

MPEG-2 Encoding Specification for the DV series (standard definition) media players

VIDEO

File format: .mpg
Video type: MPEG-2 video
Attributes: 24 bits, 720x480, 4:3 or 16:9
Frame rate: 29.970 Frames/sec
Date rate: VBR or CBR
8Mbps for current DV66s (HW1.4)
6Mbps for Ver 1.6 and older DV66s (HW1.3)

AUDIO

Audio type: MPEG audio layer 2
Attributes: 48000Hz, 16bit, stereo
Layer: 2
Bitrate: 192kbps or 224kbps

MAC

MPEG stream clip settings:
Export to: Apple MP4 (not H264)
Framesize: DVNTSC 720x480

Shareware programs that work great on a MAC for encoding files to either mpeg-2 or mpeg-4:

The easiest (and best quality) is the MPEG4 divx encoder for the DV-68 at:
<http://www.divx.com/>
You can download and use converter for free

An mpeg-2 converter for the Mac that works is "ffmpegX" at:
<http://mac.softpedia.com/get/Video/ffmpegX.shtml>
It is a little more complicated to setup, but it will encode mpeg-2 files that the DV-66/68 can read with audio.

PC

.vob to .mpg conversion:

A quick solution is to use a PC shareware program (such as DVDx) and convert the .vob to a MPEG2 file (.mpg) with MP2 audio. Not only will this solve the audio problem, the resulting file will be much smaller (1/3 of the original size).

<http://www.videohelp.com/tools/DVDx>
http://www.videohelp.com/tools/SUPER_1

Settings

Using PC software encoder – Canopus Procorder 2 Encode Template:

Storage	MPEG	AUDIO	
Select	MPEG-2 422 Profile NTSC	Audio Stream Type:	MPEG Audio Layer 2
Type	422p@ML MPEG 2 Stream	Audio Bitrate:	224 Kbps
Settings:		Sample rate:	48 Khz
VIDEO:		Channels:	Stereo
Quality:	Mastering	Bits/Sample	1
Bitrate:	VBR, 2-PASS		
Video Bitrate:	8000 Kbps		End results were good quality video with good audio.
Max. Bitrate:	8000 Kbps		
Min. Bitrate:	6000 Kbps		

Troubleshooting

Known Problem Encoders:

- Sorenson Squeeze 3 and 4 compression software produces files which are incompatible with the codec in the DV66 player. Sorenson compressed media, while valid for DVD and Windows playback, does not normally play back in a DV66. The current version of Sorenson creates an .mpg file that has the attributes of a .VOB so that when played back, the MPEG2 layer 1 audio is not played since the DV66 is looking for AC3 audio (as in a .VOB).
- VEGAS 5.0 and 6.0 also had problem with the files playing audio.
- Pro-Encode, using the same settings as Sorenson, will work fine.