

Assembly instructions







Figure 1: General view of the fully assembled SmoothBox.

Stückliste

Bauteilnummer	Bezeichnung	Stk
80301	Heating foil	1
80701	Plastic box	1
80702	Lid	1
80101	Motherboard	1
80201	Display PCB	1
80601	Power supply 12V/2A	1
80801	Fan	2
80202	Displaykabel FFC	1
80501	Touch display	1
80301	Kabeltree	1
80303	I/O Switch	1
80703	Seal	1
80401	Plastic Screw Phillips Round Head TCB PZ1 3 x 8 mm	14
80402	Plastic screw Phillips countersunk head 5 x 10 mm	16
80403	Cylinder Head Bolt M4 x 10 mm	2
80404	Cylinder Head Bolt M4 x 14 mm	4
80405	Nut M4	10
80306	Rubber grommet	10
80304	adhesive film	1
80901	Component hooks	2
81001	Acetone container	1

Schraubenverzeichnis

80401 	80402 	80403 	80404 
Plastic Screw Phillips Round Head TCB PZ1 3 x 8 mm	Plastic screw Phillips countersunk head 5 x 10 mm	Cylinder Head Bolt M4 x 10 mm	Cylinder Head Bolt M4 x 14 mm

Recommended tools

- Phillips screwdriver
- Side Cutters
- Allen key 3mm

Assembly sequence

Step 1 – Preparation of the sub-assembly

The three parts of the main girder are laid out. The two side panels (both identical) are mounted on the main beam with the supplied plastic screws 5 x 10 mm (80402).

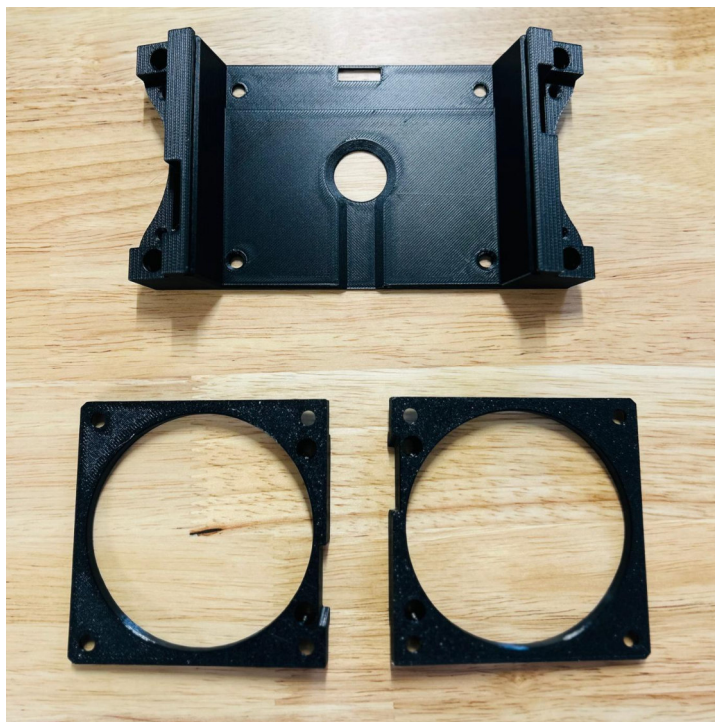


Figure 2: Associated assembly photos for Step 1 - View Prepared Subassemblies.

The cables of the two fans on the left and right are inserted from above as shown in Figure 3, and the fans are mounted on the carrier with 4 fan screws each as shown. It is important to align the cable outlets of the fans exactly at the two cable ducts.

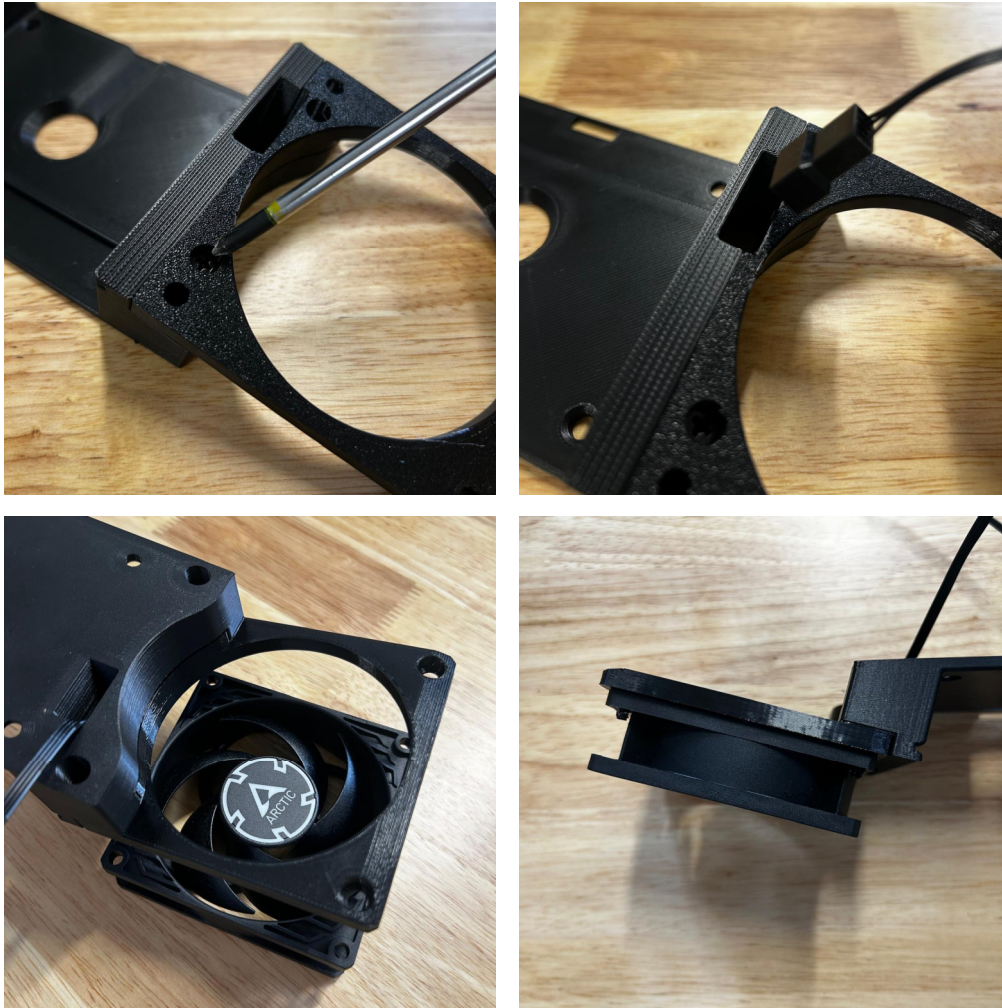


Figure 3: Associated assembly photos for step 1

The lower carrier of the central assembly and the LED holder are also connected to the previously mounted fan holder. Plastic screws 5 x 10 mm (80402) are screwed in from above.



Figure 4: Associated assembly photos for step 1.

Step 2 – Cable assembly



Figure 5: Associated assembly photos for step 2

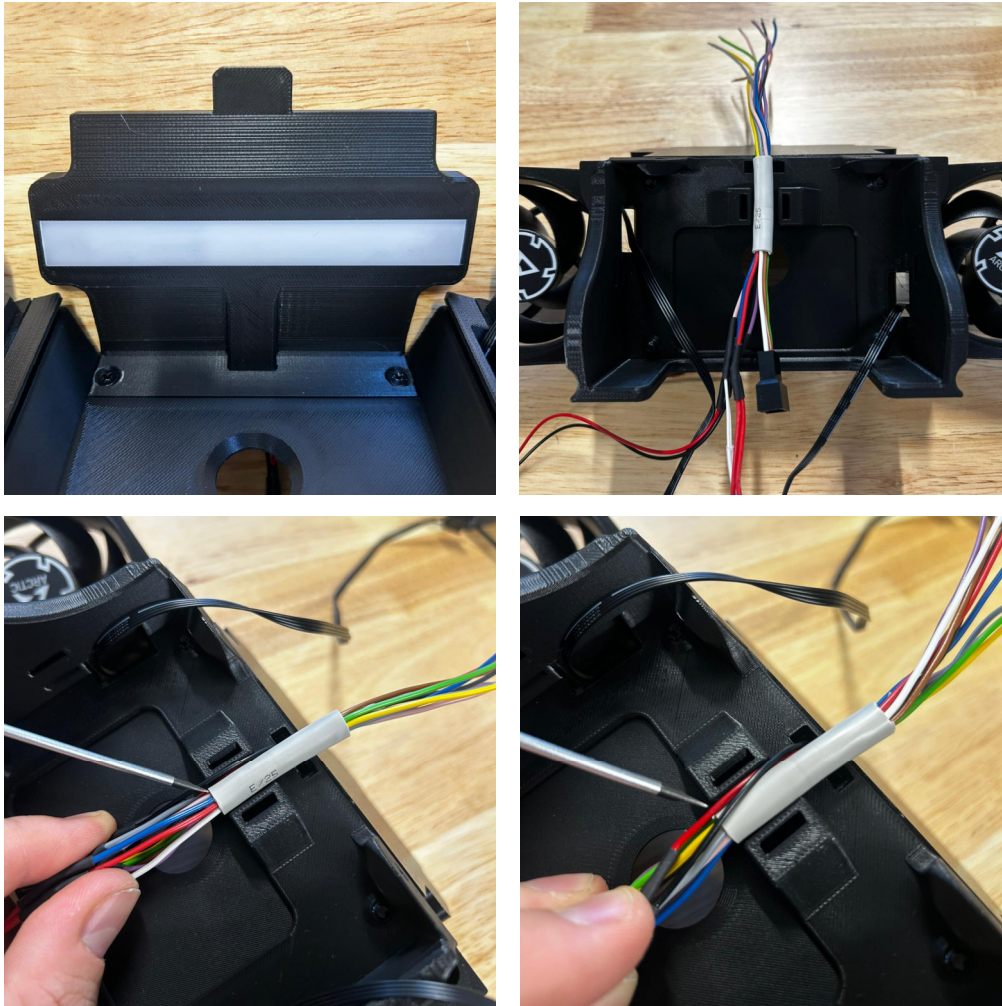


Figure 6: Associated assembly photos for step 2

From the supplied wiring harness, the LED strip is guided from below through the slot of the LED carrier and glued to the inside as shown. The cable is routed next to the LED strip in such a way that it does not come to rest in front of it later. The diffuser strip is plugged into the LED carrier. On the underside, the wiring harness is inserted into the bracket of the main beam with the appropriate orientation (see Figure 6). It is important to ensure that the insulation is flush with the carrier as shown and that the free ends of the wiring harness protrude at the rear end of the carrier. The two wires of the LED strip are folded backwards as shown and placed in a loop, so that the cable is tightened out of the LED holder. Then the entire wiring harness is fixed with the cable tie.

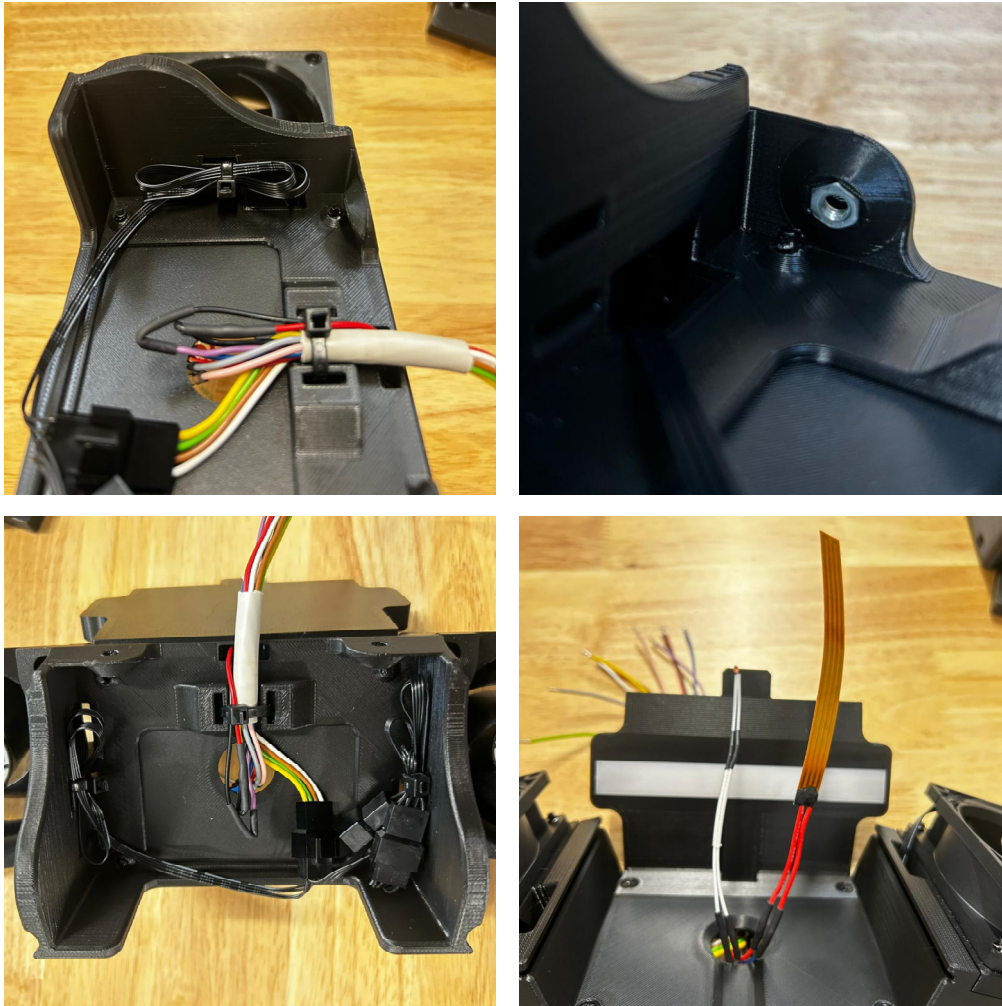


Figure 7: Associated installation photos for Step 2 – Pre-assemble fan/light carrier.

The fan cables are plugged into each other and fixed to the left and right of the main carrier with a cable tie according to Figure 7. The heating element and temperature sensor are guided through the hole from bottom to top.

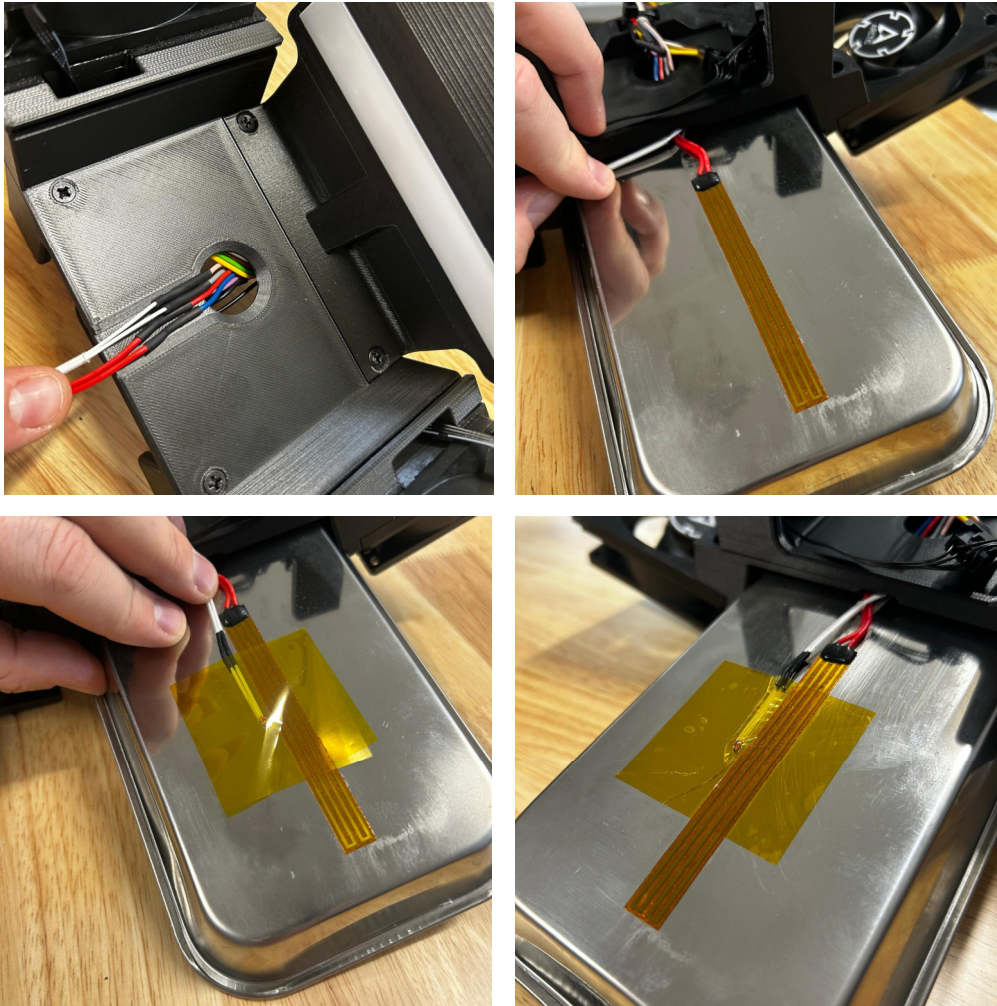


Figure 8: Associated assembly photos for step 2

The heating element is glued centrally to the acetone tub and the temperature sensor is glued with the enclosed Kapton tape in the middle next to the heating element (see Figure 8). The tub is clamped into the slots provided for this purpose in the main girder. This can be carefully bent apart.

Step 3 – Display mount

The rubber grommet is placed in the appropriate hole in the box. It is important to ensure that the ring lies neatly on the outside and inside. Then the display holder is placed on the seal but not yet screwed.

4 M4 nuts are pressed into the component hanging strip. Then the strip is fastened from the outside with 2 cylinder head screws M4 x 10 mm (80403) on the left and right. The display carrier is screwed to the component hanging bar from the outside with 2 M4 x 14 mm (80404) cylinder head screws. The two lower mounting holes of the display holder are still free.

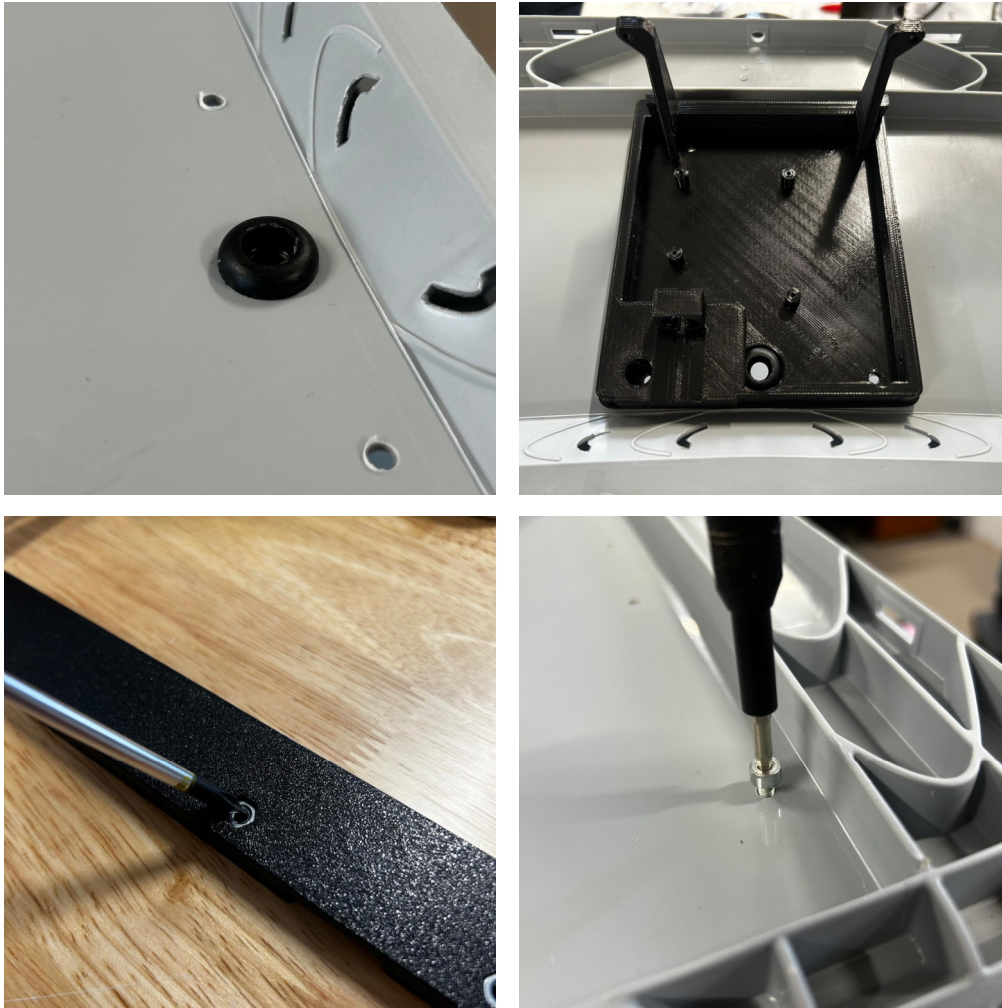


Figure 9: Associated assembly photos for step 3

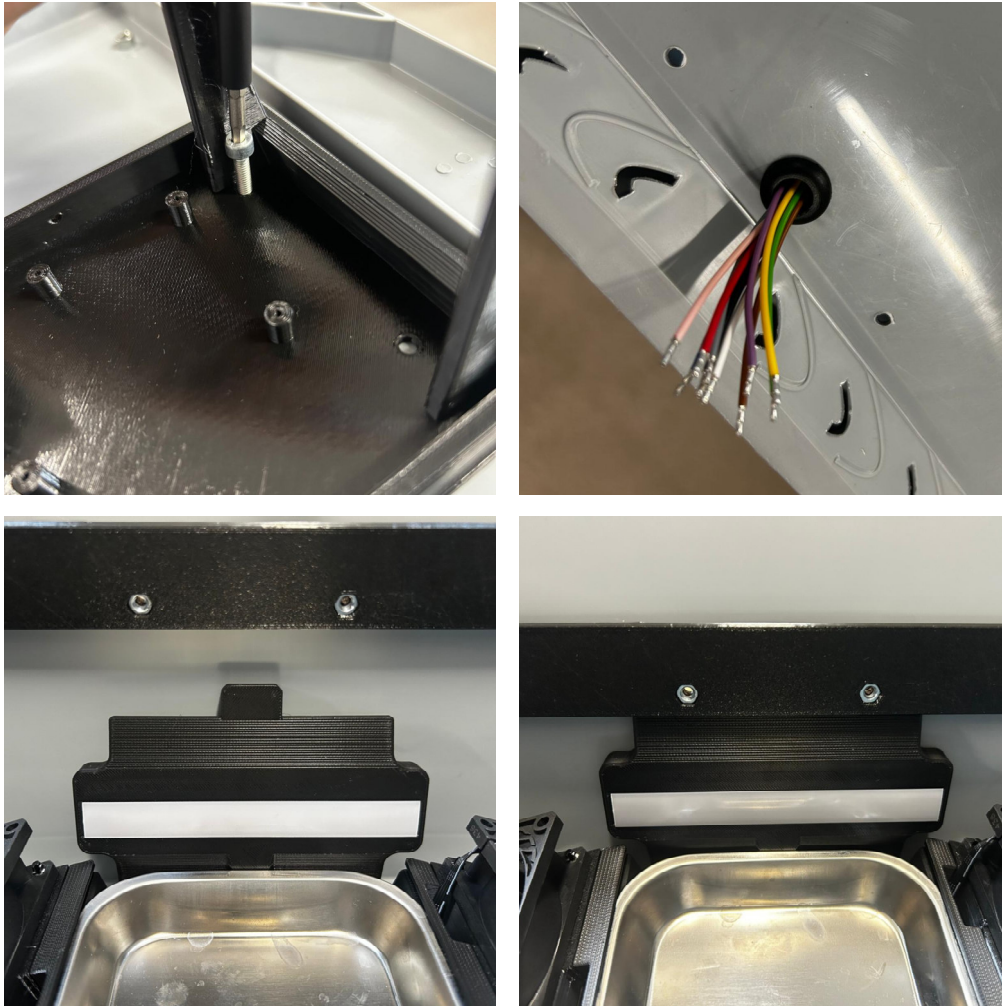


Figure 10: Associated assembly photos for step 3

The previously manufactured assembly is now placed inside and the wiring harness is also inserted through the seal from the inside. The pin of the LED holder is plugged into the component hanging bar from below.

From the outside, two M4 x 14 mm (80404) cylinder head screws are now inserted through the display holder and it is thus connected to the main assembly.

Step 4 – Display/Electronics Enclosure

The display is placed on the holder so that the ports are on the right. The display is then supplied with 4 pcs. Plastic screw Phillips round head TCB PZ1 3 x 8 mm (80401) mounted. The protective film is already being removed from the display.

The motherboard is connected to the included ribbon cable as shown (contacts above) and the display adapter board is also connected to the ribbon cable as shown.

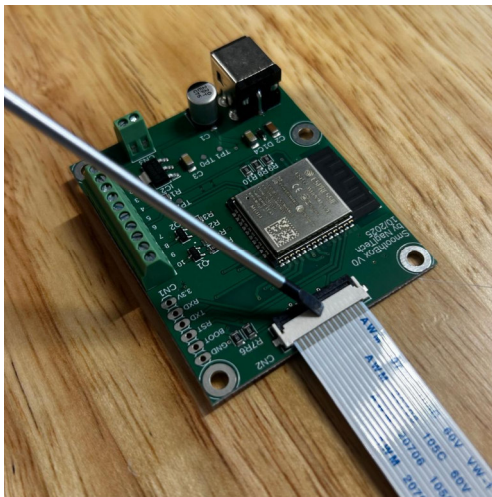
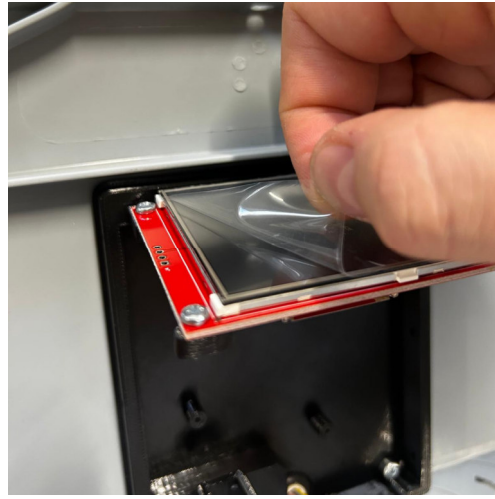


Figure 11: Associated assembly photos for step 4

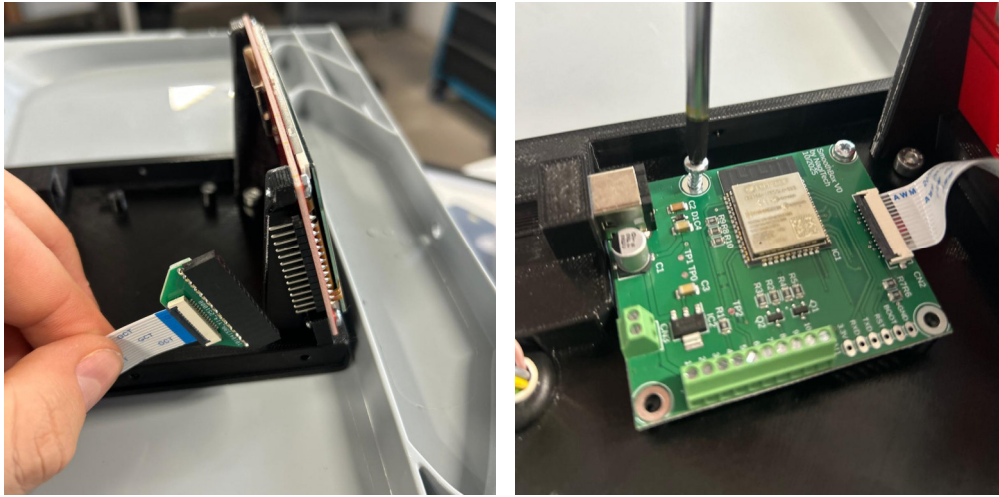


Figure 12: Associated assembly photos for step 4

Now the adapter board is plugged into the display as shown and the motherboard is screwed into the display holder at the appropriate point with 4 plastic screws TCB PZ1 3 x 8 mm (80401).



Figure 13: Associated assembly photos for step 4

The wiring harness is now connected to the mainboard according to the following illustration.

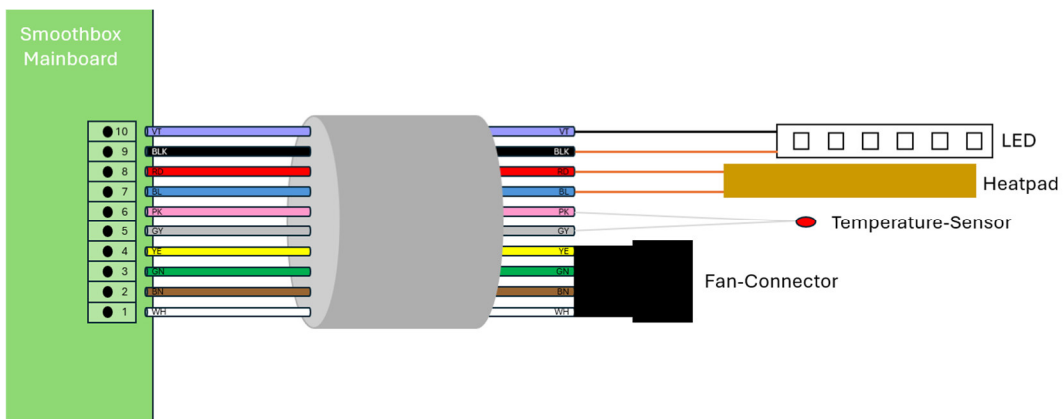


Figure 13: Connection diagram to step 4

Step 5 – Close the case and mount the feet

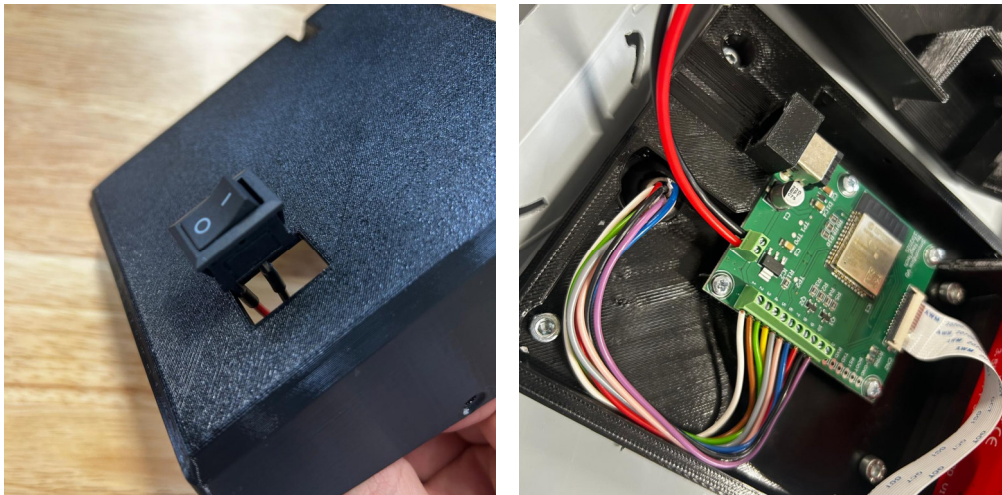


Figure 14: Associated assembly photos for step 5

The on/off switch is plugged into the housing from the outside. The “I” should still show at the top. The cables of the switch are screwed into the still existing socket on the mainboard as shown, whereby the orientation does not matter.



Figure 15: Associated assembly photos for step 5

The housing is now closed and screwed 6 times from the outside with plastic screws TCB PZ1 3 x 8 mm (80401). It should be flush on all sides and care must be taken not to pinch any of the cables.

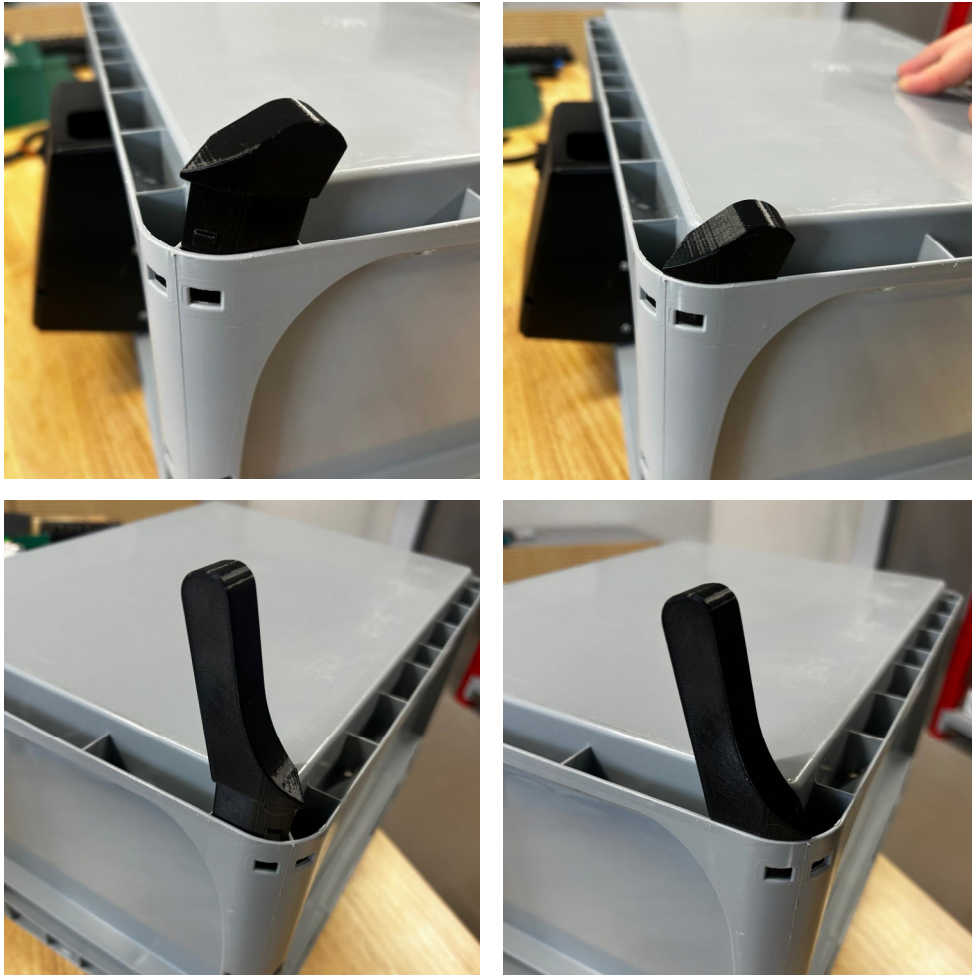


Figure 16: Associated assembly photos for step 5

The front and rear feet are plugged in as far as they go. There is one left and one right foot. When setting up, the box should not wobble on a flat surface. If they do, the feet must be checked again and, if necessary, pressed in more firmly.

Step 6 – Installing the lid gasket

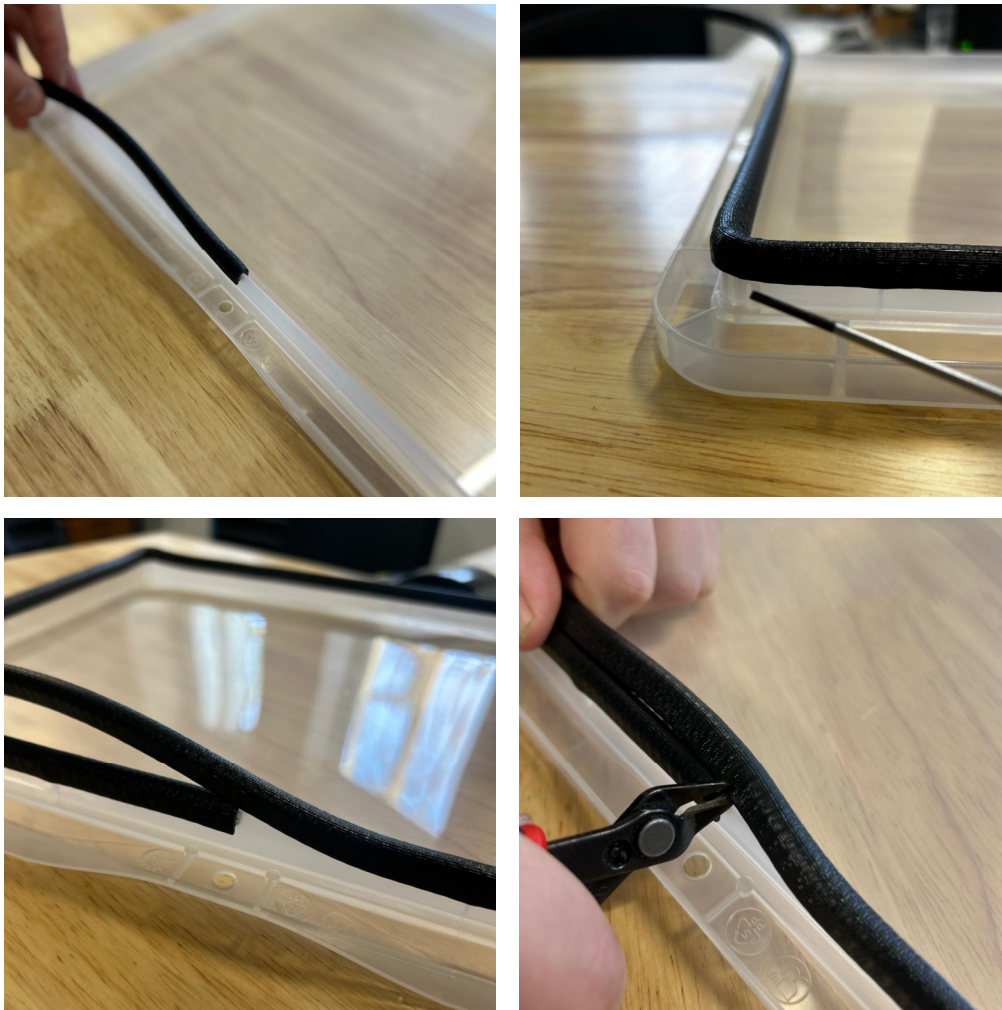


Figure 17: Associated assembly photos for step 7

Attach the supplied gasket to the inside of the transparent lid. Start in the middle of one of the long sides. At the corners, make sure that the piping is completely tucked over the edge and the inner stiffener. Cut off the protruding end with a string cutter. Make sure that there is no gap and that the seal closes cleanly. It is better to cut off a little less and shorten it again if necessary.



Figure 18: Associated assembly photos for step 7

Step 8 – Completion

The finished SmoothBox can now be put into operation. When using it, pay attention to the warnings on the Quick Guide and the operating instructions



Figure 19: Associated assembly photos for step 8