<table>
<thead>
<tr>
<th>CONNECTION</th>
<th>SIGNAL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1 +</td>
<td>PWR</td>
<td>This pin should be connected to the positive output of the driver power source. The maximum applied voltage should not exceed +50 VDC.</td>
</tr>
<tr>
<td>J1 -</td>
<td>GND</td>
<td>This pin should be connected to the negative output of the driver power source.</td>
</tr>
<tr>
<td>J4 +</td>
<td>CMD1</td>
<td>The trigger for solenoid-1 should be connected to this pin. This input is TTL / CMOS compatible. However, this input must not exceed the voltage applied to J1 +. The minimum duration of this signal is 1 milliseconds.</td>
</tr>
<tr>
<td>J4 -</td>
<td>GND</td>
<td>This pin may be used as the return for CMD1.</td>
</tr>
<tr>
<td>J2 +</td>
<td>PWR</td>
<td>This pin should be connected to one terminal of solenoid-1.</td>
</tr>
<tr>
<td>J2 -</td>
<td>SOL1</td>
<td>This pin should be connected to the other terminal of solenoid-1.</td>
</tr>
<tr>
<td>J7 +</td>
<td>+ 5 VDC</td>
<td>+5 VDC Output. Maximum usable current should be limited to 250 mAmps.</td>
</tr>
<tr>
<td>J7 -</td>
<td>GND</td>
<td>Return for +5 VDC.</td>
</tr>
</tbody>
</table>

Pick and Drop Module Pin Assignment and Description
Warning:

Handling the Pick and Drop module shall be performed in a static safe environment while a ground strap is used. Damages arising due to not observing the static pre-cautions shall void the limited ninety-day warranty.

PDD- 01 Wiring Diagram

User +5 VDC Output, Max. 250 mAmp
Return

Trigger-1
Trigger-1 Return

DC Power Source
+50 VDC Max
+9 VDC Min
Positive
Negative

Solenoid-1

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Pick Time Adjustment

R5 potentiometer adjusts the pick time for solenoid-1. Using a voltmeter, measure the voltage of JP2-1 (closer to R5) respect to JP2-2 (middle pin), this is the output of R5 potentiometer.

The scale is about 200 milliseconds per Volt when C1 jumper is in. If it is set at 1.5 Volts, the pick time will be 300 milliseconds.

The scale is about 12 seconds per Volt when C1 jumper is out. If it is set at 1.5 Volts, the pick time will be 18 seconds.

R6 potentiometer adjusts the pick time for solenoid-2. Using a voltmeter, measure the voltage of JP2-3 (closer to R6) respect to JP2-2 (middle pin), this is the output of R6 potentiometer.

The scale is about 200 milliseconds per Volt when C1 jumper is in. If it is set at 1.5 Volts, the pick time will be 300 milliseconds.

The scale is about 12 seconds per Volt when C1 jumper is out. If it is set at 1.5 Volts, the pick time will be 18 seconds.
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Optimal Engineering Systems, Inc. warrants to the original purchaser that this product to be free from defects in material or workmanship for a period of ninety days from date of purchase. Optimal Engineering Systems, Inc. agrees to repair any such defect or exchange the product with a new or equal replacement. Defective product must be returned to Optimal Engineering Systems, Inc. postpaid. This warranty is void for any product that has been modified by the customer in any way. If failure of the Product has resulted from accident, abuse, or miss-application, Optimal Engineering Systems, Inc. shall have no responsibility under this Ninety-day Warranty.