

# **TOUCH SCREEN WEATHER STATION WITH SOLAR POWERED**

## **Operation Manual**

### **About this manual**

Thank you and congratulations on selecting this professional weather station! We are positive you will enjoy the benefits of accurate weather readings and the precise radio controlled time information that our instruments offer. A solar powered weather station has the advantage of being able to provide energy for long periods of time.

This manual will guide you step-by-step through setting up your device. Use this manual to become familiar with your professional weather station, and save it for future reference.

### **Glossary of Common Terms**

#### **DCF/WWVB/MSF**

The DCF WWVB or MSF time signal is an AM modulated time-of-day signal broadcasted by the Federal Government of Germany, NIST from USA or National Physical Laboratory. The time base is generated from an atomic time generator which is accurate to 10 billions of one second.

#### **LCD**

“LCD” is an acronym for “Liquid Crystal Display”. This is a common type of display screen used in televisions, computers, watches, and digital clocks.

#### **BAROMETER & BAROMETRIC PRESSURE**

A barometer is a device that measures the pressure of the air pushing on it—this measurement is called the barometric pressure. We don't actually feel the barometric pressure because the air pressure is pushing equally in every direction.

#### **RELATIVE AIR PRESSURE**

Relative air pressure is the same as the barometric pressure. The calculation of relative air pressure is a combination of the absolute air pressure and the altitude.

#### **ABSOLUTE AIR PRESSURE**

Absolute air pressure is the actual air pressure on the barometer without regard to altitude.

#### **INCHES OF MERCURY (inHg)**

Inches of Mercury are the common unit of measurement for air pressure in the United States.

#### **HECTOPASCALS (hPa)**

Hectopascals are the common units of measurement for air pressure in the International System (SI) of measurement. The hectopascal holds the same value

### **Important Note:**

Before inserting batteries, please carefully read the operation manual.

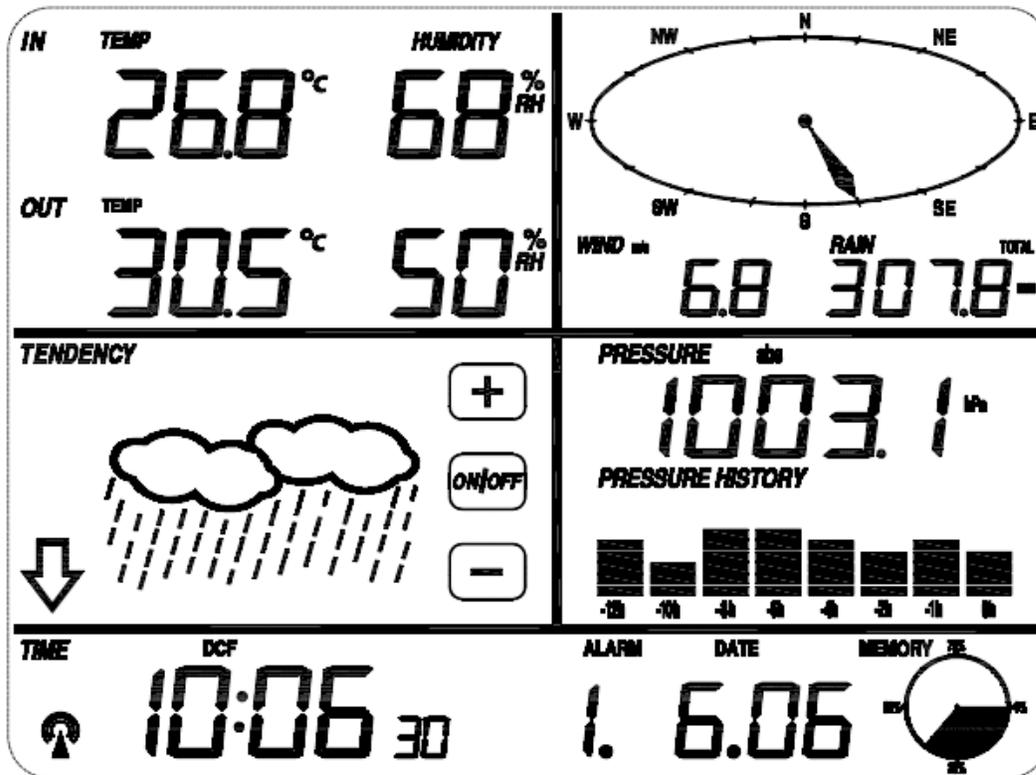
The touch screen weather station includes a base station (receiver), an integrated outdoor unit consists of solar-panel/wind direction sensor/wind speed sensor/rain gauge/thermo-hygro sensor, USB cable and a PC software package on CD-ROM.

The Base Station is equipped with a Touch Screen LCD Monitor and allows the display of a large variety of time and weather data.

Left Top LCD: IN-OUT temperature and humidity

Right Top LCD: Wind and Rain measurement  
 Left Middle LCD: Weather Forecast(Tendency)  
 Right Middle LCD: Air Pressure and Air Pressure History  
 Bottom Line LCD: Time and Date, Memory Data Usage

**Note:** The presence of the "Alarm-On icon" in the section means that the particular alarm has been enabled.



An added feature of the Weather Station is the readout of all measured and displayed time and weather data on a PC.

## Important Operation Notes

All actions and functions of the weather station are started on the touch screen by slightly touching (not pressing!) the related areas, touch the flashing +, ON/OFF or – to make the corresponding selection or increase the value.

Every time a programming step is activated by touching a switching area on the Touch Screen a tone will sound, and the back light is switched on for a few seconds as well.

If no areas are pressed for 30 seconds, the LCD will automatically revert to the normal display mode (automatic time out).

## Getting Started

### Setup Sensors

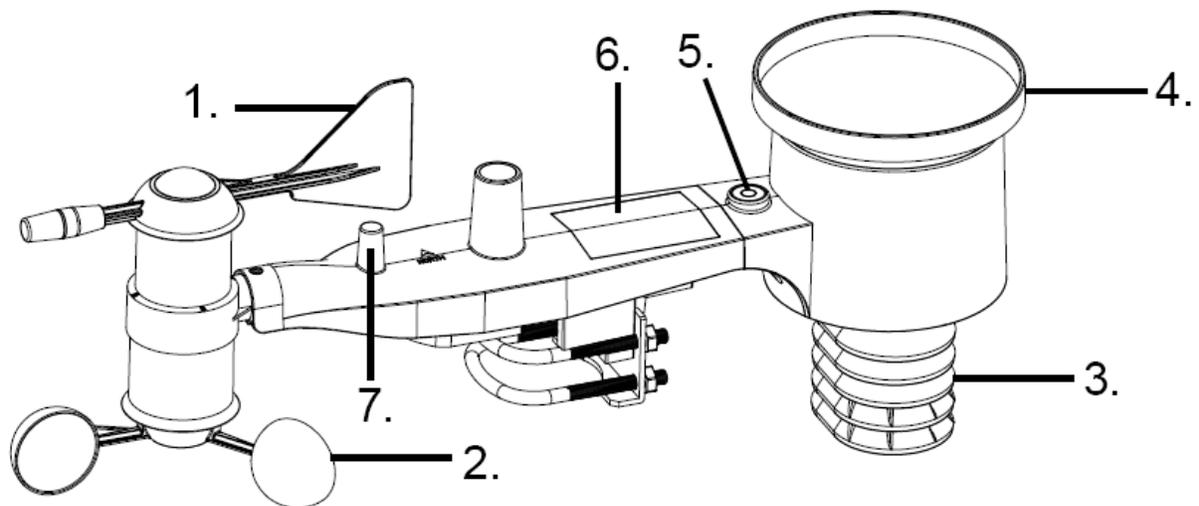


Figure 1

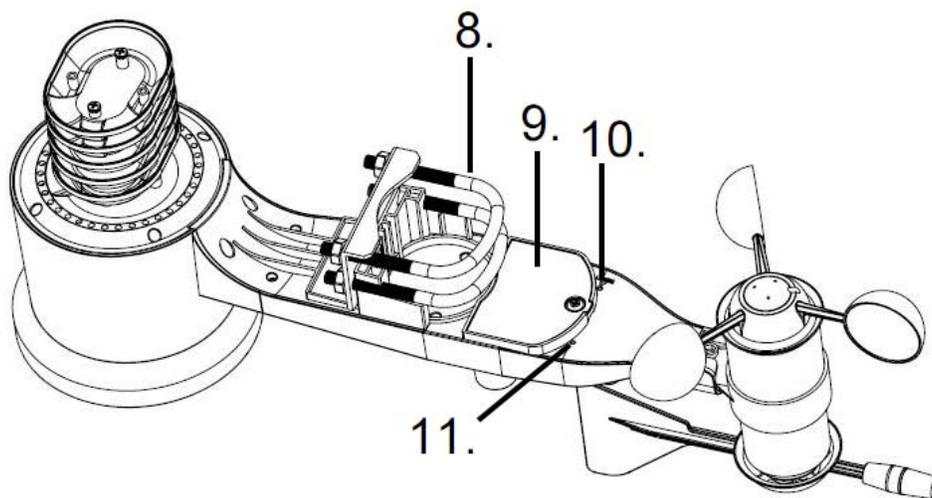


Figure 2

1. Wind Vane
2. Wind Speed Sensor
3. Thermo-hygro sensor
4. Rain collector
5. Bubble level
6. Solar panel
7. Antenna
8. U-Bolt
9. Battery compartment
10. Reset button
11. LED Indicator: light on for 4s if the unit power up. Then the LED will flash once every 48 seconds (the sensor transmission update period).

## 1. Install Batteries

Insert 2XAA batteries in the battery compartment and tighten the screw of battery cover. The LED indicator on the back of the transmitter will turn on for four seconds and normally flash once every 48 seconds (the sensor transmission update period).

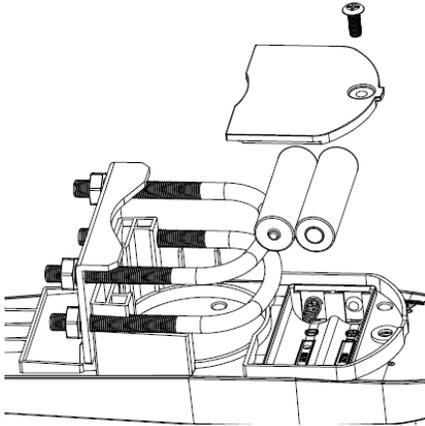


Figure 3

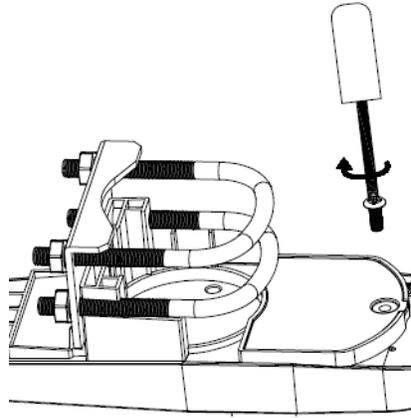


Figure 4

**Note:** If no LED light up or is lighted permanently, make sure the battery is inserted the correct way or a proper reset is happened. Do not install the batteries backwards. You can permanently damage the outdoor sensor

Note: We recommend lithium batteries for cold weather climates, but alkaline batteries are sufficient for most climates. We do not recommend rechargeable batteries. They have lower voltages, do not operate well at wide temperature ranges, and do not last as long, resulting in poorer reception.

## 2. Mount outdoor sensor

Reference Figure 5&6, the mounting assembly includes two U-Bolts and a bracket that tightens around a 1 to 2" diameter pole (not included) using the four U-Bolt nuts.

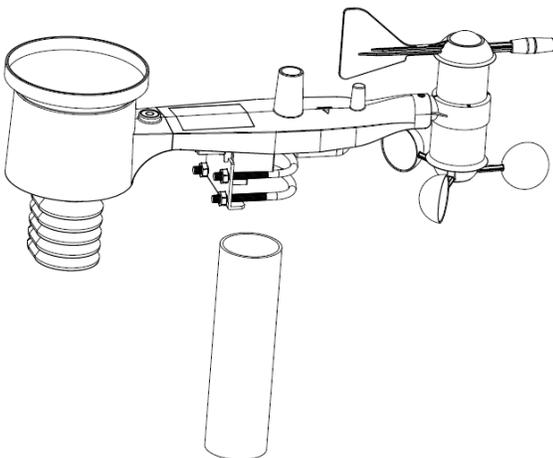


Figure 5

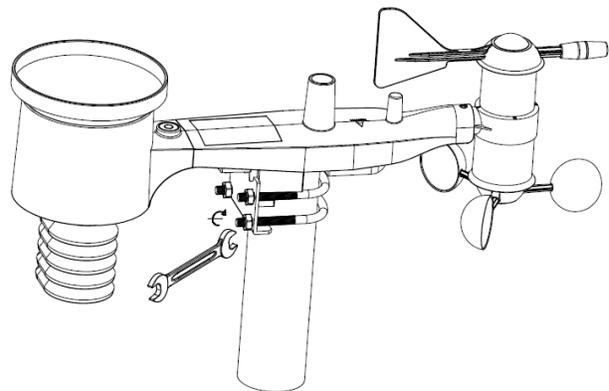
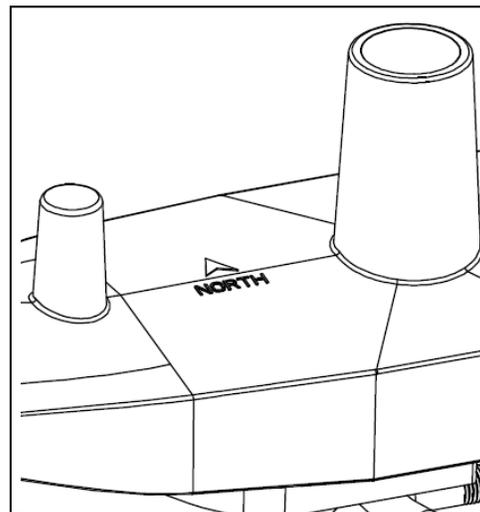
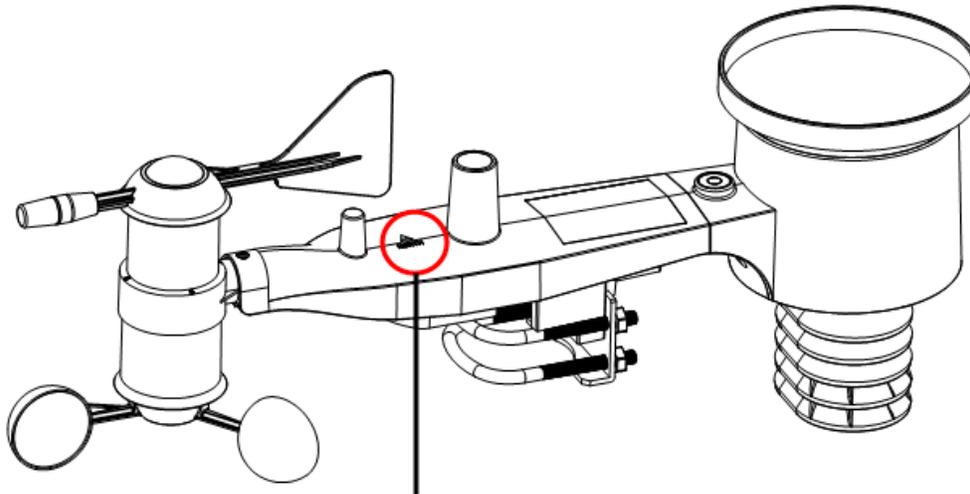


Figure 6

**Note**

Beside the antenna, there is an arrow icon with "NORTH" words (Figure 7) representing the direction of north. The sensor body has to be adjusted so that the "NORTH" indication is facing to real north direction in your location. A compass device is recommended to help adjust direction. Permanent wind direction error will be introduced when the outdoor sensor is not installed in right direction.



**Figure 7**

**Level the sensors**

Use the bubble level on the rain sensor as a guide to verify that sensors are level.

**3. Reset Button and Transmitter LED**

In the event the sensor array is not transmitting, reset the sensor array.

With an open ended paperclip, press and hold the **RESET BUTTON** for three seconds to completely discharge the voltage.

Take out the batteries and wait one minute, while covering the solar panel to drain the voltage.

Put batteries back in and resynchronize with console by powering down and up the console with the sensor array about 3 meter away

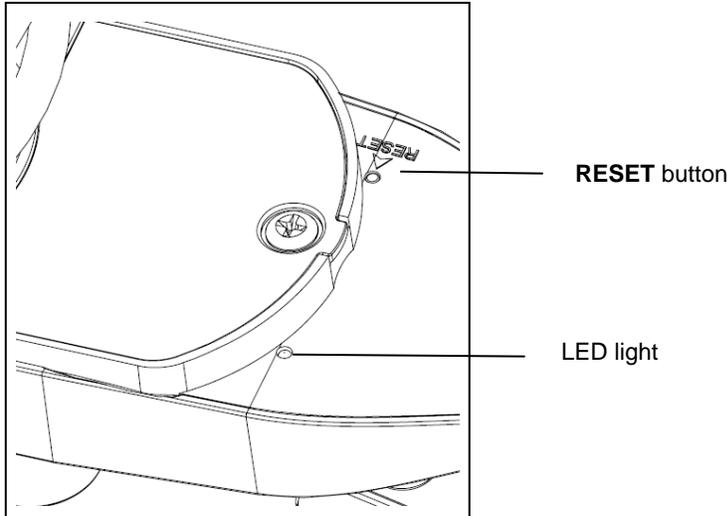


Figure 8

#### 4. Best Practices for Wireless Communication

**Note:** To insure proper communication, mount the remote sensor(s) upright on a vertical surface, such as a wall. **Do not lay the sensor flat.**

Wireless communication is susceptible to interference, distance, walls and metal barriers. We recommend the following best practices for trouble free wireless communication.

1. **Electro-Magnetic Interference (EMI).** Keep the console several feet away from computer monitors and TVs.
2. **Radio Frequency Interference (RFI).** If you have other 433/868/915 MHz devices and communication is intermittent, try turning off these other devices for troubleshooting purposes. You may need to relocate the transmitters or receivers to avoid intermittent communication.
3. **Line of Sight Rating.** This device is rated at 300 feet line of sight (no interference, barriers or walls) but typically you will get 100 feet maximum under most real-world installations, which include passing through barriers or walls.
4. **Metal Barriers.** Radio frequency will not pass through metal barriers such as aluminum siding. If you have metal siding, align the remote and console through a window to get a clear line of sight.

The following is a table of reception loss vs. the transmission medium. Each “wall” or obstruction decreases the transmission range by the factor shown below.

Medium	RF Signal Strength Reduction
Glass (untreated)	5-15%
Plastics	10-15%

Wood	10-40%
Brick	10-40%
Concrete	40-80%
Metal	90-100%

## Set up display

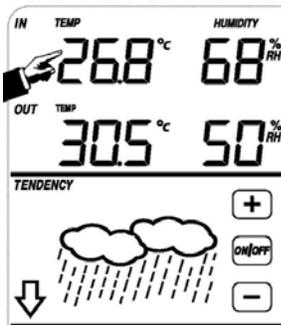
**Note:** Because of the default settings already determined by the manufacturer it may not be necessary for the majority of users to perform – except the Relative Air Pressure (see further down) - any further basic settings. Changes, however, can be easily made.

For basic settings, the following menu is started by touching the Touch Screen in the desired display area.

The basic settings can now be performed in the following successive order:

Note: setting procedure can be exited at any time by touching any other function area (except “+”, “-” or “ON/OFF”).

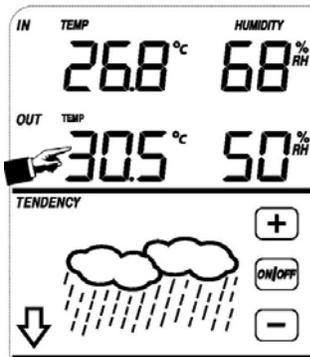
### indoor temperature



Activate the indoor temperature related setting by

- 1) Touch the INDOOR TEMPERATURE section, + button and – button will be flashing. Touch the + button or – button to Shift the display unit between °C and °F
- 2) Touch the INDOOR TEMPERATURE section again to set the indoor temperature high alarm function, the +, ON/OFF and – button will be flashing, HI AL icon will light up. Touch the+ button or – button to change the value, hold the+ button or – button for 3s to change the number in great step. Touch the ON/OFF button to choose the alarm on or off (if alarm is enabled, the speaker icon will be turned on indicating the alarm function has been enabled).
- 3) Touch the INDOOR TEMPERATURE section the third time to set the indoor temperature low alarm function, the +, ON/OFF and – button will be flashing, LO AL icon will light up. Touch the+ button or – button to change the value, hold the+ button or – button for 3s to change the number in great step. Touch the ON/OFF button to choose the alarm on or off (if alarm is enabled, the speaker icon will be turned on indicating the alarm function has been enabled).
- 4) Touch the INDOOR TEMPERATURE section the fourth time to display maximum indoor temperature record, the maximum records will be flashing, MAX icon will light up as well. Hold the flashing max value for 3s, the maximum value will be reset to current reading.
- 5) Touch the INDOOR TEMPERATURE section the fifth time to display minimum indoor temperature record, the minimum records will be flashing, MIN icon will light up as well. Hold the flashing min value for 3s, the minimum value will be reset to current reading.

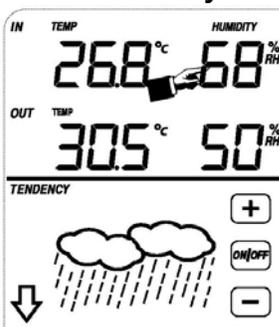
## outdoor temperature



Activate the outdoor temperature related setting by

- 1) Touch the OUTDOOR TEMPERATURE section, + button and – button will be flashing.  
Touch the + button or – button to Shift the display between Outdoor Temperature, Wind Chill and Dew Point.
- 2) Touch the OUTDOOR TEMPERATURE section again, + button and – button will be flashing.  
Touch the + button or – button to Shift the display unit between °C and °F
- 3) Touch the OUTDOOR TEMPERATURE section the third time to set the outdoor temperature high alarm function, the +, ON/OFF and – button will be flashing, HI AL icon will light up. Touch the + button or – button to change the value, hold the + button or – button for 3s to change the number in great step. Touch the ON/OFF button to choose the alarm on or off (if alarm is enabled, the speaker icon will be turned on indicating the alarm function has been enabled).
- 4) Touch the OUTDOOR TEMPERATURE section the fourth time to set the outdoor temperature low alarm function, the +, ON/OFF and – button will be flashing, LO AL icon will light up. Touch the + button or – button to change the value, hold the + button or – button for 3s to change the number in great step. Touch the ON/OFF button to choose the alarm on or off (if alarm is enabled, the speaker icon will be turned on indicating the alarm function has been enabled).
- 5) Touch the OUTDOOR TEMPERATURE section the fifth time to display maximum outdoor temperature record, the recorded maximum value will be flashing, MAX icon will light up.  
Hold the flashing max value for 3s, the maximum value will be reset to current reading.
- 6) Touch the OUTDOOR TEMPERATURE section the sixth time to display minimum outdoor temperature record, the recorded minimum value will be flashing, MIN icon will light up as well. Hold the minimum value for 3s, the minimum value will be reset to current reading.

## Indoor humidity



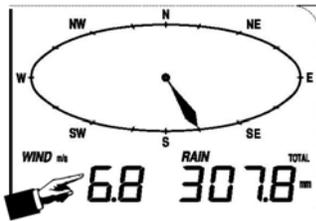
Activate the indoor humidity related setting by

- 1) Touch the INDOOR HUMIDITY section again to set the indoor humidity high alarm function, the +, ON/OFF and – button will be flashing, HI AL icon will light up. Touch the + button or – button to change the value, hold the + button or – button for 3s to change the number in great step. Touch the ON/OFF button to choose the alarm on or off (if alarm is enabled, the speaker icon will be turned on indicating the alarm function has been enabled).
- 2) Touch the INDOOR HUMIDITY section again to set the indoor humidity low alarm function, the +, ON/OFF and – button will be flashing, LO AL icon will light up. Touch the + button or – button to change the value, hold the + button or – button for 3s to change the number in great step. Touch the ON/OFF button to choose the alarm on or off (if alarm is enabled, the speaker icon will be turned on indicating the alarm function has been enabled).
- 3) Touch the INDOOR HUMIDITY section the third time to display maximum indoor humidity record, the recorded maximum value will be flashing, MAX icon will light up as well. Hold the maximum value for 3s, the maximum value will be reset to current reading.
- 4) Touch the INDOOR HUMIDITY section the fourth time to display minimum indoor humidity record, the recorded minimum value will be flashing, MIN icon will light up as well. Hold the minimum value for 3s, the minimum value will be reset to current reading.

### Outdoor humidity

Procedures and settings are similar to Indoor humidity

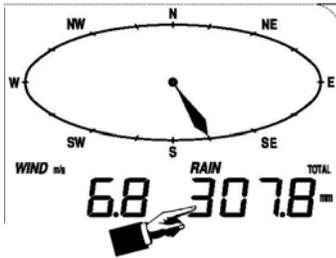
### Wind speed



Activate the wind related setting by

- 1) Touch the WIND SPEED section, + button and – button will be flashing. Touch the + button or – button to Shift the display between Wind Average Speed and Gust Speed.
- 2) Touch the WIND SPEED section again, + button and – button will be flashing. Touch the + button or – button to select wind speed unit between km/h, mph, m/s, knots, bft
- 3) Touch the WIND SPEED section the third time to set the high alarm function, the +, ON/OFF and – button will be flashing, HI AL icon will light up. Touch the + button or – button to change the value, hold the + button or – button for 3s to change the number in great step. Touch the ON/OFF button to choose the alarm on or off (if alarm is enabled, the speaker icon will be turned on indicating the alarm function has been enabled).
- 4) Touch the Wind SPEED section the fourth time to set wind direction alarm function, the wind direction arrow will start to flashing. Touch + or – to select desired alarm for wind direction, press ON/OFF to enable or disable the wind direction alarm.
- 5) Touch the Wind SPEED section the fifth time to display maximum wind speed record, the recorded maximum value will be flashing, MAX icon will light up as well. Hold the maximum value for 3s, the maximum value will be reset to current reading.

### Rain



Activate the rain related setting by

- 1) Touch the rain section, + button and – button will be flashing. Touch the + button or – button to Shift the display between 1h,24h,week,month and total rain.
- 2) Touch the rain section again, + button and – button will be flashing. Touch the + button or – button to select rain fall unit between mm,inch.
- 3) Touch the rain section the third time to set the high alarm function, the +, ON/OFF and – button will be flashing, HI AL icon will light up. Touch the+ button or – button to change the value, hold the+ button or – button for 3s to change the number in great step. Touch the ON/OFF button to choose the alarm on or off (if alarm is enabled, the speaker icon will be turned on indicating the alarm function has been enabled).
- 4) Touch the rain section the fourth time to display current maximum rain fall record. Touch the rain section for 3s will reset the maximum rain fall value to current value.
- 5) Touch the rain section the fifth time to reset rain fall value to 0 by pressing the rain section for 3s, then 1h,24h,week,month and total rain will be reset to 0.

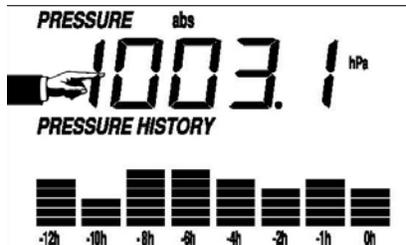
## Weather forecast

### TENDENCY



- 1) Touch the WEATHER FORECAST section, + button and – button will be flashing. Touch the + button or – button to Shift the display between SUNNY, PARTLY CLOUDY and CLOUDY, RAINY icon
- 2) Touch the WEATHER FORECAST section again, + button and – button will be flashing. Touch the + button or – button to set the pressure threshold from 2-4hPa(default 2hPa)
- 3) Touch the WEATHER FORECAST section the third time, + button and – button will be flashing. Touch the + button or – button to set the storm threshold from 3-9hPa(default 4 hPa)

## Pressure



- 1) Touch the PRESSURE section, + button and – button will be flashing. Touch the + button or

- button to Shift the display between Absolute pressure and Relative pressure.
- 2) Touch the PRESSURE section again, + button and – button will be flashing. Touch the + button or – button to Shift the display unit between hPa, inHg and mmHg.
- 3) Touch the PRESSURE section the third time to set the Relative Pressure value. The + and – button will be flashing, rel icon will light up. Touch the+ button or – button to change the value, hold the+ button or – button for 3s to change the number in great step.
- 4) Touch the PRESSURE section the forth time to set the pressure high alarm function, the +, ON/OFF and – button will be flashing, HI AL icon will light up. Touch the+ button or – button to change the value, hold the+ button or – button for 3s to change the number in great step. Touch the ON/OFF button to choose the alarm on or off (if alarm is enabled, the speaker icon will be turned on indicating the alarm function has been enabled).
- 5) Touch the PRESSURE section the fifth time to set the pressure low alarm function, the +, ON/OFF and – button will be flashing, LO AL icon will light up. Touch the+ button or – button to change the value, hold the+ button or – button for 3s to change the number in great step. Touch the ON/OFF button to choose the alarm on or off (if alarm is enabled, the speaker icon will be turned on indicating the alarm function has been enabled).
- 6) Touch the PRESSURE sections the sixth time to display maximum pressure record, to display maximum pressure, the recorded maximum value will be flashing, MAX icon will light up as well. Hold the maximum value for 3s, the maximum value will be reset to current reading.
- 7) Touch the PRESSURE section the seventh time to display minimum pressure record, to display minimum pressure record, the recorded minimum value will be flashing, MIN icon will light up as well. Hold the minimum value for 3s, the minimum value will be reset to current reading.

**Note:** when absolute pressure is selected, step 3 will be skipped since absolute pressure is selected for display.

### Pressure bar graph

Touch the PRESSURE BAR GRAPH section and then press + or – to toggle the bar graph time scale between 12hrs or 24 hrs for pressure history.

### Time



- 1) Touch the TIME section, + button and – button will be flashing. Touch the + button or – button to adjust the contrast level from 0 to 8. (default 5)
- 2) Touch the TIME section again, + button and – button will be flashing. Touch the + button or – button to set the time zone.

**Note:** At Europe, 0 for GMT+1 time zone, 1 for GMT+2 time zone, -1 for GMT time zone.  
At America, -4 for Atlantic time zone, -5 for Eastern Time zone, -6 for Central Time Zone, -7 for Mountain Time zone, -8 for Pacific time zone, -9 for Alaska time zone, -10 for Hawaii time zone.

- 3) Touch the TIME section the third time, + button and – button will be flashing. Touch the + button or – button to Shift the 12/24 hours format.
- 4) Touch the TIME section the fourth time, + button and – button will be flashing. Touch the + button or – button to set the DST ON or OFF (this function is only available for WWVB version, while for DCF version, this feature is not activated).

**Note:** “DST OFF” indicates that the feature is off and the internal real time clock will not change times automatically. “DST ON” indicates that the feature is on and the internal real

time clock will change times according to the DST time schedule automatically. Some locations (Arizona and parts of Indiana) do not follow Daylight Saving Time, and should select "DST OFF".

5) Touch the TIME section the fifth time to set the hour, the + and – button will be flashing.

Touch the + button or – button to change the value.

6) Touch the TIME section the sixth time to set the Minute, the + and – button will be flashing.

Touch the + button or – button to change the value.

## Date



1) Touch the DATE section, + button and – button will be flashing. Touch the + button or – button to shift between alarm time, date and week date.

2) Touch the DATE section again, + button and – button will be flashing. Touch the + button or – button to Shift between DD-MM format and MM-DD format for the date.

3) Touch the DATE section the third time, + button and – button will be flashing. Touch the + button or – button to set the year. Hold the + button or – button for 3s to change the number in great step.

4) Touch the DATE section the fourth time, + button and – button will be flashing. Touch the + button or – button to set the month. Hold the + button or – button for 3s to change the number in great step.

5) Touch the DATE section the fifth time, + button and – button will be flashing. Touch the + button or – button to set the day. Hold the + button or – button for 3s to change the number in great step.

6) Touch the DATE section the sixth time, + button and – button will be flashing. Touch the + button or – button to set the alarm hour. Hold the + button or – button for 3s to change the number in great step.

7) Touch the DATE section the seventh time, + button and – button will be flashing. Touch the + button or – button to set alarm minute. Hold the + button or – button for 3s to change the number in great step. Touch ON/OFF to enable or disable time alarm function.

## Memory

Touch Memory section to activate history data toggle display, + button and – button will be flashing. Press – to toggle forward to see earlier weather history data together time stamp, press + to see later history weather data. When history data displayed, the corresponding time will be displayed at the time section area (History data saving interval can only be changed using the PC software that comes with this product, the default history data saving time interval is preset to 30 minutes prior to shipment).

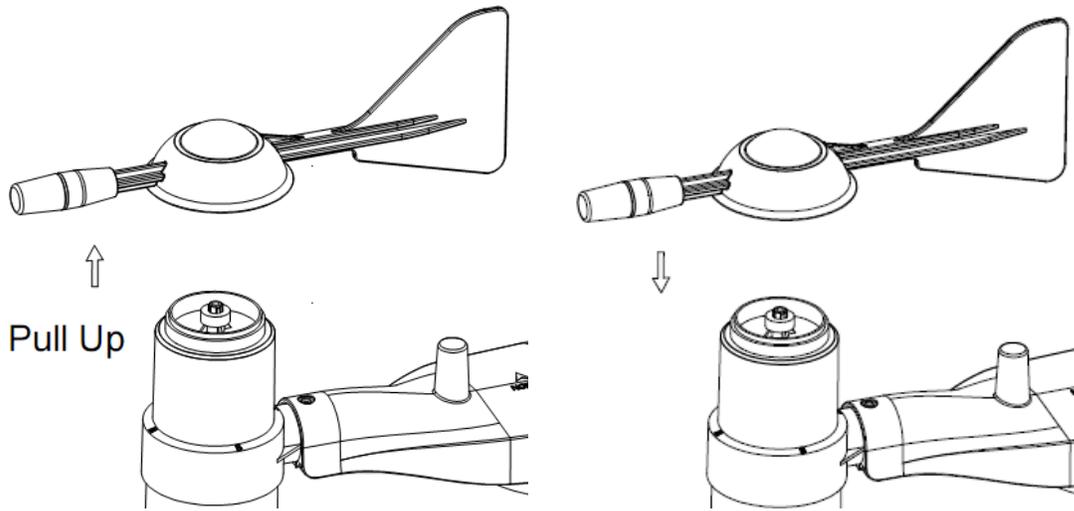
Touch Memory section again will trigger the memory clear procedure: the word of "CLEAR" will be flashing, the full memory usage icon will be flashing. Press and hold the memory full icon for 3 seconds will clear the memory.

## Replacing parts

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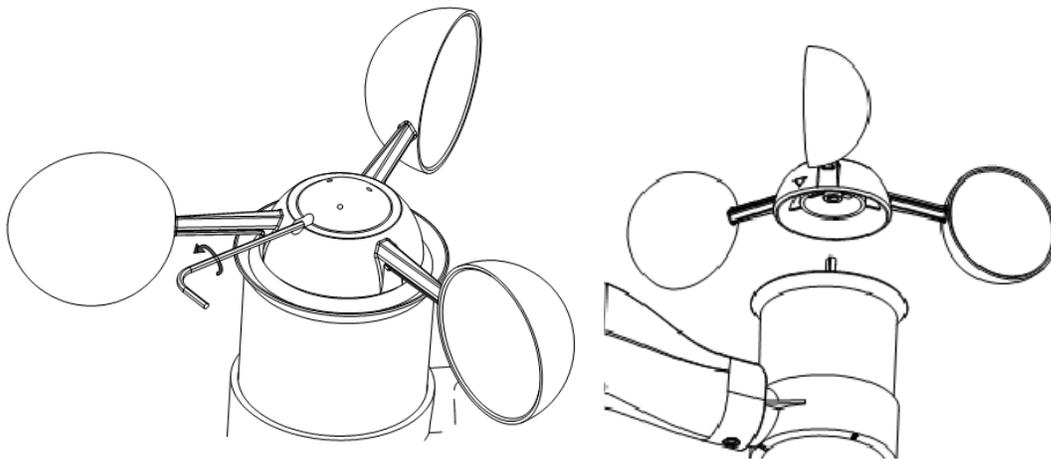
### Replacing a wind vane

Wind vane part is plugged in the shaft. Pull up the old wind vane as shown in figure and it can be removed. Take a new wind vane and push it into the shaft. Replacing is finished.

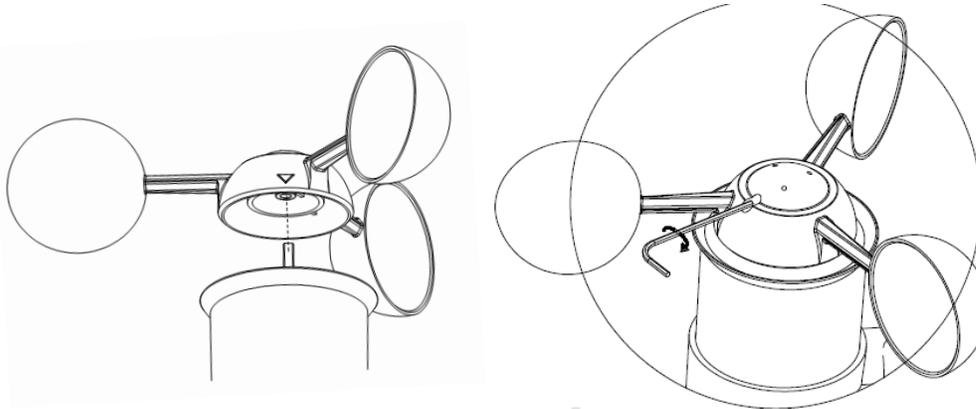


### Replacing a wind cup

1. Use the Allen wrench provided to loosen the set screw on the side of the wind cups. Pull the old wind cup out of the main body.



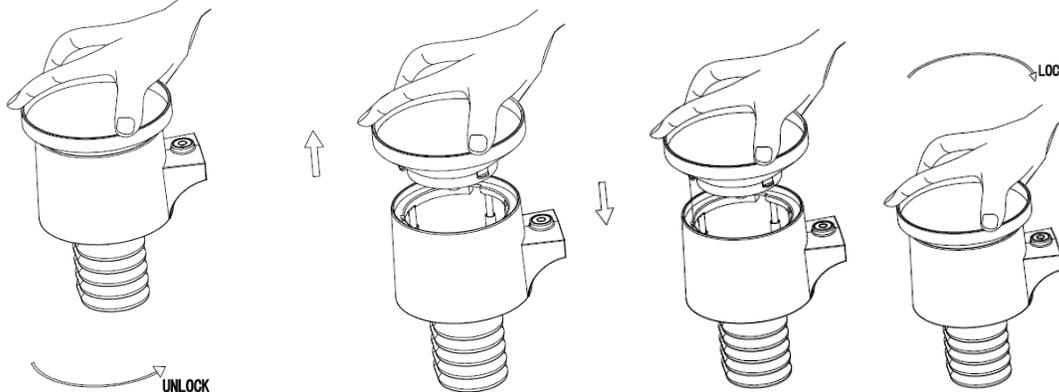
2. Take a new wind cup and push it into the shaft and tighten the set screw as shown in figure. Make sure the wind speed spin freely.



## Maintenance

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1. Clean the rain gauge once every 3 months. Rotate the funnel counter-clockwise and lift to expose the rain gauge mechanism, and clean with a damp cloth. Remove any dirt, debris and insects. If bug infestation is an issue, spray the array lightly with insecticide.



2. Clean the solar panel every 3 months with damp cloth.
3. Replace batteries every 1-2 years. If left in too long, the batteries may leak due to environmental challenges. In harsh environments, inspect the batteries every 3 months (when cleaning the solar panel).
4. When replacing the batteries, apply a corrosion preventive compound on the battery terminals, available at Amazon and most hardware stores.
5. In snowy environments, spray the top of the weather station with anti-icing silicon spray to prevent snow build up.

## PC Connection

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As an important feature in addition to the display on the Touch Screen, the Weather Station allows the read-out of all measured and displayed time and weather data in form of complete history data sets on a PC.

## Data Storage

For a comprehensive weather history, the Base Station allows the internal storage of up to 4080 complete sets of weather data with time and date. The base station will lose all weather data if an

interruption of power supply. In case the memory capacity of the Weather Station is exhausted the oldest data sets stored will be overwritten by the new ones entered.

### Data Recall

Certain weather data or setting values can only be read out, processed, and displayed by means of a PC. Also the settings of the storing intervals from 5 minutes to 240 minutes for the storage of data sets can only be performed by means of a PC.

### Connections and Software

The wiring between Weather Station and PC takes place by means of an included USB cable. The EasyWeather software package, also included in the shipping contents, must be installed on the PC.

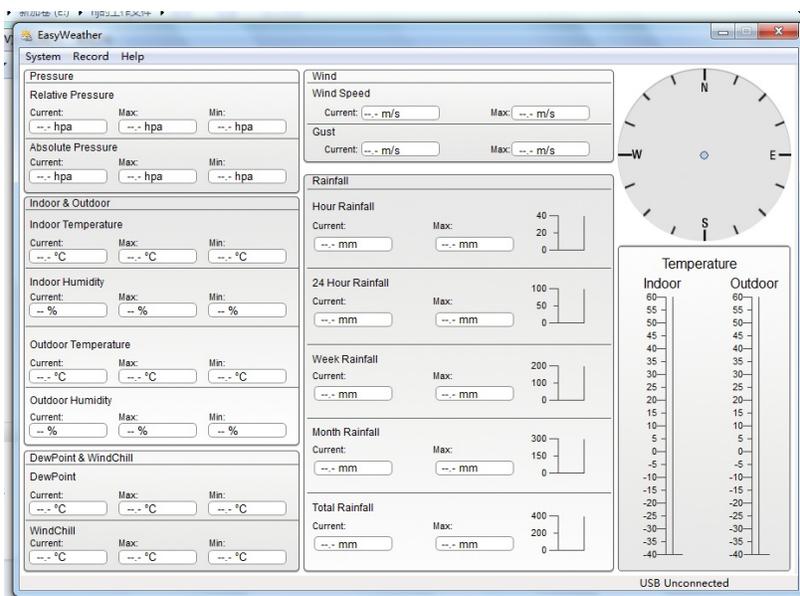
This software allows the display of all present weather data with graphic symbols. It also allows the display, storage, and printing of history data sets, whose volume exceeding the maximum 4080 data sets of the Weather Station is only limited by the capacity of the PC's main memory.

### PC software installation

The installation software is very simple: double click the setup.exe file and follow the steps popped up.

Make sure you are running the program under the administrator accounts of your windows PC platform. Otherwise the graphic function might not be working when graph display mode is needed to display all history data.

If you run the program for the first time, the current weather display will be displayed and at the sub line of the window, the program will show related information regarding the read of all history data into the PC. Please note however, when there is large amount of data is being uploaded, it will take a few minutes time before the system can respond to your setup settings. Otherwise it will display "read weather data fail" error message since the USB port is reading the data from the memory and the system is not able to respond any further job tasks.



When memory is full, it will take about two minutes to upload all history data into PC and it takes another two minutes to process all history data for graphic display. Further detailed PC software user manual can be found from the help menu.

# Specifications

## Outdoor data

Transmission distance in open field :	100m(300 feet)
Frequency :	433 MHZ/868MHZ(Europe)/915MHz(North America)
Temperature range :	-40°C--60°C (-40°F to +140°F)
Accuracy :	+ / - 1 °C
Resolution :	0.1°C
Measuring range rel. humidity :	1%~99%
Accuracy :	+/- 4% in range 20-80%RH, +/- 6% in OTHER ranges
Rain volume display :	0 – 9999mm (show --- if outside range)
Accuracy :	+ / - 6%
Resolution :	0.3mm (if rain volume < 1000mm) 1mm (if rain volume > 1000mm)
Wind speed :	0-50m/s (0~100mph) (show --- if outside range)
Accuracy:	+/- 1m/s (wind speed< 5m/s) +/-10% (wind speed > 5m/s)
Measuring interval thermo-hygro sensor:	48 sec
Water proof level :	IP44

## Indoor data

Measuring interval pressure / temperature :	48 sec
Indoor temperature range :	0°C--60°C (32°F to + 140°F) (show --- if outside range)
Resolution :	0.1°C
Measuring range rel. humidity :	1%~99%
Resolution :	1%
Measuring range air pressure :	300-1100hpa (8.85inHg – 32.5inHg)
Accuracy :	+/-3hpa (absolute pressure) +/-3hpa under 700-1100hPa
Resolution :	0.1hpa (0.01inHg)
Alarm duration :	120 sec

## Power consumption

Base station :	3XAA 1.5V LR6 Alkaline batteries (not included)
Remote sensor :	2xAA 1.5V LR6Alkaline batteries (not included)
Battery life :	Minimum 12 months for base station Minimum 12 months for thermo-hygro sensor



**Please help in the preservation of the environment and return used batteries to an authorized depot.**

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# EasyWeather PC Software User Manual

## 1.0 General Information

This Weather Station is a high quality, easy to use weather monitoring system that reads, displays and records the weather data from internal as well as external sensors. Besides the internally measured values for indoor temperature, indoor humidity and air pressure the outdoor sensor will take data for temperature and humidity, wind and rainfall. Operation of these units is by wireless transmission to the Base Station.

After installing the "EasyWeather" program on this CD-ROM, your PC can display all indoor data as well as the weather data from the Base Station received from the external sensors. For operation, simply use the USB cable supplied and connect the Base Station to the PC. From now on you can start to track current and history weather information at your finger tips.

## 2.0 System Requirements

To install the "EasyWeather" software onto your PC, the minimum requirements are as follows:

Operating System: Windows NT4 (Service Pack >= 6a), Windows 2000, Windows XP, Windows Vista, Windows 7, Windows 8

Internet Explorer 6.0 or above

Processor: Pentium III 500 MHz or above

Memory: at least 128MB, 256MB recommended

CD-ROM Drive

Base Station and PC must be connected by USB cable

## 3.0 Installation of the "EasyWeather" Software

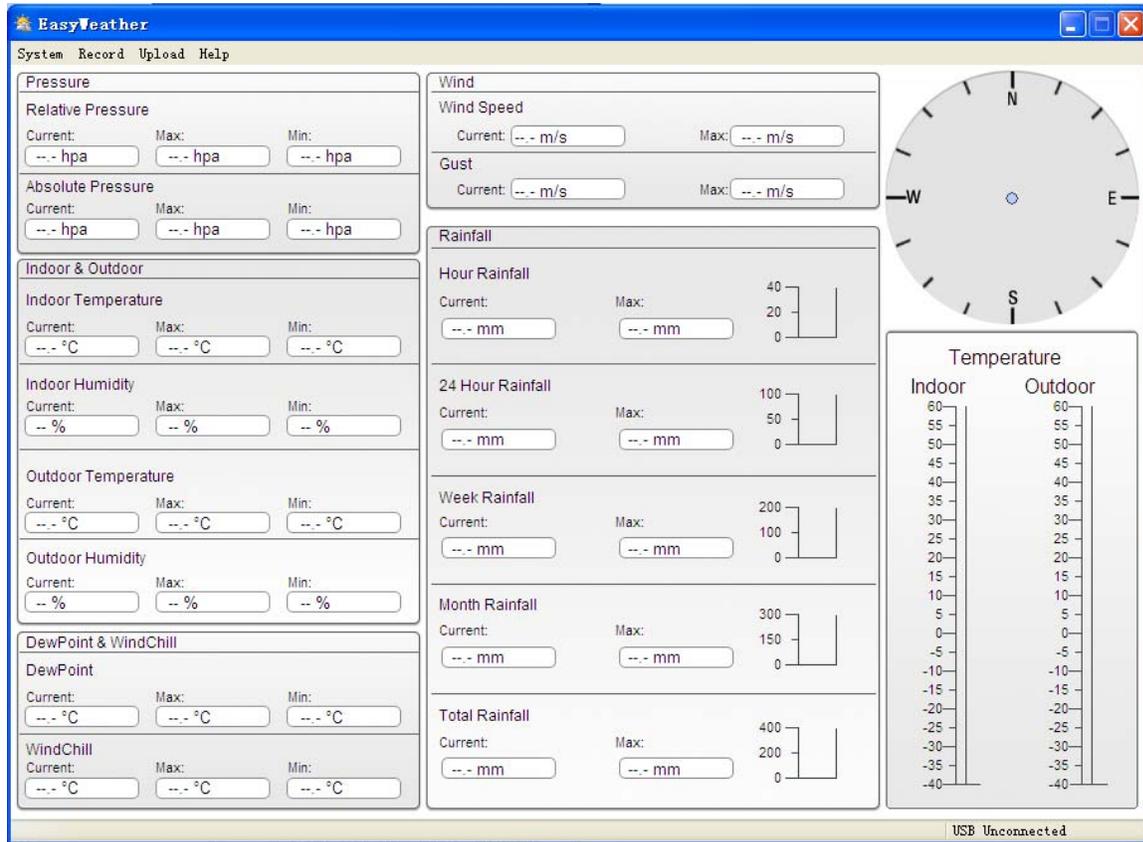
Firstly, the Base Station and the Outdoor Sensors should be connected and checked for correct function (see **Operation Manual for WH1080 Touch Screen Weather Station** for setting up the Weather Station). After successful checking, install the "EasyWeather" software as follows:

1. Switch on your PC and insert the CD-ROM into the CD-ROM Drive.
2. Double click "Easyweather.exe"
3. Select the installation process language option and click ok
4. click next and select the destination folder(change directory when needed)
5. click next and select the shortcut folder(change directory when needed)
6. click next and select the additional tasks.
7. Click next and setup is now ready to begin installing Easyweather on your computer.
8. Click install, software will be installed automatically
9. Press Finish to finish the installation process and exit. If you tick "Launch Easyweather" the software will start to run.
10. From "Start—All Programs—EasyWeather" path and double click the "EasyWeather" icon to start application.

Note: The graphic function needs the software to be installed under the administrator account. If it is installed under limited user accounts, the graphic function of the software might not be working correctly.

## 4.0 Basic Settings of the “EasyWeather” Software

After the “EasyWeather.exe” program has been started, the following main window will appear on the PC screen:



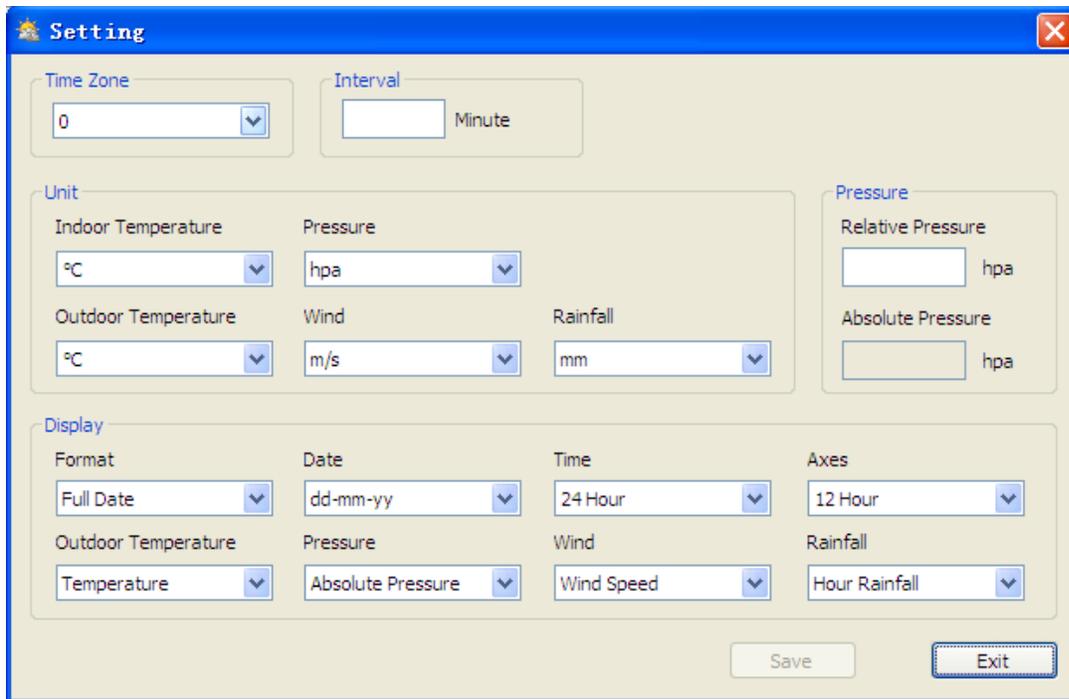
All the settings from the base unit is mirrored into the PC software, so once you have done your setting on the base unit, then you don't need to make any setting changes on the PC software. However you can still easily make any setting changes you wanted from the PC and download the changes into the base station(the setting change will be refreshed when next full minute arrives on the base station). When base unit is connected to PC, it shows “USB Connected” at the bottom of screen. If no base station is connected, it shows”USB Unconnected”.

**Tool Bar:** The tool bar at the top of the screen has 4 options; System, Record, upload and Help.

### 4.1 System option

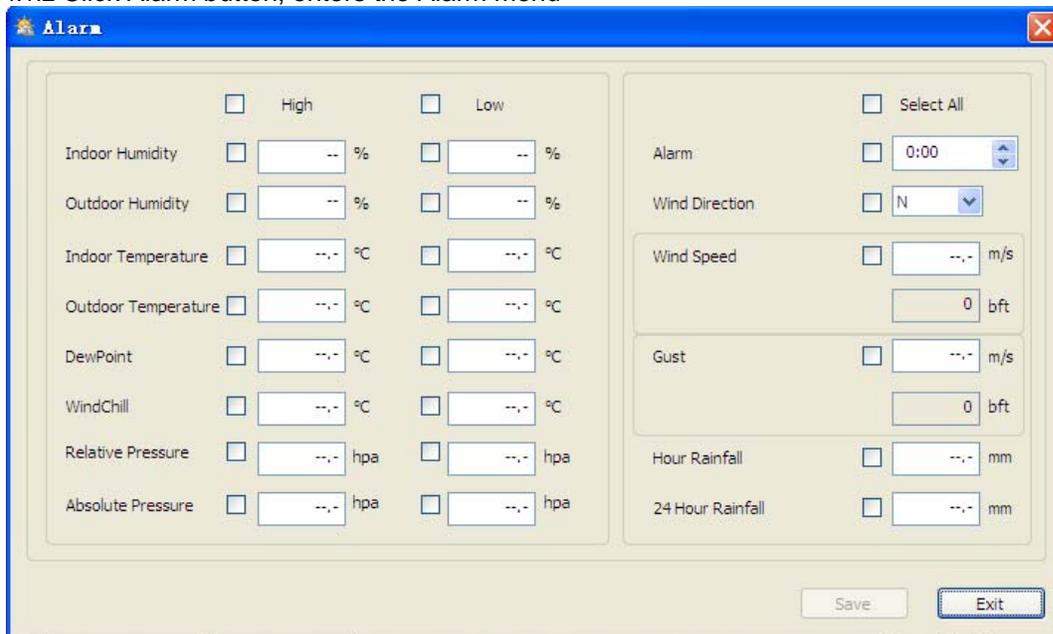
4.1.1 Click System button, enters the Setting menu





This section is used to set up PC software display, base station units. Once you made your choice, press Save to make the setting effective.

#### 4.1.2 Click Alarm button, enters the Alarm menu



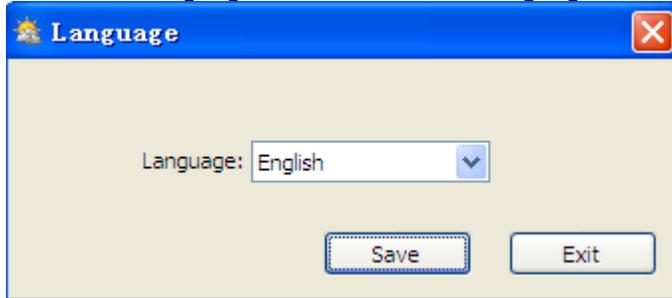
This section is used to set the desired time, high or low alarm value for the base unit, as well as able or disable the corresponding alarm function. Once you made your choice, choose Save to make the setting effective. If you don't want to make any change, just press Cancel and exit without change.

#### 4.1.3 Click Max/Min button, enters the Max/Min menu



This section is used to display the recorded min and max value recorded with time stamp. Min/Max reset can only be done through key operation on the base station.

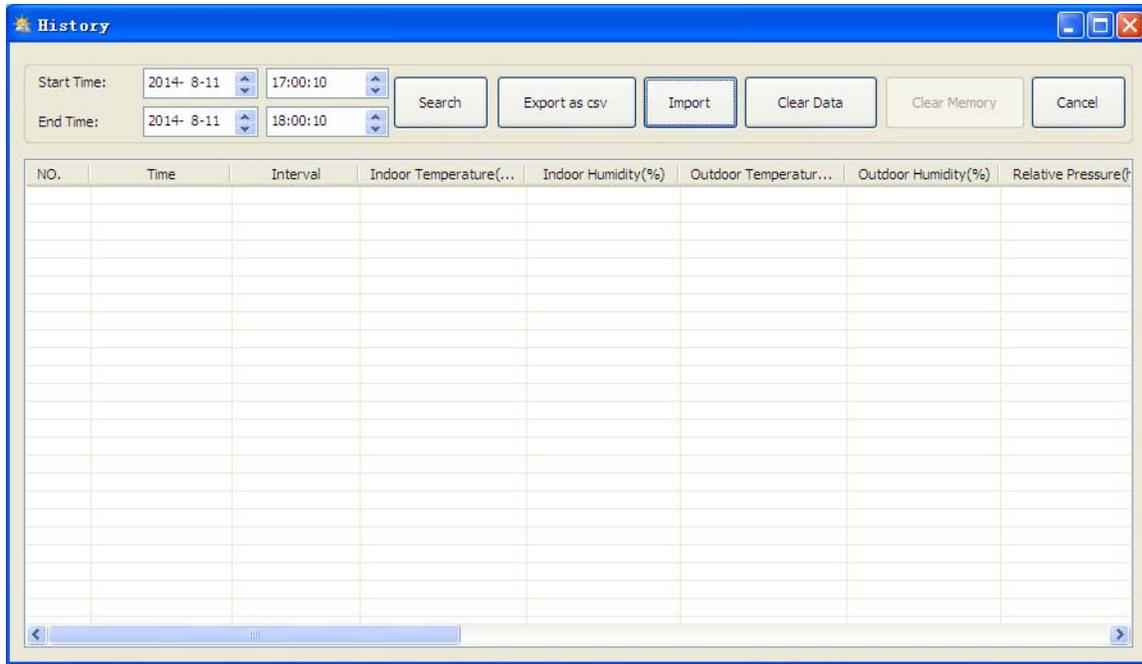
#### 4.1.4 Click Language button, enters the Language menu



## 4.2 Record option



### 4.2.1 Click History button, enters the History menu



This section is used to display recorded history data in a spread sheet. If you wanted to see all history data in a desired time period, choose the time duration and press **Search** to reload the history data. With the **Export** button, you can export the selected history data into excel format file for other application purpose.

The software version 6.2 use .dat file format, the software version above 6.2 use .mdb format. Press the **Import** button, you can import the old version data to the new version data to migrate the two different data base data.

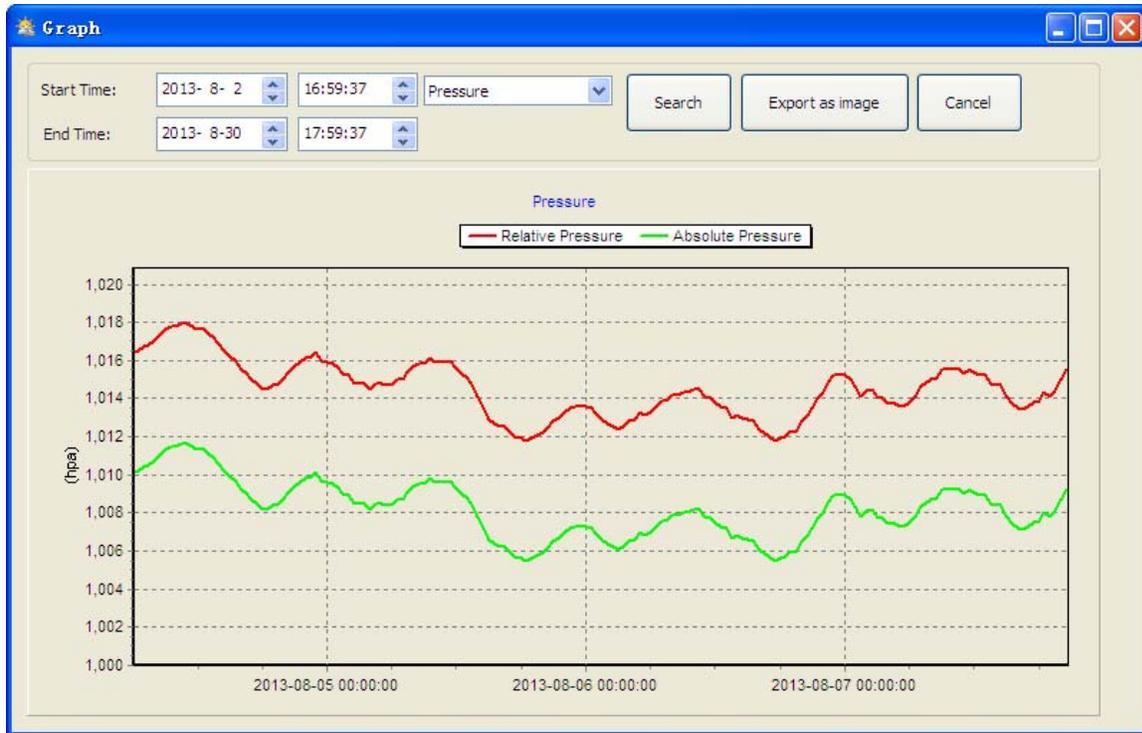
When memory on base station is full, press "**Clear Memory**" button to refresh the memory space on the base station (remember to upload all data before pressing this button). If you wanted to start a new weather history record, press "**Clear Data**" button to clear up the data base, all history weather data will be deleted (if you would like to keep a back up history file before deleting all weather data, you can make a copy of the "EasyWeather.mdb" file into another folder or just rename the "EasyWeather.mdb" file, such as "Jan-07.dat", for future reference.)

4.2.2 Click Graph button, enters the Graph menu



In this section, you can see the history data plotted in graph format for easier observation. If you want to see more details, just use your mouse to select the area you wanted and the display will be automatically updated in more detailed scale:



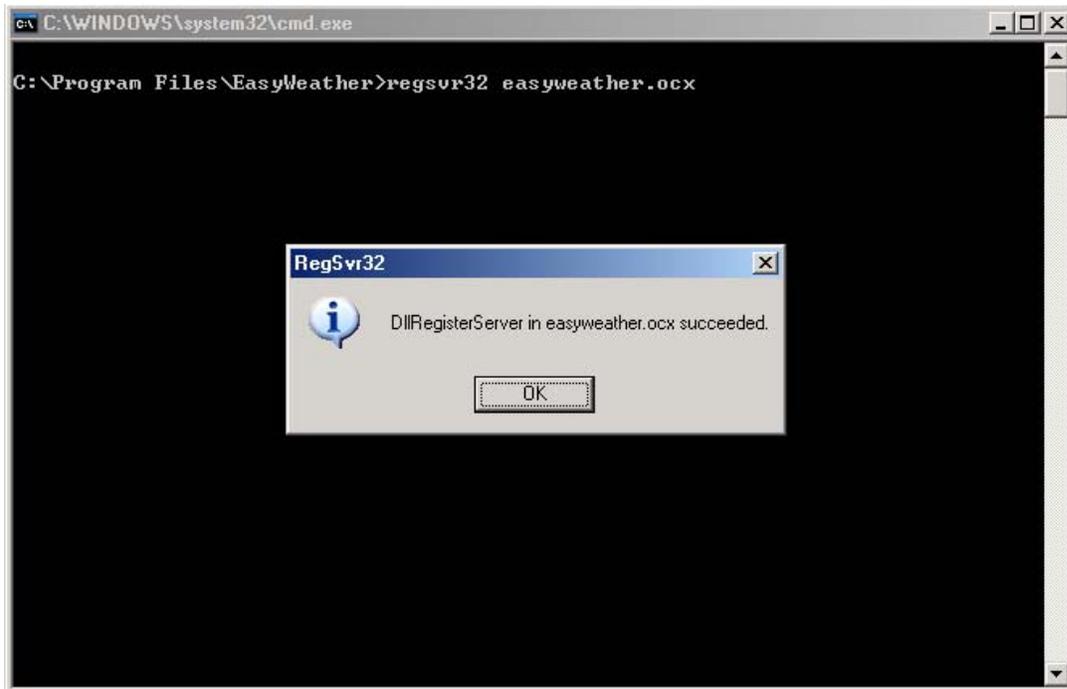


With the Export as image button, you can export the selected graph into .jpeg format file. You can change the Y axel by scrolling the mouse up and down roller.

### What to do if graph function is not working

This is the most encountered problem with this software. To make the graph function working properly, please check the following step:

- 1, find the folder where the "EasyWeahter.exe" file is located
2. Create a file name "reg\_graph.bat" file with wordpad or notepad editor program
3. Type "regsvr32 easyweather.ocx" and save the reg\_graph.bat file
4. Double click "reg\_graph.bat" file and it should register the graphic driver again. If successful, then the following window will be displayed:



### 4.3 Upload option

**Note:** This feature is only available in EasyWeather Version 8.3 or greater.

To upload weather data to the internet, from EasyWeather, select **Upload** from the menu bar.

#### 4.3.1 Upload to WeatherUnderground.com

Select **Upload | WeatherUnderground** from the menu bar.

User can upload data to website. [www.wunderground.com](http://www.wunderground.com) or their own website. If user choose [www.wunderground.com](http://www.wunderground.com), he do not need to set the server, server type and port. If user choose custom, he need to set the server, server type and port.

**Upload**

Website:

Server:

Type:

Port:

Upload Type:

ID:

PassWord:

Auto Upload

**Upload**

Website:

Server:

Type:

Port:

Upload Type:

ID:

PassWord:

Auto Upload

To upload data to Wunderground.com, you must first register on the Wunderground.com website. Registration is free.

1. Visit <http://www.wunderground.com/> and select Join if you do not have an account.
2. Once registered with Wunderground.com you will need to sign up your station. To get started visit:

<http://www.wunderground.com/weatherstation/setup.asp>

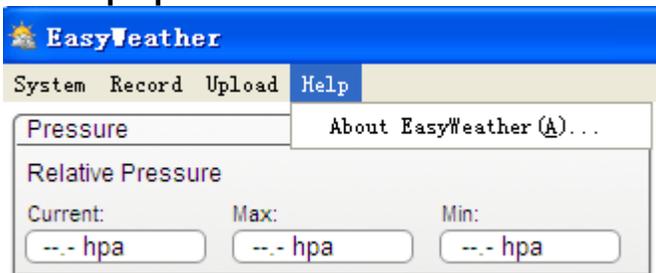
3. Enter your Station ID, and password into the ID and Password fields provided in the EasyWeather software, and select the **Auto Upload** checkbox.

**Please Note:** Make sure you enter the ID in all capitals, and the password exactly as you chose it, both fields are case sensitive.

#### 4.3.2 Upload to WeatherCloud



#### 4.4 Help option



Click About EasyWeather button, enters the About menu

#### Special Notes about time synchronization between PC and sub-station:

The PC software obtained its own time scale through the time interval marker from the base station history data, and the PC software automatically synchronizes the weather data with a time stamp calculated. Thus the history data file can have different time when the PC time and base station time is not same. In order to make the time scale correct, remember to set the PC time and base station time same, and further to this, no weather data is allowed to be missed or over-written. If history weather memory on the base station is cleared by manual setting, then the history weather data since last uploading is lost permanently.

Before memory is used up(memory icon on LCD display showing 100% full), remember to upload weather history data to PC periodically.

If there is a reset happened for the rain fall on the base station, then there will be rain fall value discrepancy between PC and base station.

## **Legal Notes**

- We reserve the right to delete or change any image whether or not purposely uploaded onto the server by a user of the Touch display weather station and the EasyWeather software products.
- The EasyWeather software products are protected by copyright laws and international copyright treaties as well as other intellectual property laws and treaties.
- You may not copy the printed materials accompanying the products.