**Tinysine Raspberry Pi Quick Start Guide**

Congratulations on your purchase and welcome to the exciting world of the Raspberry Pi!

To setup your Raspberry Pi, you will typically need the following items:

* - [SD Card](http://www.tinyosshop.com/index.php?route=product/product&path=119_120&product_id=472) loaded with a supported operating system
* - HDMI monitor or a display that has RCA composite video input (HDMI monitor highly recommended)
* - [HDMI cable](http://www.tinyosshop.com/index.php?route=product/product&path=119_120&product_id=469) or RCA cable if using an analog composite display
* - Standard USB Keyboard and Mouse
* - [Power Supply](http://www.tinyosshop.com/index.php?route=product/product&path=119_120&product_id=471) (adapter) of delivering 1A @ 5.0V
* - [Optional] Ethernet cable for connection to a wired network
* - [Optional] [USB WiFi Dongle/Adapter](http://www.tinyosshop.com/index.php?route=product/product&path=119_120&product_id=713) supported by the operating system
* - [Optional] A [case](http://www.tinyosshop.com/index.php?route=product/product&path=119_120&product_id=468) to hold and protect your Raspberry Pi

**SD Card**

If you have a pre-loaded SD card, you can skip this step.

In order to use your Raspberry Pi, you will need to install a supported Operating System (OS) onto an SD card. An Operating System is the set of basic programs and utilities that allow your computer to run; examples include Windows on a PC or OSX on a Mac. There are many different operating systems currently supported by the Raspberry Pi and more are being ported every day. Some popular supported operating systems are currently:

* - Raspbian [Recommended for beginners]
* - Archlinux
* - OpenELEC
* - Pidora
* - RISC OS
* - RaspBMC

Recently, the Raspberry Pi Foundation released what is referred to as "NOOBS" (New Out of Box Software) and this is the recommended way to get started. NOOBS is a way to make setting up a Raspberry Pi for the first time much, much easier. You won’t need network access, and you won’t need to download any special imaging software. The most recent image for NOOBS can be found on the [downloads](http://www.raspberrypi.org/downloads%22%20%5Ct%20%22_blank) page of the [Raspberry Pi website](http://www.raspberrypi.org" \t "_blank) and you can simply unpack it onto a freshly formatted 4GB (or larger) SD card. When you boot up for the first time, a menu will be presented prompting you to install one of several operating systems into the free space on the card. The choice means you can boot the Pi with a regular operating system like Raspbian, or with a media-centre specific OS like RaspBMC.

To prepare your SD card with the NOOBS image, follow the instructions on the Raspberry Pi Downloads page at [http://www.raspberrypi.org/downloads](http://www.raspberrypi.org/downloads%22%20%5Ct%20%22_blank) . You typically would want to download the "NOOBS (offline and network install)" option.

**Display**

The Raspberry Pi can be connected to a digital display through an HDMI connection or to an analogue display through a composite video connection. For best results and display quality, it is highly recommended to use the HDMI connection. You can also use a HDMI to DVI or HDMI to VGA adapter if your monitor only supports a DVI or VGA connection.

When using NOOBS, by default the Raspberry Pi will output over HDMI at your display’s preferred resolution, even if no HDMI display is connected. If you do not see any output on your HDMI display or are using the RCA composite output, press 1, 2, 3 or 4 on your keyboard to select HDMI preferred mode, HDMI safe mode, composite PAL mode or composite NTSC mode respectively.

**Keyboard / Mouse**

For the initial setup and to make sure everything is working correctly, it is highly recommended to simply use a standard wired USB keyboard and mouse. You can also use a wireless keyboard and/or mouse, keeping in mind that some of these take a lot of power from the USB port and the Raspberry Pi USB ports can only supply a limited amount of power regardless of the power rating of the power supply used. You may therefore need to use a powered hub if you find that the Raspberry Pi is not able to supply enough power for such devices.

**[ Optional ] Network**

For the initial setup of NOOBS, there is no need to connect the Raspberry Pi to a network since images for the included operating systems are already pre-loaded on the card. However, if you wish you can connect the Raspberry Pi to your local network using a standard Ethernet cable

**Power Supply**

In order to supply power to the Raspberry Pi, you will need a good quality Micro USB power supply (adapter) that can supply at the very least 700 mA at 5V. Note that some standard mobile phone charges may not be able to supply enough power to the Raspberry Pi as they have a high voltage drop when running at full load which can be the cause of random crashes or other unexpected behavior. We therefore recommend a power supply that is rated at 1,000 mA (1A) at 5V.

**Booting Up for the First Time**

Once you have made all the required connections, insert the SD card into the SD card slot located on the bottom side of the board and connect the power supply. When using NOOBS and if this is the first time you are booting up, the following screen should be displayed. You can now follow the instructions in order to setup your desired operating system. If you are just starting it is highly recommended to start with the Raspbian operating system. If you need detailed and step by step instructions, check out the following YouTube video tutorial: [http://www.youtube.com/watch?v=TyFDaMpdh2c](http://www.youtube.com/watch?v=TyFDaMpdh2c" \t "_blank) .

**Resources**

* - Raspberry Pi Website - [http://www.raspberrypi.org](http://www.raspberrypi.org" \t "_blank)
* - Raspberry Pi Quick Start Guide - [http://www.raspberrypi.org/quick-start-guide](http://www.raspberrypi.org/quick-start-guide%22%20%5Ct%20%22_blank)
* - Raspberry Pi Current Downloads - [http://www.raspberrypi.org/downloads](http://www.raspberrypi.org/downloads%22%20%5Ct%20%22_blank)
* - Introducing the New Out of Box Software (NOOBS) - [http://www.raspberrypi.org/archives/4100](http://www.raspberrypi.org/archives/4100%22%20%5Ct%20%22_blank)
* - NOOBS Video Tutorial - [http://www.youtube.com/watch?v=TyFDaMpdh2c](http://www.youtube.com/watch?v=TyFDaMpdh2c" \t "_blank)
* - Raspberry Pi Forums - [http://www.raspberrypi.org/phpBB3/](http://www.raspberrypi.org/phpBB3/%22%20%5Ct%20%22_blank)