Installation Instructions VCMS-APM Analog Power Module

- 1. Determine the best location for the power module. Take into consideration the routing of the interconnecting logic cable that attaches to the 10-pin connector on the top of the module. This cable interfaces the power module to the other VCMS modules in the system. Also take into consideration the routing of the wires to the power outputs, digital inputs, current sensor input and the +12 volt fused power source.
- 2. The power modules have a label that contains the InPower Special Spec. Number and the module's address (Mod #), model number and LOT number. In applications with more than one VCMS-PM1 power module each module will contain a different module address (Mod1, Mod2, Mod3 or Mod4). However, the VCM-APM always uses address Mod5. Be sure to identify the correct Mod # when wiring (See the VCMS Input/Output Diagram for the system being installed.).

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VCMS- MOD5
POWER MODULE
WITH ANALOG CONTROL
WITH 999999 SS43

- 2. We recommend mounting the power module to a flat metal surface. This allows the transfer of heat from the module when operating high current draw loads. Mount the module using four 6-32 screws and lock washers. **Do not drill out the mounting holes to accept larger screw sizes. Do not over tighten the mounting screws.** This will invalidate the warranty.
- 3. The wiring terminals on the power module are male ½ inch faston blade terminals. You will need to attach insulated female terminals to the wires. Use a good quality crimping tool and follow the manufacturer's instructions for the correct terminal types for wire sizes.

NOTE We recommend using wire tags that allow proper wire identification in the event the wires are removed at a later date.

- 4. Wire the ground (GND) terminal to a good quality vehicle ground (Battery Negative). It is important that this ground is connected to the power module before the interconnecting logic cable is connected.
- 5. Wire the four module output terminals (O-1, O-2, O-3 & O-4) to the correct auxiliary loads using the VCMS Input/Output Diagram for reference. Note: Some outputs may not be used.

NOTE If inductive loads (motors, coils, etc.) are used it is important that these devices contain a diode suppressor across the device.

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Installation, Continued

- 6. Wire the four module digital input terminals (I-1, I-2, I-3 & I-4) to the correct input device (e.g., Ignition +12 volts) using the VCMS Input/Output Diagram for reference. Note: Some inputs may not be used.
- 7. Connect the 4-conductor cable for the current sensor. Wire the Red wire to Terminal A, the Green wire to Terminal B and the Black wire to Terminal C. The White wire is not used. Tape it back in the cable.
- 8. Locate the +12 volt power source. Install two 20 amp fuses at the power source. Install wires of suitable size for the amperage and length from the two fuses to the two BAT terminals on the power module. Be sure to determine the current draw of the four power outputs to ensure that the power module is not overloaded. The maximum current draw of the combined loads cannot exceed 40 amps. If the +12 volt power source is directly to the vehicle battery, note that a VCMS configuration with a single power module with all switches and back lights off will draw about 16 milliamps of power. Alternatively, you may obtain the +12 volts power from an ignition switch activated power source.
- 8. Install the other VCMS modules referring to their respective installation instructions.

