# AC Wireless Wind and Light Sensor

Product Manual

AC302-02Bi is widely used on motorized shutters and awnings, it is compatible with A-OK control systems, automatically check the intensity of wind and light then send signal to motor or receiver to open or close awning and shutter.
It's a human-friendly and intelligent design, could be a good choice for home automation system.

## Application

Mainly used on motorized roller shutters and awnings.

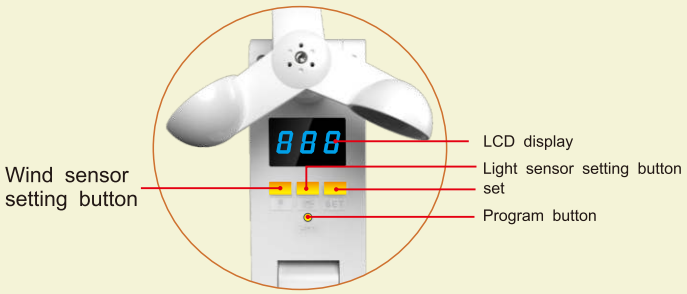
## Features

1.Fancy and elegant design with patent
2.Digital display, intuitive, generous
3.AC power supply for widely applications
4.Case is made with anti-UV material, available for outdoor installation
5.Wind sensor structure is with gearing, reduce friction and increase the sensitivity
6.Automatically check the wind and sun intensity
7.0~9 of sun and wind sensitivity levels for optional
8.With test mode for easy demonstration or testing
9.It can be set the sensitivity according to installation environment condition

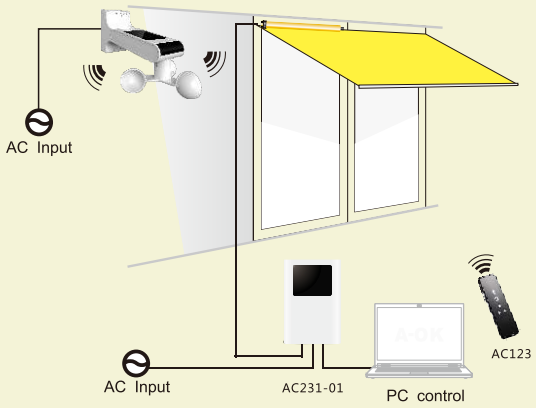
## Parameters

| Model | Power supply | Working Temperature | Frequency | Transmit Power | Working Current | IP Level | Power cable length |
|---|---|---|---|---|---|---|---|
| AC302-02Bi | AC100V~240V | -40°C~+85°C | 868.3MHz | ≤10dBm | <10mA | IP55 | 2. 5m |

## Diagram

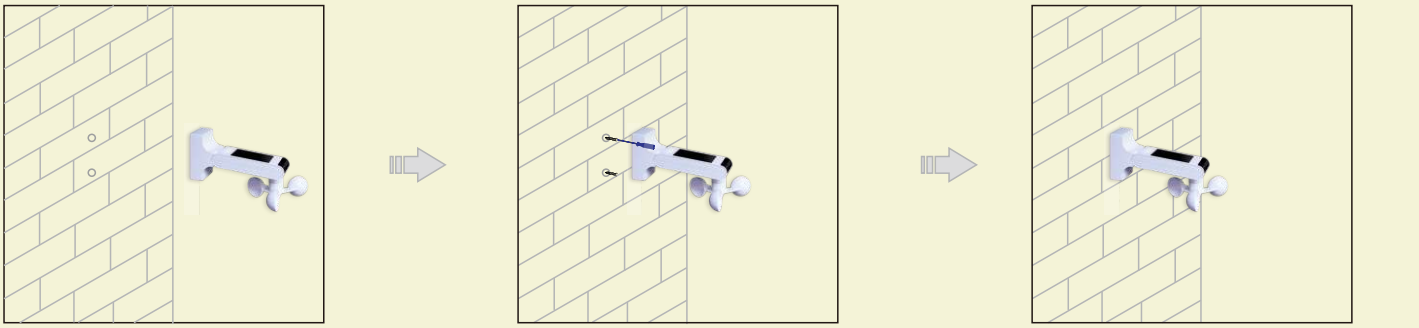



## Application Mode




## Installation Mode

Please make sure sensor is installed in a very open area in order to get enough sunlight and wind, please make sure the power supply is within 2.5M.



1.Please mark screw holes on wall
2.Drill holes and fix the base on
3.Slide senor on base, installation finished.

## Operation Instructions

### Programming

Method 1, Please press PROG on sensor when receiver/motor is under program situation, receiver/motor will have related reaction to confirm the operation.

Method 2, Press PROG on sensor for 3s when receiver/motor is power off, then power on receiver/motor and release PROG, and press PROG once again, receiver/motor will have related reaction to confirm the operation.

Note: Please follow correct programming according different receivers/motors.

### Test Mode:

Enter test mode: please press Wind and Set button at the same time for 3s, LCD display flashes means now sensor is in test mode. Under this mode, LCD display shows current signal level co-glevels and send signal(once wind signal is active, light signal will active after 20s if there is no more wind), please set sensitivity through the buttons according to the installation environment condition.

Exit test mode: please press Wind and Set button at the same time for 3s, LCD display flash once then off means now sensor is exited test mode.

Note: test mode maximum time is 3 minutes, it will exit automatically after that.

### Changing Motor Direction Operation *The LCD shows wind operation direction, the light direction is opposite

Please press Wind and Light for 3s, LCD display shows UP or DN means the direction is now changed.

### Setting Intensity Signal

1) Button recycling, press one time to extend number, it will be 0 when press one more time on 9, keep pressing the buttons will extend continuously.

2) Number 0 means sensor will not check the intensity. 1~9 for 9 sensitivities, 1 is the most sensitive level.

### Light induction set:

3) Light sensitivity setting: sensor will send UP signal to receiver/motor if intensity is equal or over sensitivity for 2 minutes, and if the intensity below sensitivity for 2 minutes, it will send DOWN signal.

Light intensity range: 0.2~30klux

### Wind speed induction set:

4) Wind sensitivity setting: sensor will send UP signal to receiver/motor if intensity is equal or over sensitivity.

Wind intensity range: 1km/h~22km/h.

Wind speed and wind force chart:

| Wind Speed | 1km/h | 2.5km/h | 4.5km/h | 6.5km/h | 9km/h | 10.5km/h | 14.5km/h | 17km/h | 21.5km/h |
|---|---|---|---|---|---|---|---|---|---|
| Wind Force | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | Level 7 | Level 8 | Level 9 |

## Caution

When sensor signal is opposite with motor moving direction.

1.To change the motor direction wiring.

2.To switch moving direction on receiver.

3.To press Wind and Light for 3s.

4.Please make sure sensor installed in a very open area without any shelter.

5.Wind sensor only sends UP signal, means awnings will not open automatically after windy time.

6.The bigger wind force, the faster reaction; there will be a 15 minutes protection time once wind sensor active, light sensor will not be active during this period, and it will be unprotected if the intensity is below the sensitivity for 15 minutes, it will be another 15 minutes protection if the intensity over the sensitivity.

7.There will be a short flash on LCD to indicate any signal sending.

8.Factory default wind signal to close awning when light signal is for open.

## Trouble Shooting

| S/N | Performance | Reasons | Solutions |
|---|---|---|---|
| 1 | Awning can not close when it is windy | 1. Please check the sensor leave if there are any obstacles on<br>2. Wind sensor or light sensor does not set correctly | 1. Clean the debris<br>2. Please reset the sensitivity |
| 2 | Awning can not open when sunshine is bright | 1. Please check the sun sensor if it is under a shadow<br>2. Under 12 minutes wind protection mode | 1. Clean the debris<br>2. It will open after exit of protection mode |