

With a Fresh Raspberry Pi and SD Card, you must install Raspbian, the Raspberry Pi Operating System. Pi-Hole runs best on Raspbian, but is supported by Ubuntu, Debian, Fedora, and CentOS.

What you’ll need (shopping list):

* Laptop with separate OS (if you need to install a Linux OS fresh)
* Raspberry Pi 3b+ or higher (recommended)
* Case for Raspberry Pi
* Pi Power Supply
* Thermal Adhesive Heatsink’s for Pi CPU and GPU cooling
* HDMI cable (if SSH is not possible or preferable)
* Monitor
* Keyboard
* Mouse

### Install Via Downloading NOOBS

Using NOOBS is the easiest way to install Raspbian on your SD card. To get hold of a copy of NOOBS:

* Visit [www.raspberrypi.org/downloads/](https://www.raspberrypi.org/downloads/)
* You should see a box with a link to the NOOBS files. Click on the link.
* The simplest option is to download the zip archive of the files.

### Formatting the SD Card

If the SD card on which you wish to install Raspbian currently has an older version of Raspbian on it, you may wish to back up the files from the card first, as they will be overwritten during this process.

* Visit the SD Association’s website and download [SD Formatter 4.0](https://www.sdcard.org/downloads/formatter_4/index.html) for Windows or Mac.
* Follow the instructions to install the software.
* Insert your SD card into the computer or laptop’s SD card reader and make a note of the drive letter allocated to it, e.g. F:/.
* In SD Formatter, select the drive letter for your SD card, and format it.

### Extracting NOOBS from the zip archive

Next, you will need to extract the files from the NOOBS zip archive you downloaded from the Raspberry Pi website.

* Go to your *Downloads* folder and find the zip file you downloaded.
* Extract the files and keep the resulting Explorer/Finder window open.

### Copying the files

* Now open another Explorer/Finder window and navigate to the SD card. It’s best to position the two windows side by side.
* Select all the files from the *NOOBS* folder and drag them onto the SD card.
* Eject the SD card.

### Booting from NOOBS

* Once the files have been copied over, insert the micro SD Card into your Raspberry Pi, and plug the Pi into a power source.
* You will be offered a choice when the installer has loaded. You should check the box for Raspbian, and then click Install.
* Click Yes at the warning dialog, and then sit back and relax. It will take a while, but Raspbian will install.
* When Raspbian has been installed, click OK and your Raspberry Pi will restart and Raspbian will then boot up.

**WITHOUT NOOBS**

For Windows users:

1. Download Raspbian: https://www.raspberrypi.org/downloads/raspbian/
2. Insert your microSD card into your card reader and find out its drive letter in Windows Explorer (for example G:).
3. Download Win32DiskImager, unzip the downloaded file and run the utility file.
4. Select the Raspbian image file you downloaded.
5. Select the drive of your SD card in the ‘Device’ dropdown. Make sure you chose the correct one. Otherwise, you risk damaging the data on your hard drive.
6. Select ‘Write’ and wait for the process to finish. That’s it!
7. Now you can plug the SD card into your Raspberry Pi’s slot.

For Mac users:

1. Put your microSD card into your card reader (and connect it to your Mac if your using an external reader). For this to work, your microSD should be empty and formatted in FAT32.
2. Go to your applications and open up Disk Utility (or just use Spotlight).
3. Now we need to find the microSD card’s so called BSD number which looks like “diskn” where “n” is a number. To find it, select it (left side) and click on ‘Verify Disk’.
4. Now, have a closer look at the appearing lines of text. There should be a line very similar to “/dev/rdisk1s1”. In this example, the BSD number would be “disk1”.
5. With your microSD card still selected, click on ‘Unmount’ in the top menu bar of Disk Utility.
6. Now Open up Terminal and run the following commands: **sudo dd bs=1m if=path\_of\_your\_image.img of=/dev/disk***n* **[replace “path\_of\_your\_image.img” with the proper path of the image file you downloaded, AND replace** *n* **with proper BSD number] ex.sudo dd bs=1m if=/Users/marc/Desktop/2014-12-24-wheezy-raspbian.img of=/dev/disk1**

All Users:

1. Now you can simply setup your Raspberry Pi how you want to. Set a password, configure your Wi-Fi Network etc. etc.

Now, it’s time to setup your Pi-Hole

Method 1: Run the following command

#### **curl -sSL https://install.pi-hole.net | bash**

* You will be prompted with a configuration screen
* Press enter until you see the “Choose an Interface” page. The default interface that is selected is eth0. This is for users who are running the Raspberry Pi through an ethernet cable straight to a router. The other option is wlan0. This should be selected if you’re using wifi.
* Next you will choose your DNS provider. If you are unsure of which DNS provider to pick, choose Google DNS (8.8.8.8).
* The next prompt will display all the default block lists you would like to use. These are all checked by default. If you wanted to pick which ones you wanted to, you may do so, but for now we will leave them all on.
* Next prompt will show IP protocols you want to block ads over. Leave this as default.
* The next screen will show the IP address of the Raspberry Pi and the IP of your router. Your IP should already be set to a static IP so hit enter and continue.
* The last screen you will be prompted with is a web interface, web server and logging modes option. Leave all these default and hit enter.
* Once this is done, the Pi-Hole will do some last bits of installation tasks and you should be shown an “Installation Complete” page. The IP and the password of the Pi-Hole web interface will be given.
* Copy the IP of the web interface into your browser and add a “**/admin/**” at the end in order to get into the admin login screen, log into with the password you set(if you set one) and your Pi-Hole is now completely installed!

Method 2: Clone Repository and run

* git clone --depth 1 https://github.com/pi-hole/pi-hole.git Pi-hole
* cd "Pi-hole/automated install/"
* sudo bash basic-install.sh

Method 3:

* wget -O basic-install.sh https://install.pi-hole.net
* sudo bash basic-install.sh