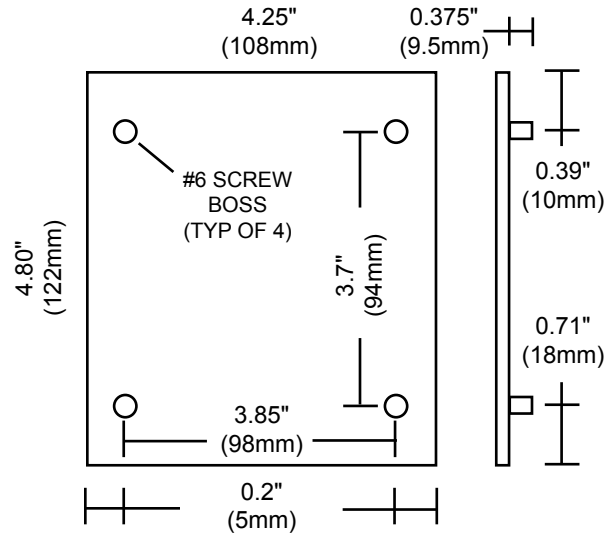


# Installation and Setup Instructions

## PC100 Single Output Ramping Proportional Controller



### DIMENSIONS

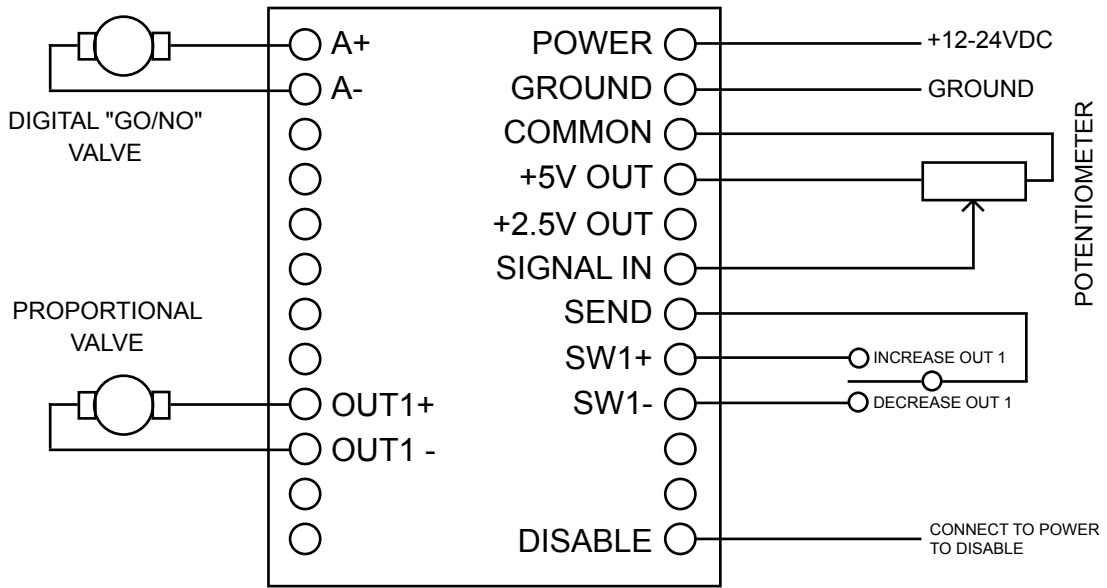


### SPECIFICATIONS

General:	Power requirement Fuse	9-30Vdc, 250mA nominal + power to external loads 15-Amp Fuse; total load must not exceed 15-amps
Digital Outputs:	Type Output	Sourcing Same as supply voltage, 5Amps max. each
PWM Outputs:	Frequency Dither Output Adjustments	1000Hz 250Hz, 0-10% of maximum current Same as supply voltage, 0-5Amps max. Minimum/Maximum: 0-5A (Can be adjusted for min>max) Ramp Up/Dn: 0.1-5 Seconds
Potentiometer Input:	+5V OUT +2.5V OUT SIGNAL IN Adjustments	Joystick power; 50mA max (1k ohm pot recommended) Tap reference; 50mA max (1k ohm pot recommended) 0-5Vdc or 0.5 to 4.5Vdc jumper selectable Threshold: 0 to +/-1Vdc
Switch Input:	FWD REV DISABLE	Dry contact Dry contact Connect to system power to disable control*
Mounting:		(4) #6 x 3/4" self-tapping screws
Environmental:	Storage Operating	-40degC to 85degC -10degC to 60degC

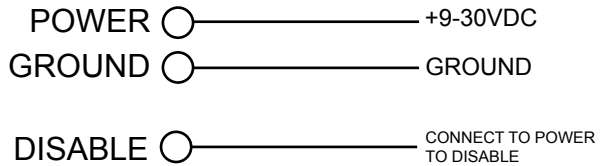
\* DO NOT USE THIS INPUT FOR SAFETY CONTROL.

# WIRING

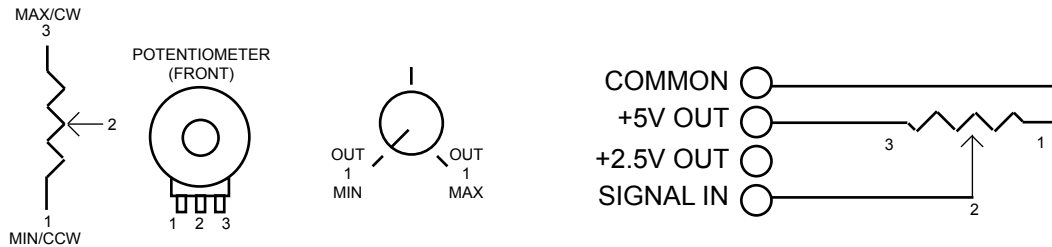


## INPUT WIRING

POWER INPUT IS REVERSE POLARITY PROTECTED AND FUSED TO 15-AMPS. FOR NORMAL OPERATION, LEAVE DISABLE TERMINAL OPEN. DISABLE TERMINAL NOT FOR SAFETY CONTROL APPLICATIONS.

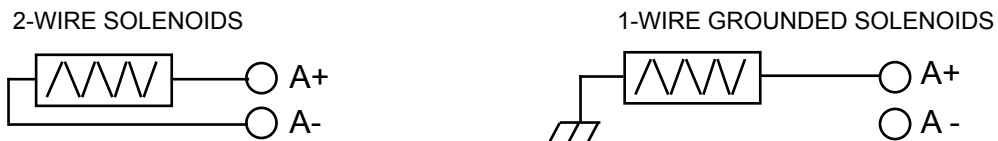


**SINGLE COIL CONTROL - POTENTIOMETER:**  
Full range of potentiometer rotation controls OUT 1.

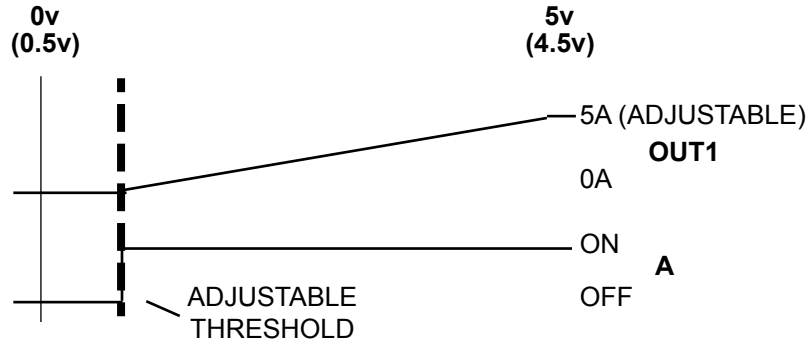


## OUTPUT WIRING

PROPORTIONAL and DIGITAL VALVE OUTPUTS:

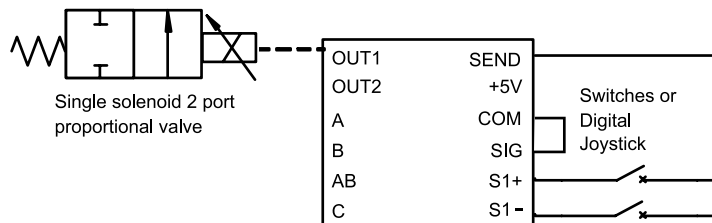


# OPERATION

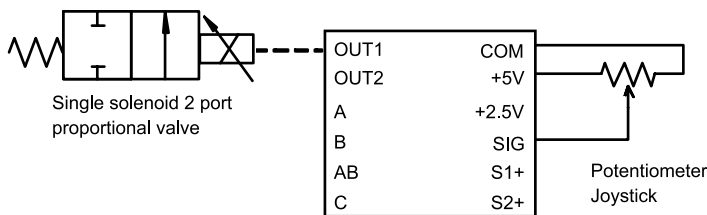


# APPLICATIONS

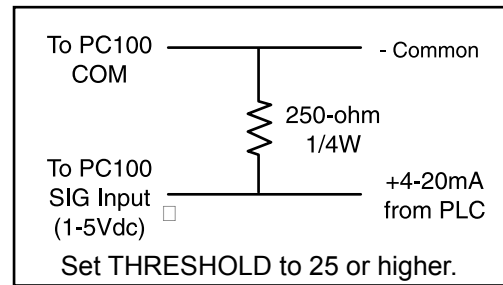
#1: Proportional control using switches.



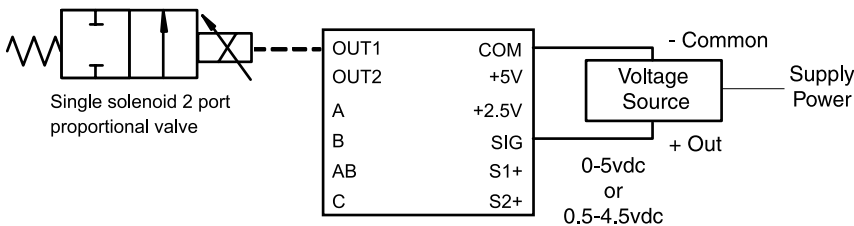
#2: Proportional control using potentiometer.



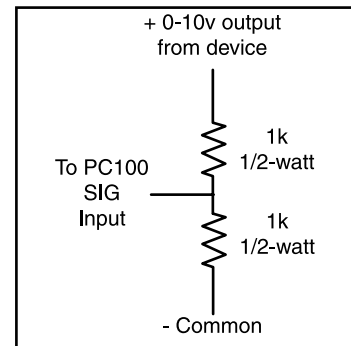
Convert 4-20mA signal to 1-5vdc signal:



#3: Proportional control using voltage input.



Convert 0-10vdc signal to 0-5vdc signal:



NOTE: APPLICATIONS SHOWN ARE EXAMPLES ONLY. MANY OTHER HYDRAULIC CIRCUITS AND CONTROL COMBINATIONS ARE POSSIBLE.

# SETUP

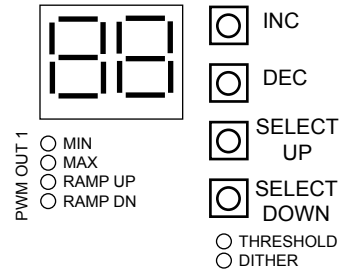
Step 1 Apply power to controller.

Step 2 Move JP13 to appropriate input signal range. Use 0.5 to 4.5v for transducer input applications. Use 0 to 5v for potentiometer applications.

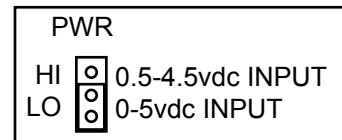
Step 3 Press SELECT UP or SELECT DOWN buttons to choose which parameter to adjust. LED's indicate selected parameter.

Step 4 Press INC or DEC buttons to adjust value of selected parameter. Display indicates value from 0-99% of adjustment range.

Step 5 Repeat steps 3 and 4 until all parameters have been adjusted to desired values.



## INPUT JUMPER SETTING:



## DESCRIPTION OF PARAMETERS:

### PWM OUT 1

MIN:	Minimum value for proportional output	0 = Off; 99 = full power
MAX:	Maximum value for proportional output	0 = Off; 99 = full power
RAMP UP:	Time for output to reach maximum value	0 = 0.1 seconds; 99 = 5 seconds
RAMP DN:	Time for output to reach maximum value	0 = 0.1 seconds; 99 = 5 seconds
THRESHOLD:	Adjusts how far the potentiometer must be moved from center before output begins to change. Increase this value to make the potentiometer less "touchy."	0 = 0 volts (0%); 99 = +/-1 volt (25%)
DITHER:	Adjusts the amount of high-frequency signal applied to the proportional outputs. This enables fine control of the solenoid by preventing sticking.	0 = none; 99 = +/-10% of max output

## SETUP NOTES: