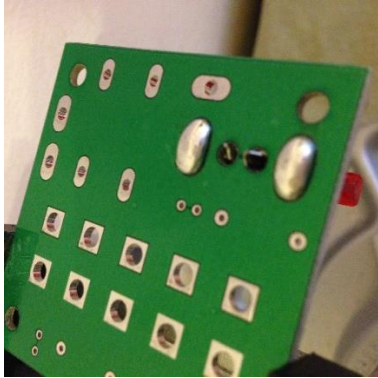
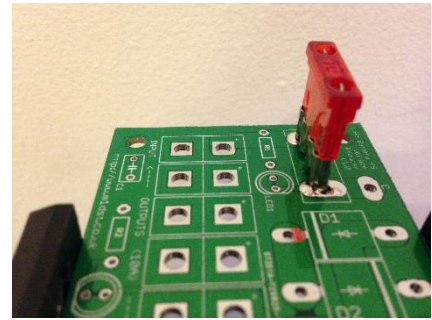


Step 1

Place the fuse holder clips onto each leg of the fuse. **Ensure they are facing the same way.** Place the fuse into the holes of the PCB and carefully tack it on the top of the PCB using a little solder. This will ensure when you flip the PCB over to solder it properly it won't fall out. Ensure the fuse is vertical before flipping the PCB.

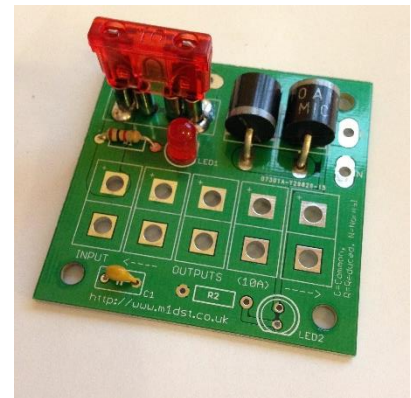


Solder the fuse holder in place and ensure you use enough heat and solder to adequately make a good connection. Ensure you don't use too much and solder the fuse to the holders else you will have trouble removing the fuse if you manage to blow it. ;-)

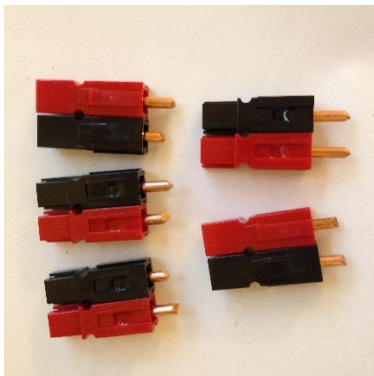


Step 2

Find the 1K resistor, an LED and the two 10A diodes and capacitor and then solder them in place as shown in the picture. **Ensure you install the diodes and LED the correct way around.** Failure to do so will stop the unit working.



Step 3



Prepare the Powerpoles but cutting each copper rod in to two equal pieces. You should then be able to insert each copper rod into the Powerpole contact. You should now either crimp or solder it to ensure it doesn't pull out. You can now insert each contact into the Powerpole casing.

Slide a red and black casing together so that it matches the picture.

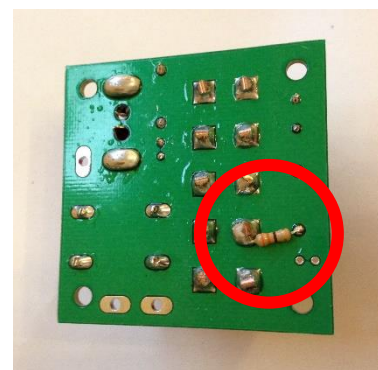
Insert the Powerpoles into the PCB **ensuring the red casing faces the fuse and power diodes.** Flip the PCB over and solder in place. If you solder one leg at a time you should be able to ensure they

are all straight.

Step 4

There was an error on the PCB which means the resistor (R2) needs to be installed on the bottom of the board and not the top as shown on the silkscreen.

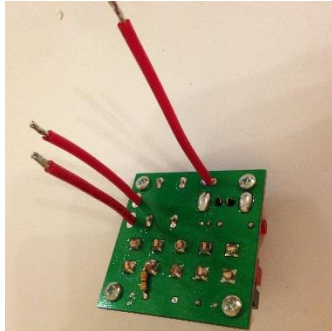
Solder the 330R resistor to the original hole nearest to the LED and the other end to one of the Powerpole copper rods providing the required ground.



Step 5

Install the nylon spacers on the top of the PCB.

Step 6



Time to prepare the wires. Cut **80mm from thicker wire** and strip a little of each end. This will be the common and soldered to the pad marked **C**.

Cut the remaining piece of thick wire into **two equal pieces** and install them in the positions marked **N** and **R**.

When installed it should look like the picture.



Step 7

Cut the thinner wire into two equal pieces and strip each end. Solder a piece of wire to each leg of the remaining LED. Solder the other end to the PCB as marked by the LED on the silkscreen. I suggest you install it on the bottom of the PCB. **Ensure you install it the correct way around else it will not work.**

Step 8

Push the switch into the faceplate and then screw the faceplate to the nylon spacers. Push the LED through the 8mm hole in the faceplate and then insert it into the holder. **Once in the holder ensure that the legs of the led aren't shorting.** If they are use a small screwdriver and part them. You may want to drop a little hot glue to ensure they stay apart. Push the LED and holder into the 8mm hole.

Step 9

Carefully bend and solder each of the thick wires to the tabs on the switch. Start with the top one, then the middle (the longer common) and finally the bottom one. See the photo if you are unsure. The wires should bend nicely and stay in place once soldered. They should also help stop the thin LED wires from moving around.



Step 10

Place the finished product into the box and screw it down using the longer pan heads.

Testing

Connect a battery or power supply to the input and switch the switch. The LED on the panel should light up in one position and not in the other.

Connect a load and then remove the fuse emulating a blown fuse. The LED near the fuse holder should light up.

Modifications

If you find the LED is too bright or you wish to reduce the power consumption of it you can change the 330R resistor for something higher such 1K, 5K, 10K or even remove the LED completely and replace the holder with an 8mm blanking dome.

If you don't need to reduce the voltage you could either omit the diodes or the thicker cable going to pad R on the PCB. This will make the switch either connect the input to the outputs or isolate them. So you can quickly switch equipment off without pulling the battery or fuse out.

If you aren't using the diodes you could increase the current rating of the unit by installing thick cable as shown in the photo below with red lines. Ensure the cable is thick enough to handle the current (up to 40A) you wish to support.

