The parallel ProStar configuration allows separate control over two different loads while sharing the same battery bank. Each controller is connected to its own PV array. The battery bank(+) is connected to battery(+) of both controllers. Likewise, the battery bank(-) is connected to battery(-) of both controllers.

The load on each of the controllers is not to exceed the rated limit. If a load of greater current rating is required, connect the load to the battery bank. Refer to the, ProStar with Load Relay document which explains how to connect a load directly to a battery bank and still have control over the load by the controller.

Important:
It is not possible to parallel a higher rated load on the load terminals of both controllers. The reason for this is because one controller may go into LVD first forcing a high current load onto the other controller, damaging the unit.
Notes:
1) Loads may be controlled by each ProStar as long as no load exceeds the ProStar output rating.
2) For loads larger than the ProStar rating, connect the load directly to the battery bank.