Smarti Pi Touch Pro 3 - 10”

Setup guide

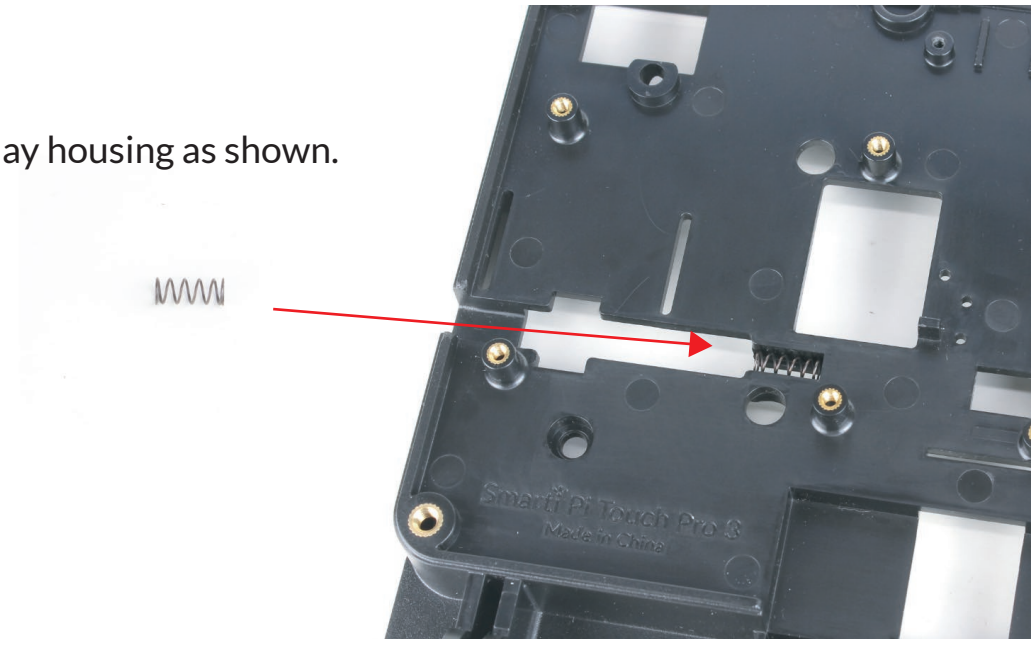
Questions? Email info@smarticase.com

This case is compatible with

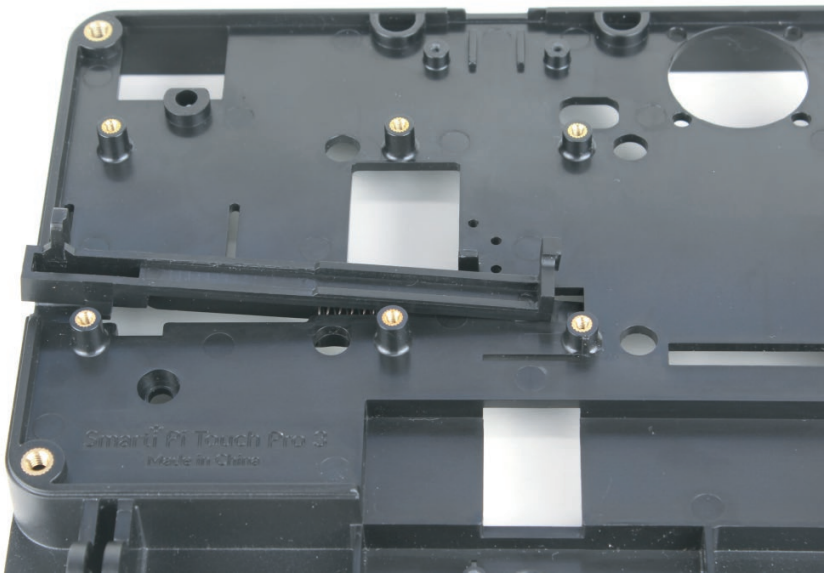
Raspberry Pi Official Display 2 - 10”
Raspberry Pi 5

Step 1

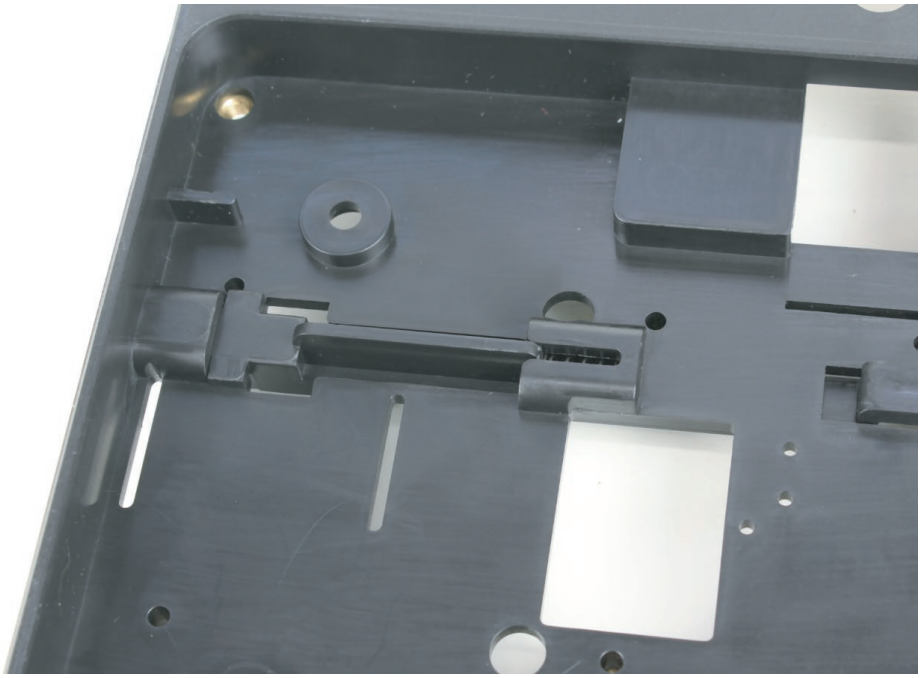
Insert the spring into the display housing as shown.



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



The actuator should look like this from the other side.

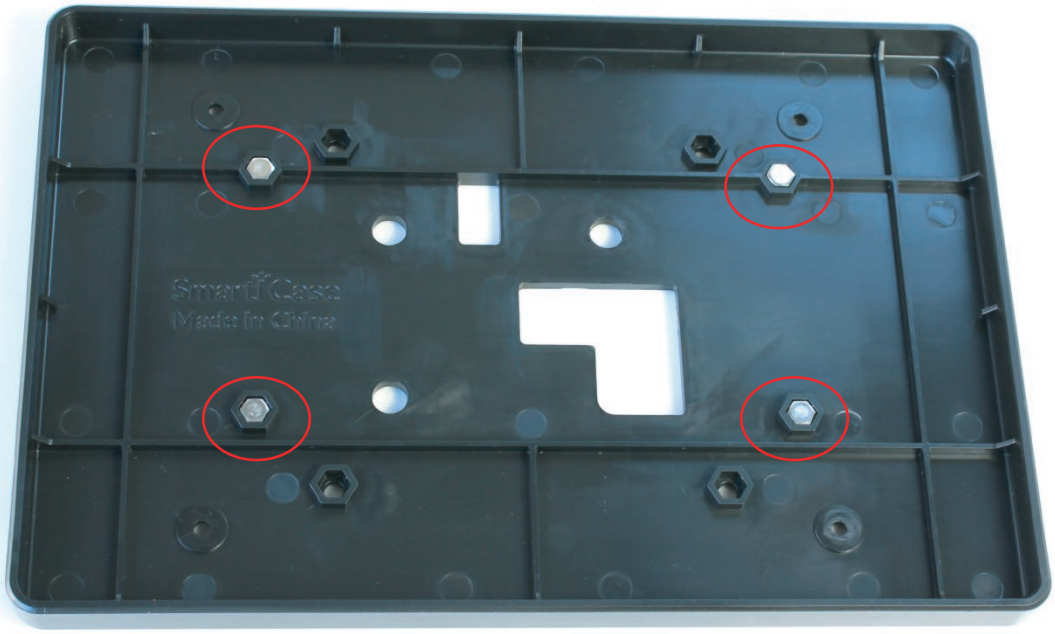


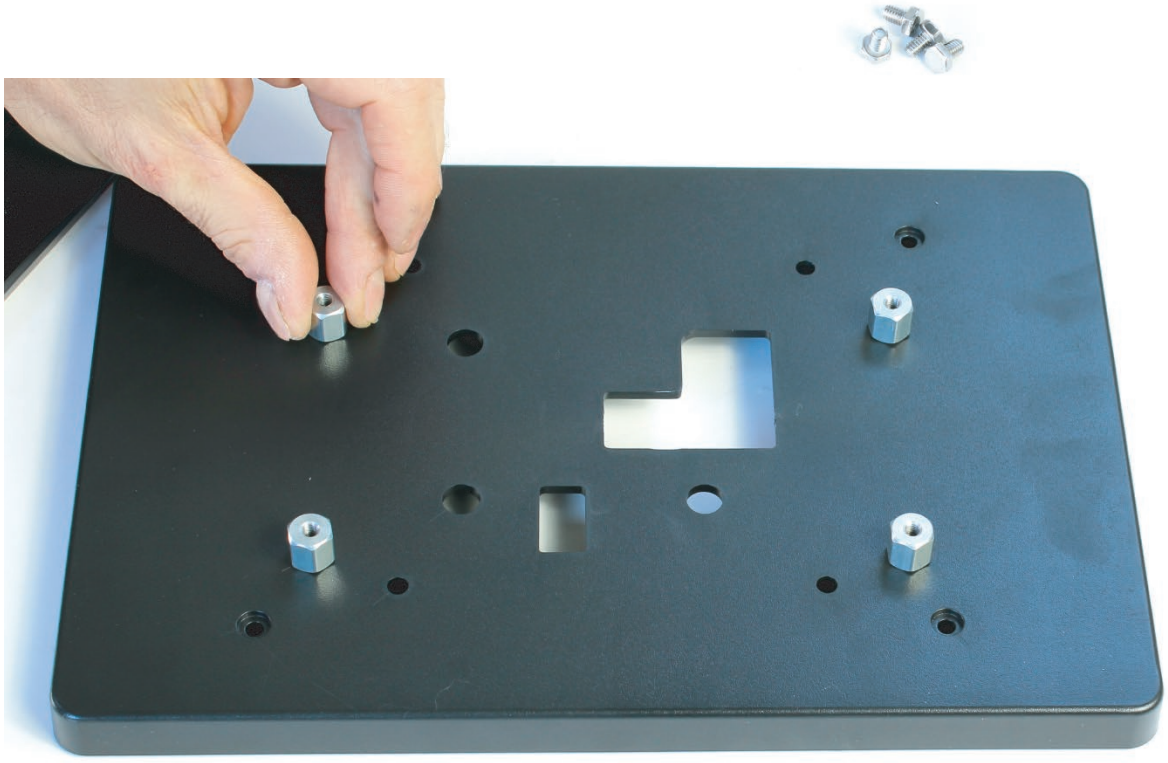
Step 2

Insert the hex-head screws into the hexagonal holes as shown. Press each screw in as far as possible using your fingers.

From the opposite side, hand-tighten the hexagonal standoffs onto the screws. This will pull the screw heads securely into the hexagonal holes.

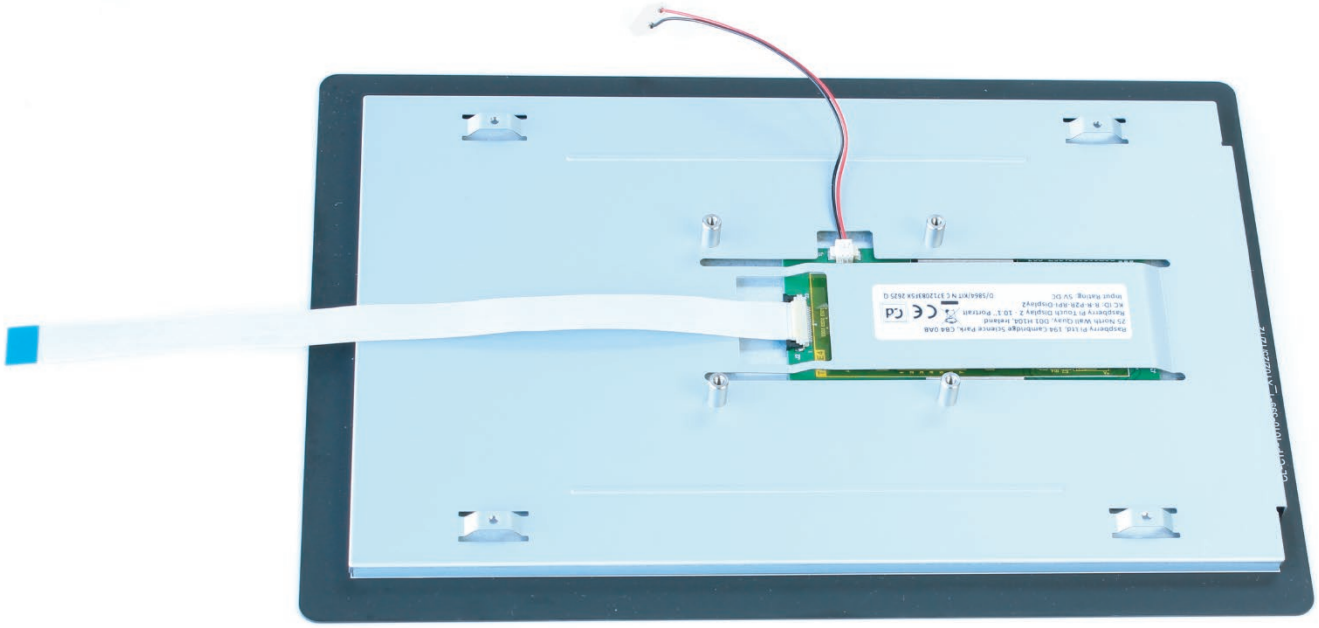
Do not use tools. Hand-tighten only.





Step 3

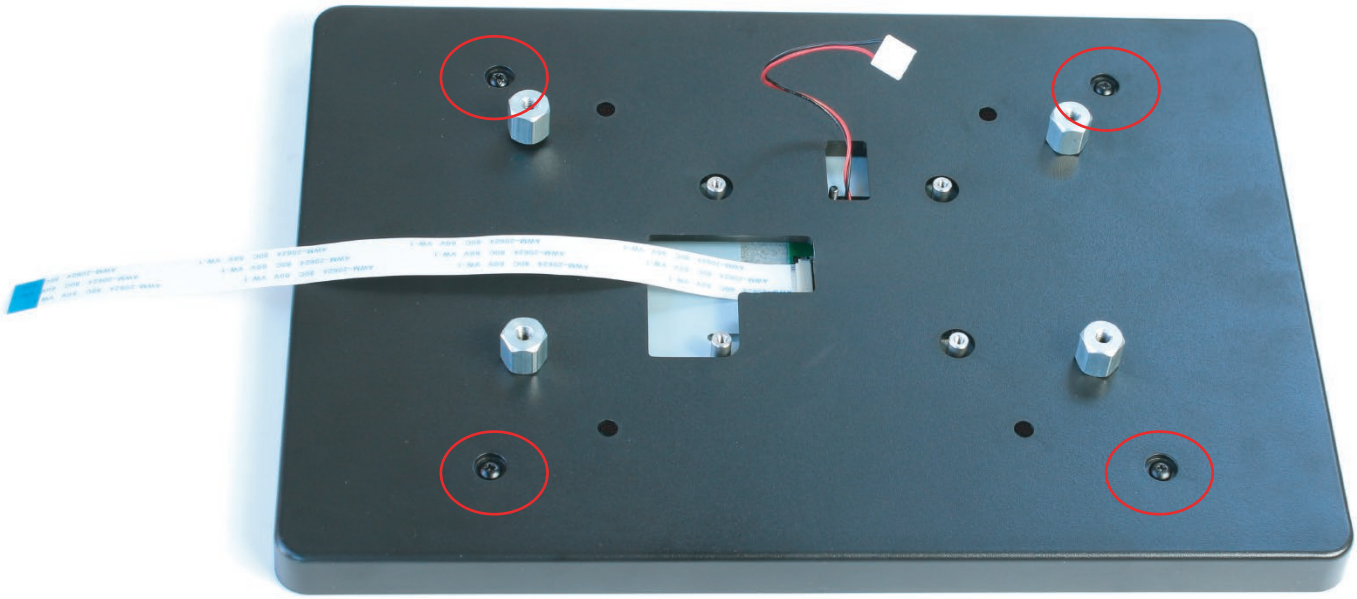
Connect the display power lead and white ribbon cable to the display as shown.



Step 4

Route the display power lead and ribbon cable through the openings as shown.

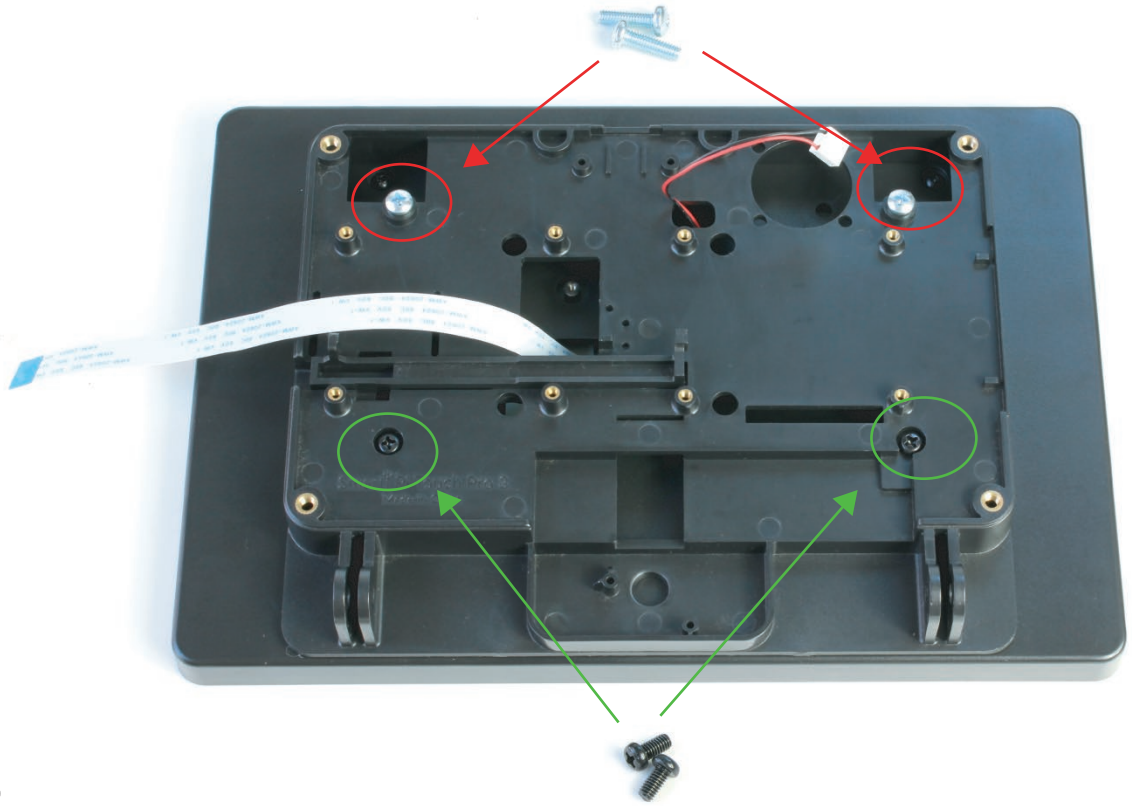
Attach the case to the display using the small black screws.



Step 5

Route the display power lead and ribbon cable through the black mounting part as shown.

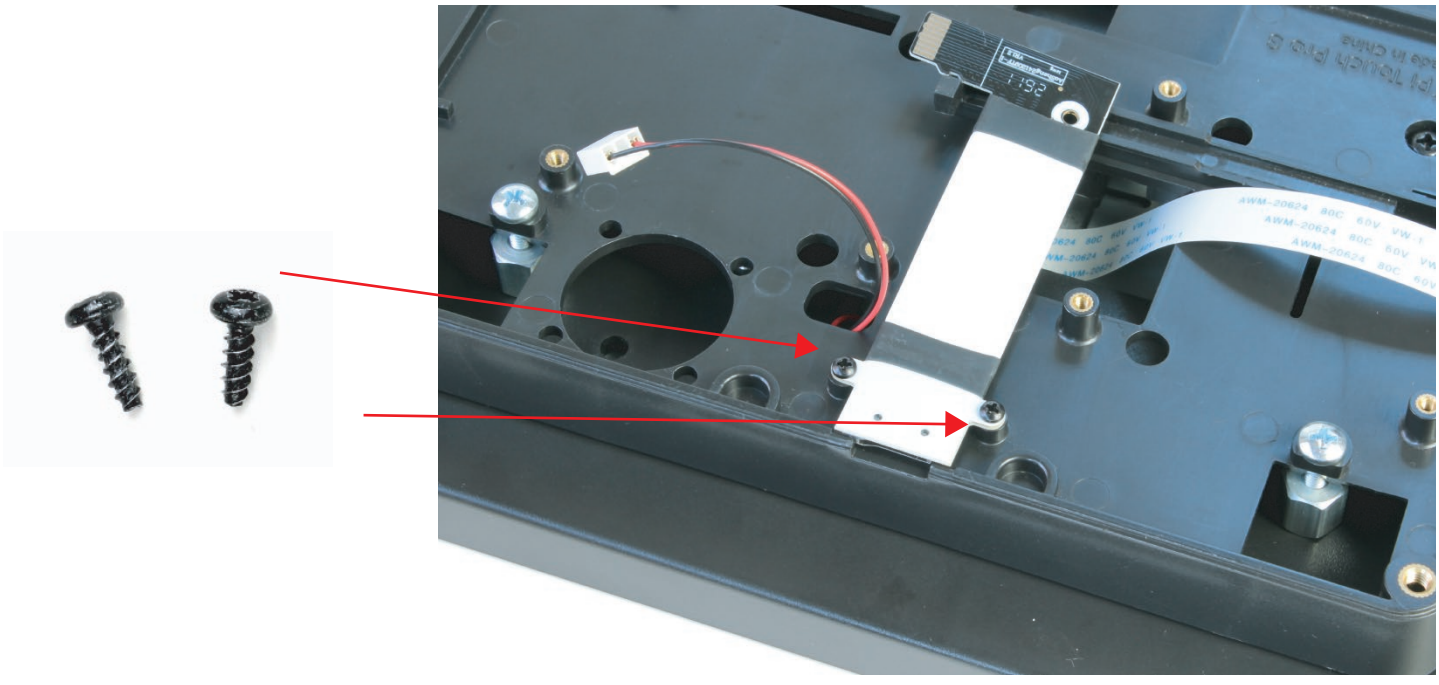
Secure the mounting part to the display case using the 14 mm silver screws and 8 mm black screws.



Step 6

If using the microSD card extender, secure it to the plastic case using two small black screws as shown.

Do not overtighten the screws. The small screws can easily strip the plastic mounting holes.



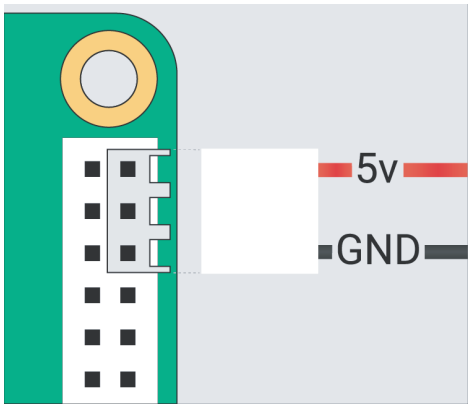
Step 7

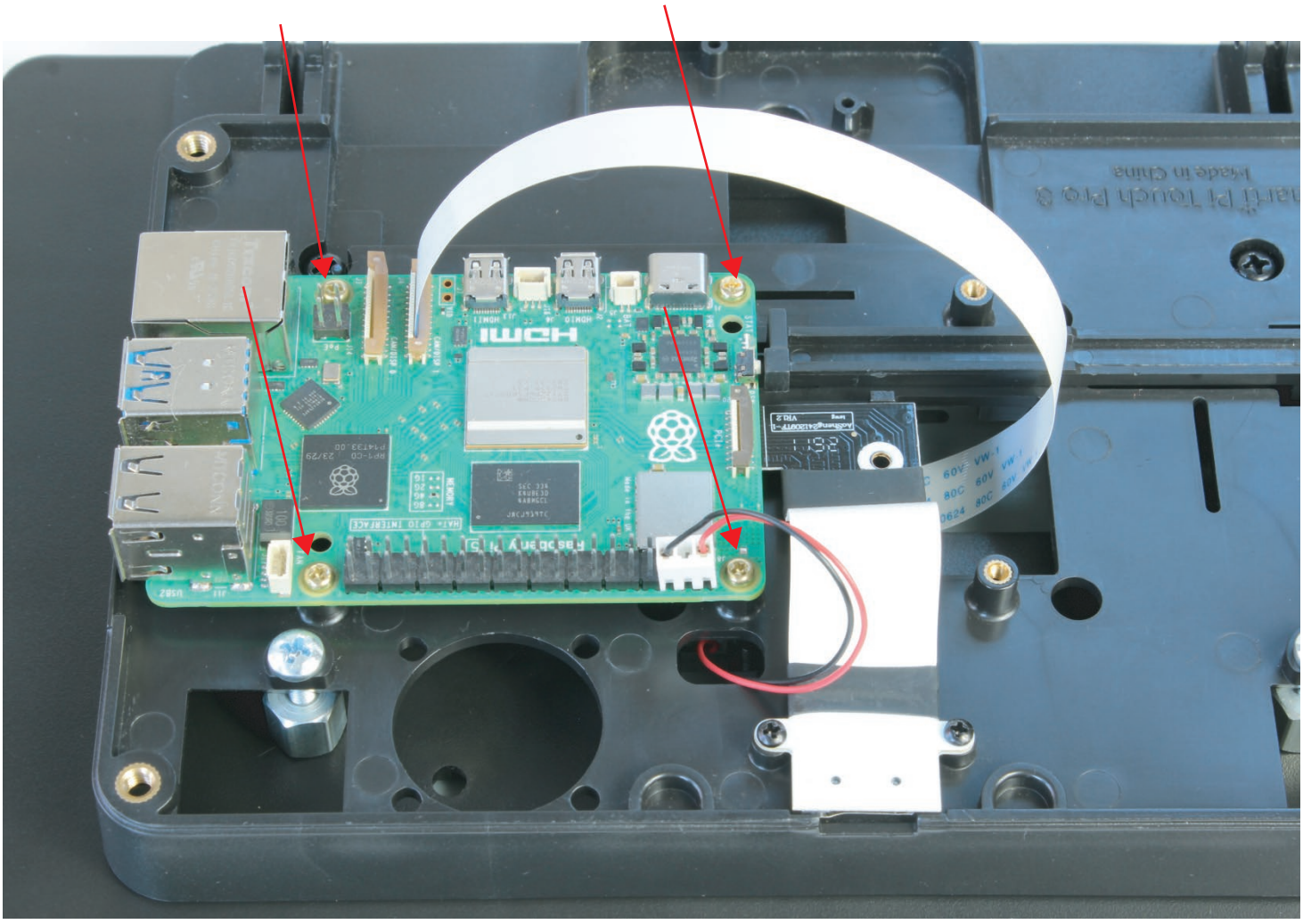
Insert the microSD card extender into the Raspberry Pi 5's microSD card slot.

Secure the Raspberry Pi to the case using the four gold screws.

Connect the display power lead to the GPIO pins according to the diagram below.

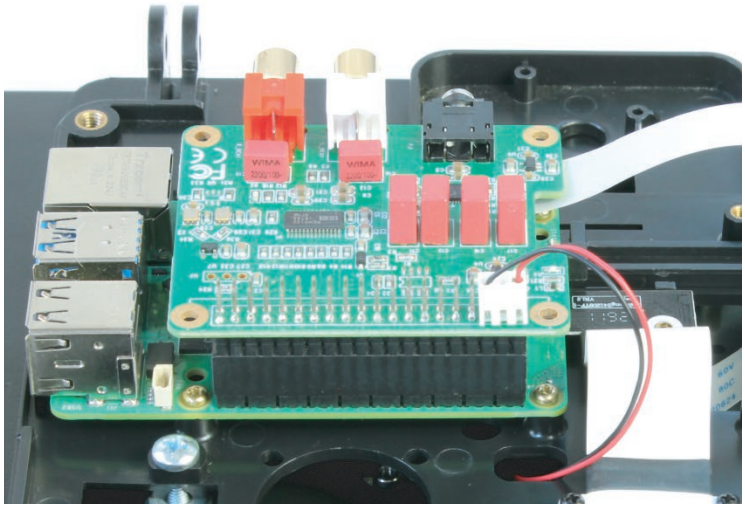
Connect the display ribbon cable to display port 1.



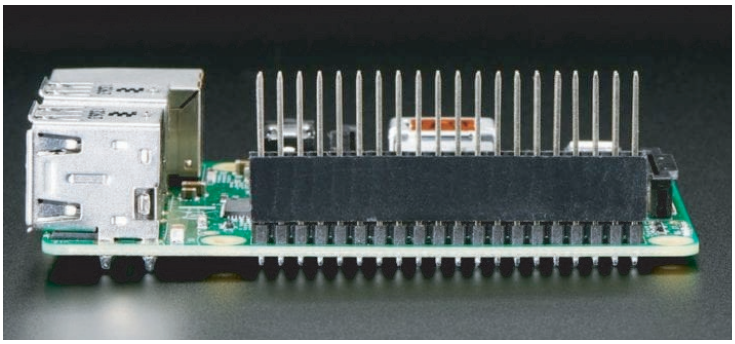


Using HAT boards

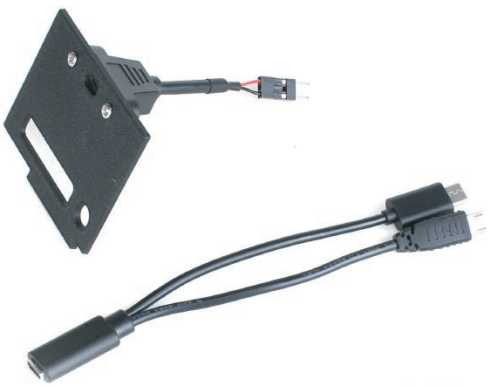
If your HAT board has extended GPIO pins, you can connect the display power lead directly to those pins.

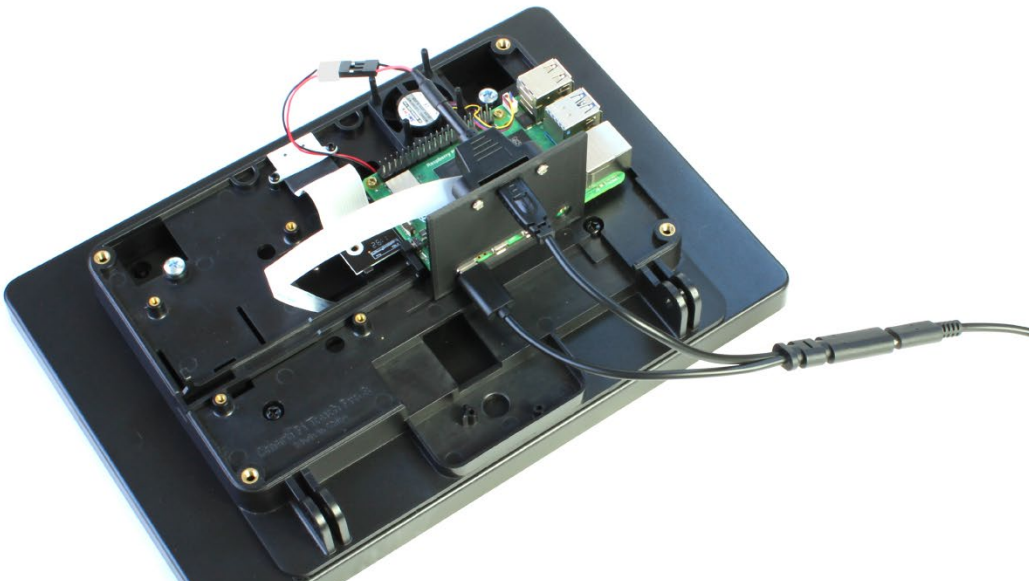


Some HAT boards have pass-through holes that allow GPIO stacking headers to extend through the board, providing access to the pins for the display power connection.



If powering the display through the GPIO pins is not possible, we offer a display power kit that allows both the display and Raspberry Pi to be powered from a power supply without using the GPIO pins. The kit can also be found on Amazon in the U.S.





Step 8

Position the lower panel around the Raspberry Pi connectors as shown.

The panel pictured is designed for the large back cover. A shorter version is included with the small back cover.

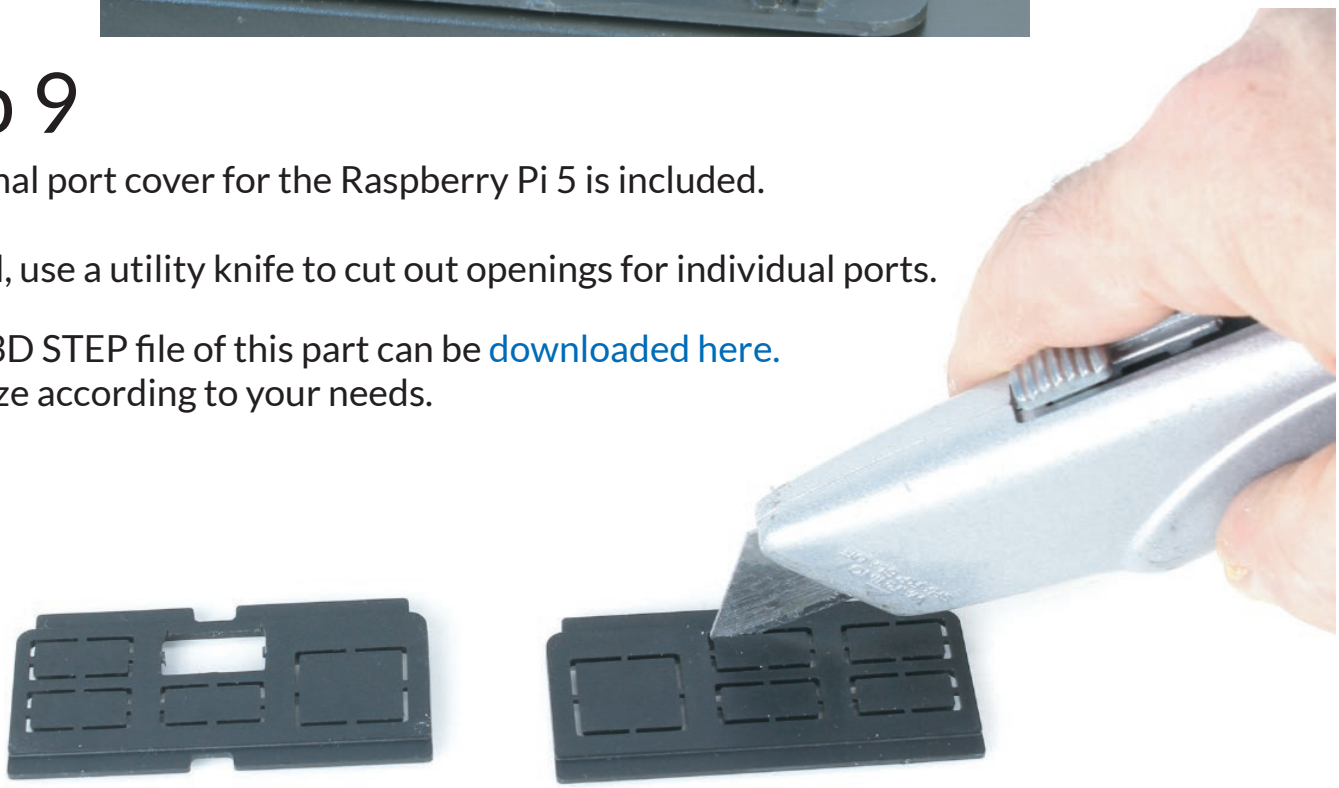
This panel is optional. The case can be assembled without it

Step 9

An optional port cover for the Raspberry Pi 5 is included.

If desired, use a utility knife to cut out openings for individual ports.

A blank 3D STEP file of this part can be downloaded here.
Customize according to your needs.



Step 10

Position the back cover over the lower panel and secure it to the front of the case using the four black screws shown. 3D STEP files of the back covers are available for download.

If using the optional port cover, position it between the front housing and back cover as shown.

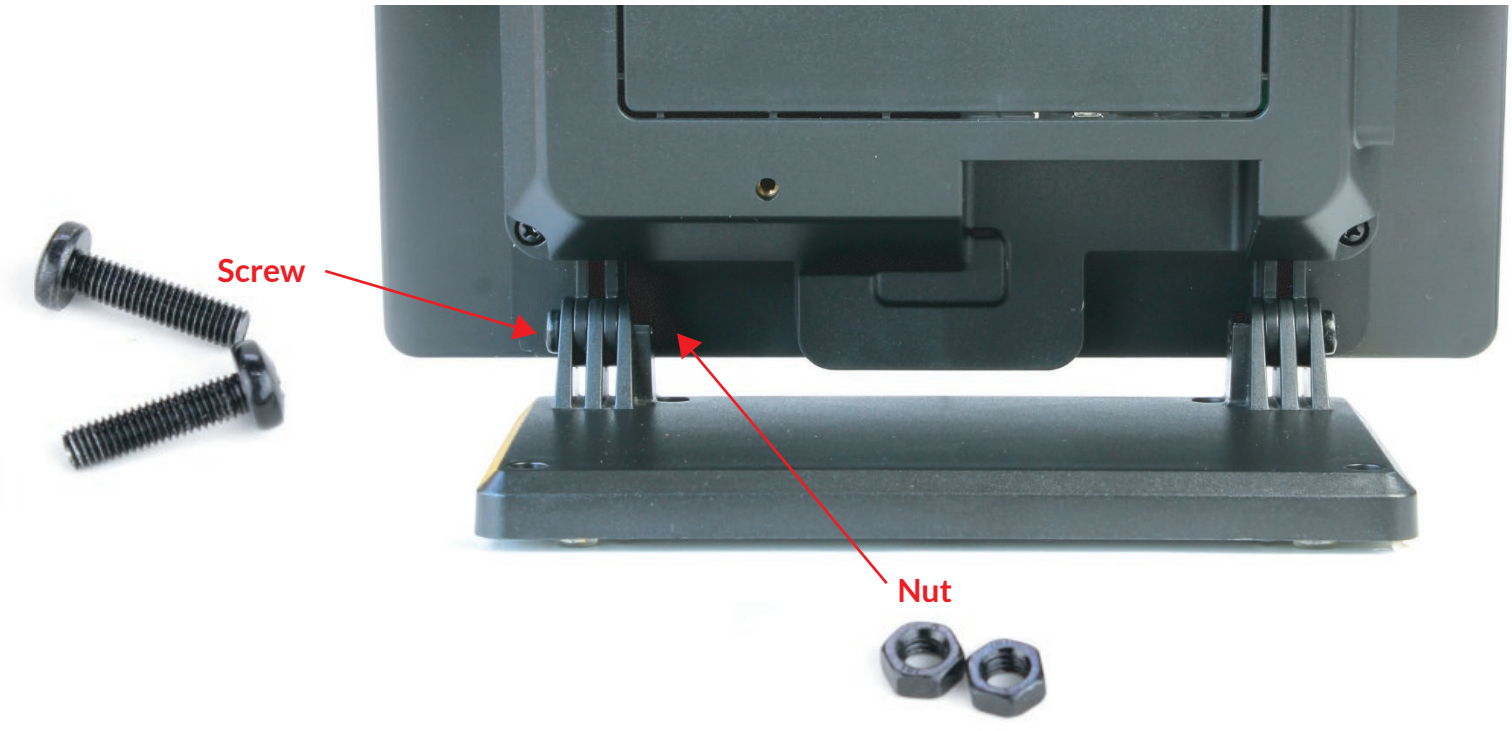
Step 11

Attach the metal baseplate using the four silver screws as shown.

Apply the rubber feet to the locations indicated.

Step 12

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



Step 13

The actuator installed in Step 1 can be used to power the device on and off (depending on the operating system).

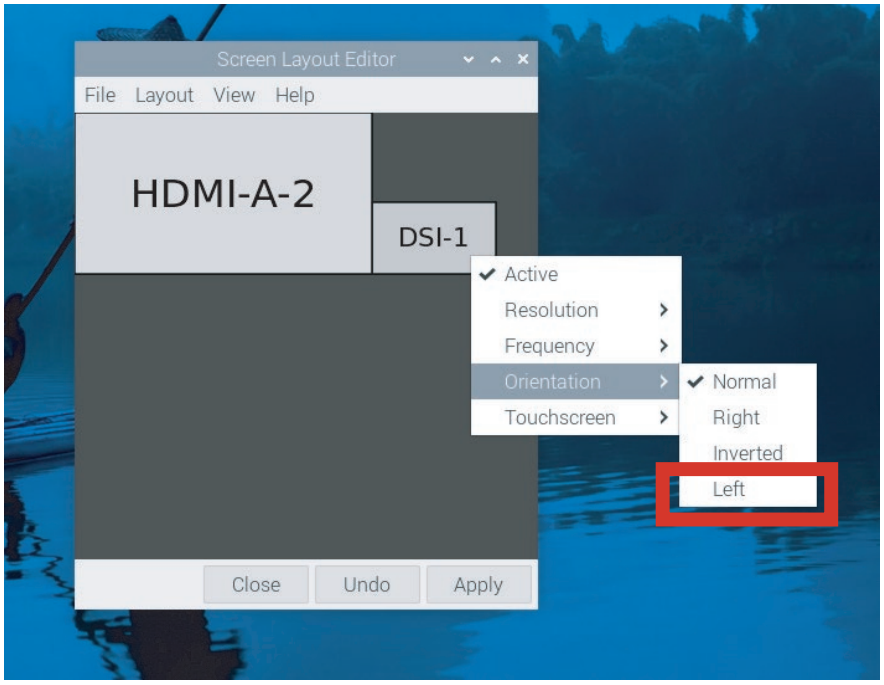
Step 14

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. Depending on the Pi OS version, you will access the DSI screen settings via one of the methods below.

Preferences -> Control Centre-> Screens

Preferences -> Screen Configurations

Once you find the DSI display, click on it and change the orientation to left.



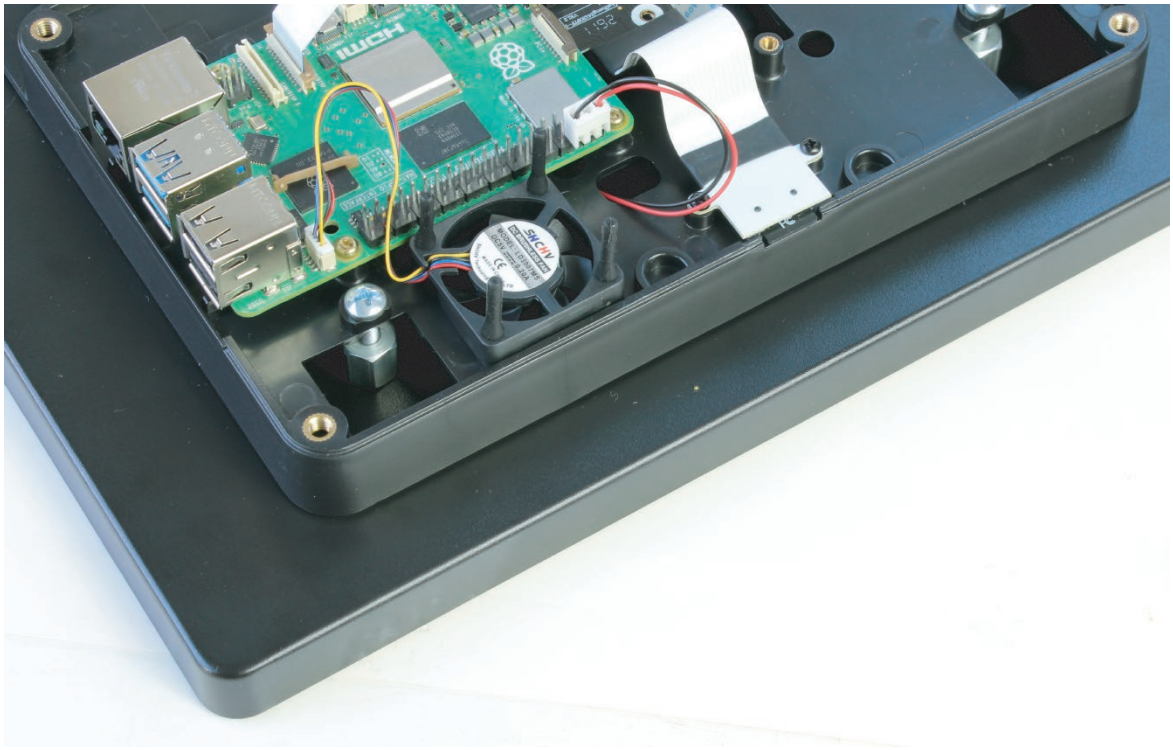
Cooling fan

A cooling fan is not included but can be purchased separately from SmartiCase.

We offer software-controlled cooling fans for Raspberry Pi 5.

The fan mounts above the Raspberry Pi and exhausts warm air through the top vents.

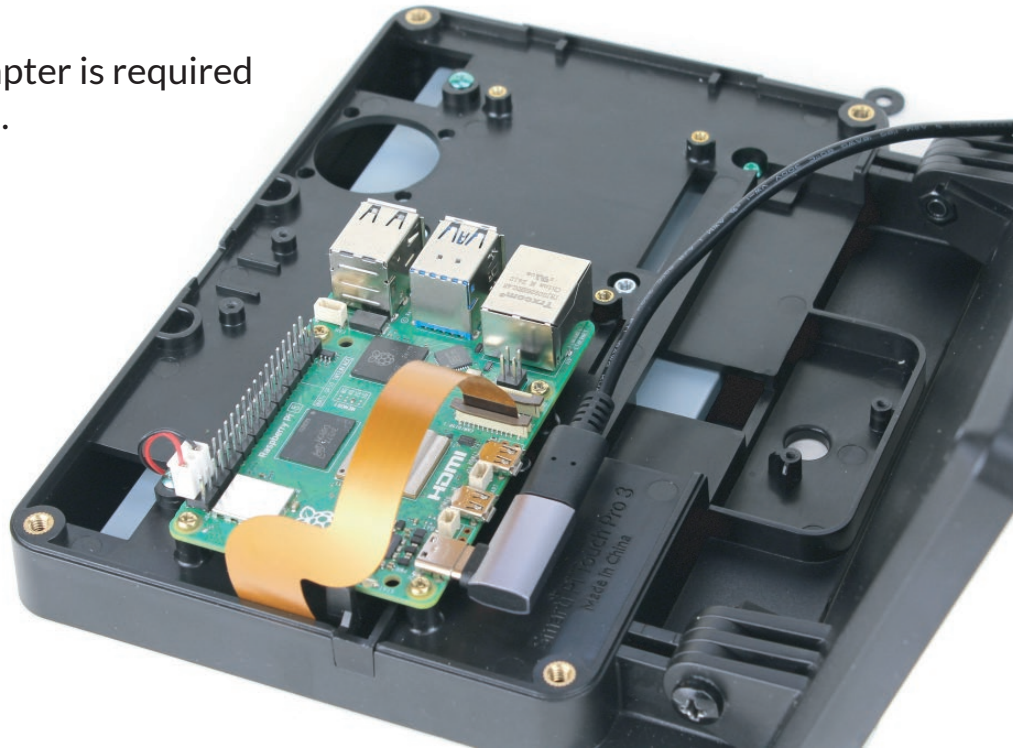
Most standard 30 mm Raspberry Pi cooling fans may also fit this mounting location.



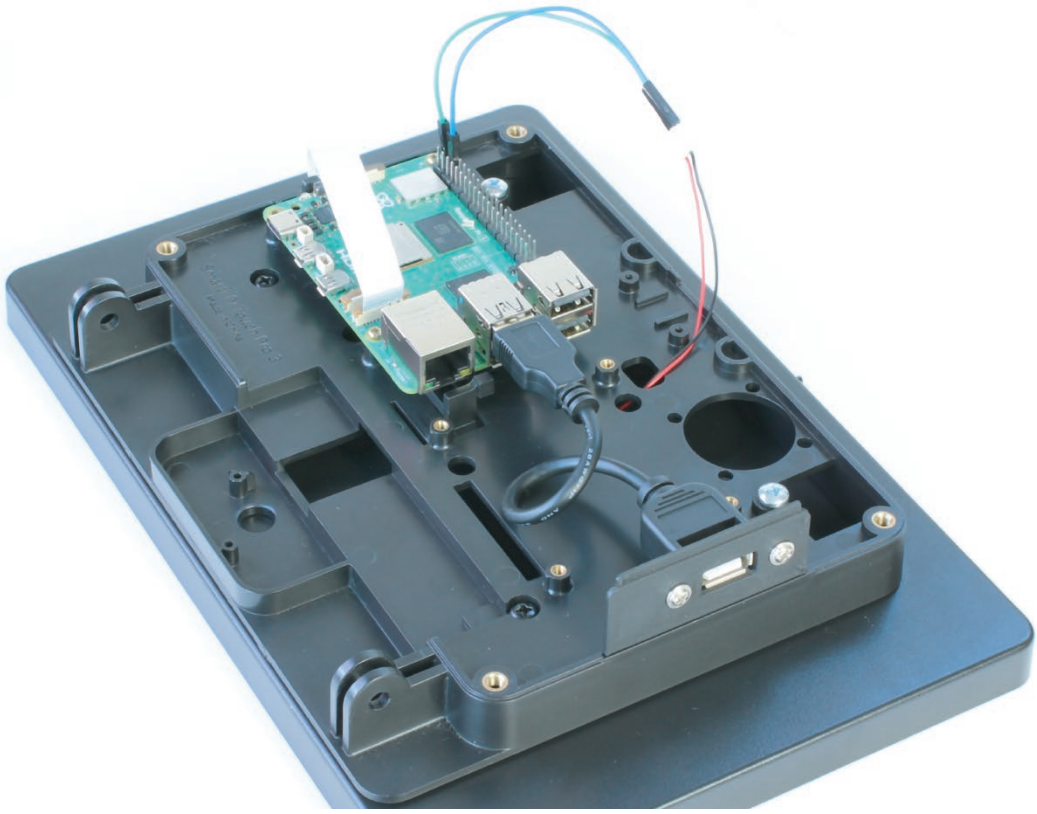
Alternative Raspberry Pi mounting option

The Raspberry Pi can also be installed using the alternate set of brass mounting points. This configuration provides easier access to the USB ports for connecting peripherals and can also accommodate HAT boards.

A right-angle USB-C power adapter is required for this mounting configuration.

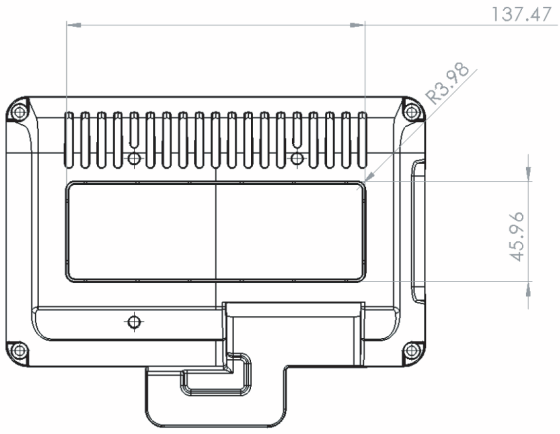


We sell a kit that includes a short USB-A extension and port insert that brings one USB-A port to the outside.

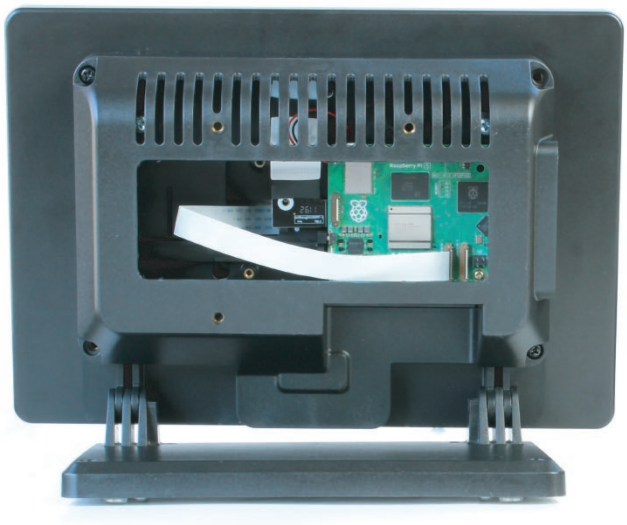


Back panel knockout

The back panel can be cut out with a utility knife, allowing you to install a custom panel with connectors or create your own cable-routing layout. The 3D STEP file shown below is designed to fit into the opening once it's cut out. Download it and modify it as needed for your application. It can be attached to the back cover using 3 mm screws or double-sided tape. If using screws, you'll need to drill mounting holes in the back cover..



Blank 3D STEP file to customize

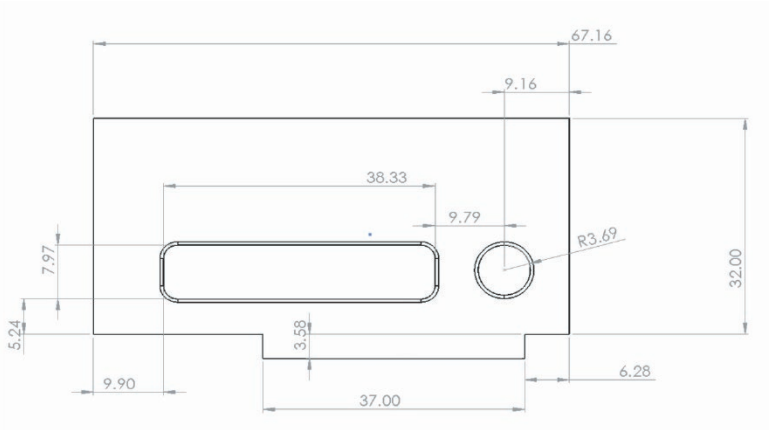


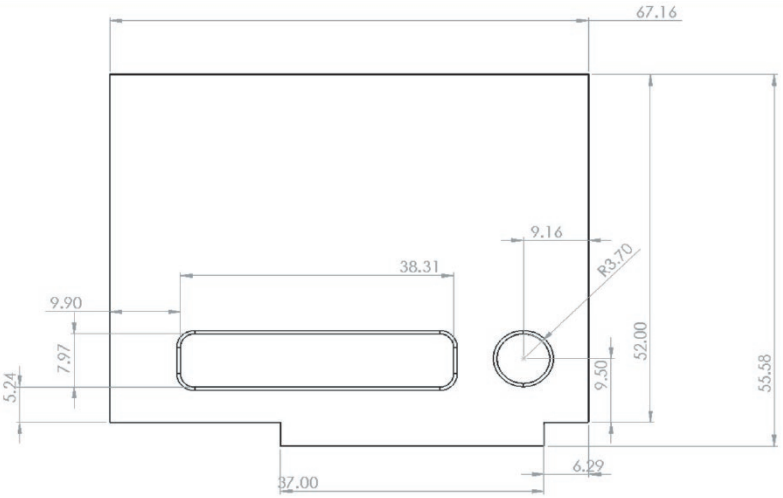
We can also customize this 3D printed panel with holes and graphics for your application. Contact us to learn more.

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. 3D STEP files of these panels can be downloaded here.

We can also customize this 3D printed panel with holes for your application. Contact us to learn more.



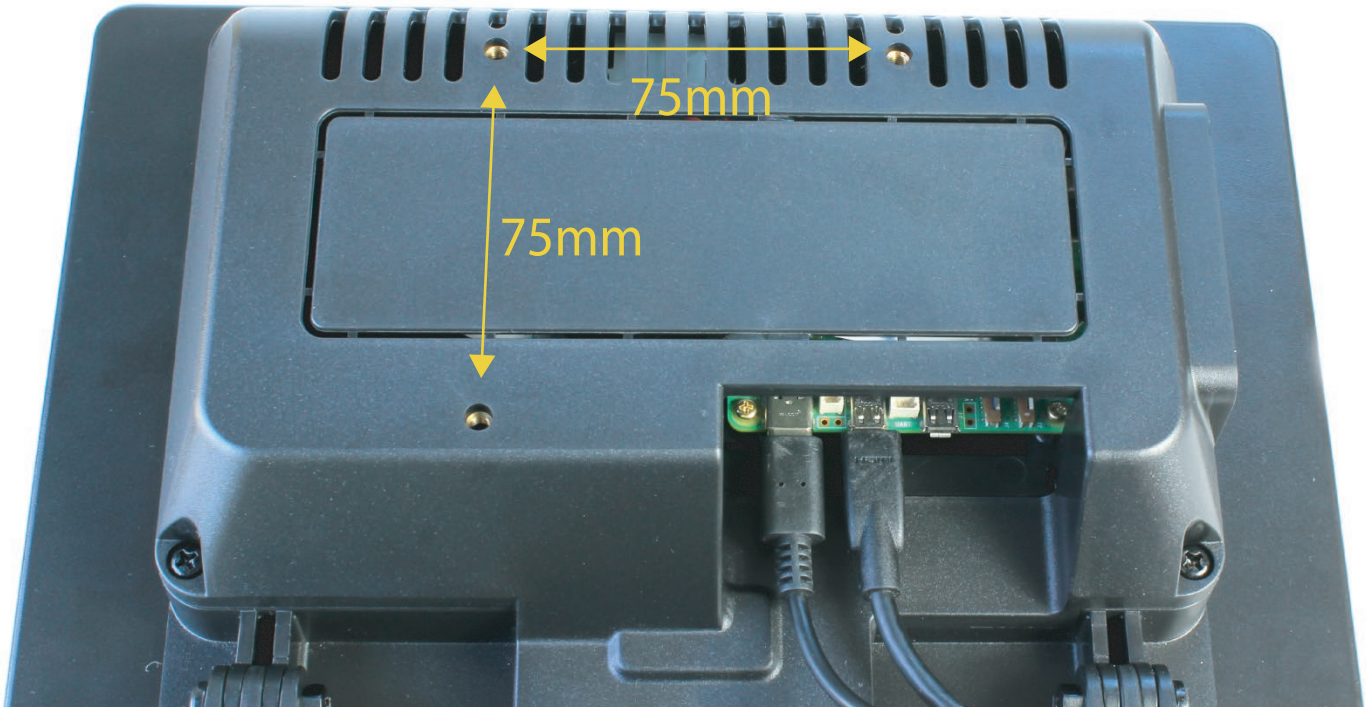


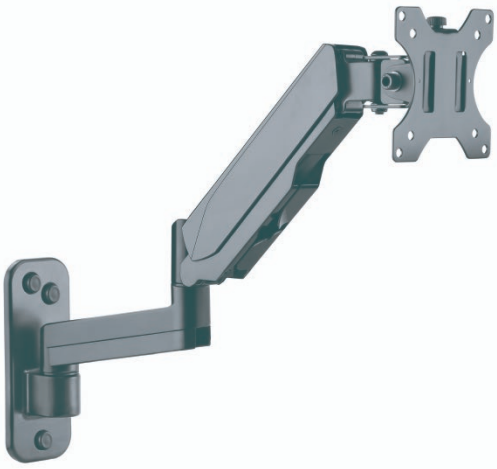
VESA mounting

The back of the case features three threaded M4 mounting points arranged in a 75 mm VESA-compatible pattern.

These mounting points allow the case to be attached to compatible monitor stands and arms.

VESA is a standard mounting system commonly available in 75 mm and 100 mm configurations.



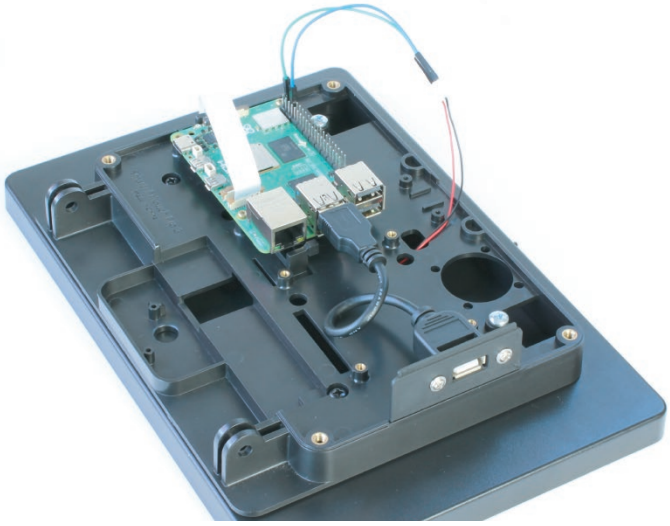


Accessories

We've got plenty of extras on our site to help you with your project.

Display power kit

Base extension for power banks



USB Extender

Base extension