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Raspberry Pi: A Quick-Start Guide, 2nd Edition

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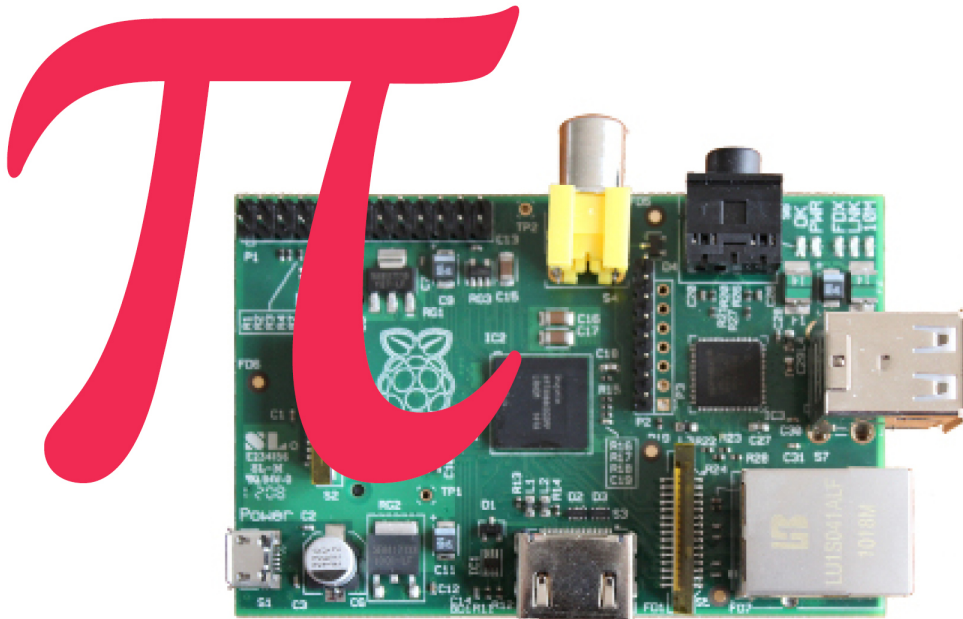
The
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Raspberry

A Quick-Start Guide

Pi

Second Edition



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Raspberry Pi: A Quick-Start Guide, 2nd Edition

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Have a Look Around with NOOBS

The number of different operating systems available for the Pi can be a bit overwhelming for new users. Thanks to the New Out Of Box Software (NOOBS) project, it's easy to try out various operating systems.

NOOBS is an automatic installer for the Pi's most popular operating systems. At the time of this writing, it supports Arch Linux, OpenELEC, Pidora, RISC OS, Raspbmc, and Raspbian. Two different versions of NOOBS are available on the Raspberry Pi's download page.⁸ You can download a fairly big zip archive (more than 1GB) that already contains all supported operating systems. Alternatively, you can download NOOBS Lite, which contains only the installer. It will download the operating systems as needed. To make sure you've downloaded NOOBS from a trustworthy server, check the zip file's SHA-1 checksum. (You can learn how to do this in [Prepare a Bootable SD Card, on page ?](#).)

You need an SD card with a capacity of at least 4GB to install NOOBS. Before you install NOOBS, you have to format the SD card with the FAT file system. If you're not familiar with formatting SD cards on your operating system, take a look at the official tools for Windows⁹ and Mac OS X.¹⁰ On Linux, it's best to use gparted.¹¹

After you've formatted the SD card, you can extract the zip archive and copy its content to the SD card. When you extract the zip archive, the content will be stored in a directory named NOOBS_v1_3 or something similar. Make sure you copy only the directory's content to the SD card, and not the directory itself.

That's all you have to do to install NOOBS. You can now put the SD card into your Pi and start it. NOOBS will greet you with a simple menu (see the following figure) showing all available operating systems. Use your mouse or your keyboard to choose as many as you like, and NOOBS will start a fully automated installation process. This installation process takes a couple of minutes.

8. <http://www.raspberrypi.org/downloads>

9. https://www.sdcard.org/downloads/formatter_4/eula_windows/

10. https://www.sdcard.org/downloads/formatter_4/eula_mac/

11. <http://gparted.sourceforge.net/>

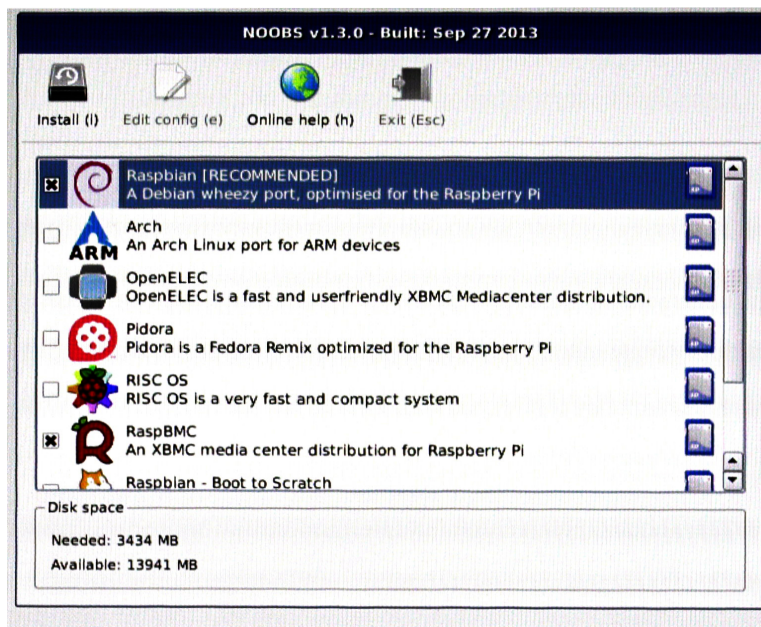


Figure 7—You can choose from a lot of operating systems in NOOBS.

In some rare cases, NOOBS will not detect the correct output mode for your display. Usually, you can fix this by pressing one of the following four number keys:

1. Sets the display mode to its default value—that is, HDMI.
2. Selects the HDMI safe mode. It may help when you've connected the Pi to a display using HDMI.
3. Try this option if you've connected your Pi to a display using composite PAL.
4. This option is for users who have connected the Pi to a composite NTSC display.

Also, NOOBS allows you to start a minimal web browser, so you can search the web for solutions to potential problems. If you've installed Raspbian using NOOBS, you can also edit `/boot/config.txt` from the main menu. In [Chapter 4, Configure the Firmware, on page ?](#), you'll learn what this file is for.

After NOOBS has finished the installation, boot the Pi, and it will allow you to boot one of the operating systems you've installed (see the following figure).

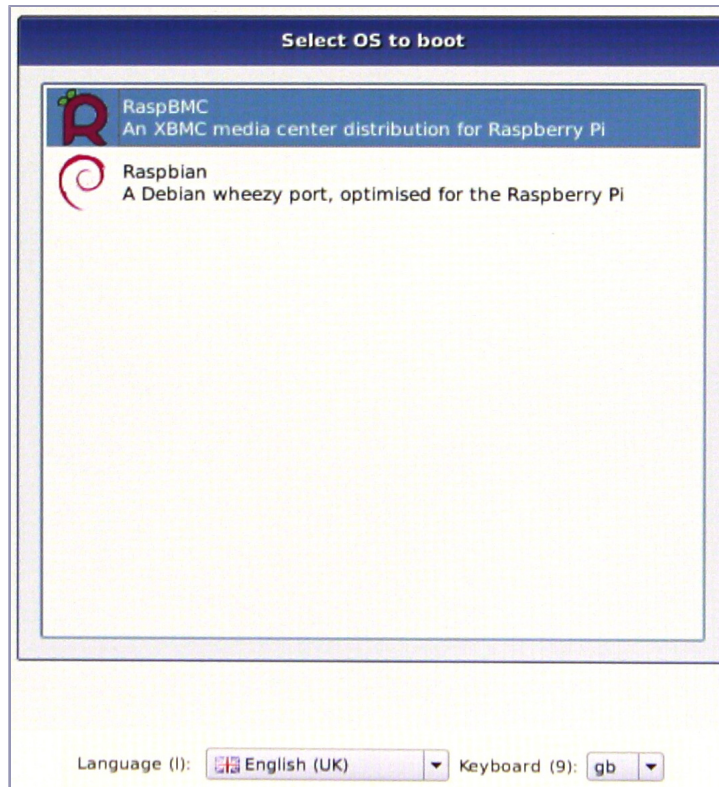


Figure 8—You can choose which operating system you’d like to boot.

If you’d like to remove an operating system or install another operating system, hold the Shift key while booting the Pi. This will open the NOOBS menu so you can choose another candidate. Note that currently NOOBS will always reinstall all operating systems, so you’ll lose all of your data!

NOOBS is great for getting an overview of the Pi’s best operating systems, but it has some disadvantages, too. For example, it doesn’t support all operating systems available, it doesn’t always contain the latest versions, and it needs some space on your SD card. So, it’s often better to cleanly install your favorite operating systems directly on an SD card. In the next section, you’ll learn how.