NEW AND IMPROVED SOLAR PANELS

CE

• Harness the power of the sun and generates free energy for many appliances and applications.

Introduction:

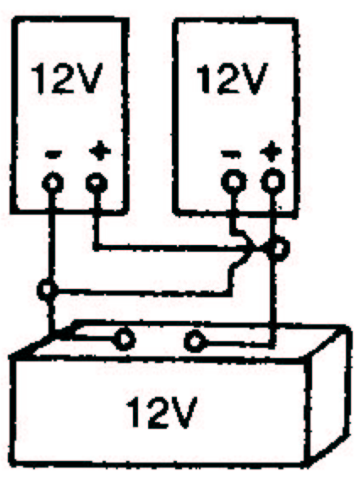
Silicon solar cells convert sunlight directly into electricity. The silicon solar cell technology was pioneered for space power applications and now has become widely adapted to earth use in such applications as power sources for monitor and control devices in reservior level gauges and telephone repeaters, navigational beacons, climatological date recording and transmitting stations, fire control stations and transmission relay stations.

These solar panels are specially designed for use in water pumps, outdoor displays, camping electrical fences, outdoor clocks, variable traffic signs, illuminations (lights), relay boosters, outdoor power supply systems, various appliances for commercial use, outdoor telephones, satellites, trucks, tractors, remote transmitters, construction equipment, warning lights, street lights, flash lights, portable televisions, portable radios, sailing boats, tent fans, recreational vehicles and ventilators for room, car...etc.

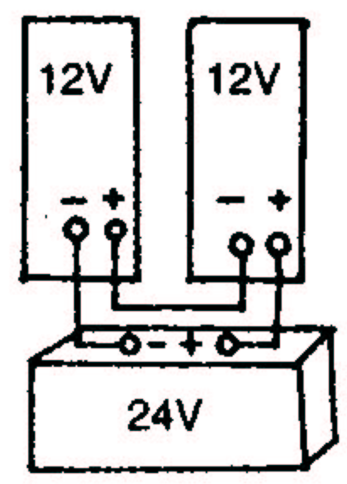
Maintenance free solar power gives years of use at no cost.

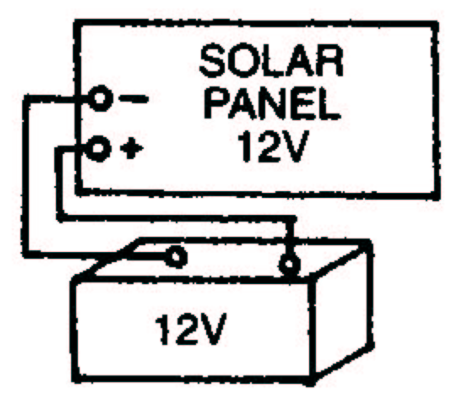
The following is the illustrations of how to increase the power.

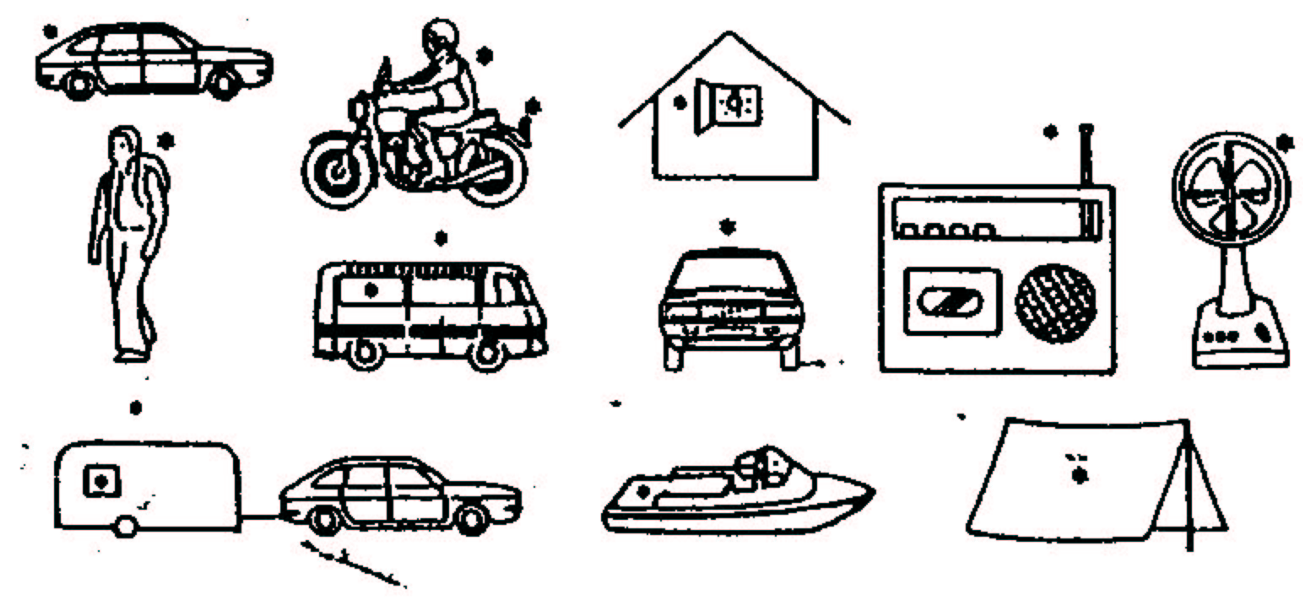
To increase the current, connect the panels in parallel system



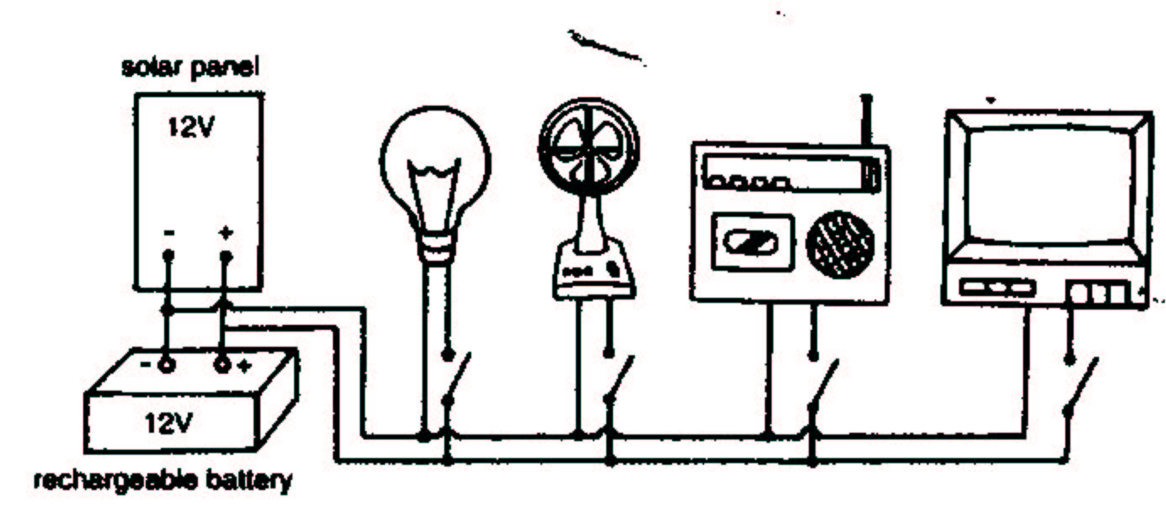
To increase the voltage, connect the panels in series system







The solar panel converts sunlight into electric power, for charging a rechargeable battery which supplies power to operate the appliance load, day time charging for night time use.



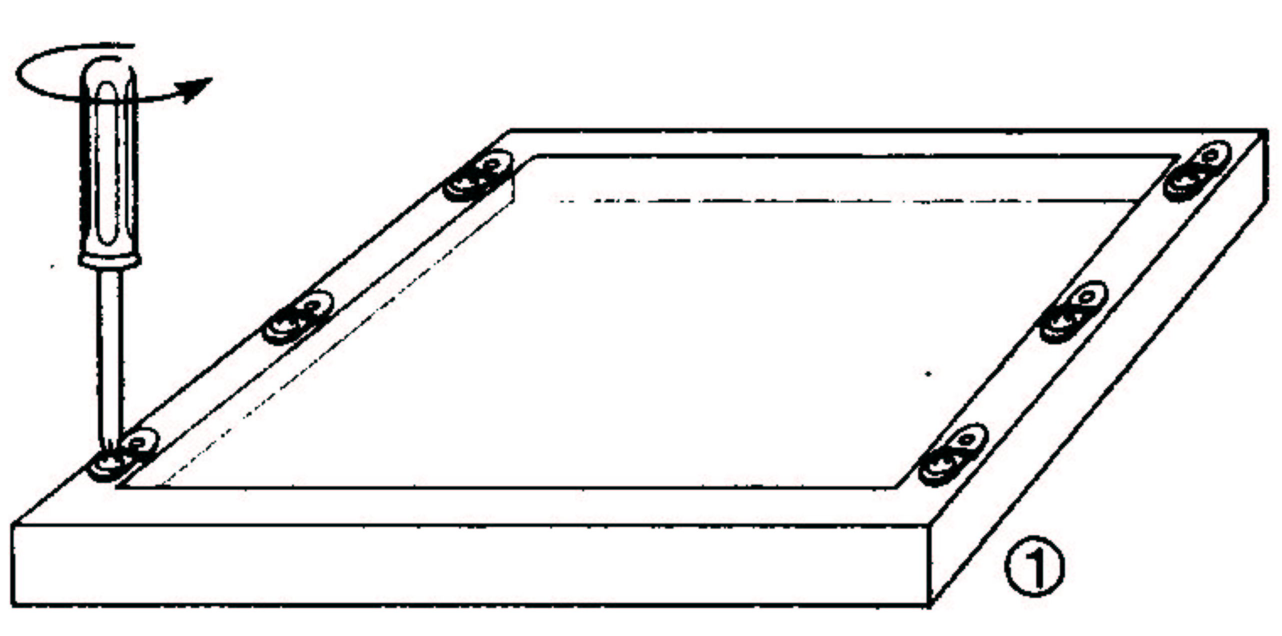
The followings are 3 suggestions of how to mount the solar panel on the strip frame shelf, with A, B or C version, or use your own imaginations.

Fix the solar panel in the best location, it will receive maximum sunlight, therefore, a kit set of mounting hook is equipped at the back of the solar panel for easy mounting.

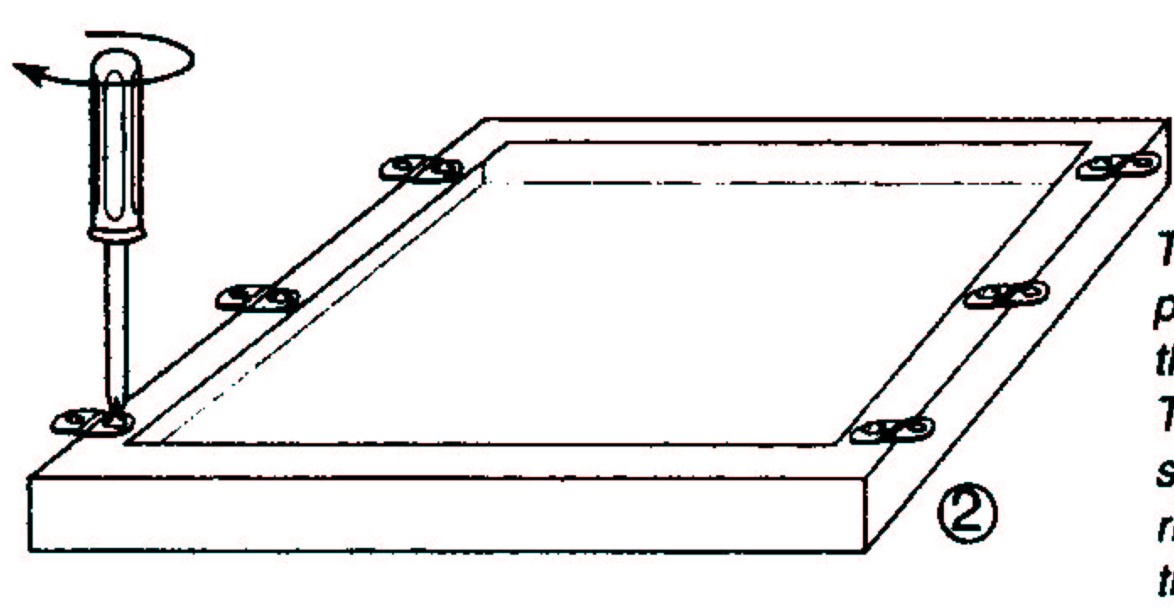
The solar panel can be mounted on the wall, on the ground or on the roof.

INSTRUCTIONS of some suggestions on how to mount your solar panels.

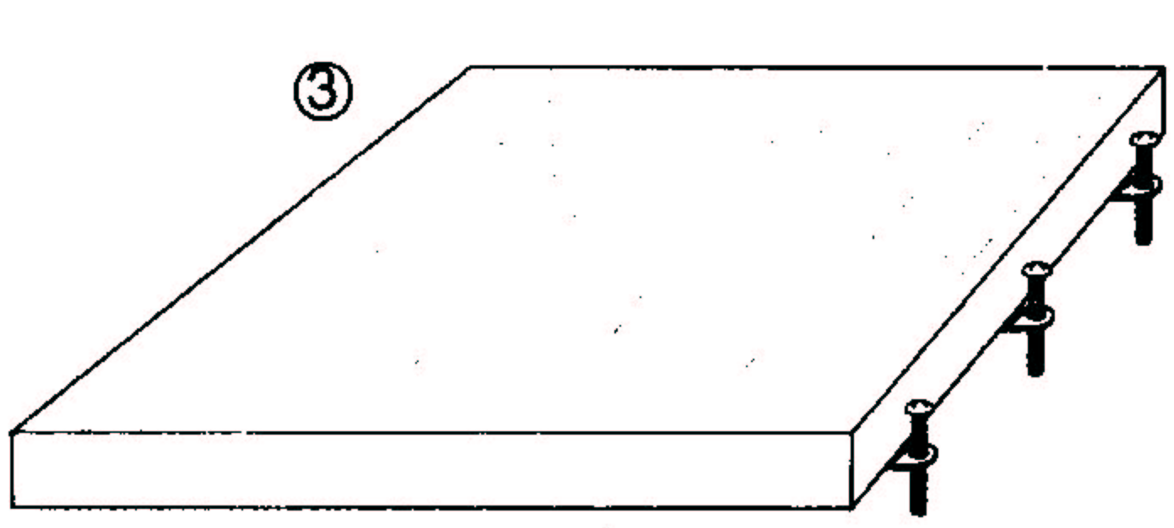
VERSION A – Panel mounting with hooks outside



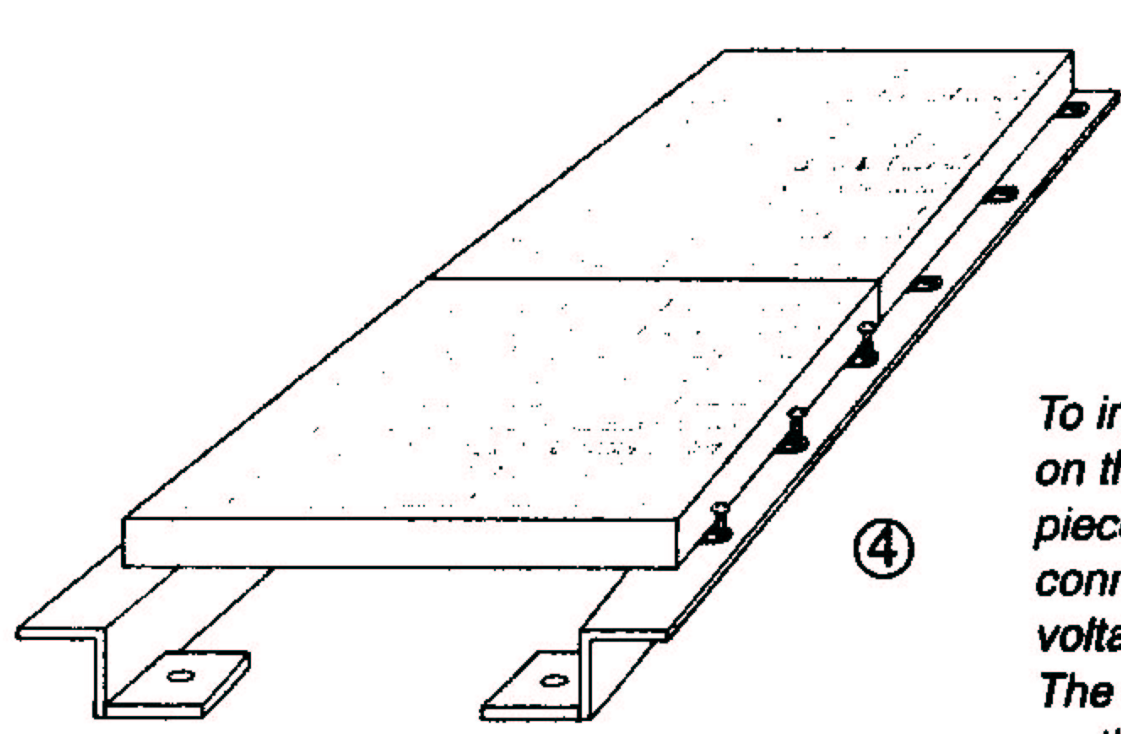
Loosen the screws of the metal hooks.



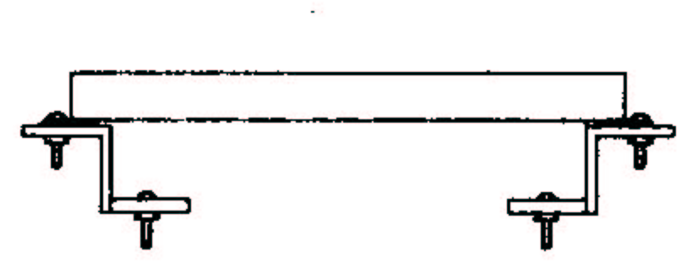
Turn the hooks to the outside of the panel, in order to put the screws through the hooks for easy mounting. The metal hooks can be adjusted by sliding up or down, or by sliding left or right position as required, then tighten the screws firmly



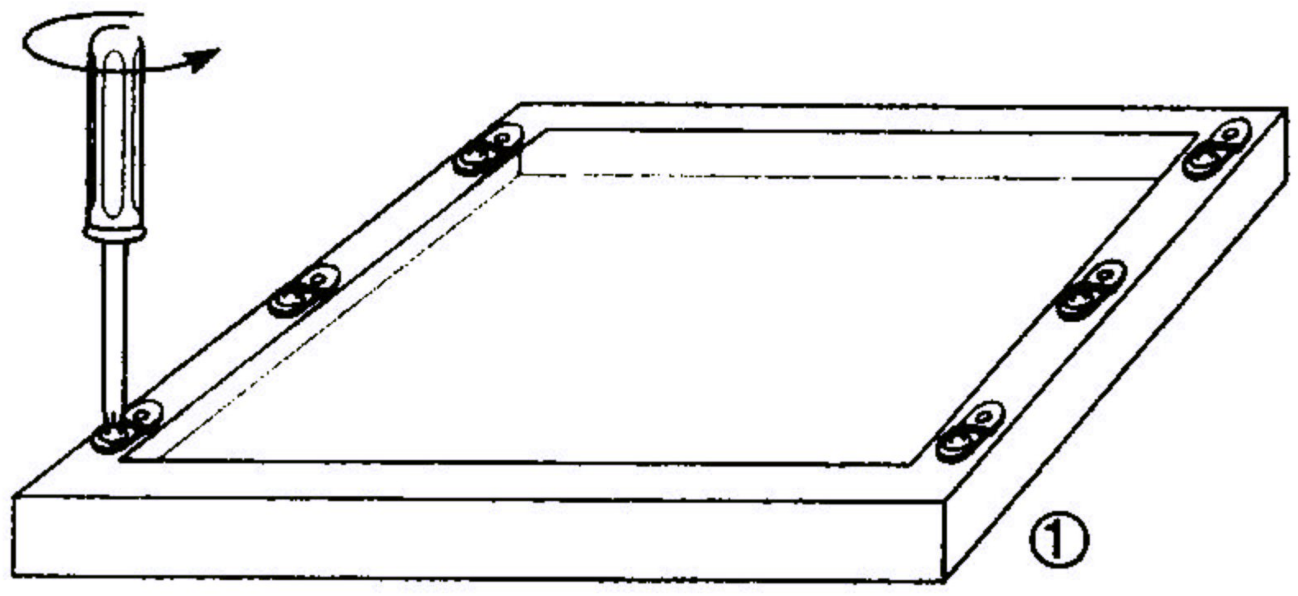
Insert the screws into the hooks in order to mount on the ground or wall.



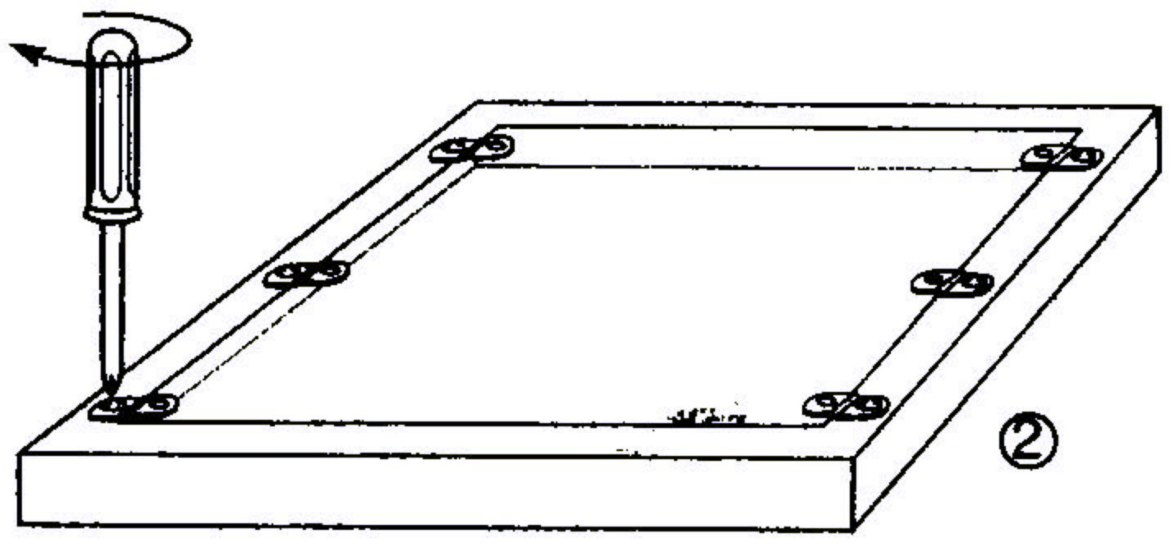
To increase the power, the panels can also be mounted on the strip frame (not included) with 2 pieces or several pieces connected together. To increase the current, connect the panels in parallel system. To increase the voltage, connect the panels in series system.
The advantage of this mounting method is easy and fast, as the hooks and the screws are outside the panel.



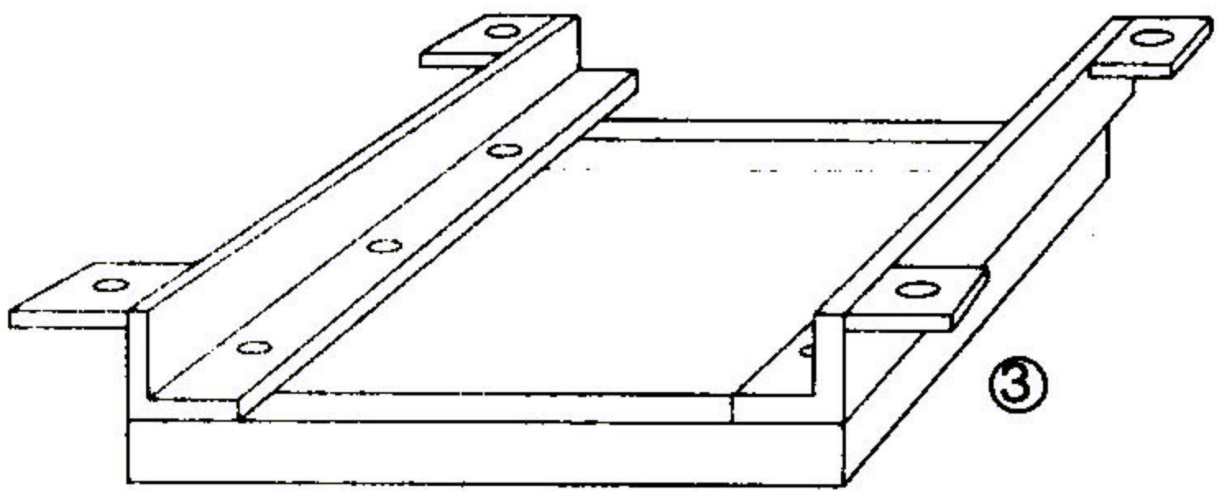
VERSION B – Panel mounting with hooks inside



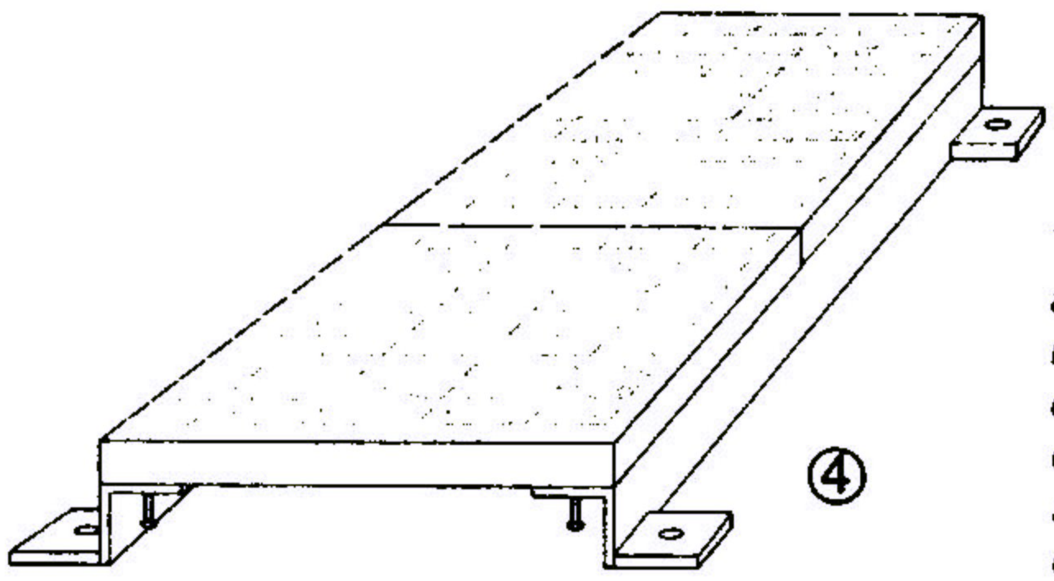
Loosen the screws of the metal hooks.



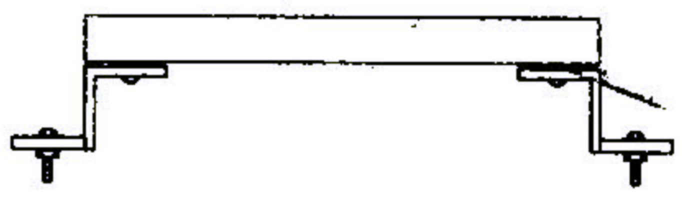
Turn the hooks to the inside of the panel, in order to put the screws through the hooks for easy mounting. The metal hooks can be adjusted by sliding up or down, or by sliding left or right position as required, then tighten the screws firmly



Fix the strip fame on the panel's hooks with screws and tight if firmly (strips and screws are not included)

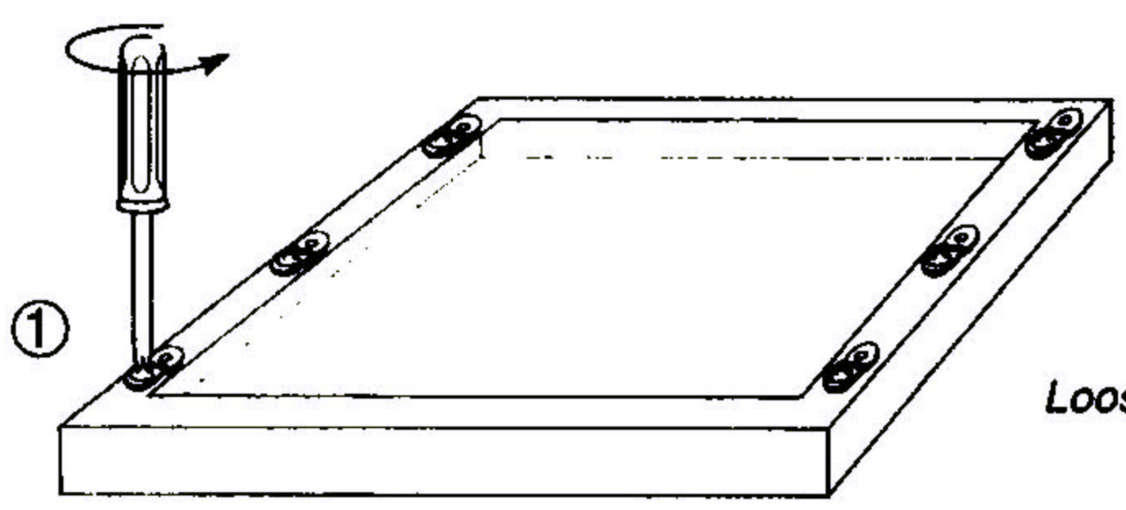


To increase the power, the panels can also be mounted on the strip frame (not included) with 2 pieces or several pieces connected together. To increase the current, connect the panels in parallel system. To increase the voltage, connect the panels in series system. The advantage of this mounting method is look nice and tidy.

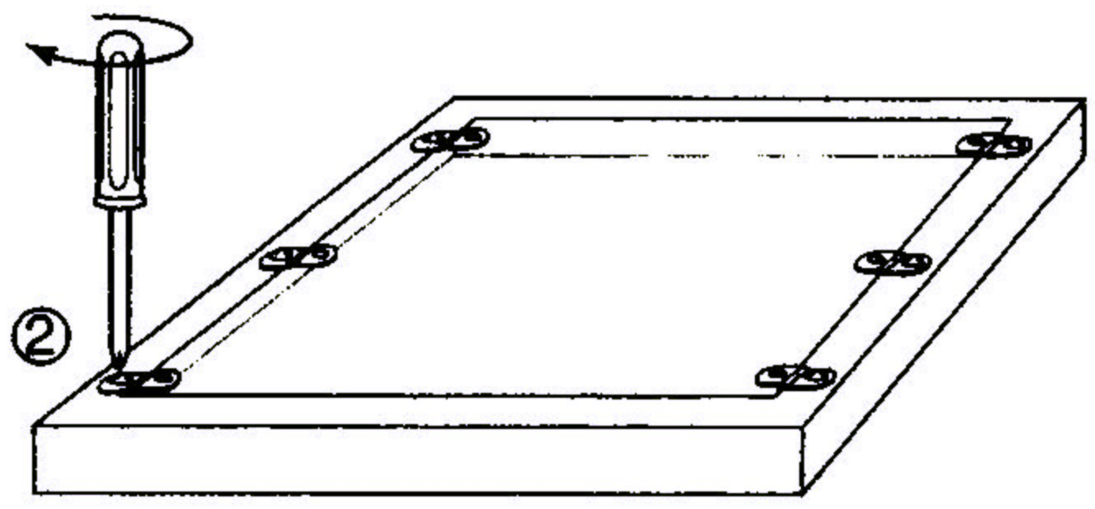


VERSION C

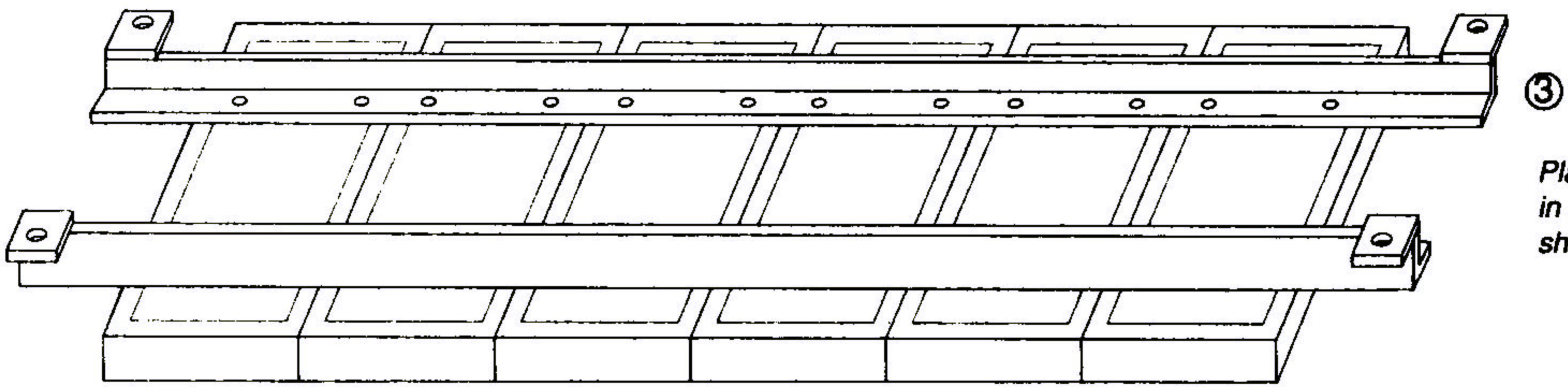
Suggestion of how to connect several pieces of solar panels together in order to increase the voltage of current of the solar panels.



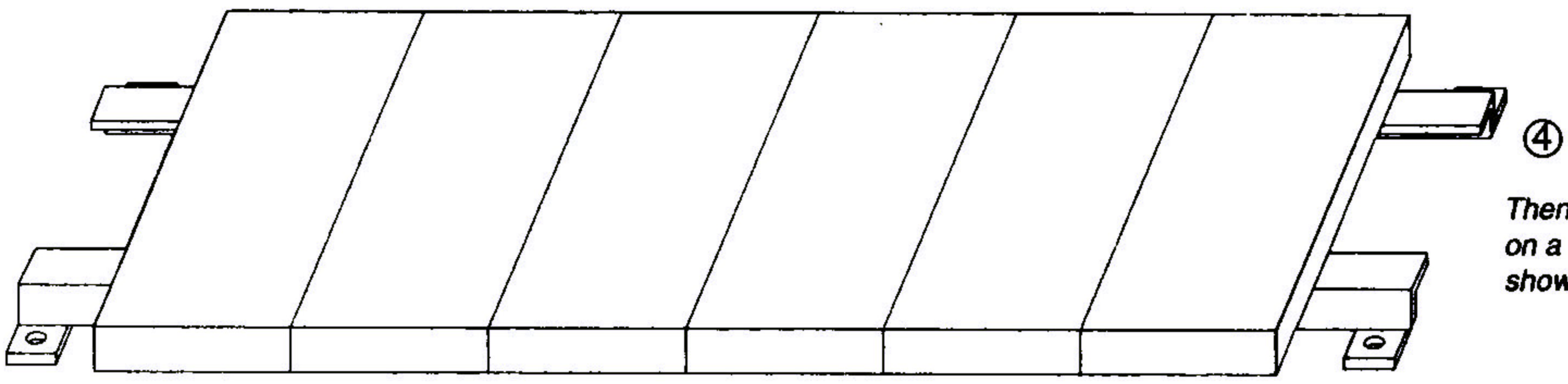
Loosen the screws



Turn the hooks to the inside position. The metal hooks can be adjusted by sliding up or down, or by sliding left or right position as required, then tighten the screws firmly.



Place the long metal strip frame in and tighten the screws as shown in the figure.



Then mount the solar panel on a fixed position as shown

The above 3 suggestions are some suggestions only, you can use your imagination and think of many other methods to fix the solar panels, which will suit your applications and the conditions.

CHARGING TIME:

The time it takes to recharge a battery is dependent upon the following:

1. The capacity of the battery
2. If the battery has already been used, how much energy remains
3. Intensity of sunlight

e.g. Charging Time: $\dfrac{\text{Battery capacity 4000mA (4A)}}{\text{solar panel output 1500mA (1.5A)}}$

= 2.6 hours

That means if your battery capacity is 4000mA(4A), then use the solar panel with output 1500mA(1.5A) to charge the battery, it takes 2.6