MIRAGESERIES
Solar area lights

M-ELEC

PRODUCT INFORMATION

The Mirage series is the latest generation of high powered solar area lights from M-Elec. With up to 100% brighter output and an impressive 200lm/W efficacy across the range, the Mirage series features true LiFePO4 battery technology and advanced PWM solar charging to deliver continuous shining performance from dusk till dawn. The smart remote allows effortless set up of motion and dimming operation modes to maximise performance. Mirage solar area lights also include a fully adjustable 80 x 150 degree beam and slip fit pole mount bracket making installation fast and final adjustments easy.

- 200lm/W efficacy
- LiFePO4 battery technology
- Built in solar panel with advanced PWM solar charging
- Programmable operating modes via remote
- Adjustable light module & mounting bracket
- Integrated motion sensor

5 year warranty
*1 year for battery

TECHNICAL INFORMATION

Colour temperature:	5000K	**Mounting method:**	45-64mm slip fit adjustable pole mount
CCT:	Single CCT	**Light module tilt:**	± 40°
CRI:	70+	**Temperature range:**	0° to 65℃
Efficacy:	200lm/W	**IP rating:**	IP65
Beam angle:	80 x 150 (H x V)	**LED tests:**	LM80
Charge time:	7 hrs	**Accessories:**	Additional remote (ML-MSLRM)
Dimmable:	Yes, via remote	**Material type:**	Cast aluminium body, pc lens, stainless fittings
Warranty:	5 Years warranty * 1 year for battery	**Compliance:**	CISPR15 (EMC), UN38.3, Level 12 wind test, EN 60598-2-3:2003 + A1:2011
Life:	50000hrs** (LED), up to 2000 cycles (battery)	**Kit includes:**	Solar light, instructions, remote control, slip fit adjustable bracket
LED chip brand:	Lumileds 5050		
Body:	Black		

*LiFePO4 solar battery & remote - 1 year warranty
**Average life is calculated on expected average lifespan

	ML-MSL8-W	ML-MSL20-W	ML-MSL30-W
Total power consumed:	8W	20W	30W
Power supply:	17W Solar panel, 5 . 8AH LiFePO4 battery	36W Solar panel, 17.4AH LiFePO4 battery	54W Solar panel, 29AH LiFePO4 battery
Run time (full power):	7 hrs	9 hrs	10 hrs
Lumen output:	1600lm	4000lm	6000lm
Dimensions:	L 500mm | W 290mm | H 80mm	L 660mm | W 420mm | H 94mm	L 900mm | W 420mm | H 94mm
Net weight:	6.6kg	11kg	14.8kg
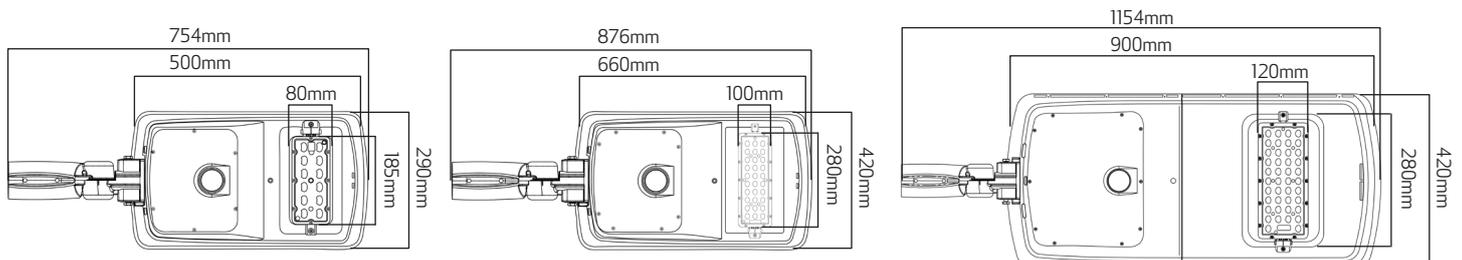
INSTALLATION INSTRUCTIONS
**PLEASE FOLLOW INSTRUCTIONS FOR CORRECT INSTALLATION!**

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Pre-installation notes

- The average full sun exposure period in the installation location should be above 3.5 hrs per day in order to ensure a normal battery function.
- Always install the solar light in a position with the solar panel facing the equator for charging optimisation (north in southern hemisphere).
- For best results, adjust tilt to at least 15 degrees for northern states and up to 35 degrees for southern states. This helps with charging optimisation and self cleaning.
- Ensure the angle of the solar panel is adjusted to capture the most sun and is away from shade where possible.
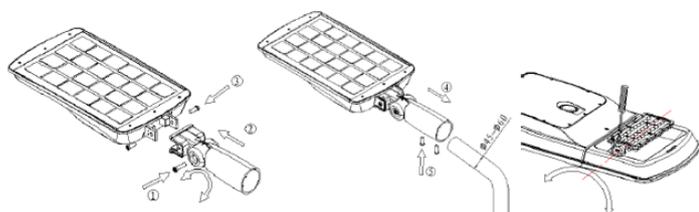
Pre-installation checks & tests

- Please make sure you conduct these tests and checks before mounting the solar light.
- Remove the security plug from the remote control.
- Press the ON/OFF button on the remote control.
- Check that the red indicator light within the sensor is illuminated.
- If the red indicator light within the sensor is illuminated, cover the panel and check if the solar light turns on (normally within 1 minute).
- If the red indicator light within the sensor is not illuminated, use a charger to charge the inbuilt battery. Chargers are not included in each box but are available upon request. It may require a few hours to charge the inbuilt battery.
- Before installation ensure battery is charged. Reference diagram below.
- We highly recommend charging all solar lights before installation for a minimum of 4 hours before installation to ensure maximum operation, particularly in times of minimal sunlight or areas of limited sunlight. (lights need to be ON to enable solar charging)
- To ensure battery life, the solar lights should be charged every 3 months when unused.
- Ensure the pole or mounting surface you are installing the solar light on is suitable for mounting the weight and wind effects on the solar light.

Red light		Green light	
Slow blinking	Charging	Lit	Battery >10%
Lit	Fully charged	Slow blinking	Battery <10%
Fast blinking	Error		

Sensor
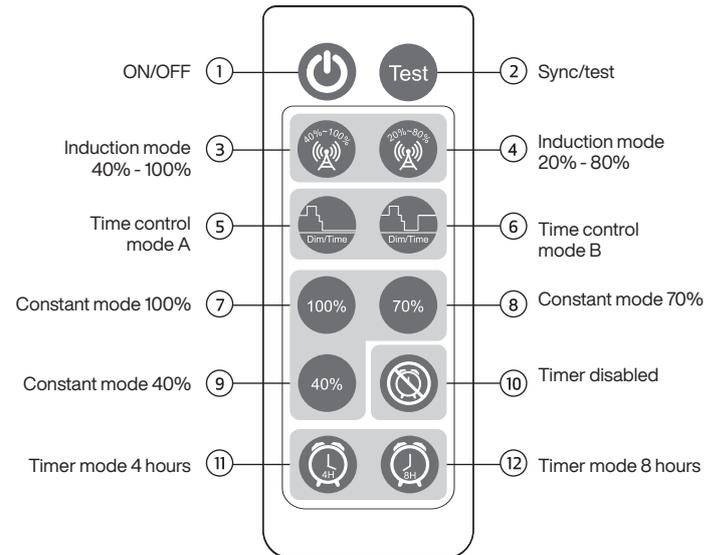
Charging point
**DC 14.6 V 3.75 A MAX**
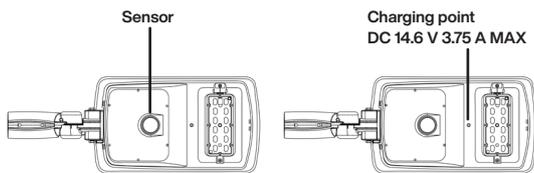
Installation

1. Remove the light and bracket from the box.
2. Install the bracket onto the light and adjust the angle to suit the installation (15-35 degrees recommended in instructions above).
3. Use the remote control to set the operation mode. The light module will flash twice when receiving signal from the remote control. The default setting is induction mode 40%-100%.
4. Mount the solar light to the pole securely and adjust the LED module angle to suit the installation.
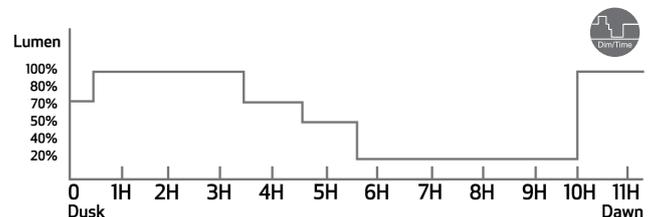
Remote control operation & settings

ON/OFF	1	
	2	Sync/test
Induction mode 40% - 100%	3	
	4	Induction mode 20% - 80%
Time control mode A	5	
	6	Time control mode B
Constant mode 100%	7	
	8	Constant mode 70%
Constant mode 40%	9	
	10	Timer disabled
Timer mode 4 hours	11	
	12	Timer mode 8 hours

1. **ON/OFF**
   Turn the light ON or OFF (when turned OFF solar charging is disabled).

2. **Sync/test**
   To sync the remote control with the light, press and release the button. To test, press it once. After 10 seconds of test mode, the light goes back to the previous mode.

3. **Induction mode 40% - 100%**
   This mode allows a constant 40% brightness (from dusk to dawn) unless motion is detected and then increases to 100% output for 120 seconds.

4. **Induction mode 20% - 80%**
   This mode allows a constant 20% brightness (from dusk to dawn) unless motion is detected and then increases to 80% brightness for 30 seconds. This mode increases the run time of the light and is very helpful for areas with decreased charging time frames.
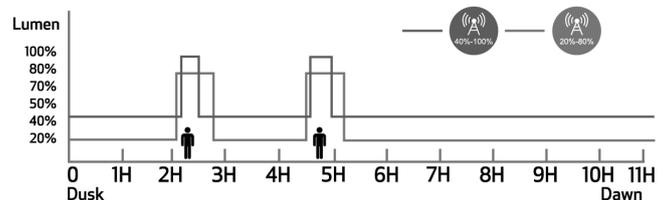
5. **Time control mode A**
   This mode is a time based control mode. After dusk the first 0.5 hr is at 70% brightness, the following 3 hrs is at 100% brightness, the following 1 hr is at 70% brightness, the following 1hr is at 50% brightness, and then the final 5.5 hrs or until dawn it is at 20% brightness.
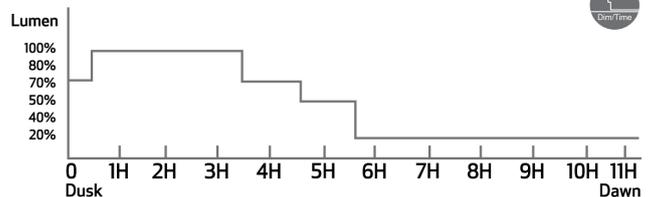
6. **Time control mode B**
   This mode is the second time based control mode. After dusk the first 0.5 hr is at 70% brightness, the following 3 hrs is at 100% brightness, the following 1 hr is at 70% brightness, the following 1 hr is at 50% brightness, the following 4.5 hrs is at 20% brightness and the final 1hr it is at 100% brightness.

For further information about our Warranties please go to: **melec.com.au/legal/warranties**

7. **Constant mode 100%**
   This mode offers 100% brightness from dusk till dawn. Suitable for areas and seasons with sufficient sunlight charging during the day.

8. **Constant mode 70%**
   This mode offers 70% brightness from dusk till dawn. Suitable for areas and seasons with sufficient sunlight charging during the day.

9. **Constant mode 40%**
   This mode offers 40% brightness from dusk till dawn. Suitable for areas and seasons with sufficient sunlight charging during the day.
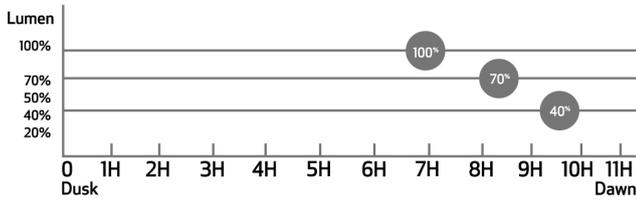
10. **Timer disabled**
    This button is used to turn off "Timer mode". Settings default to the mode selected prior to timer activation.

11. **Timer mode 4 hours**
    This mode turns the light completely off 4 hrs after dusk. For example: Press this button at any time: if the light turns on at 7pm, it will turn off at 11pm. The mode stays active until disabled with the "Timer disabled" button (10).

12. **Timer mode 8 hours**
    This mode turns the light completely off 8hrs after dusk. For example: Press this button at any time: if the light turns on at 7pm, it will turn off at 3am. The mode stays active until disabled with the "Timer disabled" button (10).

PLEASE NOTE!

- **MUST BE INSTALLED BY LICENSED ELECTRICIAN**
- **Due to our policy of continuous product improvement, we reserve the right to discontinue or update product specifications or designs at any time without notice.**
- Please visit www.melec.com.au for the latest information on our products.