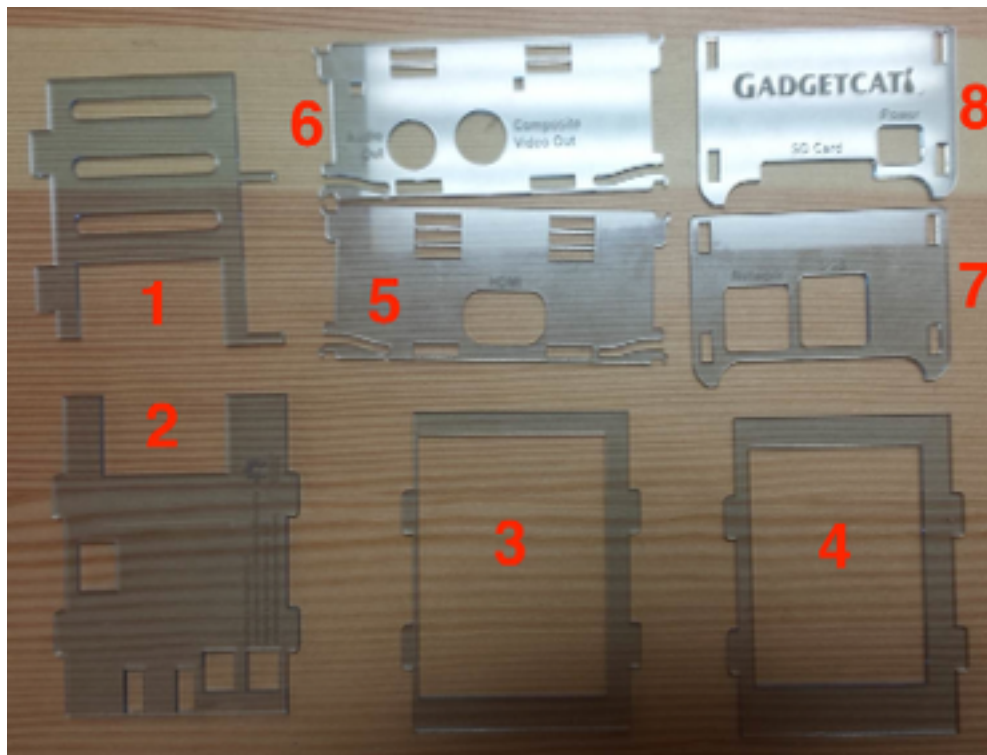




Modified Raspberry Pi Box for PiTFT Touchscreen - GC-8387 Installation Instructions

To assemble your Raspberry Pi Box, you'll first need to assemble your Raspberry Pi along with the soldered TFT Touchscreen board. The supplied header spacer can either be placed in between the circuit board and the stacking header or on the Raspberry Pi header pins, sitting in between stacking headers, which is soldered to the TFT Touchscreen and the Raspberry Pi as seen in the following pictures.

Shown below are the case parts that come with the GadgetCat Modified Raspberry Pi Box for the PiTFT Touchscreen (<http://www.gadgetcat.com/product/modified-raspberry-pi-box-for-pitft-touchscreen/>). Your case parts may still have their protective paper wrapping on them, so just peel the paper off of both sides before trying to assemble the case.



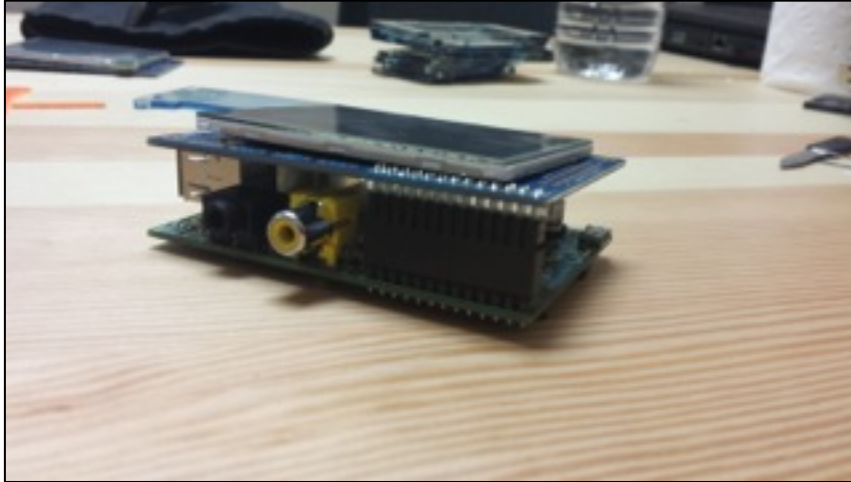
The included parts are as follows:

- 1) TFT Touchscreen Spacer
- 2) Bottom
- 3) TFT Touchscreen Alignment Piece
- 4) Top
- 5) HDMI Side
- 6) Audio/Composite Side
- 7) USB/Network Side
- 8) SD/Power Side
- 9) Header Spacer (x2), **not shown**.

Once your board has been soldered together, you can assemble the case by following the guide on the following pages.

Case Assembly

- 1) After removing the protective paper on your acrylic, secure the soldered TFT Touchscreen Circuit Board assembly to the Raspberry Pi by aligned the female headers to the male headers on the Pi and firmly pressing down. As you can see in the picture, the supplied header was soldered in between the circuit board and the male headers.



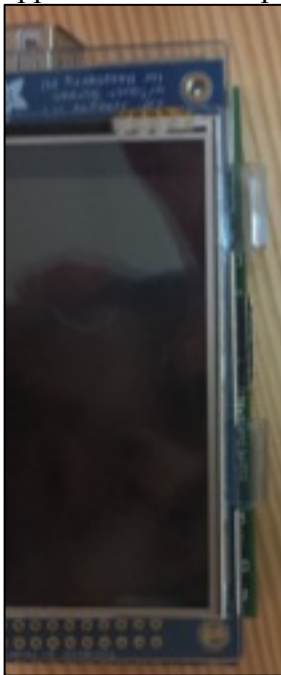
- 2) Next, carefully rotate the touchscreen away from the circuit board and slide the **TFT Touchscreen Spacer [1]** into place. Note its orientation, with the ribbon cable sliding into the “U” part of the spacer and the skinny arms sitting on the header side of the circuit board.



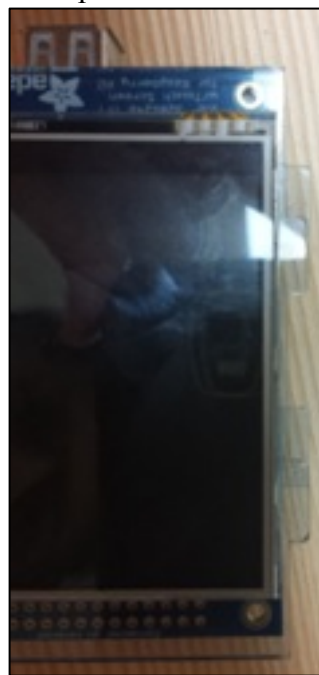
- 3) Allow the screen to rest on the **TFT Touchscreen Spacer [1]**. Due to the increased height, the screen may want to shift away from being directly over the white outline on the circuit board, but this is normal. The case was designed such that it does not attempt to maintain the default orientation and along with the inherent tolerances or “wobble room,” the ribbon cable is not stressed.



- 4) Place the **TFT Touchscreen Alignment Piece [3]** on top of the **TFT Touchscreen Spacer [1]**, making sure that it is placed squarely over the TFT Touchscreen. Additionally, be sure that it is aligned correctly, such that the tabs of the **TFT Touchscreen Alignment Piece [3]** roughly match up with those for the TFT Touchscreen Spacer [1], as seen in picture 4.1. If your tabs appear like those in picture 4.2, flip the alignment piece over until it appears like in picture 4.1.

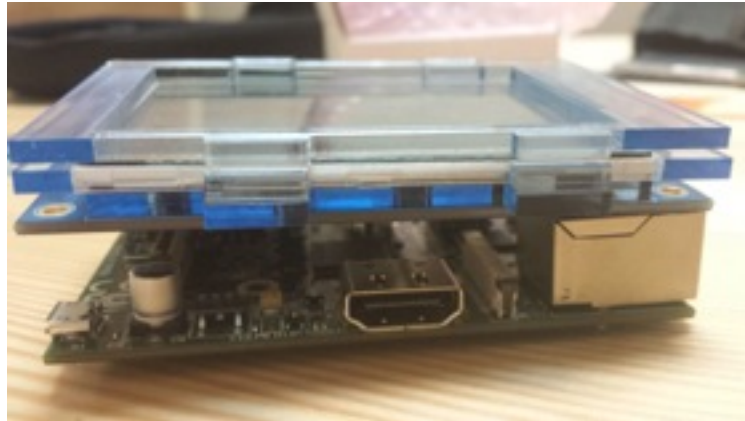


4.1



4.2

- 5) Now place the **Top [4]** piece on above the **TFT Touchscreen Alignment Piece [3]**, completing the top assembly of the case. Again, take care to make sure the tabs are all roughly lined up, as they do not fit when placed into any other orientation.
- Note:** The picture below shows the circuit board slightly skewed off parallel. Don't worry about trying to realign it right now – it can be adjusted later.

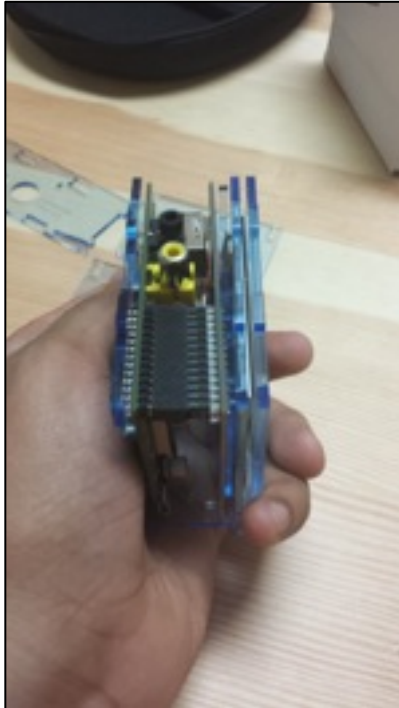


- 6) Now, while apply pressure to make sure the three pieces don't shift, rotate the entire assembly such that the Audio/Composite side of the Raspberry Pi is on the palm of your hand. Put the **Bottom piece [2]** into position, making sure it's oriented such that the engraved writing can be read when faced away from the Pi.



- 7) Rotate the entire assembly such that the HDMI Port of the Raspberry Pi faces away from your palm. Then place the **HDMI Side [5]** onto the assembly taking care to make sure each tab lines up with its respective place in the piece. A tried and tested method is to first line up the tabs for the bottom, and then use a knife or small screwdriver to successively line up each piece above it. Once everything lines up and falls into place, rotate the assembly again, and place the **Audio/Composite Side [6]** into place. Some more 'wiggling' may be necessary.

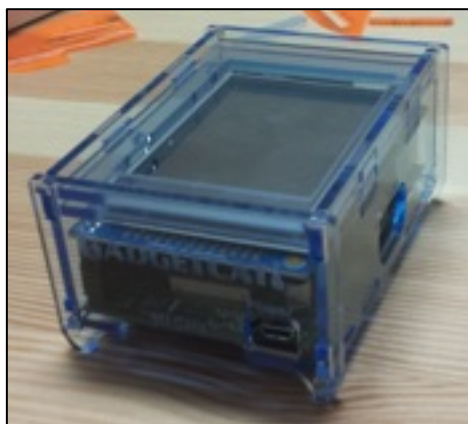
- a. **Note:** If any pieces come out of alignment as the sides are being put on, you can either remove the side piece completely to get it realigned, or twist the assembly slightly, giving just enough space for the tab to slide back into place.



- 8) While tightly holding the sides together to make sure nothing comes loose, hold the **Composite/Video side** of the assembly in your **left palm** and the **HDMI side in your right palm** and with the bottom of the case *facing away from you*. Place the **USB/Network Side [7]** such that it is hinged on the top “hooks.” Then, **use your middle fingers to temporarily compress the tabs and your index fingers to nudge the USB/Network Side into place**. The tabs should lock into place, securing the sides together.
- a. Be careful! Without the final component, the case is not ready to be handled normally.



- 9) While holding the sides of the case together with one hand, you can now use your other hand to align the Raspberry Pi with the bottom of the case as well as level the TFT Touchscreen circuit board.
- 10) Follow the same process as you did for the USB/Network side and assemble the final component, the **SD/Power Side [8]**. Once assembled, you can use the spacing in the on the Bottom of the case to align the Raspberry Pi such that each I/O port is situated squarely within its designated opening.



- 11) Congrats! Your Raspberry Pi TFT Touchscreen Case is now assembled! If you have any other problems, email us for further assistance. ☺