EVEBASE

USER MANUAL

SOLAR PANEL GO 120W / GO 200W / GO 350W



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IN THE BOX



SAFETY INSTRUCTIONS

- The installation and connection of this product should be carried out strictly in accordance with the instructions found in the user manual.
- Use original or certified cables and chargers.
- Only the main body of this product is waterproof. The junction box and controller unit and connection points should not be exposed to moisture or immersed in water or any other liquids.
- Avoid drops, bumps, friction, and other actions that can easily damage the product. Do not use sharp objects on the surface of the panel, and do not knock or impact the product.
- Do not apply pressure to the panel or allow the panel to be dropped on any of its corners, sides or faces. Such actions may result in damage to the solar panel.
- Stop using and contact manufacturer if the product is excessively hot, is emitting odor, deformed or showing any other abnormalities.
- Store in a cool and dry place, and do not expose to sunlight when stored. Recommended storage temperature 0°C / +50°C.
- To avoid the risk of injury, do not disassemble or open the product, and do not attempt to repurpose or modify in any manner.
- This product must not come into contact with highly corrosive substances, or be immersed in corrosive liquids.
- Do not clean with harmful chemicals or detergents. Clean with a dry and soft towel.
- Avoid excessive vibration, impact, or compression during transport, and keep the product away from intense sunlight (during storage) and rain.
- Keep this product away from children under 3 years old for safety.
- Please dispose the discarded product properly according to local legal regulations.

GENERAL SET UP INSTRUCTION

1) Unpack the solar panel at the location where it will be set up. Start with unfolding the back flip. Place the solar panel on solid ground and in the direction of the sun.



2) Unfold the solar panel and use the kick-stands at the back for support.



3) Use the kickstands at the back side of the panels to place the solar panel in the right angle.

Note: To use solar energy most efficiently, try to ensure that the sun shines on the panels at a 90° angle. The efficiency of the solar panel depends upon light intensity and the tilt angle used. The charging power of the panel may be affected by a number of factors such as weather conditions, seasonal changes and location.



CHARGE CONTROLLER



MENU button



1. Short press to switch between different display interfaces.

2. Hold 3 seconds to Enter or Exit interface settings.

UP button



Press to increase value.

DOWN button



Press to decrease value.

Display Interfaces

Description of how to cycle through the display interfaces and adjust the parameters manually:

- 1. Short press the **MENU** button to cycle through the display interfaces.
- 2. Hold the **MENU** button for 3 seconds to **ENTER** a display interface in order to adjust the interface parameter value manually. The value of the parameter will flash when ready to adjust.
- 3. While the value is flashing, press the **MENU** or **DOWN** button to switch or increase and decrease the value of the interface parameter.
- 4. Hold the **MENU** button for 3 seconds to **EXIT** a display interface in order to set the adjusted interface parameter. Note: The automatic memory function of this controller will set the value if this is not done manually.

Overview of the display interfaces:



- Interface 1: Main interface.
- Interface 2: Displays the surrounding temperature of the charge controller.
- Interface 3: Displays the charge current from the solar panel to the connected battery.

Interface 4: Displays the discharge current from the battery to the connected load. The icon in the middle shows how much power is left in the battery.

- Interface 5: Displays the accumulated charging power from the solar panel to the battery.
- Interface 6: Displays the accumulated discharging power from the battery to the load.
- Interface 7: Displays the charging cut-off voltage. The solar panel automatically stops charging the battery when this voltage is reached to prevent damage caused by excessive battery voltage.
- Interface 8: Displays the discharge recovery voltage. The battery will automatically stop powering the load when the voltage is too low. When the battery has returned to a sufficient voltage level, it will automatically start powering the load again.
- Interface 9: Displays the discharge cut-off voltage. The battery will automatically stop powering the load when the voltage of the load is too low.
- Interface 10: Displays the set time for the load output. This can be changed by adjusting the parameters.
- Interface 11: Battery selection menu. The correct battery type must be selected before connecting the battery to the solar panel.

SET UP WITH A PORTABLE POWER STATION



- 1. Follow the general setup instruction of the solar panel.
- 2. Use the 5-meter connection cable and connect this cable to the charging input port of the portable power station. Multiple cable connectors are included (DC/Anderson/XT-60).





Connection Cable (5-meter)

Multiple Connectors (DC/Anderson/XT-60)

Portable Power Station (Not included)

3. Unzip and open the controller bag. This bag is located at the back side of the solar panel.



4. Connect the 5-meter connection cable to the left DC-output port of the solar charge controller.

Note: To secure a stable current it is recommended to connect the power station to the solar charge controller by using the 5-meter connection cable. However, it is also possible to connect the 1-meter solar panel cable directly to the power station. Warning: Do not connect both cables to either one or multiple power stations or other devices simultaneously to avoid damaging.



5. The solar panel will start recharging the portable power station automatically if the set up is completed.

Note: When the solar panel does not start with recharging the portable power station, then please check if the cables are connected as per below schedule. If the set up is not as per below schedule, please disconnect all cables and return to point 2 to restart the setup procedure.



Schedule DC-Connection Cable - Connectors

Portable Power Station

USB-PORT

- 1. Follow the general setup instruction of the solar panel.
- 2. Unzip and open the controller bag. This bag is located at the back side of the solar panel.



3. Connect an USB-A cable of the device to the USB-A output port of the solar charge controller. When the devices are connected, recharging will start automatically. A maximum of two USB-A cables can be connected to the charge controller.



USB-A Output Port



Schedule USB-A Cabling - Devices (USB-A cable and devices are not included)

SET UP WITH OTHER BATTERIES

The solar charge controller makes this solar panel able to recharge a range of batteries. In this chapter is described how to set up the charge controller to recharge other batteries than a portable power station. Read the operation instruction in this chapter carefully before use.

Warning: Please check if the battery is compatible with the output wattage and output voltage of this solar panel. The charge controller is only suitable for regulating solar modules. Do not connect other charging sources to the charge controller.

Operation Instruction

It is possible to connect other types of batteries to the plus and minus poles at the bottom of the controller.

- 1. Check if the battery is compatible with this charge controller. This charge controller is suitable for the following 3 types of batteries:
 - Lead-acid batteries (12V/24V auto);
 - Lithium-ion batteries (3 strings of 11.1V lithium batteries);
 - Lithium iron phosphate (LiFePO4) batteries (4 strings of 12.8V).

Warning: This product can not be used for other batteries.

- 2. Set up the solar panel in a position with sufficient sunlight to power the charge controller.
- 3. Select the battery type in the charge controller menu according to the following steps:
 - a. Press 10 times on the MENU button to go to the BATTERY SELECTION MENU.





MENU button

b. Hold the **MENU** button for 3 seconds to enter the **BATTERY SELECTION MENU**.



BATTERY TYPE INDICATOR (B1/B2/B3) will flash. The **BATTERY TYPE** can be selected now.

c. Press the **MENU / DOWN** button to switch between the different **BATTERY TYPES**. It is only possible to switch and select the correct **BATTERY TYPE** while the **BATTERY TYPE INDICATOR** (B1/B2/B3) is flashing.



- Select B1 for a lead-acid battery (12V/24V auto); Select B2 for a lithium-ion battery (3 strings of 11.1V lithium batteries);
- Select B3 for a lithium-iron phosphate (LiFePO4) battery (4 strings of 12.8V).

d. After selecting the correct **BATTERY TYPE**, hold the **MENU** button for 3 seconds to set the battery type. Note: The automatic memory function of this controller will set the value automatically if this is not done manually.

Warning: Make sure the right battery type is selected before connecting the battery. The product and rechargeable device can get damaged when the wrong battery type has been selected. To adjust this setting in the charge controller, follow previous steps and make sure that the solar panel is set up in a position with sufficient sunlight to power the charge controller.

4. Connect the battery cables (not included) to the correct poles (plus/minus) of the charge controller. The cables should be as short as possible to minimize energy loss.



Charge controller battery poles (plus/minus)

- 5. Connect the battery cables to the correct poles (plus/minus) of the battery. Follow the instructions of the battery manufacturer.
- 6. If applicable, connect the load (external device) to the charge controller. Connect the cables of the load to the correct poles (plus/minus) of the charge controller.



Charge controller load (external device) poles (plus/minus)

7. 12V devices can be connected to the 12V DC output on the right side of the controller. The 12V DC output can only be used if a battery is connected to the poles on the bottom of the controller.



TECHNICAL SPECIFICATIONS

Model	EBSP-GO-120	EBSP-GO-200	EBSP-GO-350
Rated Power	120W	200W	350W
Cell Type	Monocrystalline Silicon	Monocrystalline Silicon	Monocrystalline Silicon
Cell Efficiency	22%	22%	22%
Open Circuit Voltage (Voc)	22V	24V	25V
Short Ciruit Current (Isc)	7.2A	12.5A	22A
Voltage Maximum Power (Vmp)	18V	18V	18V
Current Maximum Power (Imp)	6.7A	11A	20A
Operating Temperature	-10°C/+70°C	-10°C/+70°C	-10°C / +70°C
Connector Type	10A Charge Controller	20A Charge Controller	30A Charge Controller
Folded Dimensions	520 x 370 x 75 mm	545 x 560 x 75 mm	545 x 580 x 105 mm
Unfolded Dimensions	520 x 1660 x 25 mm	545 x 2405 x 55 mm	545 x 4055 x 55 mm
Weight	5 kg	8 kg	13 kg

EveBase Tech B.V. Oostwal 2 1747 EZ Tuitjenhorn The Netherlands

support@evebase.com www.evebase.com

Designed in NL. Made in PRC.