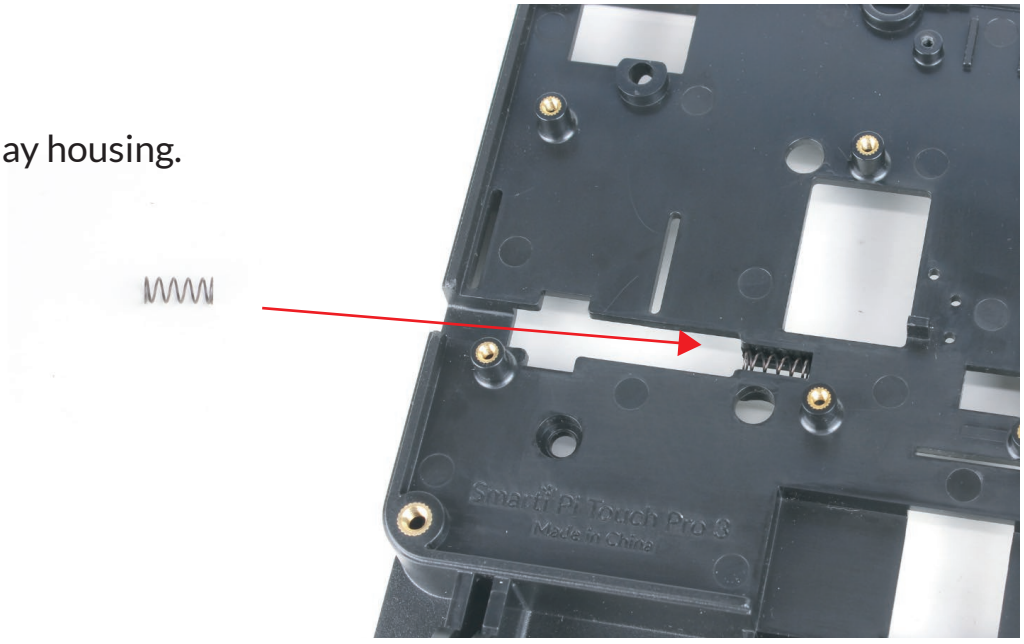
# Smarti Pi Touch Pro 3

## Setup guide

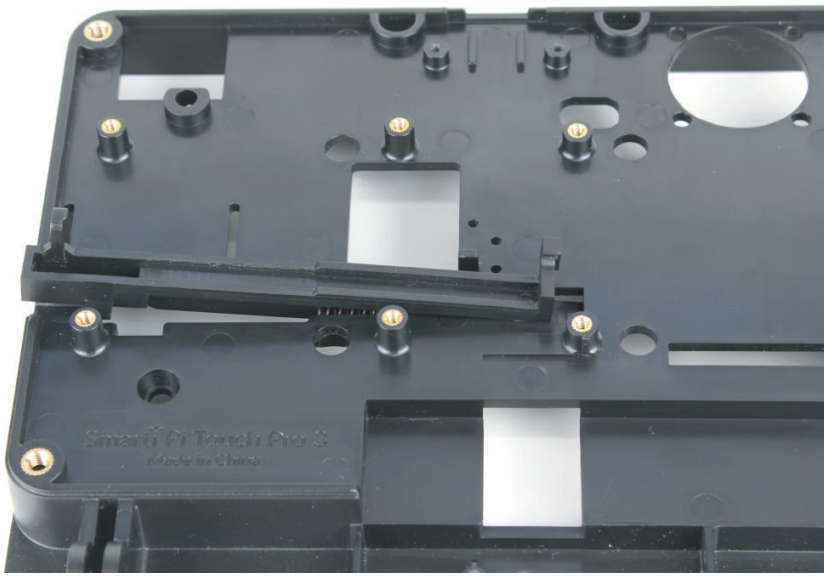
Questions? Email info@smarticase.com

# Step 1

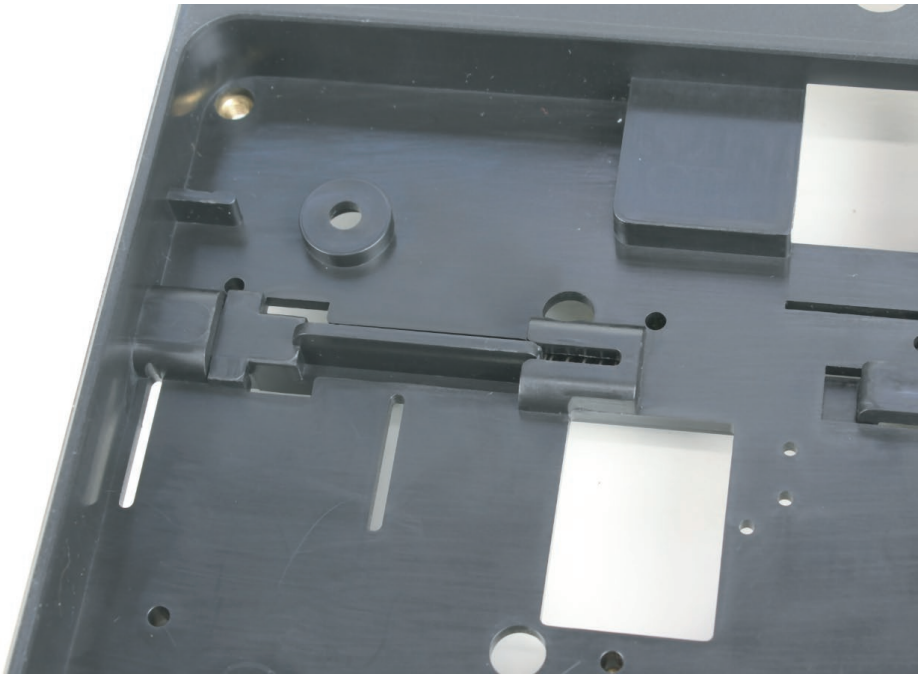
Install the spring into the  display housing.



Install the end of the actuator into the housing as shown.

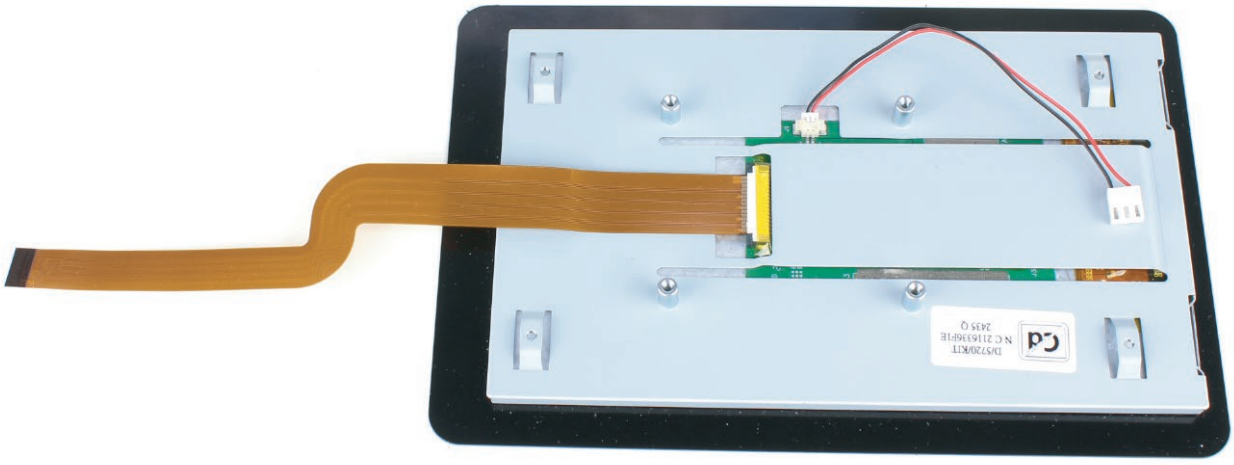


The actuator should look like this from the other side.

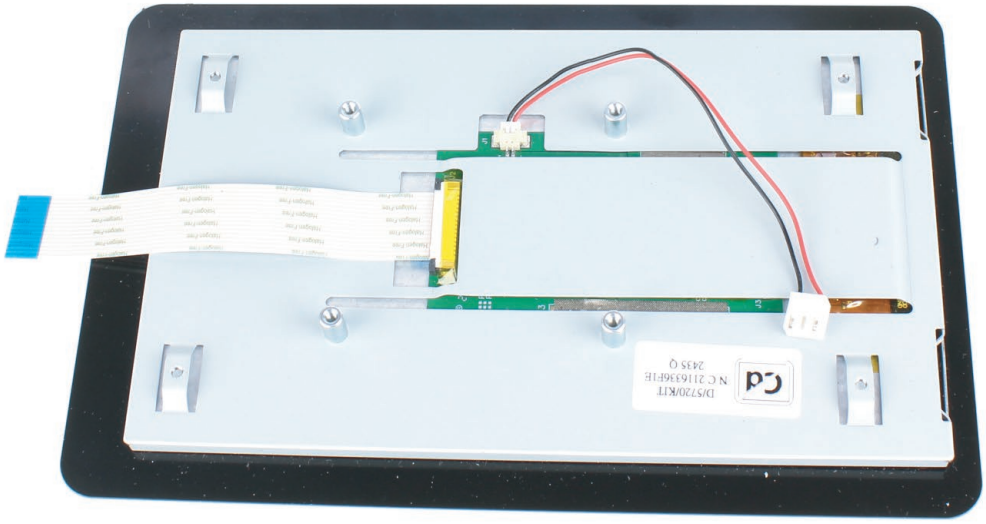


# Step 2

If using a Raspberry Pi 5, install the gold ribbon cable that came with the kit. Attach the power cable to the display as shown.



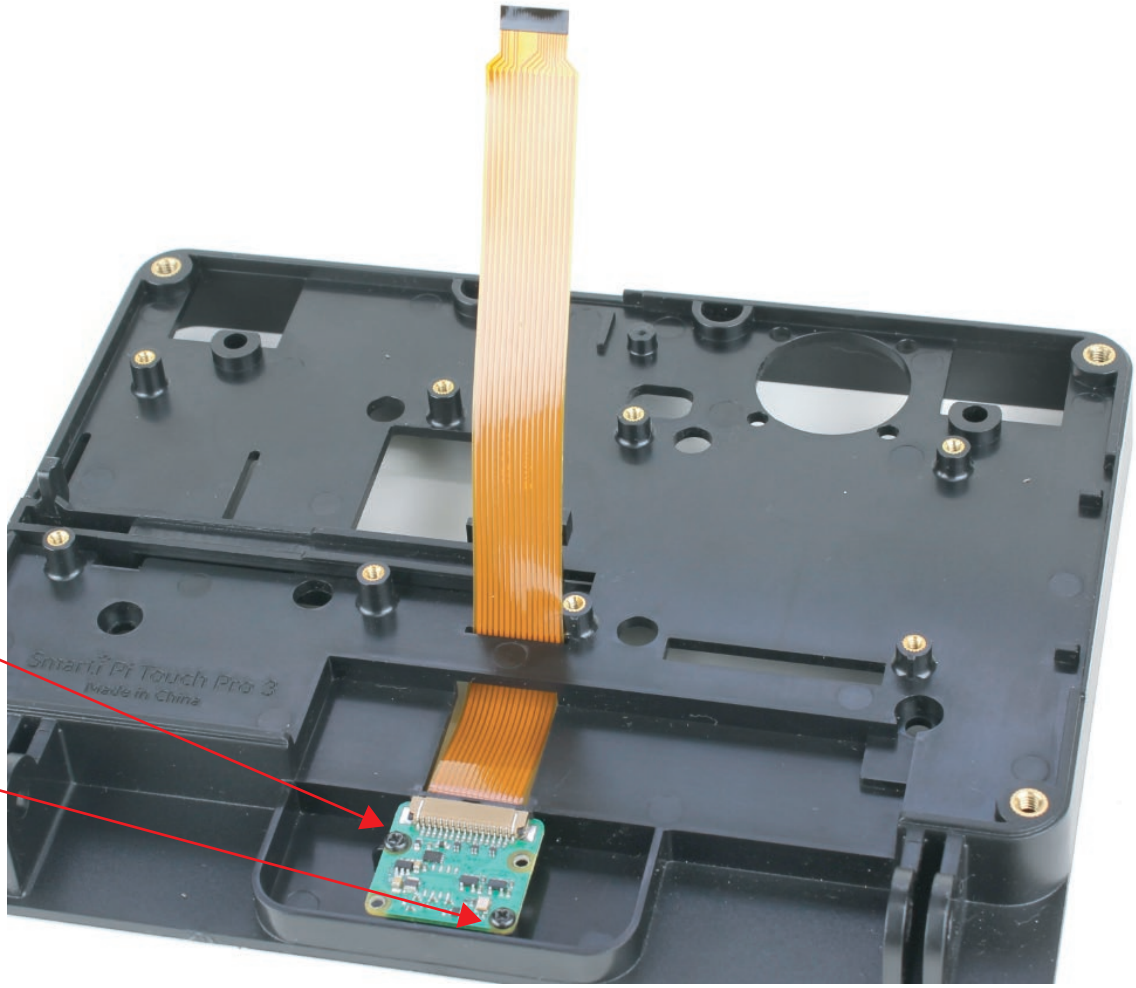
If using a Raspberry Pi 4, install the white ribbon cable that came with the display. Attach the power cable to the display as shown.



# Step 3

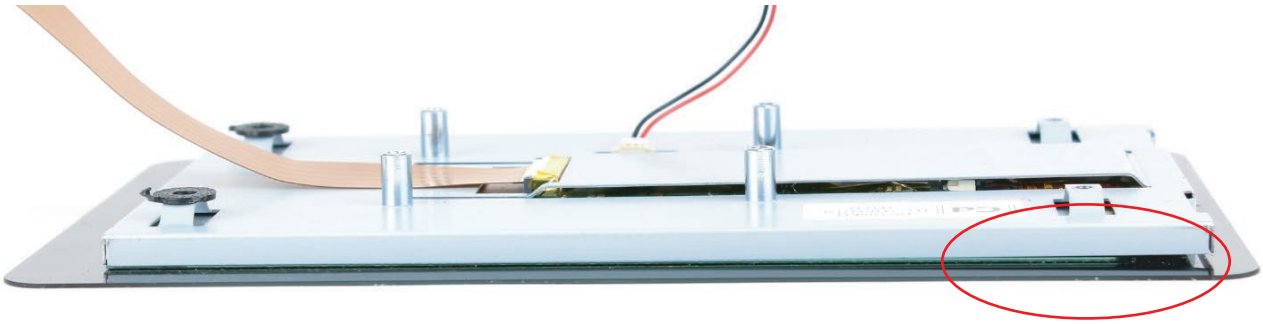
If using a camera you will need to buy a camera cable, one is not included. A 150 or 200mm cable would work best with our case.

Route the camera cable as shown below.
Use two of the short black screws to secure the camera to the case.
Be careful to not over-tighten the screws and strip the holes

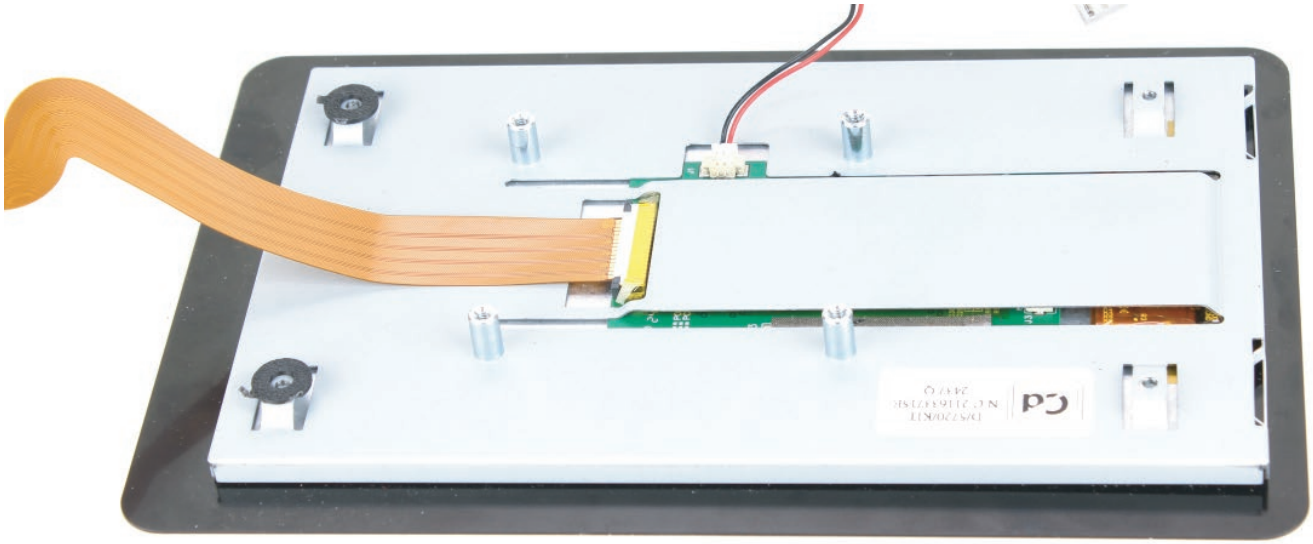


# Step 4

Early versions of the Touch Display 2 have a manufacturing defect where one side of the metal frame peels away from the glass. Because of this, the glass will be uneven when installed in the SmartiPi plastic frame. If your display does not have this issue , you can either skip this step or install all four black spacers over the four display mounting points.



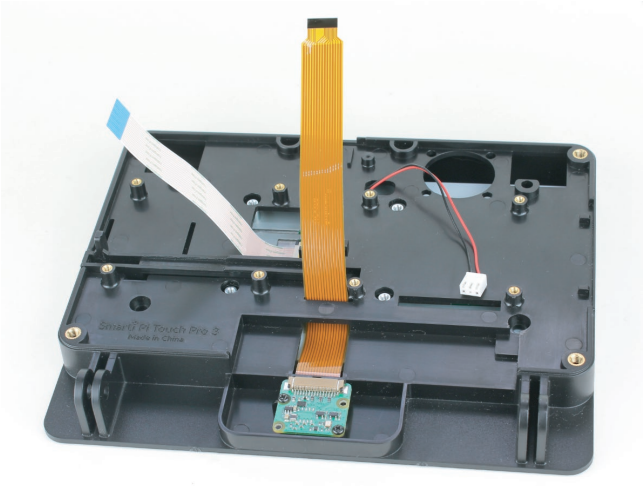
If your display has the defect shown above, install two of the four black spacers on the display mounting points, as shown below. These spacers will push the display out so it is more even with the other side.



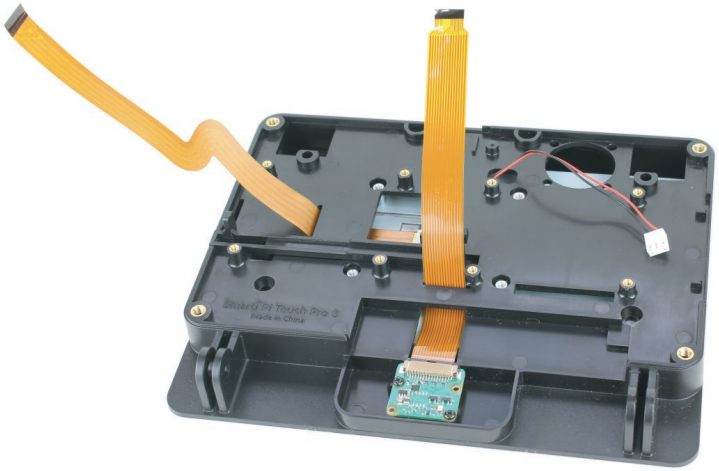
# Step 5

Place the plastic case down over the display while not disturbing the black spacers.

If using a Raspberry Pi 4 route the cable as shown below.

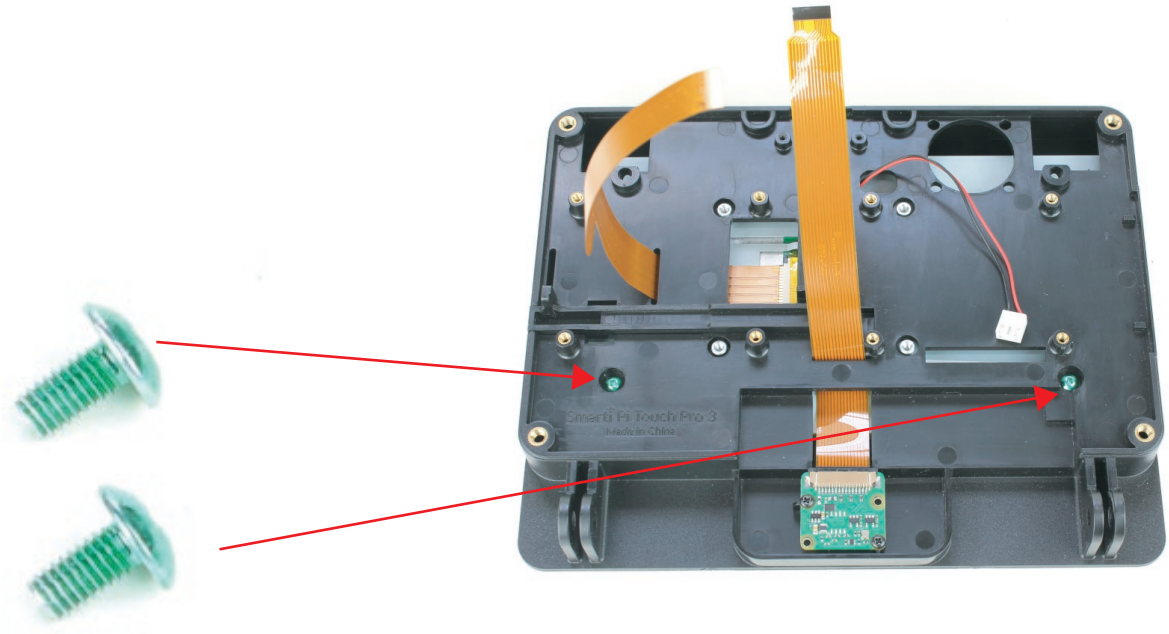


If using a Raspberry Pi 5 route the cable as shown below.



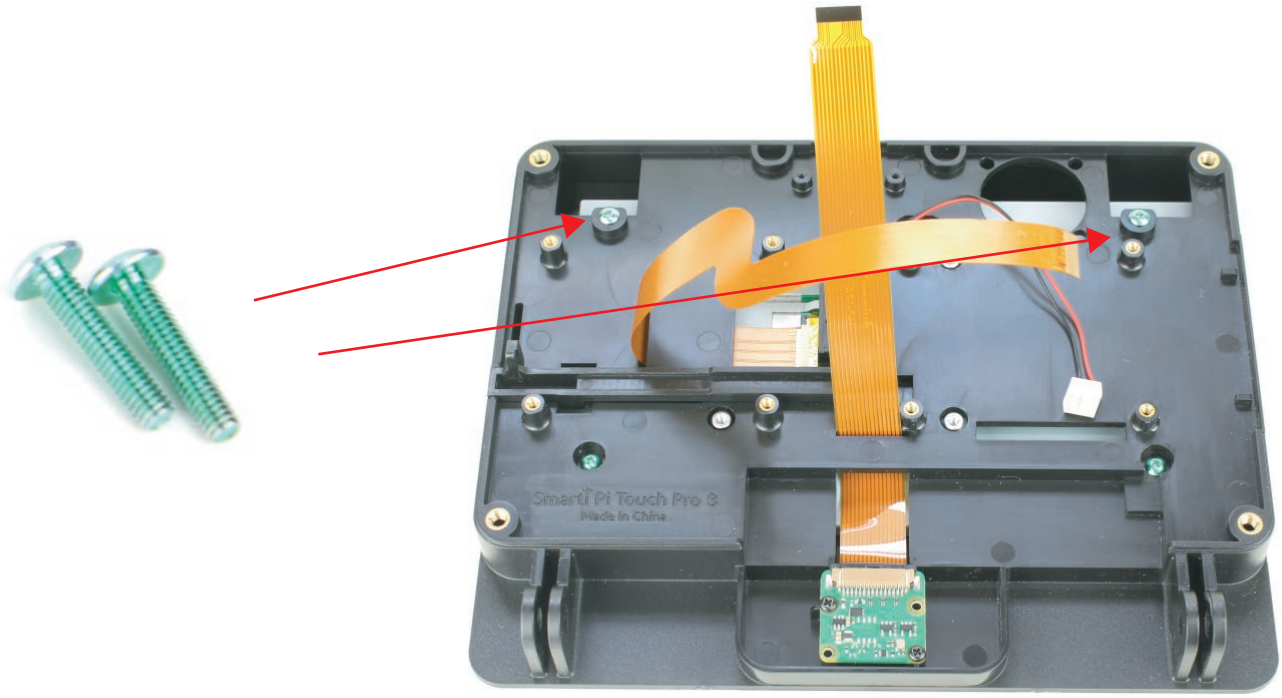
# Step 6

Install the two short green screws in the holes below.

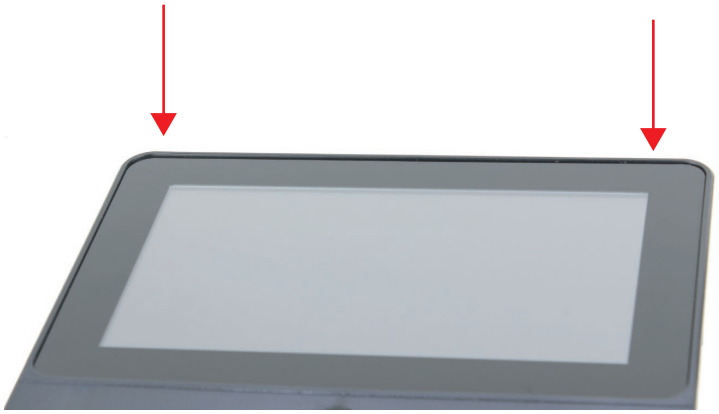


# Step 7

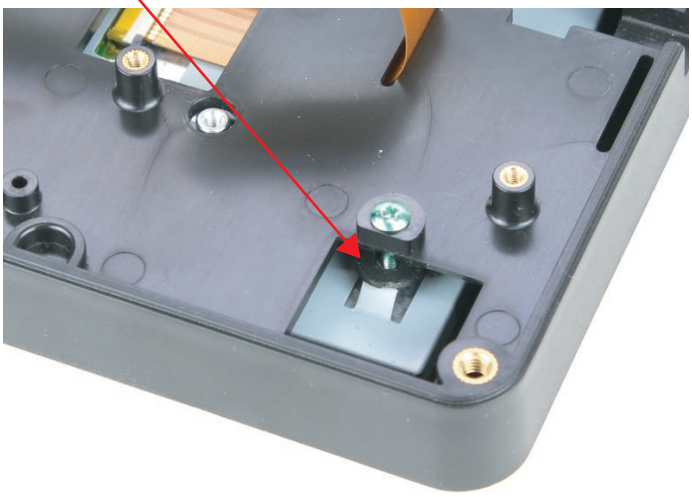
Install the two long green screws in the holes below.




Check to ensure the display looks even in the plastic frame from the front. It should be relatively the same distance from the front of the plastic frame. This step is only for aesthetics.

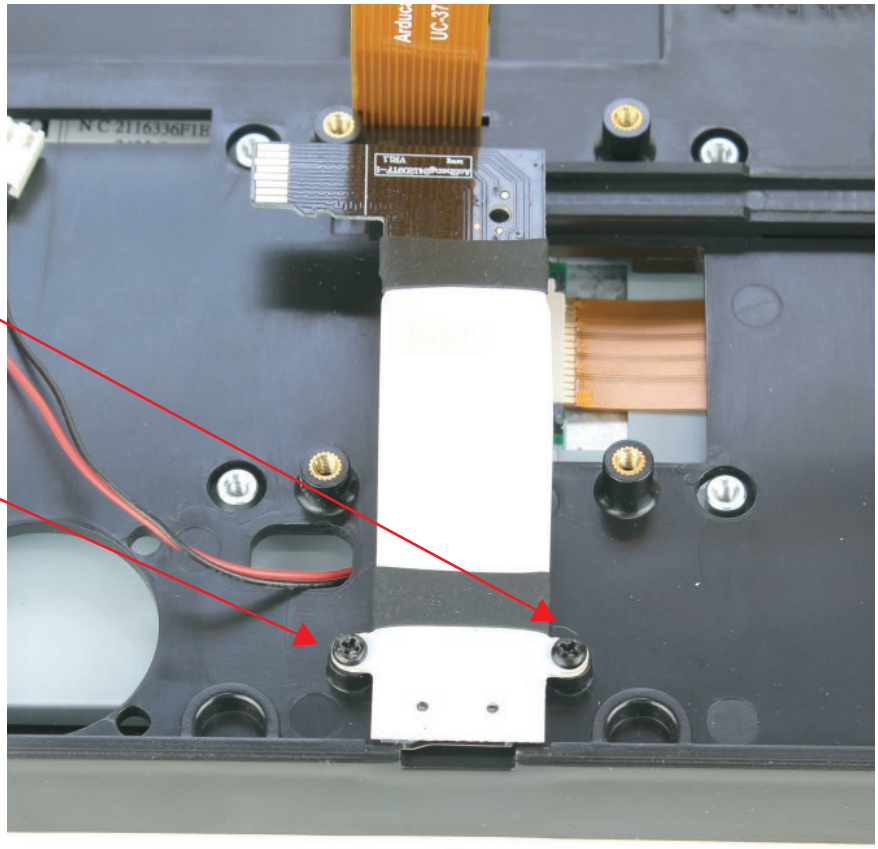


If using the spacers, one will be visible here.



# Step 8

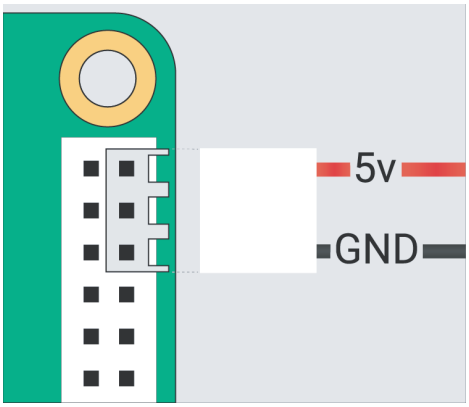
If using the micro SD extender, secure it to the plastic case with two of the small black screws as shown below. **Do not over-tighten the screws.**

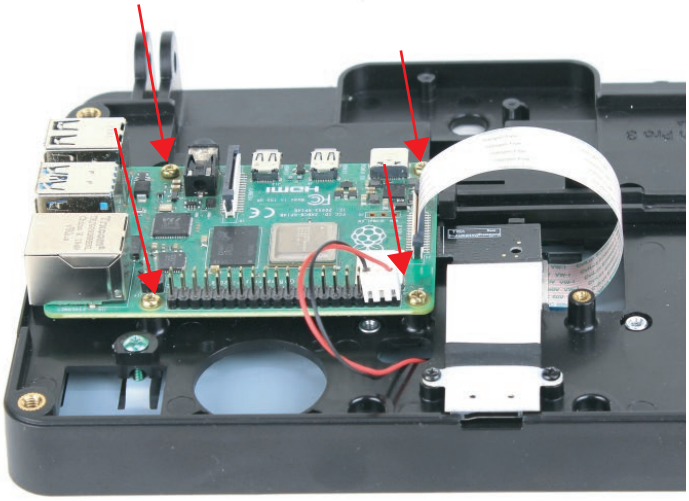


**Do not over-tighten the screws. They are small and can strip the plastic hole easily.**

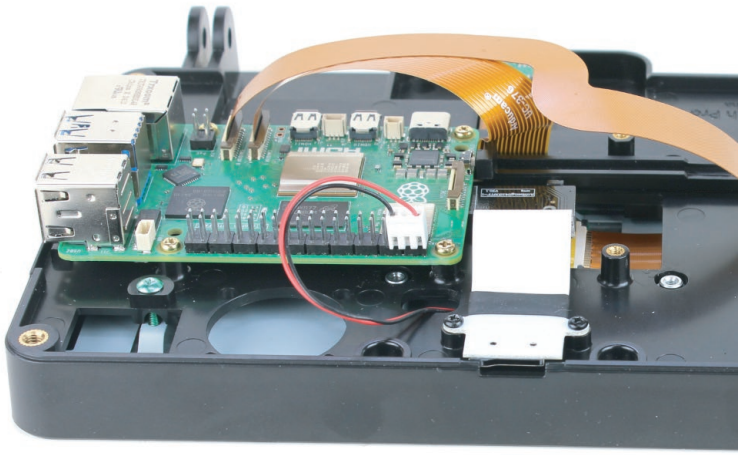
# Step 9

Secure the Raspberry Pi to the case using the four gold screws. Attach the display ribbon cable and camera cable if you are using one. Attached the display power cable to the Raspberry Pi GPIO as shown in the diagram to the right.



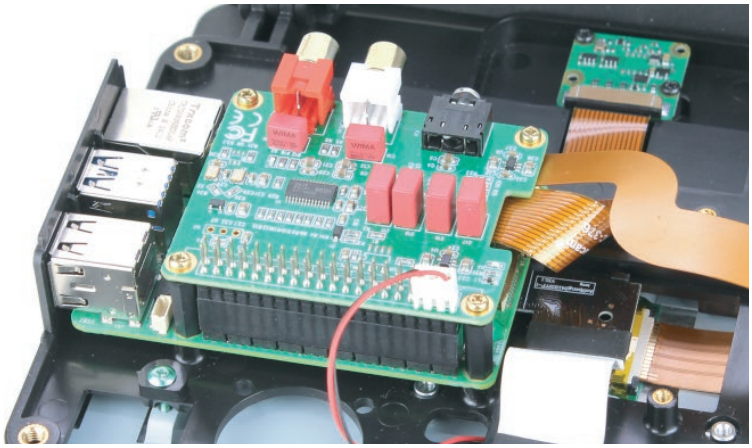
Raspberry Pi 4



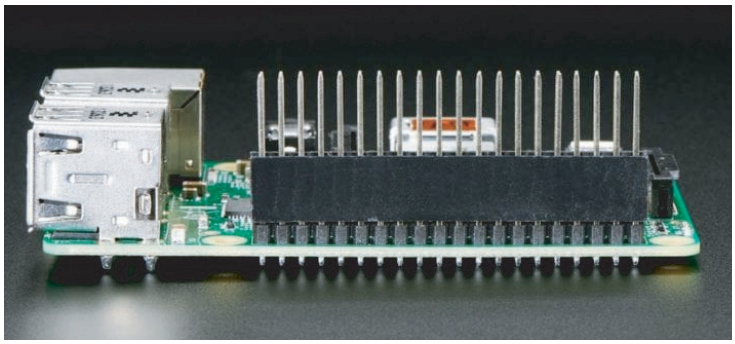
Raspberrry Pi 5

# Using HAT boards

If using HAT boards with extended GPIO pins you can attach the display power directly to the extended pins.



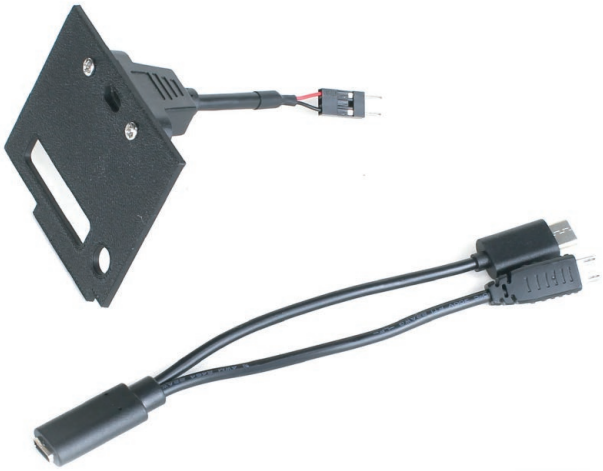
Some HATs have pass through holes. In that case you can buy GPIO stacking headers so the pins extend through the HAT, allowing you to connect the display cable.

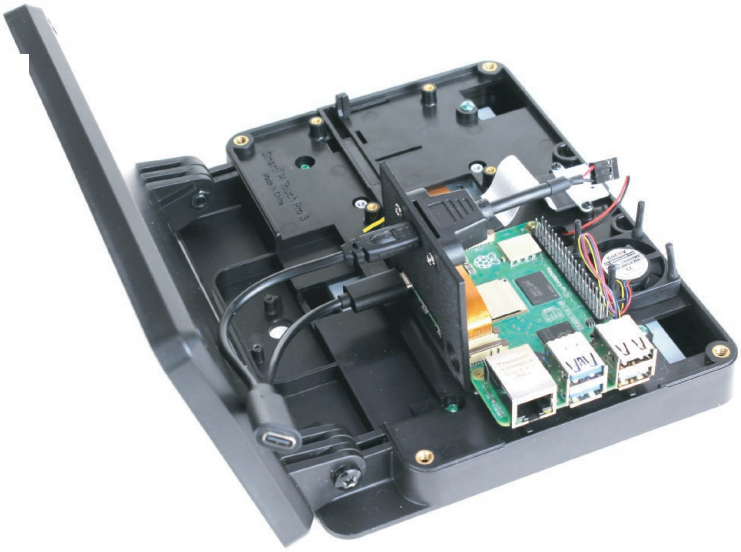


If you cannot power the display with the GPIO pins, we sell a  display power kit that will allow you to power the display and Raspberry Pi with the power supply instead of the Pi GPIO.

https://smarticase.com/collections/smartipi-touch-pro-3/products/smartipi-touch-pro-3-display-power-kit

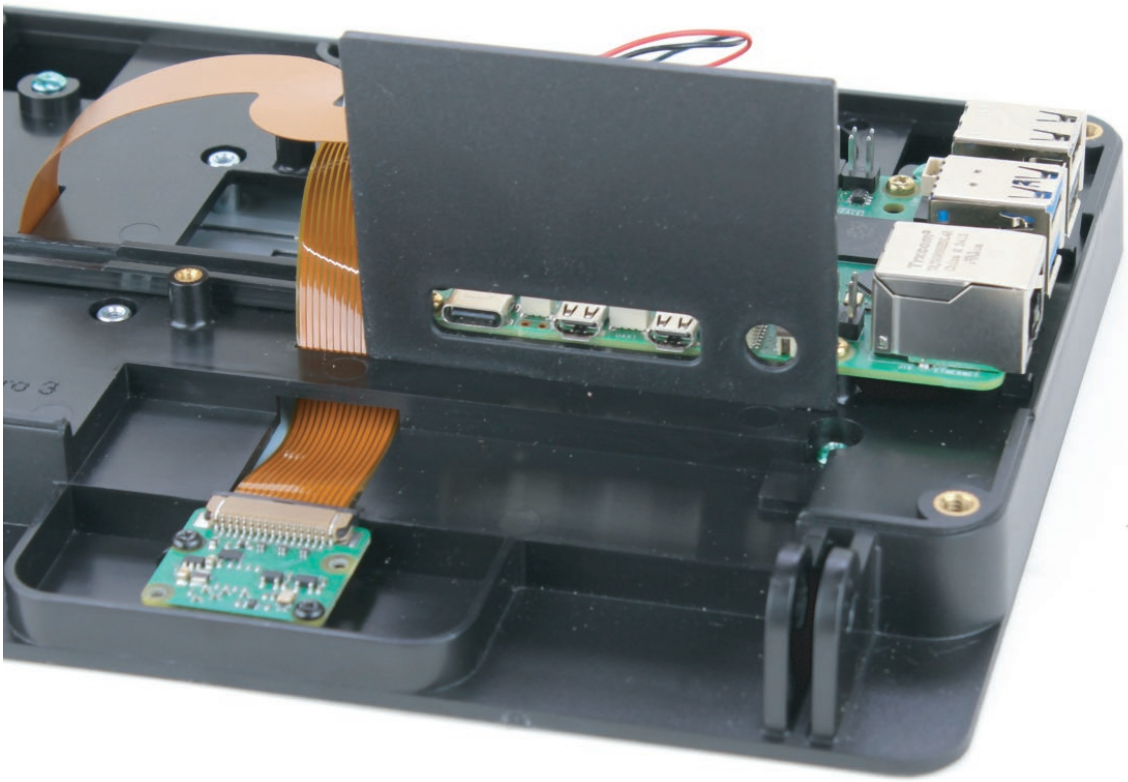
Amazon U.S. ASIN  - B0F74DMCXR





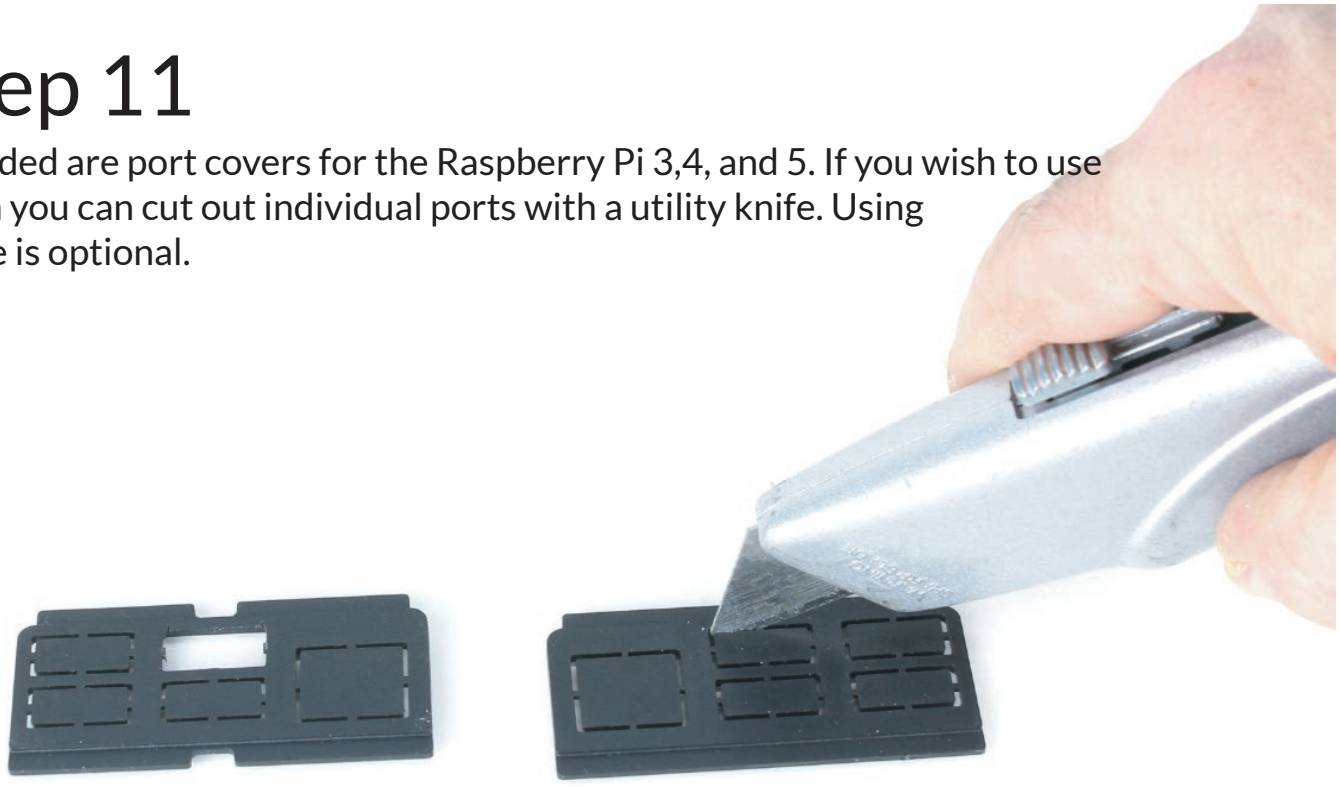
# Step 10

Position the lower panel around the Raspberry Pi connectors as shown below.  Shown is the panel for the large size back cover. The small back cover will have a shorter one included. This panel is optional. The case can be assembled without it.



# Step 11

Included are port covers for the Raspberry Pi 3,4, and 5. If you wish to use them you can cut out individual ports with a utility knife. Using these is optional.



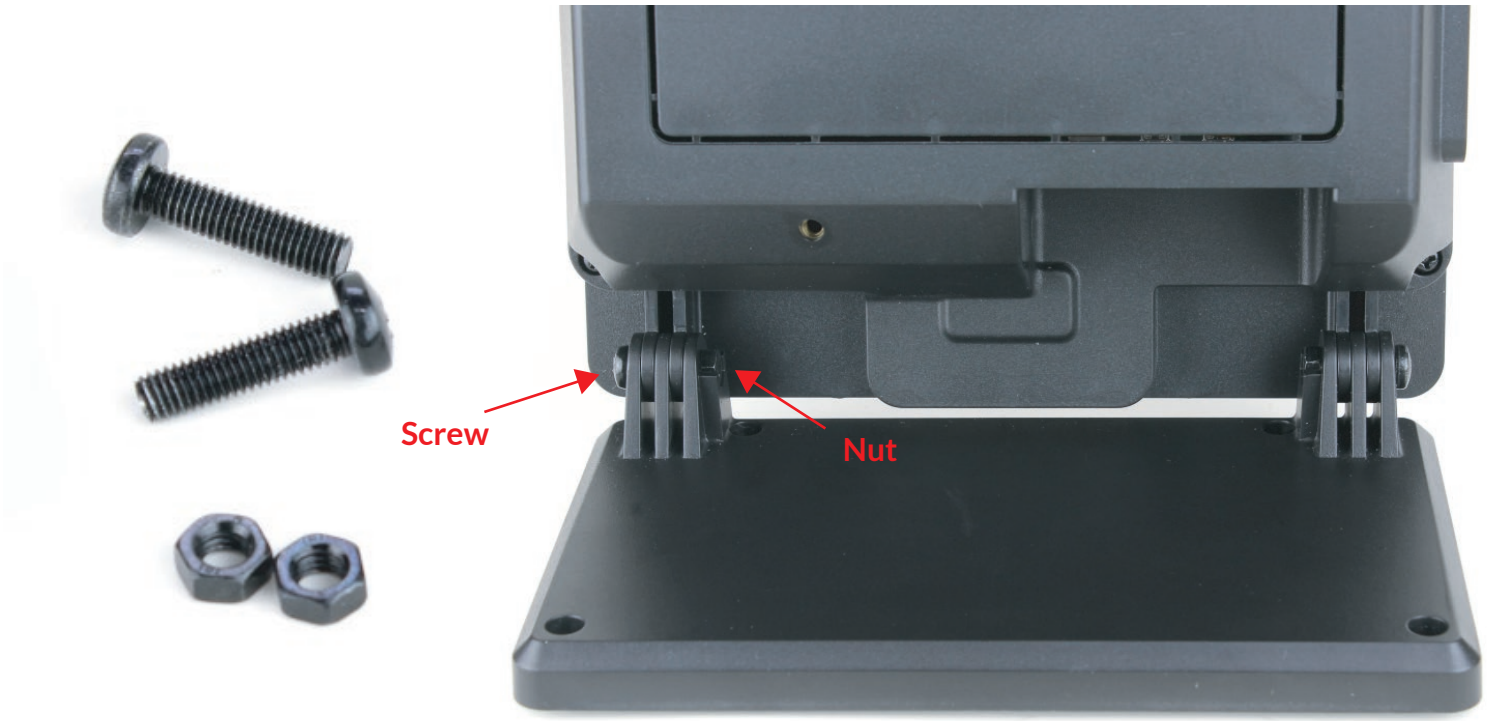
# Step 12

Place the back cover over the lower back panel and secure to the front of the case with the four black screws shown below.

If using the port cover parts, the port cover is positioned between the front part and the back cover as shown below.

# Step 13

Attach the base with the large black screws and nuts. **Do not over-tighten.**




# Step 14

Attach the metal baseplate with the four silver screws as shown below.
Attach the rubber feet in the locations shown below.

# Step 15

When using a Raspberry Pi 4, a short USB-C extension is included so you don't have to reach under the back of the case and pull the power cord directly from the Raspberry Pi. Reaching under the tilted case is difficult. The included cable is tested to work with the Official Raspberry Pi 4 (15W) power supply and may also work with many USB-A to USB-C cables plugged into USB-A power supplies. However, it will not work with the Raspberry Pi 27W power supply.

# Step 16

If using a Raspberry Pi 5, the actuator we put in the case in step 1 can be used to activate the Raspberry Pi micro-switch. The switch can be used to turn the Raspberry Pi 5 on/off without taking the power cable out.

# Step 17

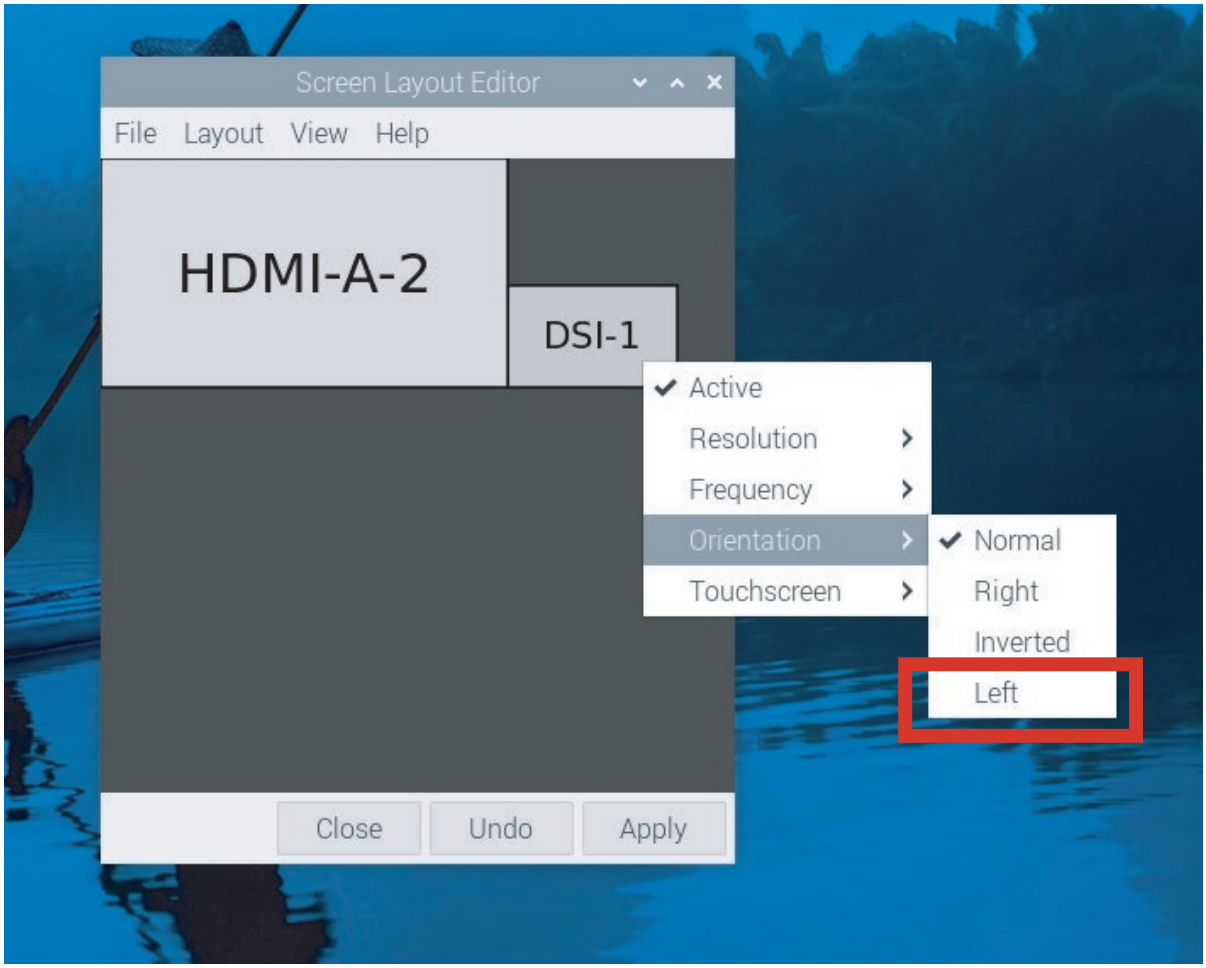
If you are not using the camera, the front adhesive label can be applied to cover the camera hole. Simply peel off the backing and apply the label to the front, aligning it with the small ledge shown by the red arrows.

Once the label is applied it cannot be removed without destroying it.

# Step 18

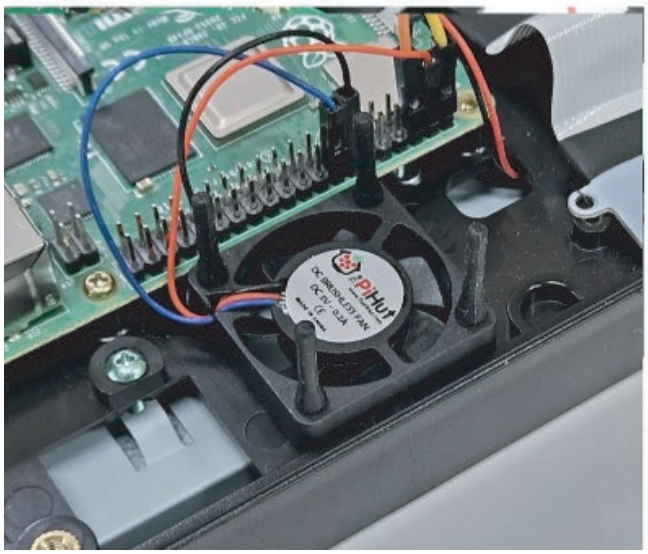
When you first start up the display using Pi OS, the orientation will be in portrait. In order to rotate the display for use with our case you will have to rotate the display.

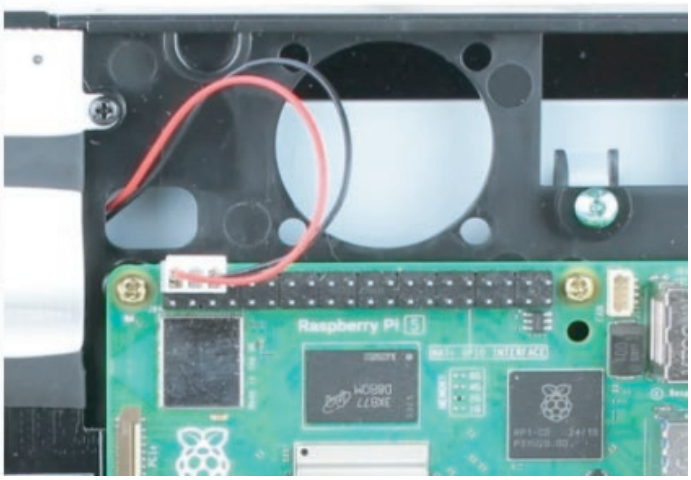
Select **Screen Configuration** from the **Preferences** menu. Right-click on the touch display rectangle (will be labeled DSI) in the layout editor, select **Orientation**, and then select **Left**. Then apply it.



# Cooling fan

A cooling fan is not included, but can be purcashed at smarticase.com. We have software controlled fans for the Raspberry Pi 4 and 5. The fan mounts to the hole above the Raspberry Pi and blows air out the top vents. Most 30mm fans you will find at Raspberry Pi shops may also fit this hole.

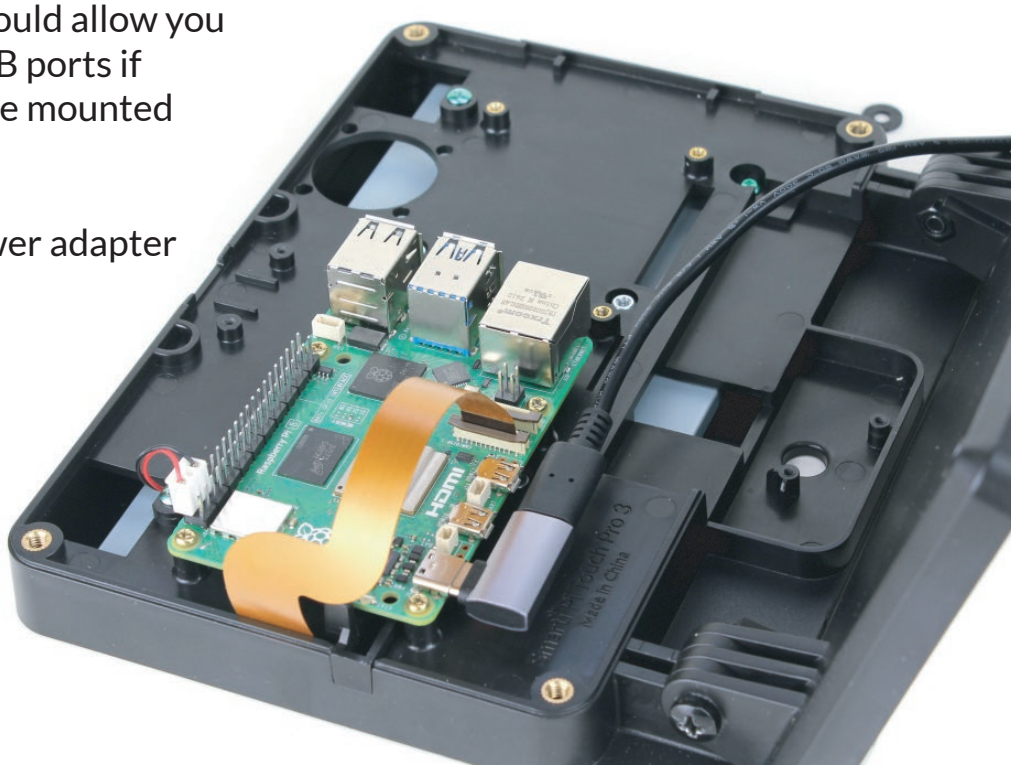


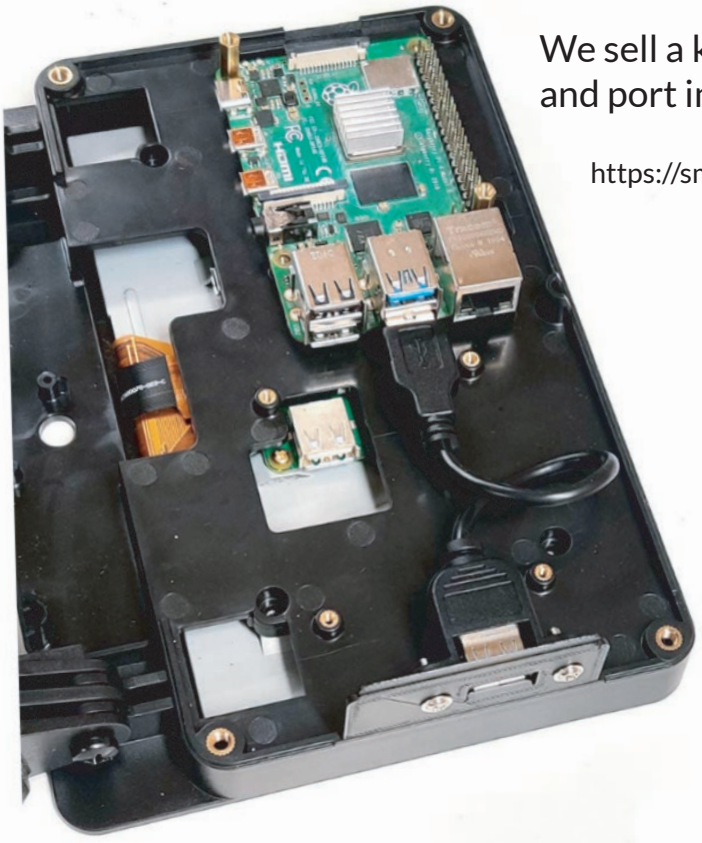


# Alternative Raspberry Pi mounting option

The Raspberry Pi can aslo be mounted on the other set of brass mounting points. This would allow you to connect peripherals to the USB ports if desired. HAT boards could also be mounted here.

A right angle adapter USB-C power adapter woud be needed if using this mounting method.



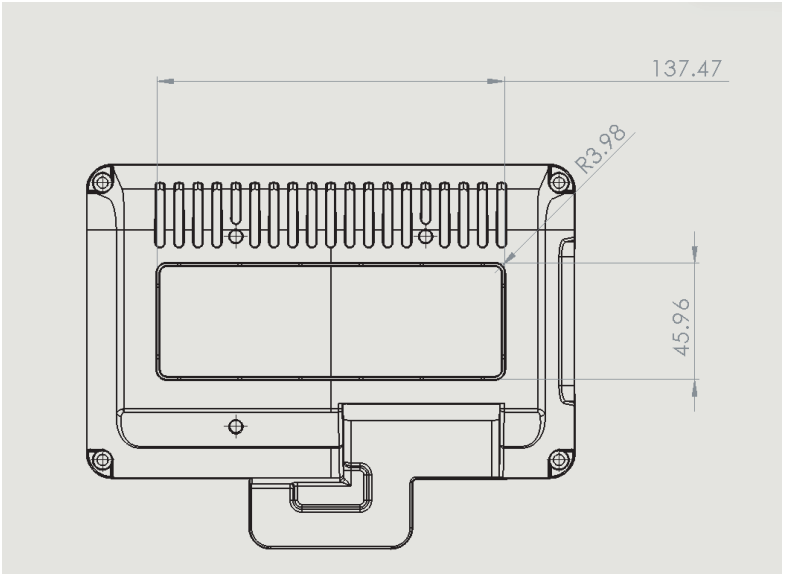


We sell a kit that includes a short USB-A extension and port insert that brings one USB-A port to the outside.

https://smarticase.com/products/ usb-extender-for-smartipi-touch-pro

# Back panel knockout

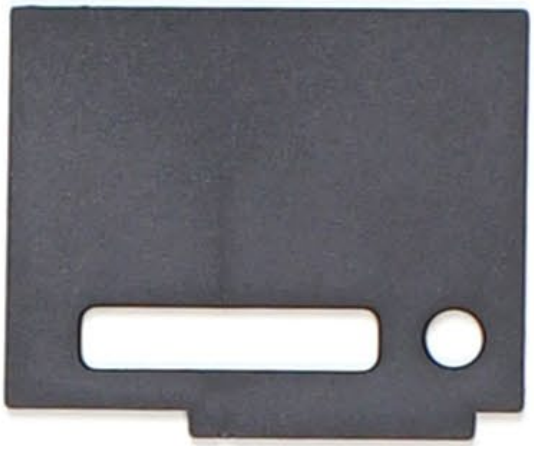
The back panel can be cutout with a utility knife. This will allow you add your own panel with connectors or allow custom cable routing.

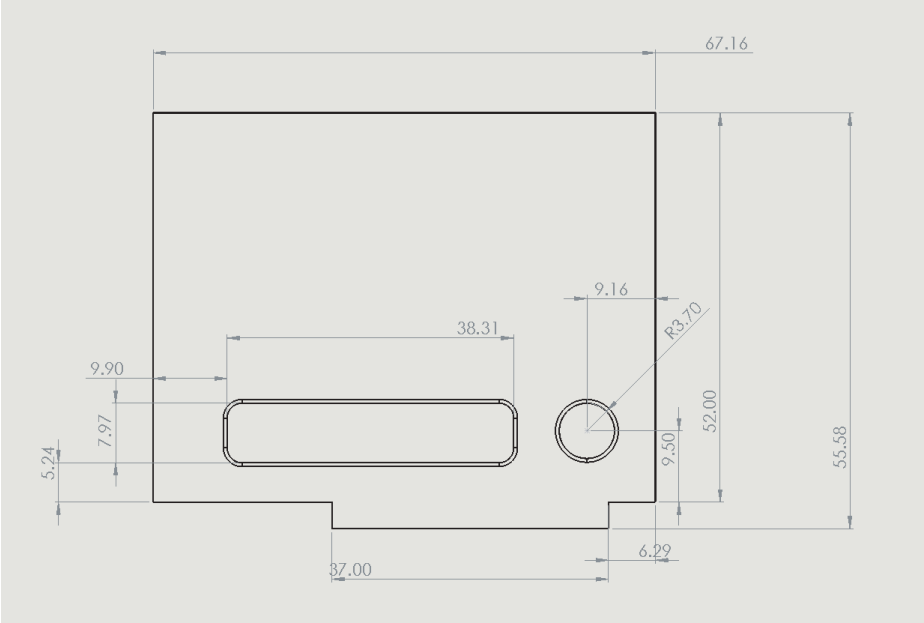


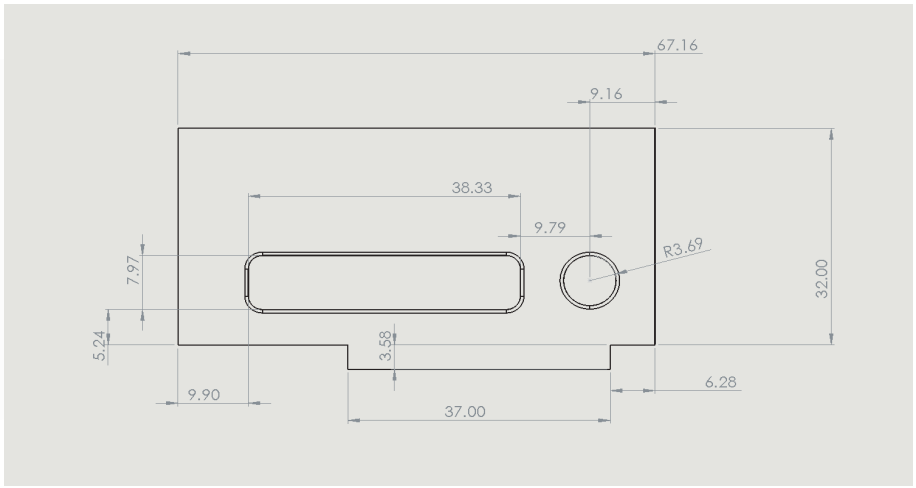

Dimensions of the opening

# Lower panel customization

If you wish to fabricate you own lower panel for connectors or any other custom modifications, below are the drawings for the parts. The panels are 2mm thick.





# VESA mounting

The back of the case has three threaded M4 mounting  points to attach to a VESA stand or arm. The points are 75mm apart. VESA is a standard pattern  for mounting displays and usually comes  in 75 mm and 100 mm variants.


# Front label customization

The front label can be customized with a full-color logo starting at just 100 pieces.
Contact us for pricing and lead time.  info@smarticase.com