

USAutomatic Battery Controller
Part # 520001



Battery controller is designed to charge 12 vdc batteries of various types using either solar panel or DC transformer part # 520009. Controller is also capable of charging 24 vdc battery if using a 24-volt solar panel. Package includes Power source input adapter plug.

Recommend battery types: SLA (Sealed Lead Acid), FLD (Flooded Lead Acid), GEL and AGM are all ideal choices. We do not recommend using Lithium-ion batteries with this controller.

Controller Features		
12 / 24 vdc battery detection	Battery voltage reading active	PWM charging mode
Battery reverse connection protection	Battery reverse discharge protection	USB power outlet
LCD display	Temperature compensation	Plug N Go connections
Controller Specifications		
10-amp solar charger	6.2 in x 2.75 in x 1 in	Weight 4.2 oz
DC adapter 20vdc @ 1.2 amps max	Float charging 13.8 / 27.6 vdc	Max solar panel 130 watts
Self-consumption < 9ma	USB max current 1.5 amps	Under voltage cutoff 10.5 vdc

Power source input: Solar panel or DC transformer part # 520009 Only. Polarity must be observed.

Installation Steps: The controller is fully automatic for easy and quick installation.

1. Connect battery to the controller.
2. Controller LCD screen will display current battery voltage.
3. Connect Power source input adapter plug to controller power source input
4. Connect Power Source to controller (solar panel or DC transformer)

Power Source Inputs:
1. DC power plug 2.5mm
2. Direct wire leads 14-18 gauge

Battery Connections:
1. Anderson Power Plug
2. Direct wire leads 14-18 gauge



Operation:

Charging indication Symbol.
This symbol when steady indicates that the power source is charging the battery.

No symbol indicates power source is not supplying enough energy to charge.

No symbol indicates power source polarity is reversed, verify power source polarity.

*If the symbol is flashing, the battery is fully charged and has entered float charging state.

Battery voltage reading

Battery symbol / 5 bar battery capacity indicator

Diagnostics:

1. Controller LCD screen is blank:
 - A. battery voltage below cutoff voltage. Load test battery replace or charge as necessary.
 - B. Reverse battery connection indication. Verify battery polarity connection to controller.
2. Battery symbol is flashing – indicates the battery voltage exceeds the rated input voltage of the charger. Disconnect the external battery charger from battery or choose appropriate battery.

Safety Information:

Warning: Risk of explosion! Never install the controller in a sealed enclosure with flooded batteries.

WARRANTY

USAutomatic, LLC warrants this product to be free of defects in materials and workmanship for 1 YEAR. For a period of 1 YEAR following purchase USAutomatic, LLC. will repair or replace the product free of charge, including parts, shop labor and return to customer shipping and handling. This 1 YEAR warranty does not cover the plastic case from normal wear or damage due to misuse.

To have the product sent for warranty consideration, it must be returned with the proof of purchase and a return authorization number. To obtain a return authorization number please call 1-888-204-0174 for assistance. The return authorization number must be clearly marked on the outside of the return package or it may not be accepted.