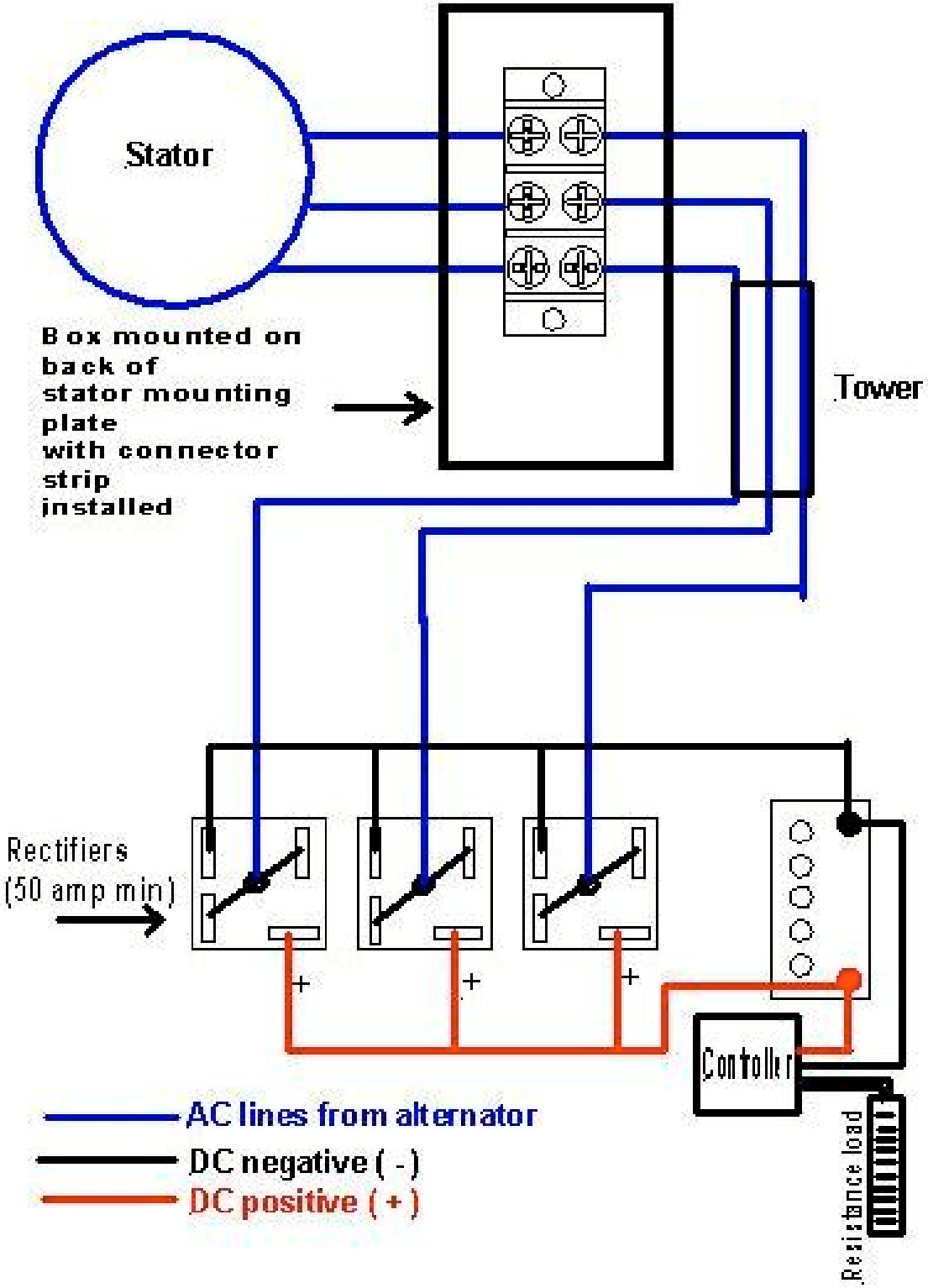
Basic wiring



The above diagram gives you a general layout of how the system is wired. You will mount a box on the back of the stator plate to house the wires from the stator and the wire that will dangle down the center of the pole. The box is a basic plastic that can be purchased at Radio shack or other electronics outlet. The size doesn't matter as long as you can get the wire inside comfortably. Mounted inside the box is a connector or terminal strip. Drill 3 holes about the same size as the wire from the stator and slip them through, connect them to the terminal strip and use a silicone sealer over the holes to seal the box from the weather. The cord that dangles down the center of the tower will be a 6-2 with ground standard flexible generator cord. You will need to bore a hole in the box just big enough to squeeze the 6-2 wire into it, connect the 3 wires to the terminal strip and seal around the wire. The cord on the wind generator will need to be fastened by clamp or wire tie's so the weight can't pull it out of the box.

You can convert the AC to DC at the bottom of the tower or run the AC all the way to the batteries and convert it there. I use 3 – 50 amp rectifiers for the system. Each of the pair of AC connectors on the rectifier is used for 1 AC lead from the generator as shown in the diagram.

The DC positive and negative are connected to the battery bank. NOTE: there should be a fuse on the positive side between the battery and the rectifiers, typically a 60 amp will be fine.

In order to keep the batteries from overcharging you'll some type of controller. There are many very nice controllers available and you can check the web for different versions. I use a C60 made by Xantrax as a diversion controller into a bank of resistors. You could also use the diversion to heat water or power other devices as well.

There isn't much to the wiring, other than the work to install it depending on your application. In my case I needed to bury 100 feet of 1-0 cable to get it to the house. Took a little time to accomplish digging the trench.

You should check your local electrical regulations to find out what meets code in your area for your application.