20W / 40W SOLAR PANEL KIT
MOUNTING INSTRUCTIONS

Kit contents

- 20W Solar Panel or 40W Solar Panel
- 2 x spare fuses
- MPPT Solar Regulator
- 1 x Solar panel bracket
- 1 x Adapter bracket for B80/B180/B280

For Tidy cable management:

- 4 x cable ties

For attaching to post:

- 2 x M8 x 65 Coach screw galvanised
- 2 x U bolts M8 x 65 x 90 x 50 Stainless Steel each with four M8 nuts SS and four washers SS

For attaching Solar panel to Solar Panel bracket:

- 2 x M8 35mm Socket Cap screw Stainless Steel
- 2 x M8 Nuts Stainless Steel
- 2 x split washer Stainless Steel

Mounting the Solar Panel

NOTE: Choose a location where the solar panel will face North (Southern Hemisphere) or South (Northern Hemisphere) for optimum performance and where animals will not be able to access and cause potential damage.

Steel posts up to 65mm in diameter or square steel post up to 45mm diameter

1. Securely drive 1 x steel post into the ground with a post rammer.



2. Fit the U-bolts to the bracket before securing the bracket to post. (Do not fully tighten).



3. Slot the bracket over the post and through the U bolts.

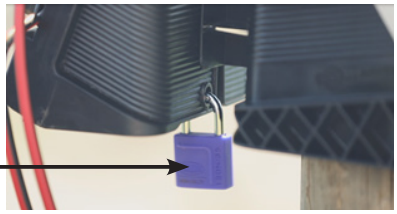


We recommend lining the bracket up with the top of the steel post, once it is in the right position, tighten the U bolts until secure.

4. Slot your energizer on the back of the bracket.



NOTE: To protect your energizer from theft, we recommend using a padlock.



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Mounting the Solar Panel (continued)

Round wooden post up to 135mm diameter

1. Drive 1 x post firmly in the ground.
2. Slot your solar panel bracket and solar panel over your post and secure tightly using 2 x coach screws.

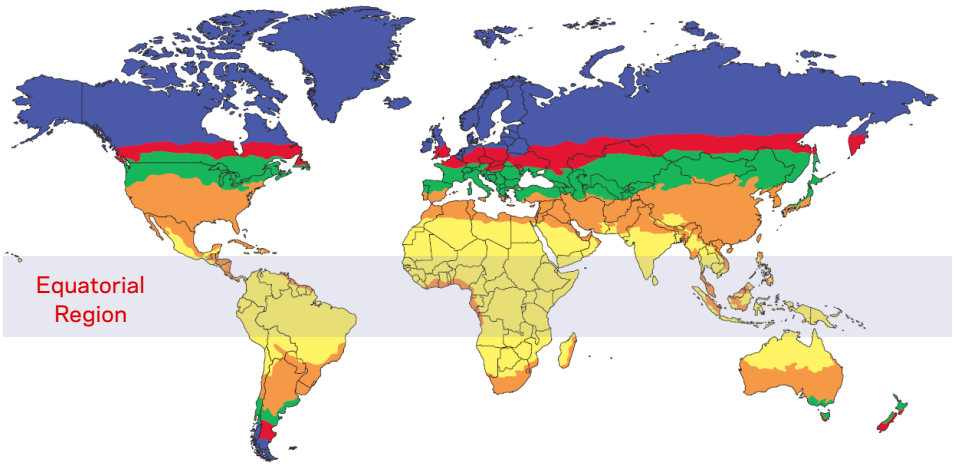


3. Slot your energizer on the back of the bracket.

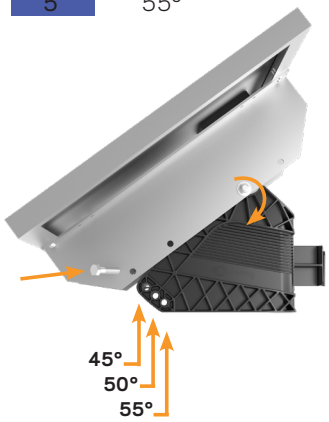


Adjusting solar panel angle

Based on the region you live in, it is important to set the correct solar panel angle to maximise solar performance.



Region	Solar Panel angle
1	45°
2	50°
3	55°
4	55°
5	55°



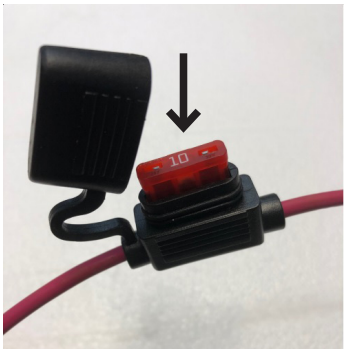
NOTE: For equatorial regions, please contact Gallagher group for recommended solar panel installations.

Connect Solar Panel to the Energizer and Battery and Insert Fuse

These solar panels are designed for easy connection to the Energizer and battery. They are supplied with two lead sets exiting the back of the solar regulator:

1. **1m Energizer connection cable:** Plug connects directly into the Energizer.
2. **3m Battery cable:** Connect the BLACK Lead to the (-) Negative Battery Terminal and the RED Lead (with the inline fuse holder) to the (+) Positive Battery Terminal.
3. **Insert Fuse:** Open the inline fuse holder on the red lead, insert the supplied fuse and close the fuse holder cover.

Note: Gallagher recommend protecting your batteries from the environment by storing them in an insulated storage container.



Multiple Panels and Multiple Battery Connections

If using multiple solar panels, the battery connection leads need to be connected in parallel with the battery/batteries as shown in Figure 1.

Only one of the panels will be required to be connected to the Energizer.

Leave the remaining Energizer cable coiled up and cable tied to the back of the panel.

With multiple batteries ensure that the connection between positive and negative is made across the complete battery bank.

For example, in Figure 1 the positive connection is made from the battery on the right and the negative connection from the battery on the left.

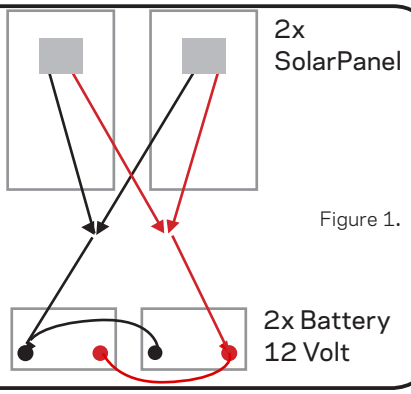


Figure 1.