

### The DLS is not providing power to the system or is not charging the batteries...

#### Step 1 - Verify that the DLS is receiving properly rated AC power.

Using a voltmeter, verify that the electrical box or outlet is supplying 110-120VAC.\*

\*216-264VAC for 240V DLS models

#### Step 2 - Check the DC output of the DLS.

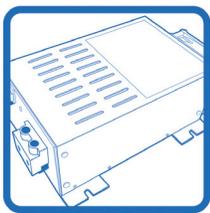
Note: Always follow proper procedure when disconnecting the DLS from the battery.

- 1) Unplug the AC power cord of the DLS from the AC outlet.
- 2) Disconnect the Positive battery cable from the DLS unit.  
CAUTION: Do not allow the disconnected cable end to contact the chassis ground.
- 3) After the Positive battery cable is disconnected, reconnect AC power by plugging the DLS power cord into the AC outlet.
- 4) Measure the DC voltage between the DLS output terminals. Make sure the Dual Voltage Plug is not inserted into the Dual Voltage Jack before measuring.

**If the voltage measures 13.6 volts**, the DLS is operating normally. If problems are occurring, check for open or high resistance cable connections to the battery. Also check for high current demand which could indicate the possibility of a bad battery. This would cause the output voltage to drop.

**If the voltage is 0 volts**, check the fuses on the converter. If the fuses are not blown, then the DLS will need to be replaced. If the fuses are blown, then the DLS was exposed to reverse polarity. Verify that the battery cable connections are correct (POS to POS, NEG to NEG) and replace the fuses. NOTE: Always use fuses of the same rating and type. Re-test after replacing the fuses.

**If the voltage is less than 13 volts**, the DLS is not performing properly and will need to be replaced.



### Power output is surging or inconsistent...

The DLS unit is equipped with thermal/overload protection to prevent overheating. In the event that the DLS overheats, the unit will shut down. The cooling fan on the DLS is designed with 'proportional fan control' allowing the fan to operate in direct relation to the unit's temperature to prevent overheating. Inconsistent output may be the result of an overheating converter.

**Step 1 - Verify that the airflow to and from the converter is not restricted** by checking that the fan and vents are not blocked. The unit should be installed in a location that provides proper ventilation. The fan requires a minimum of four inches clearance. Also verify that no other objects in the area are obstructing the fans and vents.

**Step 2 - Verify that the fan is operating.** If the converter is warm to the touch, the fan should be running. If so, disconnect the AC power by unplugging the DLS. Allow the converter to cool, then re-test. If the DLS is warm and the fan is not running, then the DLS is not performing properly and will need to be replaced.

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