DB-9 ANALOG COMMUNICATION PIN DEFINITION

Primary DB-9 Connector

- UPS Shutdown
- Battery Status Notification
- Power Failure Notification

Analog contact operation table

<table>
<thead>
<tr>
<th>Pin No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Indicates battery condition. If battery low condition occurs, pin 1 is low, otherwise pin 1 will be high.</td>
</tr>
<tr>
<td>3</td>
<td>Ground. Connect to ground (common) of control system I/O.</td>
</tr>
<tr>
<td>4/5</td>
<td>Connect Pin4 with Pin7 and Pin5 with Pin3 for 12-15 second to trigger UPS S/D sequence on inverter mode.</td>
</tr>
<tr>
<td>7</td>
<td>+9VDC to +12VDC must be applied to pin 7 from control system I/O in order for analog communication.</td>
</tr>
<tr>
<td>8</td>
<td>Indicates utility power condition. If a power failure occurs pin 8 is (low) otherwise pin 8 is (high).</td>
</tr>
</tbody>
</table>

Note: Primary DB-9 supports RS-232 as well as analog contact operation

1) To Initialize Communication:
   Pull Pin 7 with external power (+9 VDC to +12 VDC from control system).
   Pull Pin 3 with external power ground.

2) Monitoring UPS Status:
   Pin 1: (High) Battery capacity is normal.
   (Low) Battery is low capacity.
   Pin 8: (High) Utility power is normal (On Utility Mode).
   (Low) Utility power failure (On Inverter Mode).

3) Use Primary DB-9 to shutdown UPS:
   Connect Pin4 with Pin7 (+VDC) and Pin5 with Pin3 (GND) for 12-15 seconds to trigger UPS shutdown sequence.
   After trigger UPS S/D sequence, UPS will be shutdown at 2min later. Note: UPS only can be triggered shutdown on inverter mode.
   
   (High = + 9VDC - + 12VDC)
   
   (Low = < 1VDC)
Secondary DB-9 Connector

- Battery Status Notification
- Power Failure Notification
- Does Not Support UPS Shutdown

Analog contact operation table

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1) To Initialize Communication:
   Pull Pin 7 with external power (+9 VDC to +12 VDC from control system).
   Pull Pin 3 with external power ground.

2) Monitoring UPS Status:

   Pin 1: (High) Battery capacity is normal.
   (Low) Battery is low capacity.

   Pin 8: (High) Utility power is normal (On Utility Mode).
   (Low) Utility power failure (On Inverter Mode).

   (High = + 9VDC - + 12VDC)

   (Low = < 1VDC)