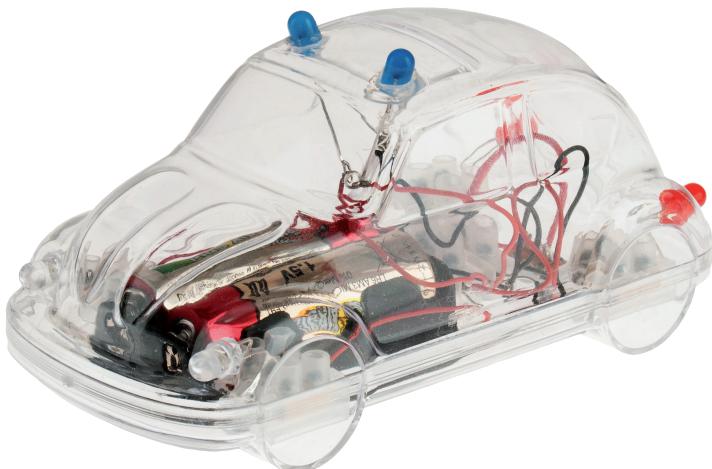


114.033 Acrylic car with LED-lighting



Necessary tools:

Drills ø2/4 and 5mm
Fretsaw
Hot glue gun
Wire strippers
File
Scissors

Please Note

The OPITEC range of projects are not intended as toys for young children. They are primarily intended as teaching aids for Design Technology and to develop young peoples practical skills. They should not be attempted unless under the guidance of a qualified adult. They are not suitable for children under 3 years old as they may contain small parts that can be swallowed - danger of suffocation!.

| PARTS LIST | | | | |
|----------------------|---|-----------|----------------|---|
| Plastic car | 1 | 130 | Car | 1 |
| Light Emitting Diode | 2 | ø5 | Lighting front | 2 |
| Flashing LED blue | 2 | ø5 | Lighting front | 3 |
| Flashing LED red | 2 | ø5 | Lighting rear | 4 |
| Connector 12pole. | 1 | 1,5-2,5mm | Wiring | 5 |
| Cable red | 1 | 500 | Wiring | 6 |
| Cable black | 1 | 500 | Wiring | 7 |
| Battery holder | 1 | | Power source | 8 |
| Micro switch | 1 | 19x6 | Switch | 9 |

Instructions

Step 1:

Take hold of the acrylic car (1) and drill the two holes 5mm dia. in (front lights) ! Turn the car over and drill the two rear lights 5mm dia.

The drill the two 5mm holes in the roof 5mm dia. 25 mm apart

Take the base make the the slot for the switch (9) 12 x 6mm and file to shape.



Note:

Drill the acrylic slowly, otherwise the acrylic will split! We recommend drilling the holes in steps, first a ø2, then ø4 and finally use a ø5mm drill bit

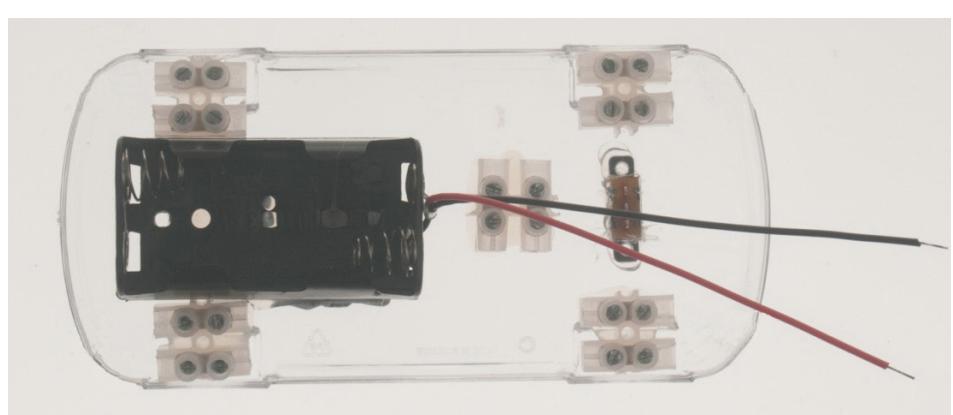
Step 2:

Cut off from the connector block(6) five lots of 2 pole sections.

Step 3:

Glue the connector blocks (in twos -2-pole) with hot glue into the base of the car as shown. Glue the micro switch (10) in the slot (12x6) , so that the connections are on the inside. Glue the battery holder (8) between the two connector blocks at the front.

Note: If you want to paint the car, do it before adding the wiring!

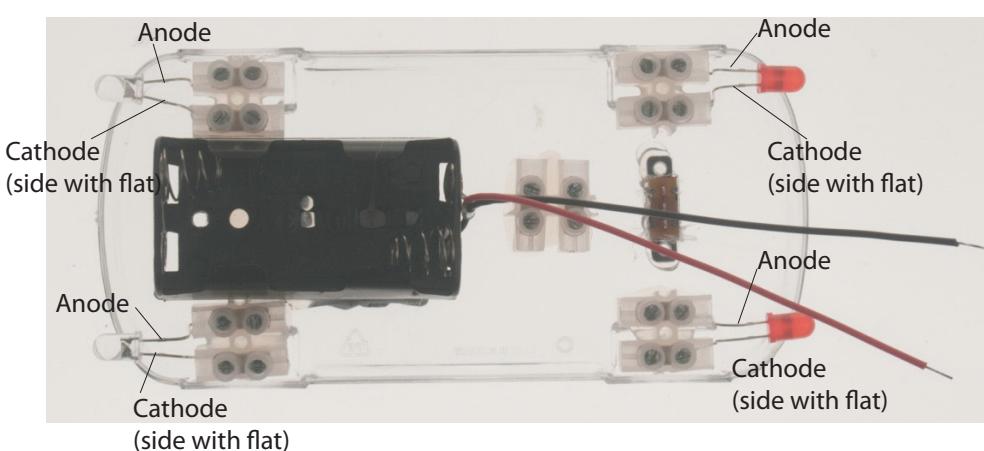


Step 4:

Insert the red and white LEDs in position as shown and bend the legs.

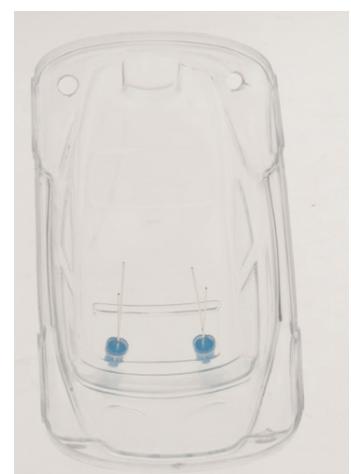


The two white light diodes (2) are inserted in the front connector block (Battery holder end) as shown and screwed in place. Note the position of the Anode and Cathode. Mount the two red LEDs (4) in the rear connector block (Switch side) and screw them in place as shown. Note the position of the Anode and Cathode- see diagram)



Step 5:

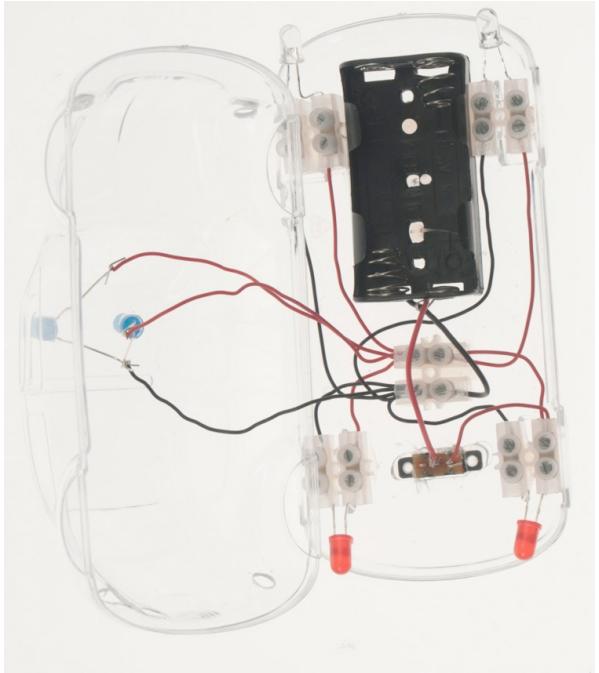
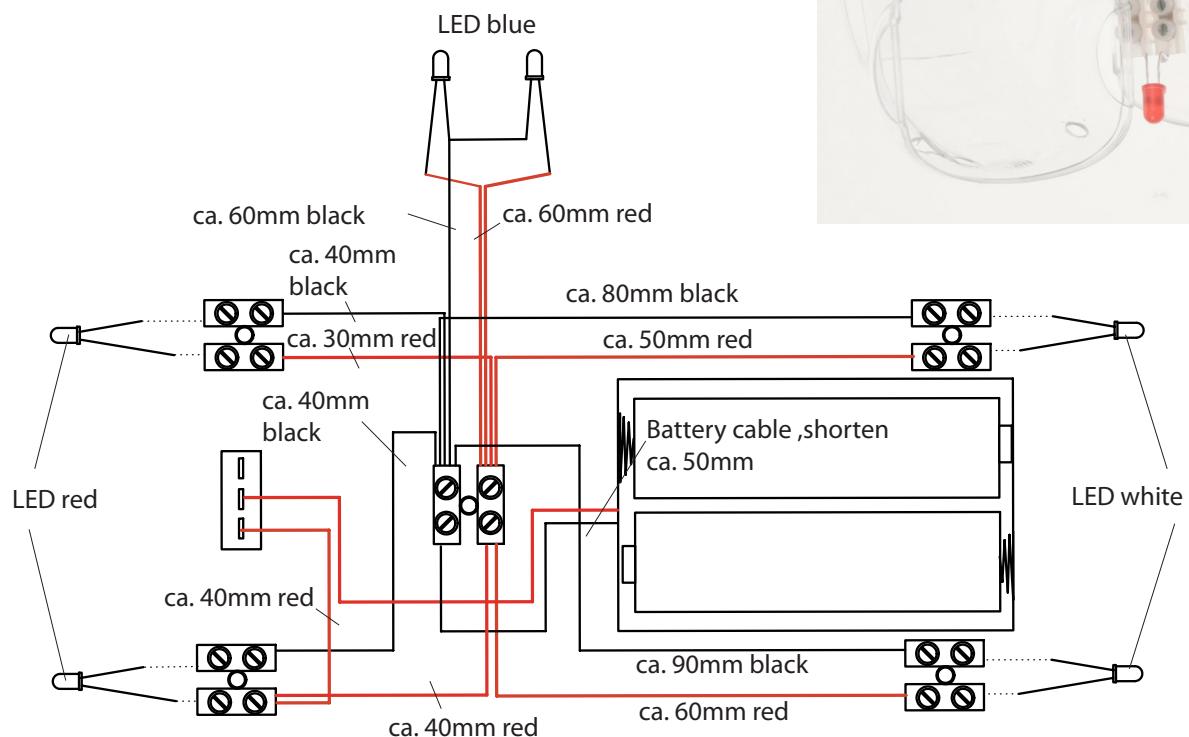
The blue LEDs (3) are glued in the top holes as shown



Instructions

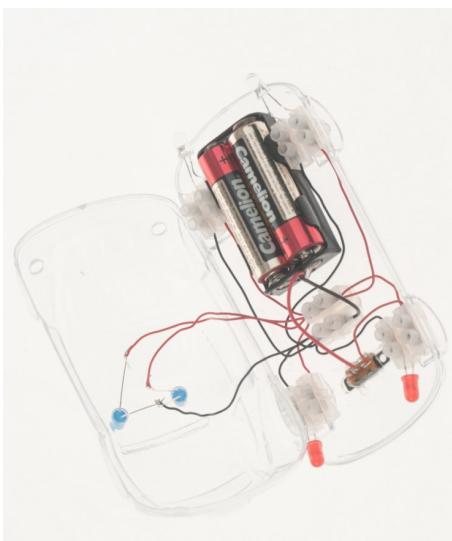
Step 6:

Connect up the various components with wire (6/7). Cut the cable to length as shown (see diagram) strip the insulation from the ends



Step 7:

Insert the (2x 1,5 V AAA) batteries.



Step 8:

Insert the rear LEDs (4, red) in the holes at the rear chassis.



Step 9:

Insert the two front LEDs (2, white) through the holes in the front and then finish by pressing the top down on the base -chassis. Finished!

