



### Instructions for use

### **Boxes for solar panels**

Thank you for purchasing a product fence from company VNT electronics s.r.o.

### **IMPORTANT NOTIFICATIONS**

- When installing, comply with all safety regulations.
- · Before carrying out any work on electrical equipment, make sure that it is properly switched off.
- Please dispose the waste according to the applicable regulations.
- Never connect the solar panel directly to the energizer or battery. Always use a regulator to avoid damage of the equipment!

Our solar panel boxes are completely ready to use.

A solar panel controller is already installed to regulate the voltage received from the sun. For easy hanging of the energizer, a DIN rail is attached.

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# Portable box instructions for solar panels 40W, 100W, 200W

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### 1. Connection of 40W, 100W, 200W panel and battery with portable box (Art.No. 8150 and 8161)

### 1.1 Connecting the solar panel to the box

After assembling the solar panel with the console to the box or to the grounding screw (Art.No. 8183), connect the panel cables to the cables on the box, plus with the red cable and minus with the black cable. Push the connectors down enough to snap into place. Use the extension cables (Art.No. 8245) to connect the panel to the screw.





Red cable with the description (+) on the panel with the red cable on the box

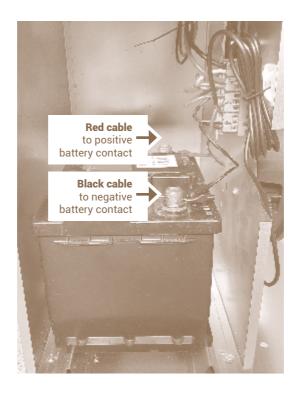
Black cable with description (-) on the panel with the black cable on the box



The 100W and 200W solar panels have both connection cables in black color, which is why they are marked with a label and connector. The 40W solar panel has connection cables distinguished by colour, black (-) and red (+).

### 1.2 Connecting the battery to the box

Open the box by removing the metal side and sliding it out into the open space of the box. Connect the battery by placing the battery as close as possible to the box in the space where it is then inserted with positive contact to the box. Connect the red cable to the plus contact, then slide the battery into the box far enough to leave the negative contact of the battery outside, and connect the black cable to the negative contact. Slide the battery into the box far enough so that when the lid is inserted, the lid does not touch the wires or the battery.



### 1.3 Connecting the energizer to the box

### **Required material:**

- · 2 pcs DIN rail holder
- 4 pcs 4 × 16 mm screw, countersunk head

Screw the DIN rail brackets onto the energizer (see DIN rail bracket instructions). Plug the cable prepared in the box into the bottom connector in the energizer (BATTERY). Mount the energizer and clip it onto the DIN rail in the box. Connect the high voltage cables - ground and fence.



Make sure to keep sufficient insulation, distances and spacing of other cables from the wall of the box. The box is connected to a high voltage fence!



### 1.4 Antenna installation and connection

When installing an energizer that communicates via an antenna (products from fencee power DUO RF PDX and energy DUO RF EDX series), it is necessary to lead an external antenna (Art.No. 8056, 8057) outside of the box, so the signal is not disturbed.

In case of using energizer without RF communication you can skip this point.

### **Required material:**

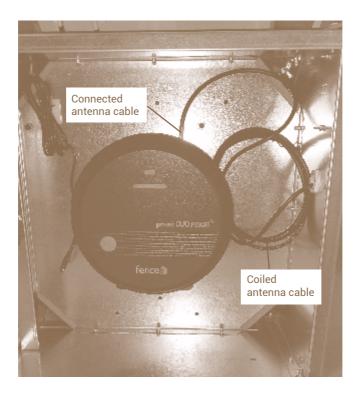
- 1 pc external antenna
- 2 pcs 4.2 × 13 mm tex screw, countersunk head

Screw the antenna to the box into the prepared holes. Tuck the antenna cable into the box through the hole in the rubber grommet. Coil the antenna cable in the box next to the energizer and screw the antenna connector onto the energizer.





When using the external antenna outside the box, there is the same connection procedure and the same grommet for entering in the box.



### 1.5 Optional features

Extension cables (Art.No. 8245), see chapter 1.1 Safety screw for portable box (Art.No. 8168)

- used to increase the protection of the box against theft
- quick and easy installation
- galvanized
- screw length 34 cm
- also usable as an earthing rod



Bolt the screw into the ground



Put the box on the screw





# The safety box instructions for solar panels 40W, 100W, 200W

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	1.5 Installation of the box to the ground
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### 1. Connection of 40W, 100W, 200W panel and battery with safety box (Art.No. 8151 and 8162)

### 1.1 Connecting the solar panel to the box

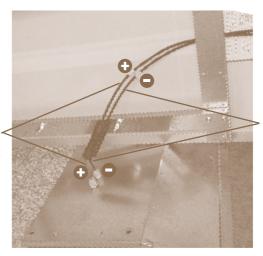
Connect the panel cables to the cables on the box, plus with red and minus with black. Push the connectors together enough, so they connect properly. Attach the solar panel with console to the box or to the grounding screw (Art.No. 8183).

Use extension cables (Art.No. 8245) to connect the panel to the grounding screw.





Red cable with the description (+) on the panel with the red cable on the box



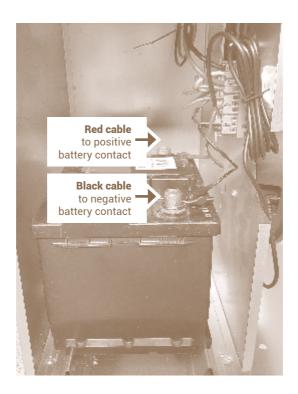
Black cable with description (-) on the panel with the black cable on the box



The 100W and 200W solar panels have both connection cables in black color, which is why they are marked with a label and connector. The 40W solar panel has connection cables distinguished by colour, black (-) and red (+).

### 1.2 Connecting the battery to the box

Open the box by removing the metal side and sliding it out into the open space of the box. Place the battery as close as possible to the box in the space where it is then inserted with positive contact to the box. Connect the red cable to the plus contact, then slide the battery into the box enough to leave the negative contact of the battery outside. Connect the black cable to the negative contact. Then, slide the battery into the box far enough so that when the lid is closed, it does not touch the wires or the battery it any point.



### 1.3 Connecting the energizer to the box

### **Required material:**

- · 2 pcs DIN rail holder
- 4 pcs 4 × 16 mm screw, countersunk head

Screw the DIN rail brackets onto the energizer (see DIN rail bracket instructions). Plug the cable prepared in the box onto the bottom connector of the energizer (BATTERY). Deploy and clip the energizer onto the DIN rail in the box. Connect the high voltage cables - grounding and fence.



Make sure to keep sufficient insulation, distances and spacing of other cables from the wall of the box. The box is connected to a high voltage fence!



### 1.4 Antenna installation and connection

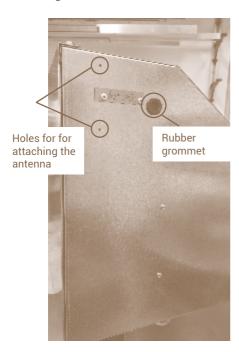
When installing an energizer that communicates via an antenna (products from fencee power DUO RF PDX and energy DUO RF EDX series), it is necessary to lead an external antenna (Art.No. 8056, 8057) outside of the box, so the signal is not disturbed.

In case of using energizer without RF communication you can skip this point

### **Required material:**

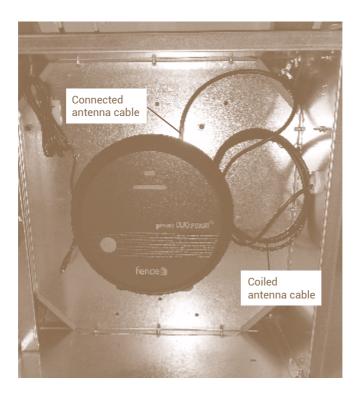
- 1 pc external antenna
- 2 pcs 4.2 × 13 mm tex screw, countersunk head

Screw the antenna to the box into the prepared holes, tuck the antenna cable into the box through the hole in the rubber grommet. Coil the antenna cable in the box next to the energizer and screw the antenna connector onto the energizer.



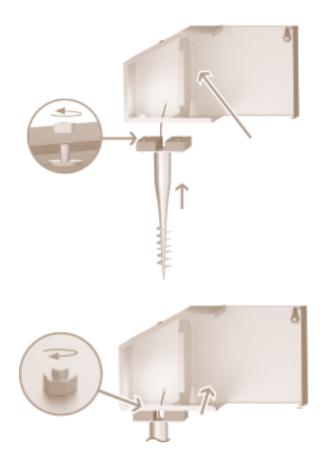


When using the external antenna outside the box, there is the same connection procedure and the same grommet for entering in the box.



### 1.5 Installation of the box to the ground

- 1. Screw the mounting post into the ground, so that at least the whole thread of the screw is screwed in the ground. Do not screw the mounting post too deep, keep the insulation board at least 10 cm above the ground or vegetation. Prevent vegetation from touching the box.
- 2. Unscrew the nuts and washers from the mounting post. Put the box on the four screws of the mounting post, while pushing the black cable into the box through the hole in the bottom of the box. Screw and tighten the nuts and washers on the four screws.



### 1.6 Optional features

Extension cables (Art.No. 8245), see chapter 1.1



## fence Electric fencing

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