

## 1) Recovering Original Video/Audio/Chapters/Subtitles

### 1.1) Software Required

**makeMKV**. This will recover all to an MKV file. Just select the largest file or folder for the main programme. Save as programname.mkv.

**mediainfo**. This allows the chapters to be listed in text format. Open MKV file, View as Text, Copy Chapter List. Paste to new text file for use later.

### 1.2) Method & Settings

As above just save the largest file as an MKV (Blu-Ray and DVD) and read off the chapters from both for use later for the new Blu-Ray and DVD.

## 2) Translating Subtitles

### 2.1) Software Required

**SubtitleEdit**. This can scan graphics subtitles using OCR and convert to text. Download and install any languages needed. (Can be done automatically.)

Save result as an SRT file. NOTE: This will not have colours. These must be added manually using html <font> codes. The end </font> is not needed.

### 2.2) Method & Settings

The resulting SRT file can be translated using SubtitleEdit but I use Google translate on the SRT file as a document. Maybe just change its file type/extension to TXT or use Word to convert to .DOCX as Google won't accept SRT.

Now you will have work to do as Google is far too literal and takes no account of context. What I do is to make a WORD document with 2 columns.

Paste the original into the right-hand column and the new language into the left-hand column. Then with the addition of line spacings you can align the text down the two columns and finally compare and tweak! For better word alternatives use <https://www.collinsdictionary.com/translator> on phrases.

Copy your end result back to a new SRT file. This should be normal plain text. Any accents must be re-inserted using the Numeric Keypad method.

## 3) Authoring New Blu-ray

### 3.1) Software Required. As above plus:

**multiAVCHD**. (multiAVCHD\_4.1.exe). This does an excellent job on a Blu-ray. (Ignore if it asks for Haal/MediaSplitter as this is not usually needed.)

**K-Lite Codec Pack 1845 Basic**. (Or Later Version) This is required for the media player to work and allow chapter thumbnails to be recovered.

### 3.2) Method & Settings. NOTE: For Repeats Just Use Existing mpf and ini files but Remember Item in BOLD Below.

Open Blu-Ray SRT subtitle file in SubtitleEdit. Use "Synchronisation", "Change frame rate". Convert from 23.976 to 24Hz. Save as Name\_23.976\_24.srt

This is to get around a bug in multiAVCHD where it gets the film speed wrong and converts the subtitles to match! So, you just do the inverse first!

Now open multiAVCHD. Ideally load in a suitable existing \*.mpf. At Settings open the matching \*.ini if available. These may not find your video MKV file or any other associated files but will set all other parameters except the "menu/extended" setting "Do not show duration (SLI/CAR)" which the author forgot to read back from the mpf & ini files! If you leave this unchecked you will get a large programme length time across the programme thumbnail!

Obvious in the Menu Previews! You have to redo this setting every time you re-open the software or load any new Project.

Then use "Add Video Files" to add the MKV. If you used existing mpf and ini files lots of the items below will already be set.

Now either Click on the MKV file or Select "properties". Then:

A) Click on and Change Programme Name (It gives file name by default!)

B) Click on and Add Poster Image

C) Go down to where it shows the "Audio".

Select "Subtitles" and click to "Remove" any original ones that exist.

Select "External subtitles" and add your new SRT file. Change language from "und" to "eng" etc and click "Change".

Select "Chapters". The last used file will have been imported (see Top Right). NOTE: Any Thumbnail set identical to Chapter Start time will be wrong!

Click "remove", "browse" and select a chapter file. Click "load". Agree to change all! DO NOT CLICK AUTO – this gives 12 equally spaced chapters!

To Check/Adjust any click Top Right on each Chapter. (Find best frame with F>> & <<F video controls. Click "Chapter thumbnail" to select new value.)

Now "export" this chapter file. If ANY thumbnail matches chapter start time add 1ms in the file. All Thumbnails will read back in correctly next time!

Click OK. Then at main page "Save Project" with your own Blu-Ray project name. (Thumbnail times are shown in Highlighted Entry below "Chapters")

Now the Detailed Author/Menu Setup:

Choose "Author". Select "create top menu" and "Slide Menu" and "PAL" (Latter probably ignored as it takes this from the files).

De-Select "Add pop-up menu" & "Add title list menu" unless required.

Change "transcode media" to just over your disc size if needed. (50000 for BD-DL). As below these are automatically saved as your new defaults.

Select "Force AR flag to 16:9" and "Force H.264 level flag to 4.1". These are NOT saved in the mpf file but stay as your new defaults or in .ini file!

Ignore Chapters Settings here as you have already set that for the Media.

Choose "Menu". Clear "Headline" if you have this on your background and Clear "Footer". These will stay as your new defaults but also in .ini file.

Select Font Type "Verdana" (probably the default). Size 80. Offset 660/100 etc. Change "Color" to brightest green (00FF00). Outline to Black.

On the Bottom menu "General"

Select "Create audio/subtitle setup pages" if required.

Select "Background image" and add a 1920\*1080 file "MenuBackground.bmp" (Drop Down Option allows bmp files). Set "Transparency" to Zero.

Set "Main menu IG color" & "Sub-menu IG color" to Pale Yellow & Pale Cyan. Opacity 100% (Yellow was 85%). These will stay as your new defaults!

You can click on "Menu" to preview at this time. (Leave "Chapter Menu Transparency" and "Setup Menu Transparency" at the 10% default values.)

Clear Smart Line!! De-Select "show build and time in footer".

On the Bottom menu "Button"

Select "Labels" and Tick "Apply button position settings". Then move them to suit using Menu Preview to check. Current settings are:

Play: 450/900, Setup: 850/900, Chapters: 1250/900, Title List: 1250/900 (Unused so "hide" selected. All others visible).

Select "Navigation" and choose – fairly easy. I chose Left/Right for all three and Up/Down for Play/Setup. Will be saved in your .mpf and .ini files.

**On the Bottom menu "Extended" Tick "No Reflections SLI/CAR" & "Do not show duration (SLI/CAR)" to clear programme time display!**

You can click on "Menu", "Chapter Menu" and "Setup Menu" to preview all three menus at this time.

Lastly the Subtitles and Audio Setup:

Font Family "Arial" as this allows "Arial Narrow" for the DVD as discussed later. Otherwise, Arial is very similar to the standard Trebuchet font.

Offset 45, Border 2, Size 45.

Colour Default is too Dark Grey so click and select "Custom Colours" Select R=B=G of 231. Click OK. Select any effect required (I normally use none).

Select "Force display of first subtitle track". This is best if the subtitle language is different from the spoken language as they will always be needed.

Settings Menu:

Just Select a suitable Temporary Folder. This could be anywhere. I use c:\multiAVCHD\\_TEMP\ but anywhere will do.

Now Save Settings (Blu-Ray). Many critical ones but NOT ALL will be saved with the Save Project file. Always save both.

**FINALLY**

Set Destination Path. Save Project. Click "START" and Select "Blu-Ray Disc".

#### 4) Authoring New DVD

##### 4.1) Software Required. As above plus:

**DVDStyler.** This creates DVDs as well as multiAVCHD does Blu-Rays. Sadly, multiAVCHD has lots of issues with DVDs but is used to help here.

**SubtitleEdit.** Used this time just to convert any Blu-Ray subtitles from 24Hz to 25Hz Frame Rate unless you already have 25Hz DVD subtitles.

**PgcEdit.** This is essential to be able to force DVD subtitles ON, as DVDStyler doesn't do that if used as below for full multi-coloured subtitles.

**mkvtoolnix.** This is used here to remove any original subtitles. It is very likely that this could also be done in multiAVCHD as for the Blu-Ray.

But I chose to do it this way when trying other systems and stuck with it. Because the MKV file is much smaller it is easy and quick to do.

**DVDSubEdit.** This is Optional. It allows you to scan through a video file quickly subtitle by subtitle to scan for (& correct) any colour issues.

##### 4.2) Method & Settings. First multiAVCHD. NOTE: For Repeats Just Use Existing mpf and ini files.

Open the DVD source file with mkvtoolnix. De-select the subtitles and save the rest as prognameDVDnoSubs.MKV.

Open Blu-Ray SRT subtitle file in SubtitleEdit. Use "Synchronisation", "Change frame rate". Convert from 24 to 25Hz. Save as Name\_25Hz.srt

Open this file in Notepad or similar. Replace ALL ff00ff with ff80ff and ff0000 with ff8080. Then Save as Name\_25Hz\_DeSat.srt

This is to dodge another multiAVCHD fault where it can assign the wrong palette colour on DVDs.

Run multiAVCHD and load your Blu-Ray mpf and ini files. Then do as below (Unless you already have suitable mpf and ini files, then just check/adjust):

Use "clear" to Delete the Blu-Ray source MKV. Replace it with your DVDnoSubs one, using "Add Video Files".

Now either Click on the MKV file or Select "properties". Then:

A) Click on and Change Programme Name (It gives file name by default!). Won't be used so Not Important.

B) Click on and Add Poster Image. Won't be used so Not Important.

C) Go down to where it shows the "Audio".

Select "Subtitles" and click "Remove". Not needed if you use the NoSubs source file.

Select "External subtitles" and add your new SRT file (25Hz Version just made for DVD). Change language from "und" to "eng" etc and click "Change".

Select "Chapters". The original ones should have been imported (see top right) but you can add your own from your file with times adjusted for 25Hz.

Click "remove", "browse" and select a chapter file. Click "load". Agree to change all! DO NOT CLICK AUTO – this gives 12 equally spaced chapters!

Click OK. Then at main page "Save Project" with your own DVD project name. (Chapter times are probably irrelevant as these are reset in DVDStyler!)

##### Now the Detailed Author Setup (Menu Setup not used as Top Menu disabled and none used anyway):

Choose "Author". De-Select "create top menu" and "Slide Menu" and "PAL" (Latter probably ignored as it takes this from the files).

The reason for doing this is that multiAVCHD always produces a messy movie menu and fails to do what you ask!

Change "transcode media" to just over your disc size if needed. (9000 for DVD-DL). As below these are automatically saved as your new defaults.

Ignore Chapters Settings here as you have already set that for the Media.

##### Lastly the Subtitles and Audio Setup:

Font Family "Arial Narrow" as this is essential for the DVD because multiAVCHD gets the aspect ratio wrong and stretches the subtitles!

Offset 80, Border 3, Size 60.

Leave Colour as set for the Blu-Ray (R=B=G of 231). Select any effect you want (I use none).

Select "Force display of first subtitle track" if not already set.

##### Settings Menu:

Just Select a suitable Temporary Folder. This could be anywhere. I use c:\multiAVCHD\\_TEMP\ but anywhere will do.

Now Save Settings (for DVD). Many critical ones but NOT ALL will be saved with the Save Project file. Always save both.

Use a different name as these are not the same as the Blu-Ray now.

##### FINALLY"

At Main Menu Select "Transcode": Bottom Right-Hand Corner: Select "Create SD-DVD title" from drop-down menu. Click "Apply".

Set Destination Path. Save Project. Click "START" and Select "SD-DVD". NOTE: multiAVCHD will say it is re-coding. This is NOT True!

You now will have a playable DVD with colour subtitles but with no menu. The subtitles should also play by default but not on VLC!

##### 4.3) Method & Settings. Next DVDStyler. NOTE: For Repeats Just Use Existing dvds file.

Now open DVDStyler. Ideally load in your standard existing dvds file. This may not find your DVD video files etc but will set all the other parameters.

My standard file uses a simple text "Play" button. (Arial Bold 26, "Normal" & "Highlighted" Green, "Selected" Red, No Background, X=328, Y=310).

You now need to find all required files again! Right Click on the screen and Select "Properties".

Click on 3 dots to right side of "Background". Find a suitable bmp file, maybe one chosen to match a Blu-Ray if done. Click OK but do Nothing Else!

Right Click on "Title 1" and Select "Delete" unless your dvds file already has the correct one. Otherwise this needs replacing completely:

From DVDStyler Top Menu Select "DVD" and Select "Add" "Titles From a DVD". "Select Folder" on the multiAVCHD DVD folder just produced above.

Right Click on "Title 1" and Select "Properties".

Delete All Chapters. Paste in Chapters from your 25Hz file. Must be Time Codes separated by commas with no spaces!

Click on 3 dots to right side of "Palette". Select your standard .rgb file for example to match the Blu-Ray if you did one.

Click OK, and all the files are now restored.

Select "File" "Save As" to save your now correct project.

Select "File" "Burn DVD". You will need to choose a temporary directory and destination directory.

You will now have a fully working DVD matching the look of the Blu-Ray. However, subtitles will not be forced on VLC or on all players yet!

##### 4.4) Method & Settings. Finally, PgcEdit to Force Subtitles on All Players

Run "PgcEdit" and wait 15 seconds for the nag to timeout!! Click "Remind me later".

Open "DVD" using disc symbol Top Left.

Follow Instructions in "PgcEdit Turning Subtitles On by Default v2.0.pdf" OR Much Simpler Do The Following!

Copy this Text: "51 00 00 00 C1 00 00 00" to your clipboard (Highlight within the quotes then CTRL C or Right Click "Copy")

Highlight film VTST1 in Left Hand Column.

Highlight "Pre-Commands" in Right Hand Column. There are None currently.

Choose "Paste After" in PgcEdit Bottom List. You should now see "1 (SetSTN) Set Sub-picture stream = 1, on" below "Pre-Commands".

Select "File" and "Save DVD". Close PgcEdit.

You now have changed just 4 small files but this will Force Subtitles ON for VLC and All Players. You can delete the backup folder left if you wish.

#### 5) Disc Burning.

Use **ImgBurn**. Choose "Write files/folders to disc". Click Folder symbol. Find folder above BDMV or VIDEO\_TS. ImgBurn will do all settings needed.

To name the disc use the Tab marked "Labels". Put name or "VIDEO" in UDF line. For a DVD click to the right and it will copy it to the ISO9660 line.

#### The END.