How to set up Raspberry Pi

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There are many great Internet of Things projects that you can combine with Raspberry Pi. You may need some extra hardware and software for many of these projects, but the Raspberry Pi is still a great base. However, if you never use Raspberry Pi before, you may not be sure where to start. In today's article, join **TipsMake.com** to learn how to set up Raspberry Pi!

What you need to prepare

Before starting the Raspberry Pi setup, make sure you have everything you need. If you bought Pi as part of the product suite, you can have everything you need. However, it doesn't take any effort to check the list below.

You will need a USB power adapter as well as a microSD card. MicroSD memory cards are things that you will load your operating system, so make sure you have enough space to do this. The memory card must be at least 8GB, but having more memory is better.

At least until everything is set up, you need a computer monitor or TV as well as an HDMI cable to plug in it. You also need a keyboard and mouse.

To set up Raspberry Pi, you will need Internet access. This means you need an Ethernet cable to plug into the network adapter on the motherboard or a USB WiFi dongle.

Finally, if you want to get started right away, you should have any IoT-specific hardware, like sensors, ready to work.

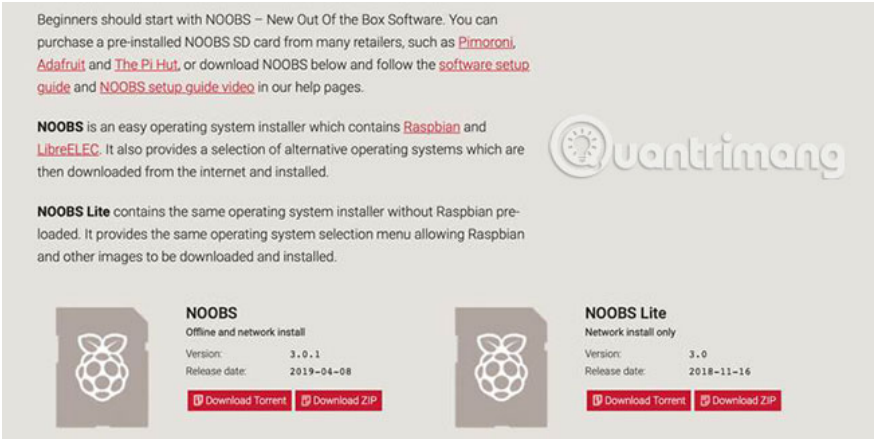
The decision about the operating system will use

You have a lot of options for the operating system, but basically, it depends on the Linux distribution that you will install. Raspbian is the official distribution of Linux and is the option that will be used in this tutorial, but there are many options geared towards other IoT.

Windows IoT is also an option and many users seem to prefer to use it. You should remember that most of the Raspberry Pi-based IoT projects you'll find are based on Linux, so it's easier if you start with Linux.

Prepare to install the operating system

The example will use NOOBS (short for New Out Of the Box Software) to download and install Raspbian. Go to the download page of the Raspberry Pi and click on **NOOBS** to download. When the download is complete, right-click the .zip file to extract it.



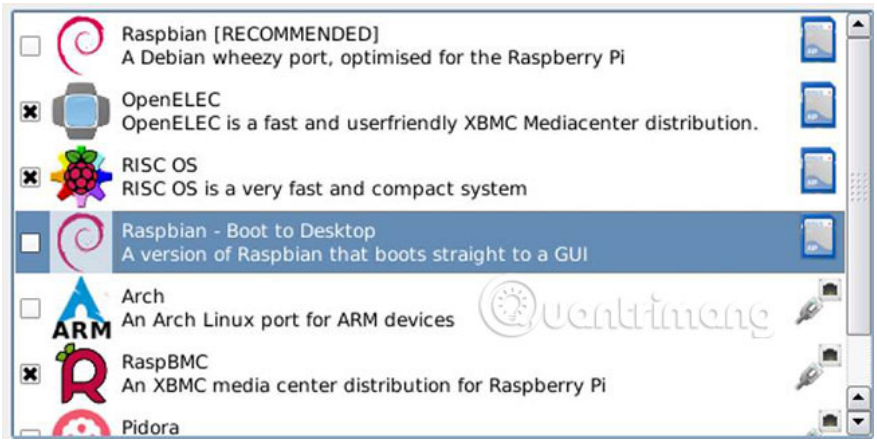
Before copying the file to an SD card, you will need to format the file as FAT. On Windows, you can use the format tool of the SD Card or **Disk Utility** platform integrated on macOS. Linux users can use **GParted.**

Copy files from downloaded .zip file to SD card. Note that you will want to put these files into the card itself, not in the directory in which they were extracted.

Start for the first time

Put the microSD memory card into the slot on Raspberry Pi and turn on the power. Assuming everything is plugged in correctly, you will notice some LED lights blinking and the screen will show the system loading.

The software will ask you which operating system you want to install. Select **Raspbian** and follow the prompts.



Now it's time to replace the default password, which is set to **raspberry.**

Later, the rest of the setup process is like any other Linux system. You can set up the keyboard, select the location and connect to the Internet. Once completed, the installer will download all available updates on the Internet.

After that, the system will reboot and you will be ready to use Raspberry Pi.

As you can see, it's easy to get started with IoT projects on Raspberry Pi. If you have no idea, don't worry too much!**TipsMake.com** has IoT projects that you can build using Raspberry Pi. These projects will help you practice but can also serve as a foundation for larger projects.

Hope you are succesful.