

The solar panel must face south, with a clear arc of sun from sunrise to sunset all year round.

SAFETY FIRST

Ensure that the site is surveyed for buried services and that any electrical supply is isolated before commencing work.

All materials to be handled using suitable mechanical equipment or sufficient manpower for the weight of the item being handled.

TOOLS & MATERIALS REQUIRED

Tri-head Key.
5mm Allen key.
Electrical Screwdriver.

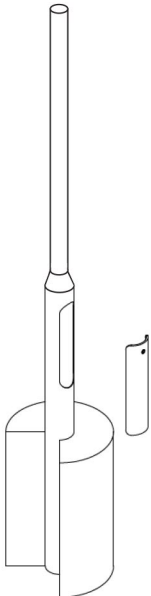
Side Cutters
13mm spanner
Ø9 and 14mm drill bits

PACKING LIST

Box 1 - Solar panel
Box 2 - LED LUB
Box 3 - Solar Panel support, LUB Bracket, batteries and regulator assy.
Box 4 - Optional - Battery Enclosure for a 114/168 post installation

INSTALLATION

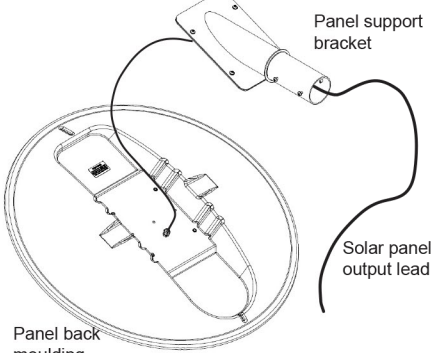
1



The Solar LUB is supplied as a kit designed to fit onto a pre-installed 114/194 or 114/168 column. The column manufacturer should be consulted to provide a column and foundation plan suitable for the equipment to be mounted and environmental conditions peculiar to the site.

Weights and dimensions of the solar LUB equipment are shown overleaf to help with calculating the loads.

2

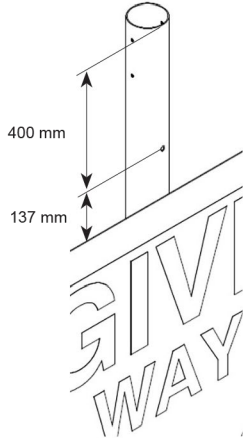


Assemble the solar panel support by uncoiling the solar panel output lead and feeding it through the panel support bracket as shown.

Place the bracket over the 4 mounting points in the panel back moulding and secure with the 4 off M8 x 12mm Hex screws supplied.

Panel support bracket
Solar panel output lead
Panel back moulding

3

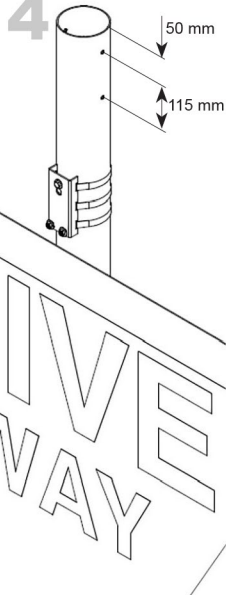


Fix the sign to be illuminated to the post in its final position.

Mark and drill a 14mm cable entry hole in the post 137 mm from the top of the sign and in line with its centre. It is recommended to have the hole 400mm from the top of the post to allow clearance for the solar panel and LUB.

De-bur and surface protect the drilled hole.

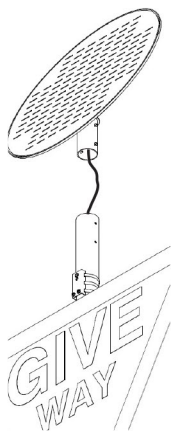
4



Important: Mark and drill 4 holes Dia 10mm (2 each side) at 50mm and 165mm from the top of the post in such a manner that the solar panel will face due South when fixed.

Fit the LUB bracket to the post with 3 TESPAs making sure to align the bracket hole with the drilled hole.

5




Take the solar panel assembly and feed the solar output lead down the post from the top so that it emerges in the column base housing.

Place the solar panel assembly on the top of the post and align it with the drilled fixing holes to point directly South. Ensure that nothing impedes the solar panels view of the sun.

Use 4 off M8 x 25mm Hex screws and lock washers supplied to fix the solar panel assembly onto the post.

6



Fix the Solar LUB sign-light to the bracket following the instructions supplied with the LUB.

Pass the LUB supply cable down the post via the drilled hole and into the column base housing.

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7

Moving to the column base fit the regulator board assembly with the countersink screw supplied.

Connect the Solar panel output lead to the PV terminals and the LUB supply cable to the Load terminals. Cross connection is not possible.

NOTE.
If fitting to a 114/168 post then refer to separate Battery Enclosure mounting document at this stage.

8

Take the battery packs and hang 2 from the lower hook 1 on the regulator board. Connect the batteries to the battery connectors.

Then hang 2 further packs from the upper hook 2 and connect these.

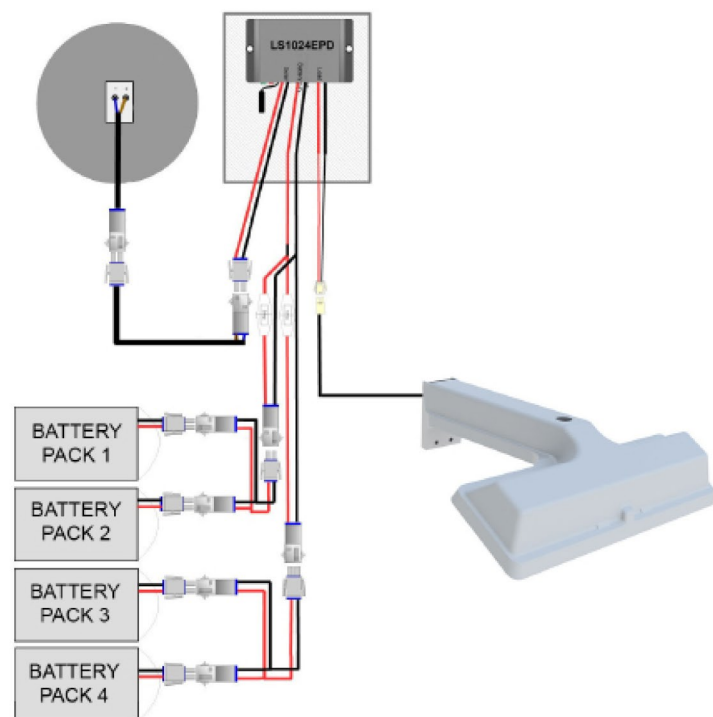
Locate the regulator On/Off Switch and press to switch on. After a short delay LUB will illuminate briefly before the photocell switches off.

Finally replace the column door.

REGULATOR STATUS

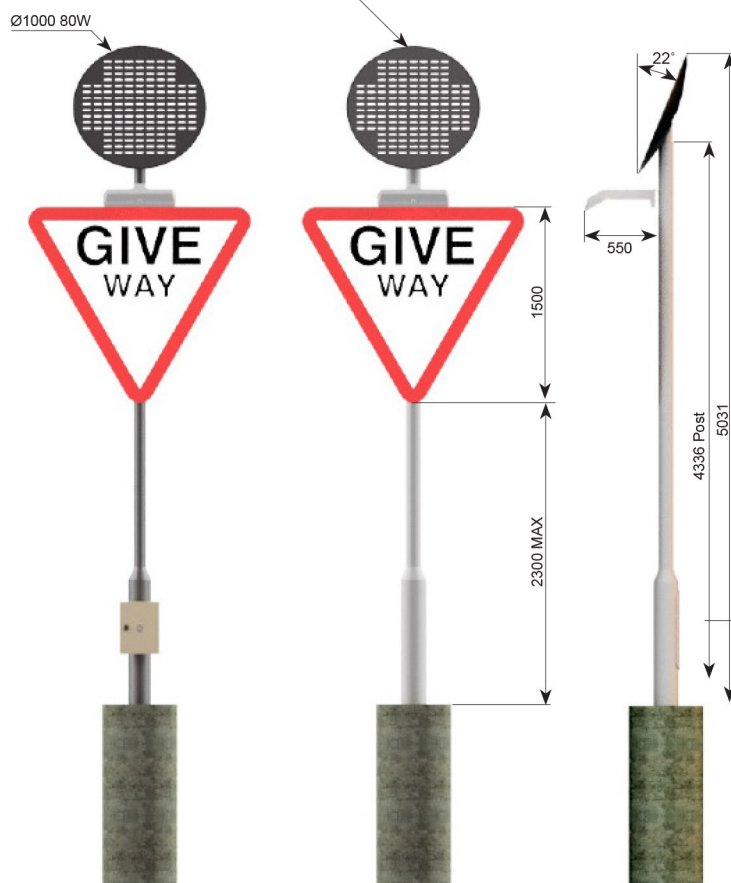
Charging Status LED Indicator	Green	On Solid	Normal
	Green	Fast Flashing	Over Voltage
	Green	On Solid	Normal
Battery Status LED Indicator	Green	Slowly Flashing	Full
	Orange	On Solid	Under Voltage
	Red	On Solid	Over Discharged
Radix Point of Digital tube (Load indicator)	Red	On Solid	Load On
	Red	Slowly Flashing	Over Load
	Red	Fast Flashing	Short Circuit

CIRCUIT DIAGRAM



DIMENSIONS

Solar Panel requires south facing aspect with a clear arc of sunlight



PRODUCT WEIGHTS

Solar LUB	7.15 Kg
Solar Panel and Bracket	14.8 Kg
Batteries	5.5 kg per pack

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