How do I test the 'G' output ?

Introduction:

The 'G' terminal (located on green terminal block, under the removable cover), can be toggled On/Off from the CHRG/CINT/GSET menu.

NOTE:

Toggling the 'G' output when in PROG=2, 3, or 4 can give erratic results as the control of the output may be overridden by the settings associated with PROG=2, 3, or 4.

Also Note:

The 'G' terminal has a maximum switching current of 120mA (PL20/40) and 300mA (PL60). A catch protection diode is also required on the PL20/40 (see reference manual Pg. 11).

<u>Test Procedure:</u>

The best method to enable toggling of the 'G' output is:

- Change to SET/PROG=1.
- Change to SET/TIME=10.0h (or just make sure it's <u>not between</u> 21.0 [9pm] and 9.0 [9am] which is generator 'quiet-time').
- Observe the state of the G output by what is connected to the terminal(s) eg. relay, LED, etc.
- Go to the CHRG/CINT/GSET menu and long push on GSET (the word 'GEN' should come up on the bottom of the screen to show that the 'generator' is running)
- Check to see if the G output has changed state eg. relay, LED, etc in opposite state.

NOTE:

- On the PL20/40, the 'G' terminal is an 'open drain' FET that is connected to BAT- on the other (source) side ie. the 'G' terminal output goes <u>low</u> when active. You <u>must</u> have something connected between the 'G' terminal and BAT+ in order to see it switching.
- The 'G' terminals on the PL60 are a solid state relay output that provides clean contacts (like a switch). You could just test these contacts for closure via a multimeter on continuity.

<u>It didn't work:</u>

If the above test does not correctly toggle the G output, then it's likely to require repair at our factory. The regulator can be sent back to Plasmatronics with a note explaining what the fault is.