Brainz



Quantity	Description
4	RGB LEDs 5 mm
1	Push button
1	CR2032 battery holder
1	CR2032 battery (not included, available at distribution)
1	Brainz board (PCB)
1	Pin / brooch pin (optional at distribution)

Difficulty: ●●○○○ Build-Time: 30 – 60 Minutes

Manual v1.0 CC BY-SA 4.0 Binary Kitchen e.V.
Board v1.0 CC BY-SA 4.0 Binary Kitchen e.V.

Safety Information

- WARNING: Not suitable for children under 14 years of age.
- Choking hazard due to small parts that can be swallowed.
- We recommend: Supervision of the assembly and soldering process by an adult.
- Keep these assembly instructions in a safe place for future reference! They contain important information.
- If the battery runs out, replace it with a new battery with the same specifications.
- During soldering, the soldering iron, solder, and components being soldered become very hot.
- ALWAYS wear safety goggles when soldering and assembling the kit.
- Always use a fireproof surface when soldering! This prevents the components from slipping.
- Always use a suitable soldering iron holder to store the soldering iron safely during assembly.
- The kit is only intended for battery operation.
- Never allow small children to play with the kit alone! The kit uses small batteries. If these are swallowed, get stuck in the esophagus, and are not treated, this can trigger a harmful chemical reaction and have serious consequences within two hours. If this happens, seek medical attention immediately.
- CAUTION: Never connect the kit to mains voltage! This poses a serious risk to life!
- Please dispose of the device at a certified disposal facility at the end of its service life. This is good for the environment and ensures proper disposal.
- Subject to changes and errors.

Disposal

This appliance is labelled in accordance with the European Directive 2012/19/EU on waste electrical and electronic equipment (WEEE). The directive provides the legal framework for the take-back and recycling of waste equipment throughout the EU.

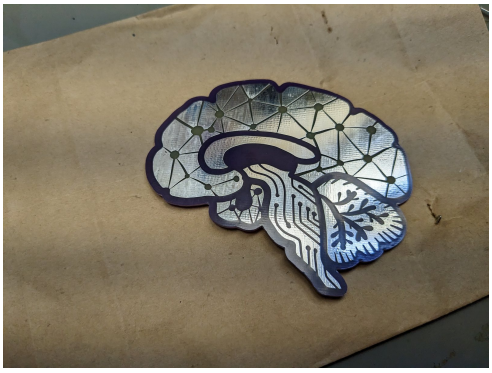
- **packaging**: The packaging is made of environmentally friendly materials and is therefore recyclable. Dispose of packaging materials that are no longer needed accordingly.
- **waste equipment**: Old appliances often still contain valuable materials. Therefore, hand in your old appliance to your retailer or a recycling centre for reuse. Please ask your retailer or your local authority for the current disposal routes.

blinkyparts.com
Egerstr. 9
93057 Regensburg
GERMANY

Step 1

a) Check your components

b) A CR2032 battery is not included. You can buy them online or at major electronics stores.

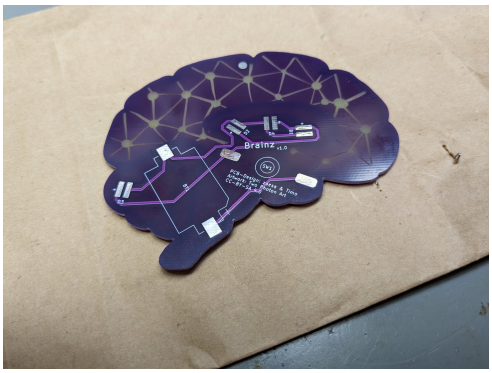


Step 2

a) Turn the PCB over

b) You will find the LED pads D1, D2, D3 and D4 on the back. One of the pads is longer and marked with a plus sign (+).

c) Add solder to the longer LED pad marked with a plus sign (+).



Step 3

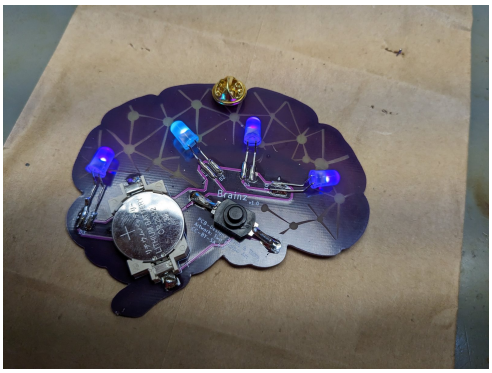
a) The long leg of the LED marks the positive side. Solder the positive leg (the long one) to the plus pad, to which you have already applied solder.

b) Make sure, that the second leg also touches the other pad without solder.



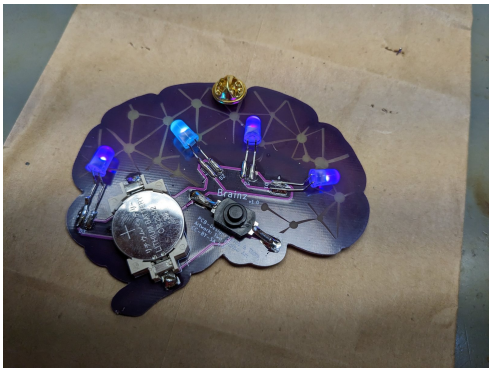
Step 4

a) Solder the other leg of the LED (cathode, negative side) to the circuit board.



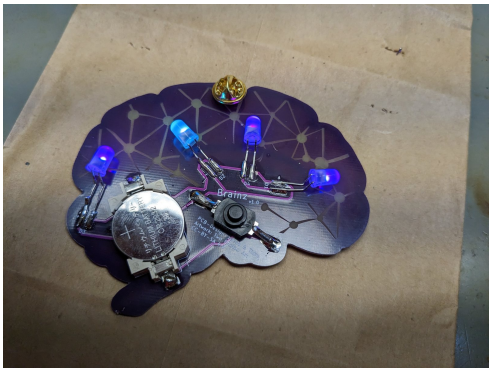
Step 5

a) Repeat the last two steps for the LEDs D2, D3 and D4
b) Watch the direction here as well: the long leg belongs on the pad marked with a plus sign (+).
c) You can still correct the height of the LEDs while the solder is hot.



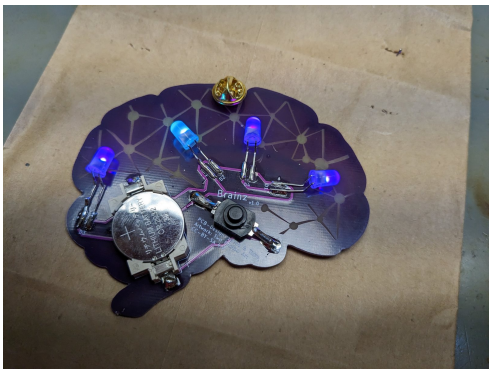
Step 6

a) The button SW1 has no direction.
b) Put solder on one of the pads of the button.
c) Bend the legs of the button so, that the legs can touch the surface of the board.
d) Heat the pad with solder again and push one leg of the button from the side onto the pad.
e) Make sure, that the other leg of the button touches the other pad.



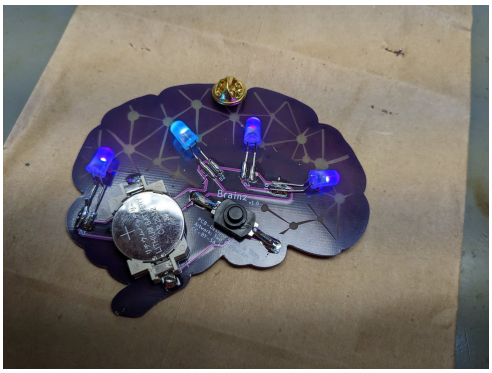
Step 7

a) Solder the other leg of the button to the board.



Step 8

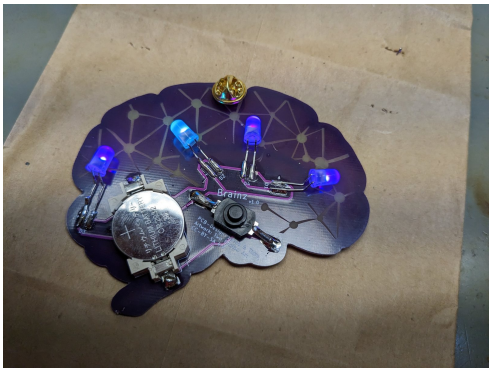
a) The battery holder BT1 has a direction, which is marked with a bevelled edge. The same bevelled edge is also printed on the circuit board.
b) Put solder on one pad of the battery holder.
c) Heat the pad with solder again and push the battery holder onto the pad from the side.
d) Make sure that the other leg of the battery holder touches the other pad.
e) Solder the other leg onto the other pad on the circuit board.



Step 9

a) Insert the battery as shown

b) The terminals on the positive side must touch the top of the battery. Slide the battery into the battery holder from the left and press only the left side down.



Step 10

a) You're done!

b) Press the button and the four LEDs start to light up.

