



Falcon SP100DV2 100W Folding Solar Panel

Quick Start Guide

Setting up the panel:

1. Remove the solar panel kit from the carry case.
2. Unclip the two latches on the side of the unit and fold the two panels outward. Extend the legs to support the panels.
3. Locate in a clear sunlit area free from over hanging branches or obstructions.
4. Place the solar panel facing the sun. For maximum output we suggest moving the panels throughout the day to track the sun's position.
5. Fully extend the battery lead and connect the battery clips to the battery, red to the battery positive terminal and black to the battery negative terminal. Ensure that the connections are secure and do not let the positive and negative connections touch each other.
6. After connecting the battery to the solar panel the controller will turn on automatically. You will see a welcome/initialization screen for a few seconds followed by the Default Screen showing the status icons:



The icons will show the following states:

	Daytime, the panel is receiving sufficient sun and the battery is charging.
	Night time, there is insufficient sun and the battery is not charging.
	Battery voltage is low
	Battery is charging
	Battery is full

	Normal operation
	Battery under voltage warning*
	Low voltage disconnect (load output is turned off) *
	Load output is on*
	Load output is off*

*In a standard battery charging setup nothing is connected to the Load output on the controller so these icons can be ignored.

LED indicators

The three LEDs to the left of the screen will be on or off as follows:

	Lights green if there is sufficient daylight and the solar panel is working, otherwise off.
	Lights red if there is an error. Check the battery is connected and there is not a short on the cables. Try disconnecting and reconnecting the battery.
	Lights if the controller is over temperature. Temporarily relocate the panel to a cooler area, it will automatically reconnect when it has cooled down.

Frequently asked questions

Q: What type of batteries can be used?

A: Any 12V DC battery used for caravans, motorhomes, cars, boats, motorcycles etc.

Q: Can I extend the battery lead?

A: Yes, extensions are ok but the longer the length the less efficient the power will be.

Q: Do I need to clean the solar panel?

A: Yes, dust and dirt should be swept off the panel use a soft brush and then use a wet cloth to wipe the panel surface to remove any remaining dirt and grime. It is recommended that any bird droppings be removed as soon as possible as if left it can cause damage to the surface.

Q: Will water damage the solar panel?

A: The solar panels are very well sealed, water should not affect them at all. The regulator even though well sealed should not be exposed to excessive amounts of water as it may enter via the wire connectors.

WARNING: Do NOT connect inverters, battery chargers or high current devices to the load terminals of the charge controller.