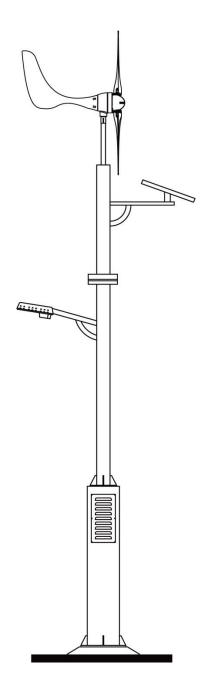
HYBRID STREET LAMP SYSTEM



Installation Guide

INDEX

1. FOUNDATION	3
1.1 Foundation Size	3
1.2 Basic Stand Embedded	3
2. TUBE AND WIRE CONNECTION	4
2.1 Wire Connections to Wind Turbine	4
2.2 Wire Connections to LED Light	4
2.3 Wire Connections to Solar Panel.	5
3. ACCESSORY INSTALLATION	5
3.1 Wind Turbine Installation	5
3.2 Solar Panel and Rack Installation	6
4. TOWER INSTALLATION	6
4.1 Top and Middle Tower Tube Joint	6
4.2 Bottom Tower Installation	7
4.3 Top and Middle Tower Installation	8
4.4 Wind Turbine Installation	9
4.5 Solar Panel Set Installation	10
4.6 LED Light Installation	11
5. WIRING DIAGRAM OF CONTROL BOX	12
5.1 Internal Control Box	12
5.2 Wire Connection to Control Box and Battery	12
5.3 Wire Connection to Upper Battery and Lower Battery	12
5.4 Wire Connection to Batteries	13
5.5 Internal System Connection Illustration	13
5.6 External System Connection Illustration	14
5.7 Actual Wiring Position	14
6. TEST	15
6.1 Lighting	15
6.2 Wind Turbine Protection Function	15

1. FOUNDATION

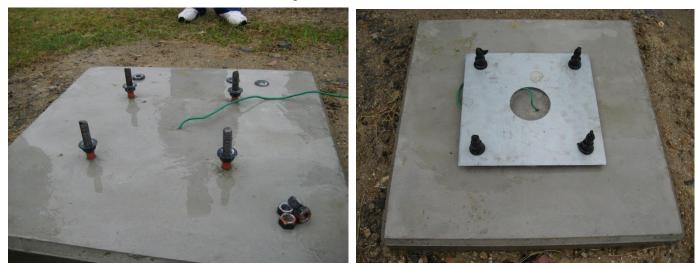
1.1 Foundation Size

Dig out the foundation of $100 \ge 100 \ge 80$ cm on the ground. Make sure the basic stand can be put in properly and horizontally.



1.2 Basic Stand Embedded

The height of the 4 props must be at least 10 cm above the ground from the embedded basic stand. Then fill the foundation with concrete before installing the bolts and nuts.



2. TUBE AND WIRE CONNECTION

2.1 Wire Connections to Wind Turbine

Run the wire through the tower from top and leave extra 20 cm of wire (black / red / white) out of the tube.



2.2 Wire Connections to LED Light

Run the wire through the tower and fasten the tube with four set screws. Then leave extra 20 cm of wire out of the tube.



2.3 Wire Connections to Solar Panel

Run the wire through the tower and fasten the tube with four set screws. Then leave extra 20 cm of wire out of the tube.



3. ACCESSORY INSTALLATION

3.1 Wind Turbine Installation

Please refer to the wind turbine manual.



3.2 Solar Panel and Rack Installation

Install the solar panel on a rack and fasten it with four set screws.



4. TOWER INSTALLATION

4.1 Top and Middle Tower Tube Joint

Run three electrical wires through the middle tower tube and fasten it with eight set screws.



4.2 Bottom Tower Installation

Erect the bottom tower at the foundation and measure the horizontal position by leveling instrument as shown. Then fasten it with 8 nuts.





4.3 Top and Middle Tower Installation

Mount the top and middle tower tubes on the bottom tower and route three electrical wires down to the bottom tower. Then fasten it with 4 set screws.







4.4 Wind Turbine Installation

Attach a rubber spacer to the tower and mount the wind turbine on the tower. Then connect the wire leads from the wind turbine to one electrical wire (red to red / blue to white / black to black). Once the connection is completed, fasten it with set screws.



4.5 Solar Panel Set Installation

Connect the wire leads from the solar panel to one electrical wire (the positive terminal to red / the negative terminal to white). Mount the solar panel to the tower and face south. Make sure the solar panel is secured with six set screws.



4.6 LED Light Installation

Connect the wire leads from the LED light to one electrical wire (white to white / black to black). Mount the LED light to the tower and adjust the position horizontally. Make sure the light is secured with five set screws.

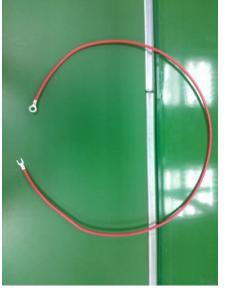


5. WIRING DIAGRAM OF CONTROL BOX

5.1 Internal Control Box



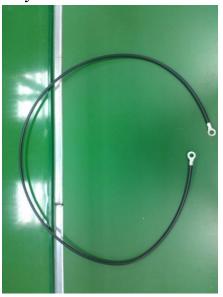
5.2 Wire Connection to Control Box and Battery



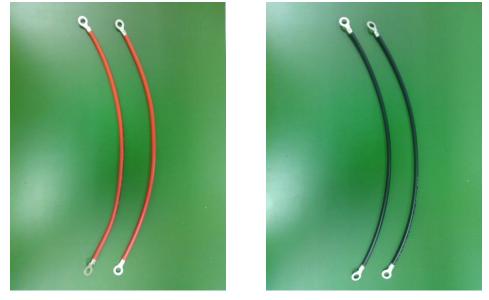


5.3 Wire Connection to Upper Battery and Lower Battery

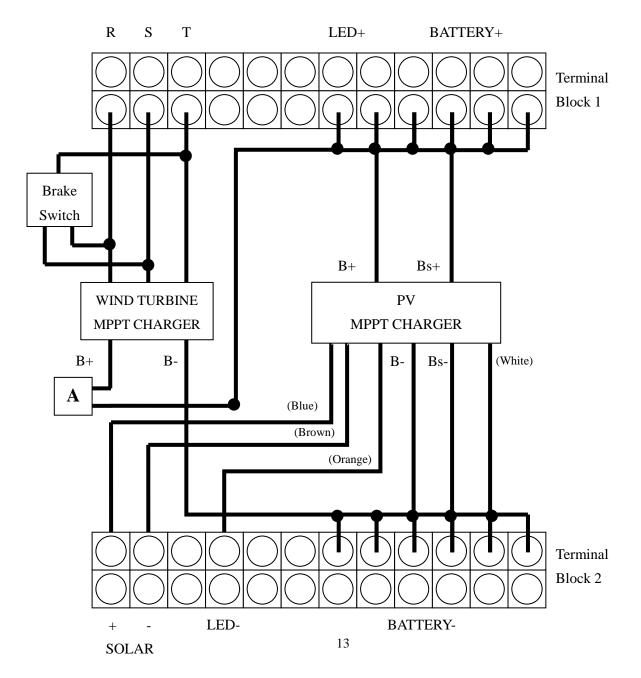




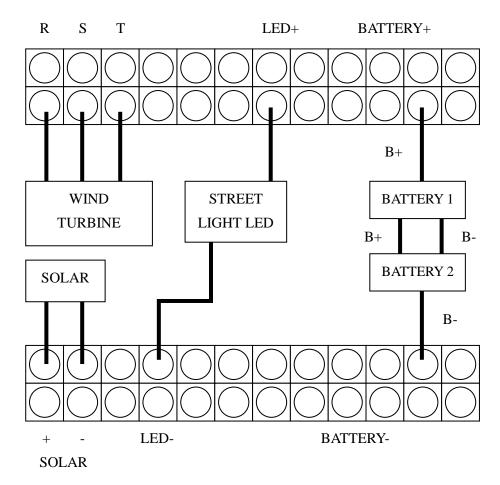
5.4 Wire Connection to Batteries



5.5 Internal System Connection Illustration



5.6 External System Connection Illustration



5.7 Actual Wiring Position





Wind Turbine Brake ON/OFF

6. TEST

6.1 Lighting

The LED light is on for 5 minutes after the solar MPPT controller is started. Please reset the discharge time for your need. (see below) If the light cannot be lit, please recheck the wire connection.

Discharge Mode (0/OFF, 1/ON)	Load Output
0000	TEST mode for 5 min
0001	2 hours on at night
0010	4 hours on at night
0011	6 hours on at night
0100	8 hours on at night
0101	10 hours on at night
0110	12 hours on at night
0111	Full on

Discharge Mode (0/OFF, 1/ON)	Load Output
1000	TEST mode for 5 min
1001	2 hours on at day
1010	4 hours on at day
1011	6 hours on at day
1100	8 hours on at day
1101	10 hours on at day
1110	12 hours on at day
1111	Full on

6.2 Wind Turbine Protection Function

Please check the mechanical stop switch health first. (see the wind turbine manual) We suggest you turn on the stop switch to see if the turbine is stopped. Then check the manual braking of MPPT to see if the speed is getting low. The red LED should be illuminated once the manual brake is turned on. If either one of them do not work, check the connection again.

