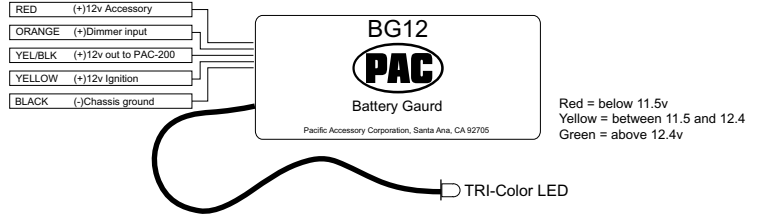


## Mobile Audio Interfacing Equipment

# SPR-200 Battery Isolator and Monitor

The SPR-200 consists of a BG12 battery monitor and a PAC-200 relay which will isolate the primary battery from the secondary battery.

- Great for isolating two different brand or age of batteries.
- Prevents a dead starting battery when listening to stereo with engine off.
- Gives you visual indication of a bad charging system before you get stranded.



### Installation

**Prior to installation, make sure your vehicle charging system is at least 13.8 volts when the vehicle is started and running.**

1. Install the PAC-200 relay as shown in Fig. 1 making sure you fuse both sides of the power wire within 18" of the battery. **Caution! Not fusing the batteries can result in a vehicle fire if the wire ever gets shorted to chassis ground.** The two large copper contacts can be either input or output to each of the batteries. Connect either one of the small terminals to chassis ground and the other terminal to the BG12 YEL/BLK wire.
2. Install the BG-12  
**RED** = Connect to +12v accessory wire. Hot only in accessory and run position.  
**ORANGE** = Connect to +12v dimmer wire. Wire will have +12 volts when parking lights are on.  
**YEL/BLK** = Connect to PAC-200 relay coil terminal as shown in diagram below. (either small silver terminal)  
**YELLOW** = Connect to +12v Ignition. Hot only in run position and not in accessory position.  
**BLACK** = Connect to vehicle's chassis ground. Do not connect directly to battery post.
3. Mount the Tricolor LED by drilling a 1/4" hole in mounting location and insert the LED from behind through the hole. Insert the black bezel onto LED and snap both pieces back into the hole until bezel is flushed against the mounting location.

### Operation

1. When the vehicle is parked and off, the PAC-200 will disconnect the secondary battery which will prevent the non-dominant battery from loading down and draining the other battery.
2. Turn the key on to the ACCESSORY or ON position but do NOT start the vehicle. At this point both batteries should be disconnected from each other. The LED will indicate what the primary battery voltage is. **Green** = 12.4 and above, **Yellow** = 11.5 - 12.4 volts, **Red** = below 11.5 volts.
3. Start the vehicle. The LED should be green and the PAC-200 should be energized, connecting the secondary battery to the primary battery. The Secondary battery should be charging at this point.
4. If at any point the alternator goes bad, the LED will change from Green to Yellow and eventually to Red which at this point the BG12 will disconnect the two batteries. If this occurs, have your charging system checked by a vehicle mechanic.
5. At night time, when the parking lights are turned on, the TRI-color LED will dim to reduce the brightness.

