WS 2355

What is the maximum distance I can have the remote sensor from the display?

In case of a 433 MHz transmission :
The maximum open-air distance is 100 meters in a straight line although you should take into account the environment, distance and interferences. Subtract 6 to 10 meters for an exterior wall or any other similar obstruction, in width or composition. Subtract 3 to 10 meters per interior wall or any obstruction that is similar in width or composition. (An obstruction would include anything that is between the line of sight like a roof, walls, floors, ceilings, trees, etc.) Also keep your units away from electronic appliances like TV's, microwaves, computers, refrigerators and speakers.

In case of a connection by cable :
The maximum distance of transmission is 10 meters (cable included) with a possible cable extension of 10 meters.

Does the thermo-hygro sensor have any trouble transmitting through specific materials (in case of a 433 Mhz transmission) ?

Yes and No… We have trouble maintaining a signal through metal siding, stucco walls and UV glass. You can get the remote sensor to transmit through these materials, but it will take a little bit of trial and error. Reset the weather station as mentioned above and change the angle that the remote transmits through the siding or glass until an outdoor temperature remains on the display for an extended period of time. Keep in mind that the signal from the remote must travel through some space (10 cm of air minimum) before reaching a wall or glass window.

Where can I mount the remote sensors?

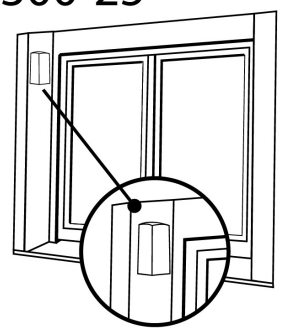
Mounting the thermo-hygro transmitter :

In order to get an accurate reading and to prolong the life of your sensor we recommend that you respect the following instructions:

- Always make sure that the rain protection cover is correctly placed on the sensor.
- Have it in a sheltered area out of the sun and direct rain. Fog and Mist will not affect the sensor, but a soaking in water may.

You can mount it outside under an eve of your house or any other suitable place that will keep it out of the sun and rain. Do not wrap the sensor in plastic or seal it in a plastic bag.

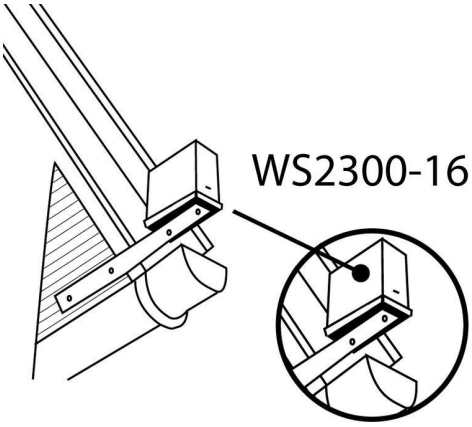
WS2300-25



Mounting the rain sensor :

In order to get an accurate reading and to prolong the life of your sensor we recommend that you :

- Always make sure that the rain sensor is mounted onto a horizontal surface : a faulty installation can lead you to get wrong recordings, or no recording at all
- Mount the sensor at a height of minimum 1 meter off the ground to prevent dirt from obstructing the funnel
- Mount it away from trees (the leaves could block the sensor)
- Check by tilting the rain sensor from side to side that the seesaw tray can move freely

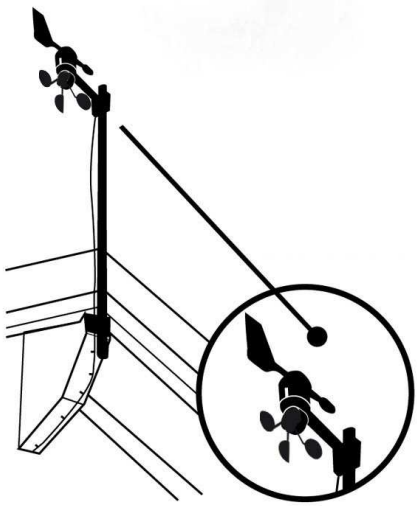


Mounting the wind sensor :

In order to get an accurate reading and to prolong the life of your sensor we recommend that you :

- Always make sure that the wind sensor is perfectly horizontal : a faulty mounting can lead you to get wrong recordings, or no recording at all
- Avoid mounting the wind sensor near a TV antenna or a satellite dish
- Avoid mounting the wind sensor onto a metallic mast

Make sure that the mounting allows the wind to travel around the sensor unhindered from all directions



How can I get outdoor data to show on the display for the first time or after loss of information (i.e. power blackout)

Bring all units of the system (station + thermo-hygro transmitter + wind sensor + rain sensor) inside your house and place them 1 to 2 meters one from the other, nothing in-between them.

1. Remove the batteries from the station, then from the thermo-hygro transmitter.
2. Disconnect the rain sensor and the wind sensor from the thermo-hygro transmitter and the latter from the station (in case of a cable connection).
3. Wait until the display is completely blank in order to clear all memory (we recommend 1 minute).
4. Carefully connect the cable linking the wind sensor to the thermo-hygro transmitter at the WIND port of this latter. The wind sensor must be pointing exactly to the East (E) in an East-West direction in order to provide an exact Eastern reference point to the base station's compass.
5. Connect the cable linking the rain sensor to the thermo-hygro transmitter at the RAIN port of this latter. The rain sensor must be mounted onto a horizontal surface.
6. The three sensors are now connected to each others.
7. Remove the battery compartment cover of the thermo-hygro transmitter and insert two AA/LR6 (1.5V) batteries according to the polarity diagram. Put the cover back to its place.
8. Finally connect the thermo-hygro transmitter cable to the weather station at the appropriate port.
9. Taking care not to press any button, reinstall the batteries into the station.
10. Do not press any button for at least 10 minutes after installing the batteries. (Let establish a good connection between the station and the thermo-hygro transmitter). Pressing of a button during this stage would be enough to stop the search for the sensor which is now being carried out by the station.

11. Every data from the outdoor thermo-hygro transmitter (temperature, humidity, wind direction « 0.0 », rainfall « 0.0 ») should be now displayed on the LCD screen. You can now put your outdoor sensors back outside.

How do I read and reset MIN/MAX recorded data ?

Press the MIN/MAX key of the station to toggle between the MIN, MAX and current recordings of the selected value. By pressing the DISPLAY key, you can choose the desired value.

To reset the MIN, MAX, times and dates of recordings of any value, press the "-" key when the selected value is displayed on the LCD screen.

The MIN and MAX values that will then be displayed will be those recorded during the reset with the time and date of the reset.

There are two exceptions :

- There is no MIN or MAX value for the total rainfall, just a total value with time and date of the recording. This value can be reset by pressing the "-" key, the time and date of recordings being replaced by the current ones.
- The MAXI rainfall quantity for 24 hours and for 1 hour is calculated on the duration displayed on the screen. By pressing the "-" key, you can reset the 2 values to the current ones, with corresponding time and date.

What do I do if my display is blank ?

Check the polarity on your batteries to make sure they are installed according to the diagram in the battery compartment. Also make sure that you are using a quality alkaline battery. We advise against reloading batteries.

Why is my time incorrect or not displaying at all ?

1. The clock of this station receives a signal from Frankfurt (DCF-77) to set the clock to atomic time and the calendar. Sometimes, due to adverse weather or atmospheric conditions you will not be able to receive a signal immediately. The best way to get a signal is to put your clock in a window facing Frankfurt until you see the tower icon appear. If definitely you are not receiving the signal, wait one night during the night time there are less atmospheric disturbances.
2. If your time is off by an increment of 1 hour, 2 hours or more, change your TIME ZONE on zero to have time zone on the atomic time (which is CET meaning Central European Time = Brussels, Paris, Rome, Berlin, Madrid,...). Change time zone on "-1" for Great Britain and Portugal. Match any time zone when receiving DCF-77 signal.
3. For this weather station, the time runs from -12 hours up to +12 hours.

How do I manually set my time and other features of this station ?

1. Press and hold the SET key for 5 seconds.
2. On the first line of the screen, you will be able to set the LCD contrast (from 0 to 7) by pressing the "+" or "-" key. Once the contrast is set, press and release the SET key.

3. The hour will start flashing : press and release the "+" and "-" key until correct time is displayed. Press then the SET key and release it.
4. Minutes will be now flashing. Press and release the "+" and "-" keys until the correct value is displayed. Press and release the SET key.
5. Proceed to the calendar display setting. To toggle between 12h and 14h, press and release the "+" or "-" button. Once your choice is displayed on the screen, press and release the SET button once.
6. The year will now be flashing. Press and release the "+" or "-" key until the correct year is displayed. Press and release the SET key.
7. The month will now be flashing. Press and release the "+" or "-" key until the right month is displayed. Press and release the SET key.
8. Now the date will be flashing. Press and release the "+" or "-" key to select the right date. Press and release the SET key.
9. The time zone will now be flashing. To change the time zone, press and release the "+" or "-" key (the time runs from +12h to -12h). Once the time zone is selected, press and release the SET key once.
10. The Celsius degrees will be flashing. To toggle between Celsius and Farhenheit, press and release the + or – keys. Once the selection is made, press and release the SET key.
11. Select now the windspeed unit : press and release the "+" or "-" key (you can choose between m/s, km/h, mph, Beaufort or knots).Once this is done, press and release the SET key.
12. You can now choose the rainfall unit : press and release the "+" or "-" key (mm or inch). Once this is done, press and release the SET button.
13. You can now choose the pressure unit : press and release the "+" or "-" key (hPa or Hg). Once this is done, press and release the SET key.
14. You can now set the relative pressure (from 920 to 1080 hPa) using the "+" or "-" key. Once the pressure is set, press and release the SET key.
15. You can now set the Weather forecast sensitivity (possible setting : 2,3 or 4) thanks to the "+" or "-" key. Once the sensitivity is set, press and release the SET key.
16. A digit will start flashing on the air pressure display. You can set the Storm alarm sensitivity (from 3 to 9) that leads to a change in the weather forecast icon display. Press and release the SET key.
17. You can now deactivate (ALOFF) or activate (ALON) the storm alarm thanks to the "+" or "-" key.

Finally, press and release the SET key

What means when "OFL" instead of data is displayed ?

"OFL" is displayed when a data is out of range (outdoor/indoor temperature or humidity, windspeed, rainfall)

NOTA:

- indoor temperature measurement range : from-9.9°C to 59.9 °C
- outdoor temperature measurement range : from -29.9°C to 69.9°C
- outdoor and indoor humidity measurement range: from 1 to 99% (for stations provided with new high definition Swiss sensors)
- windspeed measurement range : from 0 to 180 km/h

This message can also appear in case of disruptions (while transmitting outdoor data). Indeed, when an interference occurs, the system translate it into an "OFL"message on the display.

Correct data transmission is usually restored during the next data collection. If that is not the case, you should restart your station (see above)..

Why does the windspeed sometimes appear to be 91.8 km/h ?

The 91.8 km/h value can appear from time to time : this is a default value which is displayed in case of disruptions or interferences or when the station is not correctly mounted. The message « OFL » is sometimes displayed for the same reasons.

To avoid interferences, respect the following points :

- Mount the wind sensor onto a 4-to-5-meter-high-mast (or higher) with the cable inside the tube.
- Make sure the mast is correctly grounded (with a resistance below 20 Ohms)
- Avoid mounting your wind sensor near a TV antenna or a satellite dish.

How can I open an history file that has been saved as a ".dat" file?

To open history files saved as « .dat » files, proceed as follows :

- Open the main Heavy Weather window
- Click on the « setup » button »
- Click on « history », then on « save as »
- Your History.dat files will now be displayed
- Select the file you want to consult
- Go back to the main Heavy Weather window and click on the «show history» button.

By doing so, you can navigate from one history file to another.

Why are the windspeed readings below actual values ?

In case of unusual information coming from the wind sensor, proceed as follows :

In order to get correct and accurate data, the weather vane must be pointing in an East-West direction to provide an exact Eastern reference point to the base station's compass.

The problem of low speed readings is not caused by the wind or the thermo-hygro sensors, but by the vane which does not exactly face the wind direction, preventing therefore the anemometer rotor to increase its rotation speed and give accurate data.

The only way to solve the problem is to move the wind sensor to another place where there is no disturbances, to improve the efficiency in collecting data.

Make also sure that the anemometer position is perfectly horizontal and mounted onto a rigid mast.

Weather forecast icon

Weather forecast icon indicates improvement or degradation trend rather than immediate sun or rain as the icon shows.
Example: if current weather is cloudy and the icon of rain is displayed, this does not imply that the station is deficient because it is not raining. It simply means that the atmospheric pressure fell and that weather will be getting poor but not necessarily raining.

Once your station installed, it is recommended to ignore the forecast for the next 24 to 48 hours, in order to leave time to the station and to operate in constant condition and altitude.

Each noticeable and important change of atmospheric pressure will result in a change of icon. In the climates subjected to abrupt weather changes (e.g. sunny to rainy weather) the station will operate more precisely than in a climate with small weather variations (e.g. almost always sunny). In addition, an estimated forecast precision is about 75%.

The **La Crosse Technology** weather stations are the only ones being equipped with a pressure sensor which records pressure variations every 3 hours and which calculates, on a 12 hours average, and displays weather tendency averages. Consequently, the **La Crosse Technology** weather stations are more sensitive and more precise than all other similar products.

Use of RS 232 / USB adaptor

The data are transmitted to the computer through a serial port RS 232.

Using a RS 232 / USB adaptor, you may face a disruption of the data's transmission due to the port configuration of the computer.

A RS 232 / USB adaptor often receive automatically a COM port above 4 (COM 5 most of the time).

You therefore need to rename the COM 1, 2, 3 or 4 in order to allow Heavy Weather data's transmission (Heavy Weather only manage 4 COM port for HW 1.0 version).

The change is an easy move under WinXP :

- ➔ Right-click on "My computer" -> Properties
- ➔ Hardware -> Device manager -> COM ports
- ➔ Right -click on the COM 5 (or the port renamed with a number above 4)

➔ "Properties" -> "Port parameter" -> "Advance" -> "Port number" will allow you to change the COM port number attribution

This operation is much more complicated under Win98 and/or Millenium. Should you run such an operated system, we recommended you to update to WinXP or to download from the web an application in order to modify the COM ports numbering without high risk of failure (in general not free).