

# Rainbow Unicorn 01



Quantity	Description
4	RGB LEDs 5 mm
1	Push button
1	CR2032 battery holder
1	CR2032 battery (not included)
1	Board (PCB)

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

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### Step 1

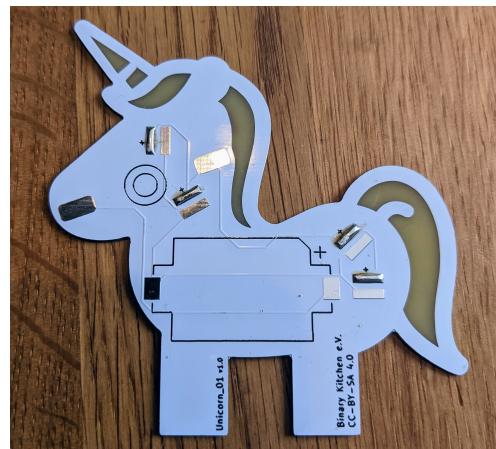
- a) Check your parts.
- b) A CR2032 battery is not included. You can get them online or at bigger electronic stores.



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### Step 2

- a) Turn the PCB to the back-side.
- b) Add solder to all four long LED-Pads marked with an +.



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### Step 3

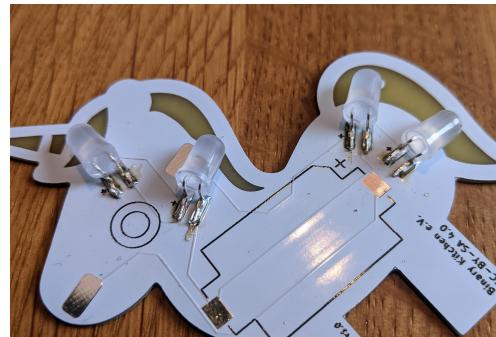
- a) The long leg of the LED marks the positive side.
- b) Bend the legs, so that the LED lays flat on the board and the legs are also touching the board.
- c) Solder the posive leg (long) to the positive pad where you've added the solder already.
- d) Ensure that the second leg also touches the other pad without solder.



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### Step 4

- a) Solder the other leg of the LED (cathode, negative side) to the board.
- b) Cut away the excess of the legs.



## Step 5

- a) The button has no direction
- b) Add solder to one pad of the button.
- c) Bend the legs of the button so it can touch the surface of the board.
- d) Heat up the pad with the solder again and push the button from the side onto the pad.
- e) Make sure the other leg of the button touches the other pad.



## Step 6

- a) Solder the other leg of the button onto the board.



## Step 7

- a) The battery holder has a direction marked with a cut edge. You can find the same missing edge also on the board
- b) Add solder to one pad of the battery holder.
- c) Heat up the pad with the solder again and push the batteryholder from the side onto the pad.
- d) Make sure the other leg of the battery holder touches the other pad.
- e) Solder the other leg onto the other pad on the board.



## Step 8

- a) If you wish, you can add hot glue to the yellow part of the board on the back-side. This helps distribute the light of the LED better.



## Step 9

- a) Insert the battery as shown of the picture.
- b) The receivers of the positive side need to touch the top of the battery. Slide it from the left in and push only the left side down.



## Step 10

- a) You are finished!
- b) You can attach a magnet to the battery to better attach the solder kit to your clothing.

