

Getting Started with InPower VCMS

The following are steps you need to perform in order to configure your custom InPower *Vehicle Control Module System* (VCMS).

1. Identify and create a list of the vehicle auxiliary 12 volt devices you wish to control.
2. Determine the current draw (amps) of each of these auxiliary devices (loads).
3. Create a list of the push button switches you will need to perform the required logic control functions.
4. Determine the exact push button switch legend wording for each switch. You can have up to three lines of six characters per line. Refer to InPower document OM-127 for a list of available standard switch legends.
5. Based on your list of push button switches, determine the VCMS Switch Module(s) you will need. Switch Modules are available in 4, 6, 8 and 10 switch configurations. You may want to allow for one or two spare switches.
6. Determine how many VCMS power modules you will need based on the number of auxiliary devices you need to control. Refer to the VCMS Power Module product data sheets for details. The currently available power modules include:
 - VCMS-PM1 six power outputs & four digital inputs
 - VCMS-PM1A two power outputs & four digital inputs
 - VCMS-PM1B six power outputs & four digital inputs, 24 volt
 - VCMS-PM1C six power outputs, three digital inputs and one analog input (0 to 30 Vdc)
 - VCMS-PM1D six power outputs, three digital inputs and 1 analog input (0 to 5 Vdc)
 - VCMS-APM four power outputs, four digital inputs & one InPower DCS current sensor input
7. Also take into consideration the digital inputs you will need to sense in order to accommodate your control logic functions. The power modules contain digital inputs that can be programmed to activate from a ground or +12 volt signal. Typical inputs include: Ignition Switch On (+12 volt true), Transmission in Park, Park Brake Set, etc. If you need to monitor battery voltage or current you will need a VCMS-PM1C or VCMS-APM power module.
8. Based on the outcome of items 5, 6 and 7, create a VCMS Input/Output Diagram from the available worksheets. Complete the switch module, switch legends, outputs and output current draw sections. Take care to complete the Input/Output System Diagram worksheet so it accurately depicts the system configuration you desire. This is a very important step that if not done properly, will create problems for you later.
9. Now that you have created the Input/Output System Diagram you are ready to document the system's logic functions. Although the format can vary, we recommend that you start by identifying each power module output and describe the logic functions related to turning that output on. Repeat this for each power output. Example:

Set output O-1 MOD1 (Flood Light) if switch SW2 (Flood Light) is on and input I-1 MOD1 (Ignition) is on.

Please feel free to contact InPower for assistance in configuring the VCMS.