Humo

Quantity	Description
9	Laser cutted parts
1	120 mm PC fan
4	PC fan screws
1	Fan grill
1	Solder-fume filter
1	USBC Power Delivery 12V board
1	LED strip
1	Switch
2	Wood screws
1	Cable 15 cm (optional)

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

Safety Information

- ATTENTION: Not suitable for children under 3 years, choking hazard due to small parts that may be swallowed.

- We recommend: Supervision of the assembly and soldering process by an adult.

- Keep these operating instructions in a safe place for later use! It contains important information.

- Magnets are included in the kit. Magnets are not toys! Make sure that the magnets do not get into the hands of children. Children can swallow small magnets. If several magnets are swallowed, they can become lodged in the intestines and cause life-threatening complications.

- Magnets can affect the function of pacemakers and implanted defibrillators. A pacemaker can be switched to test mode and cause discomfort. A defibrillator may no longer function. As the wearer of such devices, keep a sufficient distance from magnets. Warn wearers of such devices against approaching magnets.

- magnets generate a far-reaching, strong magnetic field. They can damage televisions and laptops, computer hard drives, credit and debit cards, data carriers, mechanical watches, hearing aids and loudspeakers, among other things. Keep magnets away from all devices and objects that can be damaged by strong magnetic fields.

- Neodymium magnets are brittle. If two magnets collide, they can shatter. Sharp-edged splinters can be thrown meters away and injure your eyes. Avoid collisions between magnets. Wear safety goggles when handling large magnets. Make sure that bystanders are also protected or keep their distance.

- If the battery is empty, replace it only with a new battery with the same values.

- When soldering, the soldering iron, the solder and also the components being soldered become very hot.

- Always wear safety glasses when soldering and assembling the kit.

- Always use a fire proof soldering pad when soldering! This prevents the components from slipping away.

- To keep the soldering iron safe during assembly, always use a suitable soldering stand.

- The kit is designed for USB power only. Use appropriate power supply.

- CAUTION: Never connect the kit to 230 V mains voltage! There is an absolute danger to life!

- Please take the device to appropriately certified disposal companies at the end of its service life. This is good for the environment and ensures correct 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.
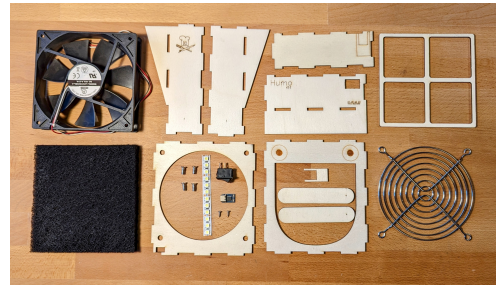
Step 1

a) Check your components

b) Clean the surfaces of the wooden parts with sandpaper

c) Tip: When you glue the wooden parts together later

masking tape helps to hold everything together;Tip: When soldering, it is helpful to tin both soldering points (e.g. cable end and metal pad) first.

Step 2

a) Attention: The fan has an airflow direction. The airflow direction can be recognised by the arrow embossed on the black plastic on the side of the fan. The airflow direction should point outwards (towards the fan guard)

b) Make sure that the cables come out where the small rectangular hole in the wooden part is (on the left in the picture)

c) Screw the fan guard and the rear panel onto the fan using the fan screws (thick screws black or silver).
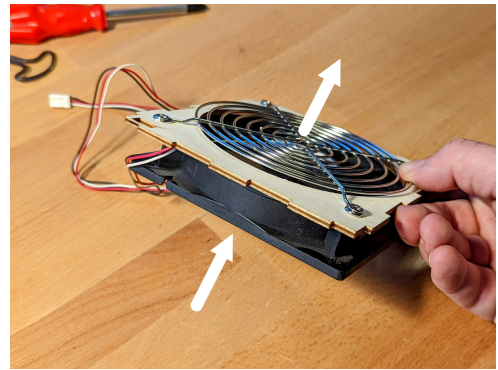
Step 3

a) The fan has two, or three cables. Cut the black cable to a length of 4–5 cm

b) Cut the red cable to a length of 19–20 cm

c) (If existing) cut the third cable completely. Remove about 5–7 mm of insulation from the ends of the wires, so that the bare copper is visible.
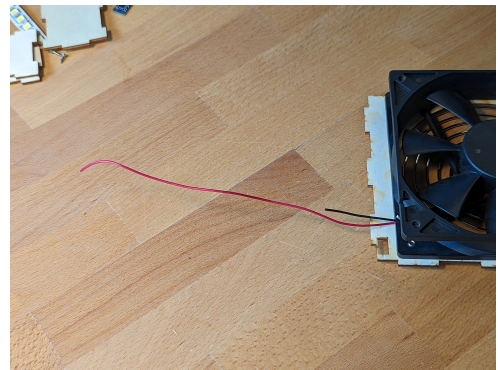
Step 4

a) Glue the small U-shaped piece of wood onto the bottom part (the piece of wood with the engraved silhouette of the U-shaped piece of wood).
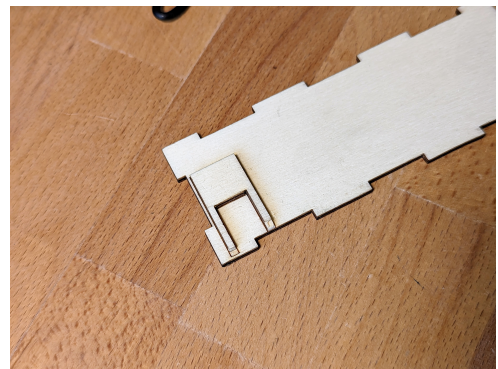
Step 5

a) Attention: Be careful with this step. The wood breaks very easily

b) press the rocker switch carefully into the rectangular hole in the piece of wood labelled "Humo". Make sure that the two metal contacts are facing outwards (left in the picture).
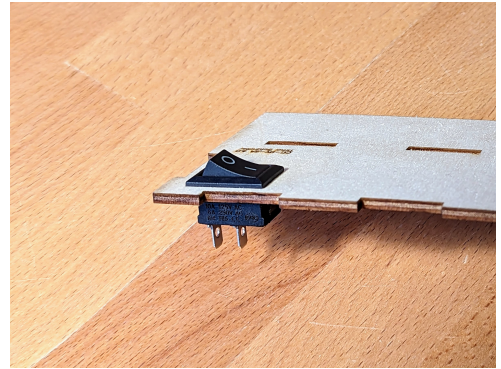
Step 6

a) In the next step we use the previously cut cable from the fan

b) Optional (if present): First cut the connector off the cable

c) Remove about 2–4 mm of insulation from one side of the black and red cable

d) Solder the red cable to the pole of the LED strip labelled "+" (plus) (from which end does not matter)

e) Solder the black cable to the pole of the LED strip labelled "-" (minus) (on the same end as the red cable).
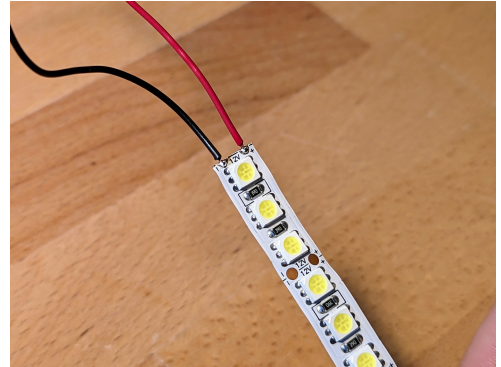
Step 7

a) Glue the LED strip to the underside of the wooden part labelled "Humo". The cables should look in the same direction as the switch (on the right in the picture).
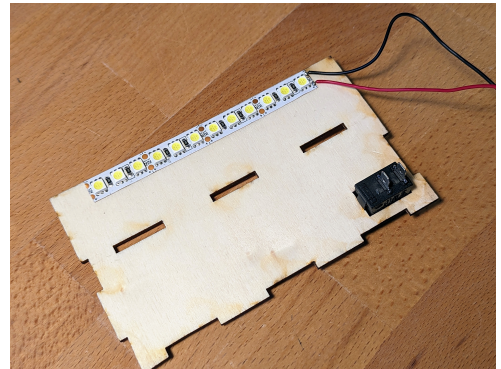
Step 8

a) Pull the two cables of the LED strip from the front through the small hole in the wooden part with the eyes

b) Pull the cable back until you can put the "Humo" wooden part onto the wooden part with eyes (see picture).
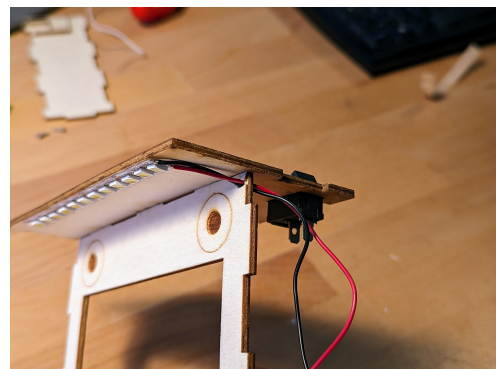
Step 9

a) We now use the remaining extra cable or the extra cable supplied

b) Remove about 5–7 mm of insulation from the remaining cable (usually white or yellow). Solder the remaining cable to a metal pin of the rocker switch

c) Cut the red cable of the LED strip back, so that you can simply solder it to the other metal pin of the rocker switch. Don't leave the cable too long. Remove about 5–7 mm of insulation from the red cable and solder it to the other metal pins of the rocker switch.
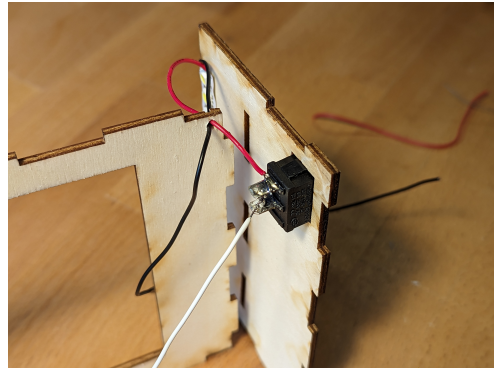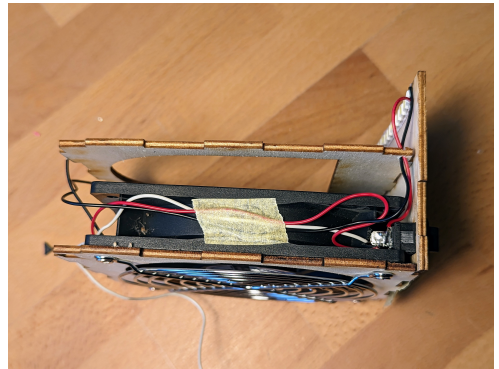

Step 10

a) Now take the red cable, that is still attached to the fan and solder it to the same side of the rocker switch as the red cable of the LED strip.
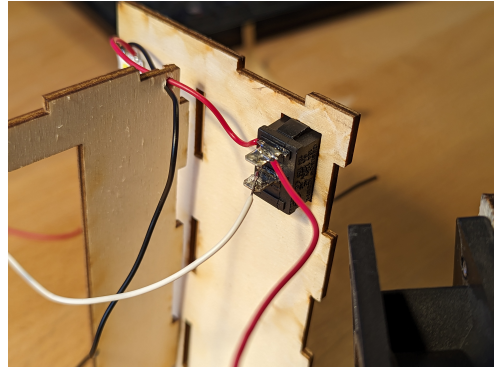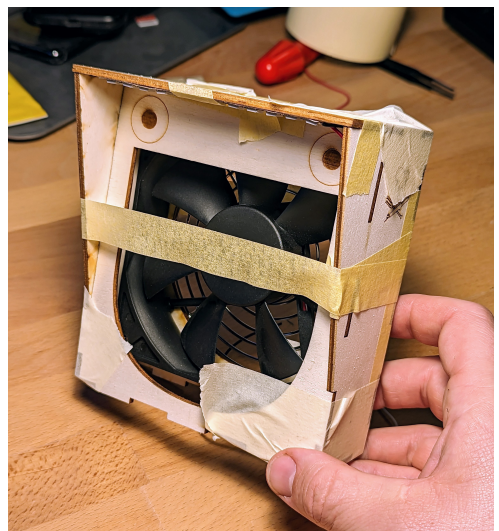

Step 11

a) Guide the cable ends all down the side of the fan

b) Tip: You can use a piece of adhesive tape to organise the cables.
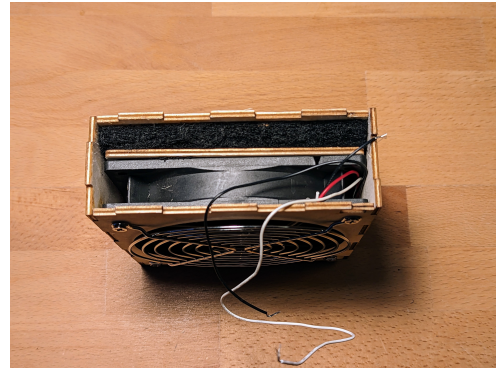

Step 12

a) Tip: Use clamps or masking tape to fix the wooden parts for the glue to dry

b) Glue the "Humo" wooden part to the two plugged wooden parts (the ones with the fan and the eyes)

c) Glue the two side parts, so that the side is facing forwards and the logo is visible on the side

d) Attention: Do not glue the bottom part yet!

Step 13

a) Insert the spacer (wooden part with 4 rectangular holes) and activated charcoal filter into the Humo as shown. If it is too tight, you can cut the activated charcoal filter to size with scissors.
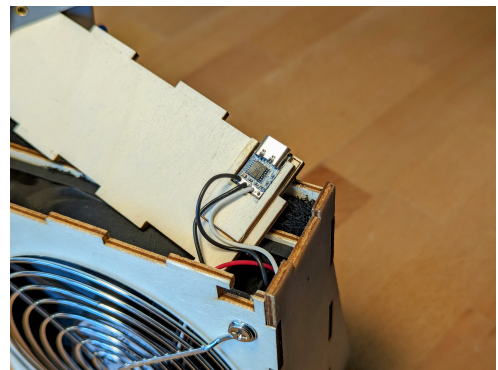

Step 14

a) Shorten the cables so, that you can easily solder them to the USBC adapter (12V Power Delivery)

b) Solder the two black cables to the soldering pad of the USBC adapter marked with "-" (minus)

c) Solder the remaining cable (white or yellow) to the soldering pad of the USBC adapter marked with "+" (plus)

d) Tip: In this case, tin only the cable.

e) Insert the cables from above (from where the USBC plug can be seen) through the holes at "-" (minus) and "+" (plus) and bend the cable ends slightly. This holds everything together. Then set the soldering points.
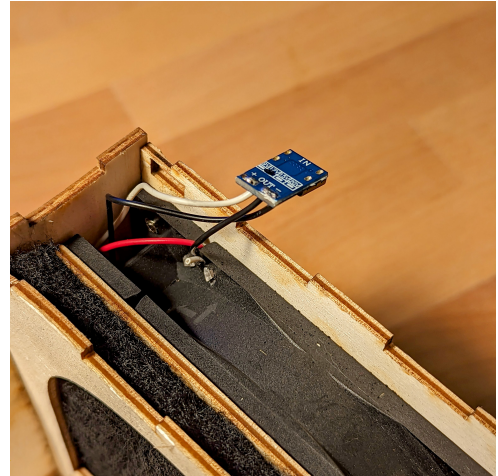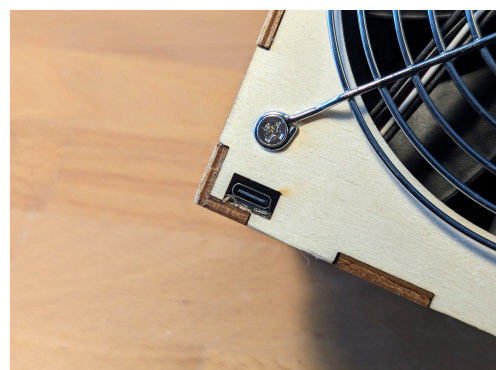

Step 15

a) Glue the USBC adapter into the U-shaped piece of wood using superglue. The USBC connection should face outwards.

Step 16

a) Insert the base so that the USBC connection is visible through the cut-out in the rear part

b) this piece of wood should not be glued so that the activated charcoal filter can be changed from time to time

c) you can secure the base with masking tape.

Step 17

a) Screw the arms to your Humo.
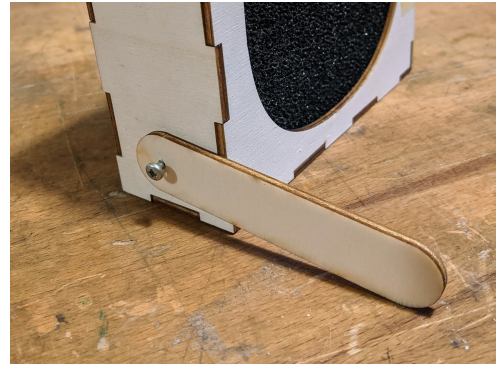
Step 18

a) You are now ready!

b) Plug the Humo into a USB port (Power Delivery PD 12V must be supported) and switch on the fan and the light.

c) You can now oil, paint or varnish, your Humo, but this is optional.