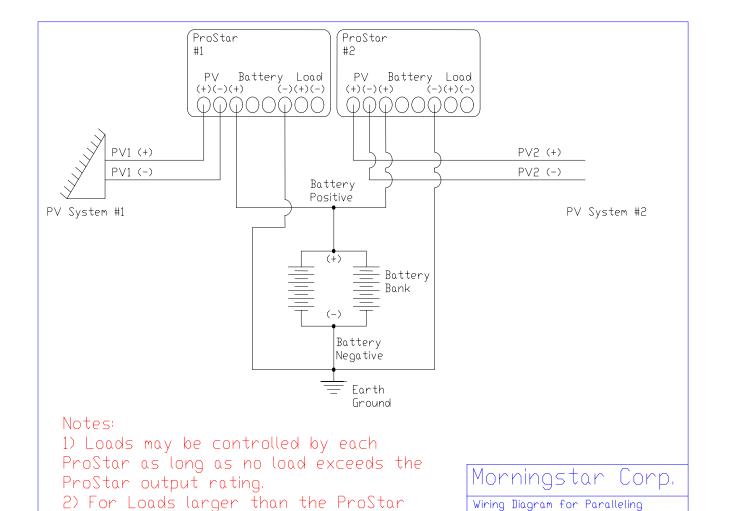# 2 ProStar - Parallel Configuration

The parallel ProStar configuration allows separate control over two different loads while sharing the same battery bank. Each controller is connected to it's 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.

ProStar #1

ProStar #2

PV   Battery   Load
(+)(−)(+)   (−)(+)(−)

PV   Battery   Load
(+)(−)(+)   (−)(+)(−)

PV1 (+)

PV1 (−)

PV2 (+)

PV2 (−)

PV System #1

PV System #2

Battery
Positive

(+)

Battery
Bank

(−)

Battery
Negative

Earth
Ground

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.

Morningstar Corp.

Wiring Diagram for Paralleling
Prostar Controllers

Rev. 1.0	Drawn By: jrd	No Scale
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