



DVC FAMLEY APPLICATION NOTE

**Driving PVG Type Valves using a DVC10
without “D” Type Outputs (e.g. DVC10-KKK)**

For BIOS, Programming Tool and Program Loader Monitor versions 4.0 and higher

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SCOPE

This application note is intended to provide wiring, use and programming information to Programmers and System Engineers using a DVC10 without a “D” type output to control a PVG type valve. This example has been written for output group 1, adjust as needed.

WIREING

1. Hook the valves power wire to HS1
2. Hook the valves input wire to PWM_1 using the filter circuit shown in Figure, 1
3. Hook the valves Ground wire to Sig Com.

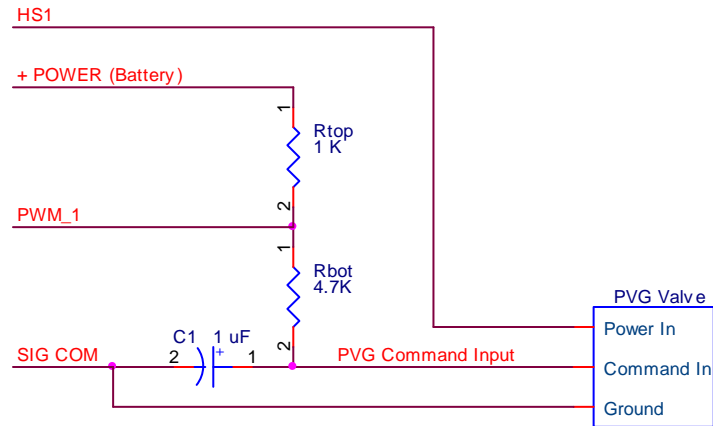


Figure 1, External Filter Circuit and PVG Wiring

PROGRAMMING

1. Set up the output group as Single Coil Low Side, PWM Duty Cycle
2. When you want to use the PVG valve, enable the PWM output and set it to the desired level (ie neutral or 50%) BEFORE turning on HS1 and enabling the valve. This will prevent violent activation of the equipment by ensuring that the valves input is set at a safe level before activating movement. I recommend at least 50mS from turning on the valves input before turning on the valve with HS1, longer if you can.
3. Remember that 100% PWM is close to 0 Volts output and 0% PWM is close to Battery Voltage output. (a simple way to turn it back around is “PWM_1 = (1023 – desired command)”))

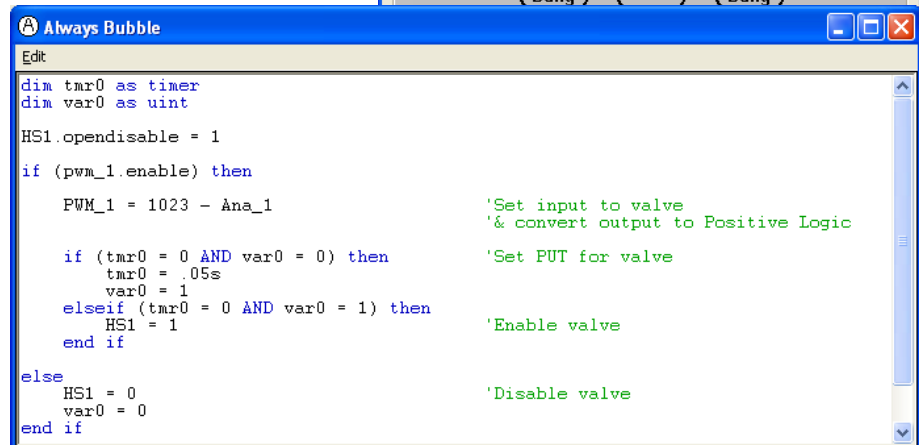
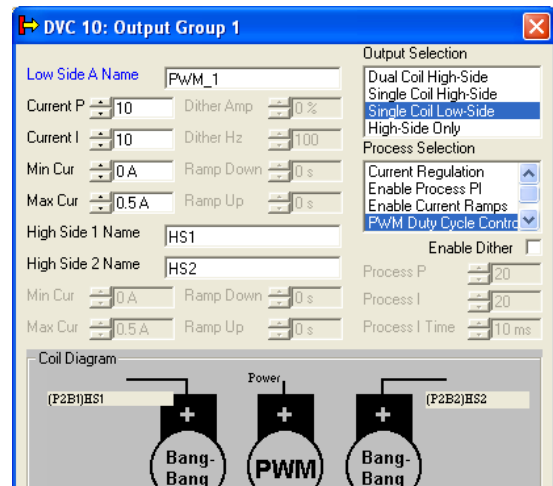


Figure 2, Application Setup and Programming