

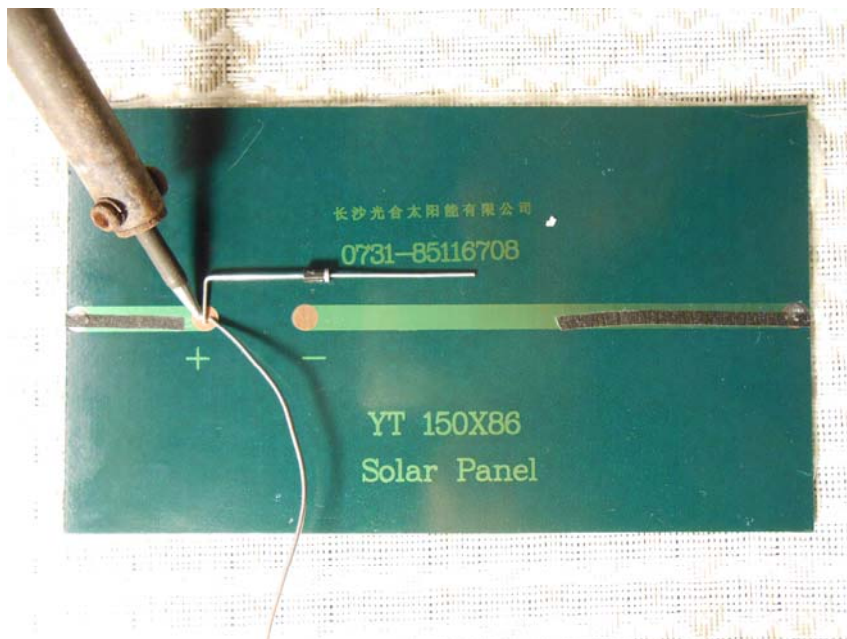
Assembly Instructions: Solar Power Module

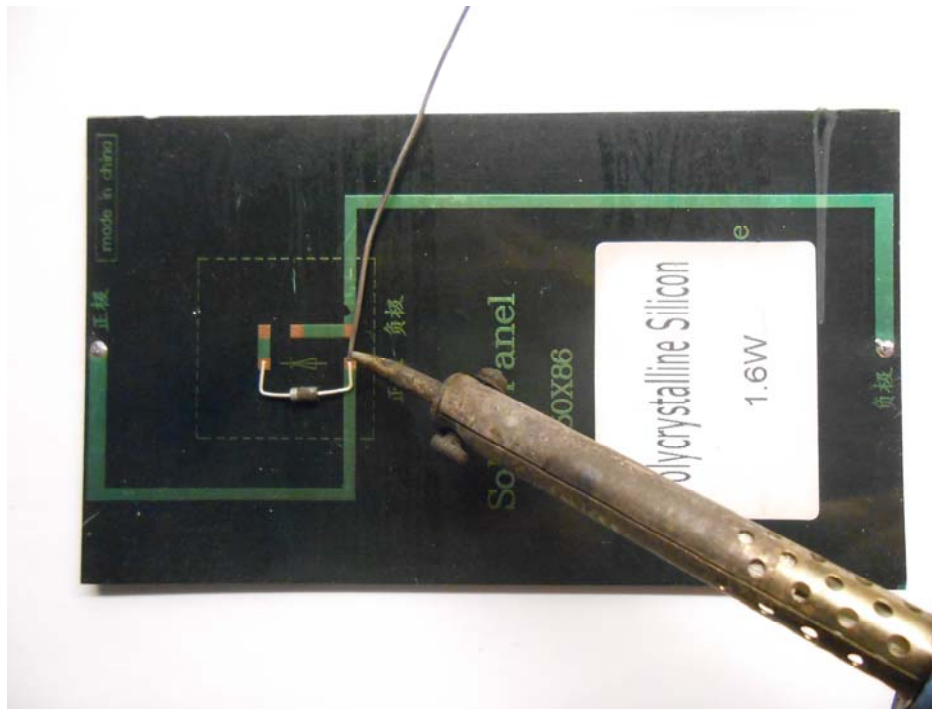


Solar Power Module could be added to any brushless motor kit available at our site. It provides enough power for them to work under direct sunlight; however the main purpose of the solar panel is recharging the batteries. It also adds a switch for your motor.

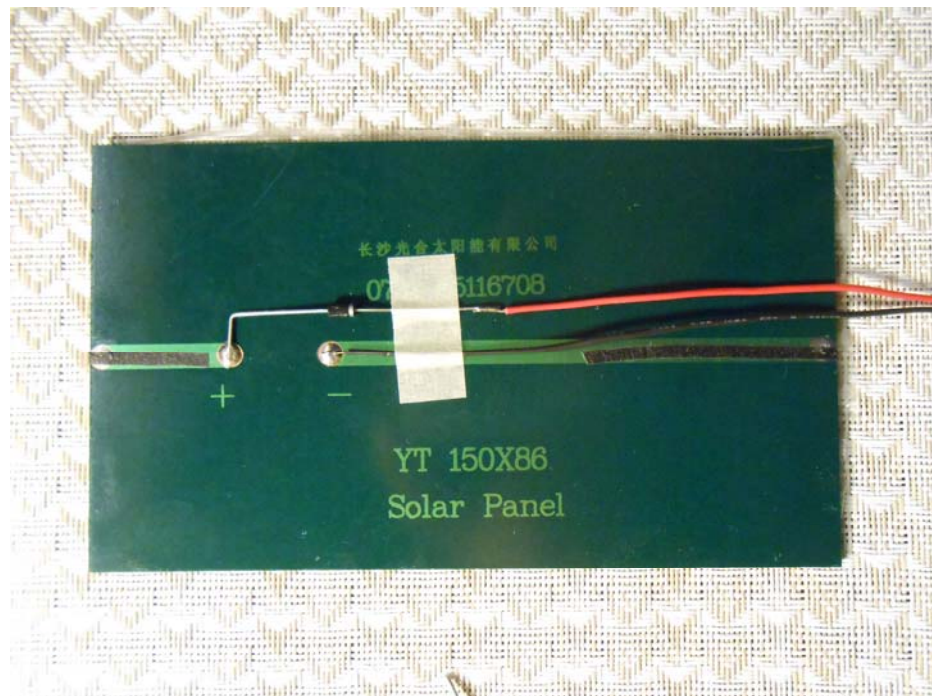
You may receive one of two slightly different solar panels with identical electrical parameters.

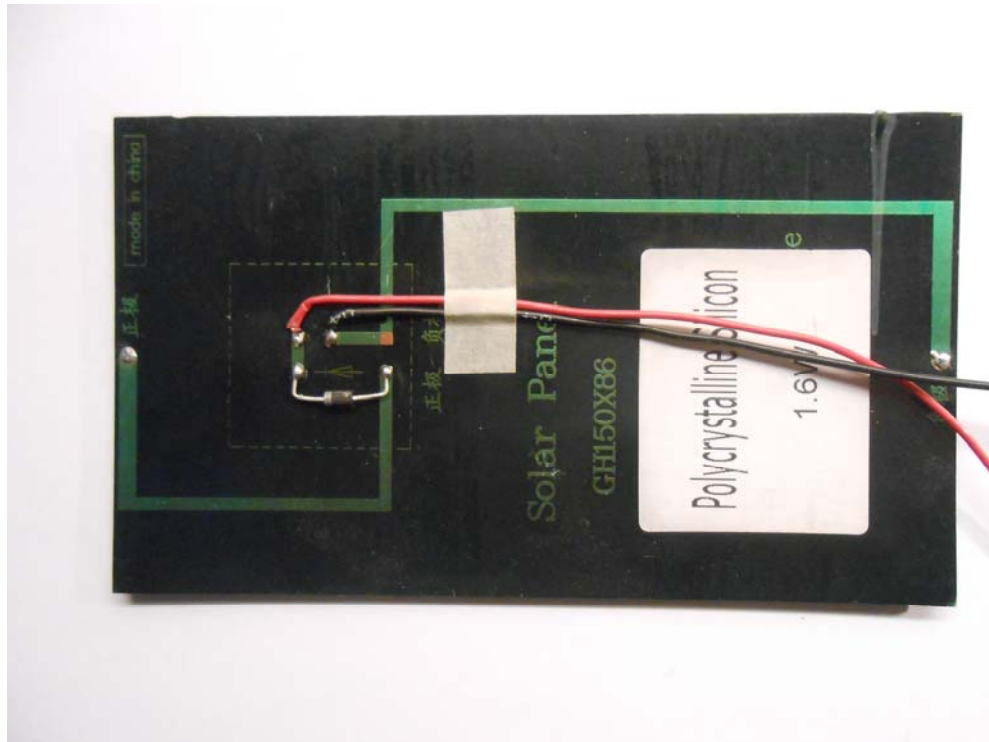
1. Solder the Schottky diode to the solar panel. Note the polarity of the diode! Thin silver band depicts the cathode.





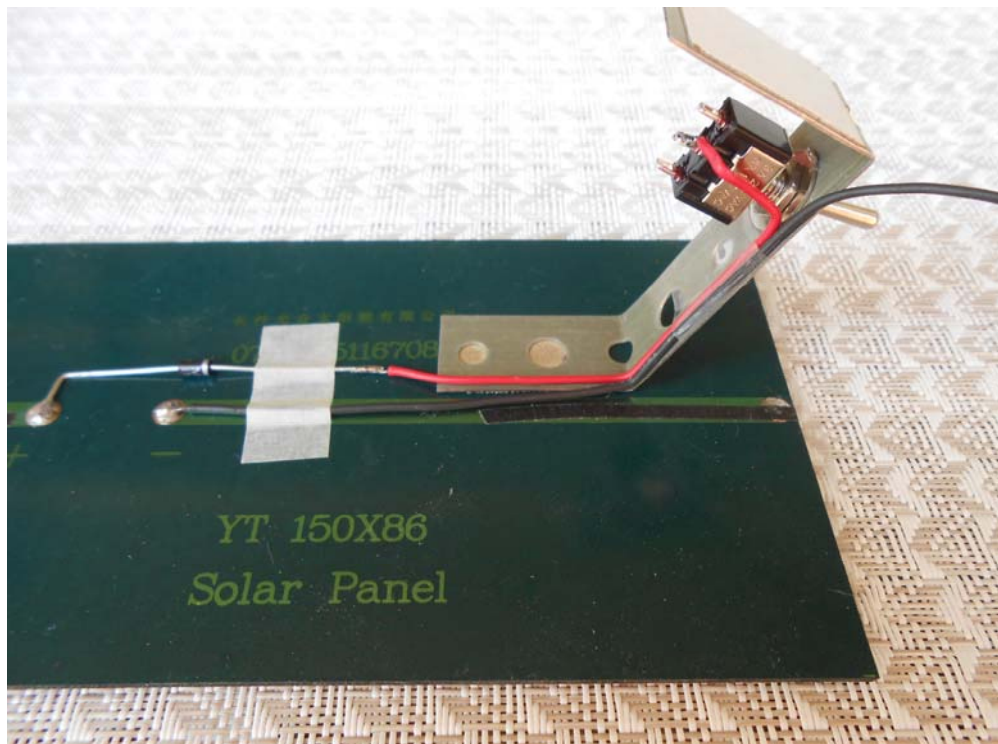
2. Solder two pieces of wire as shown. Tape them to the board.



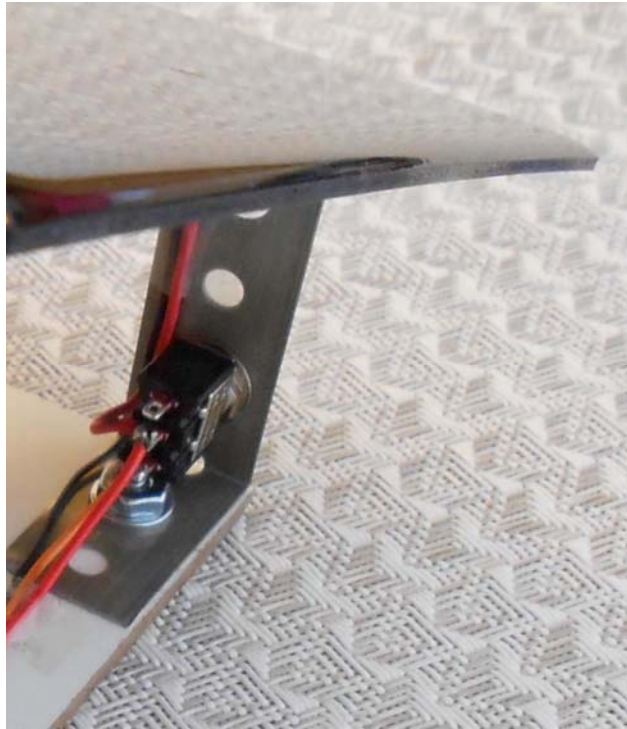


3. Attach the bracket to a solar panel. Assemble the switch on the bracket. Solder the wire from the Schottky diode to the middle point of the switch and tape wires to the bracket.

Double sided tape provided with your kit may not provide permanent adhesion. If you plan to use this solar panel for a long time you may want to use epoxy glue instead, or stronger tape such as VHB made by 3M.

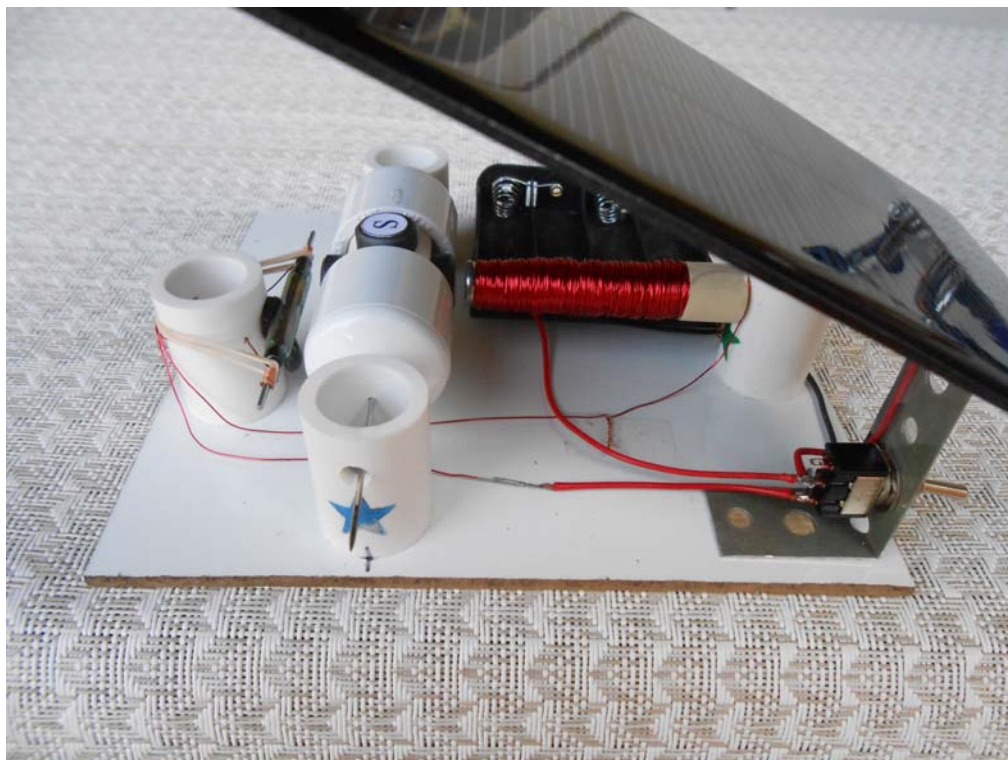


4. Attach the bracket to the board using included screw, washer and a nut. If you order the solar panel with the motor kit your board will have a countersunk hole; if you buy it separately you need to drill a hole for the screw (1/8 – 3/16" or 3.2 – 4.8 mm diameter).

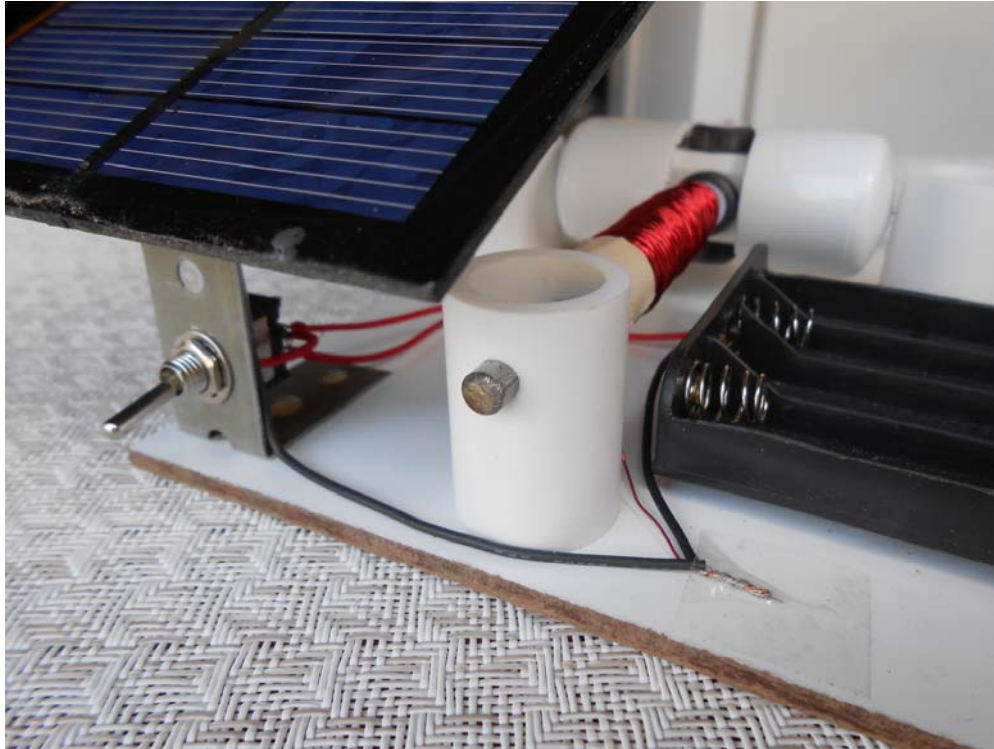


You may also use double sided tape.

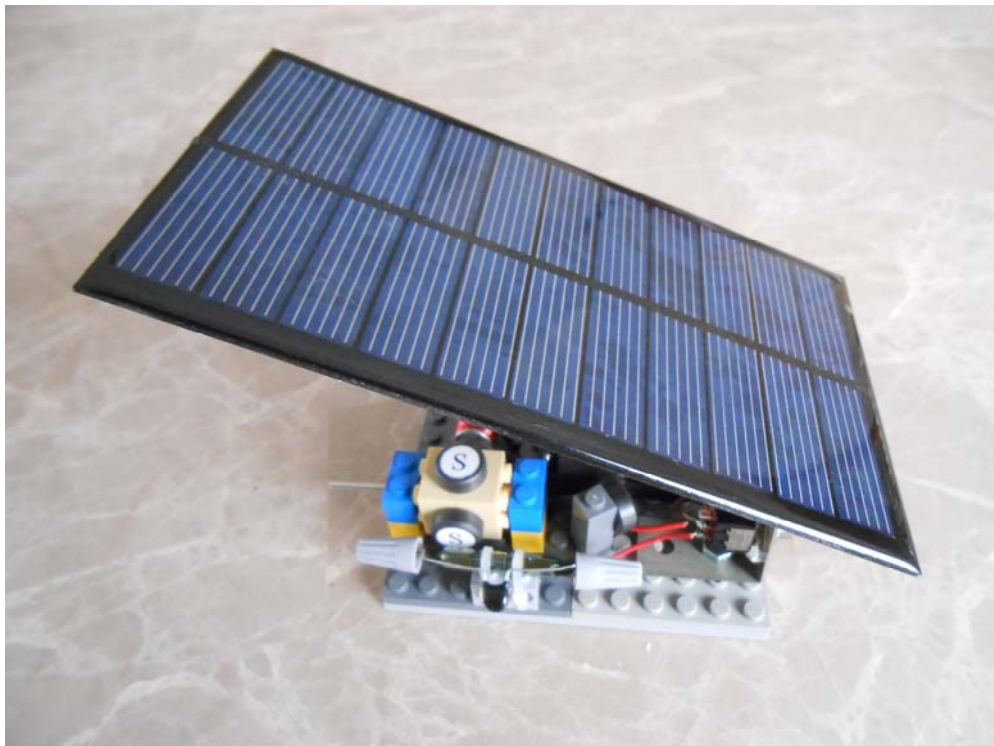
5. Disconnect battery holder positive wire (usually red) from the motor and solder it to the middle point of the switch. Solder disconnected motor wire to the lower contact of the switch.



6. Connect the remaining wire from the solar panel to negative wire from the battery holder.

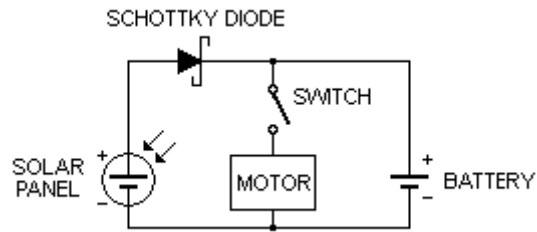


The solar panel could be used with QuikLock motors built from kits #13-14. The connection is basically the same. You might need to drill a hole through the base plate to attach the solar panel.



You may use 3 or 4 AA rechargeable batteries. For 3 batteries you need to use a jumper wire in the battery holder. We recommend using NiMH (Nickel-Metal Hydride) batteries; do not use Lithium-ion or any other expensive batteries.

Here is the electrical diagram of the solar panel connection:



Under direct sunlight all the motors (except conventional) built from our kits should work even when there are no batteries.

The batteries are being recharged even when the switch is off.

Please visit www.simplemotor.com/using-solar-energy/ for additional information on this Solar Power Module.