

# BATTERY PROTECTOR v4 QUICK START GUIDE

We **STRONGLY** suggest you study the manual to enable you to to correctly make full use of this product.

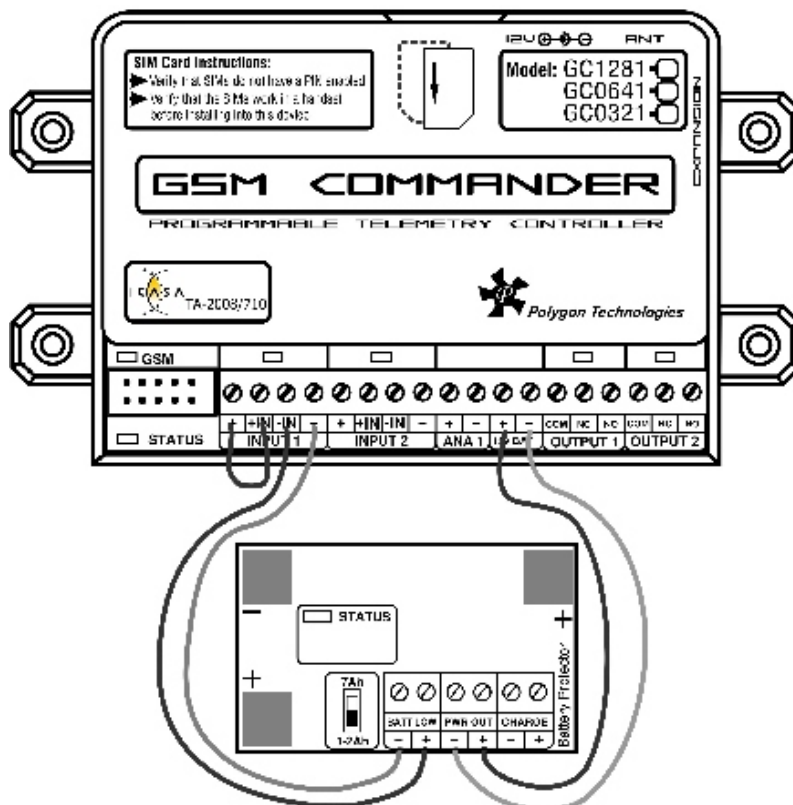
## Installation

The Battery Protector is either soldered directly onto a 12V 1.2Ah or 7Ah battery, or one could connect lead wires to the Battery Protector to connect it to 12V larger batteries. These batteries have different electrical characteristics and the battery protector is programmed to make provision for both. The small switch on the board allows you to easily switch between the 7Ah and 1.2Ah settings.



A charger can be connected to the **CHARGE** terminal. Charging current must be less than 1A. If you need to charge the battery with a higher current, it would be advisable to connect the charger directly to the battery terminals. The load is connected to the **PWR OUT** terminal.

In the case of installation with a GSM Commander, one only needs to connect the **PWR OUT** terminal to the battery terminals on the GSM Commander, since the Battery Protector **PWR OUT** terminal is not limited to only delivering power, it can also accept a small charging current from the GSM Commander.



The Battery Protector has an Open Collector output (**BATT LOW**) that will warn any connected equipment that a load disconnect is imminent. This output will activate twice per second (400ms on, 100ms off) as soon as the under voltage condition is reached. **3 minutes later the Battery Protector will go into “under voltage lockout “mode and the load will be disconnected.** This comes in very handy for installations where you need a bit of a warning, perhaps to automatically switch in a new battery, or to send a message from the GSM commander. Left is a picture as to how this output could be wired to a GSM Commander. When the output triggers, the corresponding input on the GSM Commander will become active.