

Digital Video Forums (http://forum.digital-digest.com/index.php)

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- PAL to NTSC: avi/mpg to DVD conversion using TMPGEnc & DGPulldown

(http://forum.digital-digest.com/showthread.php?t=63997)

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PAL to NTSC: avi/mpg to DVD conversion using TMPGEnc & DGPulldown

PAL to NTSC avi/mpg to DVD conversion Using TMPGEnc & DGPulldown

TMPGEnc Plus avi conversion guide:http://forum.digital-digest.com/showthread.php?t=56454TMPGEnc Plushttp://www.pegasys-inc.com/en/product/tda.htmlDGPulldownhttp://www.digital-digest.com/software/dgpulldown.html

The following is a simplistic guide to convert 25 Fps avi/mpg files to NTSC. Additional settings may be required such as **"source range"**, **"audio gap correct"**, **filters**, **"custom aspect ratio"** and so on. However this guide will get you on the right track to begin the process.

STEP 1

We must calculate the video bitrate. This can be done with a bitrate calculator but is completely uneeded for this project. Load the file you wish to convert using the wizard in TMPGEnc, then click **"next" TWICE**.

This will take you to the bitrate screen. Use your mouse and arrow to adjust the blue bar to fill the desired amount of disc space. If you wish the file to take the whole amount use 98% (save room for menus etc.). If it's a 2-part video, say, file A and file B, make each at 49%. 3 parts, 33% and so on. When you get to the place you want, record the video bitrate value. We will need this later.

TIP: The higher the bitrate, the higher the video quality. Try to keep bitrates 4500 kbits/sec and up, no more than 7000. If needed DVD Shrink can be used in the end to compress to fit on your media.

Project Wizard (4/5)			
Bitrate setting			
Specifies bitrate of MPEG file you create.			
Movie info: 72	20x480 29.97 fps / 48000 Hz St	tereo / 50 min 01 sec	
Video resolution:7	' <u>20 x</u> 480 ▼ pixel	🔽 Auto select	
Average <u>v</u> ideo bitrate: 5	270 🗢 kbiks/sec	Auto setting	
Audio bitrate: 3	84 💌 kbits/sec		
Estimated <u>fi</u> le size:	057.91 🚖 MB	E×	pert
DVD-R 4.7GB (UDF)	✓ Makes file size 49.00	🔹 % of disk capa	acity.
OMB 500MB 1000MB 1500MB ;	2000MB 2500MB 3000MB 350	00MB 4000MB 4500M	мв
Enable this Wizard at start up	< <u>B</u> ack	<u>N</u> ext >	Cancel

With TMPGEnc open, close the wizard if you have it open. Load the video file under "video source". If you will use a different audio source as explained in the TMPGEnc Plus guide such as a .wav file, load that under "audio source".

🐩 TMPGEnc	Plu	;	
<u>File Option H</u>	<u>H</u> elp		
Start	1	Progress	
<u></u>		Whole: 0%	0/0
Stop		Elapsed time: 00:00:00 Source positio Remaining time: 00:00:00	on: 00:00:00
			Stream type
⊻ideo source	B:	C:\Program Files	Browse C ES (Video only)
<u>A</u> udio source	B:	C:\Program Files	Browse C ES (Video+Audio)
Output file na	ame:	C:\Program Files	Browse System (Video only) System (Video+Audio)
MPEG-2 640x3	352	Ofps CBR 7000kbps, Layer-2 48000Hz 192kbps	Setting Load Save

Click the **"load"** button. Here under TMPGEnc's folder, look under **"template"** and select"**DVD** (PAL).mcf". Click **"open"**. Click **"load"** again, go into the folder **"extra"** and select **"unlock.mcf"**, click **"open"**.

Open					? 🔀
Look <u>i</u> n: 🛅	Template	<u> </u>	• 🗢 🖻) 📥 🛙	
Extra DVD (NTSC DVD (PAL). SuperVideo SuperVideo).mcf mcf ICD (NTSC).mcf ICD (NTSCFilm).mcf ICD (PAL).mcf	IdeoCD (NTSC VideoCD (NTSC VideoCD (PAL)	C).mcf CFilm).mcf).mcf		
File <u>n</u> ame:	DVD (PAL).mcf			\bigcirc	<u>O</u> pen
Files of type:	MPEG setting temp	plate(*.mcf)	•		Cancel

Open		? 🛛
Look in 🙋	Extra	- 🖬 🏪 -
New Folder Unlock.mcf VideoCD 12 VideoCD 12	r 246kbps (NTSC).mcf 246kbps (NTSCFilm).mcf 246kbps (PAL).mcf	
File <u>n</u> ame:	unlock.mcf	<u>Open</u>
Files of <u>type</u> :	MPEG setting template(*.mcf)	▼ Cancel

Click **"setting"** from TMPGEnc's main window. From the **"video"** tab, under **"Rate control mode"** select **CBR** and enter the value you recorded from STEP 1 under **"bitrate"**. Under **"size"**, correct from 720x576, to 720x480. Under **"motion search precision"** set to **"fast"**.

MPEG Setting		×
Video Advanced GOP struc	cture Quantize matrix Audio System	
Video stream setting		
Stream <u>t</u> ype:	MPEG-2 Video	
Size:	720 🜩 x 480 🜩 pixels	
Aspect ratio:	4:3 Display	
<u>F</u> rame rate:	25 fps Setting	
Rate control mode:	Constant bitrate (CBR)	
Bitrate:	5270 S kbits/sec	
<u>V</u> BV buffer size:	224 🗲 KB	
 Profile & Level:	Main Profile & Main Level (MP@ML) 🔹	
Vid <u>e</u> o format:	PAL	
E <u>n</u> code mode:	Interlace	
YUV format:	4:2:0	
<u>D</u> C component precision:	9 bits 💌	
Motion search precision:	Motion estimate search (fast) 💌	
	OK Cancel	

Click the **"advanced"** tab, and under **"video arrange method"** select **"full screen (keep aspect ratio 2)".** Click ok. Click Start at the top left corner of TMPGEnc's main window and start to encode. When complete, playback the .mpg file you made and see if it looks good and most important; the audio is in proper sync. If so move to the next step.

MPEG Setting	X
MPEG Setting Video Advanced GOP structure Video source setting Video source type: Non Eield order: Top Source aspect ratio: 1:1 Video arrange Method: Full Cent Cent Cent Cent	Quantize matrix Audio System interlace (progressive) • field first (field A) • VGA) • vGa) • creen (keep aspect ratio 2) • er er (keep aspect ratio) er (custom size) creen
Sources range Convert Inverse telecine (Convert Full Ghost reduction No is Sharpen edge Simple color correction Custom color correction Deinterlace (None) Clip frame 3:2 pulldown Do not frame rate conversion	ay filter setting window.
	OK Cancel

Here we need to split the .mpg file we made into separate streams. From TMPGEnc's main window, go to **FILE>MPEG Tools.** Select **"Simple De-Multiplex".** Click **"browse"** and load the .mpg file TMPGEnc created earlier. Click **"Run".** This will create a .mp2 file (the audio) and a .m2v file (the video).

MPEG Tools	\mathbf{X}
Simple Multiplex Simple De-multiplex Multiplex De-multiplex Merge & Cut	
Input: C:\Program Files Columbo - Death lends Browse	기
Video output: C:\Program Files	
Audio output: C:\Program Files	
	1
Run Close	

Open DGPulldown, click **"browse"** and find the .m2v file TMPGEnc made from the De-Multiplex step. Select **"25--> 29.97"**. Click **"convert"**. Now DGPulldown will make it's own .m2v file.

🖉 DGPulldown 1.0.3	3, by Donald A. Graft and Jetlag 🛛 🛛 🔀
Source ES C:\Program	Files ative Region Columbo - Death Lends a Hand (1971).m2v.pulld
C No change	Set timecodes Vrite timecode to text file
○ 23.976> 29.97	☑ Set drop frames (requires Set timecodes to be checked)
○ 24> 29.97	Set start time (HH:MM:SS FF)
	No output
C Custom:	> Valid MPEG2 output rates are: 23.976, 24, 25, 29.97, 30, 50, 59.94, and 60.
<u>C</u> onvert	

STEP 8

Refer to the TMPGEnc plus/Authoring guide (link above) and use the .m2v file created by DGPulldown as the video source and the .mp2 audio file created by TMPGEnc in the De-Multiplex step as the audio source to create the DVD structure files needed for burning. That's it. If the ORIGINAL encoded file from TMPGEnc has good audio sync, the final product will be 100%--Guaranteed. I hope this guide serves you, and serves you well.

Please post questions/comments in the authoring & editing forum.