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Alien hacker. Father of a toddler gymnast. Silicon Valley. My writings don't reflect my company's view.

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Raspberry Pi 2 model B, your cutest Quadcore computer

Start a Raspberry Pi in 5 Minutes

A really, really quick non-bullshit way to get started on your new Pi in no time.

If you have just got your new Raspberry Pi, and you are so excited you canceled your friends and your date just to get home to hook it up. Here, unlike any other blogs on the web, you'll find the quickest cut-to-the-chase way to get started on your Pi.

What You Need

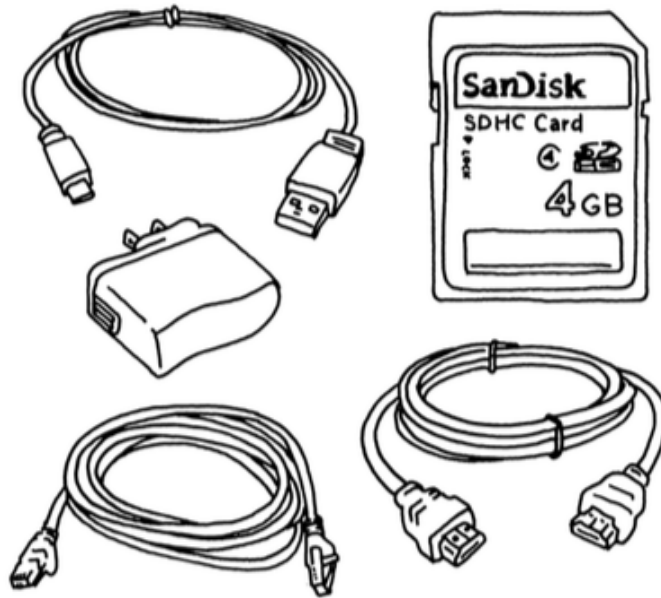


Image from Getting Started With Raspberry Pi by Matt Richardson and Shawn Wallace. It's anyone's Pi book. Get it!

If you have ordered a bare Pi, I'm sorry to say that you need more to get it started. Here is the minimal list.

SD Card (8GB) with NOOBS

for OS and storage, or a micro SD for Raspi 2. 8 GB or more is recommended. Find the one preinstalled with NOOBS (New Out-Of-the-Box Software) to quickly install Raspbian on the Pi.

Wall Adapter (5V, 1.2A+) and a Micro USB cable

A simple mobile phone adapter should do, as long as it's 5V and gives out more than 1.2 Amperes current. You might want to get those with 2-2.5A if you're planning to use a lot of its USB ports.

USB Wifi Dongle

This is so your Pi can access the internet. An ethernet cable would do too.

HDMI Cable

To connect your Pi to a PC monitor. You can get the one with a VGA adapter if your monitor has no HDMI port.

USB Keyboard and Mouse

Any keyboard and mouse with a USB connector will do. Yes, your everyday wireless bluetooth mouse will work.

Case

Unlike an Arduino, a Pi is more vulnerable. You can mess it up in many ways, so trust me and get a case. A Pibow is really durable and cool, but a cheaper acrylic type will do for a start.

Get Started

1. Insert the SD card and hook the monitor, keyboard, mouse, USB Wifi dongle up to your Pi before connecting it to the power with your wall adapter.
2. The Pi has no power switch, so it runs right away once plugged in. Wait for it to boot up and you should see some options to install OS on your screen.
3. Check Raspbian, and click *Install*.
4. Go make yourself a coffee, this wait is a while.
5. Once finished installing, you'll be presented with a few configurations (raspi-config) where you can set time and date for your region, enable camera mode, set username and password. Explore, then click *Finish*.
6. The default username (if you haven't changed that) will be *pi* and the password will be *raspberry*. Take note of that.
7. If nothing is missed, you should see a simple Debian-esque desktop with a giant raspberry on the wallpaper.

*If it boots up with a command line instead, type **start-x** to switch to the GUI.*

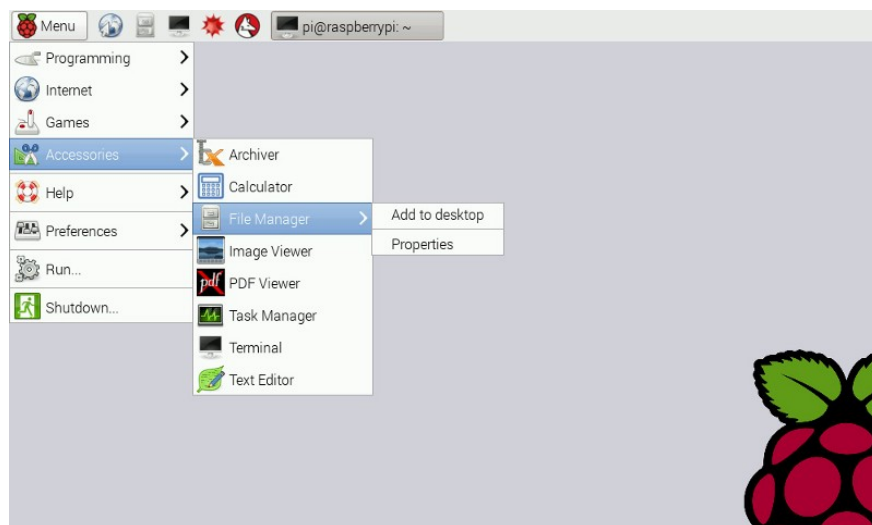


Image from raspberrypi.org

8. Navigate using your mouse to Menu > Preferences > Wifi Configurations and put in your wifi password and click *Connect*.

9. Your Pi, along with its peripherals, are now a working Linux PC in its own right.

SSH into Your Raspi

Now, if you are like me, you would think “Cool, but I’m not expecting my Pi to be just another PC!” Yeah, you would probably be working with your Pi via the command line, like real geeks do.

In that case, fire up the terminal on the screen, and type the following to find your Pi’s IP address:

```
ifconfig | grep inet
```

The first inet that’s not *127.0.0.1* is the Pi’s ip address on the internet. Take that down.

Now, on **your laptop** connecting to the same wifi router, ssh into your Pi on the command line with

```
ssh pi@<yourpiaddresshere>
```

For the first time, ssh'ing to another computer will prompt you to confirm the fingerprint identity. Say yes for now.

If prompted for the password, it's either your assigned password or the default *raspberry*.

That's it! You're now in the Pi. While still connected to the monitor, try this on your laptop's commandline:

```
cd ~/Desktop && mkdir mydir
```

See that directory you've just created appears on the desktop screen? That's the proof that you're in the Pi. This is similar to what you will be doing ssh'ing into an Amazon EC2 instance.

Optional: Serve Something

Round applause for your hitch with the Pi! Now, while still being in the Pi's shell, let's make the Pi a web server by just listen and serve a simple HTML page from the Pi server with netcat utility.

```
while true ; do nc -l 8080 < index.html ; done
```

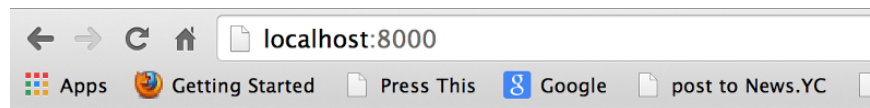
Or if you prefer Python as in Pi

```
python -m SimpleHTTPServer 8080
```

The index.html can be any HTML document in the same directory. In this case, let's create a new HTML file and write:

```
<!-- index.html -->
<!DOCTYPE html>
<html>
<body>
  <h1 style="font-family: Helvetica;">Hello from Raspi
  Server</h1>
</body>
</html>
```

Now, on another laptop or on your mobile phone connected to the same router, browse to your Pi's address on port 8080 like 192.xxx.xx.x:8080. You should get a nice greeting page.



Hello from Raspberry Pi!

File served from your Pi server. Replace localhost:8000 with <yourpiaddress>:8080

Congratulations! You have made your Pi a home server. Now go text your date and friends and tell them about it and start making cool stuff with your Pi.

