

# Installation Instructions

### WARNING

Increasing system voltages can damage batteries, and other components in the vehicle. XS Power is in no way responsible for any damage from use of this product. Contact all electrical component manufacturers to determine the maximum safe voltage when using this product in your vehicle. If using the VCM with an XS Power battery, NEVER exceed these voltages: 12V Batteries (14.9V MAX), 14V Batteries (16.9V MAX), 16V Batteries (19.5V MAX).

This instruction sheet is to be used in conjunction with the instructions received with the VCM harness. Each has specific information required for proper installation of the VCM.

### Wiring

Connect the yellow fused wire to alternator charge post with the battery cable.

Connect the black ground to alternator case or other good (bare metal) ground point near alternator.

Connect the red wire to fused side of an ignition switched circuit in fuse box.

Remove the vehicle harness plug from the alternator. Plug the vehicle harness into the VCM harness. Plug the VCM harness into the alternator. Your alternator may have as little as one wire in the vehicle harness, but it will still work with the VCM.

NOTE: Harness plug can be routed through a 1/2" grommet hole.

#### **Multiple Alternators**

The VCM is designed to control one alternator at a time, but in some cases can be wired to control more. Contact XS Power for instructions if this applies to your application.

#### **Pre-installation Settings**

On the rear of the VCM controller are six dip switches. These switch settings are specific to your vehicle and must be set before the VCM is installed. See the VCM harness instructions for the correct settings for your application.

#### Mounting

Clean the area that the VCM is to be mounted and allow to dry. Remove the coating on the adhesive and with firm pressure push the housing in its position. Avoid repositioning after adhesive has contacted dash panel.

NOTE: the adhesive has a cure time of 24 hours. The bond to the dash panel will not reach full strength for that period.

### Operation

In standard mode pressing the + button once will make the display bright, pressing the - button will dim the display.

To enter adjustment mode hold down both buttons for 3 seconds. The display is always bright when in adjustment mode and the decimal point will flash. Use the buttons to adjust system voltage. Press and hold the two arrow buttons again to lock the settings into memory and exit adjustment mode. It is acceptable to leave the VCM in adjustment mode, but note that if the key is switched off the VCM will revert back to the previously locked voltage setting.

## WARNING

Only make VCM adjustments with additional loads like sound systems turned off. If adjustments are made with high amp loads turned on, voltage may unknowingly be adjusted dangerously high and not realized until the load is turned off.

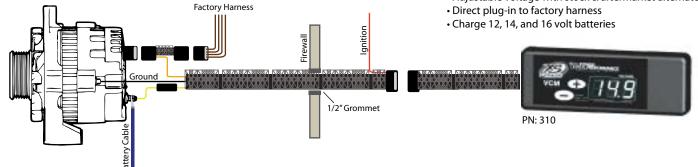
### **Specifications**

Operating voltage- 10~20 volts

12V battery dip switch setting - 14.2 (varies depending on alternator) to 15.2 volts (programmed limit)

14V & 16V battery dip switch setting - 14.2 (varies depending on alternator) to 19.5 volts (programmed limit)





#### VCM Instructions for the 312/313 Harness

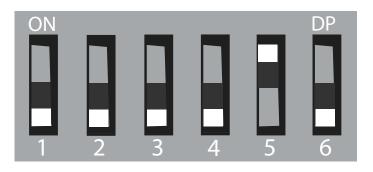
This instruction sheet is to be used in conjunction with the instructions received with the VCM (PN:310). Each has specific information required for proper installation of the VCM.

*Important:* All setting changes must be made with the controller disconnected from the harness. There are application specific settings as well as two user mode settings that must be configured before installing the VCM.

# DIP SWITCH SETTINGS

### **12 Volt Systems**

If the VCM is being used on a standard 12 volt system, set the dip switches to the below settings. This will configure the VCM to the specific application this harness is designed for and will not allow voltage adjustments to exceed 15.2 volts.



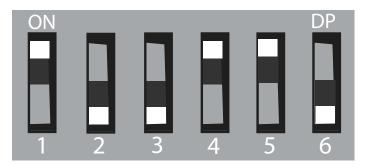
**WARNING:** If using the VCM with a 12 volt XS Power battery, NEVER exceed 14.9 volts.

### WARNING

Only make VCM adjustments with additional loads like sound systems turned off. If adjustments are made with high amp loads turned on, voltage may unknowingly be adjusted dangerously high and not realized until the load is turned off.

### 14 & 16 Volt Systems

If the VCM is being used on a 14 or 16 volt system or a custom 12 volt system, set the dip switches to the below settings. This will configure the VCM to the specific application this harness is designed for and will not allow voltage adjustments to exceed 19.5 volts.



**WARNING:** The high voltages allowed by this mode can damage batteries or other components not designed for excessive voltage. XS Power is in no way responsible for any damage from the use of this product. Contact all electrical component manufacturers to determine the maximum safe voltage when using this product in your vehicle. If using the VCM with an XS Power battery, NEVER exceed these voltages: 12V Batteries (14.9V MAX), 14V Batteries (16.9V MAX), 16V Batteries (19.5V MAX).