User Manual
WS1050

Professional Wireless Weather Station with APP

（Wifi and Bluetooth）

Contents

Ⅰ、Function Declaration

WS1050 is a professional weather station with WiFi, Bluetooth, users can view the latest weather data anytime and anywhere through their mobile phone (APP kit).

Discriptions：

1. Calendar:Date display format is YYYY-MM-DD、MM-DD- YY、DD-MM-YY（User chooses to set up）

2. Clock display: Clock display format can bu customized ,set to 12 hours or 24 hours.

3. Automatic calibration time: Indoor computers can connect to the Internet via WiFi，automatic synchronization of current phone time，Or APP through Bluetooth update time.If you cancel the alarm,press touch key.

4. Alarm clock :BI BI　alarm sound to alert users，the alarm clock rings 2 minutes.If you cancel the alarm press touch key.
5. Wireless 433MHz receiving: indoor and outdoor transmitters receive about 100m from the open space, data frequency 40 seconds / 1 launch.

6. Indoor humidity : Relative humidity display,can set the alarm value of high humidity and low humidity independently, scope:20RH%~90RH%(±5%).

7. Indoor temperature: Can set the alarm value of high temperature and low temperature independently,the user may set the unit at ℃ or Fahrenheit，scope: 0℃~60℃(±2℃).

8. Outdoor humidity: Relative humidity display,can set the alarm value of high humidity and low humidity independently, scope:20RH%~90RH%(±5%).

9. Outdoor temperature:Can set the alarm value of high temperature and low temperature independently,the user may set the unit at ℃ or ℉，scope: -40℃~60℃(±2℃).

10. Wind speed: User can set display wind speed units，can independently set the wind speed high alarm value, the display unit can be set tom/s、km/h、mph、knots or bft，scope:0m/s~50m/s.

11. Rainfall :Rainfall can be displayed in 1H、24H,、week、 month,、year or total amount. The display unit can be set to mm or inch (user setting).The total rainfall was 9999mm;APP can set the alarm value of high hourly rainfall, ranging from 0mm to 400mm.

12. Wind direction :N,NE,E,SE,S,SW,W,NW eight wind direction can be displayed.

13. Pressure:The air pressure is shown as absolute pressure, It can set high voltage alarm value and low voltage alarm value independently, and display unit can be set to Hpa or Inhg or mmhg, scope 300hpa~1100hpa(±3 hPa).

14. Pressure change trend:Pressure trend is indicated 24H variation trend.

15. Weather forecast shows: Sunny、Cloudy、Overcast、Rainy four states icons and weather trends.

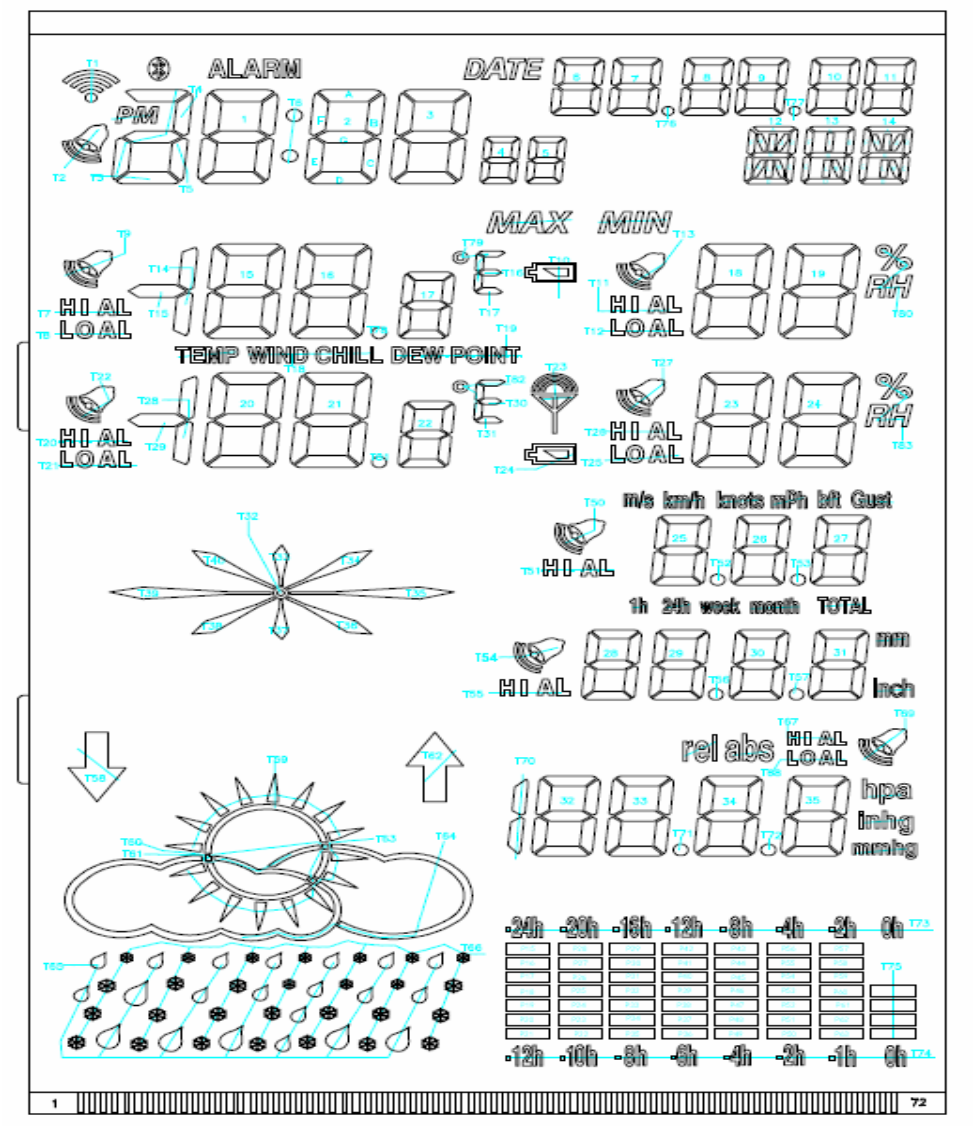
16. Low voltage detection:If the battery voltage of the receiver and transmitter is insufficient,can flicker separately to remind users to replace batteries as soon as possible(Low voltage of indoor battery around 3.2V).
17. Power supply: Alkaline battery 3 × AA 1.5V battery life more than 2 months (battery capacity determines service time).
18. External DC power supply: 5V/500mA.

19. Backlight:Press the touch button,the backlight will be lit,duration is 10 seconds(Immutable).

20. Buzzer: All weather data alarm function can be set independently, the user can set the upper / lower limit value within the design parameter range, the alarm time is 2 minutes sound is bibi.

21. Data storage: Can store more than 3 years of meteorological data, no open user query.

LCD display: The local LCD is shown below,after the user loads the battery,before the machine goes into normal operation,all icons will be displayed for two seconds;



After the user loads the battery, the machine starts searching for outdoor sensors immediately after initializing. If no target is found within three minutes,think this search failed，once the target is searched,this machine will only establish a data connection with the sensor,synchronize the data of the sensor in 40 seconds,so in order to ensure that the machine works properly, be sure to install the outdoor sensor before switching to the battery，during the search process  The icon will always flicker，icon displayed after search for outdoor unit，icon disappeared after search failed（Press the touch button after disappearing，continue to start long receive mode），During the search process,please do not

do anything with this machine.

This machine can be automatically calibrated by BT/WiFi connection，if you set up the WiFi，it can be automatically checked through the Internet every 12 hours.or user can use APP to update the receiver time via Bluetooth.

Ⅱ、 APP Operations

APP Java runtime environment

1）IOS　Run environment compatible version

Suitable for iOS 8.0 or above

2）Android version

For Android　5.0 above.

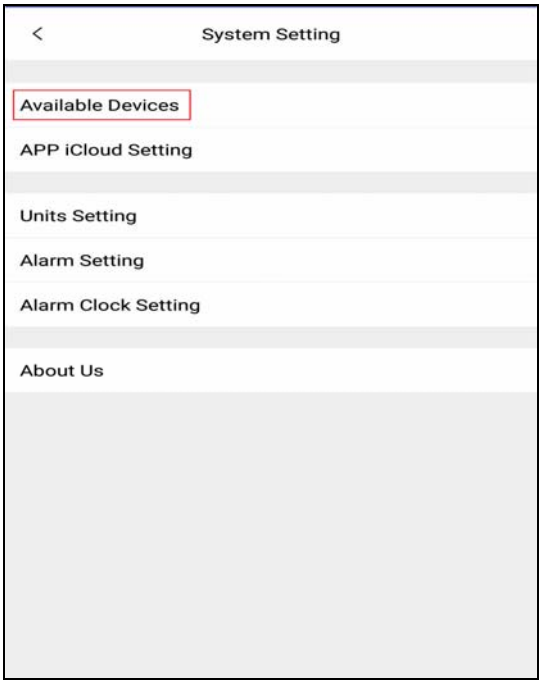
1. Download installation APP：Two-Dimensional codes for scanning instructions / Color boxes，Download and install　APP.

2. Open APP，APP the startup interface is as follows：

（APP Startup interface）

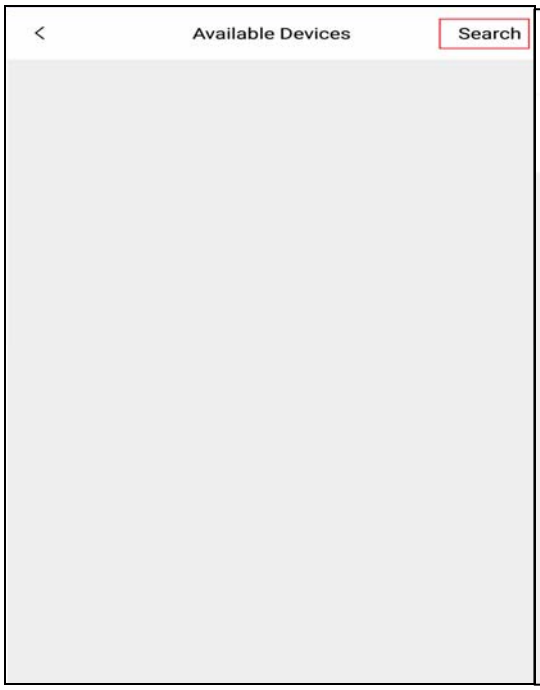
3. After starting the interface，display main interface，click on the upper left corner.  Setting button，As shown below(1)：

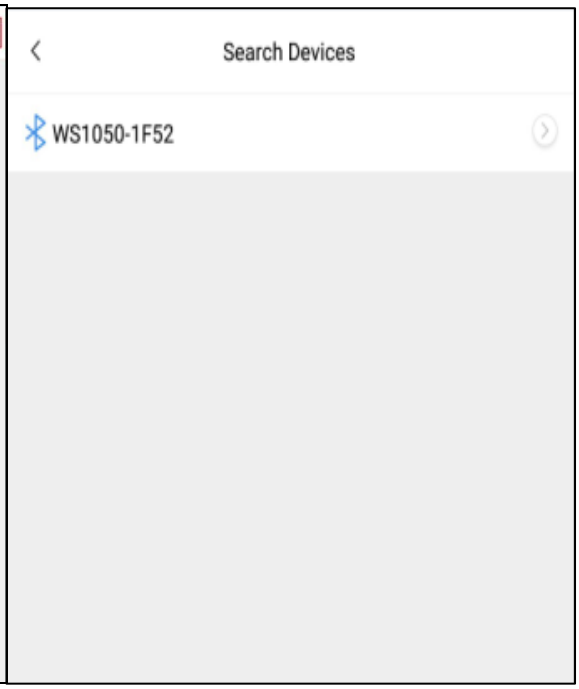
4. Bluetooth connection and WiFi settings, click Available Devices, to enter the Available Devices interface, as shown below(2):



(1) **(2)**

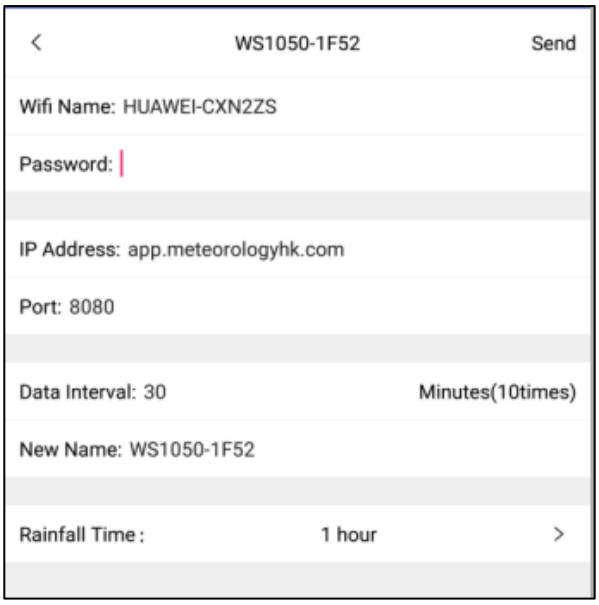
5. Click on the top right corner of the Available Devices interface Search, into the Bluetooth search interface, search the product -- WS1050-XXXX,as show below:

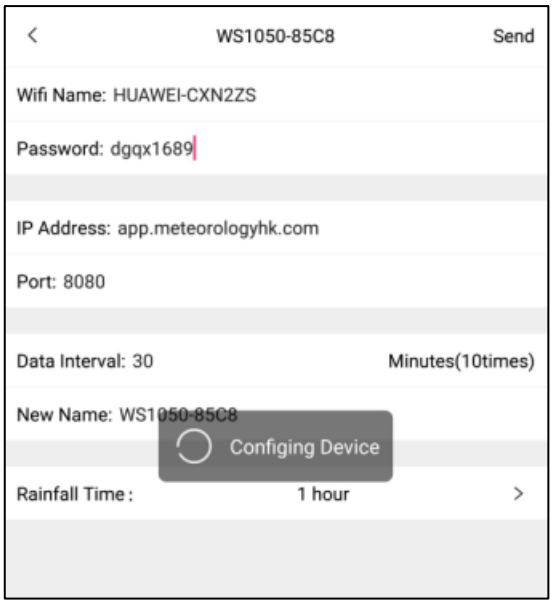




(Available Devices interface) (Product Bluetooth search)

6. WiFi setup connection:Click to search the product name WS1050-XXXX Bluetooth MAC address), pop up the WiFi setup interface, enter the WIFI connection password in the Password column, after setting up, click on the upper right corner Send to send, as show below：





7. After configuring a successful OK, APP jumps back to the Available Devices interface, as shown below：

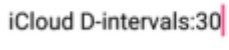
8. Click on the product name attached to the Available Devices list and jump to the main interface to see the product receive，as shown below：

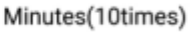
（Available Devices interface）

（APP main Interface after successful connection）

9. APP data update settings：

Data upload cloud time setting，Click iCloud Setting, the first two IP and Port remain the default.

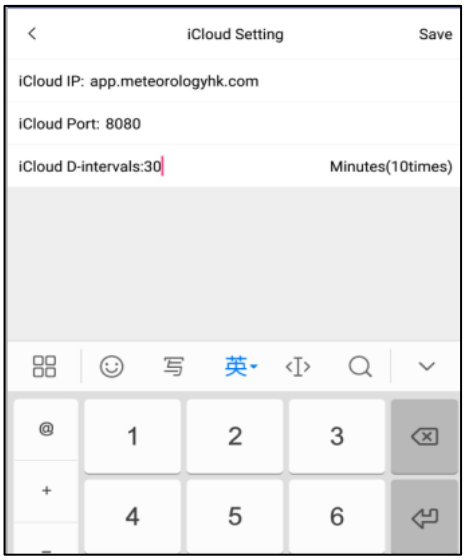
Click 



The user sets the update interval according

to the actual need.Minimum 10 minutes (others keep default 30 minutes), maximum 100 minutes.

Click on the upper right corner Save icon withdraw from，as show below:

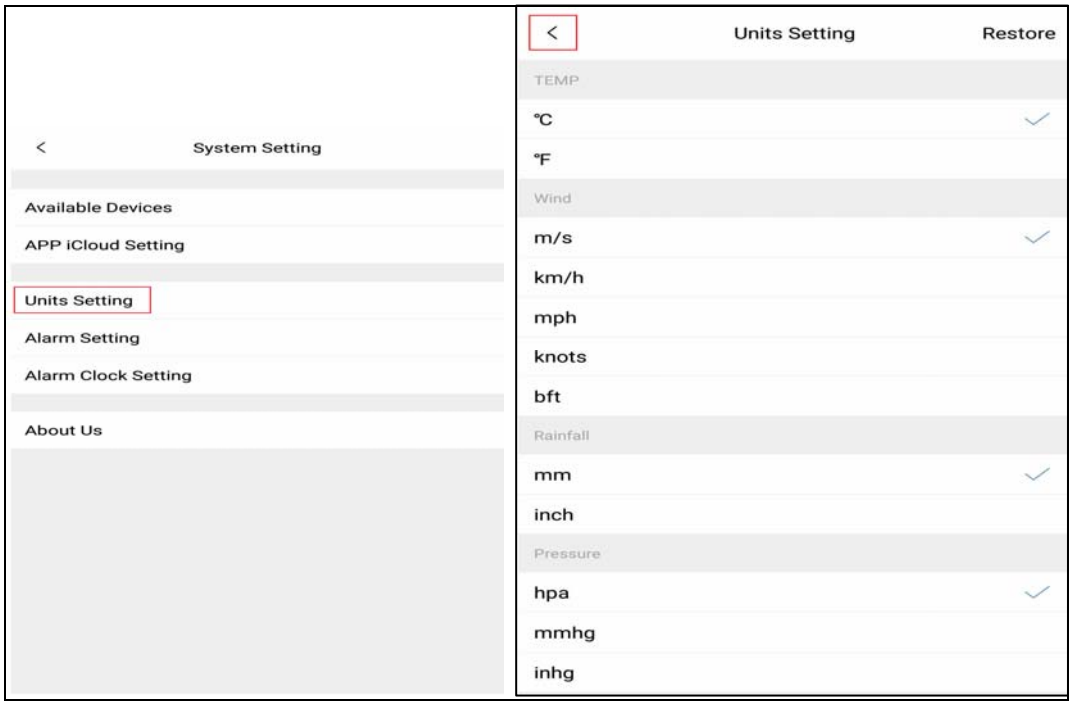


(Setting the main interface) (Upload interval setting)

10. Unit setting

Click Uints Setting, and the user sets the unit according to the actual needs, as shown below: Each data unit is displayed in the first unit value as the default unit of the system,users are free to choose units according to their needs.

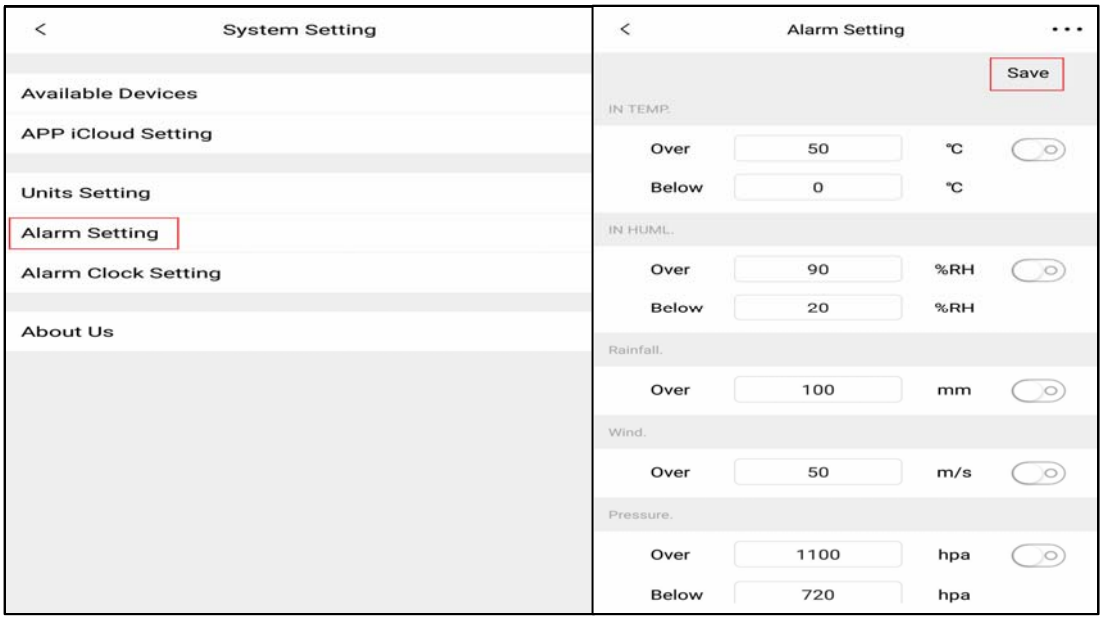
Click on the upper left corner < Icon exit, as show below:



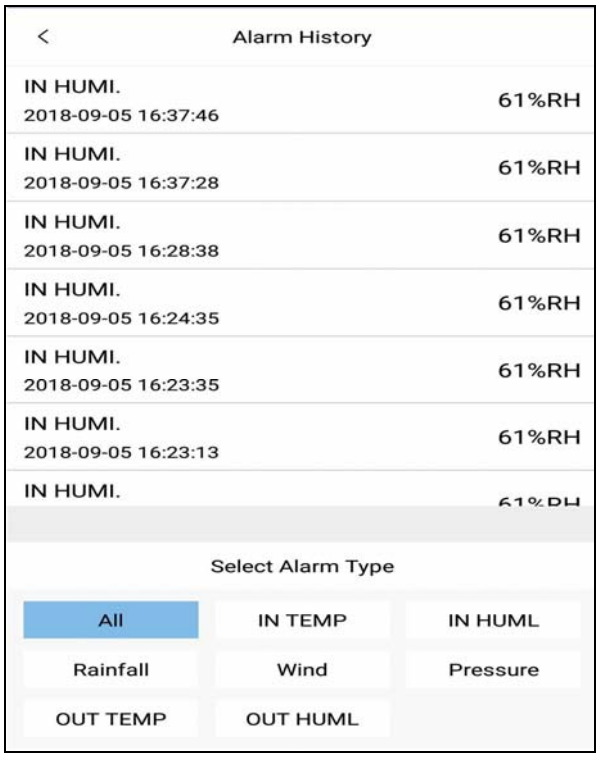
(set up the main interface) (unit setup)

11. Alarm setting:

Click Alarm Setting The user sets the upper and lower limits according to the range of design parameters .For example, temperature ：0℃～60℃ (32℉～140℉)。After the alarm value is set，click the upper right save icon to exit, as shown below：



In the Alarm Setting interface, you can view the categories of alarm history data, click on the upper right corner---- as shown below:



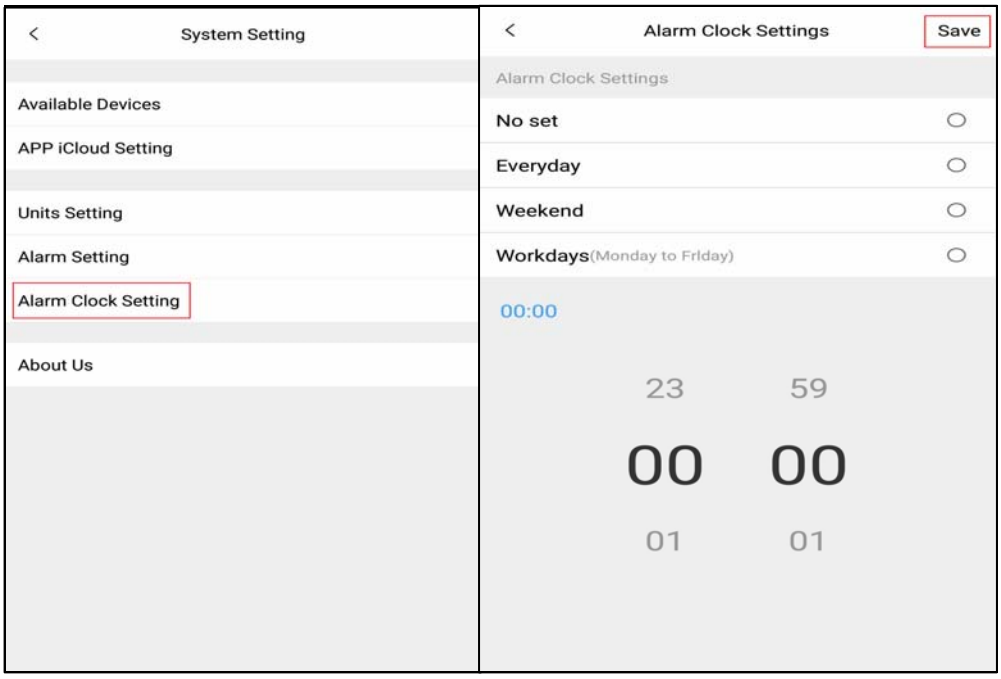
(Historical alarm data)

12. Alarm clock setting：

Click on Alarm Clock Setting, user to set alarm clock mode and time according to actual needs;

Alarm clock can be set: no alarm clock, every day, weekend, working day four modes, after setting alarm

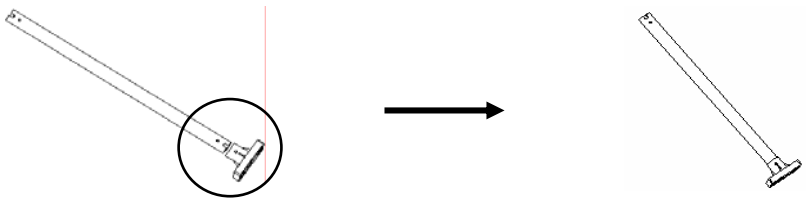
clock，Click the save icon in the upper right corner to exit，as show below：



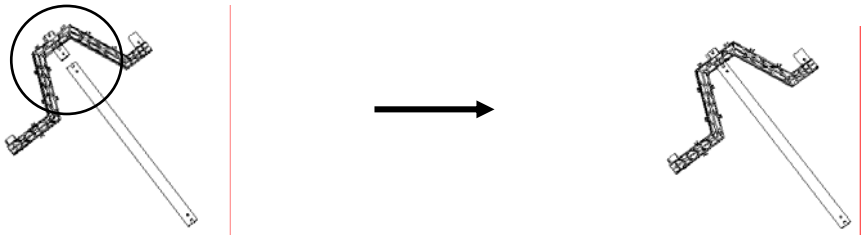
(set up the main interface)　　(alarm clock set)

Ⅲ、 Assembly Description：

1．Insert the stainless steel pipe into the base, press a M3 screw nut into the nut slot, and then establish them with a PM3.0*25mm screw:

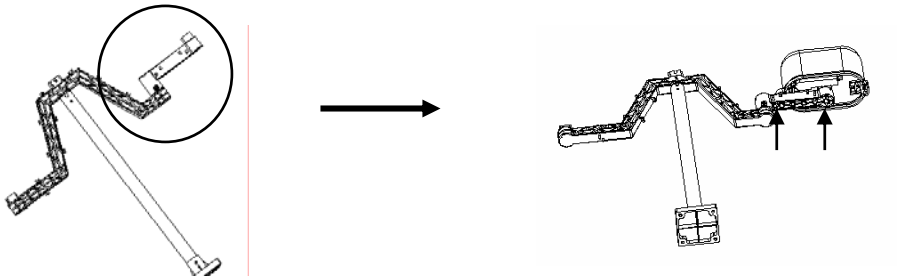


2.Insert the transmitter holder into the stainless steel pipe, establish them with a PM3.0*22mm screw and a M3 screw nut:

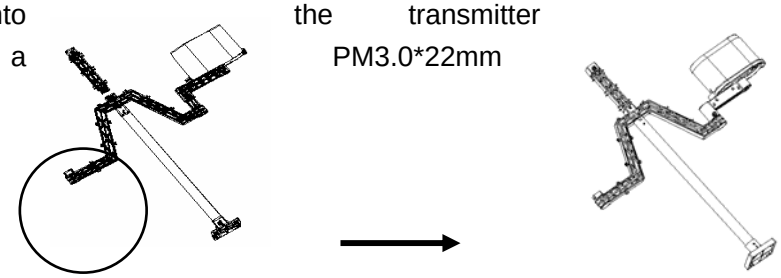


3．Insert the rain gauge holder onto the short side of the transmitter holder, establish them via a

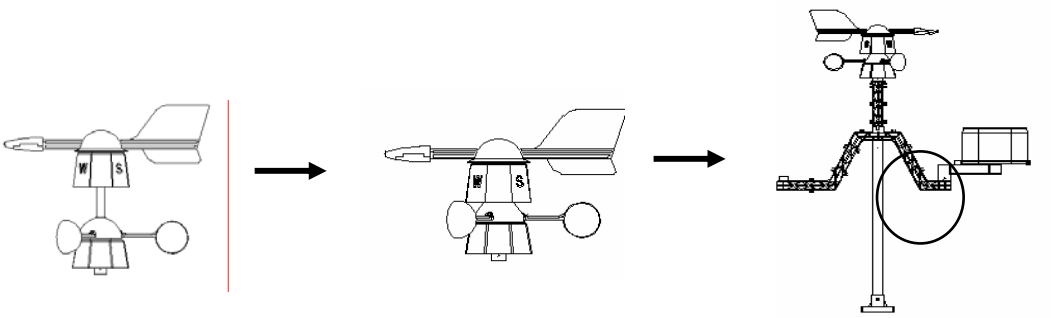
PM3.0*25mm screw and a M3 screw nut. Then install the rain gauge onto the rain gauge holder, and establish them with two PA3.0*8mm screws:



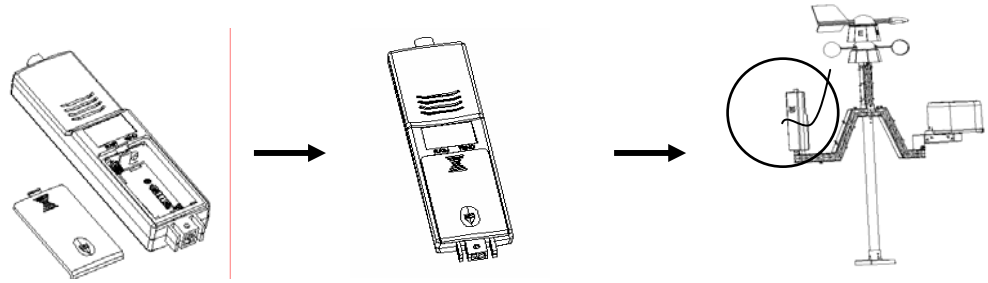
4. Press a M3 screw nut into the nut slot of the small side of the wind sensor holder, insert wind sensor holder onto the transmitter holder, establish them with a PM3.0*22mm screw:



5.Insert the wind direction component into the wind speed component, and then insert the wind direction RJ45 into the 623K hole of the wind speed component. Insert a M3 screw nut into the big side of the wind sensor holder, and then install the whole wind sensor onto the holder, establish them with a PM3.0*22mm:



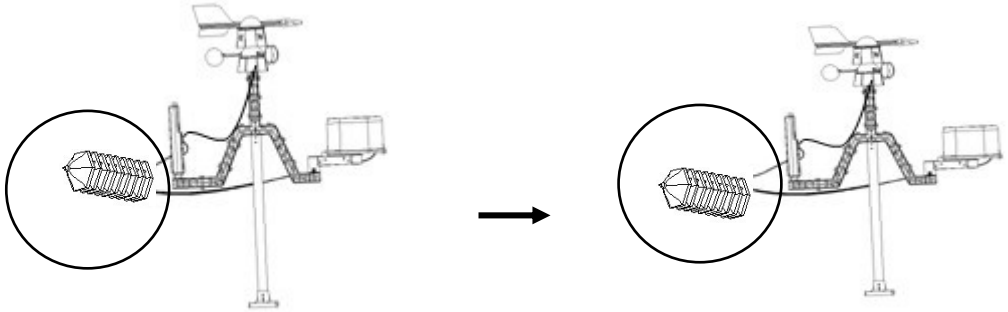
6.Open the battery compartment, install the rechargeable batteries, then cover the battery door. Insert the whole transmitter onto the long side of the transmitter holder, and establish them with a PM3.0*18mm screw. At last, insert the wind speed wire RJ45 into the "WIND" 623K hole of the transmitter:



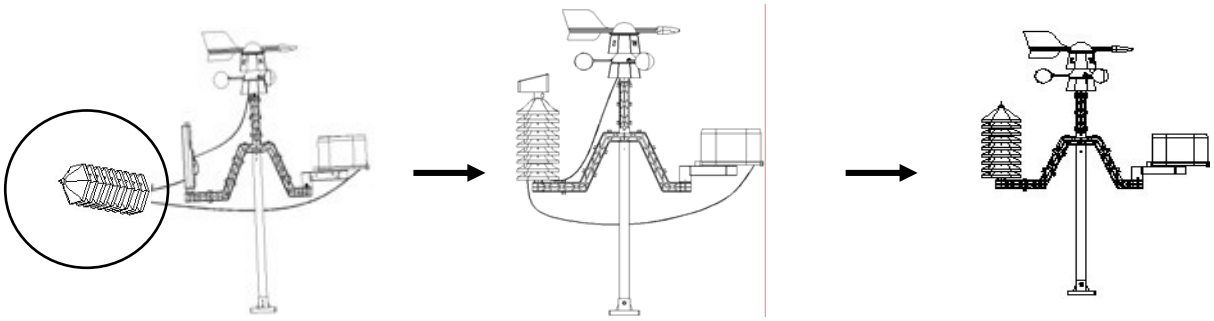
7.① Put the rain gauge wire across the waterproof tower case, and then insert the RJ45 into the 623K hole of the solar component;

② Put the solar wire across the waterproof tower case, and then insert the RJ45 into the "RAIN" 623K hole of the transmitter;

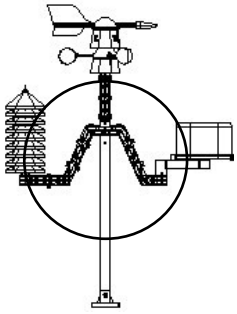
③ Insert a M3 screw nut into the top nut slot of the waterproof tower case, then insert the solar component into the top of the waterproof tower case, establish them with a PM3.0*8mm screw (Note: insert the screw from the screw nut side of the solar component):



8.Suit the assembled waterproof tower case onto the assembled transmitter, and then suit the wires onto the slots of the transmitter holder



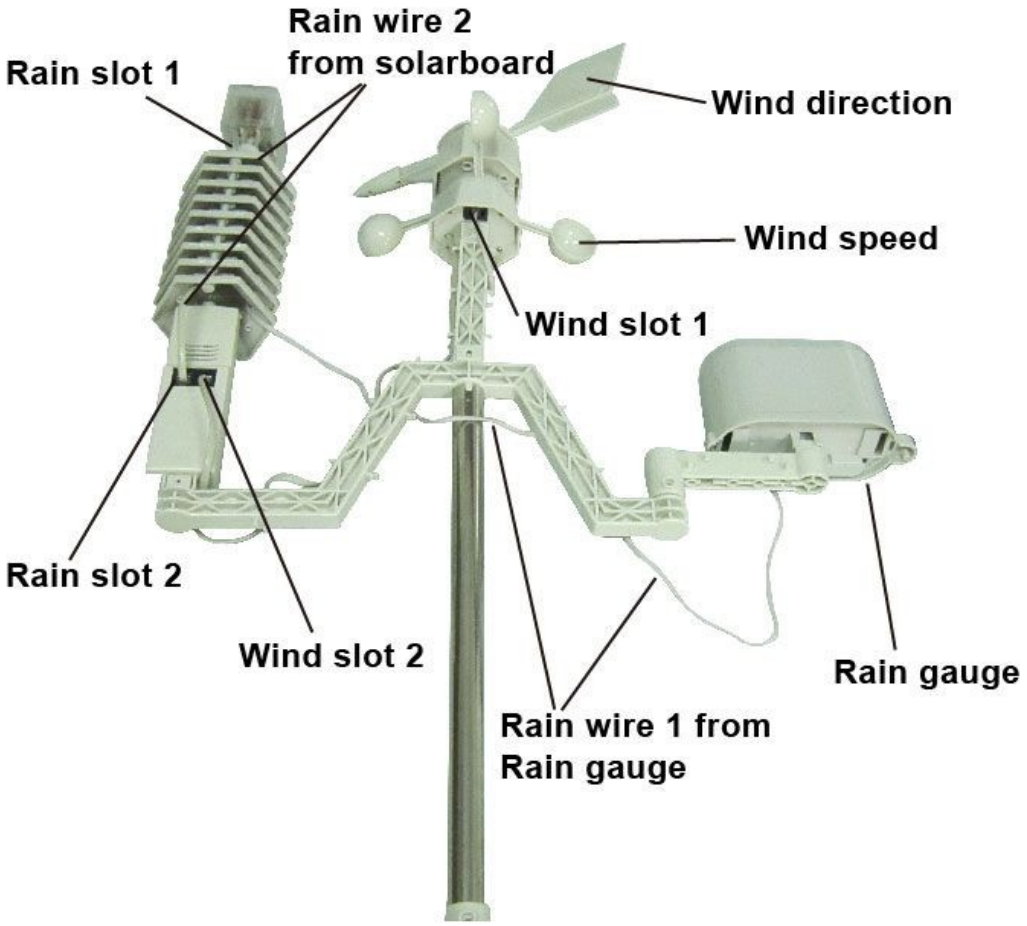
9.Suit four green plastic screw nuts into the base, and then establish the base and ground with four KA4.0*40mm screws：



10.Assembly sample diagram:

Demonstration for wire connect

1.Locate all the wires and slots as below picture demonstrated.
2.Connect them as below mapping.



Connection mapping

1) Rain wire 1 to Rain slot 1
2) Rain wire 2 to Rain slot 2
3) Wind wire 1 to Wind slot 1
4) Wind wire 2 to Wind slot 2

Note:
Wind wire 1 means the shorter wire from Wind device,
Wind wire 2 means the longger wire from Wind device

Ⅳ、Feature

一.Receiver:

1. Temperature range: 0℃～60℃(-40℉～140℉).
2. Temperature resolution : ±2℃.
3. Humidity range: 20%~99% .
4. Humidity resolution: ±5%(condition:Temperature 25℃ Humidity50%).
5. Pressure range: 300~1100hPa.
6. Pressure resolution: ±3 hPa.
7. Data update: 40 S/Time.
8. 5. Alarm clock: 2 Minutes duration.
9. Working voltage: 3XAA1.5V Battery.
10. Battery life: about 2months（The quality and capacity of the battery determine the service time of the product）
11. External DC power supply： 5V/500mA.
12. Low voltage detection:Battery icon flicker(Battery voltage lower than3.0V), (Battery voltage greater than3.0V).
13. 10. Working temperature： 0℃～60℃(32℉～140℉).

二.Transmitter:

14. Temperature range: -40℃～60℃(-40℉～140℉).
15. Temperature resolution : ±2℃.
16. Humidity range: 20%~99%.
17. Humidity resolution: ±5%(condition:Temperature 25℃ Humidity50%).
18. Wind speed range: 0~50m/s.
19. Wind speed resolution: 0.1 m/s.
20. Rainfall range : 0~9999mm.
21. Rainfall resolution: 0.4mm(rainfull<1000 mm) 1 mm(rainfull>1000 mm).
22. Data transmission : 40 S/Time.
23. Working voltage: 2XAA1.5V Battery .
24. Battery life: More than 12 months.
25. Low voltage detection:Battery icon flicker(Battery voltage less than 2.4 V).
26. Working temperature ： -40℃～60℃(-40℉～140℉).
27. Waterproof Level:IPX3.

Ⅴ、Attention

- When the battery has a low voltage warning, in order to protect the normal transmission of data, some functions may not be used normally to prevent data errors.
- 2．When the battery has a low voltage warning,avoid WIFI receiving Outdoor Sensor data from being affected，please replace the battery in time.（Receiver：Battery voltage below 3.0V flicker.Transmitter：Battery voltage below 2.4V flicker)
- 3. When setting the bluetooth connection between the mobile phone APP and the receiver, please make sure to operate the setting within 10 meters
- 4．Make sure that the WiFi is connected to the receiver in a valid receiving range,WIFI sign flicker in the upper left corner  to ensure that meteorological data can be uploaded to the cloud.)

FCC Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1)this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IC Statement

This device complies with Industry Canada’s licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

The term “IC: “ before the certification/registration number only signifies that the Industry Canada technical specifications were met. This product meets the applicable Industry Canada technical specifications.

This equipment should be installed and operated with minimum distance 5cm between the radiator & your body.

Le présent appareil est conforme aux CNR d'Industrie Canada applicable aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage,
et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

Cet équipement doit être installé et utilisé avec une distance minimale de 5 cm entre le radiateur et votre corps.