

Testing Your Solar Charging System

1. Using a voltage meter, plug **red lead** from meter into the left slot of the black plug from solar panel.
2. Plug **black lead** from meter into the right slot of black plug coming from solar top.
3. Turn meter to DC 200 voltage setting. You should see a reading ranging from 15-25 V.



4. Using a 10A fused DC amp meter.
5. Plug **red lead** from meter to left side of black plug on solar top. Plug Red Lead from meter to left port on meter (10A fused)
6. Plug **black lead** from meter to right side of black plug on solar top.



7. Turn the meter dial to DC Amp, 10A fused.
8. After all installation is completed, and controller is connected to battery. You can test the output current, providing the batteries are at a weak state of charge. If batteries are fully charged or close to charge, you will not see output current, the controller is a computerized smart controller, and will shut off feed in order not to damage batteries.
{ IE – picture shows battery bank full state of charge }

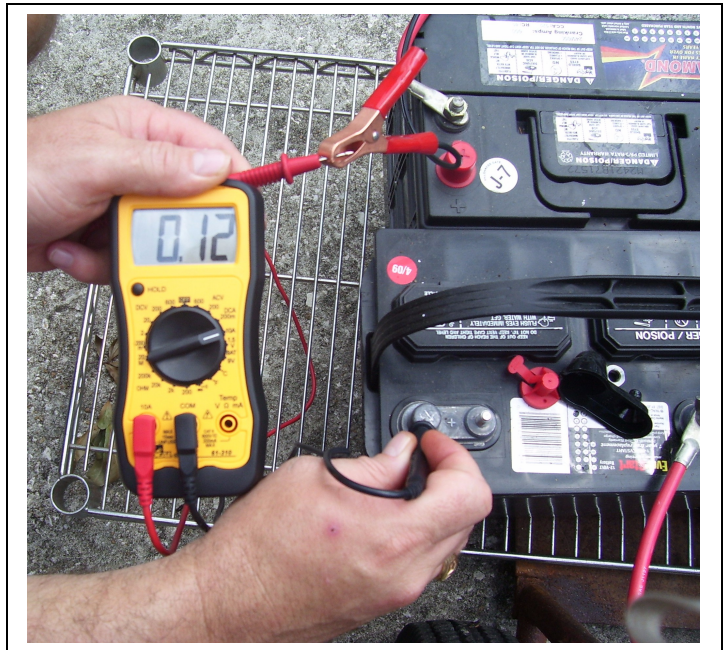


9. Checking current feed to batteries.
10. Remove **positive wire** coming from controller from the **positive post** on battery, leave negative as is.
11. Take DC 10A fused meter. Plug **red lead** from meter to left side of black plug on solar top. Plug Red Lead from meter to left port on meter (10A fused)
12. Take **red lead** from meter, attach to **positive wire (red alligator clamp)** from controller, and take **black lead** from meter and place on **positive post** you just removed the **red alligator** clamp from.
13. You should see a min of .1 amp or higher, again depending on battery state of charge.

The pictures show a battery bank In full state of charge, therefore, Smart controller will only produce Minimum charge to prevent over-charging of battery bank.

NOTE: **Red lead** from controller Is attached to red lead from Meter. **Black lead** from meter to Positive post of battery (leave **Black lead** from controller attached negative post of opposite battery).

Red lead connected to start of Battery series and black is Connected to ending of battery Series.



*THE WEAKER THE STATE OF CHAGE OF THE BATTERY BANK ...
THERE WILL BE A HIGHER OUTPUT CURRENT (AMPS) FROM THE CONTROLLER.*