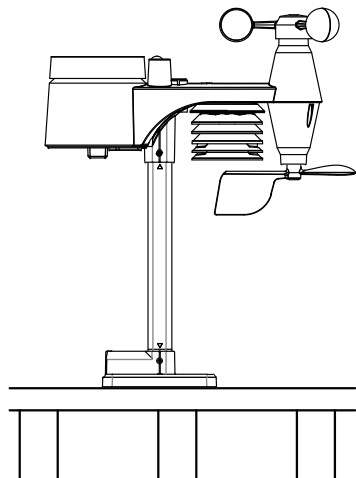
B. Mounting on the railing

SETUP THE CONSOLE

Follow the procedure to setup the console connection with sensor(s) and WI-FI.

INSTALL THE BACKUP BATTERY

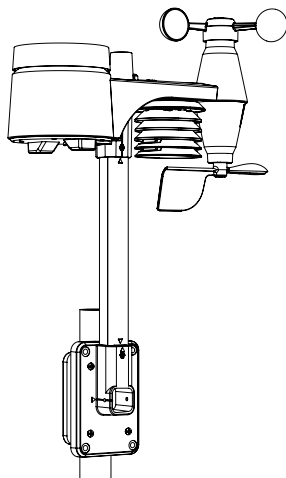| Step 1	Step 2	Step 3
Remove the console battery door with coin	Insert a new button cell battery	Replace the battery door.

▼OPEN / ▼CLOSE (▼OPEN / ▼CLOSE)

> **NOTE:**
> *The backup battery can backup: Time & Date, Max/Min & Past 24 hours weather records, Alert setting values, offset value of weather data and sensor(s) channel history. The built-in memory can backup: Router setting and Weather server setting.*

POWER UP THE CONSOLE

1. Plug the power adapter to power up the console.
2. Once the console power up, all the segments of the LCD will be shown.
3. The console will automatically start AP mode.

NOTE:
If no display appears on the LCD after you plug the adaptor, press **[RESET]** *key by using a pointed object.*

SET LCD DISPLAY VIEWING ANGLE

Press **[∧]** or **[∨]** key in normal mode to adjust LCD viewing angle to fit table stand or wall mount situation.

BUILT-IN MEMORY

The console has built-in FLASH memory that holds the vital settings. These include:

– *Time Zone, DST status, Time SYNC status, WI-FI and Weather server setting, Latitude / Longitude, Hemisphere setting, Calibration values, and Sensor ID of paired sensor(s)*

RESET AND FACTORY HARD 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.

RESYNCHRONIZE SENSORS

Press the **[SENSOR / WI-FI]** key once for the console to enter sensor Synchronization mode, and the console will re-register all the sensors that have already been registered to the it before. i.e. the console will not lose the connection of the sensors that you'd paired up before.

CHANGING BATTERIES AND MANUAL PAIRING OF SENSOR

Whenever you changed the batteries of the wireless sensor or 7-in-1 weather sensor, resynchronization must be done manually.

1. Change all the batteries to new ones in the sensor.
2. Press **[SENSOR / WI-FI]** key on the console to enter sensor synchronization mode.
3. Press **[RESET]** key on the wireless sensor or 7-in-1 weather sensor.

SYNCHRONIZING ADDITIONAL WIRELESS SENSOR(S) (OPTIONAL)

The console can support up to 7 additional wireless sensors.

1. Press the **[SENSOR / WI-FI]** key once on the console to enter synchronization mode.
2. Press the **[RESET]** key on the new sensor, and wait for a few minutes for the new sensor to paired to the console.

NOTE:
– *Channel number of the sensor must not be duplicated among the sensors. Please refer to* "**INSTALL WIRELESS SENSOR**" *for details*
– *This console can support different type of additional wireless sensor, e.g. soil moisture and pool sensor. If you would like to pair up additional sensors, please check with your retailer for more detail.*

POINTING THE WIRELESS 7-IN-1 SENSOR TO SOUTH

The outdoor 7-IN-1 sensor is calibrated to point to North for the maximum accuracy. However, for the user's convenience (e.g. users in the Southern hemisphere), it is possible to use the sensor with the wind vane pointing to South.

1. Install the 7-IN-1 wireless sensor with its wind meter end pointing to South. (Please refer to **INSTALLATION OF THE WIRELESS SENSOR** section for mounting details)
2. Select "S' in hemisphere section of the setup UI setup page. (Please refer to **SETUP THE WEATHER SERVER CONNECTION** section for setup details)
3. Press [Apply] icon to confirm and exit.

> **NOTE:**
> *Changing the hemisphere setting will automatically switch the direction of the moon phase on the display.*

OTHER SETTING & FUNCTIONS OF THE CONSOLE

MANUAL CLOCK SETTING

This console is designed to obtain the UTC time by synchronize with the assigned Internet time server. If you want to use it off line, you can set the time and date manually. During the first time startup, press and hold the **[SENSOR / WI-FI]** key for 6 seconds and let the console back to normal mode.

1. In normal mode, press and hold **[CLOCK SET]** key for 2 seconds to enter setting.
2. The setting sequence: DST AUTO/OFF ➜ Hour ➜ Minute ➜ 12/24 hour format ➜ Year ➜ Month ➜ Day ➜ M-D/D-M format ➜ Time sync ON/OFF ➜ weekday Language.
3. Press **[∧]** or **[∨]** key to change the value. Press and hold the key for quick-adjust.
4. Press **[CLOCK SET]** key to save and exit the setting mode, or it will automatically exit the setting mode 60 seconds later without pressing any key.

> **NOTE:**
> – *In normal mode, press* **[CLOCK SET]** *key to switch between year and date display.*
> – *During the setting, you can back to normal model by press and hold* **[CLOCK SET]** *key for 2 seconds.*

DAYLIGHT SAVING TIME (DST)

DST function is default "AUTO" (for EU or US version). If the current date on display is with in the summer daylight saving period, the time will be automatically adjusted forward by +1 hour, and DST icon will be shown on the LCD display.

SETTING ALARM TIME

1. In normal time mode, press and hold **[ALARM]** key for 2 seconds until the alarm hour digit flashes to enter alarm time setting mode.
2. Press **[∧]** or **[∨]** key to change the value. Press and hold the key for quick-adjust.
3. Press **[ALARM]** key again to step the setting value to Minute with the Minute digit flashing.
4. Press **[∧]** or **[∨]** key to adjust the value of the flashing digit.
5. Press **[ALARM]** key to save and exit the setting.

> **NOTE:**
> – *In alarm mode, the "🔔" icon will display on the LCD.*
> – *The alarm function will turn on automatically once you set the alarm time.*

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.*

When clock reach the alarm time, alarm sound will start.

Where it can be stopped by following operation:

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

> **NOTE:**
> – *The snooze could be used continuously in 24 hours.*
> – *During the snooze, the alarm icon "🔔" will keep flashing.*

SUNRISE & SUNSET TIME

The console indicates your location's sunrise & sunset time by the time zone, latitude and longitude you entered. Please enter the correct information in the regarding settings. If the latitude and longitude values do not match the time zone, the sunrise & sunset time cannot be shown.
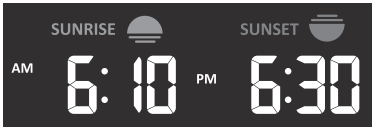
MOON PHASE

The moon phase is determined by the time, date and time zone. The following table explains the moon phase icons of the Northern and Southern Hemispheres. Please refer to **POINTING THE WIRELESS 7-IN-1 SENSOR TO SOUTH** section about how to setup for the Southern Hemispheres.

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

TEMPERATURE / HUMIDITY FUNCTION

– The temperature and humidity reading are display on the outdoor and indoor / CH section.
– Use the **[°C / °F]** slide switch to select the temperature display unit.
– If temperature / humidity is below the measurement range, the reading will show "Lo".
  If temperature / humidity is above the measurement range, the reading will show "HI".

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).

WIRELESS SENSOR SIGNAL RECEIVING

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

Outdoor 7-in-1 sensor			
Channel sensor			
	No signal	Weak signal	Good signal

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.

VIEW THE OTHER CHANNELS (OPTIONAL FEATURE WITH ADD ON EXTRA SENSORS)

This console is capable to pair with a wireless 7-IN-1 sensor and up to 7 wireless sensors. If you have 2 or more sensors, you can press **[CHANNEL]** key to switch between different wireless channels in normal mode, or press and hold **[CHANNEL]** key for 2 seconds to toggle auto-cycle mode to display the connected channels at 4 seconds interval.

During auto-cycle mode, the 🔄 icon will show on the channel section of the console's display. Press **[CHANNEL]** key to stop auto cycle and display the current channel.

TREND INDICATOR

The trend indicator shows the trends of changes in the forthcoming few minutes. The icon will appear in temperature, humidity, index and baro section.
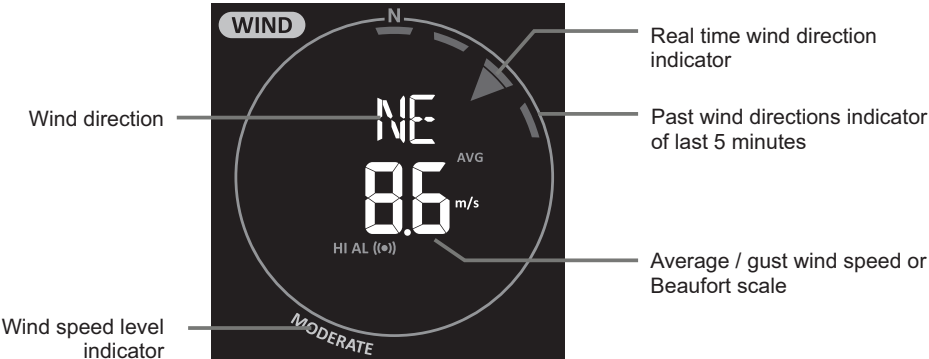

Rising   Steady   Falling

WIND

WIND SPEED AND DIRECTION SECTION OVERVIEW

Wind direction

Wind speed level indicator

Real time wind direction indicator

Past wind directions indicator of last 5 minutes

Average / gust wind speed or Beaufort scale

TO SET THE WIND SPEED UNIT AND DIRECTION DISPLAY FORMAT

1. In normal mode, press and hold **[WIND]** key for 2 seconds to enter into wind speed unit mode and the unit will flash. Press **[∧]** or **[∨]** key to change the wind speed unit in this sequence: m/s ➡ km/h ➡ knots ➡ mph
2. Press **[WIND]** key again to enter wind direction setting mode. The wind direction reading will flash, and then press **[∧]** or **[∨]** key to select the display format between 360 degree or 16 direction.
3. Press **[WIND]** key again to return normal mode.

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
0	Calm	< 1 km/h < 1 mph < 1 knots < 0.3 m/s	Calm. Smoke rises vertically.
1	Light air	1.1 ~ 5km/h 1 ~ 3 mph 1 ~ 3 knots 0.3 ~ 1.5 m/s	Smoke drift indicates wind direction. Leaves and wind vanes are stationary.
2	Light breeze	6 ~ 11 km/h 4 ~ 7 mph 4 ~ 6 knots 1.6 ~ 3.3 m/s	Wind felt on exposed skin. Leaves rustle. Wind vanes begin to move.
3	Gentle breeze	12 ~ 19 km/h 8 ~ 12 mph 7 ~ 10 knots 3.4 ~ 5.4 m/s	Leaves and small twigs constantly moving, light flags extended.
4	Moderate breeze	20 ~ 28 km/h 13 ~ 17 mph 11 ~ 16 knots 5.5 ~ 7.9 m/s	Dust and loose paper raised. Small branches begin to move.
5	Fresh breeze	29 ~ 38 km/h 18 ~ 24 mph 17 ~ 21 knots 8.0 ~ 10.7 m/s	Branches of a moderate size move. Small trees in leaf begin to sway.
6	Strong breeze	39 ~ 49 km/h 25 ~ 30 mph 22 ~ 27 knots 10.8 ~ 13.8 m/s	Large branches in motion. Whistling heard in overhead wires. Umbrella use becomes difficult. Empty plastic bins tip over.
7	High wind	50 ~ 61 km/h 31 ~ 38 mph 28 ~ 33 knots 13.9 ~ 17.1 m/s	Whole trees in motion. Effort needed to walk against the wind.
8	Gale	62 ~ 74 km/h 39 ~ 46 mph 34 ~ 40 knots 17.2 ~ 20.7 m/s	Some twigs broken from trees. Cars veer on road. Progress on foot is seriously impeded
9	Strong gale	75 ~ 88 km/h 47 ~ 54 mph 41 ~ 47 knots 20.8 ~ 24.4 m/s	Some branches break off trees, and some small trees blow over. Construction / temporary signs and barricades blow over.
10	Storm	89 ~ 102 km/h 55 ~ 63 mph 48 ~ 55 knots 24.5 ~ 28.4 m/s	Trees are broken off or uprooted, structural damage likely.
11	Violent storm	103 ~ 117 km/h 64 ~ 73 mph 56 ~ 63 knots 28.5 ~ 32.6 m/s	Widespread vegetation and structural damage likely.
12	Hurricane force	≥ 118 km/h ≥ 74 mph ≥ 64 knots ≥ 32.7m/s	Severe widespread damage to vegetation and structures. Debris and unsecured objects are hurled about.

WEATHER INDEX

At the WEATHER INDEX section, you can press **[NDX]** Index key to view different weather index in this sequence: **FEELS LIKE ➜ DEW POINT ➜ HEAT INDEX ➜ WIND CHILL.**

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.
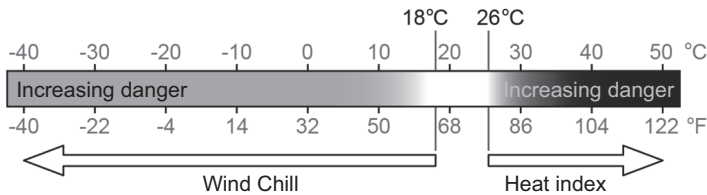
DEW POINT

– The 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.
– The dew point temperature is determined by the temperature & humidity data from wireless 7-IN-1 sensor.

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.

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. Since variation in atmospheric pressure greatly affected by weather, it is possible to forecast the weather by measuring the changes in pressure.

TO VIEW THE BAROMETRIC PRESSURE IN DIFFERENT UNIT
1. In normal mode, press and hold **[BARO]** key with 2 seconds enter unit setting mode.
2. Press **[∧]** or **[∨]** key to change the unit in sequence: hPa → inHg → mmHg

TO SELECT ABSOLUTE OR RELATIVE BAROMETRIC PRESSURE MODE
In normal mode, press **[BARO]** key to switch between **ABSOLUTE / RELATIVE** barometric pressure.

RAIN

The **RAINFALL** section shows the rainfall or rain rate information.

TO SET THE RAINFALL UNIT
1. In normal mode, press and hold **[RAIN]** key for 2 seconds to enter unit setting mode.
2. Press **[∧]** or **[∨]** key to toggle the unit between mm and in (rainfall) or mm/h and in/h (rain rate).
3. Press **[RAIN]** key to confirm and exit the setting.

TO SELECT THE RAINFALL DISPLAY MODE
Press **[RAIN]** key to toggle between:
1. **HOURLY** - the total rainfall in the past hour
2. **DAILY** - the total rainfall from midnight (default)
3. **WEEKLY** - the total rainfall of the current week
4. **MONTHLY**- 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)

Period of rainfall

Rain rate level

Rain rate level definition:

Level 1: Light rain 0.1~ 2.5 mm/h	Level 2: Moderate 2.51 ~ 10.0 mm/h	Level 3: Heavy rain 10.1 ~ 50.0 mm/h	Level 4 Violent rain: > 50.0 mm/h

TO RESET THE TOTAL RAINFALL RECORD

In normal mode, press and hold **[HISTORY]** key for 2 seconds to reset all the rainfall record.

> **NOTE:**
> *To ensure to have correct data, please reset all the rainfall record when you reinstall your wireless 7-IN-1 sensor to other location.*

LIGHT INTENSITY, UV INDEX & SUNBURN TIME

This section of display show the sunlight intensity, UV index and sunburn time. Press the **[SUN]** key to change the mode.

LIGHT INTENSITY MODE:

1. During light intensity mode, press and hold **[SUN]** key for 2 seconds to enter unit setting
2. Press **[∧]** or **[∨]** key change the unit in sequence: Klux → Kfc → W/m^2.
3. Press **[SUN]** key to confirm and exit the setting.

UV INDEX MODE:

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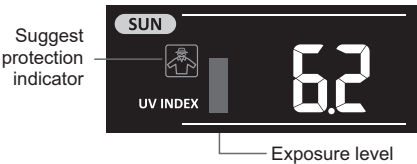
SUNBURN TIME MODE:

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

Suggest protection indicator

Exposure level

UV INDEX & SUNBURN TIME 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 indicator	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.*

MAX / MIN DATA RECORD

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

TO VIEW THE ACCUMULATED MAX / MIN

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 the current on display MAX or MIN records.

> *NOTE:*
> *The LCD will also display the "* MAX *" / "* MIN *", "* HISTORY *" icon, data records time & date.*

PAST 24 HOURS HISTORY DATA

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

1. 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.
2. 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)

> *NOTE:*
> *The LCD will also display the "* HISTORY *" icon, history data records with time & date.*

WEATHER ALERT SETTING

Weather Alert can alert you of certain weather conditions. Once the alert criterion is met, the alarm sound will activate and the alert icon on display will flash.

TO SET ALERT

1. Press **[ALERT]** to select and display the desired weather alert reading in the table below:

Alert Type	Setting Range	Display Section	Default
Outdoor Temperature High Alert	-40°C ~ 80°C	Outdoor temperature & humidity	40°C
Outdoor Temperature Low Alert			0°C
Outdoor Humidity High Alert	1% ~ 99%		80%
Outdoor Humidity Low Alert			40%
Indoor / Current Channel Temperature High Alert	-40°C ~ 80°C	Indoor / CH temperature & humidity	40°C
Indoor / Current Channel Temperature Low Alert			0°C
Indoor / Current Channel Humidity High Alert	1% ~ 99%		80%
Indoor / Current Channel Humidity Low Alert			40%
Average Wind Speed	0.1m/s ~ 50m/s	Wind direction & speed	17.2m/s

Alert Type	Setting Range	Display Section	Default
Feels Like High Alert	-65°C ~ 50°C	Weather index	20°C
Feels Like Low Alert			0°C
Dew point High Alert	-40°C ~ 80°C		10°C
Dew point Low Alert			-10°C
Heat Index High Alert	26°C ~ 50°C		30°C
Wind Chill Low Alert	-65°C ~ 18°C		0°C
UV index High Alert	1 ~16	UV & light intensity	10
Light intensity High Alert	0.01 ~ 200.0Klux		100Klux
Pressure Drop	1hPa ~ 10hPa	Barometer	3hPa
Rain rate	1mm ~ 1000mm	Rain rate	100mm

2. Under the current alert reading, press and hold **[ALERT]** key for 2 seconds to enter alert setting and the alert reading will flash.
3. Press **[∧]** or **[∨]** key to adjust the value or press and hold the key to change rapidly.
4. Press **[ALERT]** key to confirm the value.
5. Press **[ALARM]** key to toggle the regarding alert on / off.
6. Press **[ALERT]** key to shift to next alert reading.
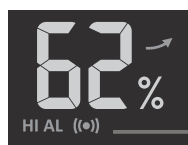
 ——— High / Low Alert on

Alert on

 ——— Alert off

Alert off

7. Press any key on the front side to save alert on /off status and back to normal mode, or it will automatically back to normal mode after 30 seconds without pressing any key.

TO SILENCE THE ALERT ALARM

Press **[ALARM / SNOOZE]** key to silence the alert alarm or let the alarm automatically turn off after 2 minutes.

NOTE:
– *Once the alert is triggered, the alarm will sound for 2 minutes and the related alert icon and readings will flash.*
– *If the alert alarm is automatically off after 2 minutes, the alert icon and readings will still keep flash until the weather reading is out of the alert range.*
– *The weather alert will sound again when the weather readings falls into the alert range again.*

BACK LIGHT

The main unit back light can be adjust, using the **[HI / LO / AUTO]** sliding switch to select the appropriate brightness:

– Slide to the **[HI]** position for the brighter back light.
– Slide to the **[LO]** position for the dimmer back light.
– Slide to the **[AUTO]** position for the auto adjust back light that according to environment light level.
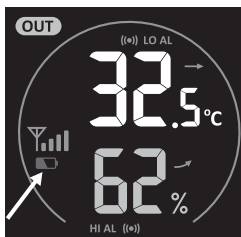
DISPLAY CONTRAST

Press **[∧☼]** key in normal mode to adjust LCD contrast in order to fit table stand or wall mount angle.

MAINTENANCE

BATTERY REPLACEMENT

When low battery indicator "▭" is displayed in OUT or CH section, it indicates that the outdoor 7-IN-1 sensor and/or current channel sensor battery power is low respectively. Please replace with new batteries.
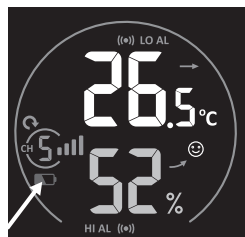
## WIRELESS 7-IN-1 SENSOR MAINTENANCE

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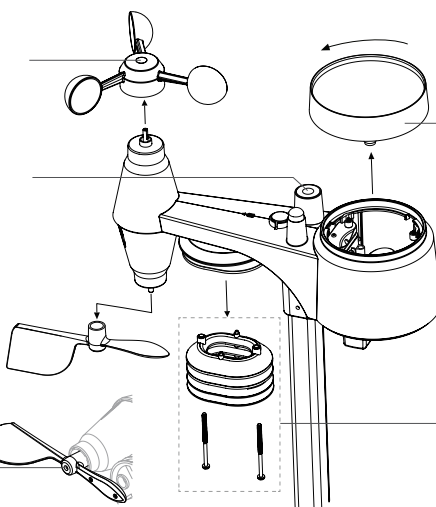
CLEANING THE RAIN COLLECTOR
1 Rotate the rain collector by turning it 30°anti-clockwise.
2 Gently remove the rain collector.
3 Clean and remove any debris or insects.
4 Install the collector when it is clean and fully dried.

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 and ventilation fan (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.

TROUBLESHOOT

Problems	Solution
7-in-1 wireless sensor is intermittent or no connection	1. Make sure the sensor is within the transmission range 2. If it still not work, reset the sensor and resynchronize with console.
Wireless sensor is intermittent or no connection	1. Make sure the sensor is within the transmission range 2. Make sure the channel displayed match to the channel selection on sensor 3. If it still not work, reset the sensor and resynchronize with console.
No WI-FI connection	1. Check for WI-FI symbol on the display, it should be alway on. 2. Make sure you connect to 2.4G band but not 5G band of your WIFI router.

Problems	Solution
Data not reporting to Wunderground.com or weathercloud.net	1. Ensure your Station ID and Station Key are correct. 2. Ensure the date and time is correct on the tablet . If incorrect, you may be reporting old data, not real time data. 3. Ensure your time zone is set properly. If incorrect, you may be reporting old data, not real time data.
Wunderground Precip. Accum. Total graph offset 1 hour reset time, during summer daylight saving time	1. Ensure the time zone of the device on Wunderground set correctly 2. Ensure the time zone and DST on your console are correct. 3. If you located your station out of US time zone region in Wunderground, the DST will be invalid. To solve this issue, please turn off the DST function in console.
Rainfall is not correct	1. Please keep the rain collector clean 2. Make sure the tipping bucket inside can work smoothly
Temperature reading too high in the day time	1. Place the sensor in open area and at least 1.5m off the ground. 2. Make certain that the sensor is not too close to heat generating sources or strictures, such as buildings, pavement, walls or air conditioning units.

SPECIFICATIONS

CONSOLE

General Specification

Dimensions (W × H × D)	240 × 140 × 21mm (9.4 × 5.5 × 0.8 in) (without attach table stand)
Weight	464g (with batteries)
Main power	DC 5V, 1A adaptor
Backup battery	CR2032
Operating temperature range	-5˚C ~ 50˚C
Operating Humidity range	1 ~ 99% RH

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)
Supported device for setup UI	Built-in WI-FI with AP mode function smart devices or laptops e.g.: Android smart phone, Android pad, iPhone, iPad or PC/Mac computer.
Recommended web browser for setup UI	Web browsers that support HTML 5, such as the latest version of Chrome, Safari, Edge, Firefox or Opera.

Wireless Sensor side Communication Specification

Support sensors	– 1 Wireless 7-IN-1 weather outdoor sensor – Up to 7 Wireless hygro-thermo sensors (1pc included)
RF frequency (Depend on country version)	868Mhz (EU version)
RF transmission range	150m

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	Through Internet time server to synchronize the UTC
Weekday languages	EN / DE / FR / ES / IT / NL / RU
Time Zone	+13 ~ -12 hour
DST	AUTO / OFF
Barometer (Note: Data detect by console)	
Barometer unit	hPa, inHg and mmHg
Measuring range	540 ~ 1100hPa
Accuracy	(700 ~ 1100hPa ± 5hPa) / (540 ~ 696hPa ± 8hPa) (20.67 ~ 32.48inHg ± 0.15inHg) / (15.95 ~ 20.55inHg ± 0.24inHg) (525 ~ 825mmHg ± 3.8mmHg) / (405 ~ 522mmHg ± 6mmHg) Typical at 25°C (77°F)
Resolution	1hPa / 0.01inHg / 0.1mmHg
Weather forecast	Sunny / Clear, Slightly Cloudy, Cloudy, Rainy, Rainy / Stormy and Snowy
Memory modes	Historical data of past 24 hours, daily Max / Min
Indoor Temperature (Note: Data detect by console)	
Temperature unit	°C and °F
Accuracy	<0°C or >40°C ± 2°C (<32°F or >104°F ± 3.6°F) 0~40°C ±1°C (32~104°F ± 1.8°F)
Resolution	°C / °F (1 decimal place)
Memory modes	Historical data of past 24 hours, daily Max / Min
Indoor Humidity (Note: Data detect by console)	
Humidity unit	%
Accuracy	1 ~ 20% RH ± 6.5% RH @ 25°C (77°F) 21 ~ 80% RH ± 3.5% RH @ 25°C (77°F) 81 ~ 99% RH ± 6.5% RH @ 25°C (77°F)
Resolution	1%
Memory modes	Historical data of past 24 hours, Max / Min
Outdoor Temperature (Note: Data detect by 7-in-1 sensor)	
Temperature unit	°C and °F
Accuracy	5.1 ~ 60°C ± 0.4°C (41.2 ~ 140°F ± 0.7°F) -19.9 ~ 5°C ± 1°C (-3.8 ~ 41°F ± 1.8°F) -40 ~ -20°C ± 1.5°C (-40 ~ -4°F ± 2.7°F)
Resolution	°C / °F (1 decimal place)
Memory modes	Historical data of past 24 hours, daily Max / Min

Outdoor Humidity (Note: Data detect by 7-in-1 sensor)

Humidity unit	%
Accuracy	1 ~ 20% RH ± 6.5% RH @ 25°C (77°F) 21 ~ 80% RH ± 3.5% RH @ 25°C (77°F) 81 ~ 99% RH ± 6.5% RH @ 25°C (77°F)
Resolution	1%
Memory modes	Historical data of past 24 hours, Max / Min

Wind Speed & Direction (Note: Data detect by 7-in-1 sensor)

Wind speed unit	mph, m/s, km/h and knots
Wind speed display range	0 ~ 112mph, 50m/s, 180km/h, 97knots
Resolution	mph, m/s, km/h and knots (1 decimal place)
Speed accuracy	< 5m/s: +/- 0.5m/s; > 5m/s: +/- 6% (whichever is greater)
Display mode	Gust / Average
Memory modes	Historical Data of past 24 hours, Max Gust / Average
Wind direction display mode	16 directions or 360 degree

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

Unit for rainfall	mm and in
Unit for rain rate	mm/h and in/h
Accuracy	± 7% or 1 tip
Range	0 ~ 19999mm (0 ~ 787.3 in)
Resolution	0.4mm (0.0157in)
Memory modes	Historical Data of the past 24 hours, Max
Rain display mode	Rate / Hourly / Daily / Weekly / Monthly / Total rainfall

UV INDEX (Note: Data detect by 7-in-1 sensor)

Display range	0 ~ 16
Resolution	1 decimal place
Display mode	UV index, sunburn time
Memory modes	Historical Data of past 24 hours, Max

LIGHT INTENSITY (Note: Data detect 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)
Memory modes	Historical Data of past 24 hours, Max

Weather Index (Note: Data detect by 7-in-1 sensor)

Weather index mode	Feels like, Wind Chill, Heat Index and Dew point
Feels like display range	-65 ~ 50°C
Dew point display range	-20 ~ 80°C
Heat index display range	26 ~ 50°C
Wind chill display range	-65 ~ 18°C (wind speed >4.8km/h)
Memory modes	Historical Data of past 24 hours, Max / Min

WIRELESS 7-IN-1 SENSOR

Dimensions (W × H × D)	343.5 × 393.5 × 136mm (13.5 × 15.5 × 5.35in) installed mounting
Weight	673g (with batteries)
Main power	3 × AA size 1.5V batteries (Lithium batteries recommended)
Weather data	Temperature, Humidity, Wind speed, Wind direction, Rainfall, UV and light intensity
RF transmission range	150m
RF frequency (depend on country version)	868Mhz (EU)
Transmission interval	– 12 seconds for UV, light intensity, wind speed and wind direction data – 24 seconds for temperature, humidity and rain data
Operating temperature range	-40 ~ 60°C (-40 ~ 140°F) Lithium batteries required for low temperature
Operating humidity range	1 ~99% RH

WIRELESS THERMO-HYGRO SENSOR

Dimensions (W × H × D)	60 × 113 × 39.5mm (2.4 × 4.4 × 1.6in)
Weight	144g (with batteries)
Main power	2 × AA size 1.5V batteries (Lithium batteries recommended)
Weather data	Temperature and Humidity
RF transmission range	150m
RF frequency (depend on country version)	868Mhz (EU)
Transmission interval	60 seconds for temperature and humidity
Operating range	-40 ~ 60°C (-40 ~ 140°F) Lithium batteries required

ADAPTER TECHNICAL SPECIFICATIONS

Manufacturer's name or trade mark, commercial registration number and address	HUA XU ELECTRONICS FACTORY, No. 1, Shi Tang Bei Street 2, Shi Jie Town, Dong Guan City, Guang Dong, P.R.China
Model identifier	HX075-0501000-AG-001
Input voltage	AC100 - 240V
Input AC frequency	50/60Hz
Output voltage	DC5.0V
Output current	1.0A
Output power	5.0W
Average active efficiency	≥64.93%
No-load power consumption	≤0.10W

INSTRUCTIONS AND INFORMATION REGARDING THE DISPOSAL OF USED PACKAGING MATERIALS

Dispose of packaging material at a public waste disposal site.

DISPOSAL OF USED ELECTRICAL AND ELECTRONIC APPLIANCES

The meaning of the symbol on the product, its accessory or packaging indicates that this product shall not be treated as household waste. Please, dispose of this product at your applicable collection point for the recycling of electrical & electronic equipment waste. Alternatively in some states of the European Union or other European states you may return your products to your local retailer when buying an equivalent new product. The correct disposal of this product will help save valuable natural resources and help in preventing the potential negative impact on the environment and human health, which could be caused as a result of improper liquidation of waste. Please ask your local authorities or the nearest waste collection centre for further details. The improper disposal of this type of waste may fall subject to national regulations for fines.

For business entities in the European Union
If you wish to dispose of an electrical or electronic device, request the necessary information from your seller or supplier.

Disposal in other countries outside the European Union
If you wish to dispose of this product, request the necessary information about the correct disposal method from local government departments or from your seller.

The product meets EU requirements.

Hereby, FAST ČR, a.s. declares that the radio equipment type SWS 12500 is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address: www.sencor.com

Changes to the text, design and technical specifications may occur without prior notice and we reserve the right to make these changes.

Address of the manufacturer: FAST ČR, a.s., U Sanitasu 1621, 251 01 Říčany, Czech Republic

SENCOR®

EN Warranty conditions

Warranty card is not a part of the device packaging.

This product is warranted for the period of 24 months from the date of purchase to the end-user. Warranty is limited to the following conditions. Warranty is referred only to the customer goods using for common domestic use. The claim for service can be applied either at dealer's shop where the product was bought, or at below mentioned authorized service shops. The end-user is obligated to set up a claim immediately when the defects appeared but only till the end of warranty period. The end user is obligated to cooperate to certify the claiming defects. Only completed and clean (according to hygienic standards) product will be accepted. In case of eligible warranty claim the warranty period will be prolonged by the period from the date of claim application till the date of taking over the product by end-user, or the date the end-user is obligated to take it over. To obtain the service under this warranty, end-user is obligated to certify his claim with duly completed following documents: receipt, certificate of warranty, certificate of installation.

This warranty is void especially if apply as follows:
- Defects which were put on sale.
- Wear-out or damage caused by common use.
- The product was damaged by unprofessional or wrong installation, used in contrary to the applicable instruction manual, used in contrary to legal enactment and common process of use or used for another purpose which has been designed for.
- The product was damaged by uncared-for or insufficient maintenance.
- The product was damaged by dirt, accident of force majeure (natural disaster, fire, and flood).
- Defects on functionality caused by low duality of signal, electromagnetic field interference etc.
- The product was mechanically damaged (e.g. broken button, fall).
- Damage caused by use of unsuitable media, fillings, expendable supplies (batteries) or by unsuitable working conditions (e.g. high temperatures, high humidity, quakes).
- Repair, modification or other failure action to the product by unauthorized person.
- End-user did not prove enough his right to claim (time and place of purchase).
- Data on presented documents differs from data on products.
- Cases when the claiming product cannot be indentified according to the presented documents (e.g. the serial number or the warranty seal has been damaged).

Authorized service centers
Visit www.sencor.com for detailed information about authorized service centers.

SENCOR®

SWS 12500
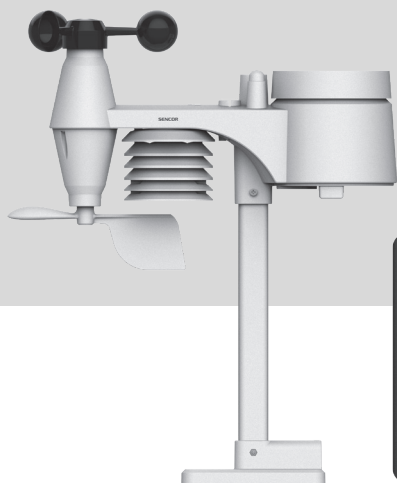
USER MANUAL

UŽIVATELSKÁ PŘÍRUČKA

NÁVOD NA OBSLUHU

HASZNÁLATI ÚTMUTATÓ

INSTRUKCJA OBSŁUGI

| EN | CZ | SK | HU | PL |

WIFI INSTALLATION INSTRUCTIONS AND
WUNDERGROUND ACCOUNT SETTINGS,
WEATHERCLOUD AND FIRMWARE UPDATE.

INSTALAČNÍ NÁVOD FUNKCE WIFI A NASTAVENÍ ÚČTŮ
WUNDERGROUND, WEATHERCLOUD
A AKTUALIZACI FIRMWARU.

INŠTALAČNÝ NÁVOD FUNKCIE WI-FI A NASTAVENIE
ÚČTOV WUNDERGROUND, WEATHERCLOUD
A AKTUALIZÁCIA FIRMVÉRU.

WIFI FUNKCIÓ TELEPÍTÉSI UTASÍTÁSOK,
VALAMINT A WUNDERGROUND, WEATHERCLOUD
FIÓKBEÁLLÍTÁSOK A FIRMWARE FRISSÍTÉSÉHEZ.

INSTRUKCJA KONFIGURACJI WI-FI, USTAWIENIA
KONT WUNDERGROUND, WEATHERCLOUD ORAZ
AKTUALIZACJI FIRMWARE.

TABLE OF CONTENTS

CREATING AN ACCOUNT ON A METEOROLOGICAL SERVER AND SETTING UP A WI-FI CONNECTION

The device allows you to share measured meteorological values of your environment. Meteorological values are stored in the third party server databases (WUnderground and/ or Weathercloud) via the internet service. You can set up your unit by following the steps below.

> *NOTE:*
> *Weather Underground and Weathercloud website may change.*

CREATING AN ACCOUNT ON WEATHER UNDERGROUND

1. On *https://www.wunderground.com*, click "**Join**" in the top righthand corner to open the registration page. Follow the instructions to create an account.

> *NOTE:*
> *To register your account, please enter a valid e-mail address.*

2. When you have created your account and finished e-mail verification, go back to the WUndergound website and log in. Then click the *My Profile* button on the top to open the drop-down menu and click "**My Devices**".
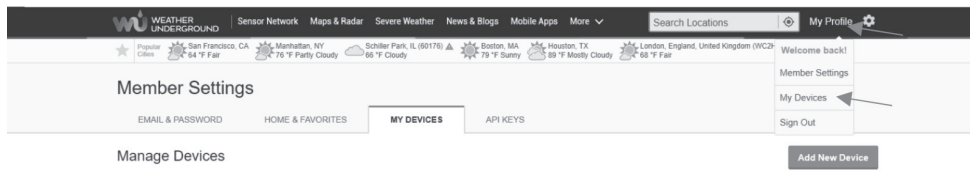
3. In the centre of "**My Devices**" page, press "**Add New Device**" on the right to add your device.
4. Please follow the server operator's instructions shown. All important parameters to connect to your Weather station will be required in the following steps.
   • **TYPE -** In the **Personal Weather Station** section, select "**Other**".
   • **LOCATION -** Please select the place on the map your Weather station will be located at.
   • **DETAILS -** Please complete the required fields for the next step:
     – "**Name**" - name of your device
     – "**Elevation**"
     – "**Device Hardware**" - please select "**Other**"

   Select "**I Accept**" checkbox to confirm the completed parameters. To accept the **Weather underground** privacy statement, click "**Next**". This will create the ID and key for your station.

5. Take a note of your "**Station ID**" and "**Station key**" for the next setup step.

CREATING A WEATHERCLOUD ACCOUNT

1. If you want to use only the **WEATHER UNDERGROUND** server, go to the **SETTING UP WI-FI CONNECTION** chapter. Please register at *https://weathercloud.net*, , *select* your login details in "**Join us today**" and follow the instructions to create your account.

2. Log in to Weathercloud, go to the "**Devices**" page and click "**Create device**" to create a device.
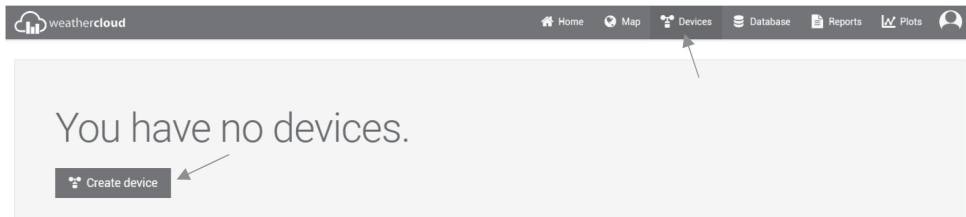
If you already have some device added to the server, click "**+ New**" (+ New) in the top righthand corner to create another new device.
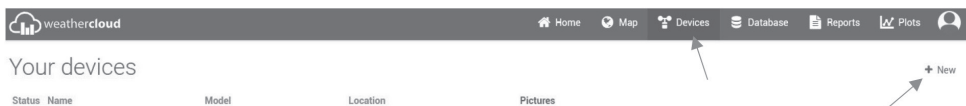
3. At the "**Create new device**" page, please complete the following:
   "Basic information":
   – "**Name**": To name your device
   – "**Model**" (Device type): In the CCL section, please select "W100 Series"
   – "**Link type**": select "SETTINGS"

   "**Location**": Enter the Weather station's location data:
   – "**Country**": Select the country in which the device will be operated.
   – "**State / Province**": Select the region where the device will be operated.
   – "**City**": Please enter the city name.
   – "**Time zone**": Please select your country's time zone.

   "**Get coordinates**":
   – Use the Get coordinates button to display the world map and select the exact location of your Weather station with the mouse cursor. Press "Done" at the map window bottom to store the selected area.

   You can also enter the coordinates manually in the following fields:
   – "**Latitude**"
   – "**Longitude**"
   – "**Altitude**"
   – "**Height**"

When you have completed all data required for the device registration, please create a device using the "**Create**" button at the bottom right of the page.

4. To get a unique ID key, move the mouse cursor over the "**Settings**" button to open the drop-down menu. Select "**Link**" to display Weathercloud "**ID**" and "**Key**".

Take a note of the generated data displayed.

NOTE:
Please be case-sensitive while writing data.

SETTING UP WI-FI CONNECTION

1. When the station is turned on for the first time or when you hold down the **[SENSOR / WI-FI]** button for 6 seconds in normal mode, the station LCD display will show "**AP**" and the "   " icon to indicate the AP (access point) mode activation and the readiness for WI-FI setup.
2. To connect the station with WI-FI, please use smartphone, tablet or PC.

3. On your PC, select WiFi settings or in Android/iOS, select ➤ WI-FI settings to choose the SSID station: *PWS-XXXXXX* in the list; the connection will take several seconds to complete.
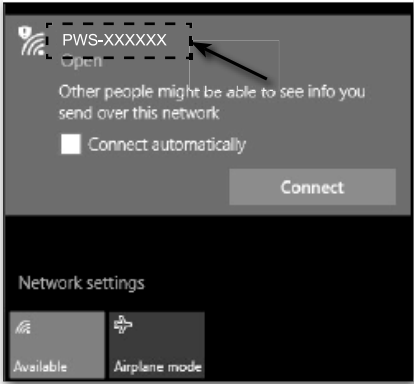
| PC WI-FI network interface | Android WI-FI network interface |

4. When connected, enter the following IP address in your web browser's address bar to access the station's web interface:

http://192.168.1.1

NOTE:
- *As some browsers will consider the **192.168.1.1** to be the search target, remember to add the **http://**header.*
- *The recommended browsers include the latest versions of Chrome, Safari, Edge, Firefox or Opera.*

- If your PC is connected to the internet service via the RJ45 (Ethernet) cable, external modem or other unit, please disconnect it during the weather station setup. This will avoid the IP address setup collision with another device.
- It will be necessary to complete all items each time you edit in the administration environment. Any data entered in previous setup will be lost.

WI-FI CONNECTION STATUS
WI-FI icon on the device's LCD display status as follows:

| Stable: The device is connected to the WI-FI router. | Flashing: The device is attempting to connect to the WI-FI router. | Flashing: The device is in the AP (access) mode at the moment. |

SETTING UP THE METEOROLOGICAL SERVER CONNECTION

Please enter the following information in the web interface "SETUP" page shown below. If you decide to use neither _Wunderground.com_ nor _Weathercloud.net_, please leave the check boxes blank.

Press to display the extended settings.

Press to search for a router.
Changing the UI interface language settings
Select the (Wi-Fi network / SSID) you wish to connect to.

Press to enable adding a router manually.
Enter SSID manually if it's not listed.
Select the router safeguarding type (usually WPA2).

Router password (leave blank if unsecured).

Enter the new Station ID and Station key assigned by the Wundeground service.

Enter the new Station ID and Station key assigned by the Weathercloud service.

Reserved for a verified meteorological server, for details, please contact your dealer.
Enter the new Station ID and Station key assigned to the corresponding meteorological servers.

Select a time server
Select the time zone to place your Weather station.

Enter the latitude value.
Enter the longitude value.
Select the direction of your Weather station placement.

Select the placed sensor's hemisphere (for example, USA and EU countries are also "N", Australia is "S").

Press to finish the settings.

NOTE:
- _Your default WI-FI connection will be restored when the Weather station's WI-FI setup has been completed._
- _To stop the AP mode and restore previous settings in the AP mode, you can hold down the_ **[SENSOR / WI-FI]** _button for 6 seconds._

Time zone: To display your time zone current time, change the time zone in the time setup mode from "00" (default) to your time zone (such as 08 for Hong Kong).

The time will be synchronized automatically from the internet time server, each day at 12:00 and 24:00. To get the internet time manually in 1 minute, you can also press **[REFRESH]** button.

TIME SERVER CONNECTION STATUS

When the device has been connected to the internet, it will attempt to connect to the internet time server and get the UTC time. If this connection is successful and the device clock is updated, the LCD display will show "**SYNC**" (synchronization) icon.

ADVANCED WEB INTERFACE SETTINGS

Press the **"ADVANCED"** button on the web interface top. This is where you can set and display the device's calibration data as well as make a firmware update.

Press to enter the global settings

Select the displayed temperature unit

Indoor / Outdoor & Ch 1~ 7 temperature calibration

Pressure calibration

Current firmware version

Indoor / Outdoor & Ch 1~ 7 moisture calibration

Please select the pressure unit.

The current offset value is the one you set before to compensate for the pressure reading.

Rain, wind speed, wind direction, UV and light

The firmware update is only available from the PC/MAC web browser.

SETTINGS

SETUP   ADVANCED

Temperature °C ▼   Humidity %

Indoor	Current offset: 0	Current offset: 0
Outdoor	Current offset: 0	Current offset: 0
CH 1	Current offset: 0	Current offset: 0
CH 2	Current offset: 0	Current offset: 0
CH 3	Current offset: 0	Current offset: 0
CH 4	Current offset: 0	Current offset: 0
CH 5	Current offset: 0	Current offset: 0
CH 6	Current offset: 0	Current offset: 0
CH 7	Current offset: 0	Current offset: 0

Range: -20.0 ~ 20.0°C
-36.0 ~ 36.0°F (Default: 0.0)

Range: -20 ~ 20
(Default: 0.0)

Pressure hpa ▼

Absolute Pressure Offset: [ ] Current offset: 0 (Default: 0)

Relative Pressure Offset: [ ] Current offset: 0 (Default: 0)

Setting Range:
-560~ 560hpa / -16.54 ~ 16.54inHg / -420 ~ 420mmHg

*Rain gain: [ ] Current gain: 0.85 Range: 0.5 ~ 1.5(Default: 1.00)

*Wind speed gain: [ ] Current gain: 0.75 Range: 0.5 ~ 1.5(Default: 1.00)

*Wind direction: [ ] Current offset: 2° Range: -10 ~ 10(Default: 0°)

*UV gain: [ ] Current gain: 1.1 Range: 0.01 ~ 10(Default: 1.00)

*Light gain: [ ] Current gain: 1.1 Range: 0.01 ~ 10(Default: 1.00)

* Depends on the model

Firmware version: 1.00

[ ] Browse

Upload

CALIBRATION

1. Users can enter or change the offset and gain values for various measurement parameters while the current offset and compensation values are displayed next to the relevant fields.
2. When finished, press the [Apply] button on the **SETUP** page.

The current offset value will show the previous value you entered. If you want to change that value, just enter a new value in the blank field; the new value will become valid when the [Apply] icon on the **SETUP** page is pressed.

NOTE:
The calibration of most parameters is not required with the exception of the Relative Pressure parameter, which must be calibrated with respect to the sea level to consider the elevation influences.

SHOWING YOUR METEOROLOGIAL DATA ON WUNDERGROUND

To show your Weather station's live data in a web browser (PC or mobile version), please visit http://www.wunderground.com and enter your "**Station ID**" in the search field. Your meteorological data will be shown on the next page. You can also log in to your account to view or download your Weather station's recorded data.

Another way to display your station's data is entering the following address in the web browser's URL bar:

**https://www.wunderground.com/dashboard/pws/XXXX**

In place of XXXX, enter your station's Weather underground ID to directly access the live view of your station's data.

At Weather Underground website, you can also find detailed information about the Android and iOS mobile application.

SHOWING YOUR METEOROLOGIAL DATA ON WEATHERCLOUD

1. To show your Weather station's live data in a web browser (PC or mobile version), please visit https://weathercloud.net and log in to your account.

2. In the "**Device**" section, click the [View] icon inside your station's [Settings ▾] drop-down menu.
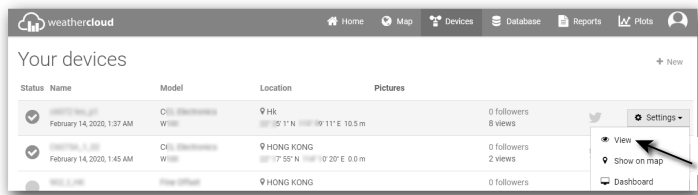
3. Click "**Current**", "**Wind**", "**Evolution**" or "**Inside**" to show your Weather station's live data.
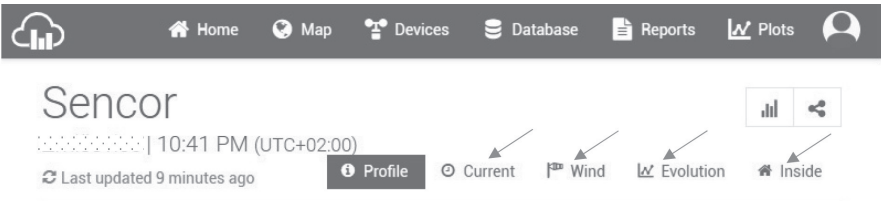
FIRMWARE UPDATE

This device supports OTA firmware upgrade. Its firmware may be updated at any time (whenever necessary) wirelessly using any web browser on a PC with a WI-FI conection. However, the update function is not available for mobile/smart devices.

Current firmware version

Firmware version: 1.00

Browse

Upload

Please select the file to be uploaded in the device.

Button to start the firmware update

FIRMWARE UPDATE PROCEDURE

1. Download the latest firmware version to your PC.
2. Switch the device in the AP (access point) mode, then connect your PC to the device (see "SETTING UP WI-FI CONNECTION" on the previous page).
3. To update the firmware, in the Firmware (firmware function) section, click [Browse] and browse to the file location downloaded in step 1. To update the WI-FI firmware, click [Browse] in the Firmware WI-FI section.
4. Then click [Upload] to start the firmware file upload into the device (indicated by upload completion in %).
5. When the device has received the firmware file, the update will be performed automatically and the display will show the update progress (100 means finished).
6. The entire update will last 5-10 minutes.
7. When the update is finished, the device will restart once.
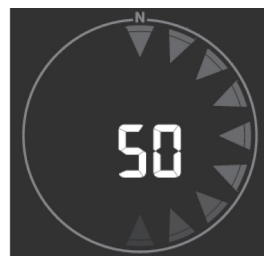
> *NOTE:*
> * *Please do not disconnect power during the update process.*
> * *Please make sure that your PC WI-FI connection is stable.*
> * *Do not use your PC or device during the update process.*
> * *The device will stop recording data while the firmware update is in progress. When the update has been successfully finished, the device will reconnect to your WI-FI router and record data. If the device cannot connect to your router, please close the SETUP page and make the setup again.*
> * *After the firmware update, the device may require that Weather Underground ID and password be entered again.*
> * *If the previously set selections are missing after the firmware update, the whole device must be setup again.*

INSTRUCTIONS AND INFORMATION ON DISPOSING OF USED PACKAGING MATERIALS

Dispose of used packaging material at a site designated for waste in your municipality.

DISPOSING OF USED ELECTRICAL AND ELECTRONIC EQUIPMENT

This symbol on products or original documents means that used electric or electronic products must not be added to ordinary municipal waste. For proper disposal and recycling, take these products to designated collection points. Or in some European Union states or other European countries the products can be returned to the local retailer when buying an equivalent new product. Disposing of this product correctly helps save valuable natural resources and prevents damage to the environment by improper waste disposal. Ask your local authorities or collection facility for more details. In accordance with national regulations penalties may be imposed for the incorrect disposal of this type of waste.

For business entities in European Union states

If you want to dispose of electric or electronic devices, ask your retailer or supplier for the necessary information.

Disposal in other countries outside the European Union

This symbol is valid in the European Union. If you wish to dispose of this product, request the necessary information about the correct disposal method from the local council or from your retailer.

The product meets the respective EU requirements.

The text, design and technical specifications may be changed without prior notice and we reserve the right to make these changes.

The original version is in the Czech language.

Address of the manufacturer: FAST ČR, a.s., Černokostelecká 1621, Říčany CZ-251 01

FAST ČR, a.s. hereby declares that the radio device type SWS 12500 conforms to the 2014/53/EU directive.
For the full version of the EU declaration of conformity, please refer to:
www.sencor.com

SENCOR®

EN Warranty conditions

Warranty card is not a part of the device packaging.

This product is warranted for the period of 24 months from the date of purchase to the end-user. Warranty is limited to the following conditions. Warranty is referred only to the customer goods using for common domestic use. The claim for service can be applied either at dealer's shop where the product was bought, or at below mentioned authorized service shops. The end-user is obligated to set up a claim immediately when the defects appeared but only till the end of warranty period. The end user is obligated to cooperate to certify the claiming defects. Only completed and clean (according to hygienic standards) product will be accepted. In case of eligible warranty claim the warranty period will be prolonged by the period from the date of claim application till the date of taking over the product by end-user, or the date the end-user is obligated to take it over. To obtain the service under this warranty, end-user is obligated to certify his claim with duly completed following documents: receipt, certificate of warranty, certificate of installation.

This warranty is void especially if apply as follows:
- Defects which were put on sale.
- Wear-out or damage caused by common use.
- The product was damaged by unprofessional or wrong installation, used in contrary to the applicable instruction manual, used in contrary to legal enactment and common process of use or used for another purpose which has been designed for.
- The product was damaged by uncared-for or insufficient maintenance.
- The product was damaged by dirt, accident of force majeure (natural disaster, fire, and flood).
- Defects on functionality caused by low duality of signal, electromagnetic field interference etc.
- The product was mechanically damaged (e.g. broken button, fall).
- Damage caused by use of unsuitable media, fillings, expendable supplies (batteries) or by unsuitable working conditions (e.g. high temperatures, high humidity, quakes).
- Repair, modification or other failure action to the product by unauthorized person.
- End-user did not prove enough his right to claim (time and place of purchase).
- Data on presented documents differs from data on products.
- Cases when the claiming product cannot be indentified according to the presented documents (e.g. the serial number or the warranty seal has been damaged).

Authorized service centers
Visit www.sencor.com for detailed information about authorized service centers.