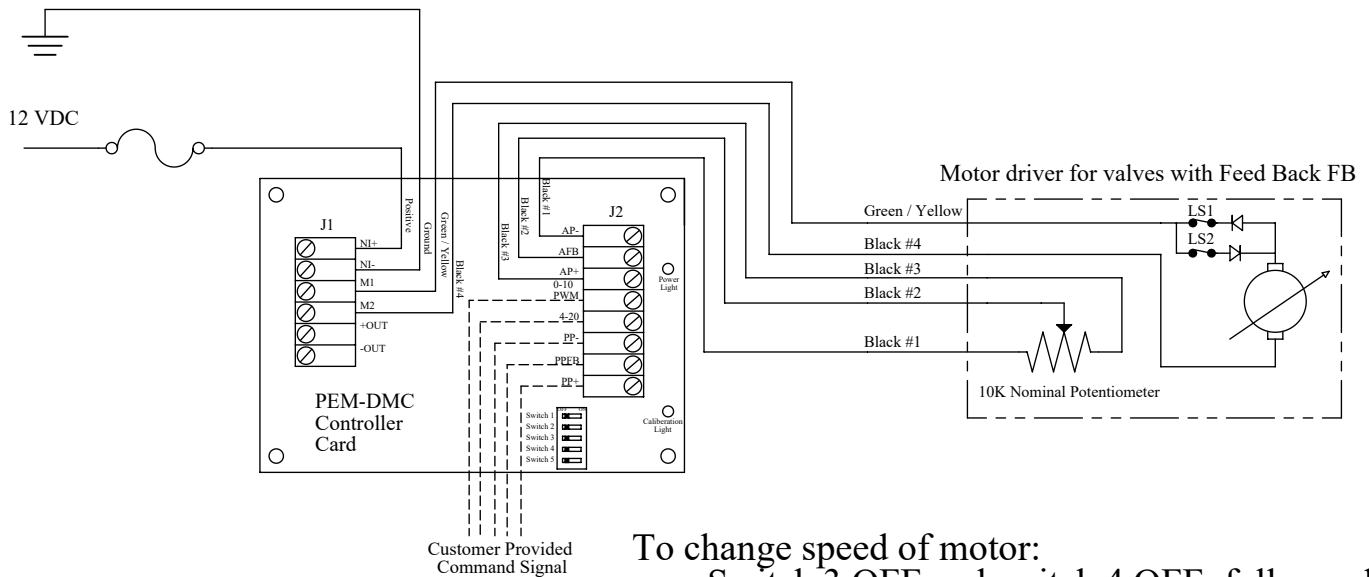


Calibration Procedure for PEM-DMC Controller Card

1. Turn all switches OFF before powering up the controller.
2. Power up controller
3. Turn switch 5 on to start calibration
4. The calibration light will be solid on for 10 seconds. During that time you have to select the desired mode:
 - Potentiometer: switch 1 OFF & switch 2 OFF
 - 4-20 MA: switch 1 ON & switch 2 OFF
 - PWM: switch 1 OFF & switch 2 ON
 - 0-10 Volt: switch 1 ON & switch 2 ON
5. After light is on for 10 seconds, it will start blinking at 1/2 second intervals
6. Turn switch 1 & 2 back OFF
7. Set command signal to lowest setting. (Turn command pot to fully closed, 4MA, minimum PWM signal, or 0 volts.)
8. Turn switch 1 ON. Valve will close, calibration light blinks at 1/4 second intervals.
9. After valve closes, calibration light goes back to 1/2 second intervals
10. Set command to maximum setting.
11. Turn switch 2 ON
12. Valve will travel to full open
13. After 6 seconds the calibration light will blink rapidly, indicating calibration is complete.
14. Set switch 1 and 2 back to desired control mode setting

Calibration is now complete as long as switch 5 is left on. In this mode the valve will remain calibrated whenever main power is turned off and back on.



To change speed of motor:

- Switch 3 OFF and switch 4 OFF: full speed
 - Switch 3 ON and switch 4 OFF: 2 second
 - Switch 3 OFF and switch 4 ON: 4 second
 - Switch 3 ON and switch 4 ON: 8 second
- No need to recalibrate when changing speeds