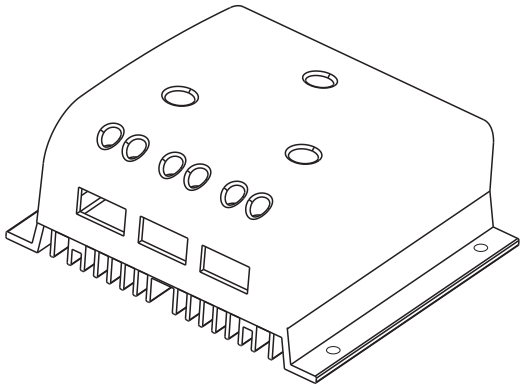


Dual battery charge controller

user manual

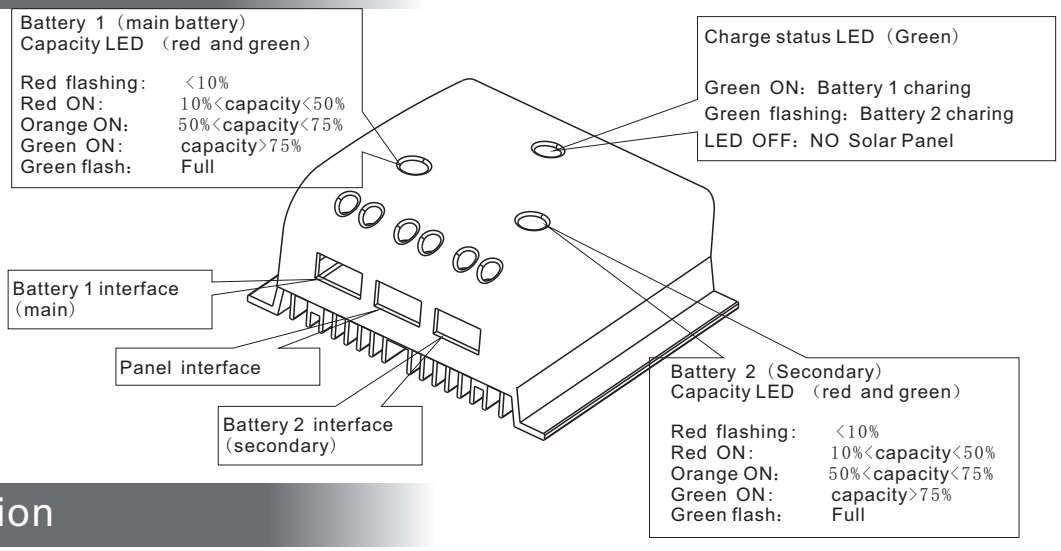
DBC series

Thank you very much for buying our product, please read thoroughly before using the product

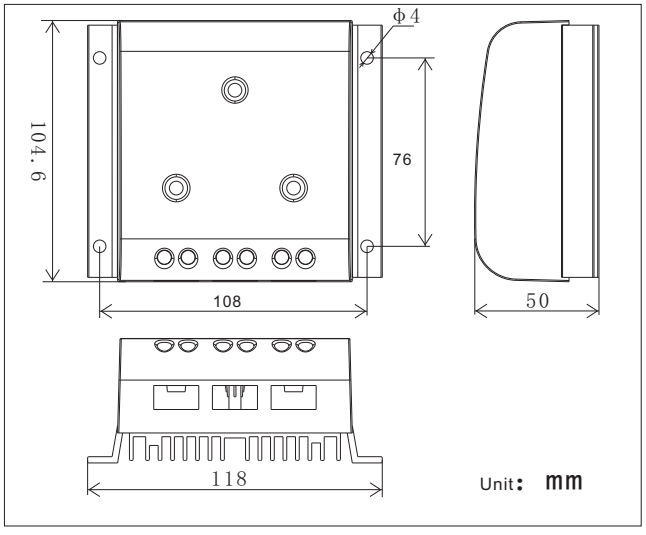
Function

1. The controller is ideal for use with motorhomes, caravans, boats or anywhere there are two independent batteries for instance a starter battery and a leisure battery.
2. LED indicates charging status
3. System voltage: 12V
4. The controller can give two groups of battery charging
5. PWM charging
6. Over charging, short-circuit, reverse polarity & reverse current to PV Protection

Parts name



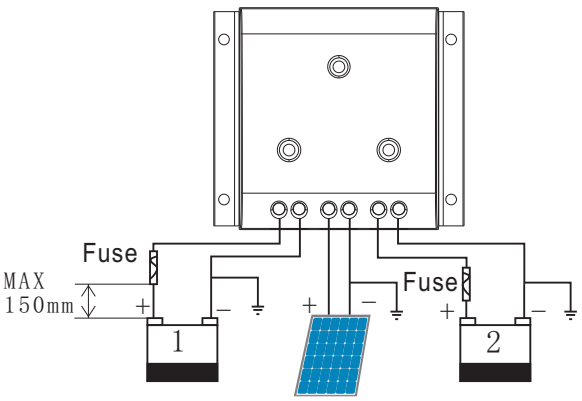
installtion



The controller is intended for indoor use only. Protect it from direct sunlight andpreferrably place it in a dry environment. Please verify that all cable/wire connectionsare done properly and well insulated and that no water or humidity can ingress. Thisavoids any bad or loose connections that would result in excessive heating or furtherdamage. Controller and battery must be installed in the same room.

Connecting

Connect the controller by following the steps described below to avoid installation faults.



- Connect the battery 1 → Connect the battery 2 → Connect the PV
- Additionally, to avoid any voltage on the wires, first connect the wire to the controller, then to the battery, photovoltaic modules.
- Recommended minimum wire size: 2.5 mm2;
- Make sure the wire length between battery and controller is as short as possible.
- Be aware that all negative connections of DBC controller are common and therefore have the same electrical potential. If any grounding is required, always do this on the negative wire.

REMARK: If the device is used in a vehicle which has the battery negative pole connected to the chassis, than any Battery and PV positive must not have an electric connection to the car body. Otherwise t the electronic fuse function of the controller will become impaired(short circuited).
REMARK: Mind the recommendations of your battery manufacturer. We strongly recommend connecting a fuse directly to the battery pole to protect any short circuit on the battery wiring. The fuse must match/attend the nominal current of the controller DBC05: 10A, DBC10: 20A

Instructions for use

1. The controller is intended for use on 12 V systems
2. The DBC charge controllers do not provide an equalization charge, and therefore are suitable for use with lead acid batteries with liquid electrolyte (vented battery) and lead acid batteries with immobilized electrolyte (GEL or AGM type).
3. Charging steps: when there have two battery charging together, the battery 1# have priority to be charged. After battery 1# had been fully charged, the controller will charge battery 2#. When the voltage of battery 1# goes down to 12.8V, the controller will automatically return to charging battery 1#.
5. It is important that the battery gets fully charged frequently (at least weekly). Otherwise the battery will permanently be damaged.

Parameter

Model	DBC10
System voltage	12V
Max, charge current	10A(total)
Max. solar panel power	160W/17.5V
Boost voltage	14.5V
float voltage	13.7V(25℃)
The charge switching voltage	12.8V
Max.wire size	4mm^2
weight	270g
demension	118×105×50mm
Work tempreture	-40-50℃
IP	IP22

Liability Exclusion

The manufacturer shall not be liable for damages, especially on the battery, caused by other use than as intended or as mentioned in this manual or if the recommendations of the battery manufacturer are neglected. The manufacturer shall not be liable if there has been service or repair carried out by any unauthorizedperson, unusual use, wrong installation, or bad system design