

A Simple Desk Lamp

Outline of Design

A wooden base A on which is fixed a vertical rod F carrying a horizontal bar H with the LED D at the end.

Wire (flex) connects the LED to the battery B and the pv module C via junctions at G

Here the positive braids can be twisted and soldered, wrapped with insulating tape or connected together with a terminal block. Same for negative (black) wires.

To keep it very simple, we have no switch but just put the lamp, with its pv panel, in the sun for an hour or two each day bringing it indoors for the evening. The LED stays on all the time!

And one can add more LEDs for more light but for less time!

It could easily be made much smarter but we will go into that later.

There is just one real limitation that we will come to later – if the battery is Li-ion it must not be overcharged!

