How to assemble your PiJuice Maker Kit Case

PiJuice Maker Kit

The PiJuice Maker Kit case is designed to house the Raspberry Pi, PiJuice HAT and Media centre HAT all in one neat little case. With the addition of the media centre HAT it opens up the possibilities to create amazing project that are portable, wireless and easy to interface with using the touchscreen display. We have a number of projects available that you can check out in our MakerZone.

The case itself has been designed in a way to accommodate a number of applications with its features:

- Camera tripod mount
- Strap mount
- Suction cup mounting
- Desktop mount
- Stand

In the following guide we will show you all of the feature above.

What you need

- Raspberry Pi
- PiJuice HAT
- Media Centre HAT
- Raspberry Pi Camera (optional)
- Maker Kit Case
- Tripod (optional)
- Camera Strap (optional)

How to assemble the PiJuice Maker Kit Case

Step 1 - First you will need to separate the two half of the case by putting your finger in the inside of the case and pushing the two ends outwards, where both half should then separate from one another.



Step 2.1 - Now we need to stack all of our HAT boards on top of our Raspberry Pi. Before we do this, you need to ask yourself if you are going to mount the Raspberry Pi camera within the case. If so, you will need to insert the camera cable into the CSI port on the Raspberry Pi first.



Step 2.2 - Now you can stack the PiJuice on top of the Raspberry Pi making sure that you use all of the mounting screws and standoffs to securely fasten it to the Pi.



Step 2.3 - Lastly, lets stack the Media Centre HAT. You will need to snap off the mounting holes on each corner first. You can do this with a pair of strong pliers and apply a fair amount of force to do this. Once snapped off mount the MCH HAT on top of the PiJuice HAT.



Step 3.1 - If you plan on mounting the Raspberry Pi camera you will need to first screw the Pi camera to the bottom half of the case using the provided screws. Once done so attach the other side of the camera cable to the Pi module.



Step 3.2 - Take the bottom half of the PiJuice Case and slot all the boards into it, making sure that you align the cut out holes in the side correctly with the correct connectors of the Pi and the PiJuice. The boards should then slot into the grooves on each side.





Step 4 - Now take the top half of the case and carefully slide it over the bottom half making sure that it slides into the groves the are cut into the top half and it should just click into place.



How to mount your PiJuice Maker Kit Case

There are a number of options depending on your project needs to mount, stand and hold your PiJuice Maker Kit case. Below is a list of options on how to do this:

Option 1 - Stand

If you are not using the Raspberry Pi camera in the PiJuice Maker Kit case and you want to use it as a touchscreen interface but need to angle it slightly so you can see the screen then we have built into the case a mini stand. The stand allows you to angle the case at different levels to suit your viewing. To use this you will need to remove the stand by sliding down and pulling out the slot where the camera is mounted and the slot the two corners into one of the free slots either side.





Option 2 - Desktop

At the bottom of the case there are 4 holes to insert rubber feet into them. This will allow you to stand the case on any flat surface and stop of from sliding around. To insert the rubber feet you will need to pinch the smallest rubber end slightly and push it in with a fine object such as a pen or pencil.





Option 3 - Suction cups

Suction cups are perfect for use with the Raspberry Pi camera. It allows you to mount the PiJuice Maker Kit case to any glass surface providing it is flat. There are two suction cups provided which can be mounted at either the top or bottom half of the case and there are 4 slots provided in total, 2 on each side. To mount the suction cups simply slot the smaller knob into the largest hole in the case and the slide down to prevent it from falling out or coming loose.





Option 4 - Tripod

Supplied with the Maker Kit Case is a 1/4 inch tripod mount adaptor. This allows you to mount your PiJuice Maker Kit case on to any 1/4 thread for tripods. This is great for getting those steady shots or where your PiJuice Case needs to be in a fixed position but easy moved. To mount this slot you need to remove the existing slot, which is on one of the sides of the case and is indicated by some arrows pointing in the direction that it slides in. First you will need to remove the top half of the case and then remove it the blank plate by sliding it out and then slide in the tripod mount plate.





Option 5 - Strap

If you have a camera strap, you can secure it to the case using the provided cutouts next to the where the Raspberry Pi mounting hole is. To mount the straps you may need to remove the top half of the case and even the Raspberry Pi and PiJuice itself to feed the strap through the hole and back through again.







PiJuice Projects

We have created number of PiJuice projects to inspire you to create your own or similar projects using the PiJuice or the PiJuice Maker Kit. Take a look at the project below:

- Weather Station
- DIY Portable Games console
- Point and Shoot Camera
- Remote Camera Systems
- Compact Robot
- Portable Pocket Pi