Center tapped potentiometer (4 wire)

V_{out} = \frac{V_{in}}{2} \quad 0 \quad -\frac{V_{in}}{2}

For ±10V out apply 20V in

†Shielded cable is recommended (4 Conductor, e.g. Belden 9418)

PLUS / PLUS CONTROL

Center tapped potentiometer (4 wire)

V_{out} = +V_{in} \quad 0 \quad +V_{in}

Ex. V_{in} = 10
V_{out} = +5 \quad 0 \quad -5

Shield*

*Shielded cable is recommended (3 Conductor, e.g. Belden 8618, 8770)

PLUS (THROTTLE) CONTROL

Standard potentiometer (3 wire)

V_{out} = 0 \quad +V_{in}/2 \quad +V_{in}

Ex. V_{in} = 10
V_{out} = 0 \quad 5 \quad +10

NOTE - FOR ALL SKETCHES:
Depending on mounting and pot rotation, it may be necessary to change output polarity by swapping supply & ground connections

<table>
<thead>
<tr>
<th>POTENTIOMETER</th>
<th>RATING</th>
<th>TYPE</th>
<th>WIPER CURRENT MIN / MAX</th>
<th>LIFE (CYCLES)</th>
<th>ELECTRICAL ANGLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarostat</td>
<td>0.5 Watt</td>
<td>Conductive plastic</td>
<td>0mA / 10mA</td>
<td>2 Million</td>
<td>260°</td>
</tr>
<tr>
<td>BI tech 6143</td>
<td>1 Watt</td>
<td>Conductive plastic</td>
<td>0mA / 1mA</td>
<td>10 Million</td>
<td>260°</td>
</tr>
<tr>
<td>PW55/PD550</td>
<td>3 Watt</td>
<td>Wire wound</td>
<td>25mA / 100mA</td>
<td>10 Million</td>
<td>250°</td>
</tr>
<tr>
<td>PEC</td>
<td>2 Watt</td>
<td>Carbon element</td>
<td>0mA / 60mA</td>
<td>1 Million</td>
<td>260°</td>
</tr>
<tr>
<td>PW70</td>
<td>5 Watt</td>
<td>Wire wound</td>
<td>25mA / 120mA</td>
<td>10 Million</td>
<td>240° (4w), 350° (3w)</td>
</tr>
<tr>
<td>DP60</td>
<td>50 Watt</td>
<td>Wire wound</td>
<td>25mA / 500mA</td>
<td>1 Million</td>
<td>270°</td>
</tr>
</tbody>
</table>
NOTES:
1. ALL WIRES = 20 AWG, COLOR AS SPECIFIED.
2. WIRES TO EXTEND 6" PAST BODY OF JOYSTICK.
3. BI POTS ≠ 04.484 & 04.500;
   R (CW) IS VIO WIRE
   L (CCW) IS ORN WIRE
STANDARD POTENTIOMETERS

Type 6143 BI Conductive Plastic Potentiometer
10 Million + Revolutions Rotational Life

60° Shorting Bar
25° Hop Off Area
5K Ohm Center Tapped
Special Screen for use with MO Only

Type 578 Clarostat Conductive Plastic Potentiometer
2 Million + Revolutions Rotational Life

(consult factory for special requirements.)

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