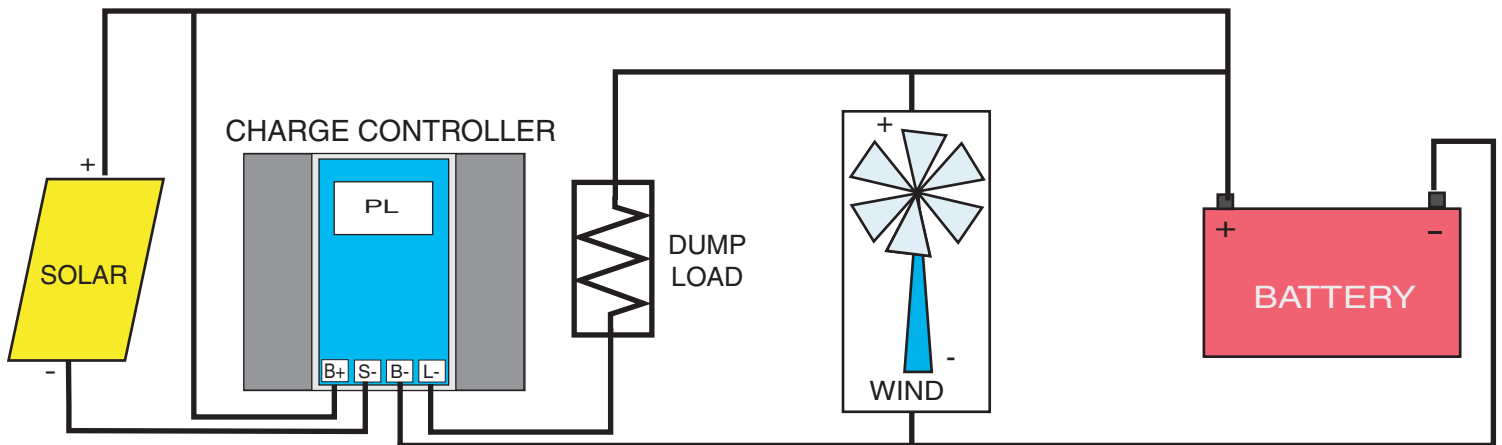


PL AND WIND -SHEET ONE

Use these diagrams when you wish to regulate current flowing from the wind generator and the maximum wind generator current is less than the rated load current for the PL. If the maximum current from the wind generator is greater than the load current for the PL, see PL AND WIND -SHEET 2

The PL should be in Shunt Regulation mode. For shunt regulation mode LSET MUST be set to 10. PWM can be set to 0,1,2,or 3, but in general it's best to use PWM=3 unless you have a good reason not to (for example PWM has been causing noise on radio equipment). Charge should flow into the Dump Load when the battery is full. The Dump Load must draw more current than the wind generator can deliver and less current than the PL's load terminal is rated. That is, the Dump Load must be less than 20A for a PL20, less than 5A for a PL40, (7A for recent models of PL40) and less than 30A for a PL60. When sizing the dump load, bear in mind that it will be operating between the float voltage and the boost maximum voltage. It will still need to draw more current than the wind generator produces when the float voltage is applied to it, and less current than the load terminal is rated for when the boost maximum voltage is applied to it. The Dump Load must have a sufficient power rating to handle full load current.



ALTERNATIVE (NO REVERSE FLOW FROM BATTERY)

This example is the same as above, except that a diode has been added between the dump load and the battery to stop the possibility of the dump load draining the battery. The diode in this example must be rated at greater than the wind generator maximum output. There are several disadvantages to this scheme and it won't save you any power in the long run, but if you really insist on using it, it won't damage anything provided that the diode is sized correctly. The diode should be in a well ventilated enclosure as it will generate a lot of heat.

