

# Invert™ Pure Sine Wave Inverter

## Checking or Changing the LVD Set Point

There are five low voltage disconnect (LVD) settings available on the controller.

Note that unlike other inverters that have a fixed LVD point, these inverters have a dynamic LVD point based on how much current the inverter is drawing from the battery. The approximate voltages listed here are the voltages of the battery after the inverter turns off. The inverter will actually operate down to as low as 9.5 volts under heavy loads. The inverter measures the current draw and dynamically adjusts the LVD point so that after it turns off the unloaded battery voltage will be approximately what is listed here.

Setting	Approximate Voltage	Function
Low 1	11.2	This setting is activated by connecting an active high 12 volt signal (indicating that engine auto-start is enabled) to the auxiliary I/O pin
Low 2	11.8	Allows the battery to reach near 0% state of charge (ideal for deep cycle batteries that are not needed to start a truck)
Medium 1	12.0	<b>Default setting.</b> Allows the battery to reach about 25% state of charge
Medium 2	12.2	Allows the battery to reach about 50% state of charge
High	12.4	Allows the battery to reach about 75% state of charge

Step 1: Press the power button 10 times in quick succession. All the lights will turn yellow, then they will indicate the current LVD Set Point.

Low 1: I/O pin connected; not programmable

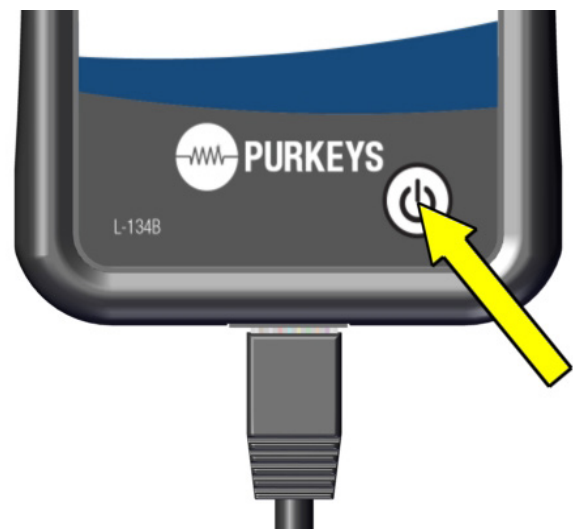
Low 2: 1 yellow light

Medium 1: 2 yellow lights

Medium 2: 3 yellow lights

High: 4 yellow lights

Step 2: To change the current LVD set point, press the power button one or more times. Once the lights indicate the desired LVD set point, wait 10 seconds and the lights and inverter will resume normal operation.



Note: As the inverter operates it “learns” the characteristics of the battery and self-calibrates so that it can more accurately estimate the dynamic LVD point. To get a head start on this learning/calibration process, turn on/off one of the higher loads the inverter will be powering in this manner: With the inverter on, turn the load on for 5 or more seconds, then turn the load off for 5 or more seconds. Repeat 10 times.