

# **Manual** Energy Generation Kit Solar Rise Three 2.0

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#### General safety instructions

- Solar modules generate electricity in low incidence of light too! Cover the solar panel and work carefully!
- Make sure that the installation of the solar charge controller takes place in a stable, flat and dry environment. Please note to keep a distance of 15 cm around the unit!
- Danger of explosion due to improper handling of batteries! Danger of receiving an acid burn through the battery acid! Keep children away from batteries and acid!
- Please note the operating instructions of the solar charge controller, the solar module and the battery as well!
- When connecting the cables, make sure the polarity is correct! All work must be carried out in compliance with the national provisions and the local regulations!
- Do not use defective components and keep the intended use of the system!

## For the installation you need well isolated tools:



For the installation of the wind generator you may need additional tools. Please see therefore the manual of the wind generator.

# Connect battery (ies) with solar charge controller

- Charge controller
- Battery
- Battery cable
- Wind generator

#### Step 1

Remove the fuses during the installation. Loosen the screws distinguished with a battery label at the solar charge controller. Insert the red labelled wire end sleeve of the battery cable into the positive contact (+) and the blue labelled wire end sleeve into the negative contact (–). Tighten the screws.



### Step 2

Loosen the screws at the battery terminals. Tighten the red marked ring terminal at the positive terminal (+) and the blue marked ring terminal at the negative terminal (–). Insert the fuse once again.



#### Step 3

The wind generator is connected to the battery together with the solar charge controller, Please observe the manufacturer's manual for the installation.



# Connect solar module (s) to solar charge controller

- Solar module
- Cable

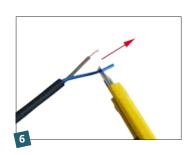
#### Step 4

Cut the cable (2 x 2,5 mm<sup>2</sup>) in two parts. One part connects the solar charge controller with one solar module. The other part connects the two solar modules



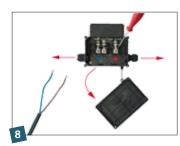
#### Step 6

Strip 10 mm of the insulation of the two cable ends. Cut the wires carefully and remove the coating.



#### Step 8

Strip off the wire insulation at the other end of the cable (2 x 2,5 mm<sup>2</sup>) Remove 10 cm of the coating and strip 10 mm of the insulation of both wires. Open the box es and cable glands at the solar module.



#### Step 5

Strip the insulation of one cable end (2 x 2,5 mm<sup>2</sup>). Carefully cut a piece of the upper coating and remove it, so two individual wires become visible.



#### Step 7

Loosen the screws distinguished with a solar module label at the solar charge controller. Insert the positive wire (brown) into the positive contact (+) and the negative wire (blue) into the negative contact (–). Tighten the screws.

#### Step 9

Slip the cable gland and the seal in the appropriate order onto the cable. Insert the wires into the box. Screw the positive wire (brown) at the positive contact (+) and the negative wire (blue) at the negative contact (–). Tighten the cable gland.





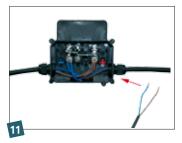
#### Step 10

Strip the insulation on both ends of the second cable (2 x  $2,5 \text{ mm}^2$ ). Remove 10 cm of the coating and strip 10 mm of the insulation of both wires.



#### Step 11

Slip the cable gland and the seal in the appropriate order onto the cable. Insert the wires into the box. Screw the positive wire (brown) at the positive contact (+) and the negative wire (blue) at the negative contact (-). Tighten the cable gland.



#### Step 12

Slip the cable gland and the seal in the appropriate order onto the other end of the cable. Insert the wires into the box at the second solar module. Screw the positive wire (brown) at the positive contact (+) and the negative wire (blue) at the negative contact (-). Tighten the cable gland.



### Step 13

Close the boxes and tighten the cable glands.

