

AOK-5055 WEATHERSTATION USER MANUAL

Thank you for purchasing this device, Please read the operating instructions carefully to familiarize yourself with the features and modes of operation before using the instrument.

Package Contents

Carefully unpack and remove the contents:

- 1x weather station main unit
- 1x stainless steel mast
- 1x thermo-hygro sensor
- 1x rain sensor
- 1x wind speed sensor
- 1x wind direction sensor
- 4x 30mm Mounting screws, 2x 20mm Mounting screws, 4x 15mm Mounting screws
- 4x anchor bolts
- 2x Stainless steel accessory for fixing the mast and screws.

Technical Details

- Six keys: **MODE**, **+**, **-**, **ALARM**, **ALERT**, **SNOOZE/LIGHT**
- Radio controlled clock
- Automatic receiving of time signal DCF77 to display exactest time
- Automatically switches to/from daylight saving time (summer/winter time)
- Time display in 12/24 format
- +/-12 total 24 adjustable time zones
- Continuous perpetual calendar up to 2099
- Display of Date, Month and Day of week
- Day of week display available in 7 languages, i.e. German, English, Italian, French, Dutch Spanish, Danish.
- Dual alarm with snooze function (5 minutes alarm interruption)
- 5 weather forecast: sunny, partly sunny, cloudy, rainy, storm .
- Barometer and bar and data of 12 hours history for air pressure
- Indoor /outdoor temperature and humidity with trend
- Max./min. of temperature and humidity
- Thermometer measuring range inside: °C to +50 °C , outside -20°C~60 °C
- Temperature display elective in °C or °F
- Temperature alert for indoor and outdoor
- Living space humidity
- Moon phase
- Wind speed in mph /kmh, wind speed 0~256kmh
- Wind direction in 16 directions
- Rainfall in mm and inch and display of 1hour, 24hour, TOTAL.
Rain volum: (0~999.9MM)
- Low battery indication
- Blue background illumination LED.
- Main unit batteries: 2 x AA, LR06, 1.5V

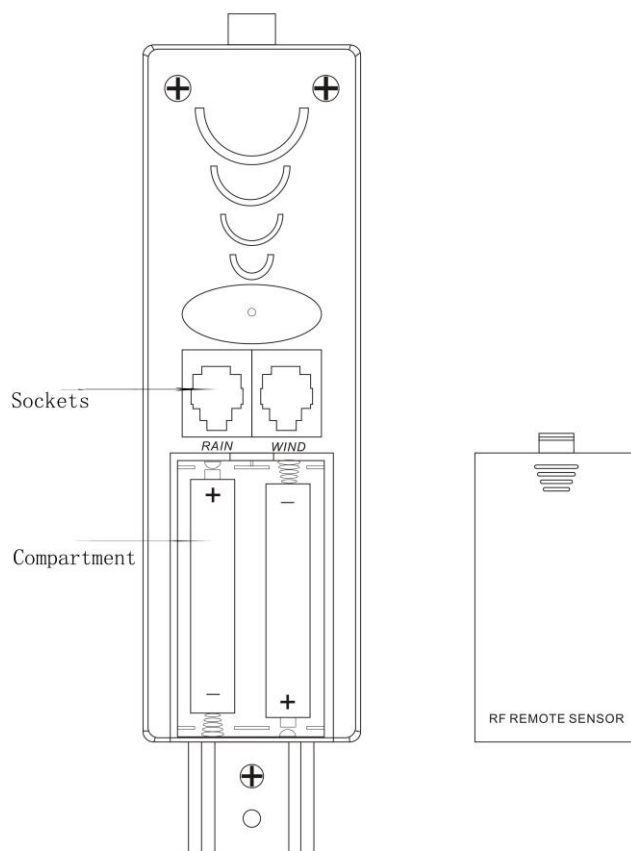
Outdoor sensor:

- Frequency: 433 MHz
- Transmission range: 100 meters in open area.
** Actual distance may be varied depending upon the environment, it will be shortened if with interference, such as concrete wall etc.
- Batteries: 2 x AA, LR06 1.5V

Installation

• Installing the Batteries

- Open the main unit battery cover located at the back of the unit and insert 2XAA batteries into the battery compartment and close the battery cover.
- Pull away the shower proof casing of the thermo-hygro sensor to reveal the 2 sockets.(for the wind sensor and rain sensor)
- Connect the attached cables 1.cable from wind speed sensor insert into the socket of wind direction sensor 2. cable from wind direction and cable from rain sensors to the corresponding sockets of the thermo-hygro sensor by clicking them into place. Make sure that rain and wind cables are connected to the correct sockets.



NOTES:

- First insert the batteries of main unit, then insert the batteries of the outdoor sensor in 3 minutes after the main unit is powered on, to assure of the sensor data received well. In case of the outdoor sensor data received failure, pls press **ALARM** key for more than 3 seconds to synchronize the RF signal.
- Every time the batteries are replaced , the main unit will loose all the weather data.
- Every time the batteries are replaced , the thermo-hygro sensor will sychronize with the main Unit again.you must press the **ALARM** key for more than 3 seconds to synchronize the RF signal.
- In case of any failure of RF, pls reset the sensor to and press **ALARM** receive again.

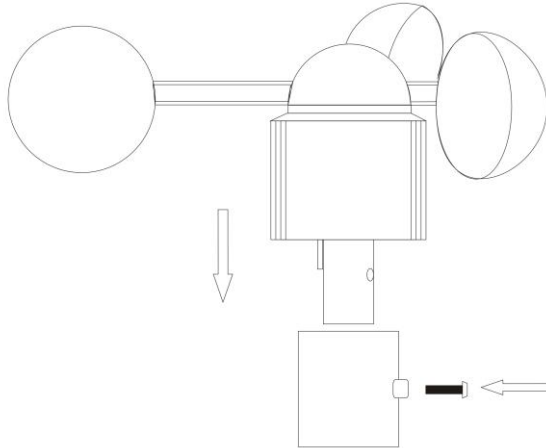
• Mounting the main unit

The main unit can be placed onto any flat surface or wall mounted at the desired location by Hanging hole, It is important to check that the radio signal can be received before mounting.

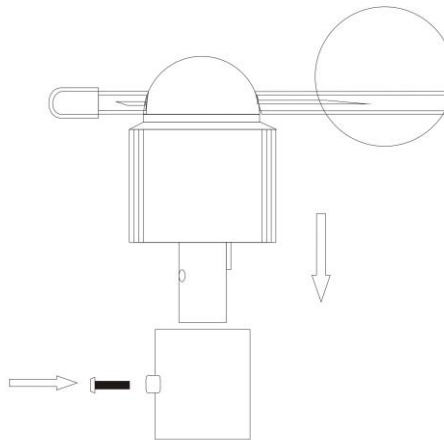
• Mounting the outdoor sensor onto the stainless steel mast

For accurate results, the outdoor sensor mast should be securely mounted onto a horizontal surface and in an open area away from trees and other coverings where rainfall or wind speed may be reduced causing inaccurate reading.

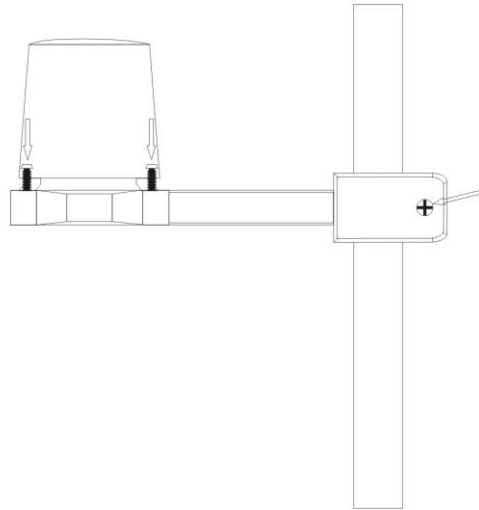
1. **Mounting the wind speed sensor to the first plastic bracket by 30mm screw:** first check the wind-fan can rotate freely before fixing . The wind speed sensor should now be mounted by 30mm screw onto the bracket provided to allow the wind to travel around the sensor unhindered from all directions.please follow the below display :



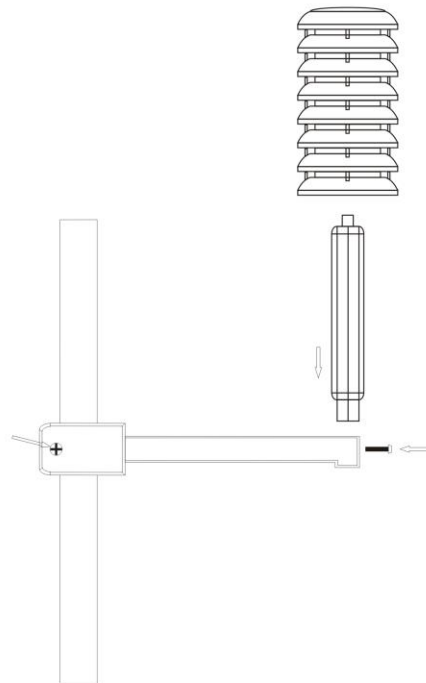
2. **Mounting the wind direction sensor to the first plastic bracket by 30mm screw:** first check the wind direction sensor before fixing,there is one cable from wind speed sensor, please insert it into the socket under the wind direction sensor.please follow the below display:



3. **Mounting the rain sensor to the second plastic bracket by 4x 15mm screws:** there are vertical engraved lines at the bottom edge of the round cover and the sensor part, you only need adjust the two line into one position, then turn clockwise, the rain sensor part will be connected well, then fix them with 4 screws onto the plastic bracket (don't use only 2 screws) please follow the below display:



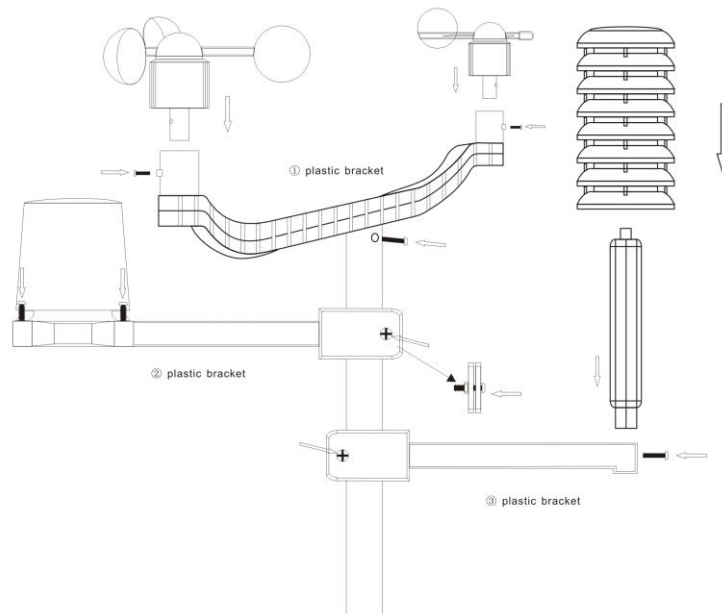
4. **Mounting the thermo-hygro sensor to the third plastic bracket by 30mm screw:**
 once the wind sensors and rain sensor are fixed onto the bracket, connect the cables to the corresponding thermo-hygro sensor sockets with the plugs, so that data can be transmitted to the main unit ,then put the house-like cover onto the thermo-hygro sensor, please follow the below display:



Note: please don't put in or take off the plug very often, or put the plug outside in the air so long time to avoid any damage of the plug, if so, there will be bad connection.

5. **Mounting all the sensors onto the stainless steel mast and fix the whole parts at outdoor open area :**(note: please make sure all the cables are connected well into

the sockets) (For wind direction and wind speed sensors, please fix with 30mm screw, for rain sensor and thermo-hygro sensor, please fix with 2x 20mm screws)



Initial Operation

- After inserting the batteries, the main unit will connect with the outdoor sensor by RF signal. The RF signal symbol at the out area will flash.
- This process takes about 3 minutes. Then the display shows the outdoor temperature /humidity/wind speed/wind direction/rainfall, in case of failure of reception , pls press“**ALARM**”for more than 3 seconds to receive again.
- the automatic receiving of the DCF radio signal begins after 3 minutes of outdoor RF reception.
- This RCC reception process is going on,the flashing symbol “radio tower” appears in the time display area at the same time.
- Once radio signal receiving is successful, the display shows the symbol “radio tower” continuously.no flashing.

If, due to bad reception,or no RCC automatic time reception is possible, follow the steps below manually.

Manual time set-up(Please also follow the steps to choose some setting, such as 12/24hour, time zone,languages etc.)

- Press and hold key “**MODE**” for 3 seconds.
- The 12/24 hour flashing. Use “+ “ and “- “ to select
- Press “**MODE** “ to confirm.
- The display for the time zone is flashing. Use “+ “ and “- “ to select the time zone (-12 to +12).
- Press “**MODE** “ to confirm.
- The DM/MD flashing, Use “+ “ and “- “ to select
- Press “**MODE** “ to confirm.

- The display for the year is flashing. Use “+ “ and “– “ to select the year.
- Press “**MODE** “ to confirm.
- The display for the month is flashing. Use “+ “ and “– “ to select the month.
- Press “**MODE** “ to confirm.
- The display for the date is flashing. Use “+ “ and “– “ to select the date.
- Press “**MODE** “ to confirm.
- The display for the hour is flashing. Use “+ “ and “– “ to select the hour.
- Press “**MODE** “ to confirm.
- The display for the minutes is flashing. Use “+ “ and “– “ to select the minutes..
- Press “**MODE** “ to confirm.
- The language selection for the display of the weekdays is flashing. Use “+ “ and “– “ to select the language.
- Press “**MODE** “ to confirm
- The C/F for temperature flashing, Use “+ “ and “– “ to select .
- Press “**MODE** “ to confirm.
- The hpa/inhg for air pressure flashing, Use “+ “ and “– “ to select .
- Press “**MODE** “ to confirm.
- The mm/inch for rainfall and kmh/mpg flashing, Use “+ “ and “– “ to select .
- Press “**MODE** “ to confirm.

Information:

- The clock automatically changes from set-up mode to time display mode if no keys are pressed for 20 seconds.
- Explanation for the time zone display:
You can manually adjust the clock to the time zone of a country (up to 1500km distance to Frankfurt/Main) where the clock receives the DCF signal but where the actual time differs from the time received.
If, e.g. the time in a given country is 1 hour ahead of the German time, set the time zone display to 01. The clock is now DCF controlled but the time is one hour ahead.

Daily alarm set-up

- Press “**MODE**” to switch from time display to A1 display
- Press and hold the key “**MODE**” for 3 seconds ,the flashing alarm time are shown
- The hour display of the alarm time is flashing. Use “+ “ and “– “ to select the hour.
Press “**MODE**” to confirm.
- then follow the minutes. Use “+ “ and “– “ to select the minutes,
Press “**MODE**” to confirm.
- The same setting as for A2.

Daily alarm on/off

- 1st press “**ALARM** “ to activate the alarm 1 with alarm symbol showing.
- 2nd press “**ALARM**” cancel the alarm 1, then activate the alarm 2 with alarm symbol showing
- 3rd press “**ALARM** “ to activate the alarm1 and alarm 2 with alarm symbol showing.
- 4th press “**ALARM**” cancel all the alarms

Information:

- The clock automatically changes from set-up mode to time mode if no keys are pressed for 20 seconds.
- The alarm sounds for 2 minutes if no key is pressed to stop it.

Snooze function

To activate the snooze function, follow the steps below

- Press the key **"SNOOZE/LIGHT"**, while the alarm sounds, to activate the snooze function.
- If the snooze function is activated, alarm symbol is flashing.
- The alarm repeat after 5 minutes.
- The snooze function can be stopped by pressing any key.

12/24 hours mode

- The time display can be in 12 (AM/PM) or 24 hours mode, please follow the manual set-up to select

°C/°F temperature display

- The temperature display can be in °C or °F, please follow the manual set-up to select.
-

Max./ Min. for the indoor/outdoor temperature and humidity

- Press **"+"** for displaying of indoor/outdoor max./min. of temperature and humidity, hold **"+"** for more than 3 seconds to clear up the max./min.

Temperature alert set-up

- Press **"ALERT"** for more than 3 seconds, the upper limit of inside temperature is flashing, use **"+"** and **"–"** to set the maximum alert temperature.
- Press **"ALERT"**, the lower limit of inside temperature is flashing, use **"+"** and **"–"** to set the minimum alert temperature.
- Press **"ALERT"**, the upper limit of outside temperature is flashing, use **"+"** and **"–"** to set the maximum alert temperature.
- Press **"ALERT"**, the lower limit of outside temperature is flashing, use **"+"** and **"–"** to set the minimum alert temperature.
- When the alert is activated, the alert symbol will be shown.

Temperature alert on/off

Press and hold the key **"ALERT"** to set the temperature alert on or off.

- Alert on: Temperature alert symbol shown in display
- Alert off: Temperature alert symbol goes out.

Information

- The set-up process cannot be completed if the maximum temperature selected is lower than the minimum selected temperature.
- The minimum temperature selected must at least be 1°C below the maximum selected temperature.

5 Weather forecast

Sunny

Slightly Sunny

Cloudy

Rainy

Storm

Remarks: as the weather is forecasted by air pressure only,

. The display will have discrepancy with the actual weather sometime.

Barometer

Air pressure can be in hPa and inHg

Wind speed in mph/kmh (0~256kmh)

- The wind speed can be shown in **mph** and **kmh**, please follow the manual set-up to select **mph/kmh**, the display of the speed is updated in case of the sensor updated every 1 minutes.

Wind direction

- There will be 16 wind directions, the display of the direction is updated in case of the sensor updated every 1 minutes

Rainfall display (0~999.99mm)

- Rain fall can be shown in **mm** and **inch**, please follow the manual set-up to select the **mm/inch**.
- Press “-“ to show the rainfall in 1 hour, press again 24 hours, then TOTAL.
- Press “-“ for more than 3 seconds to clear up the volum accordingly, such as if showing 1 hour, clear up the data in 1 hour, others unchanged, if showing 24 hours, clear up the data in 24 hour, others unchanged.
- The max. of the rainfall is up to 999.99mm (99.99inch), the display is flashing in case of the max., you have to clear up the data by hand, otherwise, the data can not be updated any more.

Illumination

- Press the key “**SNOOZE/LIGHT**” to activate the display illumination for 8 seconds.

Moon phase display

The weather station uses saved data to show the moon phase



A B C D E F G H

A: New moon

D: increasing 3/4

G: Last half

B: increasing crescent

E: Full moon

H: decreasing crescent

C: First half

F: decreasing 3/4

Living space humidity

The weather station uses saved data to determine the humidity in the living space and shows the respective symbols.



comfortable, dry, humid

Low battery condition display

The weather station displays the low battery condition symbol to remind the batteries of the weather station or the outdoor sensor need to be exchanged.

- Weather station low battery condition display: within indoor area of the display
- Outdoor sensor low battery condition display: in the outdoor area of the display

RF connection to the outdoor sensor

- Press and hold the key “ALARM “ for 3 seconds to search for outdoor sensor , the RF signal symbol at the outside area will flashing when trying to connect . RF reception is weaker in rooms with concrete walls (e.g. in the basement) and in office buildings, the distance will be shorten if have interference. For extreme cases, please put the main unit near a window

Reception of radio controlled signal

- DCF radio signal search starts automatically about 3 minutes after battery exchange. The “radio tower” signal is flashing.
- Press “+”, “-“ for more than 3 seconds to enter or quit the Radio controlled signal reception
- The clock synchronizes with the DCF radio signal automatically and daily from AM 1:00 to 3:00 to correct potential time deviations each hour. If the synchronization is unsuccessful (“radio tower” symbol disappears), a further synchronization attempt is made From 4:00 and 5:00 until success. This process is repeated up until 5:00 AM. If still not success, daily reception stop.

Information

- Flashing “radio tower” symbol stands for DCF radio signal reception started.
- Continuous “radio tower” symbol stands for DCF radio signal reception successful.
- Please observe a minimal distance of 2.5m to sources of interference such as televisions or computer screens.
- The radio signal is weaker in rooms with concrete walls (e.g. in the basement) and in office buildings. For extreme cases, please put the main unit near a window.
- There are less atmospheric disturbances at night. A radio time signal reception is usually possible at that time. One synchronisation per day is sufficient to keep the time display accuracy at 1 second.

Tip

You can adjust the time manually in case the clock cannot receive the DCF radio signal (due to interferences, large distance to the sender, obstructions like mountains, etc.) As soon as the radio signal can be received, the clock will be adjusted automatically.

Radio signal sender coverage up to 1500km distance to Frankfurt/Main.