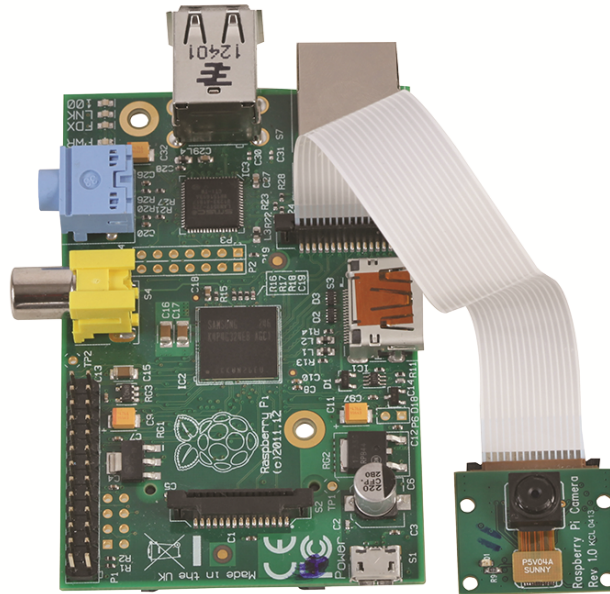




## Raspberry Pi Camera – Quick start guide

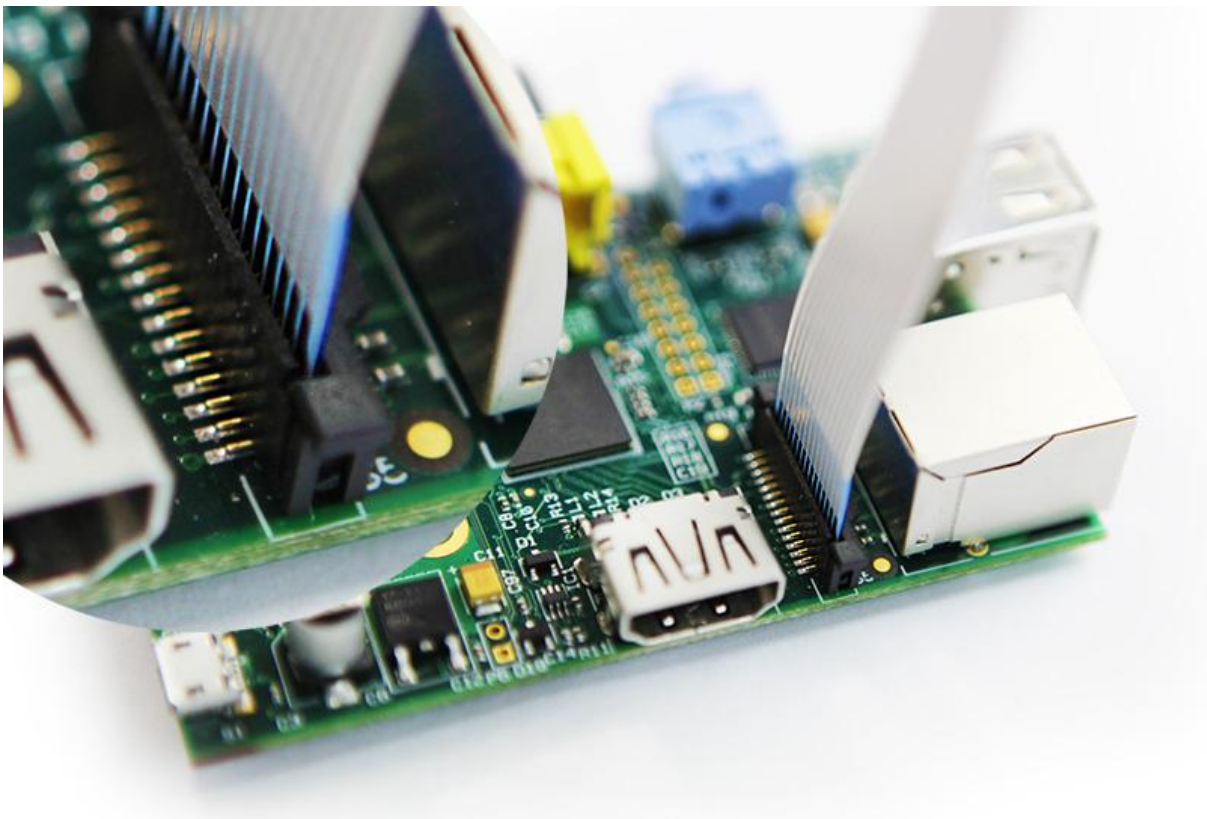


## Quick start guide to setting up your Raspberry Pi Camera

First, please download the latest Raspbian image (2013-02-09-wheezy-raspbian.img) and install it onto your SD card. Please ensure that your SD card is at least 4 GB in size.

Then, connect the Camera module to the CSI port on the Raspberry Pi computer.

**Please note that the Raspberry Pi must be powered down before connecting the Pi Camera**



## Configure your Raspberry Pi

Once booted you can login to your Raspberry Pi using the following credentials

Username: **pi**

Password: **raspberrypi**

Run the following command in terminal to upgrade the Raspberry Pi's firmware to the latest version

### Sudo apt-get update

```
pi@raspberrypi ~ $ sudo apt-get update
Get:1 http://archive.raspberrypi.org wheezy Release.gpg [490 B]
Get:2 http://mirrordirector.raspbian.org wheezy Release.gpg [490 B]
Get:3 http://mirrordirector.raspbian.org wheezy Release [14.4 kB]
Get:4 http://archive.raspberrypi.org wheezy Release [7,200 B]
Get:5 http://archive.raspberrypi.org wheezy/main armhf Packages [6,470 B]
Get:6 http://mirrordirector.raspbian.org wheezy/main armhf Packages [7,412 kB]
Ign http://archive.raspberrypi.org wheezy/main Translation-en_GB
Ign http://archive.raspberrypi.org wheezy/main Translation-en
56% [6 Packages 4,113 kB/7,412 kB 55%]
```

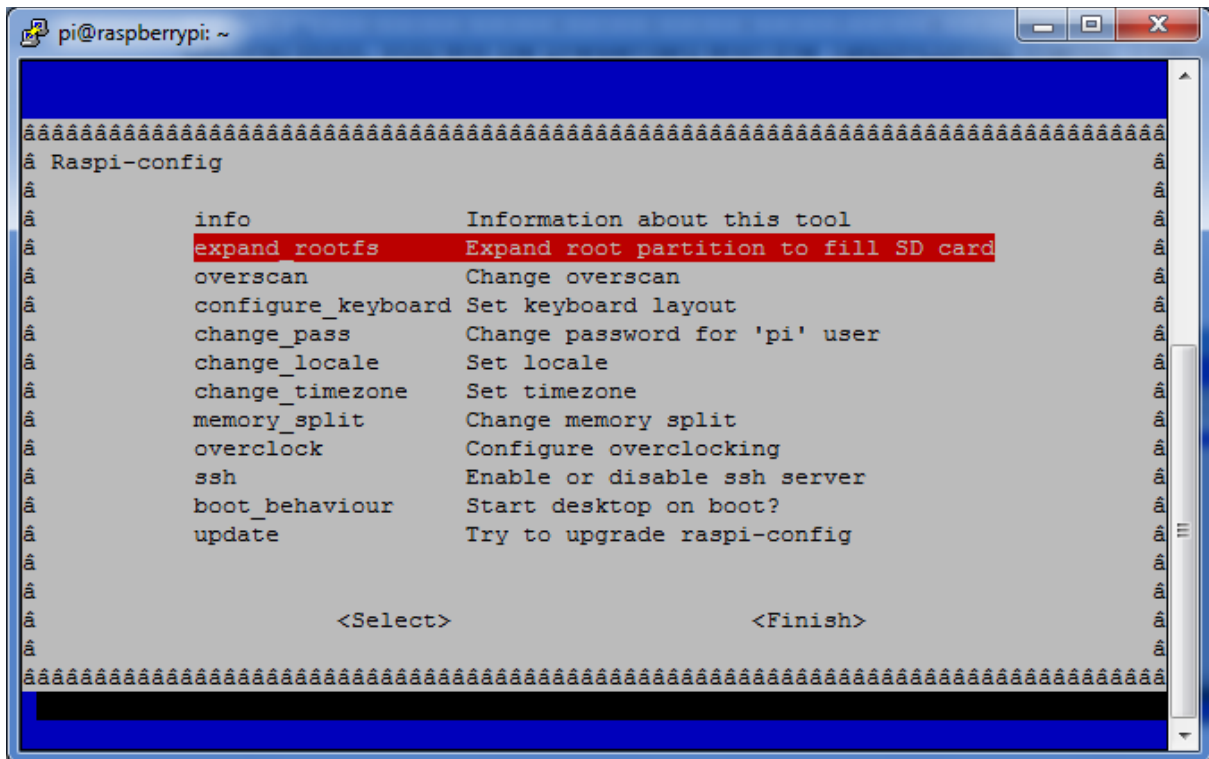
### Sudo apt-get upgrade

```
pi@raspberrypi ~ $ sudo apt-get upgrade
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages will be upgraded:
  libraspberrypi-bin libraspberrypi-dev libraspberrypi-doc libraspberrypi0 raspberrypi-bootloader raspi-config
3 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 60.4 MB of archives.
After this operation, 5,120 B of additional disk space will be used.
Do you want to continue [Y/n]?
```

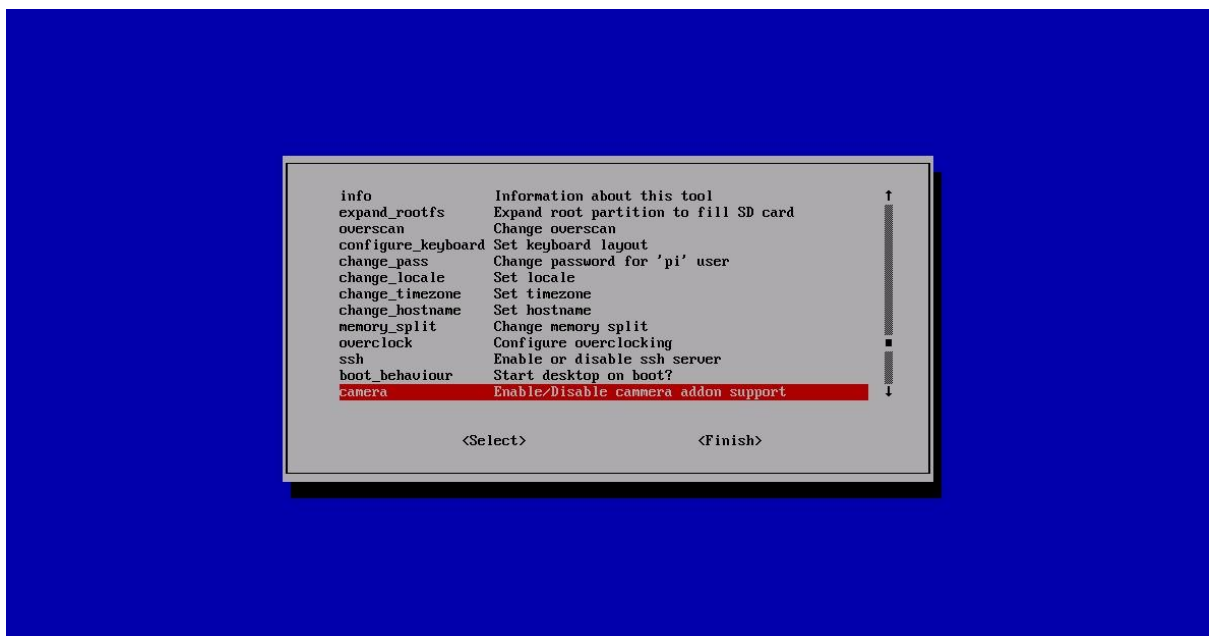
Access the configuration settings for the Pi by running the following command

### Sudo raspi-config

Expand the filesystem on the Raspberry Pi



Navigate through the menu and select "Camera" then "Enable" option to enable the camera





Now select "Finish" and reboot your Raspberry Pi



Once rebooted login to your Raspberry Pi and navigate to the Pi Camera software location using the following command:-

**CD /opt/vc/bin**

## Using the Raspberry Pi Camera Software

'raspivid' is a command line application that allows you to capture video with the camera module, while the application 'raspistill' allows you to capture images.

-o or --output specifies the output filename and -t or --timeout specifies the amount of time that the preview will be displayed in milliseconds. Note that this is set to 5s by default and that 'raspistill' will capture the final frame of the preview period.

-d or --demo runs the demo mode that will cycle through the various image effects that are available.

To see a list of possible options for running 'raspivid' or 'raspistill', you can run:

**raspivid | less**

**raspistill | less**

Use the arrow keys to scroll and type q to exit.

### Example commands

Capture an image in jpeg format:

**raspistill -o image.jpg**

Capture a 5s video in h264 format:

**raspivid -o video.h264**

Capture a 10s video:

**raspivid -o video.h264 -t 10000**