

# USE AND MAINTENANCE INSTRUCTIONS

## Photovoltaic power kit

To use the photovoltaic kit correctly, follow the instructions below:

### Installation guide

Place the photovoltaic panel on the pole facing south. Make sure there are no obstacles to sunlight (trees, buildings, etc.) from 10 a.m. to 4 p.m., especially during Winter. Place the box nearby the photovoltaic panel. Generally, the box is installed on the same pole as the photovoltaic panel. In the case of a compact photovoltaic kit, the panel and the box are integrated in a single solution.

Access the box and connect the devices to the charge regulator respecting the safety standards in force, as indicated below:

- Positive and negative load.
- Positive and negative battery.
- Positive and negative photovoltaic panel.

The kit contains an AGM/GEL battery. To ensure the correct functioning, it is necessary to create the connecting bridge on the terminal blocks as shown in Fig. 2 (3). Connect a sufficiently charged battery (>12.8V).

NOTE: respect the polarity indicated on the terminal block.

### Functioning

Verify the correct functioning making sure that:

- The green LED light (1) turns on once the photovoltaic panel catches the sunlight.
- There is current on the output terminal block (load).

### BATTERY TESTER

There is a battery tester (5) that shows the level of charge. In case the battery level lowers below 11.5V, the charge regulator disconnects the load and turns on the red LED. The load will be reconnected only once the battery charge reaches a level of 12.6V. For further informations about the battery tester, see the section "Problems resolution".

Check the correct ignition of the connected load.

The device is correctly installed.

### Maintenance

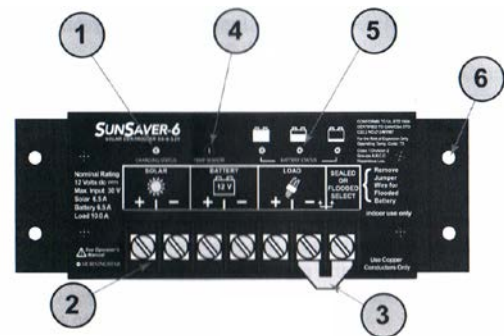
Check periodically:


1. The charge level of the battery, especially during Winter.
2. The cleanliness of the panel to guarantee the efficiency during the charge (e.g., snow, leaves etc.).
3. The condition of the electric connections. Replace in case of deterioration of the insulation material.
4. The tightening of the bolts.

Fig.1



Fig.2



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## Problems resolution

In case of malfunctioning, verify the error message that appears on the battery tester of the charge regulator:

LED battery tester	Description	Solution
reen flashing light	The battery is charged	Correct functioning of the kit
reen steady light	The battery is almost charged	Correct functioning of the kit
z o o } Á r • š	The battery level is at 50%	Check sun exposure of the panel
Z r( o o } Z P } Z P	The battery is almost dead	Check sun exposure of the panel
Z } t o } ( ) • •	The battery is dead	Check sun exposure of the panel
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Z = P Œ v I Œ	Load in short circuit/overload	Check load/connections
Sequenza Rosso / verde / giallo	Failed self-diagnosis	Disconnect and reconnect battery and photovoltaic panel

## Caratteristiche regolatore fotovoltaico

CARATTERISTICHE REGOLATORE FOTOVOLTAICO		
Codice regolatore	82016	82018
Modello regolatore	SunSaver 06	SunSaver 10
Corrente max pannello fotovoltaico	6A	10A
Corrente max carico	6A	10A
Potenza max pannello fotovoltaico	50W	140W
Tensione nominale pannello fotovoltaico	12Vdc	
Tensione massima pannello fotovoltaico	25Vdc	
Tempo massimo con sovraccarico +25%	Max 5 minuti	
Corrente di autoconsumo	8 mA	
Tensione di ricarica	Batterie non sigillate	14,4 Vdc
	Batterie sigillate	14,1 Vdc
Protezione blocca scarica	Carico scollegato	11,5Vdc
	Carico ricollegato	12,6Vdc
Temperatura operativa	-40÷60 °C	

Per ulteriori informazioni si prega di contattare:

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