



## SCHRÁNKA k solárním panelům BOX for solar panels



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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!

For your safety and the safety of your surroundings, place a WARNING ELECTRICAL DEVICE sticker in a visible place on the box.



Our solar panel boxes are completely ready to use.

If you have our complete box, it is already equipped with a regulator and will regulate the voltage received from the sun.

If you only get a separate box, you need to install a regulator between the solar panel and the battery to avoid destroying the device.

For easy hanging of the energizer, a DIN rail is attached.

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# **Transport box instructions for solar panels 40W, 100W, 200W**

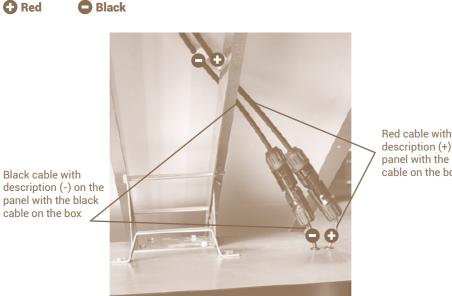
#### CONTENT

1	Connection of 40W, 100W, 200W panel and battery with transport box
	1.1 Connecting the solar panel to the box
	1.2 Installing the battery cable
	1.3 Connecting the battery to the box
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	1.5 Antenna installation and connection (Art.Nr. 8056, 8057)
	1.6 Optional features

### **1.** Connection of 40W, 100W, 200W panel and battery with transport box (Art.Nr. 8528)

### 1.1 Connecting the solar panel to the box

After assembling the solar panel with the console to the box or to the ground screw (Art.Nr. 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.Nr. 8245) to connect the panel to the screw.



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

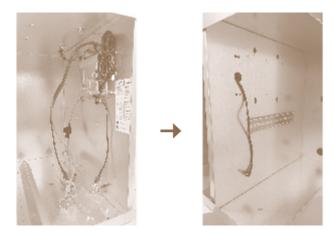


The 100W and 200W solar panels have both connection cables in black color, which is why they are marked with a label and connector. The 40W solar panel has connection cables distinguished by colour, black (-) and red (+).

### 1.2 Installing the battery cable

Open the box by sliding the metal side into the open space of the box. Take the battery cable supplied with the energizer. Untie the cable and loosen the battery ends so they are the same length as the battery cables from the regulator. Loosen the end with the energizer connector enough to easily plug into the energizer (see picture). Tie off the remaining strand of cable with the original tie wire.

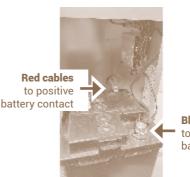
Insert the binding wire, supplied with the box, through the two holes in front of the regulator and use this wire to tie the battery cable to the wall of the box. Push the necessary end of the cable through the large hole in the wall.



### 1.3 Connecting the battery to the box

Place the battery on the edge of the box with the positive contact (+) first and connect the red cables to this contact. Then insert the battery into the box and connect the two black cables to the negative contact (-). The battery must be inserted in the box so that when the box lid is inserted, no contact between the lid and the wires or battery will occur.





Black cables to negative battery contact

### **1.4 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 – earthing and fence, and lead them through the side grommet as shown.



### 1.5 Antenna installation and connection

This point is only for energizers with RF communication (energizers DUO RF PDX and energy DUO RF EDX series ), omit this point if using another energizers series.

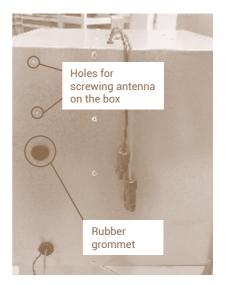
### **Required material:**

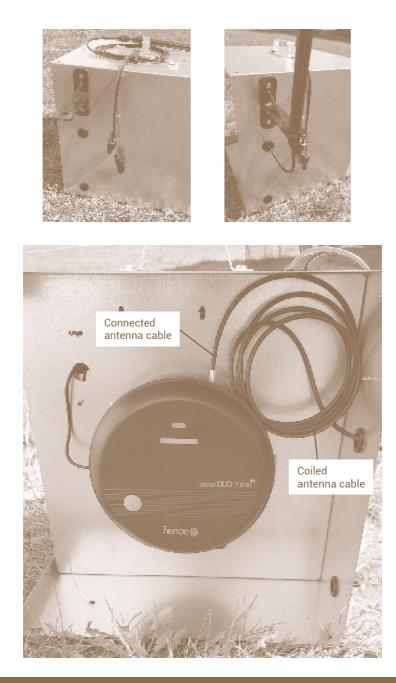
- 1 pc external antenna
- 2 pcs 4,2 × 13 mm tex screw, countersunk head

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.Nr. 8056, 8057) outside of the box, so the signal is not disturbed.

Unscrew the antenna from the bracket, screw the bracket in place of the prepared holes, screw the antenna onto the bracket. Tuck the antenna cable into the box through the hole in the rubber grommet, coil and tie the antenna cable in the box next to the energizer and screw the antenna connector onto the energizer.







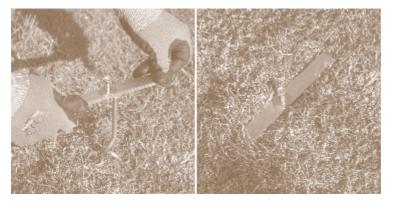


When the external antenna is placed outside the box, the connection and the grommet for entering the box are the same as in procedure 1.5.

### **1.6 Optional features**

Extension cables (Art.Nr. 8245), see chapter **1.1** Anti-Theft post for transport box (Art.Nr. 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



Place the box on the screwed screw



Attach the safety screw and the box together using the attached nut

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

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	1.4 Connecting the energizer to the box
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	1.6 Connecting the solar panel to the box
	1.7 Optional features

# **1.** Connection of 40W, 100W, 200W panel and battery with security box (Art.Nr. 8526)

### 1.1 Installing the box in the ground

Materials needed for post:

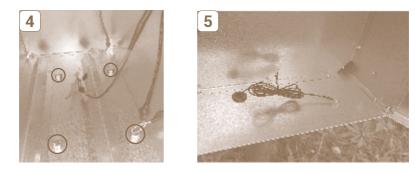
- 1 pc mounting post
- 1 pc reduction plate
- 4 pcs insulator
- 8 pcs screw M8×10
- 4 pcs screw M8×20
- 4 pcs nut M8
- 4 pcs washer M8
- 1. Screw the insulators onto the reducing plate, use 4 pcs M8×10 screw.
- **2.** Install the screw so that at least the entire thread of the screw is screwed into the ground. At the same time, the screw plate must be at least 10 cm above the ground or vegetation.
- **3.** Screw the reduction plate onto the screw, using a 4 pcs M8×20 screw and a 4 pcs M8 nut. Alternatively, a cable for connecting the generator ground can be fitted under one nut.

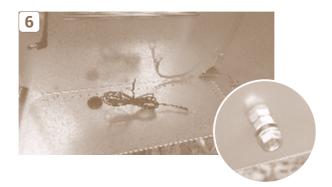




# Materials needed for the box – the red cable:

- 1 pc red cable
- 1 pc screw M8×20
- 2 pcs M8 nut with collar
- **4.** Place the box with the bottom and four holes on the four mandrel insulators so that they overlap, and screw 4 pcs M8×10 screws with 4 pcs M8 washers inside the box and tighten them.
- **5.** The diaphragm in the grommet at the bottom of the box needs to be cut, but only enough to stretch the cable eye. Unwind the ground cable and pull it through the rubber grommet. Coil the cable to a length that will reach the energizer at the black terminal.
- **6.** Put the red cable with eyes on the M8×20 screw, push the screw through the wall of the box and tighten the M8 nut from the outside. Another use of this screw and the second M8 nut is to connect the box to the fence. The other end of the red cable is fitted to the red terminal of the energizer.





### 1.2 Installing the battery cable

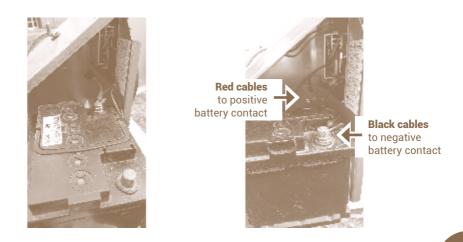
Open the box by sliding the metal side into the open space of the box. Take the battery cable supplied with the energizer. Untie the cable and loosen the battery ends so they are the same length as the battery cables. Loosen the end with the energizer connector enough to easily plug into the energizer (see picture). Tie off the remaining strand of cable with the original tie wire.

Insert the binding wire, supplied with the box, through the two holes in front of the regulator and use this wire to tie the battery cable to the wall of the box. Push the necessary end of the cable through the large hole in the wall.



### 1.3 Connecting the battery to the box

Place the battery on the edge of the box with the positive contact (+) first and connect the red cables to this contact. Then insert the battery into the box and connect the two black cables to the negative contact (-). The battery must be inserted in the box so that when the box lid is inserted, no contact between the lid and the wires or battery will occur.



### 1.4 Connecting the energizer to the box

### **Materials needed:**

- · 2 pcs of DIN rail holder
- 4 pcs of 4 × 16 mm screws, countersunk head
- 1. Screw the DIN rail brackets onto the energizer (see DIN rail bracket instructions).
- 2. Connect the high voltage cables ground and box.
- 3. Connect the cable prepared in the box to the bottom connector in the energizer (BATTE-RY), mount the energizer and clip it onto the DIN rail in the box.



Care must be taken to maintain sufficient insulation, distance and spacing of uninsulated cables and terminals from the wall of the box. The box is connected to a high voltage fence!





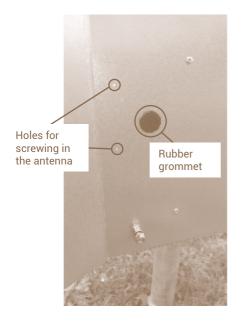
### 1.5 Antenna installation and connection

### **Material required:**

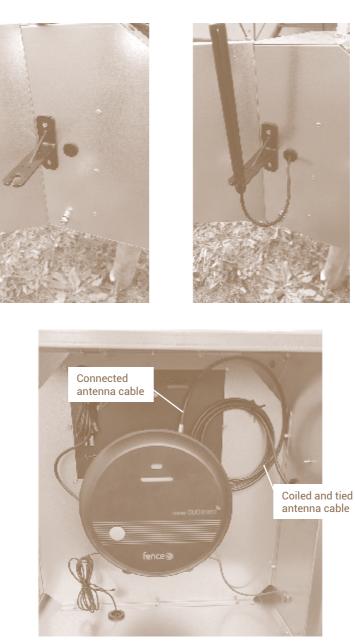
- 1 pc external antenna
- 2 pcs tex 4.2 × 13 mm screw, countersunk head

When installing a energizer that communicates via an antenna (products from the fencee power DUO RF PDX and energy DUO RF EDX series), it is necessary to take the external antenna (Art.Nr. 8056, 8057) outside the box to avoid signal interference.

Unscrew the antenna from the bracket, screw the bracket in place of the prepared holes, screw the antenna onto the bracket. Tuck the antenna cable into the box through the hole in the rubber grommet, coil the antenna cable, tie it to the wall in the box next to the energizer and screw the antenna connector to the energizer.





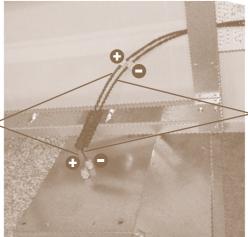


When placing the external antenna outside the box, the connection design and the grommet for entering the box are identical to procedure 1.5.

### 1.6 Connecting the solar panel to the box

Connect the panel cables to the box cables – plus with the red cable and minus with the black cable. Push the connectors in sufficiently so that they click into place. Screw the solar panel with bracket to the box or to the screw (Art.Nr. 8183). Use extension cables (Art.Nr. 8245) to connect the panel to the screw.





Connect the red cable labeled (+) on the panel to the red cable on the box Connect the black cable labeled (-) on the panel to the black cable on the box

The 100W and 200W solar panels both have black connection cables, so they are distinguished by a label and a connector. The 40W solar panel has connection cables differentiated by colour, black (-) and red (+).

### **1.7 Optional features**

Extension cables (Art.Nr. 8245), see chapter 1.6





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