

Additional operating instructions for VivoPort K3 door systems Solar module incl. charging regulator Art. No.: 80 805 223

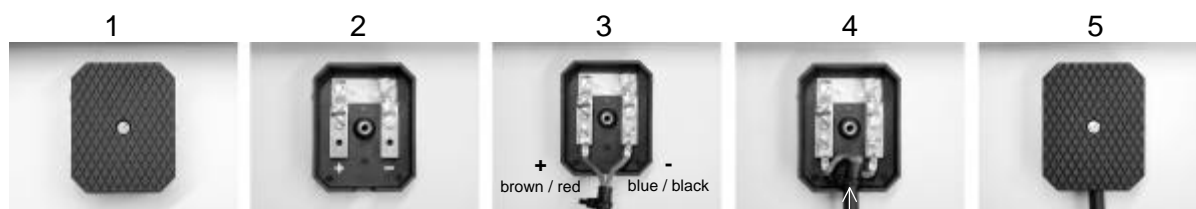
Only to use as a supplement to the additional installation instructions for VivoPort K3 door systems!

Laying and installing connection cable

Pull the open cable end through any needed drill holes or openings of your garage and roughly lay the cable as envisaged in the final position.

Caution: Do not as yet insert the cable into the battery pack! The open cable end could produce a short-circuit which would destroy the battery pack!

Now connect the cable to the solar module. Proceed as follows:



1. Unscrew the casing screw on the back of the panel and remove the cover.
2. Unscrew the screws for the ring lugs from the connection terminals.
3. Screw the connection cable ring lugs onto the connection terminals.

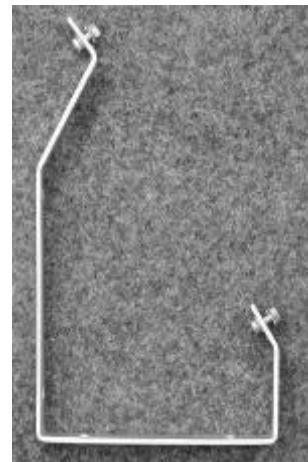
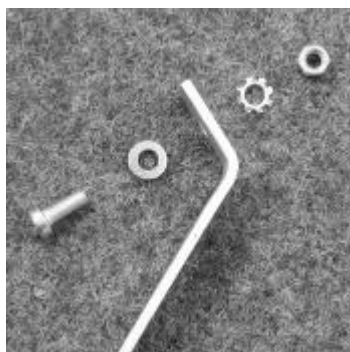
Caution: Make sure the polarity is correct:
+ : brown or red wire
- : blue or black wire

Tighten the screws and ensure that the cables point downwards to stop them touching the ring lugs (risk of a short-circuit!).

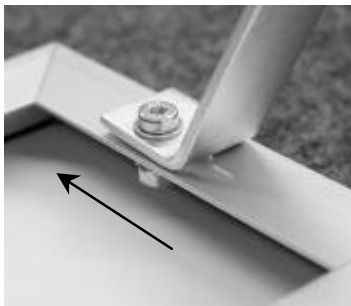
4. Put the cord grip (cable tie) of the connection terminal into the inside of the casing.
5. Re-screw the cover tightly onto the casing.

Fitting retaining clips

The retaining clips must now be fitted. Firstly insert the supplied cylinder screws with a washer, as shown, into the drill holes of the retaining clips. Then push a lock washer onto the screw and twist a nut onto the screw. Make sure you only loosely fix the nut by just turning twice.



Gently place the solar module – as shown – on a soft surface and fit the retaining clips. Note that the retaining clips must be fitted on the right sides so they are flush with the panel aluminium frame. For fitting purposes, place the screws of the retaining clips into the large opening of the slots. Then push the retaining clip upwards into the upper, narrow part of the slot. In so doing, ensure that the lock washer is seated under the aluminium frame of the solar module. (see illustration).



Now tightly screw on the retaining clips. In so doing, hold down the nuts by hand until the lock washer stops them from also being turned.

The solar module is now completely fitted and can be set up.

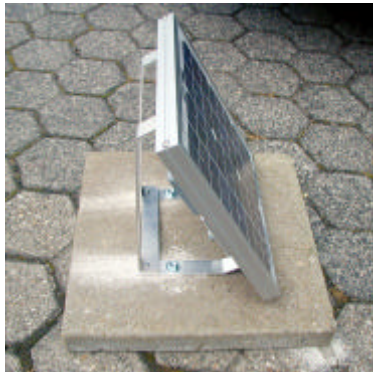


Instructions on setting up the solar module

At all events, the solar module must be aligned to face south. And this at an angle of approx. 30°. This angle is pre-determined by the support mounting.

Choose a site where the solar module is not affected by the shadows of trees, buildings, chimneys or aerials. Even shadows of short duration can lead to considerable solar module yield losses. Shadows can have a negative impact on proper functioning of the door operator.

The solar module can be directly secured to any building wall facing south. However, the recommendation is usually to mount the solar module on a paving slab and place the panel on the garage roof (see installation example)



Installation example,
illustration similar

With installation, make sure that the solar module is not in water given heavy rainfall (e.g. puddles on the roof). Any rain falling must drain off immediately.

Ensure that the position is firm and stable. Never set up the solar module without additional fastening.

Check regularly to see if the solar module, for instance, is covered by leaves or is dirty. In such an instance, carefully clean the surface with a moist cloth.

Connection to the battery pack

The battery pack can be connected once the solar module is fully installed. Insert the solar module plug into the left-hand side "charging" socket of the battery pack. If the sunlight is intensive enough, the battery of the pack will be re-charged.



Note: The charging control light of the battery pack only operates given charging from a 230 V mains supply. An optical charging check under solar operations is not possible!

Following installation of the operator and solar module, the battery pack should firstly be completely charged from the 230V mains supply.

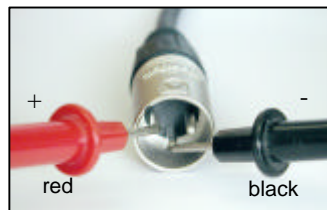
Note: The generated energy of the solar module might not suffice during the dark winter months or under unfavourable installation conditions. In this case, the battery pack needs to be charged or re-charged with the help of a 230V mains supply.

Checking the solar module function

To check on the function of the solar module, proceed as follows:

Pull the solar module plug from the battery pack and hold the testing tips of a voltage meter (voltmeter or multi-meter) on Pin 1 (+) and Pin 3 (-) of the solar module plug (see illustrations). Depending on the sunlight available at the time, the meter must show a voltage of between approx. +6V and +14V. The charging regulator integrated in the connection cable may result in the gauged voltage pulsating.

Pin 1: plus pole +
Pin 3: minus pole -



Technical data

Solar module incl. charging regulator, Art. No.: 80 805 223

Output: 5.2Wp
I_{max}: 309mA
U_{out}: 14.2V

Connection cable: Length 8m, charging regulator is integrated in the connection cable
Panel dimensions: 330mm x 293mm (without support mounting)
Weight: approx. 1.6kg
Mounting angle: approx. 30° (pre-determined by support mounting)

Ground and wall fastenings can also be supplied with the mounting support.

