



## Solar Fan GSK-1001

This circuit converts sunlight into electrical energy. The fan speed is controlled by the intensity of the sun collect by the solar panel. This kit provides a rudimentary demonstration for how solar energy works

### Technical Specifications

Power Source: Solar panel  
Power of solar panel: 4VDC @ 60mA  
Solar panel dimensions: 6 x 6 cm

### Operating principles

When the solar panel is facing sunlight it will convert the suns energy to DC voltage The DC voltage will be utilized by the DC motor to turn the fan. Fan speed will be determined by the intensity of the sun collect by the solar panel.

### Testing

Connect all components as shown in figure 2. Make sure the red clip is connected to the positive pole and the black clip to the negative pole. If the connections are reversed the fan will turn in reverse direction. The motor (fan) will turn faster the greater the suns intensity and slow or stop moving with less or no sun light.

### Note

This solar panel will not convert fluorescent light to DC voltage

### **Special handling instruction**

Extra care must be taken to ensure the solar panel positive and negative connections do not touch causing a short circuit. Damage to the solar panel may occur if the connections are short circuited.

### Troubleshooting

The solar panel may be tested by connecting the positive pole and negative pole to a voltmeter. Turn the solar panel towards the sun and any movement displayed by the voltmeter indicates the solar panel is functional.

To test the DC motor connect a 3VDC power source to the motor. If the motor turns it is working.