

## Night Light Soldering Kit/PPKIT4005





This fun little soldering kit contains all of the parts required to make a dark activated night light.

Using an LDR (Light dependent resistor) and an NPN transistor, the 5 white LEDs included in the kit will fade up and down depending on how dark the environment is.

We wanted to see if a box made from soldered together PCBs would be strong and work well, so we thought that a nice little USB powered night light would make a great project. We drew a nice geometric cube design to see how well our PCB manufacturer could route complex patterns and we were very impressed with the results. For the top of the lamp we decided on a different design and drew an angular spiral.

This kit is an intermediate kit, the hardest part is creating the box with the PCBs. You should be able to assemble this in 10 - 30 minutes with basic soldering skills.

Once assembled the lamp is powered using a micro USB cable (not included).

## Included:

- 1 x Top PCB
- 1 x Base PCB
- 4 x Side PCBs
- 5 x White 5mm LEDs
- 5 x 270 Ohm resistors
- 1 x 39K Ohm resistor
- 1 x LDR
- 1 x USB power connector
- 1 x NPN 2N3904 transistor

## Required:

- Soldering Iron
- Solder
- Cutters
- An elastic band
- Micro USB cable