Smarti Pi Touch Pro 2

Assembly instructions

Compatible with Raspberry Pi 4 and 5

Questions, missing parts, or CAD files?
Email info@smarticase.com

Using this case with Raspberry Pi 5

When using this case with Raspberry Pi 5 there will be a warning in Pi OS thats says

This power supply is not capable of supplying 5A
Power to peripherals will be restricted

There are no communication lines in our splitter cable therefore the Raspberry Pi will not be able to detect a 5A power supply even if it is connected. Therefore it is not possible to prevent this message from appearing.

You can overide the restricting of the current to the USB ports by doing one of the two things below.

1 - Adding *usb_max_current_enable=1* in /boot/firmware/config.txt

OR

2 - Enabling USB max current on the Pi OS desktop GUI under preferences -> configuration

Once enabled the Pi5 will not restrict power to the peripherals and will allow 1600mA to the USB ports.

One thing to note is that even if you are using a 5A power supply, our splitter cable is only rated for 3A. If you try to draw more than 3A through our splitter, the voltage will drop too low for the Raspberry Pi to function and it will reboot.

Power supply

Always use a UL or CE marked wall power supply with the included splitter cables. Use a wall power supply that can deliver enough current for your application. For best results, use a 5.1 volt power supply to avoid low voltage warning on the display. The official Raspberry Pi power supply is recommended.

The splitter cables are only for use with the Raspberry Pi and Official Raspberry Pi display.

5.1 V 3A USB-C Power supply recommended

Also compatible with the Raspberry Pi 27W power supply. Our splitter will only work up to 3A.

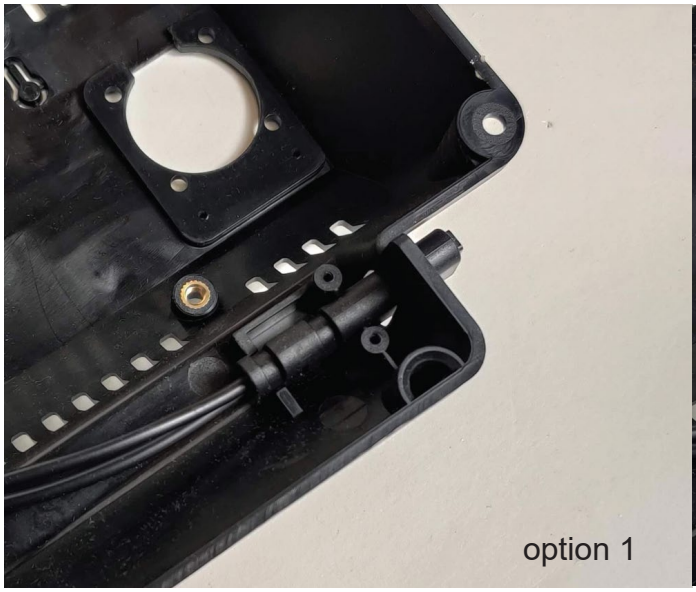
USB-C input

USB-C (Pi 4 and 5)

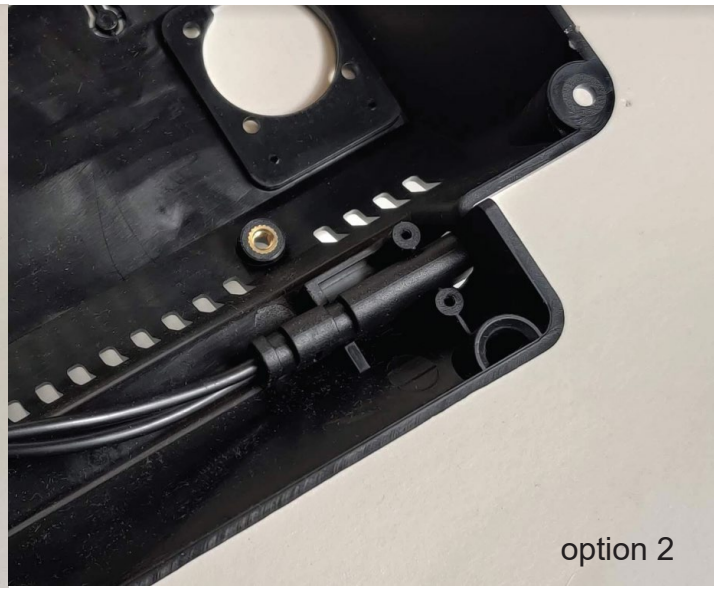
Micro USB (display)

Assembly Step 1

Insert the female end of the splitter into the back cover as shown below. The cable can be assembled in either of two positions. Option 1 extends further out for easier access. Option 2 is the more compact option.



option 1



option 2

Assembly Step 2

Use two of the small black screws in the **blue bag** to secure the small plastic retaining part to the back cover. This will secure the power cable to the case.

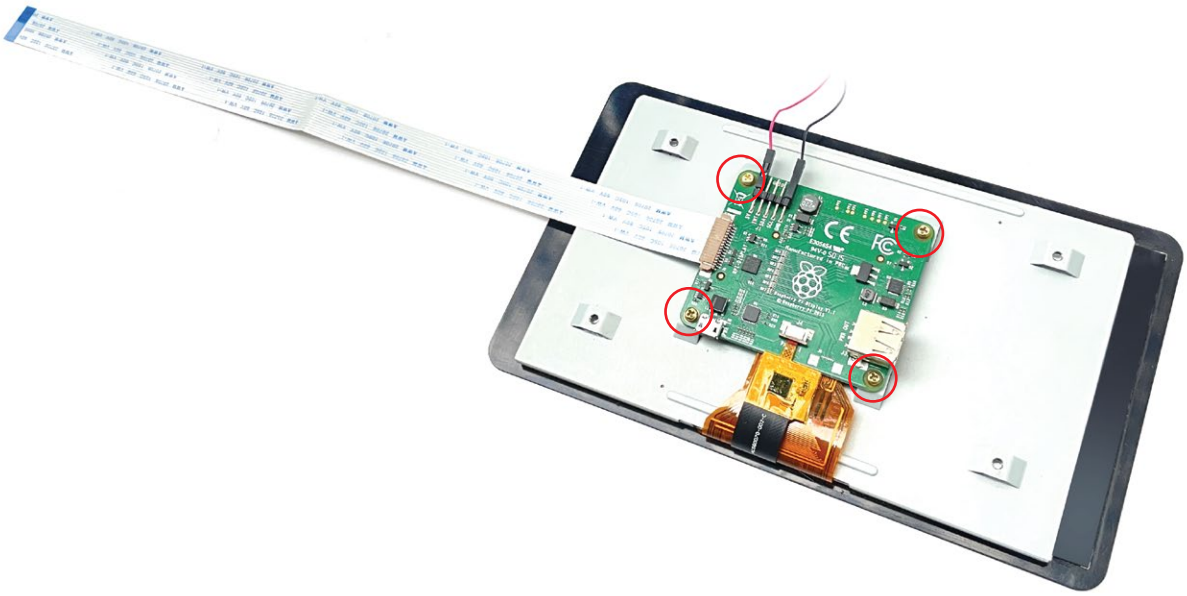
Assembly Step 3

Assemble the metal base on the bottom of the plastic base. The metal base can only properly assemble onto the base one way. Please make sure all of the holes are aligned. Use the four silver screws to attach the metal base to the plastic base. Assemble the screws as shown in the photo. Then assemble the adhesive rubber feet in the locations show below.

Assembly Step 4

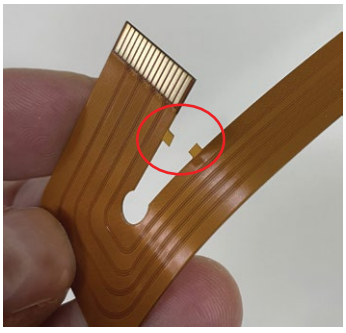
If using a Raspberry Pi 4

Assemble the long white ribbon cable with the contacts facing up, to the display connection on the display board. If using the fan, connect the red jumper lead **that came with the display** to the 5v connection on the display board GPIO pins and the black jumper lead to the ground pin. Remove the standoffs that attached the display board to the display and replace with the provided gold screws (circled in red).



If using a Raspberry Pi 5

Assemble the gold ribbon cable with the contacts facing up, to the display connection on the display board. If using the fan, connect the red jumper lead **that came with the display** to the 5v connection on the display board GPIO pins and the black jumper lead to the ground pin. Remove the standoffs that attach the display board to the display and replace with the provided gold screws (circled in red).



The small piece of material connecting the ribbon cable together can be cut to make assembly easier. It is there to strengthen the cable during transport.

A piece of tape (not provided) can be added to the cable here to help secure it to the display.

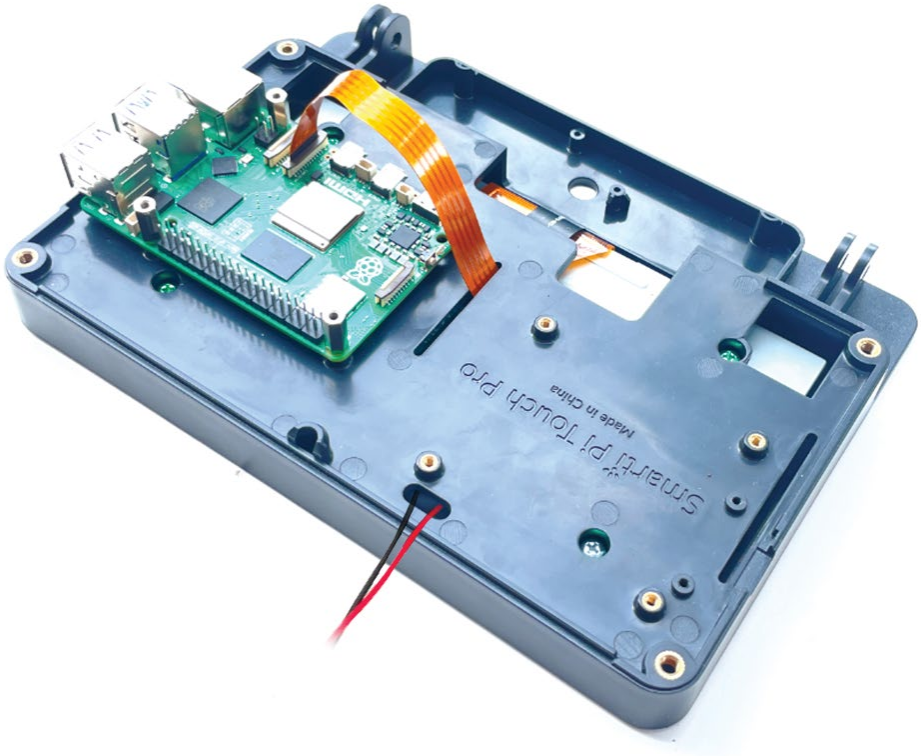
Assembly Step 5

If using a Raspberry Pi 4

Attach the display to the housing using the green screws as shown below. Feed the white ribbon cable through the slot in the housing as shown below. Feed the jumper leads through the hole at the top of the case. Use the standoffs that were attached to the display board to secure the Raspberry Pi to the case as shown.

If using a Raspberry Pi 5

Attach the display to the housing using the green screws as shown below. Feed the gold ribbon cable through the housing as shown below. Feed the jumper leads through the hole at the top of the case. Use the standoffs that were attached to the display board to secure the Raspberry Pi to the case as shown.



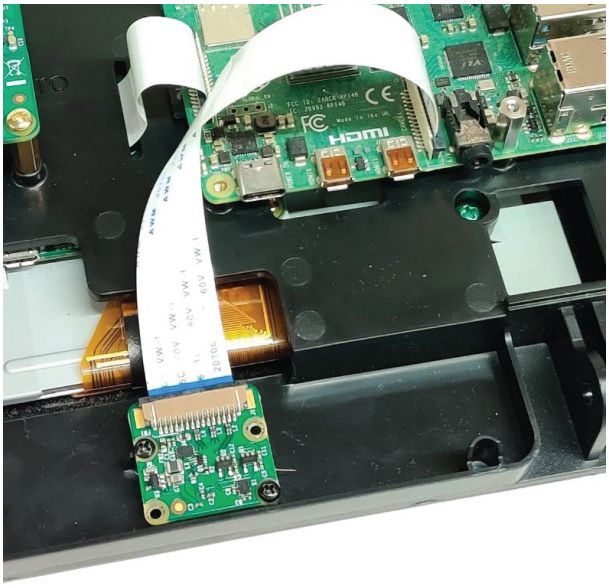
Assembly Step 6

If you are not using the camera, proceed to Step 7.

If you choose to use the camera hole, the Official Raspberry Pi camera (v1, v2, or v3) can be assembled into the camera hole with two of the small black screws in the clear bag of harware. If using Raspberry Pi 4 one of the supplied white ribbon cables can be used to attach the camera.

If using a Raspberry Pi 5 you will need to supply your own cable. The Raspberry Pi 5 has a new smaller camera connector and requires a special cable to connect to the camera. This cable is usually available where Raspberry Pis are sold.

Do not overtighten the screws!



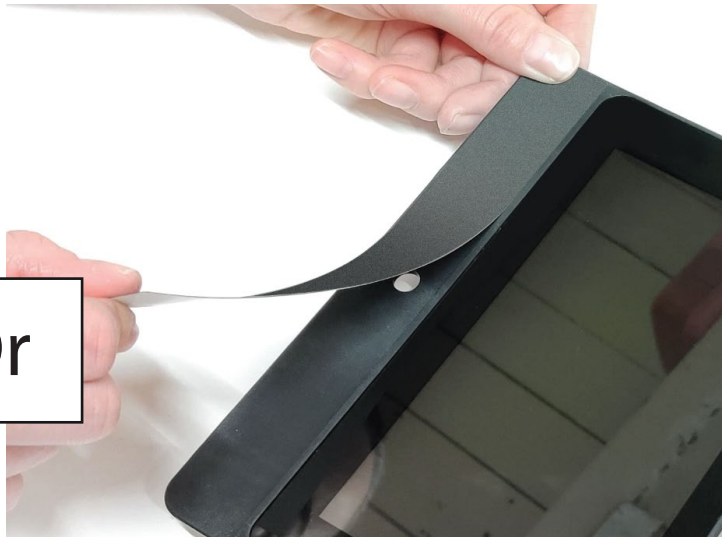
Assembly Step 7

If you chose to not use the camera, you can temporarily plug the hole with the small plastic cover part and two of the small black screws.

Alternatively, you can permanently cover the camera hole with the adhesive front panel. Do not have the plastic camera cover part installed when you apply the adhesive panel. The adhesive panel is not removable.

Custom artwork and logos can be added to this adhesive panel for bulk quantity puchases. Contact us for more info.

Or



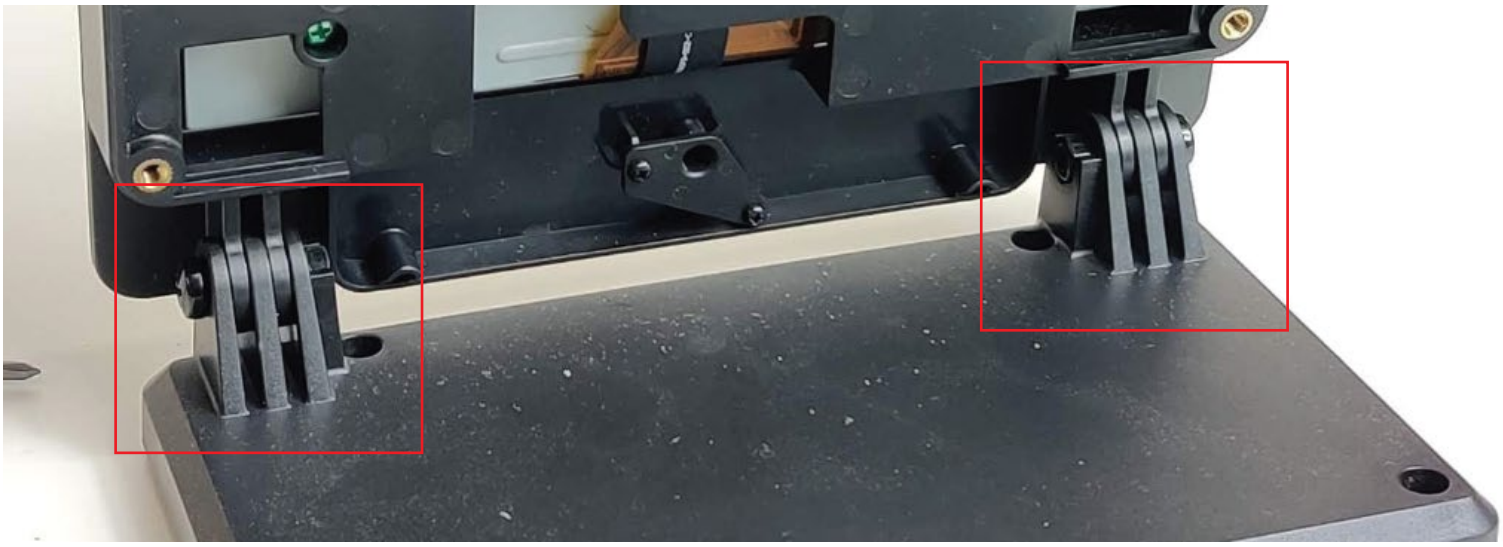
Assembly Step 8

Attach the SD card holder with two of the screws in the **blue bag**. Be care to not overtighten.

Attach the SD card holder end to the SD card slot in the Raspberry Pi.

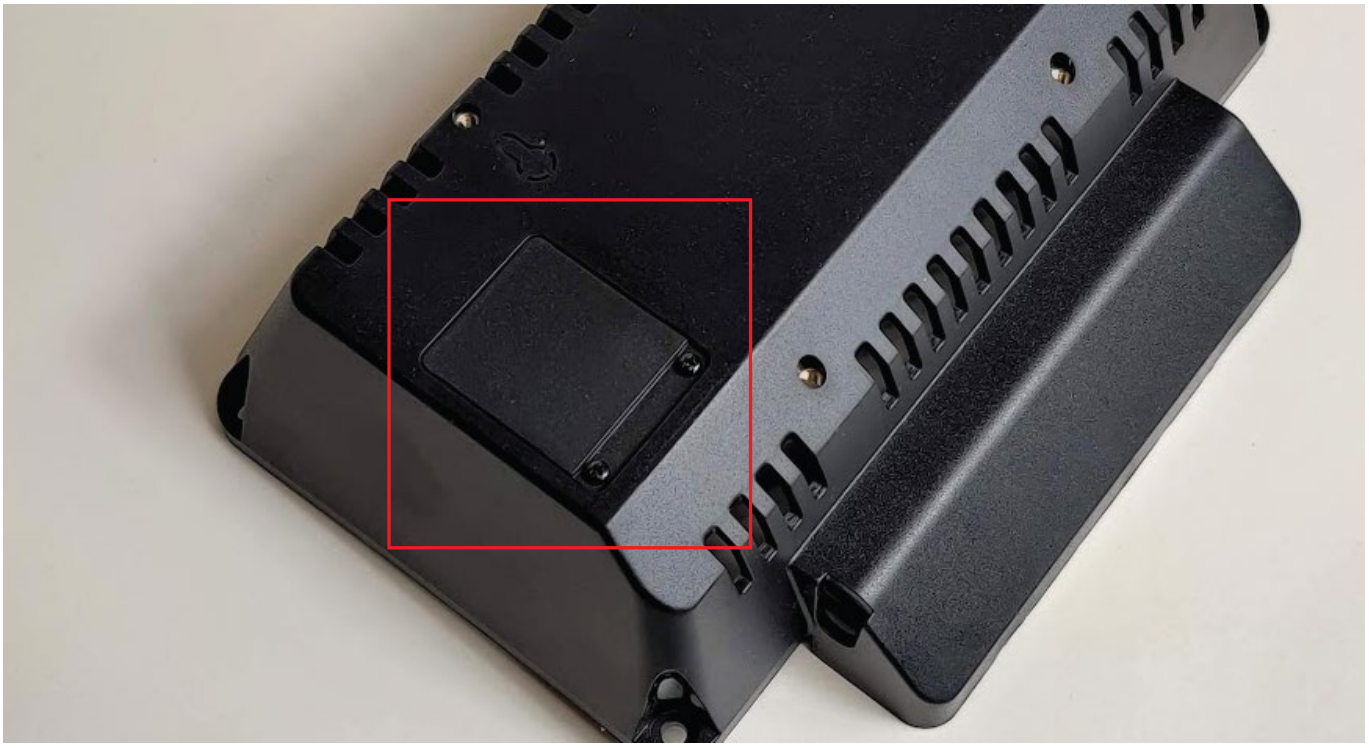
Assembly Step 9

Assemble the display housing to the stand with the large black screws and nuts.
DO NOT OVERTIGHTEN. Loosely attach the screws at this point.



Assembly Step 10

If you choose to not use the fan, the small door can be assembled into the hole in the back cover and attach with two of the small black screws from the clear bag.

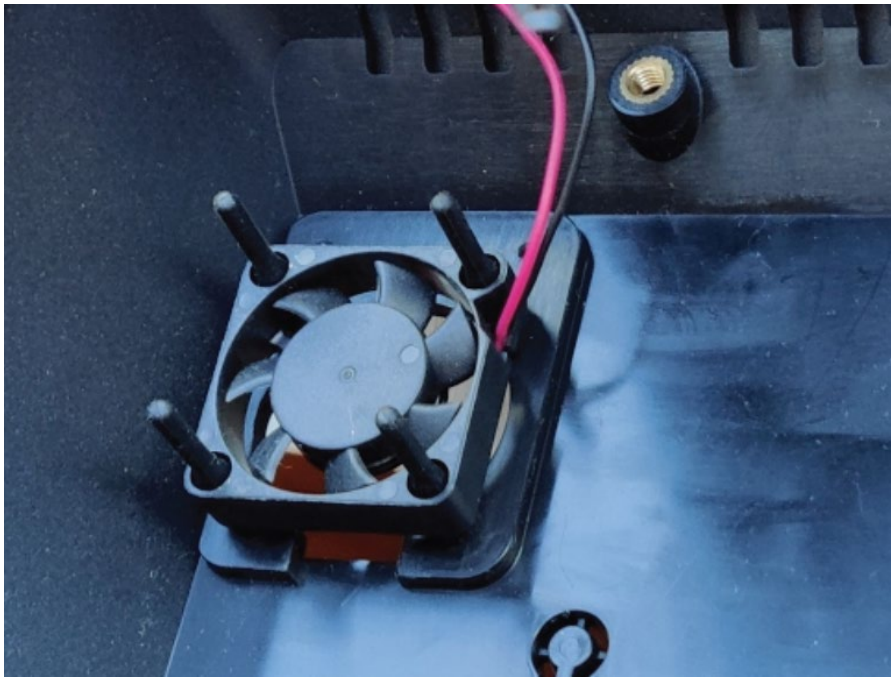


Assembly Step 11

If you choose to use the fan , attach the small rubber vibration mounts to the holes in the back cover as shown below. Push the small end of the mount through the back cover from the outside. Then pull it through the cover as shown.

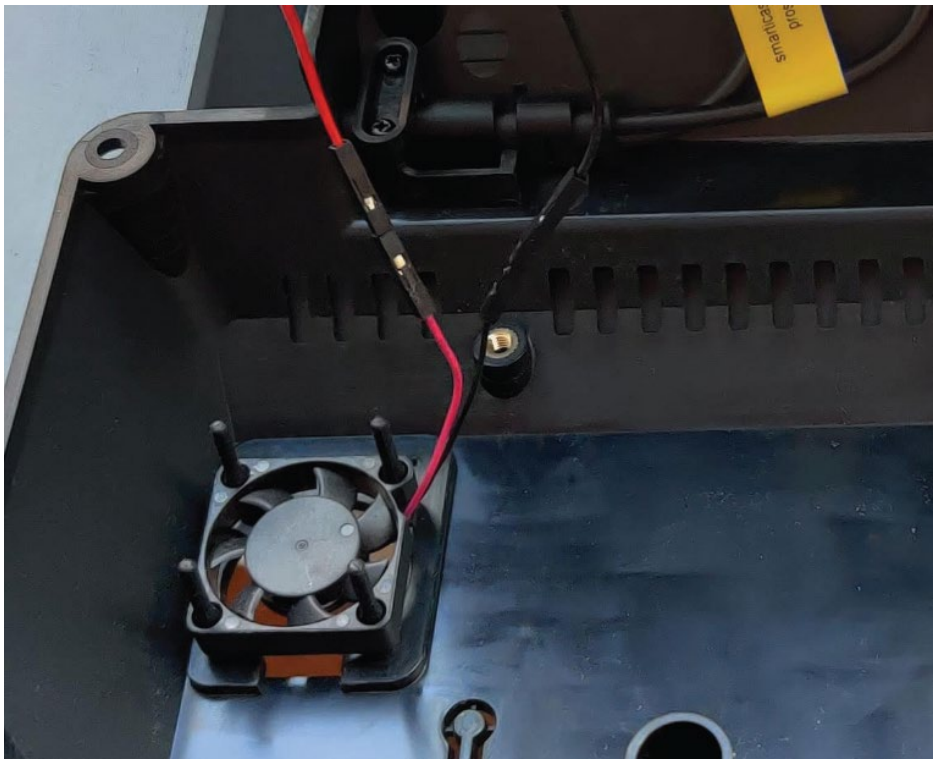
Assembly Step 12

Pull the rubbers mounts through the fan holes and pull the thin end of the mount until the fan is mounted on the rubber mounts as shown below.



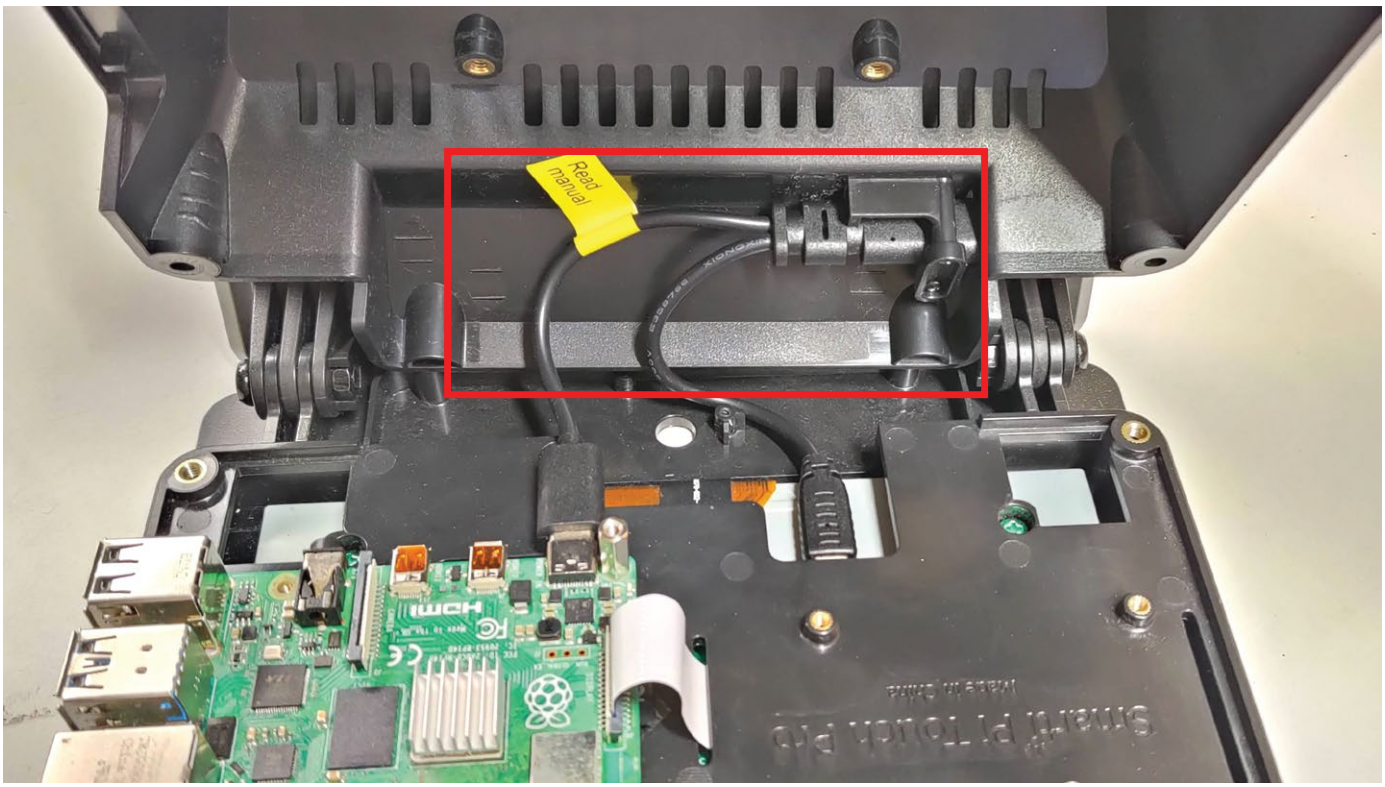
Assembly Step 13

Attach the power leads from the display to the red and black on the fan.

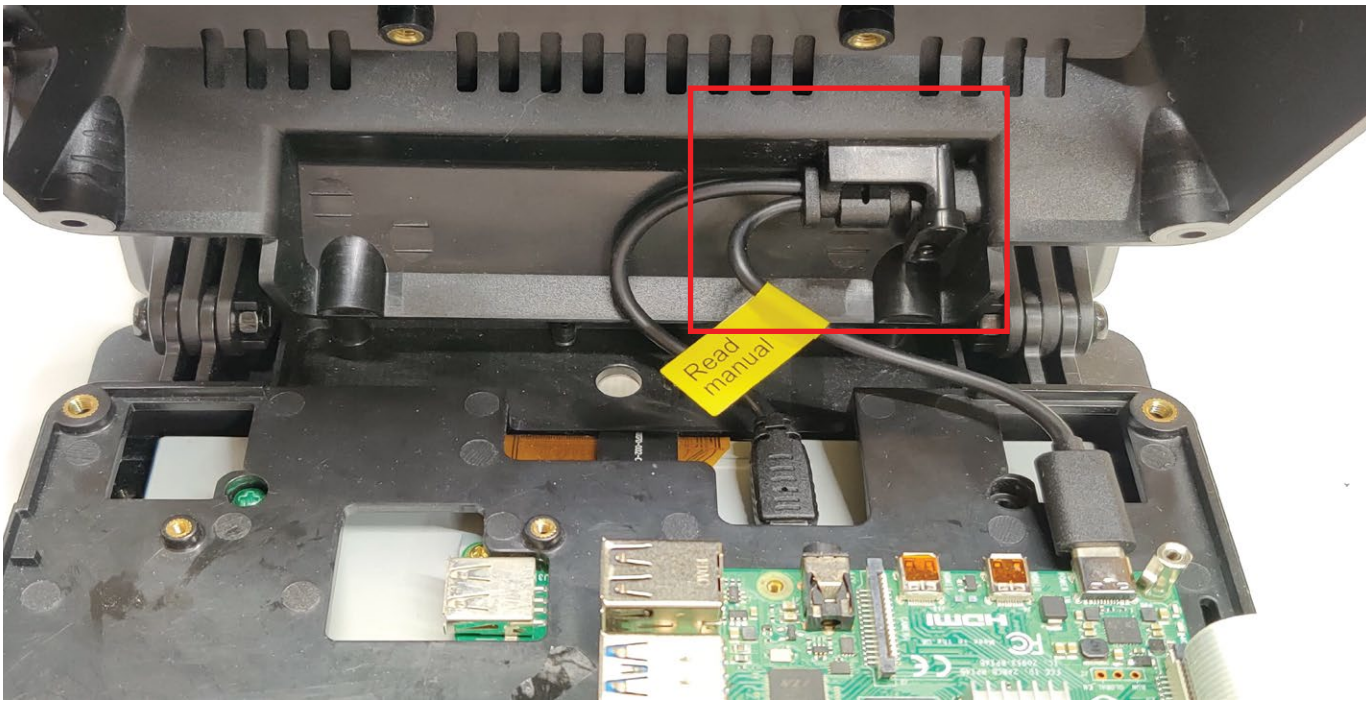


Assembly Step 14

Attach the power cables to the Pi and the display. You may choose to flip the position of the cable input so the power leads are not cossing each other and for more efficient wire routing.

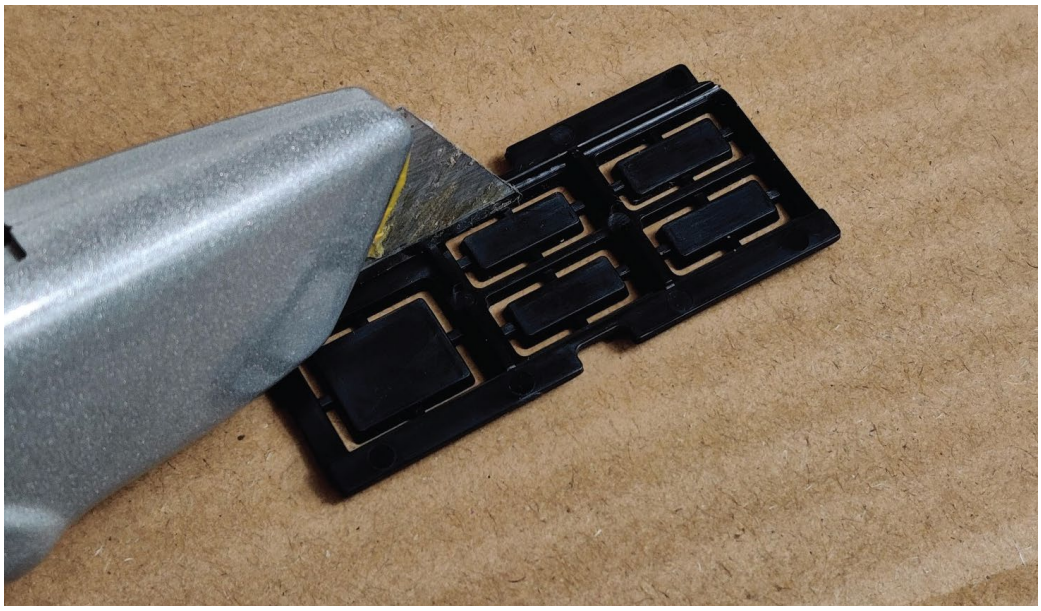


If you are mounting the Raspberry Pi as shown below, you may need to mount the cable input at the farther out position and rotate the connector so that the Raspberry Pi cable lead is positioned closer to the Raspberry Pi as shown below.. This will give you more slack in the cable.



Assembly Step 15

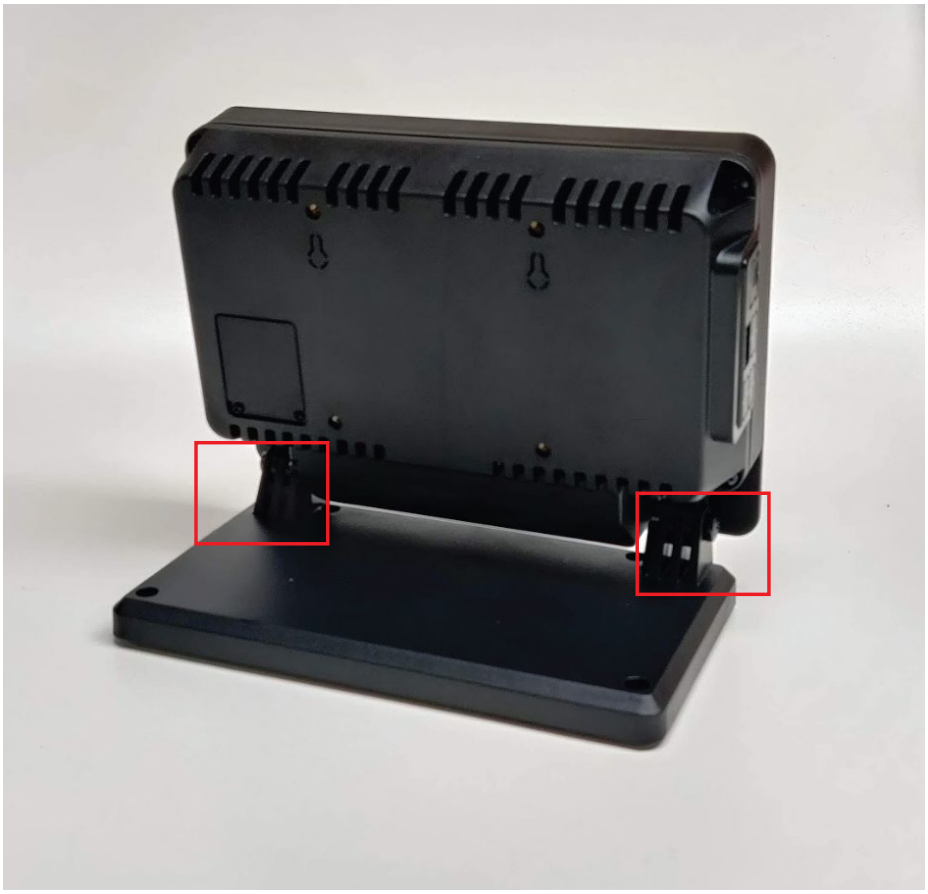
If using the port blocking part, from the back side cut out the desired ports with a utility knife. Two parts are included. One for Pi 4 and one for Pi 5. This part is completely optional.



Assemble the back cover to the display housing with the four black screws.
The port blocking part should have tabs that fit inside the housing and cover.

Assembly Step 16

Adjust the angle of the display to suit you needs. Then tighten the pivot screws.
DO NOT OVERTIGHTEN. Tighten the screws just enough to hold the display in place.



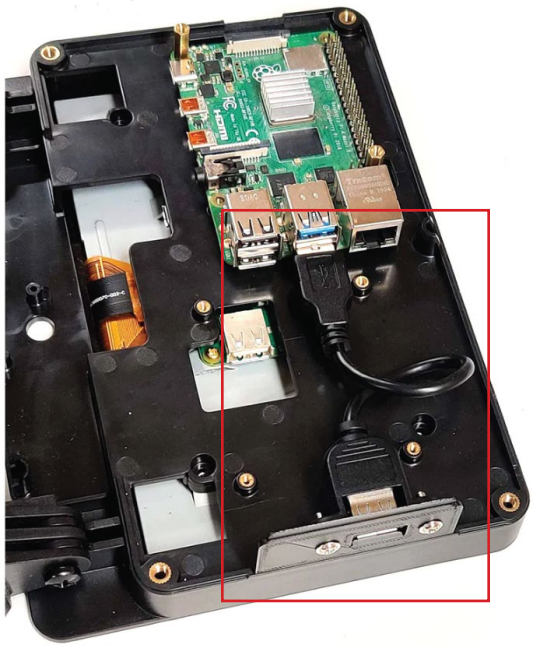
Additional information and options

You can choose to mount the Raspberry Pi in the other set of brass inserts if you wish. Although you won't have access to the USB and ethernet ports from the outside. We offer small extension cables in our store that extend USB port access and audio jack access back out to the side of the case when mounting the Pi in this configuration.

You will not be able to use the SD card extender if you use mount the Raspberry Pi on this side.

Pi 4

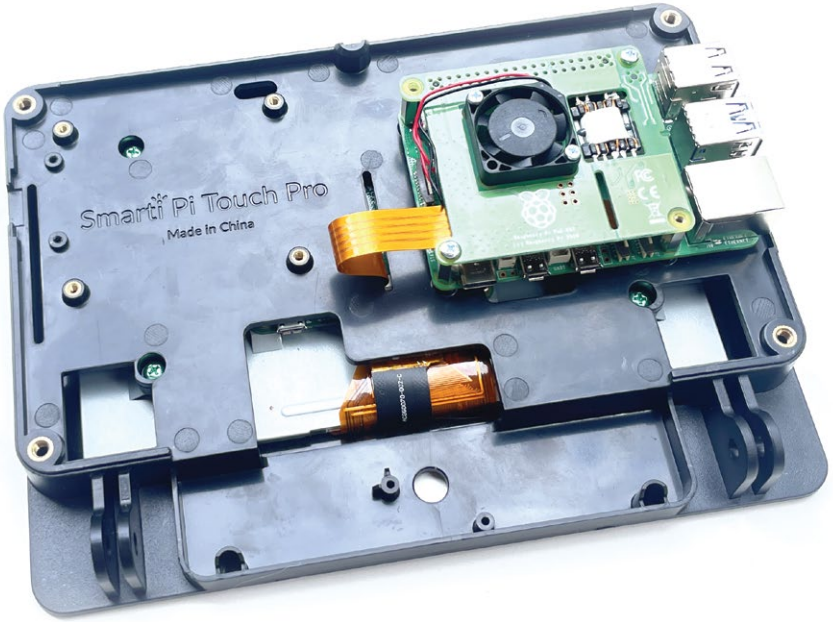
Pi 5



USB extender accessory sold in our store Smarticase.com

Additional information and options

You can mount HAT boards on top of the Raspberry Pi or on the other set of inserts. In either option you will need appropriate wiring or headers to connect the HAT board to your Raspberry Pi.



Additional information and options

75mm VESA mounts (circled in red) can be used to mount the display housing instead of using the stand. The threaded holes are size metric m4.

Two eyelets can be cut out with a utility knife (circled in blue) to mount to a surface. The mounting points are 75mm apart.