

Connecting Your Raspberry Pi

The Raspberry Pi is a barebones computer. It's really pretty useless on its own. In order to program sounds with it, we need to connect a number of things to it:

- An **SD card**. This card contains the *programs* that can be *loaded* onto the Raspberry Pi in order for it to do things. You need to slide the card into the slot with the metal pins facing in towards the Raspberry Pi. The label should be visible when it is inserted.
- A **keyboard**. Plug the keyboard into one of the two USB slots. USB stands for *Universal Serial Bus*. It's a kind of connector for all sorts of devices. The keyboard will be the main tool we will use to communicate our programs to the Raspberry Pi.
- A **mouse**. Plug the mouse into the other of the two USB slots.
- A **sound splitter**. This is a cable that will split the audio signal two ways. Plug this into the audio jack on the Raspberry Pi.
- **Headphones**. These will allow you to hear the sound you will produce. Plug these into the sound splitter.
- A **monitor**. This will allow you to see the program you're currently creating. Plug the HDMI connector into the Raspberry Pi's HDMI port. Plug the other end of the HDMI cable into your monitor. You'll want to make sure you have power to the monitor, that it's switched on and that it's set to view what comes in on the HDMI cable (typically the *digital* option).
- A **power adapter**. Plug the power adapter into a socket and then the small USB connector into the Raspberry Pi. When you turn the socket switch on, you should see the Raspberry Pi flash and text should appear on the monitor.

Logging In

Once the Raspberry Pi has completed booting and the text has stopped whirring past on the screen, you'll be greeted with a simple prompt for your username. Type **pi** and then press Enter. Next, you'll be asked for your password. Type **overtone rasp** and press Enter again. Don't worry that you don't see the password on the screen as you type it. This is a security feature to stop people snooping over your shoulder and stealing your password. You should now be greeted with a strange text prompt.

Starting the Graphical Environment

The strange text prompt that you see is one of the most powerful ways to communicate with a computer. However, it's not very easy and is full of strange arcane commands - much like the contents of a magic spell. We can therefore move to a more familiar graphical environment with windows and menu bars that may perhaps feel a bit more comfortable. To do this type the magic spell **startx** into the text terminal and press Enter.

Starting the Sonic Pi Environment

Once the graphical environment has started, you can click on the start menu in the bottom left (it looks like a little bird) and choose Sonic Pi from the Programming menu. After a few moments, you should see the Sonic Pi application menu on your screen.