

Instruction Manual

2SPA003A Solar Multi-Functional Charging Post

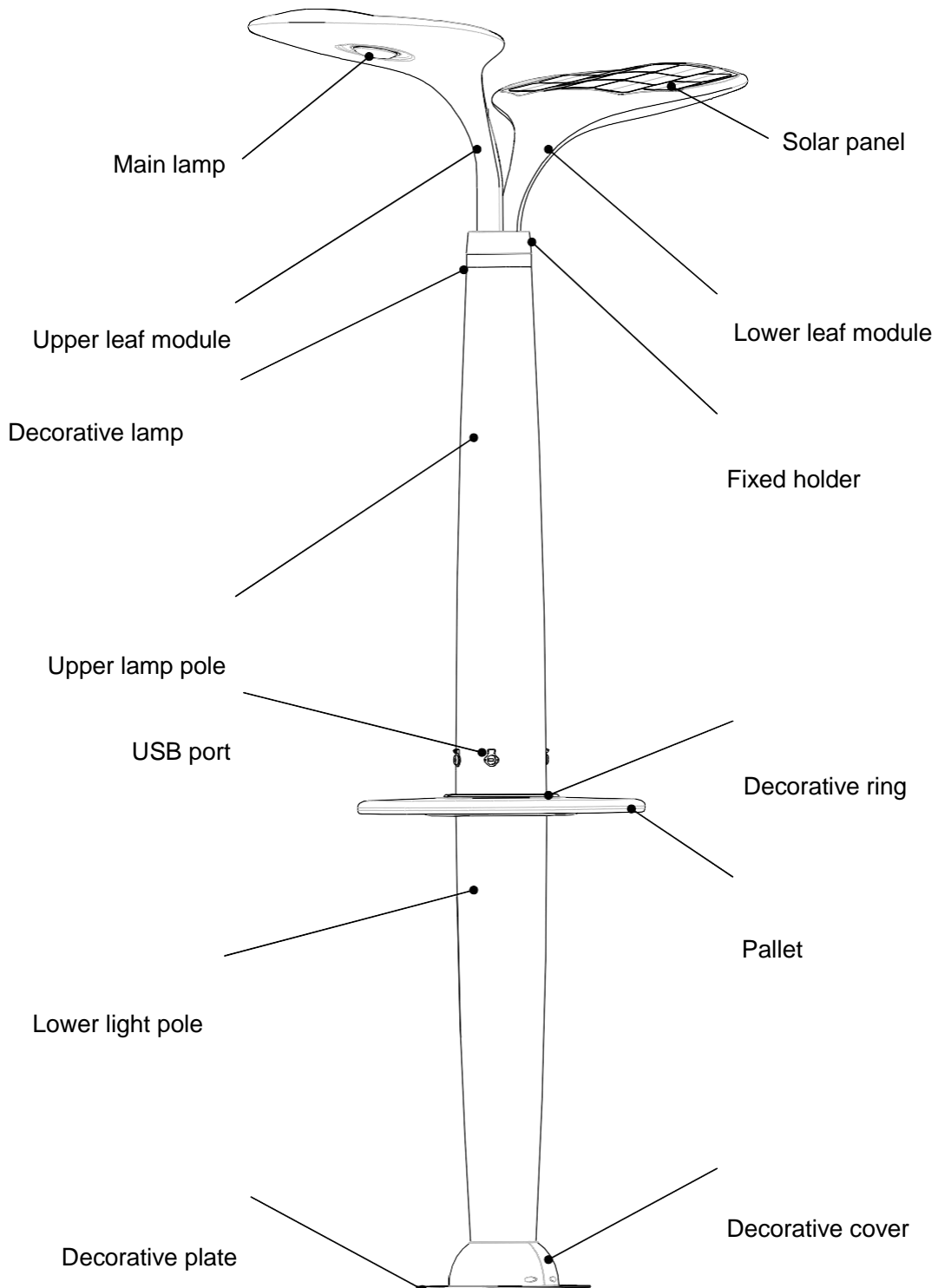
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1. Overview

Please read this instruction manual carefully before using, to ensure that you can safely use the product well and at the same time, please take good care of this manual, for reference when necessary.

2. Product Image



3. Product Characteristics

- Choose flexible monocrystalline solar panels, High conversion efficiency, compact structure.
- The light source has international famous brand LED chips, high photosynthetic efficiency, high brightness, and has a long life.
- The intelligent controller can automatically turn the light on and off automatically. Time can be set to when the light showed be on and at what intensity.
- The infrared remote control device, can wirelessly adjust the running state of lamps and lanterns, conducive to the maintenance of lamps and lanterns.
- Don't need to adjust the position of the solar panel orientation, solar panels remain in the best working position.
- Light pole structure uses the high strength quality aluminum alloy materials, the surface after chemical processing, can meet the requirements of long-term outdoor use.
- Equipped with digital devices, mobile phone available charging USB output port

4. Working Theory

This product can be used in the sun and the solar panels then convert solar energy into electrical energy stored in the battery. When it is night again, the controller outputs to the LEDES to turn it on, as shown in figure 1.

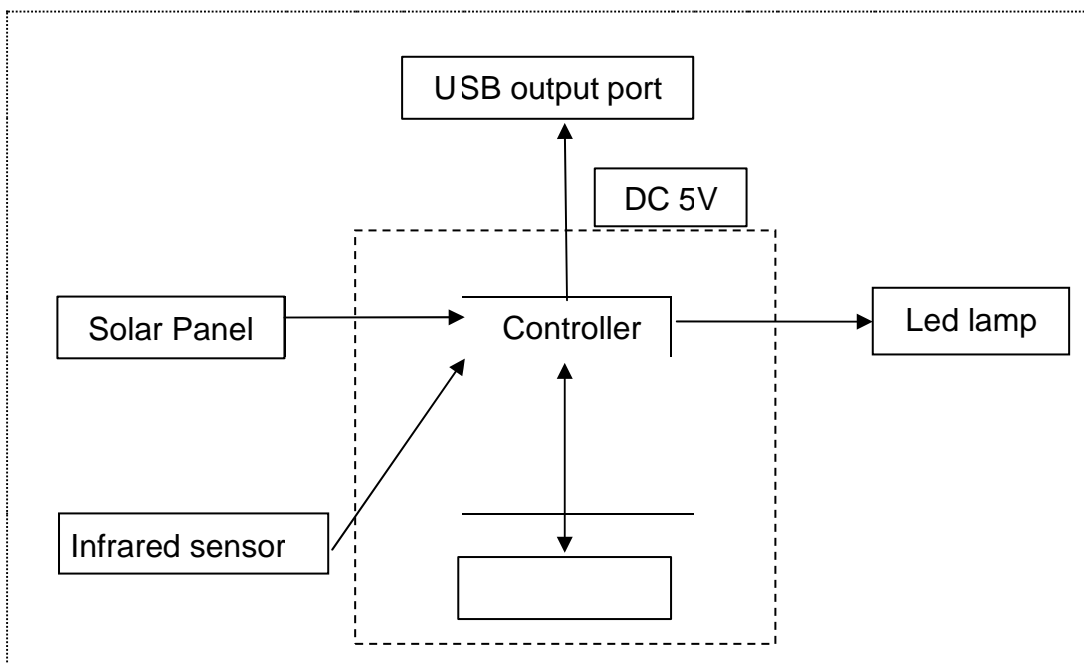




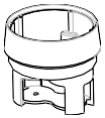
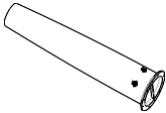
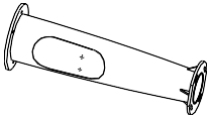

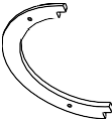
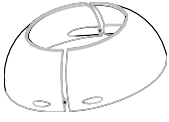
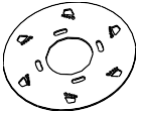


Figure 1

5. Technical Specification

NO	ITEM	2SPA003A	
1	Light Source	The main light source power 2 w * 2, color temperature of 5000 k; RGB light source power < 1 w	
2	Battery	12 v / 30 ah Lithium iron phosphate battery, capacity can meet the requirements of 3 rainy day, installed it into the light pole.	
3	Solar Panel	Monocrystalline silicon; 54 w + / - 15%; Two pieces in parallel	
4	Light Pole	High strength high quality aluminum alloy, the surface after polishing and chemical treatment	
5	Lamp Height	9.51 FT	
6	Working Temperature	-4F~122F	
7	Wind Resistance	27m/s (10 class)	
8	Operation	Optical control+ time control	
9	USB Port	24 hours power supply, DC 5V/2A	
10	Controller technical parameters	Controller type	2SPC808
		Maximum charge and discharge current	6A
		System Voltage	12V
		Overload, short circuit protection	Protection of automatic recovery after 10 seconds
		Overvoltage Protection (77F)	≥30V
		Full Charge Voltage (77F)	14.6V
		Over Discharge Protection (77F))	10.5 V

6.Component List

Chart 2

No.	Item	Quantity	Specification	Remarks
1	Upper leaf module	1 PC		
2	Lower leaf module	1 PC		
3	Fixed holder	1 PC		
4	Upper lamp pole	1 PC		
5	Lower lamp pole	1 PC		
6	Pallet	1 PC		
7	Decorative ring	2 PCS		
8	Decorative cover	1 SET		2PCS/set
9	Decorative plate	1 PC		Feet picture design
10	Silicon gaskets	1 PC		
11	Cover	2 PCS		


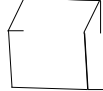
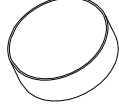
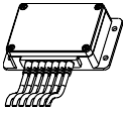
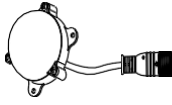
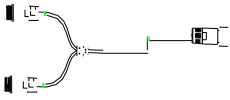
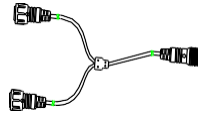
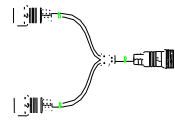
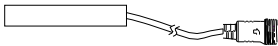
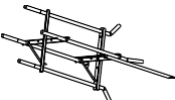











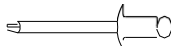
12	Stator	1 PCS		
13	Battery cover	1 PCS		
14	Lamp shade	1 PC		RGB lamp shade
15	Controller	1 PC		
16	Infrared sensor	1 PC		
17	Waterproof cable	1 PC		solar panel parallel connection cable
18	Cable	1 PC		Connect the main lamp (length 2M)
19	Waterproof cable	2 PCS		USB plug parallel connection cable (length 0.2M)
20	RGB lamp strip	1 PC		
21	Ground Cage	1 PC		
22	Battery	1 PC		phosphoric acid iron battery
23	Remote controller	/		For optional
24	Accessories	1 SET		Chart 3
Remark	1. Without prior notice while configuration changes caused by design changes, 2. For options of the remote controller for engineering accessories,			

Chart 3 (accessory package)

No.	Accessories item	Quantity	Specification	Remark
24.1	Bolts	12 PCS		M8*20
24.2	Bolts	4 PCS		M8*35
24.3	Flat washers	16 PCS		M8
24.4	Spring washers	16 PCS		M8
24.5	Bolts	6 PCS		M3*10
24.6	Bolts	2 PCS		M5*8
24.7	Bolts	2 PCS		M3*8
24.8	Nuts	12 PCS		M14
24.9	Flat washers	4 PCS		M14
24.10	Spring washers	4 PCS		M14
24.11	Name board	1 PC		
24.12	Clinch bolt	4 PCS		Φ3.2
24.13	Qualification	1 PC		

7. Installation Instruction

※ Please prepare tools including #6 inner hexagon spanner, cross screwdriver, large adjustable wrench and some paddings protection materials before installation.

7.1 Locking fixed holder and leaf modules

- ① It is appropriate to put the protection padding on the ground in order to stabilize the leaf placement interval.
- ② The silicon gaskets go through the upper leaf and lower leaf as requested (Note: the convex dot hole on the silicon gaskets go through the LOWER leaf), shown in Figure 2.
- ③ Use 2pcs M8 inner hex screws and flat washer and spring washer to locking fixed holder and leaf modules, as shown in Figure 2.

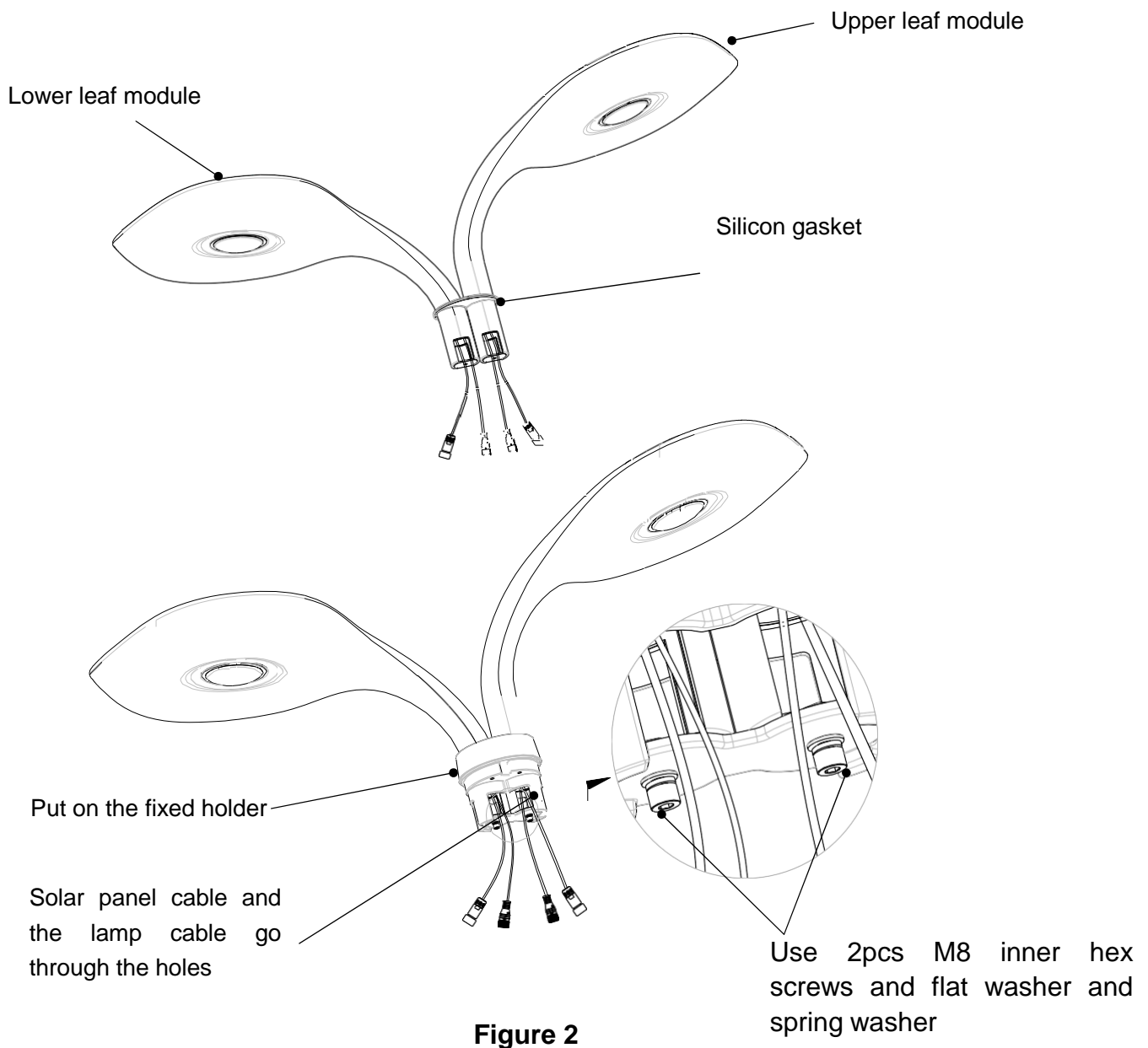


Figure 2

7.2 Installaton of RGB lamp strip, RGB lampshade and cables

- ① According to the wiring diagram, join the solar panels cable, the lamp cable and adapter cable.
- ② Tear off the gum of RGB lights, to paste it into the lamp holder recess, while the stator stuck the RGB lights; cable go through RGB lampshade, then put the RGB lampshade covering the RGB lamp bar, as shown in Figure 3.
- ③ After locking the leaf modules and fixed holder, please tear off the protective film attached on the surface of solar panel.

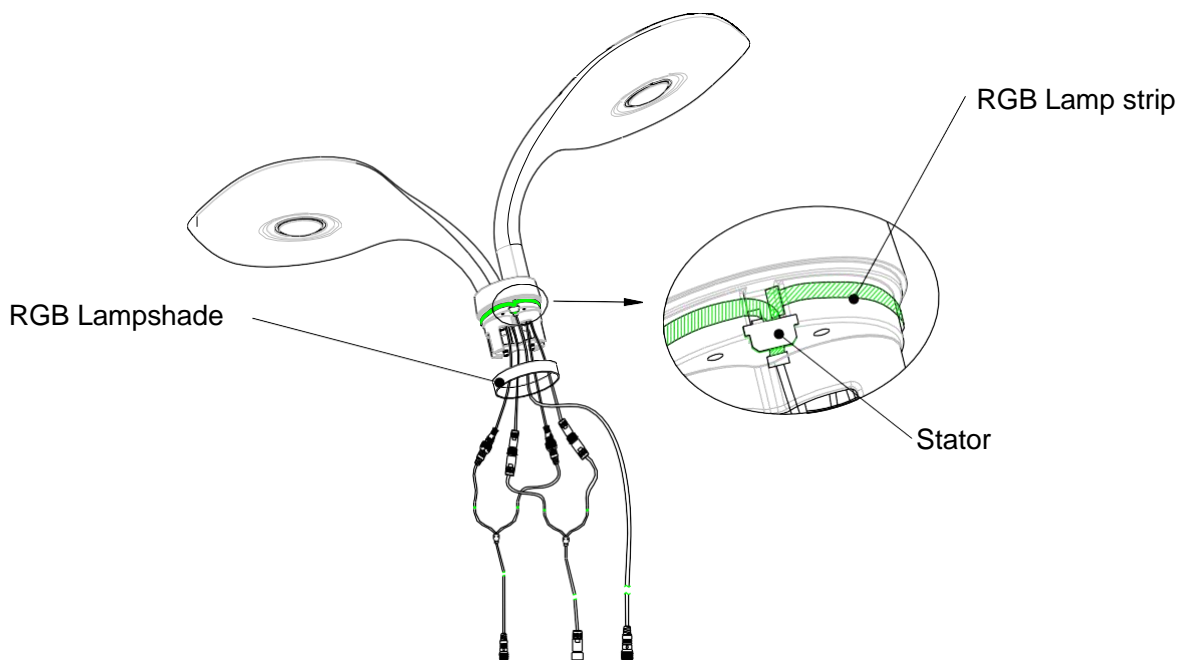


Figure 3

7.3 Pallet go through the upper lamp pole

- ① Pallet goes through the top of the upper pole and move downward, as shown in Figure 4

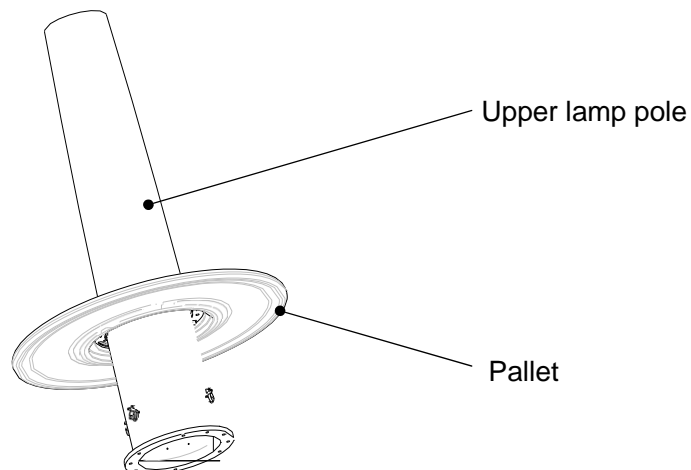


Figure 4

7.4 Locking the fixed holder and upper lamp pole

- ① Solar panel wiring and lamp wiring and RGB wiring, as shown in Figure 5 through the hole on top of the poles. The lamp fixture assembly shown in Figure 6 then attached to the poles.

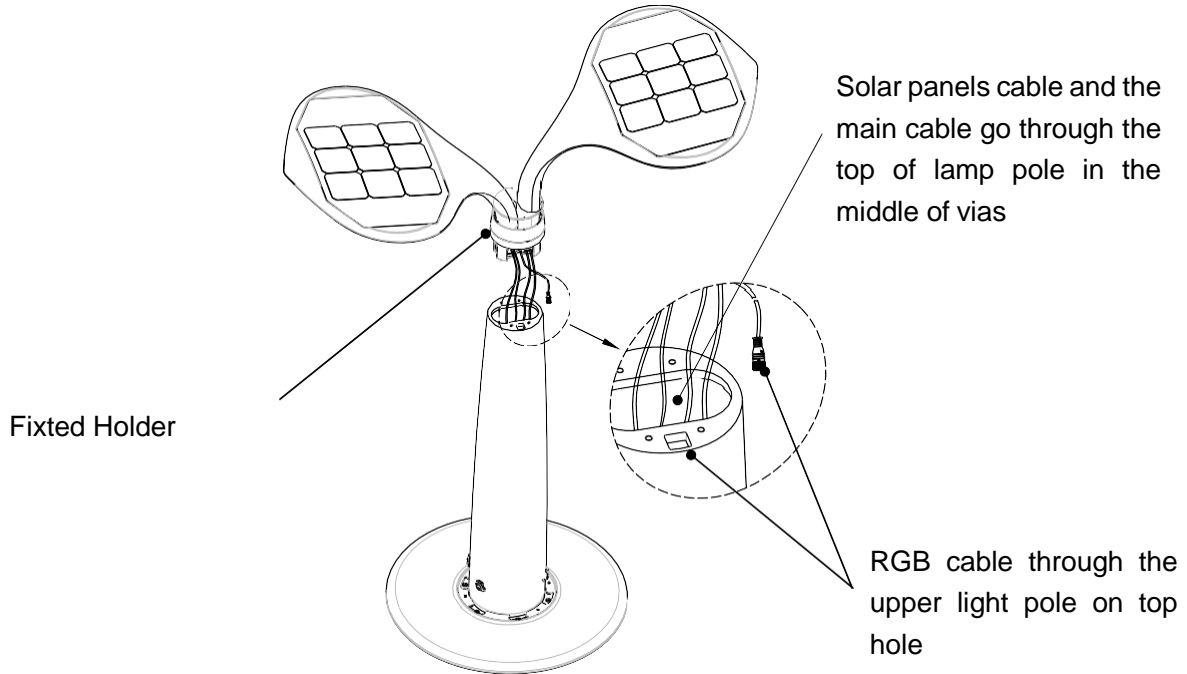


Figure 5

- ② Don't tug at it, avoid wire skin scratch, abrasion during pulling the cables.

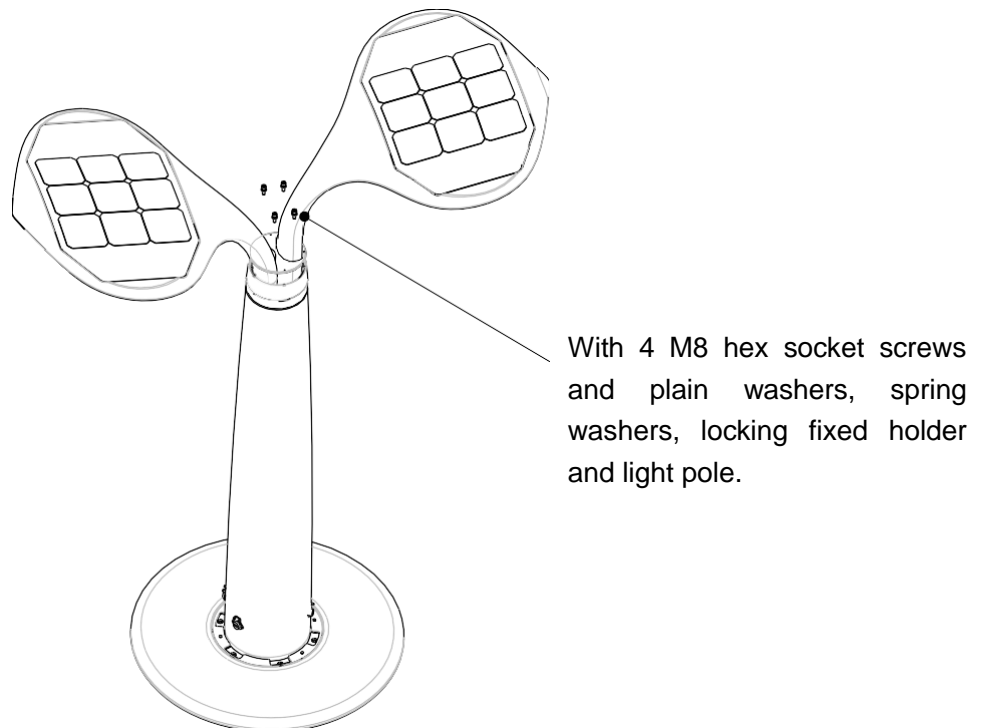


Figure 6

7.5 Locking the other parts

- ① After the silicon gasket holes align the lamp holder, the 2 pieces of the same alignment hole, with 6pcs M3 screw locking the cover.

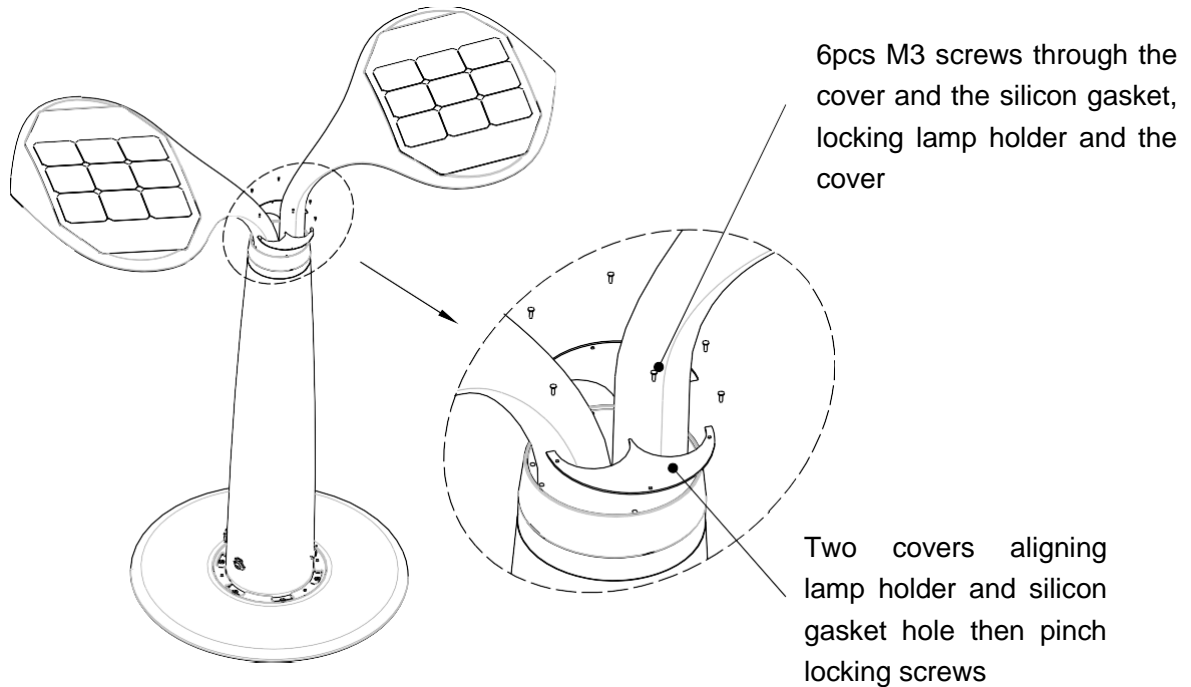


Figure 7

7.6 Fixed support for bottom light pole

- ① Place four square pads on already leveling nut, then align flat decorative plate (at the same level with the ground).

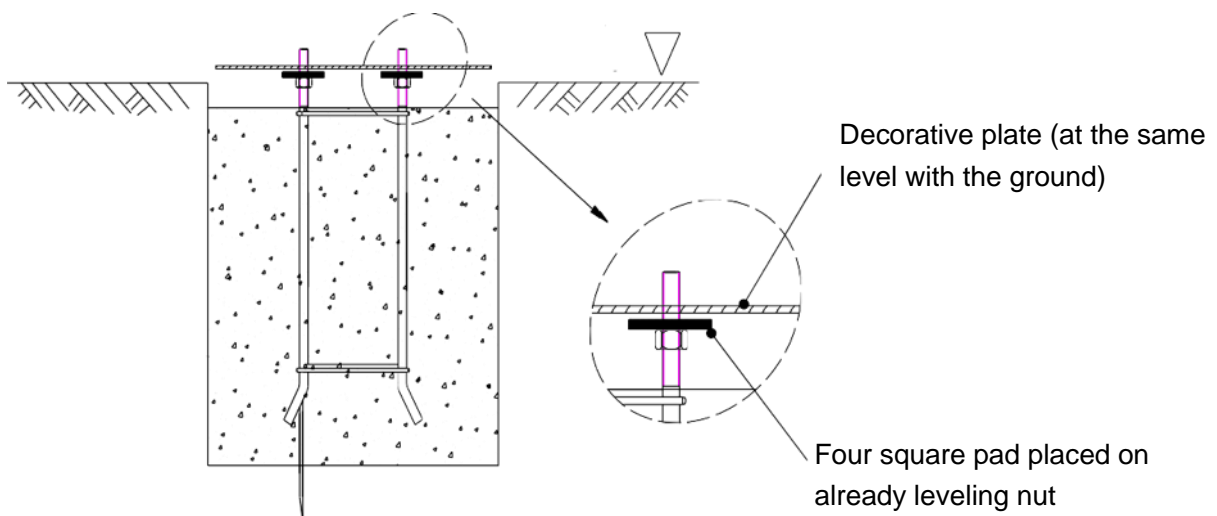


Figure 8

- ② With M14 nuts and spring washers and square flat gasket lock the under light poles, as shown in Figure 9.

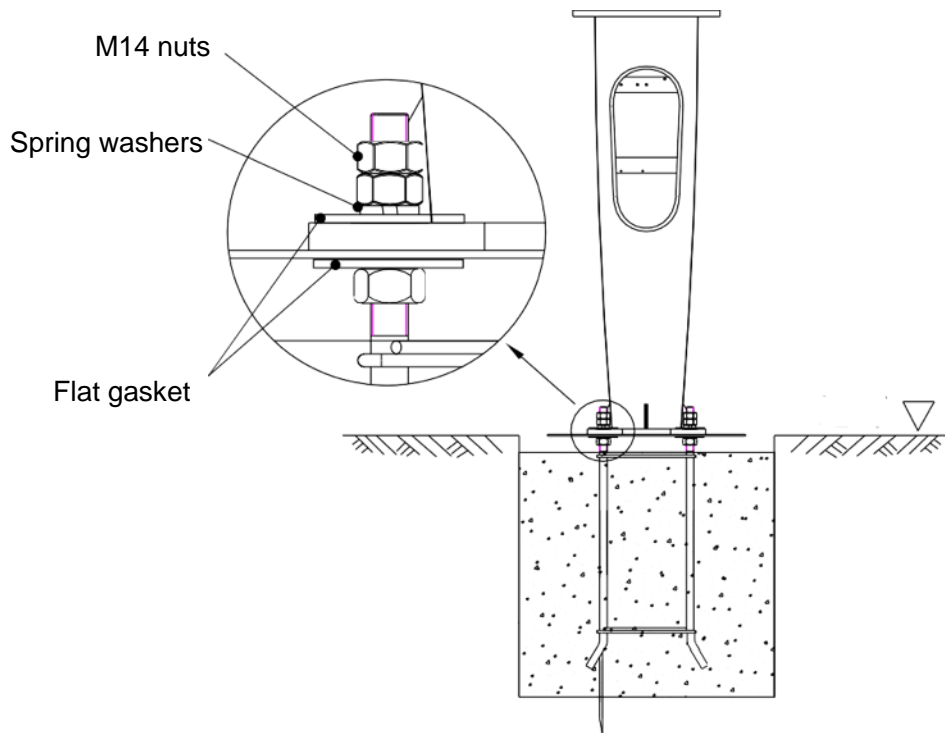


Figure 9

- ③ Cover the cage with decorative covering and lock with screws, as shown in Figure 10.

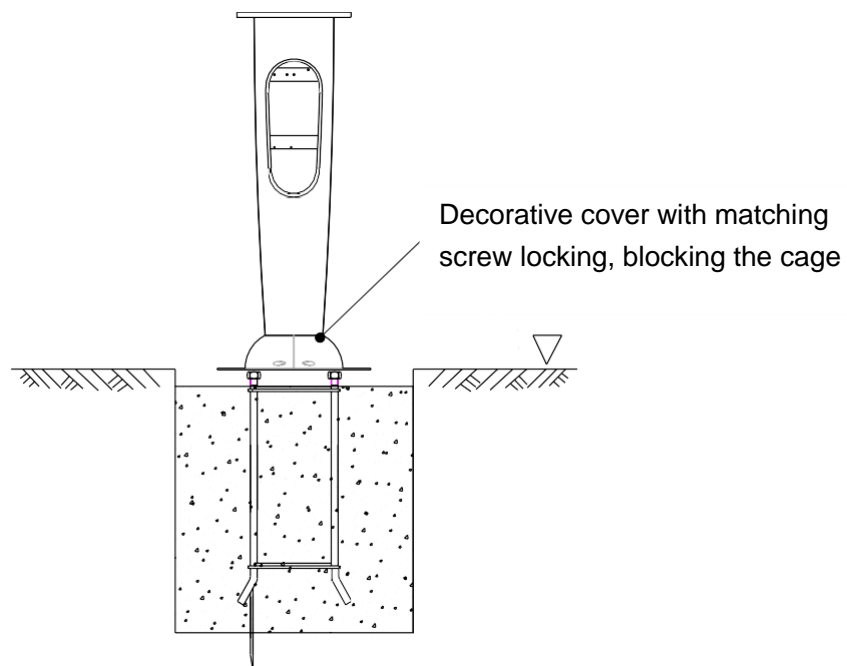


Figure 10

7.7 Locking upper light pole and lower light pole

- ① Upper pole and the lower pole holes are aligned with the inner six M8 hex screws and flat washer shells pad lock, as shown in Figure 11.

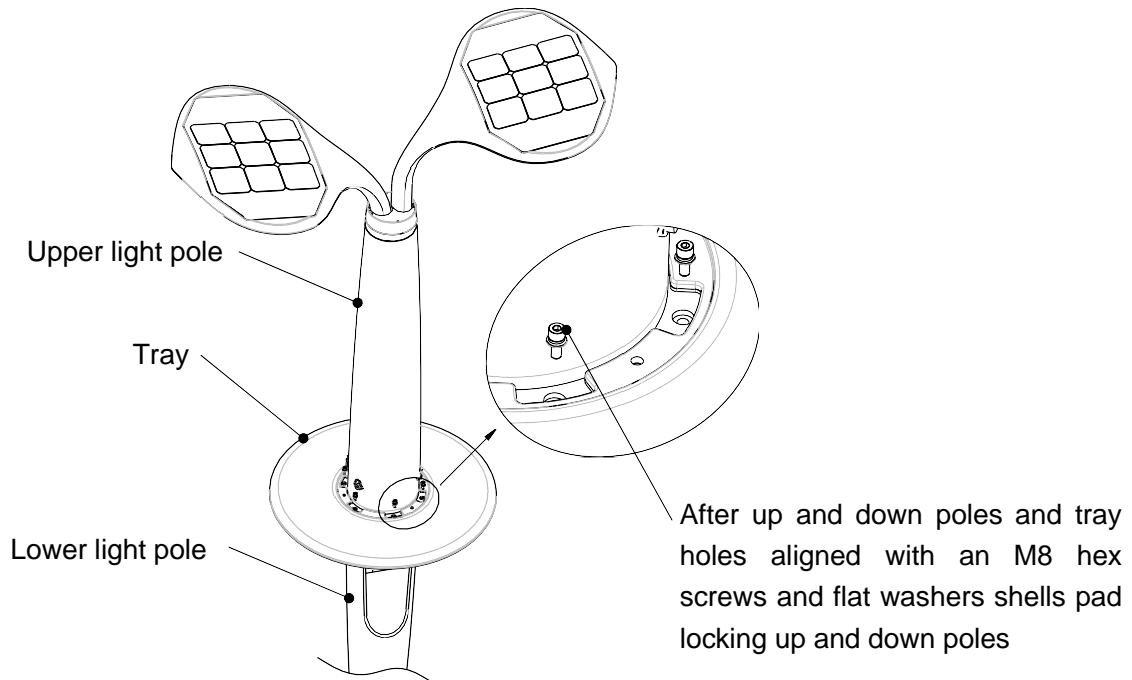


Figure 11

- ② After locking up and down the pole, align the holes in the tray placed decorative ring, hexagonal screws through the back of the lower poles on poles and trays with internal M8, decorated with thread locking ring, as shown in Figure 12.

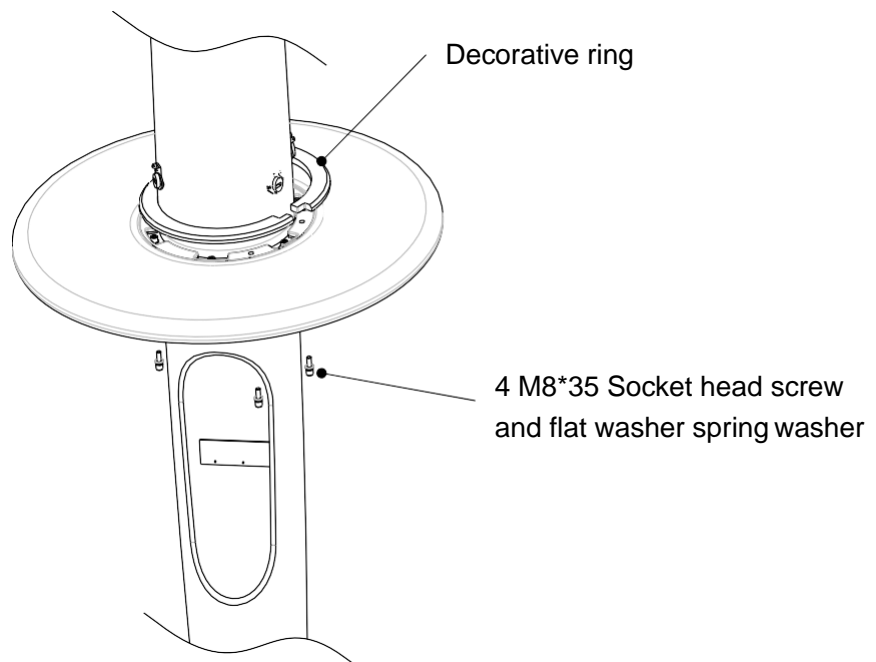


Figure 12

7.8 Install an infrared transceiver, lock controller

- ① As shown in figure 13 open the inside and put the battery into light pole, then the the battery cover over the batteries.
- ② The controller and the infrared transceiver head is fixed as shown in the following figure 13 on the stator of distribution door, and with a locking screw, infrared transceiver align an induction hole on distribution door.

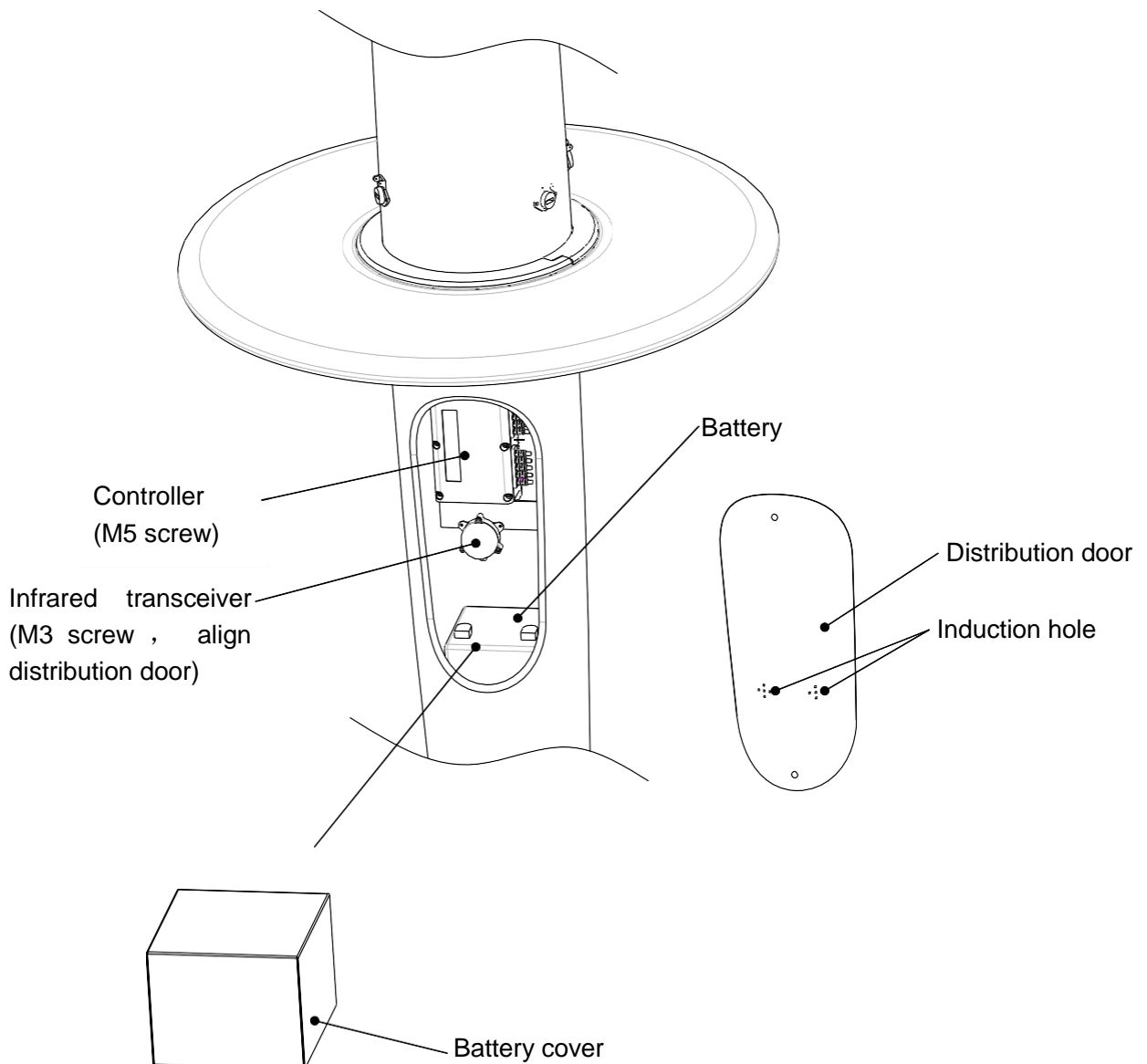


Figure 13

7.9 Controller wiring

According to the figure 14 the controller and the lamp holder, solar panels, batteries and infrared transceiver head connect one by one.

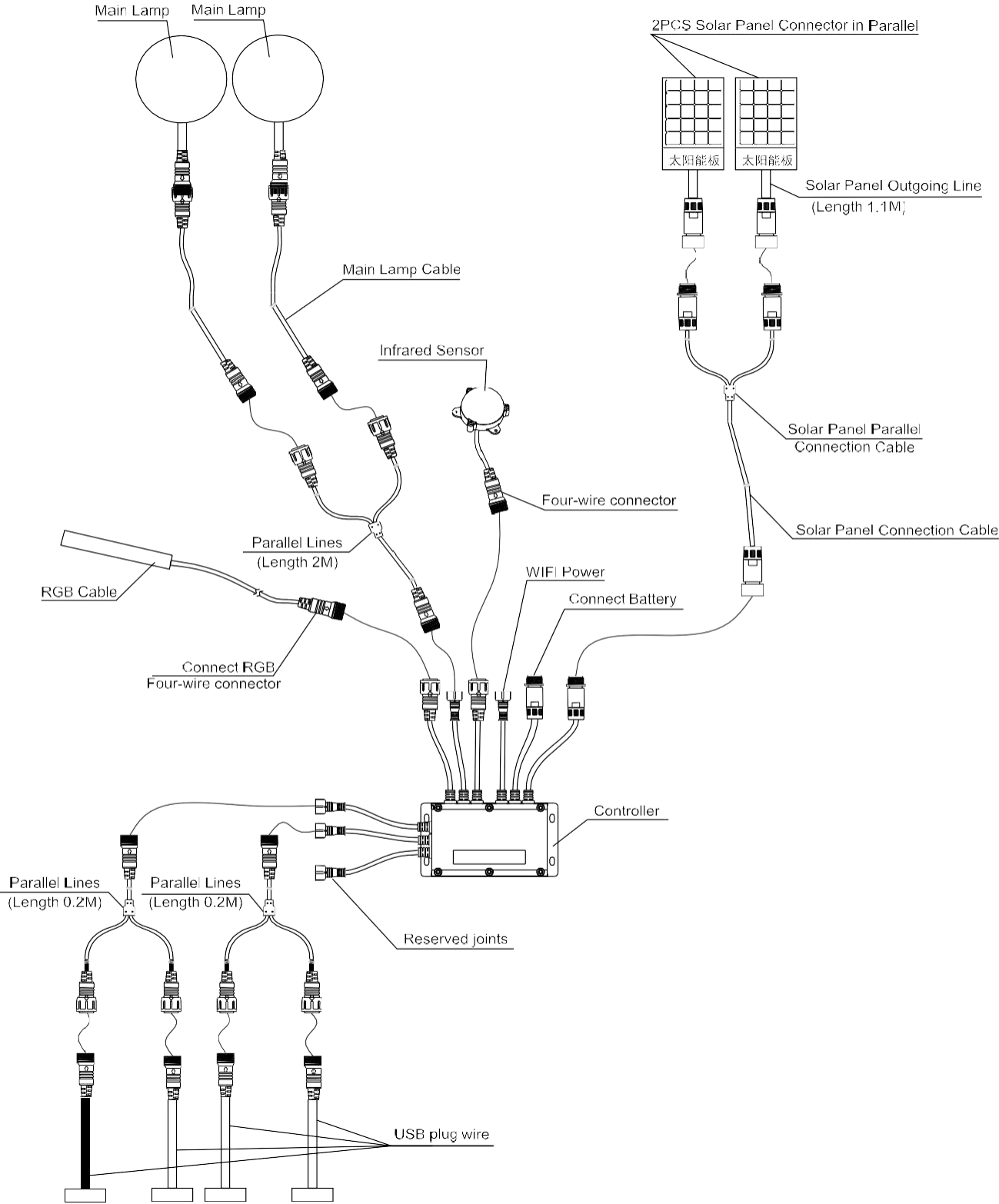


Figure 14

※ When docked, it should pay attention to see the line head logo stickers affixed

7.10 Foundation construction

※ Before installation please prepare transparent tape, hoe, horizontal ruler, shovels and other tools, the following work should be done within 5 ~ 10 days before lighting accessories arrival.

- ① As shown in Figure 15, folded cage expanded, fixed with a stator and with transparent tape wrap the top four screw columns of the cage, prevent the screws columns stained cement.

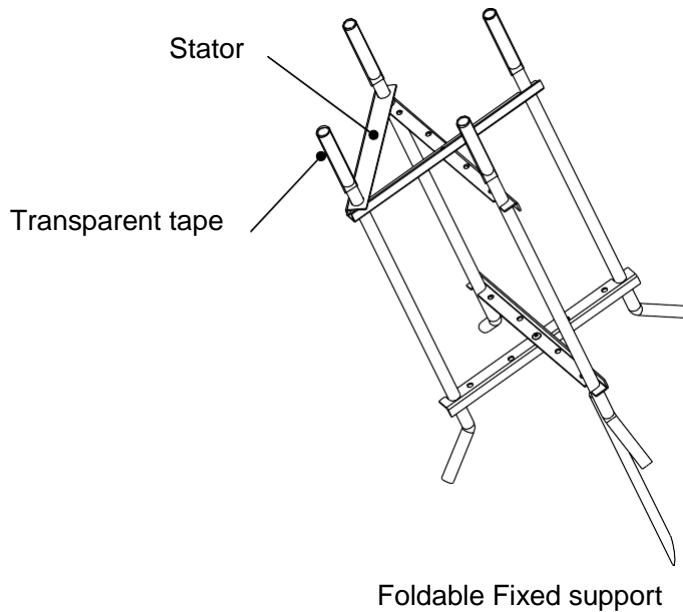


Figure 15

- ② As shown in figure 16, dig light pole hole, 19.6 inches * 19.6 inches * 23.6 inches;

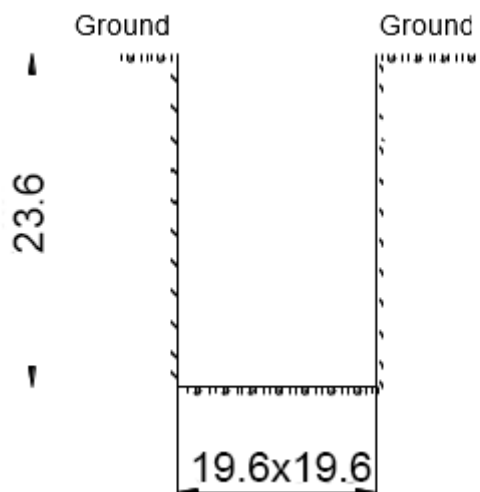


Figure 16

- ③ As shown in figure 17, put cage in a pit in the middle, at a good measuring position and height, to ensure that the height of the cement, is parallel to the side of the cage and road.
- ④ The cage is fixed with cement on pit reserve screw column about 3.1 inches, see Figure 17.

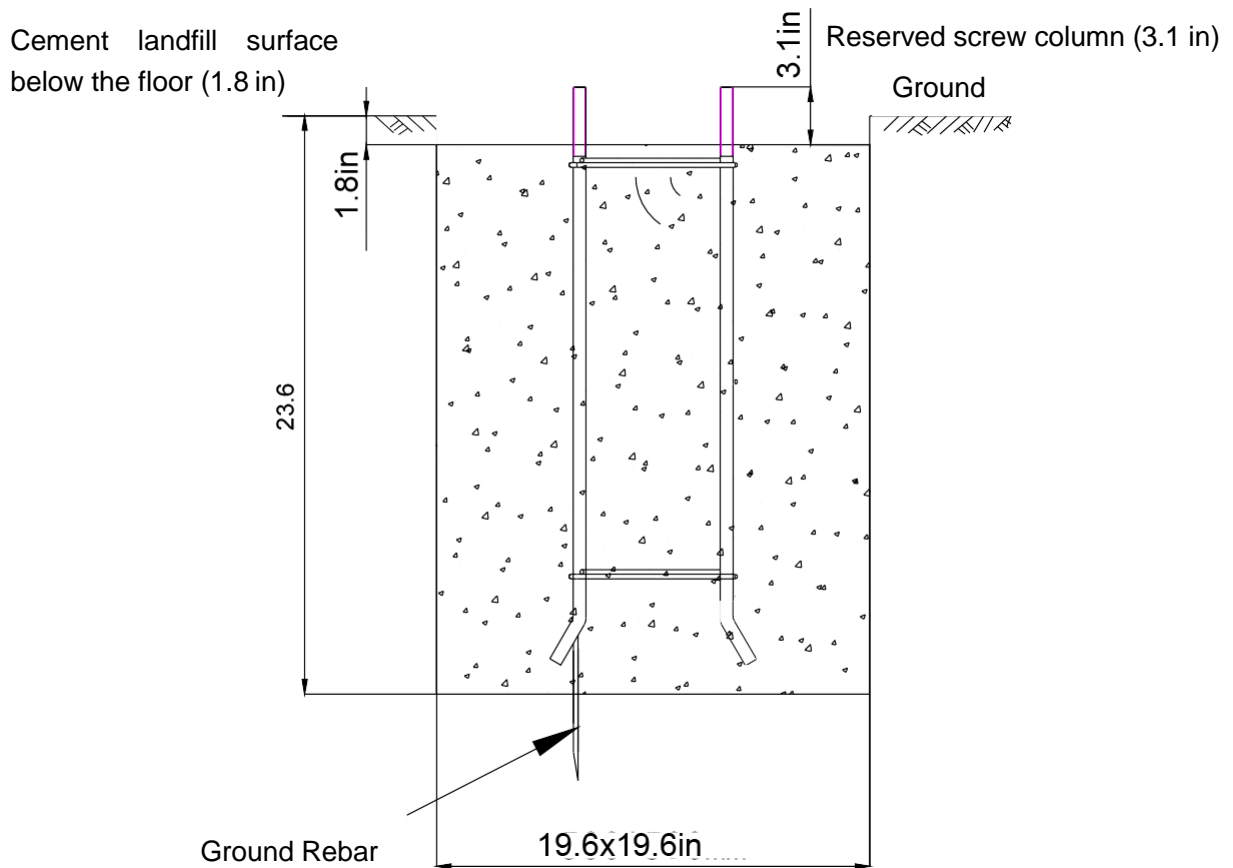


Figure 17

7.11 The whole light fixing

※ Ready wrench before installation.

- ① Use knife to remove the tape on the cage.
- ② In the foundation's four screws, put horizontal plate so each screw can have a locking nut.
- ③ Use a Horizontal ruler to measure the level of degree, by adjusting the nut height, ensure that the lower surface of the horizontal plate is parallel to floor surface as shown in Figure 18.
- ④ After adjustment remove the horizontal plate, horizontal ruler and other tools.

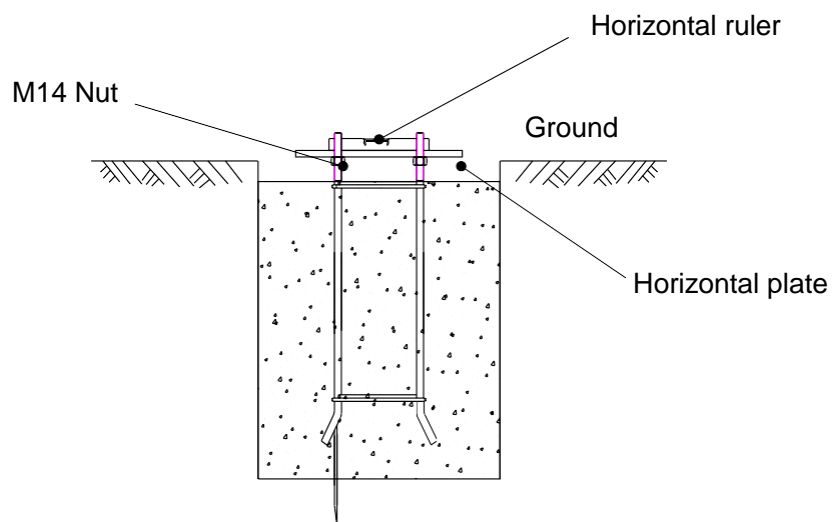


Figure 18

- ⑤ The spring washer and flat washer should be through the stud placed on the whole lamp base, with nut fixing, as shown in Figure 19.

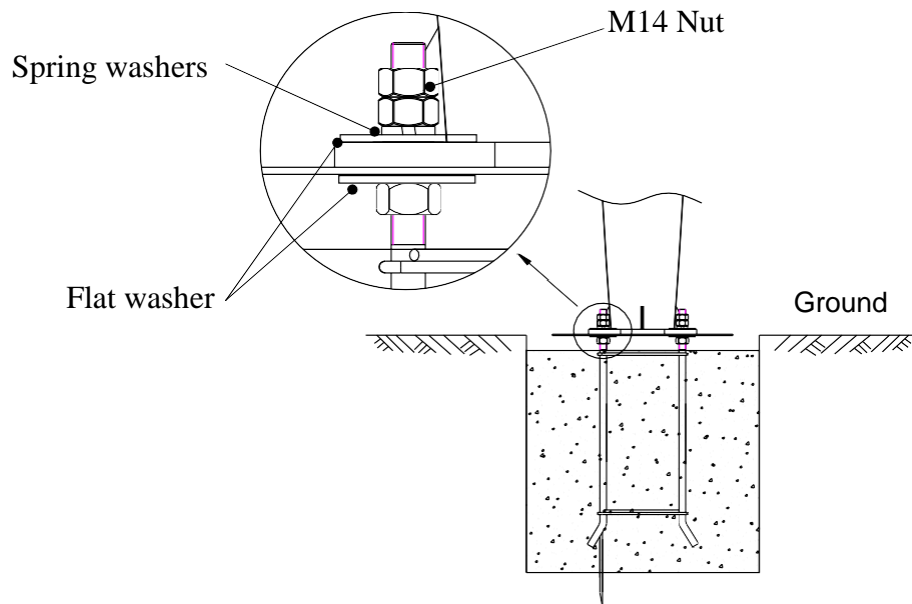


Figure 19

8. Precautions

- Solar charging post rely on solar power, please install in a place where sunlight can be accepted throughout the day. If the installation is in a shady environment shade or shadow can reduce the time of sunshine. This will reduce lighting power, and will have insufficient power supply (likely to affect the long-term battery life)
- When you install the entire lamp gently to prevent collision when installing the solar panels, resulting in damage; as long storage time, it should clean up the dust of the solar panel before installation.
- Light source part is fragile, do not use a sharp object to touch or heavily knock.
- The controller should not be disassembled and replaced by users. If you have questions, please notify the manufacturer immediately for confirming and replacement.

9. Light power adjustment method

Due to seasonal variations in latitude and longitude of the installation site, climate differences, installation orientation differences and specific environmental differences, leading to every luminaire operating status differences, in order to ensure that each luminaire can reasonably stable operating, extend lamp life, during the installation process, it should have the appropriate settings for each lamp light power.

- The following conditions should be the larger value: the low-latitude, summer, more sunny days, around unobstructed, installed facing south direction;
- The following conditions should be a smaller value: high latitudes in winter, more rainy days, around a sheltered, mounting direction or something to look northward

Note: The above adjustment shall be the basic parameters in factory settings adjusted up or down on the basis of 60% brightness.