

## Recoding Video For The Micca Slim

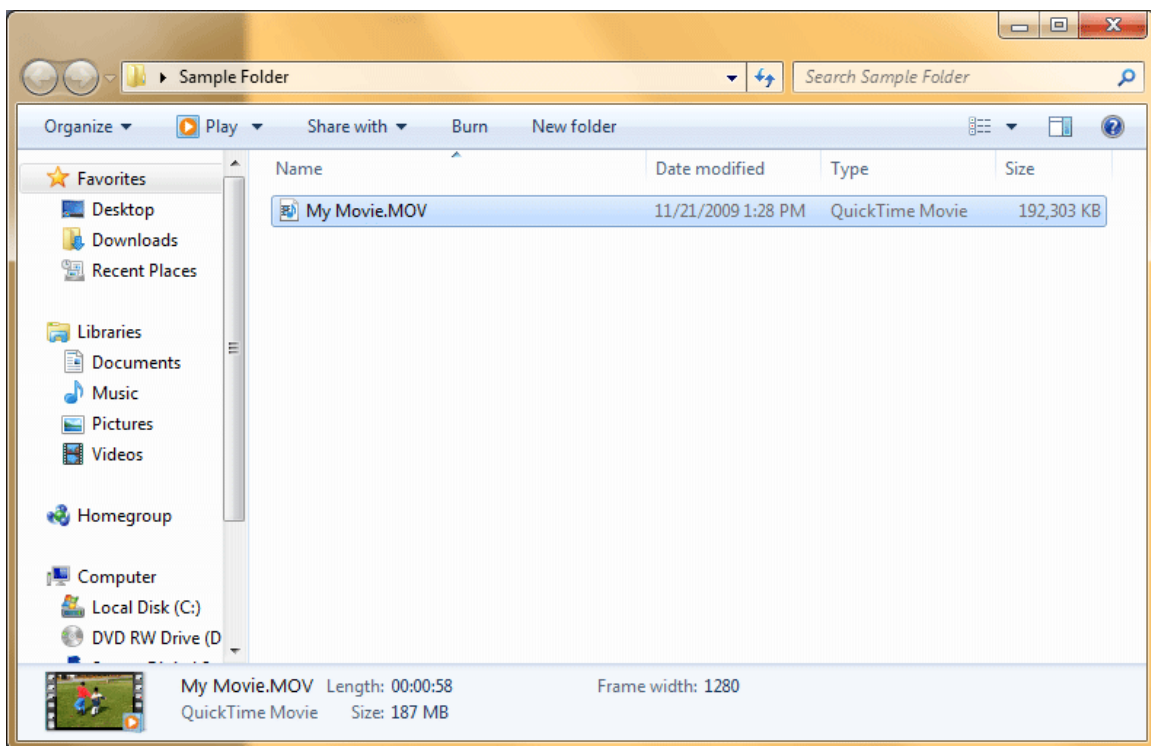
While the Micca Slim supports a wide variety of modern digital media formats, there are a few file types that the Micca Slim will not be able to handle correctly, including:

- Incompatible codec, such as H.264
- Incompatible container file, such as MKV
- Incompatible resolution, such as 1280x720
- Variable frame rate

Luckily, most of these issues can be addressed by a simple recoding of the video file with some free and easy to use software tools. Lets get started.

### The Source File

The file used in this tutorial is a family video taken with a Canon T1i digital camera, but any source video will work equally well.

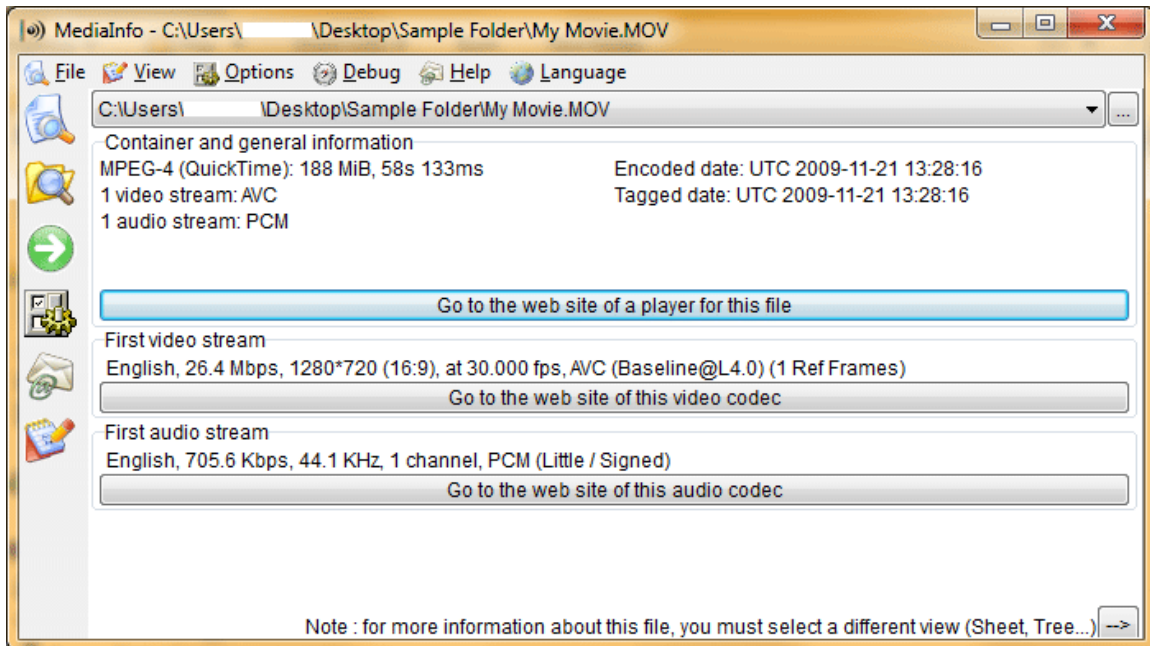


At this point, we assume that we don't know anything about this video file, except that it won't playback on the Micca Slim. So we'll recode it to play on the Micca Slim.

### The MediaInfo Tool:

Download and install the free MediaInfo tool from the following URL: <http://mediainfo.sourceforge.net/en>. This tool will be able to tell us everything we need to know about the video file that we are trying to play.

We run the MediaInfo tool and select File->Open->File from the menu, and select the "My Movie.MOV" file that we are interested in. The MediaInfo window now shows us a summary of the information about this video file:



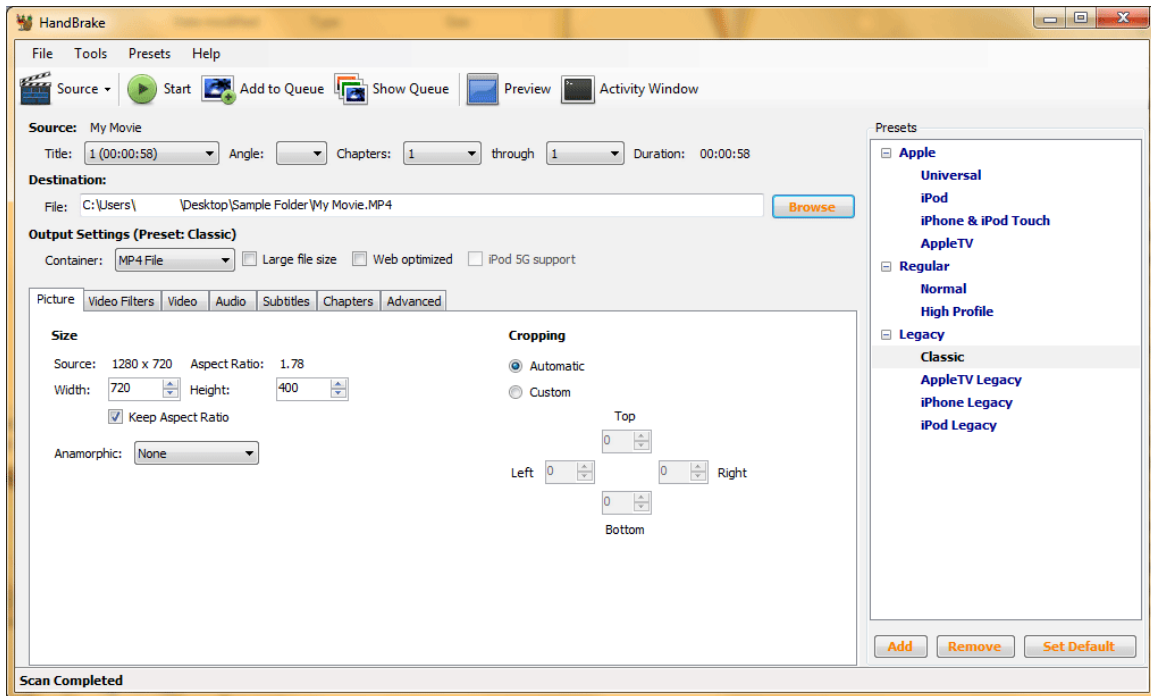
From the above screen, we note that the codec is "AVC", which is not supported by the Micca Slim. We also note that the frame rate is 30fps – keep this in mind as we'll need to use it later.

### The Handbrake Tool

Handbrake is the software tool that we will use to recode the sample video so that it will play on the Micca Slim. Download and install Handbrake from the following URL: <http://handbrake.fr/downloads.php>. Now we are ready to recode the video into a format that the Micca Slim can playback. Follow these steps below:

- From the Handbrake menu, select Source->Video File
- Locate and select the "My Movie.MOV" file
- Select the "Legacy->Classic" preset on the right
- Click on the "Browse" button next to the Destination field and set the destination location and file name.

After the above steps, the Handbrake window should look like the following:

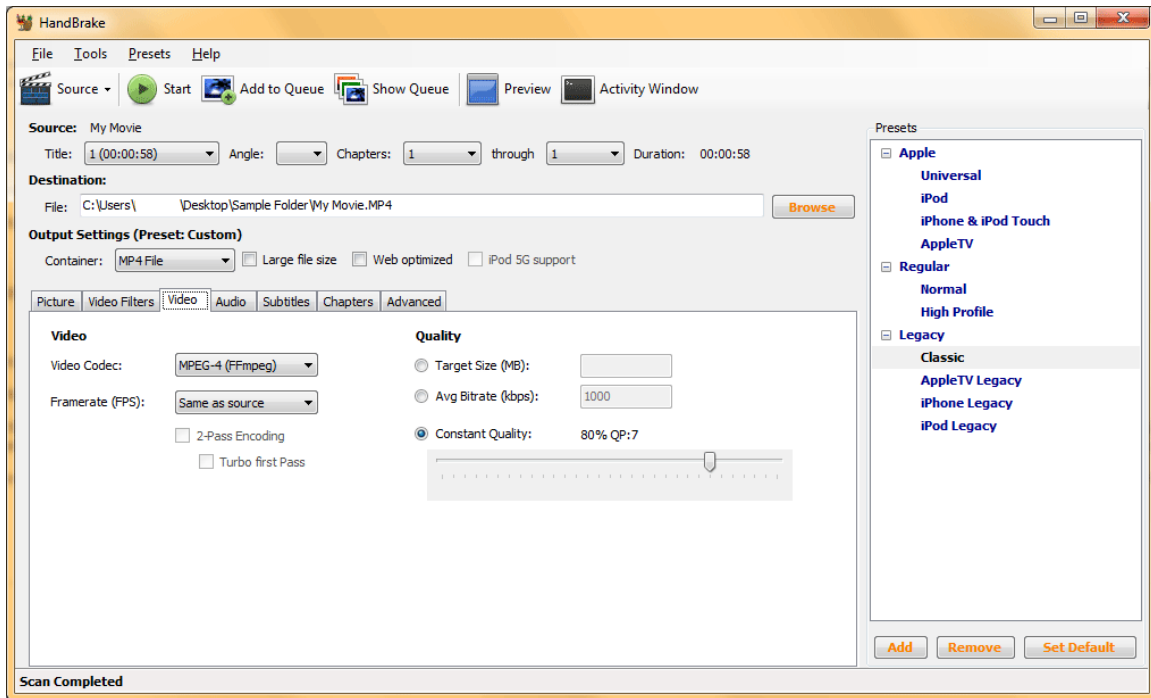


The source video file has a resolution of 1280x720, which we must reduce to a resolution supported by the Micca Slim with the following steps:

- Check the "Keep Aspect Ratio" field to make sure that the original video proportion is kept.
- Set the width to 720; the height field is automatically set to 400.

The maximum video size supported by the Micca Slim is 720x576, so we must set the new video resolution such that it is not larger than this maximum in either height or width. In this example, 720x400 is within the limits of the Micca Slim's capabilities, this is a good resolution to use.

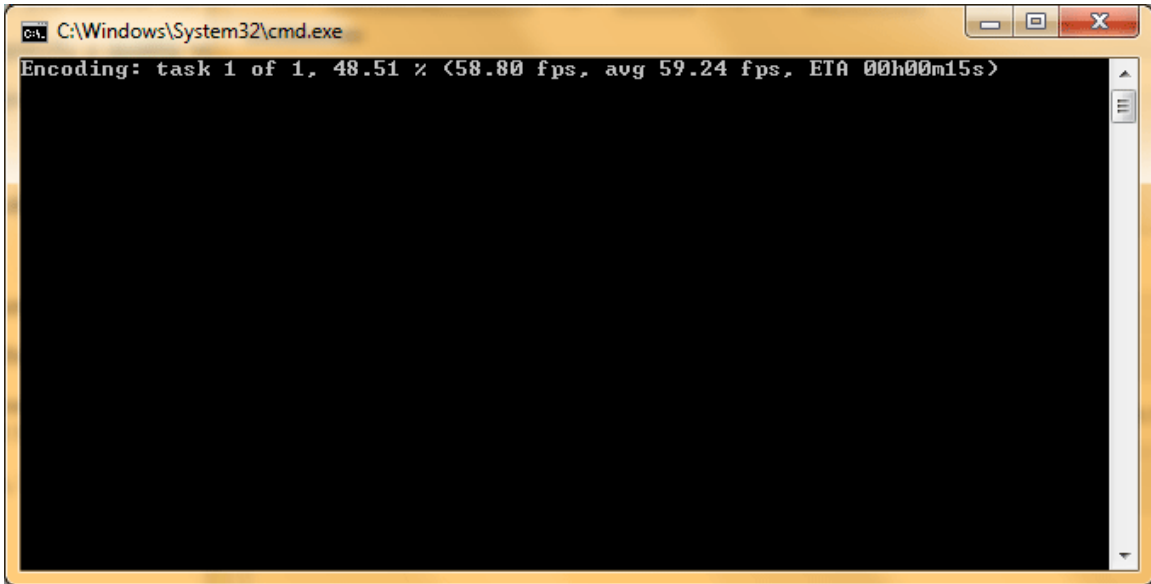
Next we set the video encoding features by clicking on the "Video" tab, which brings up the following screen in Handbrake:



Make the following settings:

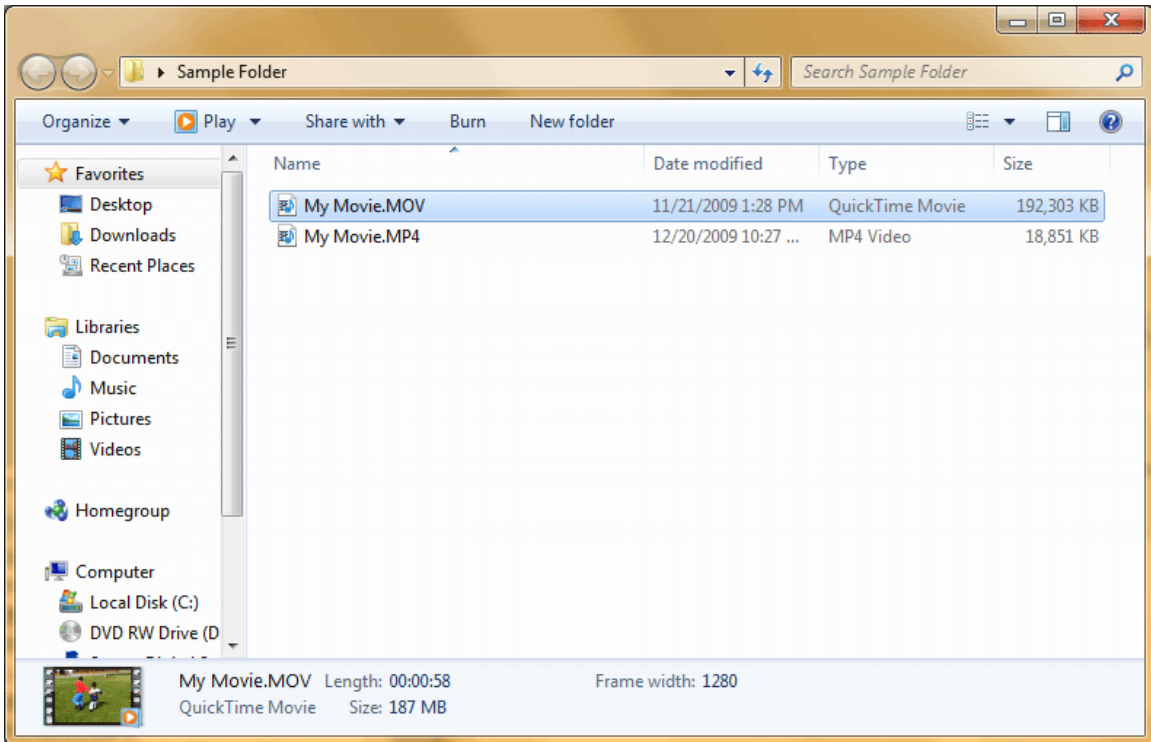
- Confirm that the Video Codec is set to MPEG-4 (FFmpeg)
- Set the Framerate (FPS) to be the same as the original video. Handbrake lacks a setting for 30FPS so we'll just use "Same as source" in this example. But always select the FPS that matches the original source video if it is available in the drop-down menu.
- Select "Constant Quality" and set the slider to 80%. This will give us a DVD-quality compression level.

With all of the settings done, we are ready to recode the video. Press the "Start" button and Handbrake will spring into action recoding the video. The following window will pop up to indicate progress:



How long it takes to recode a video depends on the size of the original video and how powerful the computer is. In our example, this 1-minute long high definition video took about 30 seconds to recode on a laptop computer.

When completed, we see that the new video file has been created:



We've successfully recoded this home video into a format that can be played on the Micca Slim. What's more, the video is now less than 1/10<sup>th</sup> of its original size while still maintaining an excellent level of quality.