

Instructions Flexopower Foldable Kit

SKA79 79W /SKA158 158W /SKA237 237W

Carefully follow the instructions below for successfully operating the Flexopower SKA79 /SKA158 /SKA237 4x4 kit.

The Flexopower SKA79 /SKA158 /SKA237 Solar Camping kit are based on foldable, glass free, flexible solar panel technology and includes everything needed to charge/manage the batteries from the sun: solar panel, solar regulator with a remote LCD display, cabling, connectors and user manual. Easy to install, plug and play principle. The SKA79 /SKA158 /SKA237 4x4 kit are suitable for marine, desert and tropical environments.

1. Caution

- Do not fold SKA79 /SKA158 /SKA237 solar panels other than in its default folding zones
- Do not stand on SKA79 /SKA158 /SKA237 solar panels when folded up
- Do not erect under or near power lines
- Do not stand on, walk or drive over SKA79 /SKA158 /SKA237 solar panels
- Do not tamper with cabling, equipment and connectors
- Do not pull on lead cables
- Always observe polarity: red/brown cable (+) positive; black/blue cable (-) negative
- Always use with a solar regulator with correct capacity
- The SKA79 /SKA158 /SKA237 kit as described here is suitable only for **12VDC** systems. Please contact Flexopower if you operate a 24, 36 or 48VDC system.

2. Complete kit consists of

Foldable Panel	SKA79 (79W)	SKA158 (158W)	SKA237 (237W)
Foldable glass free solar panel with lead wire and 50A Anderson grey connector	1x	2x	3x
Solar regulator with LED display	1x 14 A, 12V	1x 14 A, 12V	1x 20 A, 12V
LCD remote display [V,A]	yes	yes	yes
Special ripcord twin core cable 4mm ² with 50 Amp Anderson grey connectors to connect panel to regulator	1x 10m cable	2x 10m cable	3x 10m cable
User Manual	1x	1x	1x

Please note based on client feedback, no battery cable is included.

The power output of the Flexopower SKA79 is suitable for smaller appliances and shorter stays in camps without power. The power output of the Flexopower SKA158 is suitable for 1-3 fridges and longer stays in camps without power. The power output of the Flexopower SKA237 is suitable for extra heavy loads and long stays in camps without power.

3. Assembly and disassembly (*observe correct polarity: plus to plus, negative to negative*)

- 3.1 Mount solar regulator with the remote LCD display in a suitable position as close as possible to battery. Ensure solar regulator is protected from the elements, engine oil, engine heat etc.
- 3.2 Connect the solar regulator to the battery terminal at its battery symbol. *Please note the battery cable is not included in kit.*
- 3.3 The solar regulator will now switch on.
- 3.4 The remote LCD display will now switch on.
- 3.5 Position SKA79 /SKA158 /SKA237 solar panel where it will have full day sun exposure. Temporarily leave solar panel folded up until point 3.8. (eliminating the possibility of sparks when connecting the solar panel to the solar regulator, i.e. no current flowing).
- 3.6 Connect SKA79 /SKA158 /SKA237 solar panel to the 10m cable via 50Amp Anderson grey connectors.
- 3.7 Connect the 10m cable to the solar regulator via 50Amp Anderson grey connectors.
- 3.8 The SKA79 /SKA158 /SKA237 [™] solar panel is now connected to the solar regulator and battery. Remove Styrofoam and unfold the solar panel to full day sun exposure. The deep cycle battery is being charged now.
- 3.9 Secure SKA79 /SKA158 /SKA237 through its eyelets if required.
- 3.10 The reverse order applies when disassembling. The solar regulator may be left permanently connected to the battery terminals.

Optional

Permanently connect load (fridge, lights) to DC port of solar regulator. DC flows directly from panel to load/consumer. Surplus DC power is stored in battery. Any balance will be supplied from battery if DC output from panel is insufficient. Automatic switch during sun set and sun rise.

Benefits:

- eliminate 15% waste/loss of generated solar power in battery
- reduced battery cycles and prolonged service life of battery
- measure consumption of load (fridge, lights) in Amps via remote LCD display

Caution:

- do not connect load exceeding 14A/20A
- do not connect AC inverter to DC port of solar regulator

4. Maintenance, transport and storage

- Regularly wipe SKA79 /SKA158 /SKA237 solar panel with damp clean cloth
- It is recommended to transport and store the SKA79 /SKA158 /SKA237 solar panels in a vertical position with the Styrofoam inserted
- Dry and wipe clean SKA79 /SKA158 /SKA237 solar panel for storage
- Refer to solar regulator and remote LCD display manufacturer's instructions

5. Warranty

- 5.1 The SKA79 /SKA158 /SKA237 solar panels are covered by a 2year manufacturing defect warranty.
- 5.2 Refer to solar regulator and LCD display manufacturer's warranty.
- 5.3 All warranties and claims are null and void if the unit, connection and components have been tampered with.
- 5.4 All warranties and claims are null and void if the unit, connection and components have been operated beyond their limitations.
- 5.5 All warranties and claims are null and void in the event of reversed polarity.
- 5.6 All warranties and claims are null and void if cautions under 1) have not adhered to.

6. Features SKA79 /SKA158 /SKA237 4x4 kit

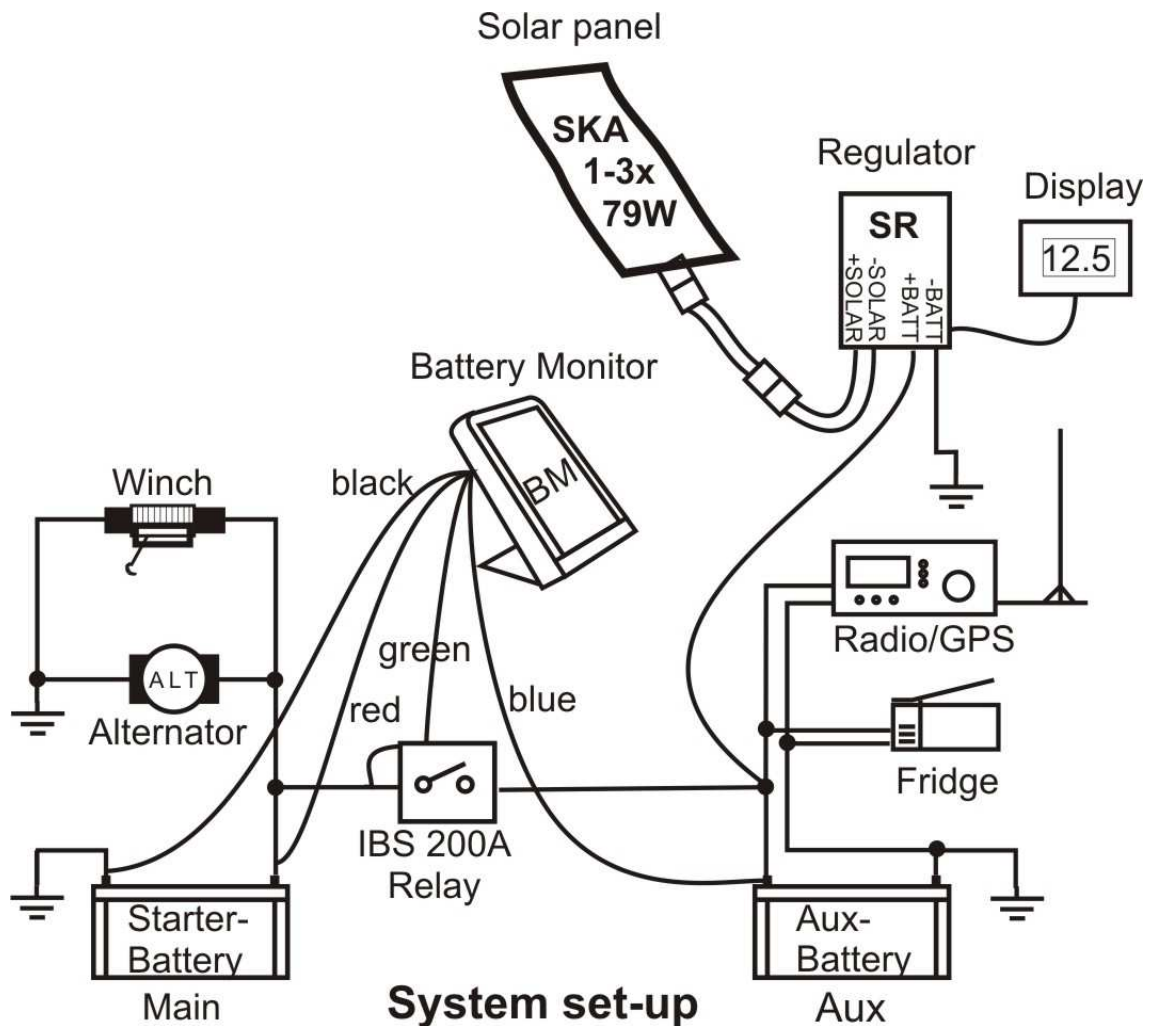
- Foldable, flexible solar panel with eyelets on each side for proper securing
- Expansion ready to conveniently add additional solar panels if needed
- Easy to set up. Plug and play principle
- More low light (overcast) and high temperature tolerant than glass solar panels
- Delivers up to 20% more energy into the battery than glass solar panels
- Virtually unbreakable
- Water, hail and dust proof

7. Specifications SKA79 /SKA158 /SKA237 Solar Panel Foldable Kit

IBS Order Number:	SKA79	SKA158	SKA237
Flexopower Name	Atacama-79™	Atacama-158™	Atacama-237™
Pmax, Power	79W	158W	237W
Imp, Current at max. Power	4.1A	8.2A	12.3A
Vmp, Voltage at max. Power	19.2V	19.2V	19.2V
Weight of panel	3.0 kg	2x 3.0 kg	3x 3.0 kg
Dimensions deployed L x W x H each	233x39x0.15cm	233x39x0.15cm	233x39x0.15cm
Dimensions folded up L x W x H each	29x39x7cm	29x39x7cm	29x39x7cm
Max. operating temperature	85°C	85°C	85°C

8. Disclaimer

- Flexopower (Pty) Ltd and IBS GmbH shall not be held liable for any loss or damage suffered from the use of this system.
- Flexopower (Pty) Ltd and IBS GmbH reserves the right to change the content of this manual without prior notice.



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