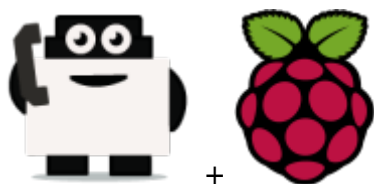


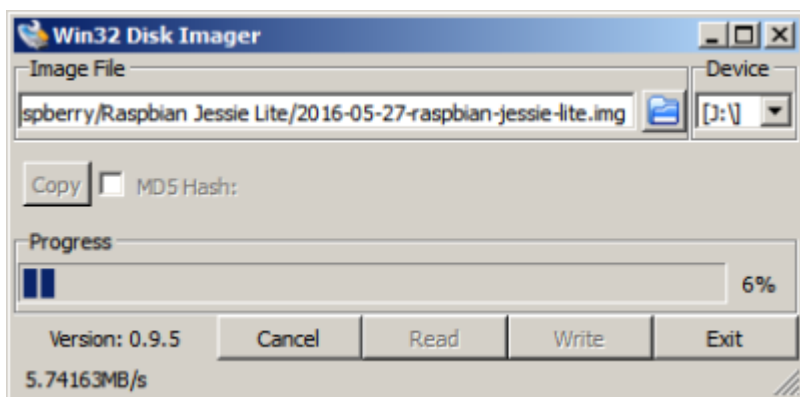
# Installation for Raspberry



## Hardware requested

- Raspberry Pi 2 Model B (~ \$30)
- Alternative: Raspberry Pi Model B+ (~ \$30, predecessor of the RPI 2 Model B)
- Case for the RPI (~ \$10, if you want the HDD, buy HDD enclosure too for ~\$10)
- Aluminum heatsink set (~ \$5)
- Power supply (~ \$9)
- MicroSD card (~ \$8-\$17, I recommend getting one with at least 16GB of space, and class 10)
- Hard Drive WD PiDrive 314Gb, (~ \$40, if you want to use fast and heavy storage)
- Ethernet cable (~ \$8)
- Alternative: WiFi USB adapter (if you don't want to use a cable)
- Optional GSM gateway if you plan to not use Voip (~ \$200, for a Goip 4 channels)

Global price should be ~ \$200 in standard (without the GSM gateway).



You different environment to install the Voxibot suite for Raspberry :

- [Raspbian](#) : Native Raspbian 8
- [RasPBX](#) : Integrated Asterisk/FreePBX
- [RasPBX](#) : Raspbian 8 with the WD HardDrive

## 2. Option with Raspbx version



A 4GB card is required. First download the image disk to flash it in your MicroSD.

Get it from : [Downloads \(from raspberrypi.org\)](#)

The latest image available for download is based on Raspbian (Debian 8 / Jessie) and includes:

- Asterisk 11.21.0
- FreePBX 13.0.74
- Torrent raspbx-06-03-2016.zip.torrent
- HTTP raspbx-06-03-2016.zip
- SHA-1 38665490e4ca3771ef39623c72019737d979e988

Follow those instruction : [Flash Image \(from raspberrypi.org\)](#)

RasPBX already install Asterisk with FreePBX so you only need to complete your installation with the Voximal package :

Get it from : [lastes Voximal for Raspbian package](#)

Connect to SSH (raspbx/raspberrypi) to complete the installation with the Voximal installer package.  
The default login acces is :

SSH login:

- user: root
- password: raspberrypi

Default FreePBX login:

- user: admin
- password: admin

```
Raspbian GNU/Linux8 raspbx tty1
```

```
raspbx login : root  
Password:
```

```
Welcome to RasPBX - Asterisk for Raspberry Pi
```

```
RasPBX is based on Debian. The programs included with the Debian GNU/Linux system are free software; the exact distribution terms for each program are described in the individual files in /usr/share/doc/*/copyright.
```

```
RasPBX comes with ABSOLUTELY NO WARRANTY, to the extent permitted by applicable law.
```

```
List of RasPBX specific commands:
```

```
-----  
-  
raspbx-upgrade      Keep your system up to date with the latest add-ons and  
                    security fixes  
configure-timezone  Set timezone for both system and PHP
```

```
install-fax          Install HylaFAX
add-fax-extension    Add additional fax extension for use with HylaFAX
install-fail2ban     Install Fail2Ban for additional security
install-dongle       Install GSM/3G calling capability with chan_dongle
raspbx-backup        Backup your complete system to an image file
```

```
Last login: Sat Mar  5 18:56:10 2016
```

Once your RasPBX has successfully booted, run this command on the console to install the latest additions and improvements:

```
root@raspbx:~# raspbx-upgrade
RasPBX upgrade tool
Run "raspbx-upgrade --help" for additional options
Base version: 06-03-2016
Installed upgrade:          21
Local upgrade available:    21
Online upgrade available:   24
Running apt-get update && apt-get dist-upgrade.

... (lot of logs...)

132 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.
Need to get 164 MB of archives.
After this operation, 10.4 MB of additional disk space will be used.
Do you want to continue? [Y/n] y

... (installing packages...)

Setting up libraspberrypi0 (1.20160620-1) ...
Setting up libraspberrypi-dev (1.20160620-1) ...
Setting up libraspberrypi-doc (1.20160620-1) ...
Setting up libraspberrypi-bin (1.20160620-1) ...
Setting up raspbx-upgrade (1.0-43) ...
Setting up raspi-config (20160527) ...
Installing new version of config file /etc/init.d/raspi-config ...
Processing triggers for initramfs-tools (0.120+deb8u2) ...
Processing triggers for libc-bin (2.19-18+deb8u4) ...
Processing triggers for systemd (215-17+deb8u4) ...
Installing upgrade 22.
-----
Fixing Asterisk startup problems in recent 2016 images
-----
Installing upgrade 23.
-----
Increasing swap size to 200MB; installing en_US locale
-----
Generating locales (this might take a while)...
  en_GB.UTF-8... done
  en_US.UTF-8... done
Generation complete.
```

## Installing upgrade 24.

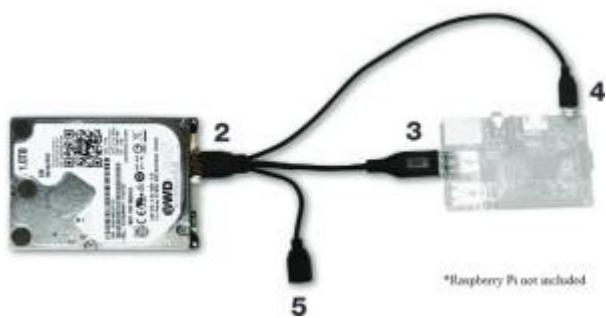
1. Updating GPG keys for FreePBX
2. Enabling Apache2 rewrite module

```
-----  
gpg: refreshing 2 keys from hkp://pool.sks-keyservers.net  
gpg: requesting key 69D2EAD9 from hkp server pool.sks-keyservers.net  
gpg: requesting key B33B4659 from hkp server pool.sks-keyservers.net  
gpg: key 69D2EAD9: "FreePBX Mirror 1 (Module Signing - 2014/2015)  
<security@freepbx.org>" 2 new signatures  
gpg: key B33B4659: "FreePBX Module Signing (This is the master key to sign  
FreePBX Modules) <modules@freepbx.org>" 2 new signatures  
gpg: Total number processed: 2  
gpg:          new signatures: 4  
gpg: 3 marginal(s) needed, 1 complete(s) needed, PGP trust model  
gpg: depth: 0  valid:   1  signed:   1  trust: 0-, 0q, 0n, 0m, 0f, 1u  
gpg: depth: 1  valid:   1  signed:   0  trust: 0-, 0q, 0n, 1m, 0f, 0u  
Enabling module rewrite.  
To activate the new configuration, you need to run:  
  service apache2 restart  
Finishing RaspBX upgrades installation, installed version is now: 24  
root@raspbx:~#
```

```
[root]# ./voxibot_1.x.xx_2016xxxx_0voximalxxcentos6_all.run
```

```
[root]#
```

## Install the Raspberry with a WD HDD



First step is to install the berryboot installer.

Follow this steps : [Berry boot install \(from WD\)](#)

Install the Debian 8, in text only mode.

From:

<https://wiki.voximal.com/> - **Voximal documentation**

Permanent link:

[https://wiki.voximal.com/doku.php?id=installation\\_guide:raspberry:start&rev=1473773651](https://wiki.voximal.com/doku.php?id=installation_guide:raspberry:start&rev=1473773651)

Last update: **2016/09/13 13:34**

