

# APM

**BALMAR**  
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DC CHARGING SOLUTIONS

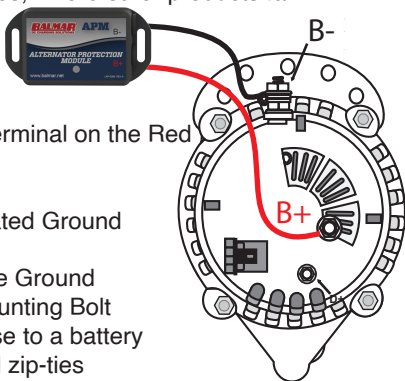
## Alternator Protection Module

The Balmar APM provides best-in-class surge protection using the latest technology developed for the automotive industry. It can protect alternators from damaging effects:

- Battery switch disconnects
- Lithium battery BMS disconnects
- Surges from solenoids, combiners, starters and other motors.

**Green LED** = Protecting  
**Red LED** and/or beep =  
Protection failure, replace  
APM

The Balmar APM excels in both short duration and longer duration spikes, where other products fail.



### Installation:

1. Connect the Ring Terminal on the Red Lead to the B+ Post

2. Black Lead:

If the alternator is Isolated Ground  
Connect to B- Post;

If the Alternator is Case Ground  
Connect to a Case Mounting Bolt

3. Secure the APM case to a battery  
cable with the included zip-ties

**DO NOT PLACE EITHER CONNECTOR  
UNDER THE BATTERY CABLE LUGS**

See Alternator manual for locations of B+ and B- connections

Note: If the nuts securing the cables to the alternator loosen, the APM cannot protect the alternator. No surge protection device can protect against unlimited surges in either amplitude, power or duration. In certain cases it is possible that the APM will provide protection, but in the process become damaged so that it no longer provides protection. In this event, the APM LED will turn red, and it will begin to give a chirping sound. In extreme cases such as lightning strikes, the APM can be damaged to the point it no longer functions or provides feedback. Meets ISO 16750-2 for Load-Dump Surge Specification, ISO-7637-2 for Surge Capability, SAE J1171 for ignition protection and ASTM B117 for Salt Spray/Fog.

Use the correct module for the application - 12v, 24v or  
A mismatch will not provide protection.

**More information available at  
[www.Balmar.net/apm](http://www.Balmar.net/apm) or scan the QR Code.**



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