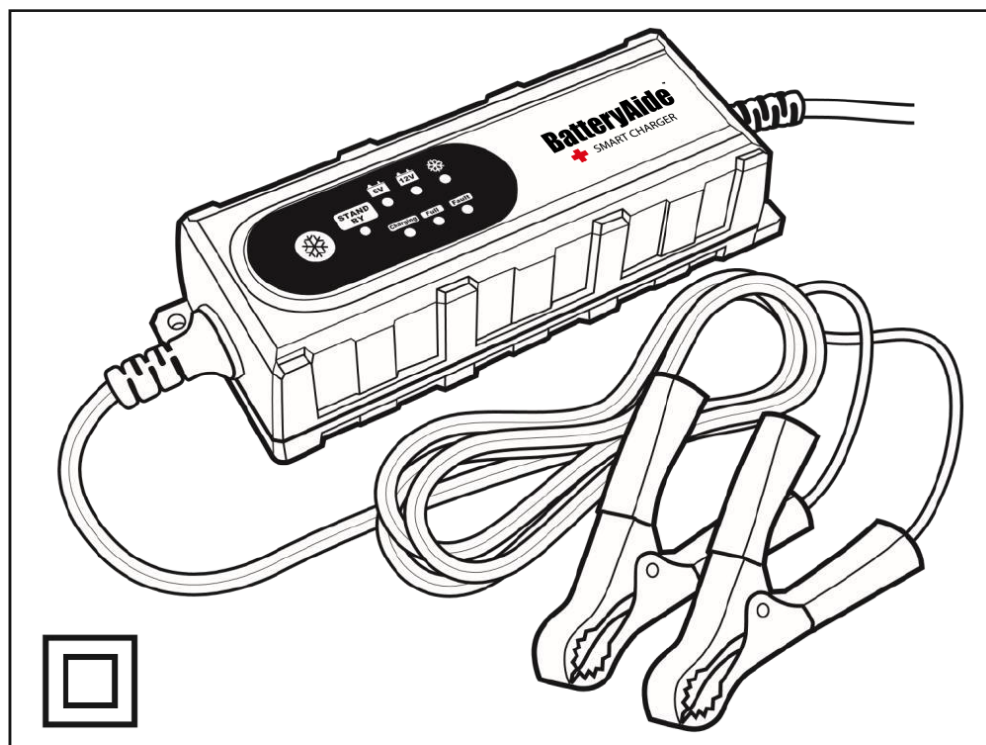


# BatteryAide™

**+** SMART CHARGER

## Smart battery charger

MODEL#: BGSM1



Please note that your safety is your personal responsibility



**PLEASE READ BEFORE USE AND RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.**



**IMPORTANT NOTE:  
ALWAYS CHECK THE EQUIPMENT BEFORE USE.**

## SAFETY INSTRUCTIONS

To ensure safe operation when using your battery charger, make sure you follow basic safety principles to reduce the risk of personal injury, electric shock and fire. Please read the following instructions prior to operating this product and keep for future use.

### **WARNING:**

This device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the device by a person responsible for their safety. Children should be supervised to ensure that they do not play with the device.

- **Guard against electric shock**

Do not work on or near “live” equipment or services.

- **Work environment**

For indoor use only. Do not use the charger in damp or wet areas.

Work in an area that is not cluttered and has good light.

Do not expose the charger to direct sunlight, heat, snow or rain.

Do not use near flammable gases or liquids

Keep work area clean.

- **Clothing**

Avoid wearing loose clothing or jewellery to prevent these from touching the battery or charger.

- **Look after the charger**

When not in use store in a dry, high place or keep locked up out of children's reach.

Use the charger only for its intended purposes.

- **Protect the cable**

Do not carry the charger by the cable or pull the cable to remove the plug from the mains socket.

Protect the cable from sharp objects, heat and oil.

- **Disconnect charger**

When not in use disconnect from mains supply.

- **Check that charger is not damaged.**

Before use, check there is no damage to charger, cord and leads

- **Repairs**

Always have repairs carried out by a qualified person for your safety.

There are no user serviceable parts inside the charger.

Do not open the charger.

If the cord or wires to the crocodile clips become damaged, replaced them prior to use.

- **Gases**

When the battery is being charged you may notice bubbling in the fluid caused by the release of gas.

As the gas is flammable, no naked lights should be used around the battery, and the area should be kept well ventilated. Because of the risk of explosive gas, only connect and disconnect the battery

leads when the mains supply is disconnected

### • Types of battery

The charger is only suitable for Lead-Acid batteries types and should NOT be used to recharge, NICAD or any other type of battery.

Do not use the charger in the circumstances that the output polarity does not match the load polarity.

#### **Summary:**

This charger is designed for charging a variety of SLA batteries widely used in cars, motorbikes and some other vehicles, such as WET, GEL, AGM and so on, whose capacity ranges from 12V/12AH to 12V/120AH. The specialized design of the device, with a three stage charging strategy, permits the battery to be recharged to almost 100% capacity, and allows for long time connection of the battery to the charger when not in use, to maintain a perfect state without damaging it. Two charging modes are available for charging batteries under different ambient temperatures, which is very convenient for the user to select the optimum method to charge the battery more efficiently and safely. Compared to normal battery chargers, this device can recharge deeply discharged batteries that have a minimum of 5 volts remaining. The charger does not rescue completely dead batteries.

Full protection against wrong connection and short circuit ensures that the charging operation is very safe. Due to the electronic switch embedded in it, the charger won't act immediately when a battery is connected to it until a suitable charging mode is selected. This way, the spark, often appearing in the connecting course, is avoided as a result. Furthermore, this device is controlled by an integrated MCU, which makes it smarter and more reliable. This device is IP65 grade dust- and waterproof.

- 6V Motorbike Battery 3-12Ah
- 12V Car Battery 12-120Ah
- Cold Weather 12-120Ah

#### **DANGER**

AVOID GETTING ELECTROLYTE ON YOUR SKIN OR CLOTHES IT IS ACIDIC AND CAN BURN. IF THIS HAPPENS IMMEDIATELY RINSE THE AFFECTED AREA WITH WATER.

## Charging function:

***Always connect the battery terminal leads first then connect to the mains supply***

### 1. RESET

When connected to the battery & then the power supply, the device will automatically reset itself and go into standby mode.

2. The unit will automatically establish the correct battery voltage and then start charging, at this point the charging indicator will illuminate.
3. When the battery is fully charged the Full charged indicator will illuminate.
4. The charger will then maintain battery charge all the time it is connected

If the battery is frozen connect the battery in the normal way and when the unit indicates that it is charging press the mode button so that the frost symbol indicator illuminates, the charger is then set for charging a frozen battery.

If a battery is heavily depleted it will attempt to reclaim the battery.

If the battery is faulty the charger will not charge the battery, and will illuminate the fault indicator and flash, if this situation occurs have the battery checked by your local car battery dealer

The fault indicator will also illuminate and flash if:-

The leads are wrongly connected (reverse popularity)

The leads are short circuited

MODEL# : BGSM1 Technical Specifications	
Voltage :	12V 60Hz
Maximum power:	60W
Charging current:	6Vdc 0.8A $\pm$ 5% 12Vdc 3.8A $\pm$ 5%
Battery types:	Lead Acid, Calcium, Silver, AGM & GEL 3 – 120Ah
Protection:	IP 65

## Caution:

1. Before charging, make sure the input is within the range of rating, otherwise, it may seriously affect the performance of the charger.
2. Always make sure charger and battery are connected correctly, and also make sure no short circuit happens, otherwise, the charger won't work.  
Do not charge a battery next to flammable materials; when connecting or disconnecting the battery, it is better to set the charger to standby mode first so as to reduce the danger of emitting sparks, which  
3. might result in a fire.
4. It is possible that some explosive gases are emitted (for example hydrogen decomposed from water in the battery during the course of charging), therefore make sure that no flames or sparks can come close to a battery to avoid the risk of fire.
5. This charger is especially designed for charging 12V lead-acid batteries, and charging other types of battery with this charger may cause an explosion, i.e. Li-ion.
6. It is recommended to disconnect the battery from the charger when the charger is not connected to the power supply, which can reduce the cost of back drain current to a minimum.
7. If the battery is found to be too hot or leaking out some liquid in the charging course, the charging course must be ceased immediately.
8. When charging an unsealed lead-acid battery with this device, please don't face the battery – or you might get hurt by some corrosive liquid ejecting from the battery.
9. If the supply cord is damaged, it must be replaced by a qualified person in order to avoid a hazard.
10. The battery terminal not connected to the chassis (positive) has to be connected first. The other connection (negative) is to be made to the chassis, remote from the battery and fuel line. The battery charger is then to be connected to the supply mains.
11. After charging, disconnect the battery charger from supply mains. Then remove the negative connection first then the positive connection from the battery

**WARNING! DO NOT ATTEMPT TO CHARGE A NON-RECHARGEABLE BATTERY**