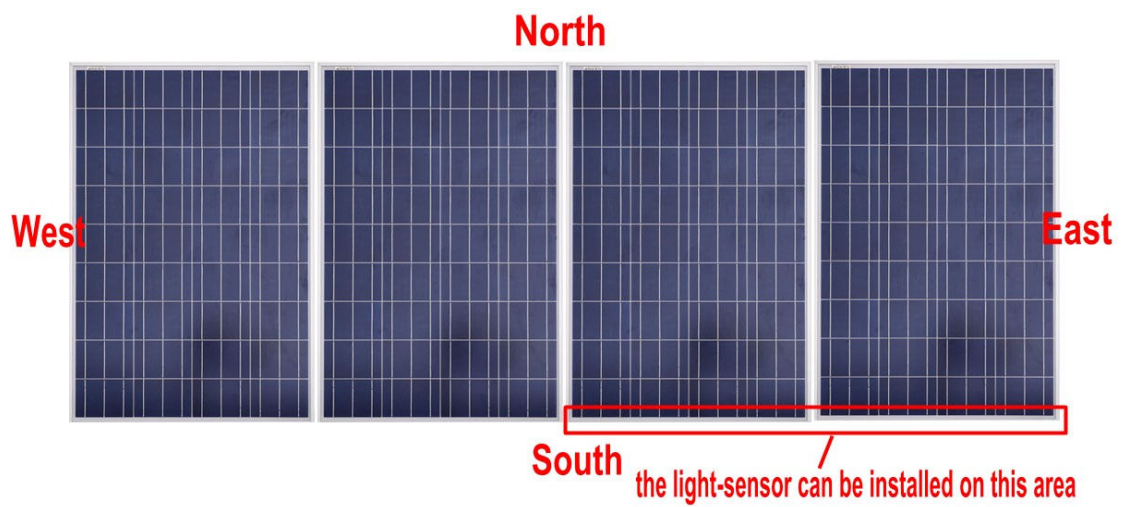
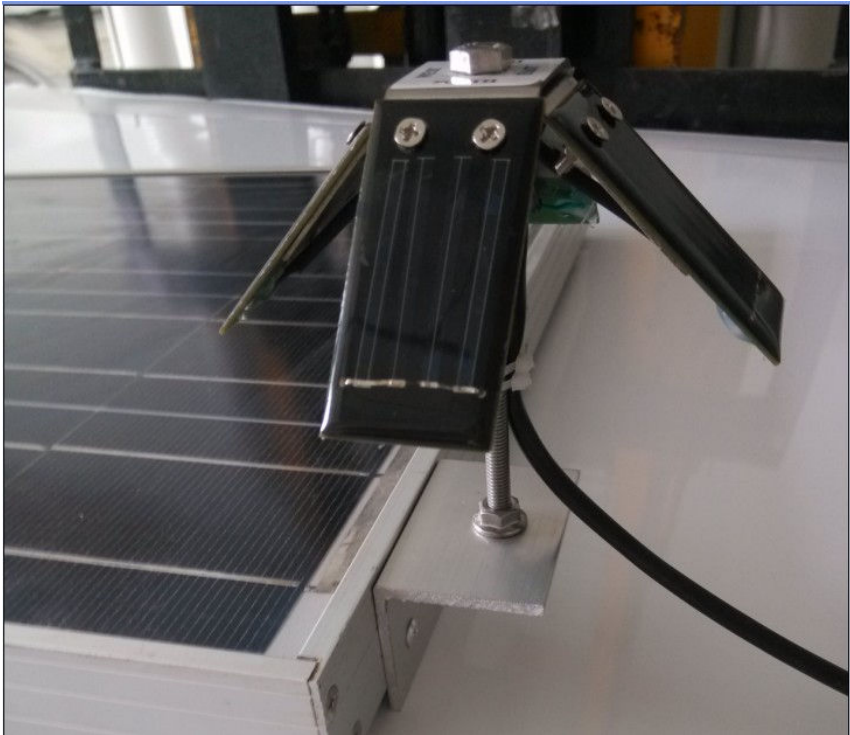


Step 1: Mounting the light-sensor and electronic box

Light sensor



Install the light-sensor as shown in the figure.

Please make sure that the direction which was marked on the light-sensor box be consistent with your local direction.

Please make sure the light sensor in the same direction of the solar panel.

Electronic box

We suggest you attach the electronic box to the galvanized post (installation holes pre-drilled)

Step 2: Solar panel connections

The solar panels electrical connections can now be performed. Solar panel electrical Connections need to be installed following the electrical code of the country you reside in. If you are unfamiliar with the electrical code of your country, consult a licensed electrician.

Note: The "ECO-WORTHY" Solar Tracker moves in all directions throughout the day while tracking the sun. Make sure that there is enough slack in the solar panels electrical connections to handle the full rotational movements of the "ECO-WORTHY" Solar Tracker throughout the day.

Step 3: Electronic Connections

For running solar tracking system properly, firstly we need to choose the right power supply.

How to choose the right power supply for ECO-WORTHY solar tracker system?

Basically, the electronic box for tracking system can work with 8-25V power supply, so you just choose the right power supply according to the voltage of linear actuator.

DC12V linear actuator only can be powered by DC12V power supply,

DC24V linear actuator work with DC24V power supply

Power supply for off grid solar system:

You can use the battery bank from your solar system as the power supply for solar tracker (If you plan to set a 12V off grid solar system, you just choose 12V solar tracker system, if you are going to set a 24V off grid system, choose 24V solar tracker system)

Power supply for grid tie solar system

You have to get a separate DC12V or DC24V power supply for this tracking system.(which can be a small solar panel, or Gel battery)

Once the power supply has been properly selected, locate the electronic box mounted to the galvanized post. Follow the directions below to power up the ECO-WORTHY solar tracker.

Electronic box wiring:

1. Locate the two wires that coming out of the bottom of the electronic control box, which have connected with quick connector. Connect the “North/South” quick connector to the North/South linear actuator. Connect the “East/West” quick connector to “East/West” linear actuator .
2. Locate the white and black wires coming out of the bottom of the electronic control box, this is for power supply, Red for positive , Yellow for negative, connect the cable to right polarity to power up the tracking system

Electronic Controller Box and Remote controller

ECO-WORTHY solar tracking system included the remote controller for testing after system was all well installed.

This controller can control dual axis linear actuator to make the solar panel to follow the Sunlight, keep the solar panel always face the sunlight.

Smart weather detector, stop working in cloudy day

Flat the solar panel during nighttime or rainy day

Flat the solar panel in the storm

Specification

Nominal output: 8-25V

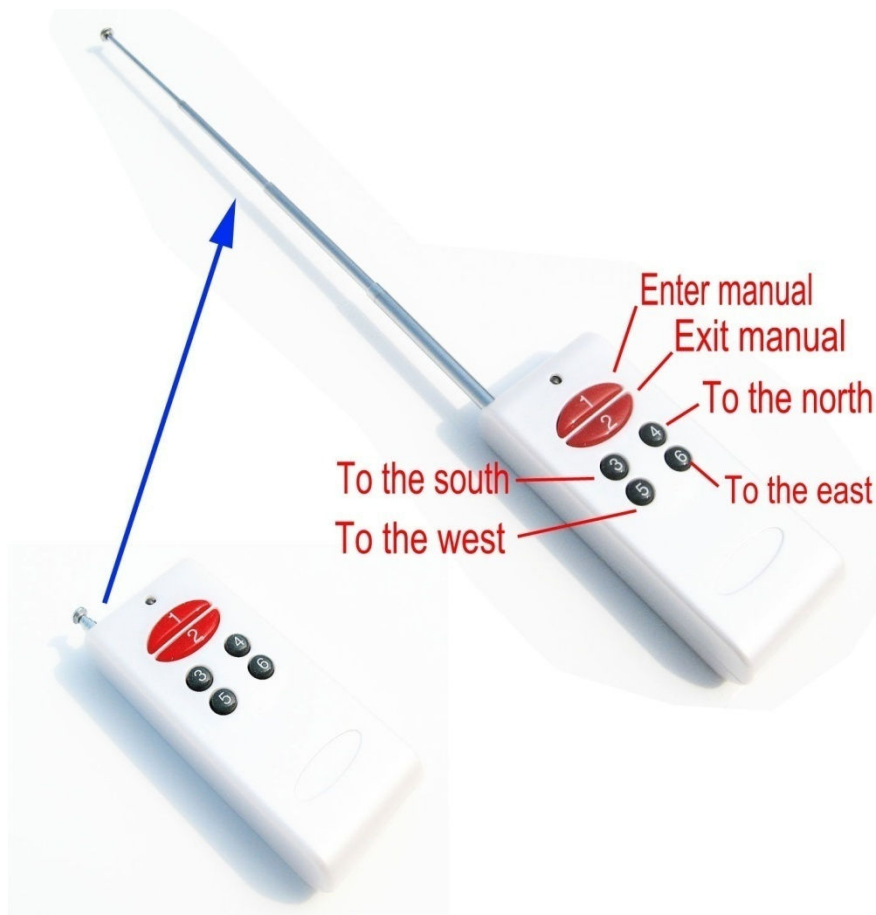
Max load current: 6A

Waterproof: IP65

Operating temperature: -40 to +85°C

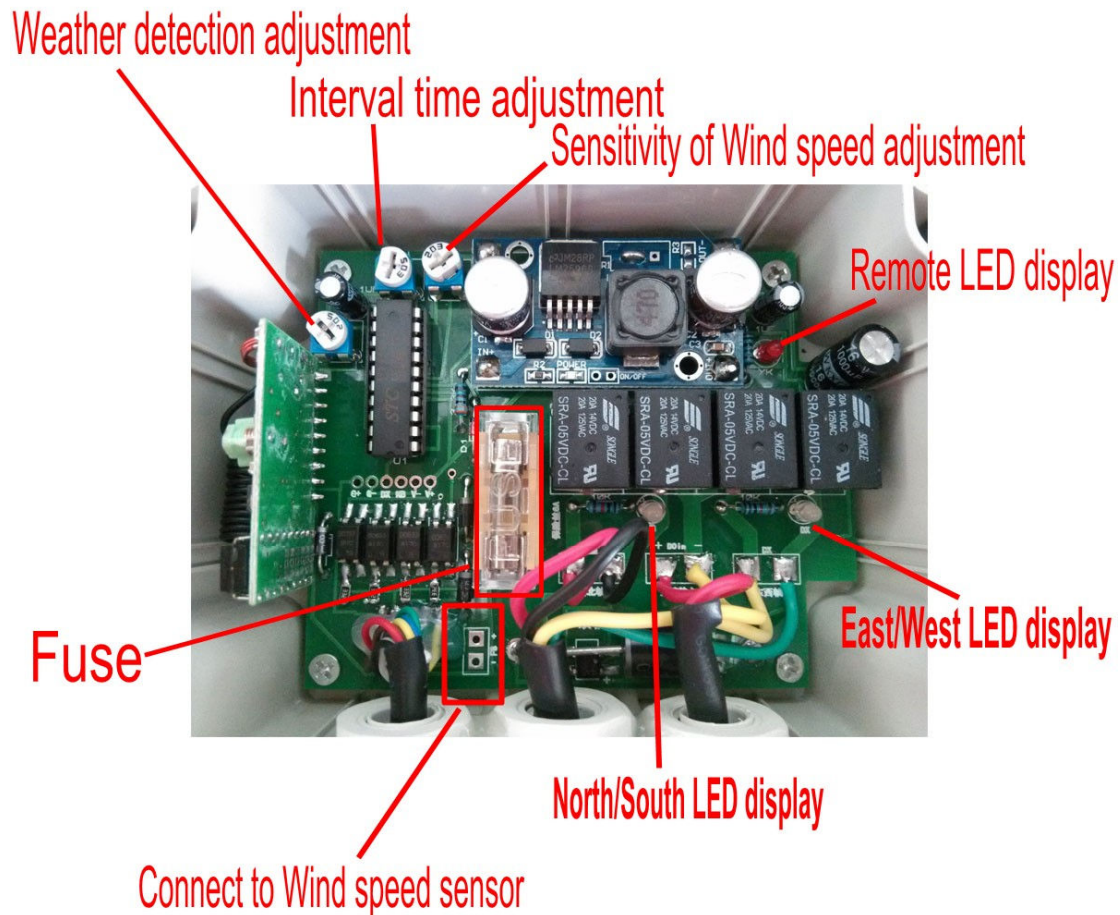
Features

1. Weather detector
2. Day and night detector
3. The sensitivity of light can be adjustable
4. LED display
6. The control precision is ± 2 degrees
7. Max current: 6A
8. Over current protection
9. EMF elimination
10. Wrong battery pole connection protection



Usage:

- (1) Fixed the control box on the frame of solar panel, You can install the light sensor a little higher than the face of solar panel so no shadow on the sensor.
- (2) Connect the controller to the linear actuator (Note the direction mark on the terminal of controller)
- (3) Connect white and black wire to power supply.
- (4) Press the remote controller "1" button to enter the manual control, remote led display light will flash. (Please pull out the antennas before testing)
- (5) "3/4/5 /6" button. "3" –South,"4" –North,"5" –West,"6" –East,
Please press the direction button to check the right direction solar tracker moving, if the solar tracker moves to the opposite direction, you should change the terminal connection of control box and linear actuator
- (6) "2" button to exit the manual States. Remote control light goes out



How to adjust the interval time

Default interval time (max interval time) 500 seconds,

One time working (tracking) time is 5 seconds

Default interval time is 0, you can adjust it by yourself.

Rotate the time adjustment button to Adjust the interval time (max time

Rotate to left to shorten the interval time (Min 0 = No interval time, always tracking)

Rotate to right to add the interval time (max is 500 seconds)

Move the photo resistor (4 resistors, east, west south north) to improve the accuracy of the direction position

Note: please don't not adjust Weather detector by yourself, we set it on the right position for you before out factory