

## Lab - 02

### Raspberry Pi Quick Start Guide - Connecting the System

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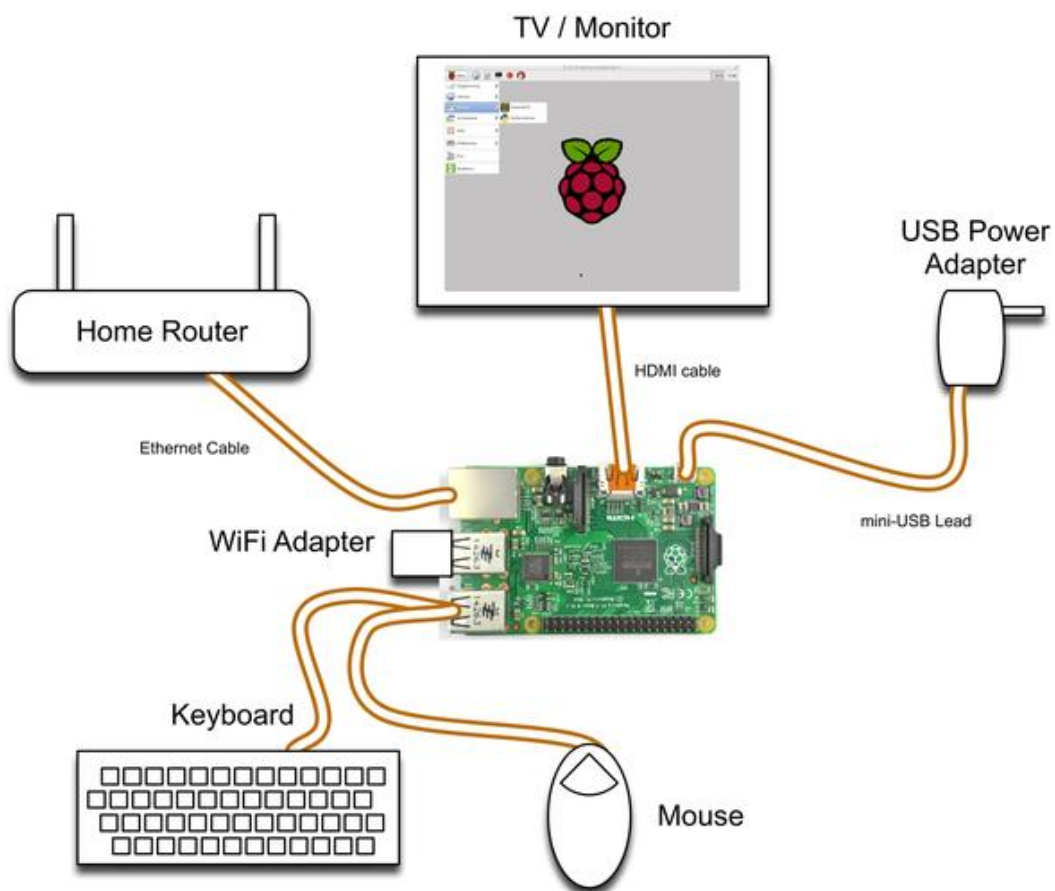
#### **Problem**

You have everything that you need for your Raspberry Pi, and you want to connect it all together.

#### **Solution**

Unless you are embedding your Raspberry Pi in a project or using it as a media center, you need to attach a keyboard, mouse, monitor, and probably a WiFi dongle, unless you have a Raspberry Pi 3.

Figure shows a typical Raspberry Pi system.



*Figure. A typical Raspberry Pi system*

#### **Discussion**

The Raspberry Pi is perfectly happy with pretty much any keyboard or mouse, wired or wireless. The exception to this is Bluetooth wireless keyboards and mice, which will not work with the Raspberry Pi.

If you have an older Raspberry Pi or a model A or A+ and run out of USB sockets, then you will also need a USB hub.

Start by inserting the micro SD card into the dedicated micro SD card slot on the Raspberry Pi. This is located on the underside of the Pi.



If you need an internet connection, plug in your Ethernet cable. (Optional)



Then plug in your HDMI cable. The other end of the cable should be plugged into your TV or Monitor. If you are using a TV, make sure you have the correct input selected. Make sure your TV/Monitor is turned on.



Now we need to plug in our Keyboard and Mouse into the USB ports on the Raspberry Pi.



Once you have double checked everything has been connected properly, it's time to plug in your micro usb power supply. With the power supply plugged in, turn on the power supply.



If this is the first time you have powered on your Raspberry Pi, and you have a NOOBS Micro SD card, you will need to install an Operating System. Simply select one from the list. You can see more Operating Systems when you are connected to the internet via an Ethernet cable.

Once the OS has been installed your Pi should automatically reboot. This time your Pi should boot into the installed OS.

If you have installed Raspbian (the recommended OS) the default username and password is:

Username: pi  
Password: raspberry

#### RECOVERY

If you managed to break your OS install, or you simply want to start from fresh again, you can do so easily using the NOOBS recovery feature.

To access this, you need to hold down the Left Shift key on the keyboard immediately after turning on the Raspberry Pi. Keep Shift pressed until the recovery menu displays.

You should see a list of the operating systems, and a x next to the OS you currently have installed. To simply overwrite your existing install, press the Install button. You will then have a prompt letting you know that all data on the SD card will be deleted. If you are happy with everything being removed, click YES to continue and re-install the OS.

If you would like to change operating systems, simply untick the currently installed OS and tick the OS you want to install. Like above, you'll be told that all data will be removed. Clicking YES will continue the process and delete your existing OS, and install the newly selected OS.