One pot or joystick controls two proportional outputs (fwd/rev).

FEATURES

- **Simple, Complete Solution**
  Complete, single component interface allows virtually any joystick or potentiometer to directly control two PWM current operated valve actuators.

- **Universal Inputs**
  Compatible with a wide range of input devices, including potentiometers, transducers, and other devices producing 0 to 10vdc, 0 to 5vdc, or 0.5 to 4.5vdc control signals. Also accepts inputs from switches for manual override.

- **Fully Adjustable**
  Adjustable min, max, ramp-up, ramp-down, dither, and threshold (deadband). Great for setting a desired operating range and “feel.”

- **Versatile Outputs**
  Two high-capacity proportional output and three digital outputs are ideal for 2-coil control applications. Outputs can drive up to 5-amp coils directly.

**OPERATION**

**Input signal**
Jumper selectable 0 to 5vdc or 0.5 to 4.5vdc input. Use resistor divider (see installation instructions) to accommodate 0 to 10vdc input signal. Use 250-ohm shunt resistor (see installation instructions) to accommodate 4 to 20mA input signal.

**Adjustments**
Min, max, ramp up, ramp down, dither, and threshold (deadband) are adjustable from 0-99% of full-scale range. See specifications for adjustment ranges.

**Outputs**
Proportional and digital outputs can drive up to 5-amp coils directly. Digital output A operates whenever joystick or pot is above threshold (deadband) setting. Digital output B operates whenever joystick or pot is below threshold setting. Digital output AB operates whenever joystick or pot is above OR below threshold setting. Digital output C operates whenever joystick or pot is above threshold, and remains energized until joystick is below minimum threshold (pulled back).

**Manual Operation**
Inputs are provided for toggle switches to manually override or “bump” the output signals without using a joystick or potentiometer.

**OPERATION DIAGRAM**

**SETUP**
Pushbutton and LED menu interface simplifies adjustments. Digital setup eliminates guesswork.

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>PART #</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC200</td>
<td>Dual coil valve driver</td>
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**SPECIFICATIONS**

### General
- **Power requirement**: 9-30vdc, 250mA nominal + power to loads
- **Fuse**: Blade fuse, 15-amp

### Digital Output
- **Type**: Sourcing
- **Output**: Same as supply voltage, 5-amps max

### PWM Output
- **Frequency**: 1700Hz
- **Dither**: 100Hz, 0-10% of max current
- **Output**: Same as supply voltage, 5-amps max
- **Adjustments**: Min/Max: 0-5-amps
- **Ramp up/down**: 0.1 to 5 seconds
- **Threshold**: 0 to 2vdc
- **Dither**: 0-10%

### Analog Input
- **Signal Range**: 0 to 5vdc or 0.5 to 4.5vdc, jumper selectable
- **Courtesy Power**: +5vdc, 50mA max signal provided for potentiometer
  - +2.5vdc, 50mA max provided for tap reference
  - 1k pot recommended

### Digital Inputs
- **Manual Switches**: Dry contact - connect “SEND” to SW1+ or SW1- and SW2+ or SW2-
- **Disable**: Connect to power terminal to disable control
  - Do not use disable input for safety control

### Dimensions
- **Overall**: 4.8”L x 4.25” W x 1.125” D
- **Mounting**: 4 x #6 self-tapping screws

### Environmental
- **Storage**: -40ºC to 85ºC
- **Operating**: -10ºC to 60ºC

*When using 2 controllers with 2-axis joystick, AB(+) output terminal of one controller can be connected to DISABLE terminal of a second controller to prevent simultaneous operation of X and Y axis.*

**WIRING EXAMPLES:**

![Wiring Diagram 1](image1)

![Wiring Diagram 2](image2)