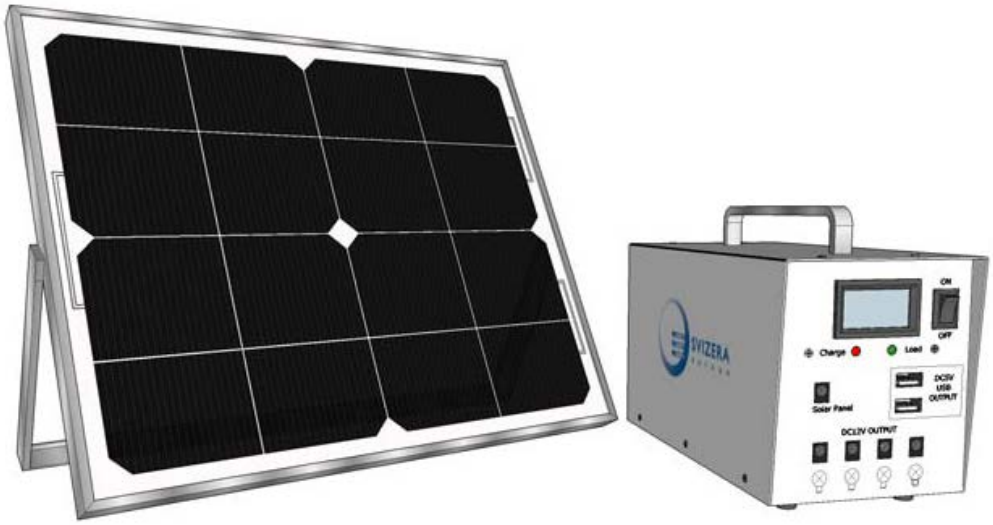
SOLAR POWER SUPPLY SYSTEM



INSTRUCTIONS FOR USE.

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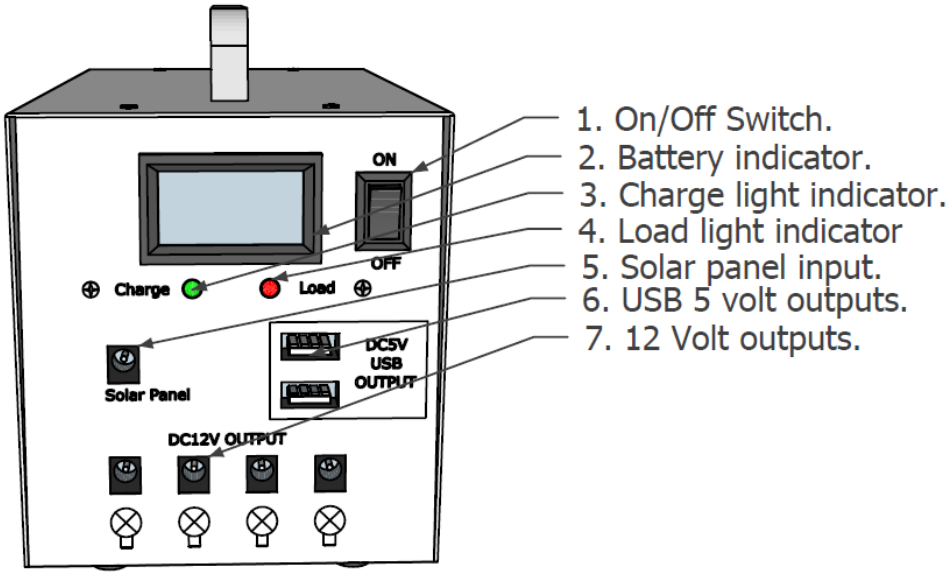
1. OPERATING INSTUCTIONS



1. The On/Off switch
2. Battery indication: normal operating voltages are between 13 and 11 volts.
3. The Charge light: will indicate if the system is receiving power from the solar power.
4. The Load light: will only turn on in auto protect modes and at initial startup.
5. Solar panel input: connect the solar panel or net charger only with this connection.
6. USB output this is a 5VDC output used to power the Olympus CX23 it can also be used charge phones tablets and such.
7. 12VDC outputs these can be used for the supplied led light or to power a Zeiss Primostar I-Led other 12v equipment can also be powered below 30 watts.

2. SYSTEM EFFICIENCY AND MAINTENANCE

The supplied solar panel is a 10 watts panel, this is a number reached in ideal conditions. To achieve the best possible efficiency some steps are important:

1. Adjust and point the solar panel directly at the sun. (if you wish to use the system a for longer period of time without moving the system it is best to position the solar panel when the sun is at its highest point.)
2. Make sure no shadows are casted on the panel.
3. Keep the panel clean and dust free.

The Power supply,

To make sure the power supply has the longest possible life please note the following:

1. Please keep the system upright. (although the use of a gel battery it is still preferred)
2. Avoid shock loads such as drops and vibrations.
3. Keep the system away from water, heat, dust and corrosives.
4. Although the solar panel needs sun, the power supply should be placed in the shade.
5. The battery should be fully charged once a month (please note this could also be done with solar power and does not require the Net charger.)
6. If the system is not used for a longer period of time it should be turned off.

Maintenance,

Please note this system is microprocessor controlled and has auto protection features which eliminates the use of fuses. The only item in the system which will experience wear is the battery which may be replaced if needed. Please contact Svizera Europe BV for a correct replacement battery or use the following type: 12v 7ah Gel. *Al repairs and maintenance should be done by a professional.*

3. TROUBLE SHOOTER

Fault problem	Treatment
Charging indicator not working under charging.	Check: • the battery correct connections • Input port connections • solar panel cable
Battery voltage is below 10.5V and System alarm beeps automatically.	Battery needs to be charged immediately. (By sun or net power)
When Load light turns red or no output.	Battery over discharge, automatic recovery after charged.
Short-circuit/Over-voltage/Low voltage and red Indicator light is on with auto protection mode.	Disconnect the output and charging plug, turn the switch to OFF and then turn to ON again. The red indicator is off after a few seconds, connect the plug again and you can return to normal output mode. If the system will return again to auto protect mode inspect the connections/cables of the powered equipment and solar panel.
The indicator turns red and no outputs under switch on status .	Disconnect the output and charging plug, turn the switch to OFF and then turn to ON again. The red indicator is off after a few seconds, connect the plug again and you can return to normal output mode.

4. SPECIFICATIONS

Specification and accessories		
Solar panel	Monocrystalline silicon	
	Power	10 Watts
	Vmp	18V
	Imp	0.56A
	Voc	21.2V
	Isc	0.62A
Battery	Type	Gel maintenance free
	Specifications	12V 7Ah
Power Controller	Type	Microprocessor controlled
	Specifications	12V 3A(36Watts max)
	Outputs	12V DC voltage regulated ±10%
	USB outputs	5V DC voltage regulated±10%
Wire looms	12V	Zeiss Primostar lLed
		8in one jack plug set
	USB 5V Outputs	Olympus CX 23
		10 in one universal charger
	Light	12V 3W led light
Charging	Charger net power 230V	15V 2A
	World adapter plug	3 parts set