Raspbmc Quick Setup Guide

Dear Raspberry Pi owner,

Welcome to the world of Raspberry Pi!

We've put the Raspbmc bundle together to make it super easy to set up your Raspberry Pi as a home media centre. Simply follow these step-by-step instructions and your Raspberry Pi will be able to play high-definition movies, music and photos in short order.

We realise that these instructions are basic, but they are basic for a reason: even if you have never plugged a cable into a socket, we want to help you start to use your Raspberry Pi. Engineers may want to jump to the later sections of this document.

This guide is intended to help you through the simple stuff. Raspbmc is quite accessible so don't worry about exploring the options that it gives you and learning by trial and error. You are not likely to break anything and even if you do, it is easy to reinstall Raspbmc on your SD card.

What Do I Need to Get Started?

Your Raspbmc bundle contains:

- 4 GB Class 4 SD card with Raspbmc preloaded
- 3 m Ethernet cable
- 1 m HDMI cable
- Wireless keyboard & touchpad media controller

You will also need:

- Raspberry Pi Model B
- Power supply with a microUSB adaptor (1 A, 5 V)
- TV or monitor with HDMI connector (N.B. you can use the Pi-View HDMI-VGA adaptor if you would like to use an older monitor. However, the audio signal will be lost, so you will need to use the headphone jack on the Raspberry Pi).

You may also want:

- WiPi USB dongle
- MPEG-2 codec (for playing the kind of files which originate media such as DVDs, as well as digital TV broadcasts)
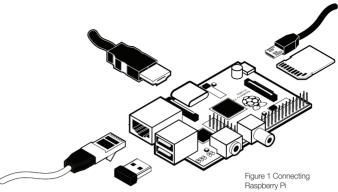- VC-1 codec (for playing files which originate from media including Blu-ray discs)

First Time Setup

1. Connect the Ethernet cable from the Ethernet connector of the Raspberry Pi to your router. Make sure that your internet connection is working. You only need to do this the first time that you set up Raspbmc, so that the program can update itself to the latest version. Updates are enabled by default and can be disabled later if you want.

2. Connect the HDMI cable from the HDMI connector on your Raspberry Pi to the HDMI connector on your TV.

3. Plug the SD card into the slot on the underside of the Raspberry Pi. Make sure that the SD card is pushed all the way in so that it is making a good contact with the connectors.

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4. Plug the wireless adaptor from your keyboard & touchpad media controller into a USB port on your Raspberry Pi.

Finally, insert the microUSB power supply. This will automatically boot the Raspberry Pi up. If you are successful you will see the Raspbmc logo appear on your television screen. On the first boot, this may take a little longer than subsequent uses.

Figure 1 Connecting Raspberry Pi

The Raspbmc Interface

You should now see the user interface for Raspbmc, which lists (left to right) weather, pictures, video, music, programs and system. This is the basic interface which will allow you to browse your videos, music and other media.

Adding Media

Now it's time to access your home media from your Raspberry Pi. You can do this in a few different ways depending on the way your home network is set up. The simplest way is to plug in a USB drive or external hard drive which contains your movie files to a USB port on your Raspberry Pi. N.B. if your files originate from media such as a DVD or Blu-ray disc, you will need to buy the MPEG-2 or VC-1 codec license key from raspberrypi.com. See Raspbmc Settings for information on how to enable these codecs. Just while we're on the subject… ripping copy protected DVD and Blu-ray content is illegal!

1. Click on **Videos**
2. Click on **Files**
3. Click on **Add Videos…**
4. Click on **Browse** (in the top right corner)
5. You should now see a list of folders including your USB drive or hard drive. From here you can navigate to the folder where your video media is stored. Once you have found the folder where you keep your videos, click **OK**. You only have to add the media source once; from now on it will appear automatically when you click on **Files**.
6. For audio files, you can follow the same process outlined above, starting instead from the **Music** section of the main menu.

Adding a Network-attached Storage (NAS) drive or connecting to a Windows network is also easy to configure using Raspbmc. If your NAS drive supports Universal Plug and Play (UPnP), then it should appear listed under UPnP after you click Browse as before. Windows networks will also appear listed under Windows Network (SMB). Essentially, Raspbmc makes it very easy to navigate to media stored in your home network and is flexible enough to accommodate most of your different storage devices throughout your home.

YouTube and Other Add-Ons

Raspbmc allows you to install add-ons which enable you to watch YouTube, a variety of on-demand TV services, for example BBC iPlayer, and also audio streaming apps such as Spotify (provided you have a premium account with them). Some add-ons require a slightly more in-depth approach which involves downloading the application via SSH, but fear not, we will help you. Here's how to access YouTube, which is one of the listed add-ons. You need to make sure you have an internet connection to do this, since Raspbmc will download the application.

1. Click on **Videos**
2. Click on **Files**

3. Click on **Video Add Ons**

4. Scroll down, select and install YouTube. This can then be used and configured according to your tastes (enabling / disabling safe search etc).

Raspbmc Settings

By going to **programs > Raspbmc Settings** you can configure a wide range of options and settings including whether or not you want to overclock your Raspberry Pi. N.B. We don't advise selecting the "super" setting when overclocking as it can cause SD cards to corrupt.

Enabling MPEG-2 or VC-1 Codecs

In **Raspbmc Settings** click on the tab at the top of the window which is labelled **System Configuration**. Here you can set passwords and manage updates to Raspbmc. If you scroll down to **Advanced System Settings** you can enable the codecs by simply typing in the license key that you can buy at **raspberrypi.com**. Hey presto!

To buy the license keys, you need to know the serial number of your Raspberry Pi. This is easy to find by typing: **cat /proc/cpuinfo** in the command line once you have booted your Raspberry Pi.

For further information on how this process works, and to buy the licenses, visit: **http://www.raspberrypi.com/ mpeg-2-license-key/** or **http://www.raspberrypi.com/vc-1-license-key/**

Using a Smartphone or Tablet to Control Raspbmc

If you would like to connect your smartphone or tablet to your Raspberry Pi, either to use as a controller, or to transfer media between the two devices, make sure that it is connected to the same network as your Raspberry Pi. There are several free apps you can download (both for Android and iOS) which will let your device act as a remote. Certain TV remotes are also supported natively in Raspbmc, with commands sent to the TV (as normal) and transferred via HDMI.

Nightly Builds

To manually update Raspbmc, you can select "nightly builds". A nightly build is a version of the software which reflects its current state. These are not necessarily stable releases. However, you might find that it can help to fix issues when you start to experiment more with Raspbmc.

Using SSH With Raspberry Pi

Secure Shell (SSH) is a way of executing commands on your Raspberry Pi directly from another computer. It's very useful for installing extra software on your Raspberry Pi and in the case of Raspbmc you may want to use it to include additional add-ons which aren't listed by default. Basically, what you are doing is "logging on" to your Raspberry Pi through a terminal on another computer.

There are lots of tutorials on how to do this, but since it is useful for Raspbmc, here's the process:

1. The first thing you need to find out is the IP address of your Raspberry Pi. This can be done by going to **System** and then **System Info**. The IP address will look something like this: **10.13.36.183.** Note this down for later use. You can also check your router settings and inspect which devices are connected to it to figure out the IP address of your Raspberry Pi, but it's much easier just to do it from Raspbmc.

2. Now, connect your computer using an Ethernet cable to the Ethernet jack on your Raspberry Pi.

3. If you're using a **Mac** or **Linux** computer, then open up a terminal and type: **ssh 192.168.1.111 –l pi** which will connect you to your Raspberry Pi. Just continue when you see the security warning as it is only trying to make sure that you know the remote computer that you're connecting to. You're now ready to enter your username and password.

4. If you're using a **Windows** computer, then you will need to download a tool called an "SSH client". There are many to choose from, but for simplicity, download PuTTY. Open the file **putty.exe.** Enter the IP address from step 1 and click **Open**, say **Yes** to the security alert and then you will be ready to enter your username and password.

5. The username is **pi** and the password is **raspberry**. You won't see the password as you type it in: this is a security feature of Linux. For reference, this is the same username / password as the Raspbian operating system which you can download from raspberrypi.org.

Example Raspbmc Plugin: BBC iPlayer (UK only)

1. Connect via SSH to your Raspberry Pi and then from the console enter **cd** to change to your home directory (though you should already be there). Now type:

   wget https://xbmc-iplayerv2.googlecode.com/files/iPlayer-v2.4.17.zip

N.B. the URL shown above is very likely to change as different versions of the app are developed. For this reason, you should navigate to the exact link yourself. Searching for "xbmc iplayer" will help you navigate to the correct URL in this instance.

   This will put the zip file in the home directory of your Raspberry Pi.

2. The next step is to boot up your Raspberry Pi as normal. In other words there's no need to use SSH from now on. As described in the previous section **YouTube and Other Add-ons**, navigate to **Video Add Ons**. Here you should see a .. at the top of the list, click this to get to the next list, followed by another click on another .. to land on a list of options including "install from zip file". Click on this, then choose **Home Folder** as the location of the zip file. Select it and then watch as it installs. This should complete the process.

Further Reading and Online Help

This guide is by no means a complete resource. To learn about the more in-depth features of Raspbmc we recommend visiting: **raspbmc.com/wiki/user/**

For further guides, tutorials and help from our online community, visit: **element14.com**

Donate to Keep Raspbmc Afloat

Raspbmc is maintained by Sam Nazarko, who has worked incredibly hard to support XBMC on the Raspberry Pi. Please visit his site, where you can support Sam's work with donations:

raspbmc.com

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COMPLIANT WITH

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device has had its operation certified by the FCC and has been granted the following FCC ID: YIZRT-MWK08

WARNINGS:

Do not alter the frequency at which this product operates, doing so will breach the Radio and Telecommunications Terminal Equipment Directive 1995/5/EC.

Children must be supervised whilst using this product. This product poses a choke hazard and is not suitable for children under the age of four.

N2272

FCC ID: YIZRT-MWK08