SOLAR STREET LIGHT (LED 21W)

INSTALLATION MANUAL

MOTECHE INDUSTRIES INCORPORATED
Address: 6F, NO.248, Sec.3, Pei-Shen Rd., Shen Keng Dist.,
New Taipei City, 222 Taiwan.
TEL: 886-2-2662-5093
FAX: 886-2-2662-5097
www.motech.com.tw
INDEX

1. Frame Base (Foundation) .................. Page 2

2. Installation Procedure .................. Page 6

3. Install Controller & Battery In System Box Procedure ............. Page 13

4. Controller System installation ........ Page 16
Foundation Preparation:

**Note:** Place the sample plate directly on the 4 poles. Ensure no deformation of the poles occurs.

![Sample plate](image1)

**Note:** The arrow indicated below is the direction of light being projected. Please ensure the direction of the base is correct.

![Direction of light](image2)

**Note:** Before pouring the concrete, place plastic bags on each of the four poles to avoid cement stains splashing onto the poles. The poles should be above ground level at a minimum of 15cm-20cm.

![Plastic bags on poles](image3)
1. Suggested Foundation: 80cm x 80cm x 80cm
Screw poles must be above ground level at a minimum of 15cm-20cm

※Note: The poles must be firmly balanced
2. Suggested minimum installation range: 100cm away from the main roads.

**Note:** The base foundation must be parallel on even surface to the main road and ensure the light projection onto the road is correct before installation.
3. If the sample plate cannot be placed onto the four poles, then the base frame of the poles is either damaged or deformed. Please place a nut on each of the poles and use a mallet to gently adjust the poles until the sample plate can be placed correctly on all four poles.

Note: Do not directly use the mallet to hit the pole.

4. Before placing the streetlight pole on top of the base, ensure the poles are evenly balanced. Apply oil onto the metal parts to avoid rusting.
Installation Procedure:

1. Lift the pole higher onto a support for easier installation.
2. Lead the solar cable out from the support pole.
3. Strip and cut the Lighting Cables (×2).
4. Fix the frame and Cable (Solar Cable).
Install Solar Panel and Cable

※Note: Do not insert the Cable/Lamp in this manner

Lamp (Light-1 · Light-2) Cable connect to (Light-1 · Light-2) Cable

Use No.14 trigger to fix the lamp screw

Do not tighten screw for the solar panel frame too tight so upon installing the pole, the direction of the panel can be adjusted. If the angle of the solar panel is already confirmed then tighten the screw to the correct angle.
Installation of System Box:

Outputs: Light-1, Light-2, Solar Cable.

Installing the control box: Use Ω Type clamping tool to attach the control box to the pole.
Lifting the pole:

Once assembling has been completed. The pole can be lifted and placed within the foundation structure.

Apply oil on each of the four poles to avoid rusting.

※Note: Lift the pole only in the area indicated by the red circle. Please do not try to lift the pole anywhere else.
Procedure:

Step-1. Adjust the direction of the Control Box:
(1). 1~2 people to support the control box while the iron pole is lifted up. This is to avoid any damage to the control box.
(2). Inside System Box, release Ω clamping to loosen the screw for adjustment of the Control Box.

Adjust/Move the direction of the control box. The iron pole and control box when lifted upwards should be moved in a similar method. After moving to the preferred location, tighten the screw of the clamping. (Do not tighten the screw too tight in case of any damage)

Step-2. Place the 3 Cables inside the control box:
(1). Fix the tube on the bottom of the control box.
(2). Choice the correct dimension plastic tube.
(3). Place all three cables (Light-1 · Light-2 · Solar Cable) inside the tube
(4). Seal the tube with the connection point.
(5). Seal the tube with the pole
(6). Apply silicon around the hole (connection of tube) in prevent any water leakage.
The three cables (Light-1, Light-2 and Solar Cable) coming out of the hole in the iron pole are placed in the tube and connected to the Control Box.

Apply silicon to seal the hole around the iron pole to prevent any water leakage.
After the streetlight structure is fixed. Place the battery inside the control box.
Install Controller & Battery In System Box Procedure:

1. Screw in the Controller

2. Fix Battery Cable (Black \(\rightarrow\)) with Controller’s "Battery \(\rightarrow\)" (tighten the screw)

3. Fix Battery Cable (Red \(\rightarrow\)) with Controller’s "Battery \(\rightarrow\)" (tighten the screw)
Install Battery In System Box Procedure:

**STEP-1**

MODE SELECT: B / TIME SELECT: 6

Place Battery inside the control box

**STEP-2**

Fix Screw of Battery (+)
※Note: The screw needs to be fixed very tight as loose connection will lead to system failure.

Fix Screw of Battery (−)
※Note: The screw needs to be fixed very tight as loose connection will lead to system failure.

For further installation, please refer to: Controller System Installation Manual
Upon completion of the installation, please place screw covers on the four pole screws for protection from rust.

Finally pour cement around the base to complete the foundation.
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CONTROLLER SYSTEM INSTALLATION MANUAL

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INDEX

1. CONTROLLER SYSTEM STRUCTURE

2. CONTROLLER FUNCTION EXPLANATION

3. SYSTEM INSTALL PROCEDURE
   (STEP-1  ~  STEP-6)
CONTROLLER SYSTEM STRUCTURE:

CABLE
RED Cable: Positive (+)
BLACK Cable: Negative (−)

Solar Panel

Dual Mode LED Lamp Head

CONTROLLER

No.1 Group Light (LED: 12W)
No.2 Group Light (LED: 9W)

Battery
CONTROLLER FUNCTION EXPLANATION:

Select "Single Mode" or "Dual Mode":
A: Select the system switch for single mode lamp.
B: Select the System switch for dual mode lamp. (Suggest setting B)

Select A: Single mode lamp (one group cable) connection at LIGHT-1.
Select B: Dual mode lamp (two group cable) connection at LIGHT-1 & LIGHT-2.

Time Select Knob: Set system lighting time (See Time Table at page.6)

System Condition LED: Solar (Green) · Light (Orange) · Battery (Red)

System Test Button (TEST): Continuously press the TEST button for 3~5 seconds.
The system will illuminate for 3 minutes for self-testing.
After 3 minutes, the system will turn off automatically.

LIGHT-2: No.2 Group Light
"7" (Negative · -) · "8" (Positive · +)

LIGHT-1: No.1 Group Light
"5" (Negative · -) · "6" (Positive · +)

BATTERY: "1" (Negative · -) · "2" (Positive · +)

SOLAR PANEL: "3" (Negative · -) · "4" (Positive · +)
SYSTEM INSTALLATION PROCEDURE:

STEP-1
MODE SELECT: B / TIME SELECT: 6

STEP-2
Connect With Battery

(1). Black Cable (−) to Battery Negative (−)
(2). Red Cable (+) to Battery Positive (+)

BATTERY LED WILL ILLUMINATE RED

STEP-3
Connect With Solar Panel

(3). Black Cable (−) to Solar Negative (−)
(4). Red Cable (+) to Solar Positive (+)

SOLAR LED WILL ILLUMINATE GREEN
**STEP-4**

Connect With LIGHT-1 (LED 12W)

(5). Black Cable (−) to LIGHT-1 Negative (−)
(6). Red Cable (+) to LIGHT-1 Positive (+)

**STEP-5**

Connect With LIGHT-2 (LED 9W)

(7). Black Cable (−) to LIGHT-2 Negative (−)
(8). Red Cable (+) to LIGHT-2 Positive (+)
STEP-6
System Test

Continuously press the TEST Button for 3~5 seconds. The LIGHT-1(LED 12W) & LIGHT-2 (LED 9W) will then illuminate for 3 minutes for self-testing. After 3 minutes, the system will automatically turn LIGHT-1(LED 12W) & LIGHT-2(LED 9W) off.

※After sunset, LIGHT-1(LED 12W) & LIGHT-2(LED 9W) will be turn on for 6 hours, then the system will turn LIGHT-1(LED 12W) off automatically.

※System will to continue illuminate LIGHT-2(LED 9W) until sunrise.

LIGHTING TIME TABLE

The blue portion on the lighting timetable shows the number of hours Light 1 and 2 are operating and yellow portion shows the number of hours Light 2 is operating between sunset and sunrise.