

# **PAL to NTSC with TMPGEnc Plus and DGPulldown**

There are many different ways and tools to convert DVD from PAL to NTSC. The fastest method is to patch the PAL DVDs with IfoEdit so no need PAL to NTSC conversion. Unfortunately not all standalone DVD players can read these patched discs. Converting with AviSynth can yield great result by slowing down the framerate from 25 fps 23.976 fps and then using GoldWave to adjust the Time Warp to keep video and audio in sync. It is definitely a great program but also looks intimidating to someone who's never tried scripting before. Canopus ProCoder 2 is one of the best programs for converting PAL to NTSC. However, not so many people can afford its high price. Although the method I use below is not a perfect for this kind of conversion, it utilizes most of free or trial tools, simple to use, and lesser chance for the audio to go out of sync.

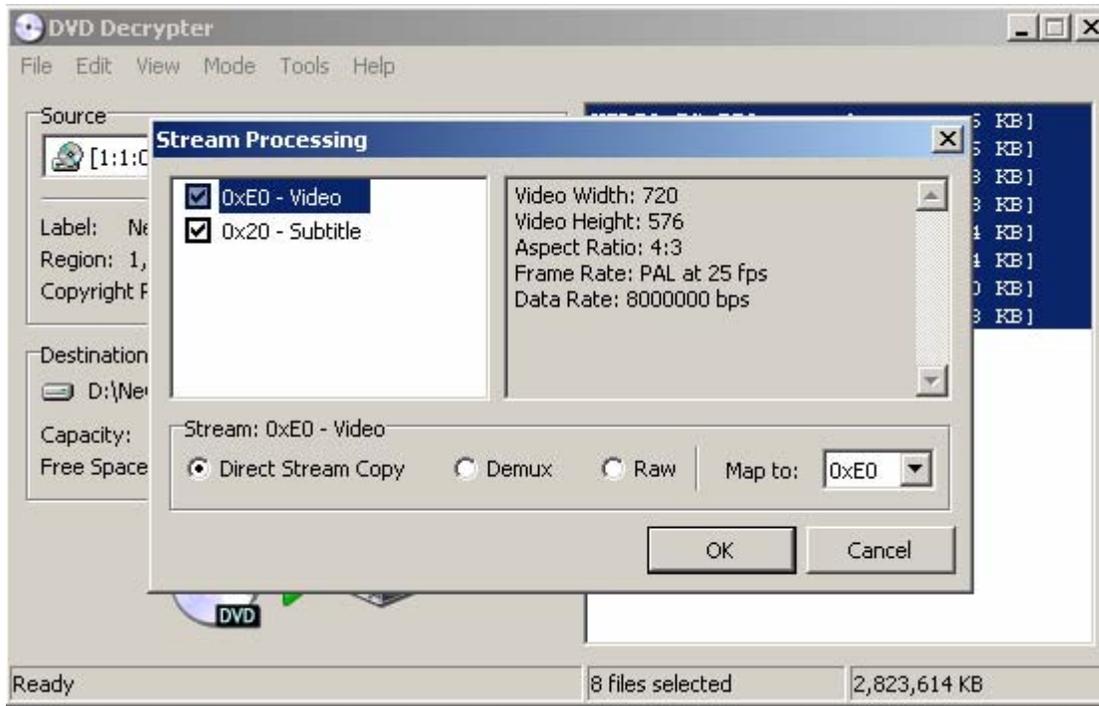
## **Tools needed:**

- DVD Decrypter or DVD (free)
- DGIndex (DGMPGDec) (free)
- TMPGEnc Plus (trial ware)
- DBPulldown (free)

## **Procedure:**

### **Ripping with DVD Decrypter**

In this procedure, I use DVD Decrypter to decrypt the PAL DVD to my hard drive in File mode. When ripping with DVD Decrypter, we can easily see the DVD format either PAL or NTSC by right-clicking the disc content and selecting the Stream Processing (That is the reason of common complaint about burnt DVD only plays with PC, not with standalone DVD player)

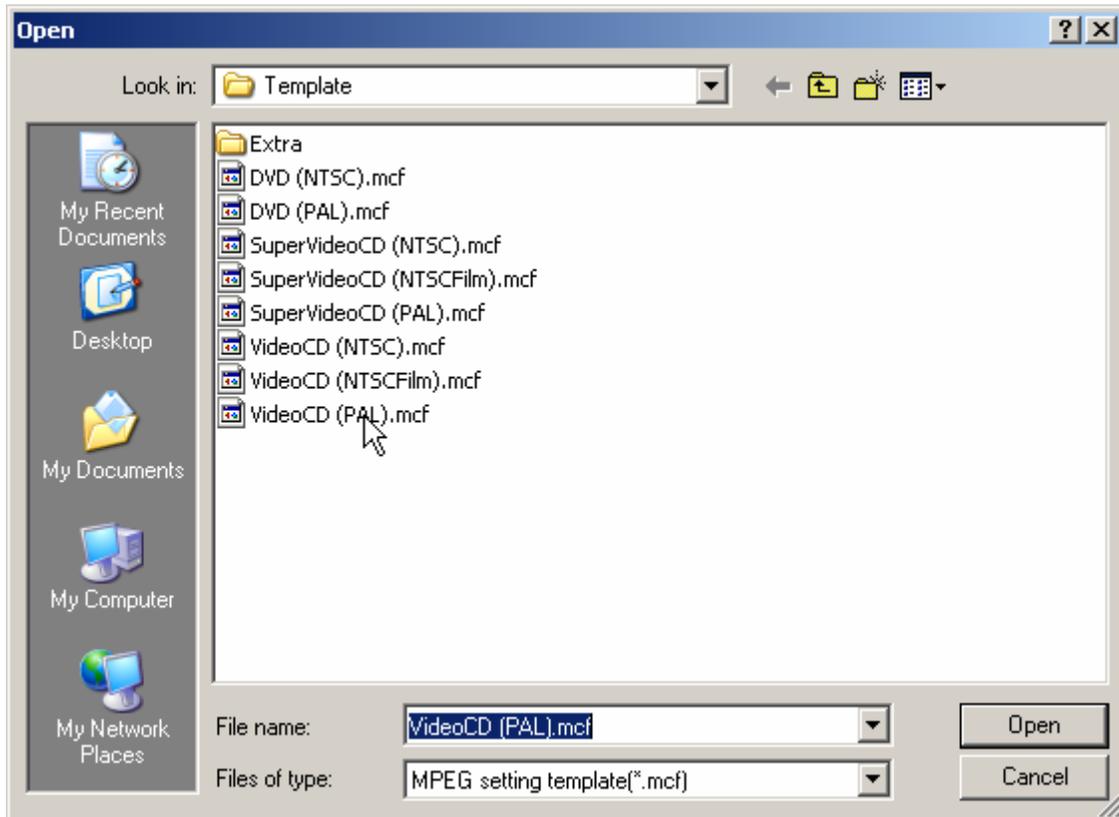


## Frameserving DVD with DGIndex

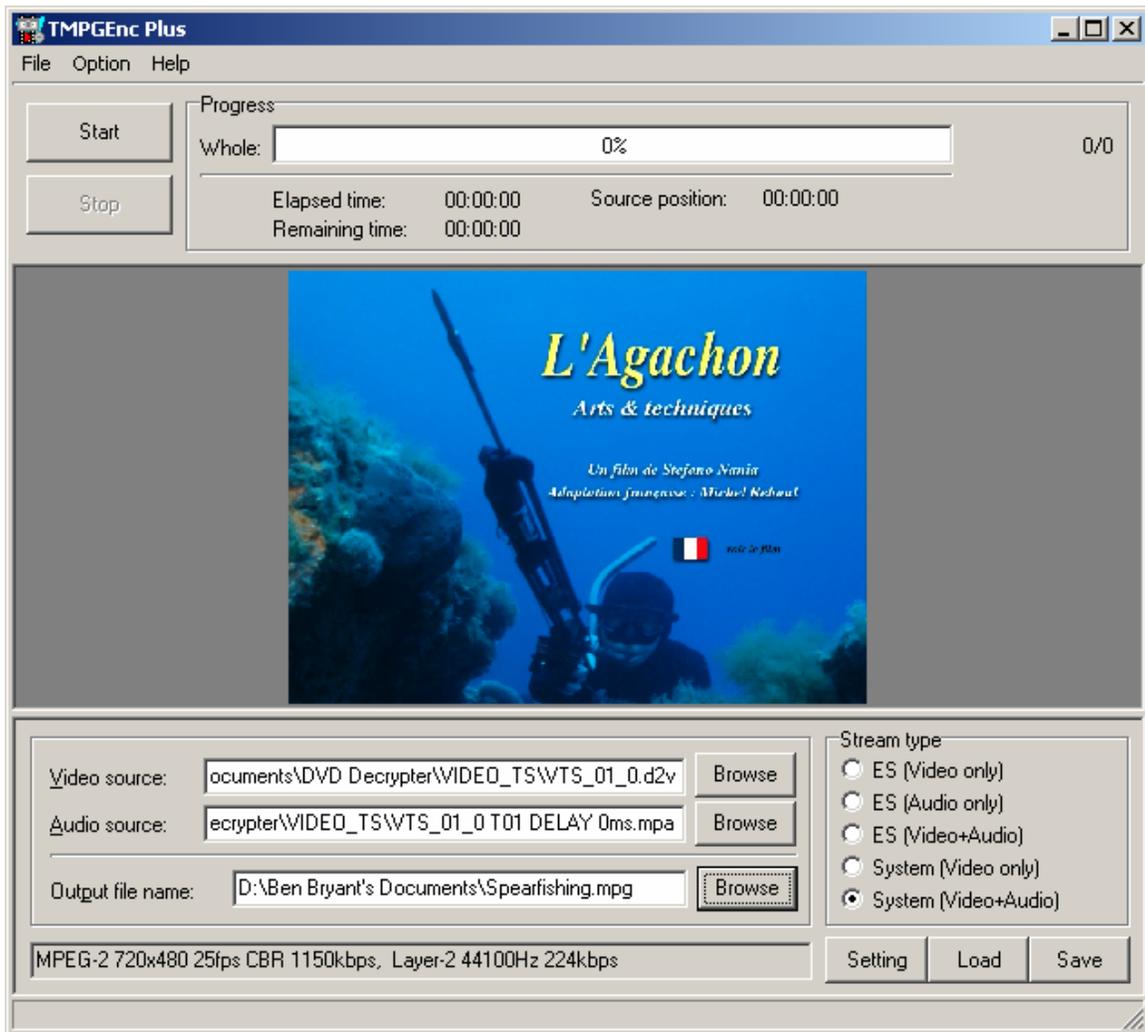
Start DGIndex, go to File and click Open. Browse to the VIDEO\_TS folder of the DVD backup, select and open all the available files in the File List, and then click OK to load the entire DVD in DGIndex. We can preview our DVD by pressing F5. Finally Go to File, select Save Project (F4) to create a new name and location for DGIndex Project Files (\*.d2v) for video and (.mpa) for audio

## Converting with TMPGEnc Plus

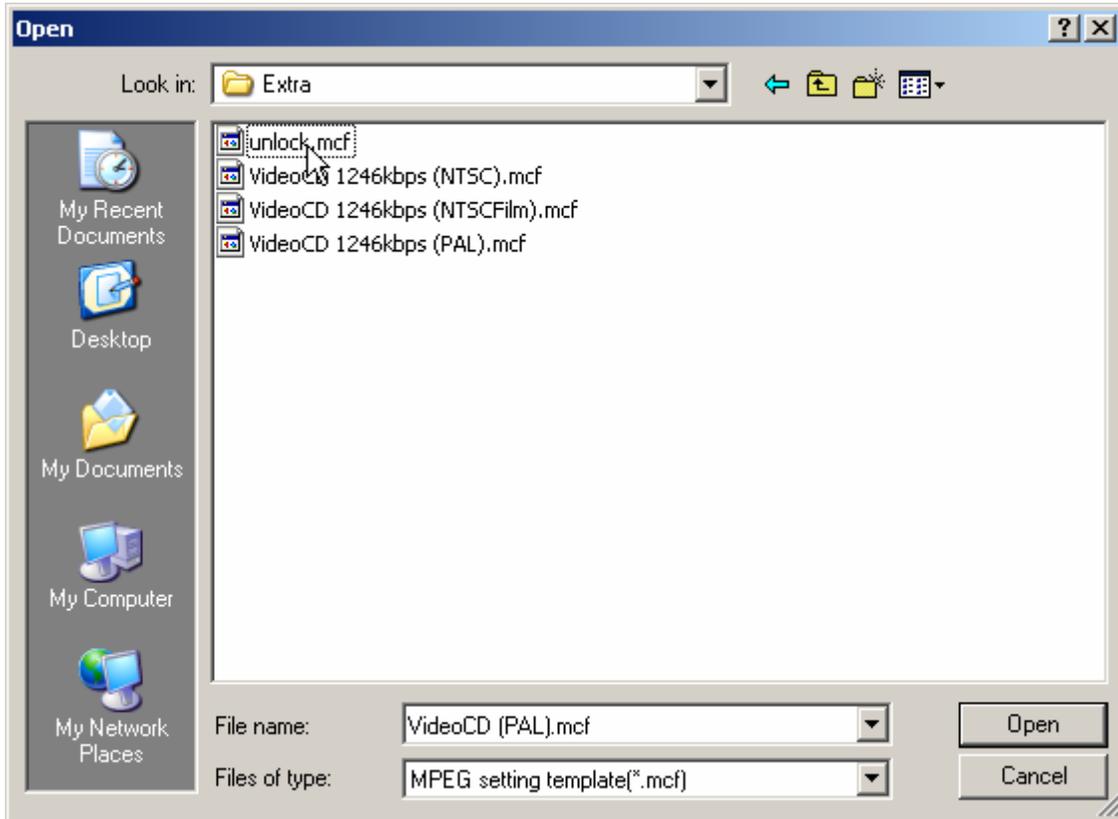
Start TMPGEnc Plus, close the Wizard, press Load to open the Template, and load the "DVD (PAL).mcf" template (This is the template of the original PAL file)



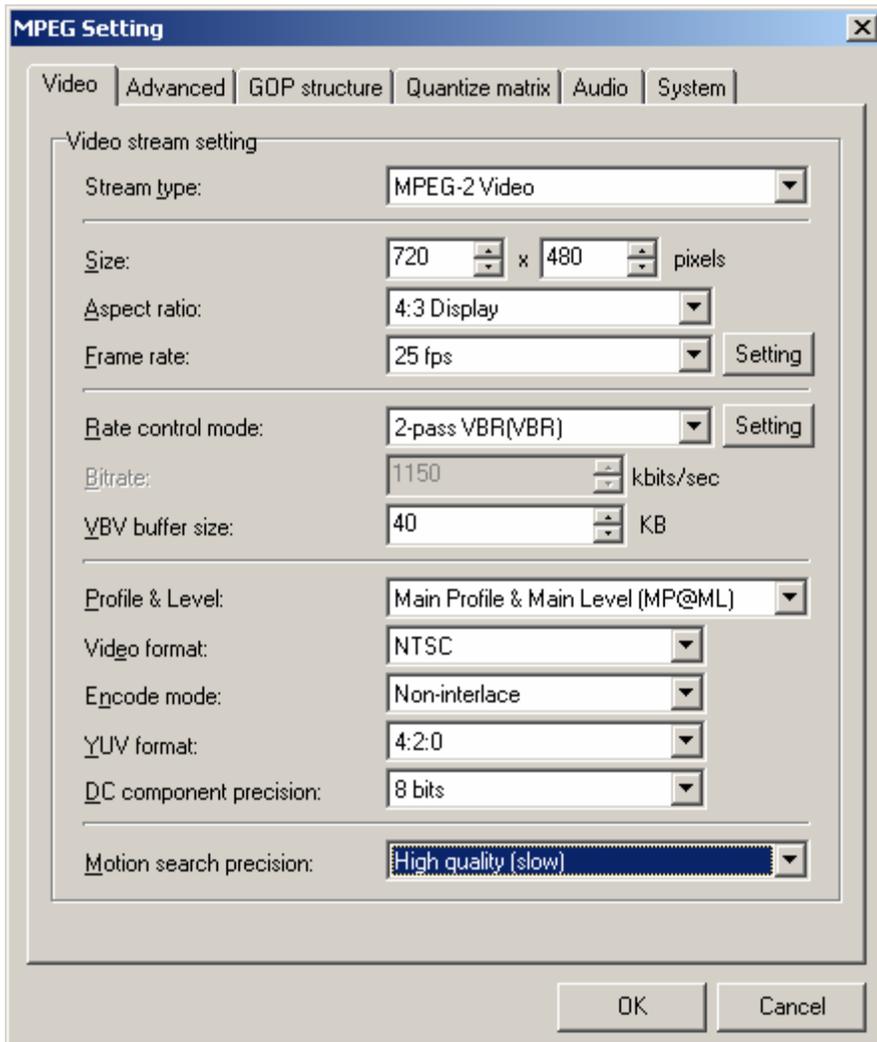
Click Browse buttons of the Video source to select the .d2v file and the Audio source for .mpa file. Then choose a name and location for the Output file name



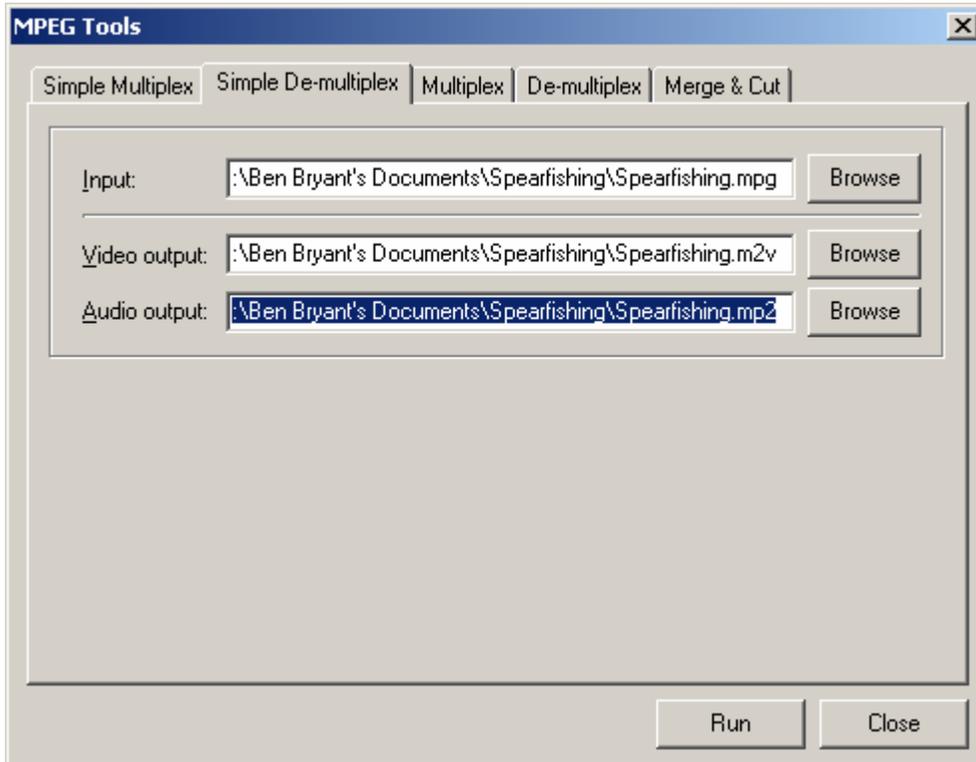
If we go to the Setting right now, we will notice that most of the settings on the Video tab become grayed out. Therefore, we have to click Load button again, open the Extra folder, and load the "unlock.mcf" template by selecting it and click Open



Now, press the Setting button, on the Video tab change the video resolution from PAL to NTSC (For example: changing from 720x576 to 720x480). Change the Encode mode from "Interlace" to "Progressive" (Non-interlace). Don't change the Framerate. Just keep it at 25 fps. Click Start to begin encoding

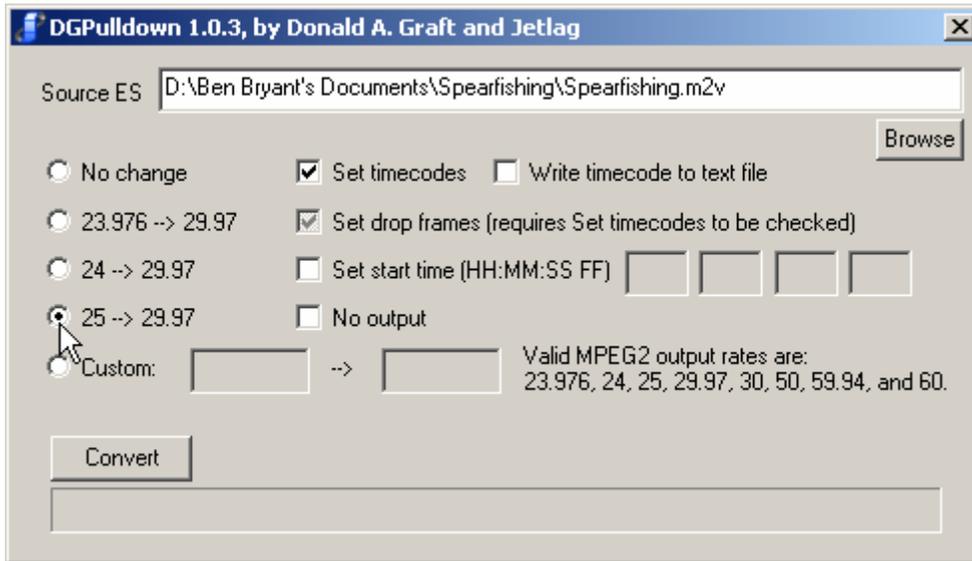


After encoding the file, go to TMPGEnc Plus→File→Mpeg Tools→Simple De-multiplex, load the mpg, and demux it into the .m2v and .mp2 files **(This step is necessarily needed to have a lesser chance of the audio going out of sync.)**



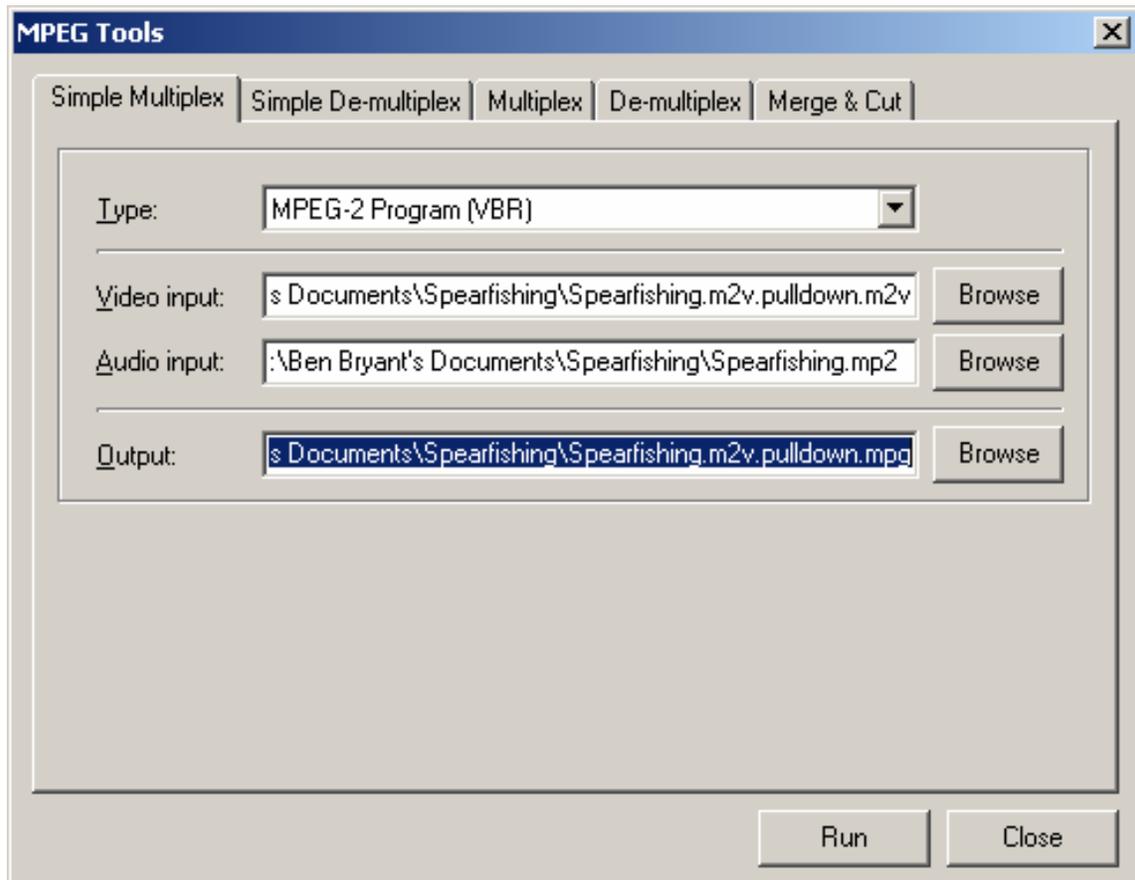
## Applying 3:2 pulldown

Open DGPulldown, click Browse to load the m2v file, choose the desired framerate from 25 fps to 29.97 fps, and click Convert button



The DGPulldown is useful for applying traditional 3:2 pulldown which takes a progressive MPEG-2 video elementary stream and applies pulldown flags to change it to a higher legal MPEG-2 output framerate. It also allows changing/correction of timecodes

After the DGPullDown conversion is done, the m2v and mp2 can be remuxed by using TMPGEnc Plus→File→Mpeg Tools→Simple Multiplex to be authored with any DVD author programs or opening them directly to the TMPGEnc DVD Author for DVD authoring



I do my best to organize this thread in hope to be able to share my little contribution of a member to this great forum

