

PL_What.about.the.noise.on.my.radio.(PWM.vs.Slow.Switching).doc

If you are running communications equipment nearby (particularly HF or AM radio) we usually suggest that customers don't run in PWM mode (Pulse Width Modulation, high current switching at 125Hz), and instead run the PL in slow switching mode (slow switching on/off regulation) which is less than 2Hz max.

(1)

First:

Check to see if the noise on your radio is coming from the solar system by removing power from the regulator or switching off the charge current by use of a circuit breaker.

(2)

If the solar system appears to be the source of the noise...

Next:

Check if the noise goes away when you unplug the PLS2 shunt adapter (if fitted in the system). If it does, you may have an old PLS2 that doesn't have a built-in noise suppression capacitor. This noise suppression capacitor can be fitted by our factory under a repair job.

(3)

If the PLS2 is not the problem...

You will need to change to SET/PROG=4 (if you are not in it already)

NOTE: check the settings under SET/REG menu are correct for what you require (see PL Ref Manual for presets used in PROG=0-3)

Then change to SET/MODE/PWM=0 to achieve slow switching mode (ie. no PWM on any terminals).

This should remove the noise source and still provide the standard regulation cycles (just not at a nice smooth PWM current).

If the switching is a little more often than you would like, it's possible to increase the SET/REG/HYST value a bit to slow down the switching.

(4)

Try a 0.1uF polyester or ceramic capacitor across the charge FET switch. The easiest way to connect this capacitor is across the SOL- and BAT- screw terminals at the PL regulator.