



## Handbrake Tutorial

Handbrake is a free, no strings attached, video encoder. It will encode almost every video format (I don't know of a video type that it won't encode) and just about every DVD into an MP4 format you can display on the Web or your handheld device.

Handbrake uses the H264 codec and the encoding process it employs delivers a stunning end result that matches any encoder on the market.

You'll first need to download this PC and MAC compatible tool. You'll find it at <http://handbrake.fr/>.

The tutorial presented is specifically for encoding video for desktop viewing on the Web. If you use the provided settings, your encoded video will meet or exceed your expectations.

We'll be encoding on a PC. The Mac version is slightly different but the same options exist.

The settings below can be saved in Handbrake under "Presets" and you can do multiple encodes at the same time through "Add to Queue". I recommend using the presets as they make encoding set up very fast.

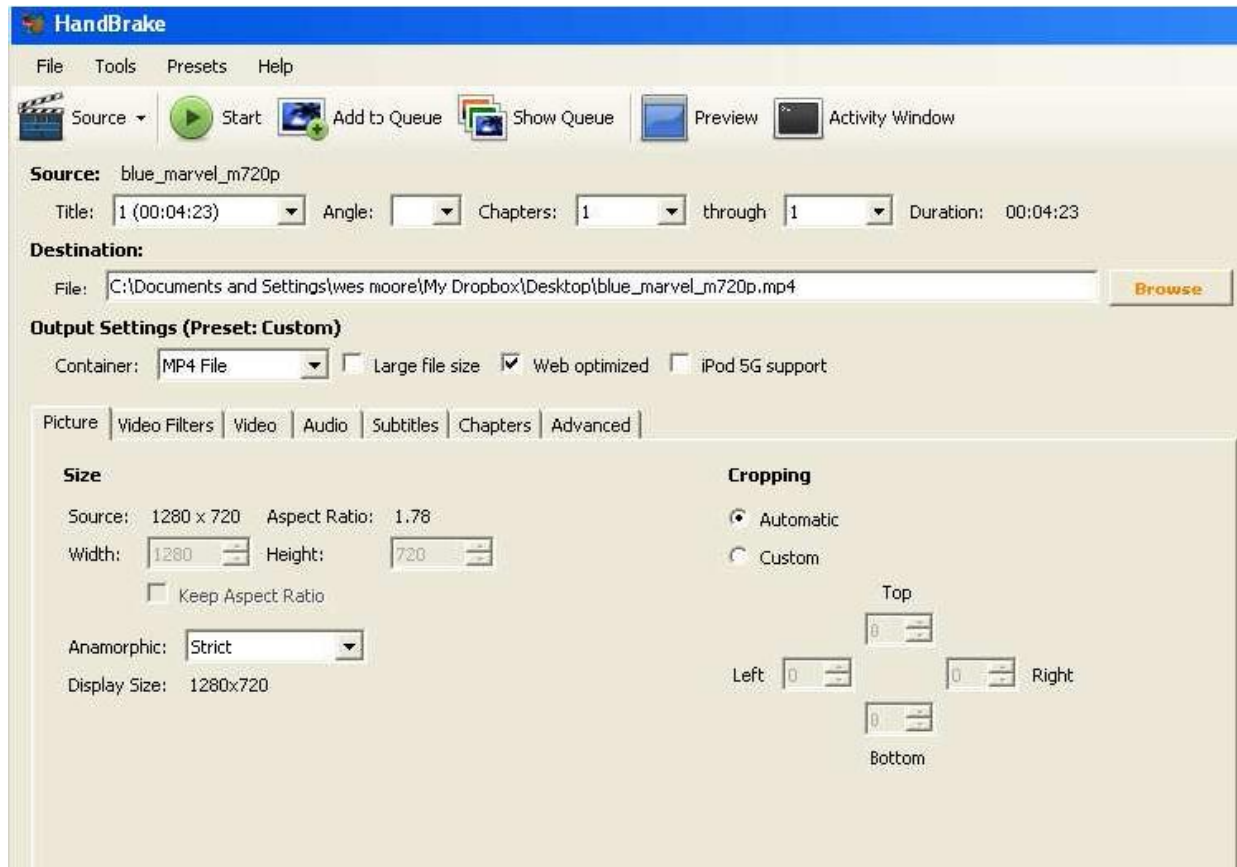
Once you've opened handbrake, begin by clicking on "Source" in the main menu at the top. Choose the video file you wish to encode.

To the right of "Destination", click "Browse" to choose the name and destination of your encoded file. When using Handbrake to encode for iPlayerHD, it is a good idea to place the encoded bitrate at the end of the file name for identification later. For example: filename\_1000.mp4 or filename\_2000.mp4.

In the "Destination" window, your file may have an .m4v designation. Change that to .mp4.

Important: Before you add to queue or start encoding, be sure your Output file extension is mp4 and not m4v.

Under “Output Setting”, your container should be MP4 and only “Web Optimized” should be checked. If this is not checked, your video will not play immediately on the Web. Instead, the file will play only after it has downloaded completely. Do not check off the other two boxes.



Below Output Settings are seven tabs. We’ll discuss Picture, Video Filters, Video, Audio, and Advanced.

## Picture

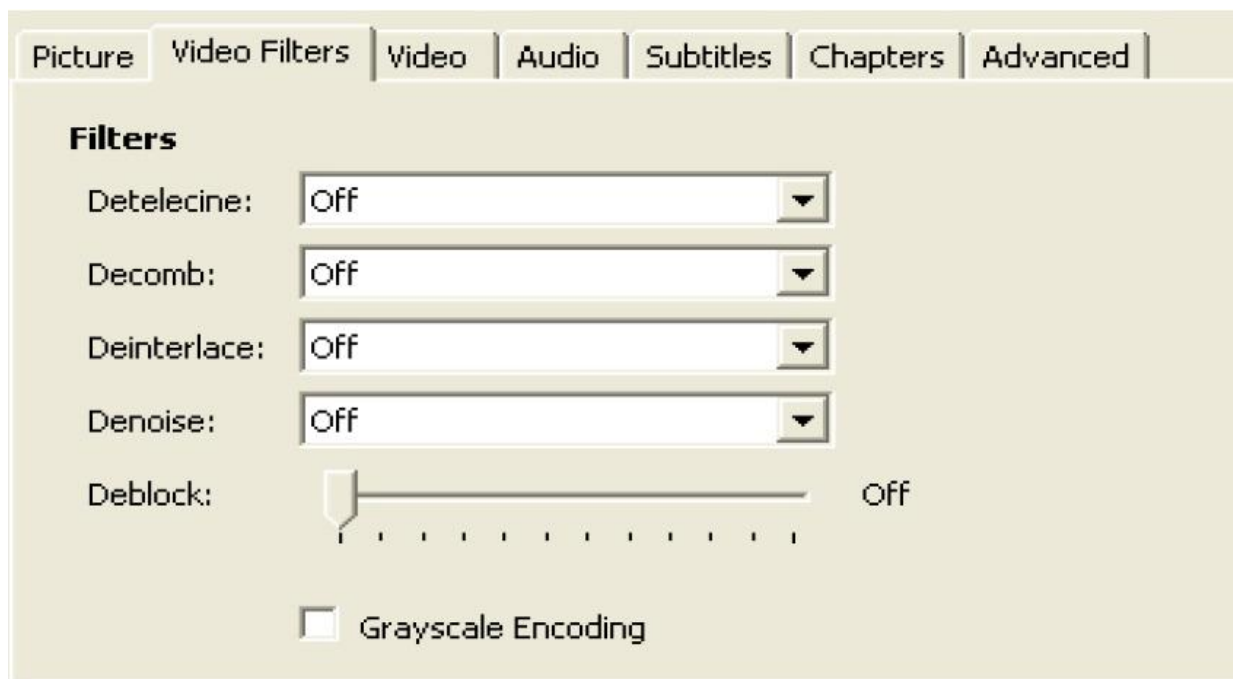
Under “Size”, you will see your source video resolution and aspect ratio. If you want the encoder to preserve those, maintain the default “Strict” setting next to “Anamorphic”. If you want to create a custom size video, choose “None” under “Anamorphic” and place your own width and height.

Important: You’ll want to max out your width at 1280. While iPlayerHD will easily deliver 1920, those viewing your video may have issues that cause the video to play poorly. When you choose “none” and with “keep aspect ratio” checked, type in the width you want to encode and then click in the height box and the correct height will auto calculate and display.

## Video Filters

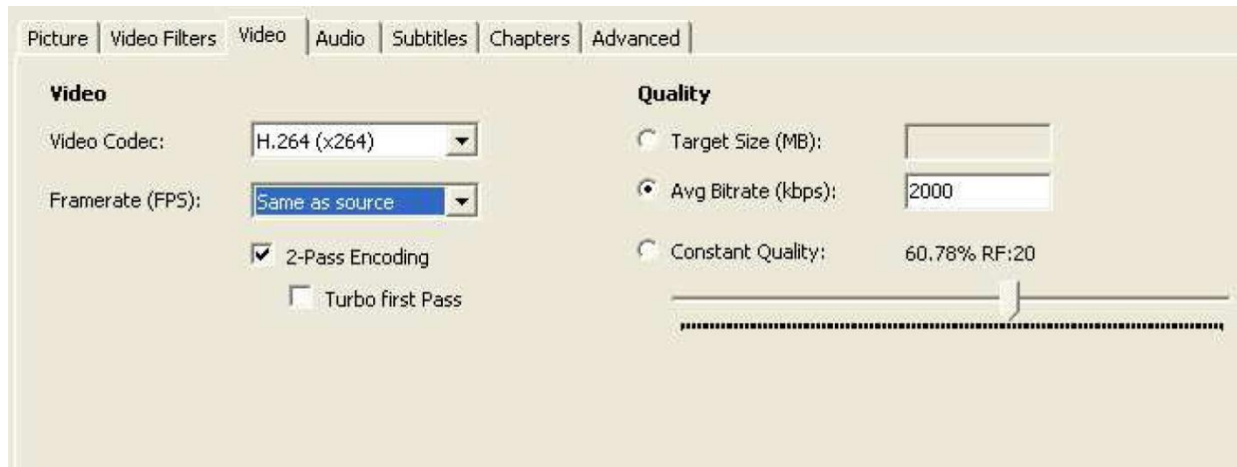
If your video is interlaced you must convert it to progressive scan. To do this, choose “Deinterlace – Yes” and the encoder will create a progressive scan video. Otherwise, do not change the default settings.

You must deinterlace an interlaced video if you are to display it on the Web.



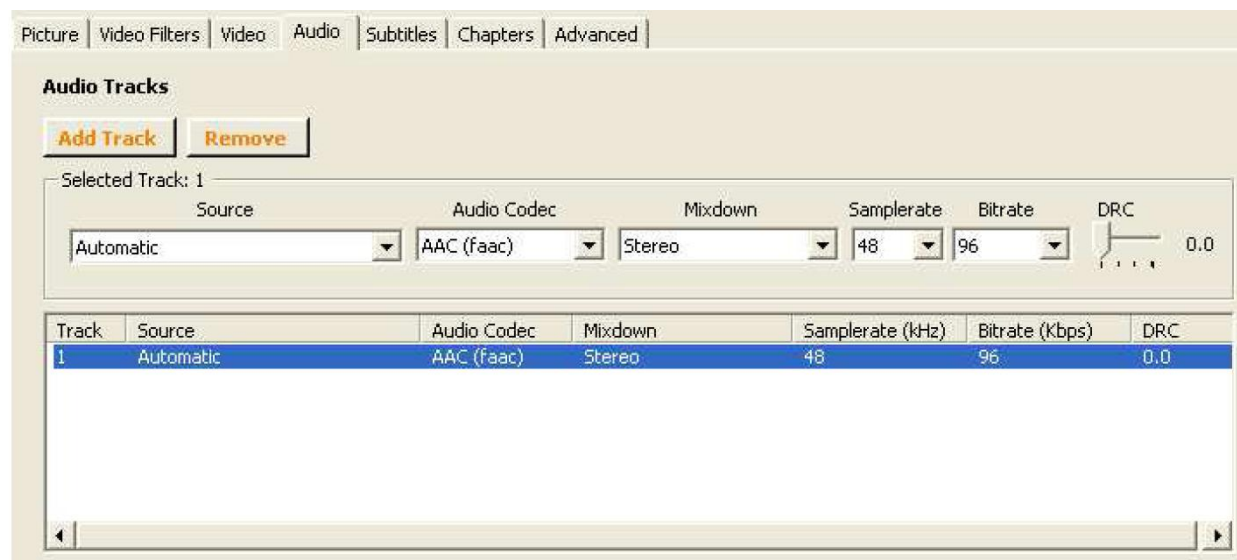
## Video

Choose H.264 as the codec. Your framerate can be the current framerate of your video or you may change it. Keep it 30 frames or less. Choose two-pass encoding. Do not check Turbo first pass. Your average bitrate can be anything you want it to be. To take full advantage of iPlayerHD's bandwidth detection, we recommend bitrates of 1000 and 2000. You'll create a preset at 1000 – call it iPlayerHD 1000 and another at 2000 – call it iPlayerHD 2000. More on presets at the end of the tutorial.



## Audio

Click on the audio track listed – there is likely to be just one. Then choose the settings you see in the image below. You must use AAC (faac) for the audio to work on the Web.



## Advanced

We do not recommend changing the default Advanced Settings. Any changes will increase the encode time from a few minutes to many hours for marginal quality improvement.

## Presets

At this point, you may click “presets” in the menu at the top and then add preset. Give the preset a name that includes the bitrate used and then “add”. If you wish to create a preset with a different bitrate but with all of the other settings the same, simply go to the Video tab and change the bitrate and then back to presets and add a new preset with the bitrate in the name.

Each time you have set up a video to encode, add it to the queue. Continue to do that until you have all you videos ready to encode. You may then click “start” and the videos will encode one at a time.