



Automatic and Custom Encoding options in Toast

- Toast

To change the Encoding Settings:

1. Start a new Music DVD or DVD-Video project
2. Click More in the left drawer and choose the Encoding tab.
3. Choose either Automatic or Custom:
 - **Automatic:** Choose this option to use all video and audio encoding settings that maximize quality and fit the most content on the DVD. Variable bit rate encoding is used for video, Dolby Digital 192 kHz is used for audio, and aspect ratio is determined automatically from the source videos.
 - **Custom:** Choose this option to manually set video and audio encoding options. This option is recommended only for people who have an understanding of video and audio encoding terminology.
4. If you selected Automatic, choose the Video Quality:
 - ?
 - **Good:** Suitable for simple video, such as people talking - fastest processing time.
 - **Better:** Suitable for most video - average processing time.
 - **Best:** Suitable for complex video, such as fast motion - slowest processing time.
5. If you selected Custom, choose from the following video and audio encoding options:

Video Encoding Options:

- **Average Bit Rate:** Sets the desired average target bit rate for the video encoder.
- **Maximum Bit Rate:** Sets the maximum bit rate for the video encoder. The minimum bit rate is derived from the above two values using the following formula: Minimum = (2 x Average) - Maximum.

?

- **Motion Estimation:** This setting defines which methods are used to search for pixel movement in the video stream. It has a large impact on the final quality, but on the processing time as well. Better motion estimation takes longer to process.
- **Half-PEL:** When this option is activated the motion estimation operation also looks for pixels that move only one half of a pixel from one frame to the next. This setting should usually be enabled and should only be disabled if speed is desired over quality.
- **Re-encoding:** Choose Always to re-encode all source video, including previously encoded MPEG1 and MPEG2 content. This will also re-encode audio. This is the best option to ensure that the video will play properly. Choose Never to not re-encode any source video. This is a good option if you have previously encoded your video outside of Toast. Toast will still need to multiplex your files. Note that if your source video is invalid as per the official DVD specification, Toast will still attempt to re-encode it. Toast will not create a DVD that is out of spec. Choose Automatic to let Toast make the best choice depending on the source video re-encode only if necessary.
- **Field Dominance:** This setting should match the field order of the source video. DV is generally bottom field first, but other types of video may be different. In most cases, Toast is able to detect the field order of the source video and the Automatic setting should work fine.

- **Aspect Ratio:** This setting should match the aspect ratio of the source video. In most cases, Toast is able to detect the aspect ratio of the source video and the Automatic setting should work fine.

Audio encoding options:

- **Audio Format:** Choose Dolby Digital or uncompressed PCM. In almost all cases, Dolby Digital is the best choice. It uses less disc space, so you can fit more video on the DVD, and the sound quality is almost the same as PCM.
- **Data Rate:** Choose the bit rate to encode the Dolby Digital audio. Higher bit rates can produce slightly better sounding audio, but use more disc space. Toast uses 192 kbps by default.
- **Dynamic Range Compression:** Enabling dynamic range compression reduces the range between loud and soft sounds in order to make dialogue more audible, especially when listening at low volume levels.

PCM audio should be used if you want to maintain 100% fidelity and only if the audio source is already uncompressed PCM, such as tracks on an audio CD or a high quality audio recording. If the audio files are already compressed (such as MP3 or AAC songs in your iTunes library) do not use PCM - it will not improve the sound quality. Toast records PCM at 48 kHz / 16 bit levels, which is higher than standard CD quality. Audio that has been recorded at 96 kHz / 24 bit is downsampled automatically unless you choose the 96 kHz / 24 bit option, which maintains the higher quality but significantly reduces disc space. When you choose PCM, any existing Dolby Digital audio files will be "passed through" without reconverting to PCM.

6. Click OK.

You can also click Reset Defaults if you want to reset the video and audio encoding to the default settings when Toast was first installed. The Toast Preferences contains options for setting the appropriate TV standard for your video discs.