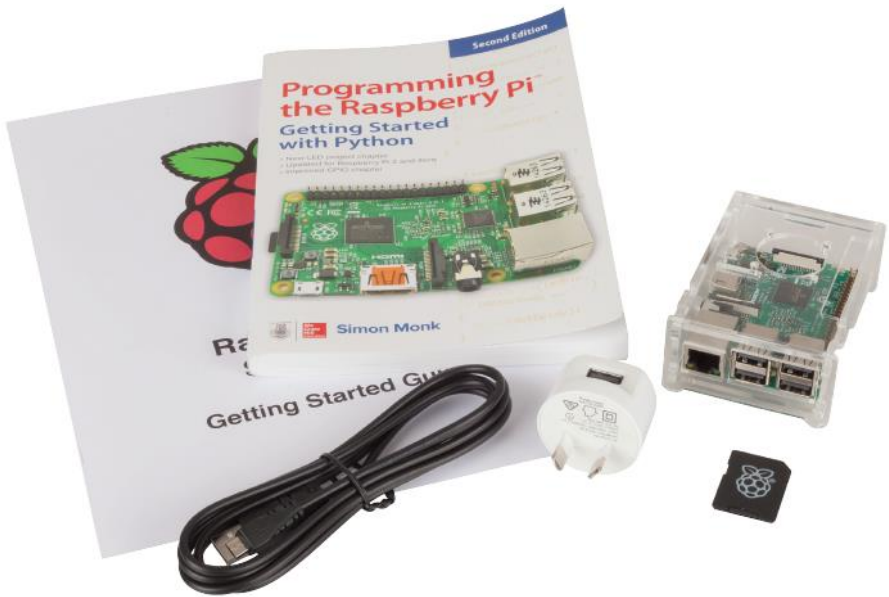


Raspberry Pi Starter Kit



Getting Started Guide
XC9010 Raspberry Pi Starter Kit

The Raspberry Pi has been designed as a computer that anyone can use. If you want to get started with a Raspberry Pi, but don't know where to start, then this kit has just about everything you need. Ideal for those starting out, or even as a basic educational computer for a student. You will also need a USB keyboard, mouse, HDMI monitor/TV and HDMI cable. As well as the information here, there are some great resources on the official Raspberry Pi website at <https://www.raspberrypi.org/documentation/>

Includes:

Raspberry Pi 3B

Acrylic Case

Power Supply and USB Cable

Book (Programming the Raspberry Pi: Getting Started with Python)

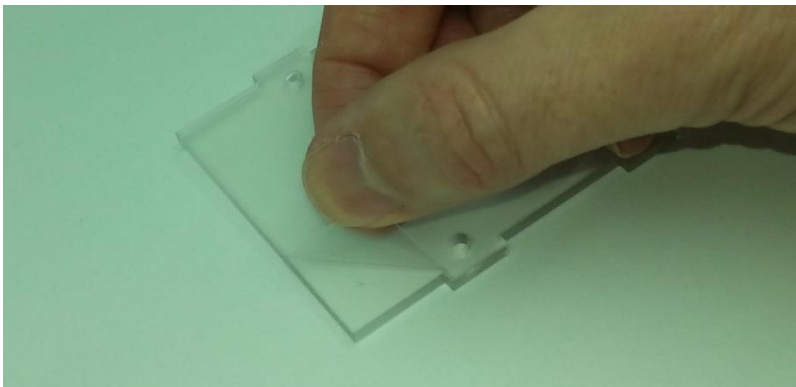
Micro SD Card loaded with NOOBS software

Getting Started Guide (this booklet)

Just like any piece of electronic equipment, if it is treated with care and not exposed to static electricity, it will perform at its best. It is recommended that the first step is to construct the Case to protect the Raspberry Pi.

Case Assembly

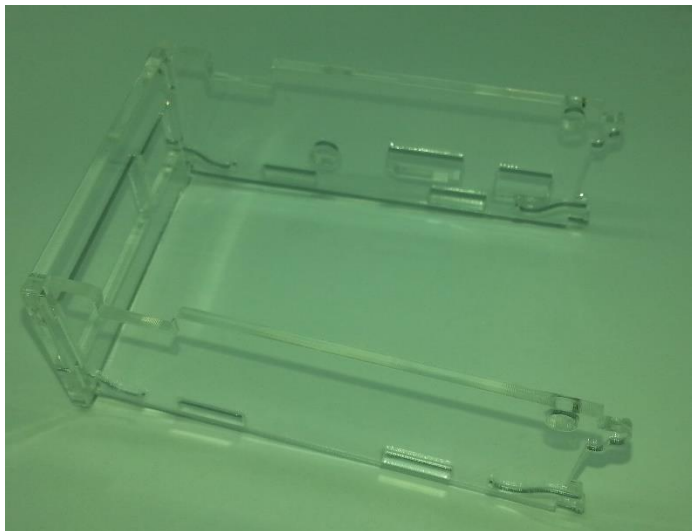
Assembly of the case takes a bit of care to ensure all the parts are oriented correctly, but is otherwise fairly straightforward. We would recommend having a small Philips screwdriver and pliers to fasten the nuts and bolts.



Start by carefully removing the protective film from all the acrylic pieces. You might find that gently scratching the corner with a fingernail will help to start the process.



Attach the bottom plate to the Raspberry Pi, noting the slots for the main processor IC and MicroSD card slot. The insulating washers sit between the plate and the board.



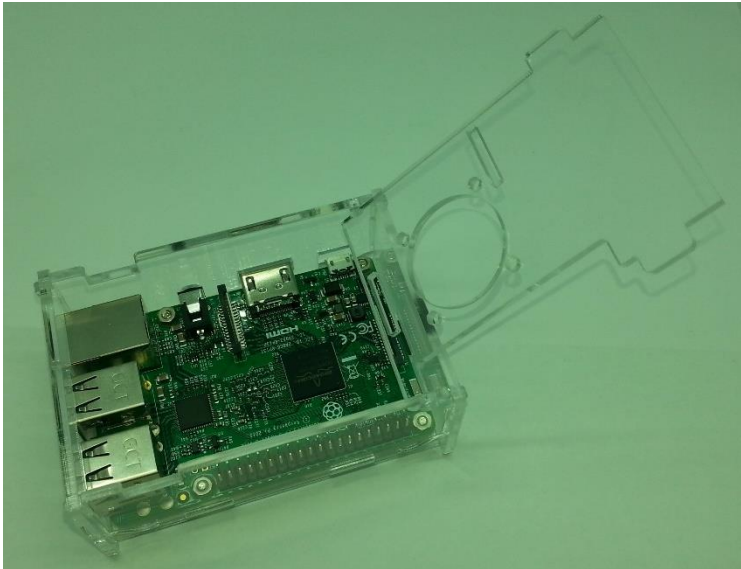
Clip three of the side plates together as shown in the photo- you might find it easier to gently squeeze the bottom clips to ease them into the slots. For guidance, compare the above assembly with the Raspberry Pi- the large slots to the left are for the USB and Ethernet ports, the plate at the top has holes for the HDMI and audio sockets, and the plate at the bottom is adjacent to the GPIO pins.



Place the above assembly around the Raspberry Pi and line up the slots.



Attach the fourth side (with slot for MicroSD card) by clipping it into the other three sides, again gently squeezing the lower tabs if necessary.

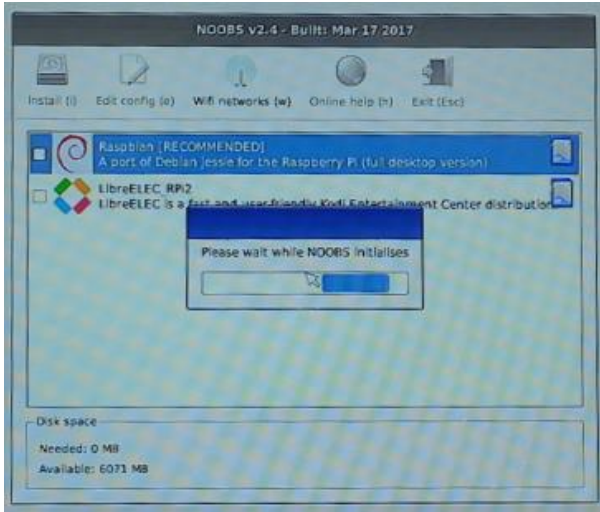


Attach the lid by inserting one post into the hole at the top, and then gently guide the other post into the corresponding hole, making sure the long slot in the side of the top plate lines up with the GPIO header. The lid can then be pivoted closed.

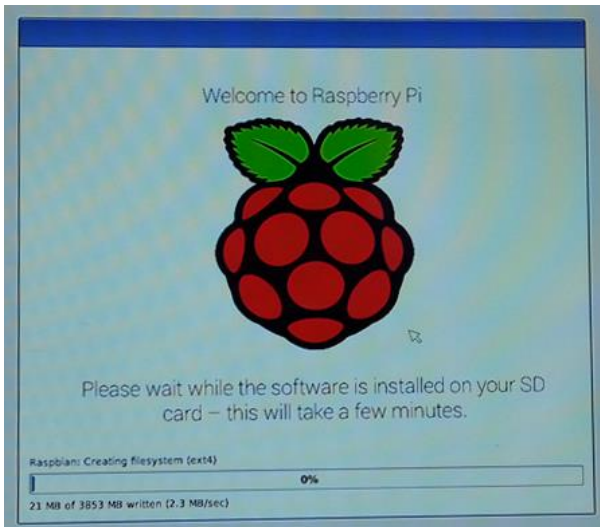
MicroSD Card Setup and OS install

The included Micro SD Card includes a copy of NOOBS, which is an operating system installer. This includes the Raspbian Operating System, which is recommended by the manufacturers of the Raspberry Pi. There is a huge range of software included in this operating system, such as Python, Scratch, Sonic Pi, Java, Mathematica and many more utility apps such as a browser and text editor.

Insert the Micro SD Card into the socket, then connect all the peripherals such as keyboard, mouse and HDMI monitor. Finally connect the power supply and plug it in. The NOOBS installer screen looks like this:

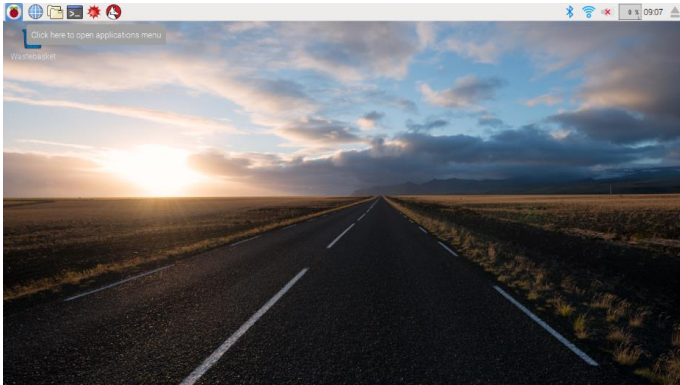


Select Raspbian and then click Install. The install process will commence, and take about 20 minutes to complete.



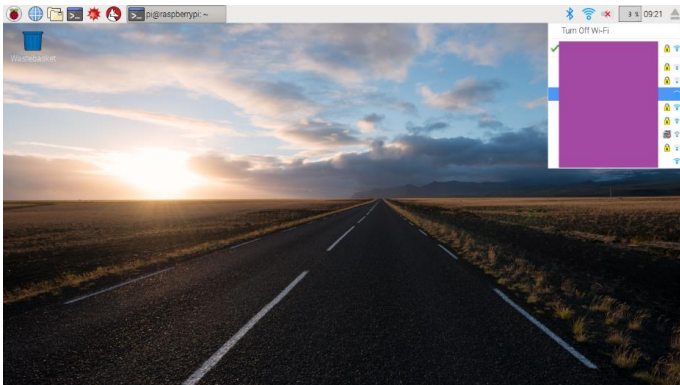
When the message pops up saying that the OS install is complete, press OK to allow the Raspberry Pi to boot into Raspbian.

When this screen appears, the boot process is complete.

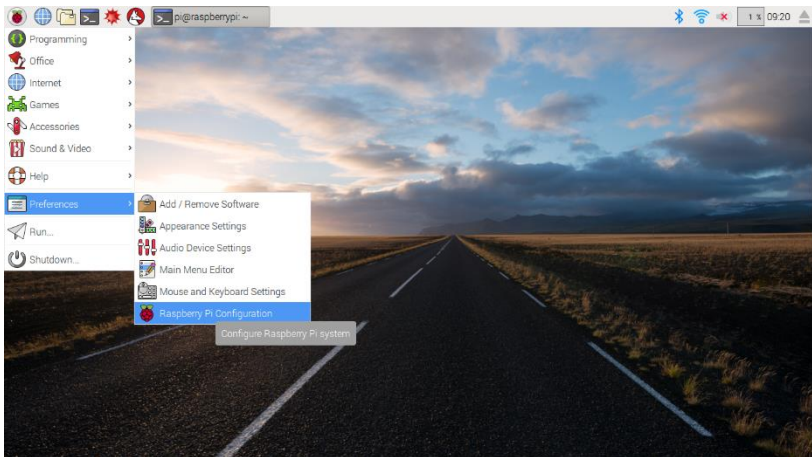


Even if you have never used Raspbian before, you should find it similar to operating systems like Windows. The main program menu is the Raspberry icon in the top left corner, and there is a menu of program groups to choose from. Two important things that you might find slightly different are the way programs are installed, and the way WiFi is set up.

To add a WiFi network, click on the icon next to Bluetooth in the top right corner, and then choose the name of your network and add the credentials. You will need some sort of internet connection before installing programs, as they are (mostly) installed from a single repository.



To add and remove programs and other features, click on the Preferences submenu, then Add/Remove Software. Everything is done via a package system for uniformity.



If you ever need to enter a username/password combination to access some feature, the default username is 'pi' (the system is set up by default to login as this user) and the default password is 'raspberrypi'. If there is any chance that the Raspberry Pi could be accessed (even via network), then it is recommended to change the password to something different.

Because the Raspberry Pi doesn't have a battery backed clock to run while it is turned off, one more useful thing to do is to set the timezone and the Raspberry Pi can get its time from an NTP server on the internet.

You can access a lot of system settings (such as timezone and localization) via the menu shown above (Preferences>Raspberry Pi configuration).

Useful programs like the browser and file explorer can even be accessed from the menu bar at the top of the screen.

From the main Raspberry menu, there are even programming options like Arduino and Python, as well as common apps like a browser, text editor and office programs.