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# Getting started

# with AVCHDCoder (11.05.07)

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# What does AVCHDCoder do?

AVCHDCoder is a free application that does two main jobs.

- Backup high-definition video files to a Blu-ray disc or to an ordinary DVD that will play in a Blu-ray player
- Blu-ray disc to another Blu-ray disc or to an ordinary DVD that will play in a Blu-ray player.

#### MKV, MP4, M2TS, MTS, TS, WMV or Blu-ray to AVCHD or Blu-ray

AVCHDCoder will convert a .mkv file, a .m2ts file, a .wmv file or a Blu-ray disc (or combine several files) into an ISO file that you can burn to an empty Blu-ray disc (if you have a Blu-ray burner), or to an ordinary DVD9 (8.5GB) or DVD5 (4.7GB) disc in high-definition AVCHD (Blu-ray) format. For .wmv files dBpoweramp is required (US \$24 from www.dbpoweramp.com).

There will often be little or no loss of quality, especially if you backup just the main movie with AC3 audio to a DVD9 (dual-layer) disc. You must have a drive that reads Blu-ray discs if you want to convert Blu-ray discs. If the Blu-ray disc you are backing up is copy-protected, you will need to use AnyDVD from www.slysoft.com (free for 21 days).

AVCHDCoder will create an ISO file that you can burn to a BD-R or DVD disc using ImgBurn (Included). You can only play the discs on a Blu-ray player, not on an ordinary DVD player. A 2-hour movie will take very approximately 3-24 hours to convert to an ISO file, depending on the speed of your computer.

This Getting Started manual will is written when adding a MKV file. After first use you will understand Blu-ray disc input as well.

# 1. Opening a movie file



Before we can convert a movie we need to add a movie file. You can open a movie file by clicking on "Open movie file"(1.) or drag a file to the Video Track section. Now continue with chapter 2.

If you want to open a Blu-ray disc use the BDMV-mode option and point to the BDMV directory of your blu-ray disc.

Note: If you want to enter a wmv file you need to do some extra steps. Download the installation guide for detailed instructions. In short:

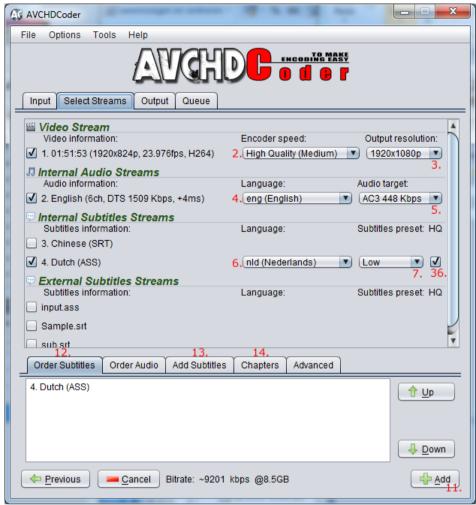
Download and install: <u>dBpoweramp Music Converter</u>

Download and install: Windows Media Audio 10 Pro codec

At the settings panel choose the location of CoreConverter.exe located in:

"Program Files\Illustrate\dBpoweramp"

# 2. Select Streams



Now we are ready to select the streams we want. To select a stream tick the selection box before the stream. Keep in mind you can only select 3 audio streams, 1 video stream and 0 to 32 subtitles streams.

#### **Video settings**

If you want to change your output resolution you can choose the destination resolution at 3. Don't worry, borders will be added automatically. AVCHDCoder will also let you choose between 2 predefined encoding settings (Third can be activated in the settings). You can leave it on Medium if you have a fast computer. You can change it at 2.

#### **Audio settings**

If you want to keep your original audio file you can select Untouched. If untouched is not available AC3 448 Kbps will be the default setting. You can choose this at 5. The language for your selected stream can be changed at 4. For most mkv files and some m2ts files the language will be set for you. It will be copied from your source file. It is not necessary to choose a language but it looks nicer on your player.

#### **Subtitles settings**

For the first time it can look strange. What is a Subtitles Preset? AVCHDCoder works with a preset of settings. The idea is that you can assign those settings to a specific stream. (7.) There are 3 presets to choose from. Low will place the subtitles on the bottom of your screen. High will place it inside your anamorphic visible screen. (mostly 1920x816). You can select another preset for each stream. For more information about Presets see Chapter 4. Notice: PGS sup files have no preset and will be scaled to your destination resolution.(This applies to Blu-ray discs and M2TS files with internal subtitles) AVCHDCoder now comes with a High Quality subtitles converter. But this is much slower as normal quality subtitle conversion. You can use the High Quality feature by selecting 36. For optimal speed see <u>chapter 5.4</u>. I advise you not convert to many subtitles at High Quality. I would say only as much as the number of native cores of your processor. (Default is 2).

# **Order subtitles/audio**

	12. er Subtitles	Order Audio	13. Add Subtitles	14. Chapters	Advanced	
4. Du	itch (ASS)	10.				1 Up 8.
						↓ <u>D</u> own9
( <b>P</b>	revious	<u> </u>	Bitrate: ~9201 k	bps @8.5GE	3	 <u>A</u> dd1.

Let's have a closer look. Each selected subtitles stream will be visible at 10. You can change the order of the subtitles. Just click on a stream and use the Up and Down buttons to move it. The order will be the same as on you blu-ray player. At exactly the same way you can change the order of audio streams.

#### Add subtitles

12. Order Subtitles Order Audio	13. 14. Idd Subtitles Chapters Advanced			
External	Internal			
<u>₽</u> rowse for subtitles.15.	3. Chinese (SRT)	16. 🔻		
	Add internal subtitles	17.		
← Previous — Cancel Bitrate: ~9201 kbps @8.5GB				

There are 2 ways to add more subtitles. Add External Subtitles by clicking on Browse at 15. or dragging them into AVCHDCoder. They will show up at the selection panel and at 12. If you want to add an internal subtitles stream more than once you can do that by clicking on 17. after you selected the stream at 16. This feature can be used if you want the same subtitles with different presets.

#### **Chapter settings**

	12.		13.	14			
	Order Subtitles	Order Audio	Add Subtitles	Chapters	Advanced		
					01:25:00.00	00	<b>A</b>
í I					01:30:00.00	-	
					01:35:00.00	-	
					01:40:00.00	-	
					01:45:00.00		
	Validate19. Re	set Chapters 1	8.		01:50:00.00	-	
í I	<u></u>		)		01:52:00.42	20	V
	← <u>P</u> revious	<u> </u>	Bitrate: ~9201 k	bps @8.5GE	1		<u> </u>

The chapters will be copied from the source if they are found. If they are not found a custom chapter list will be created. You can enter custom chapters at 20. if you want to. Click on 18. if you want to get the original chapters list back.

#### **Bitrate indication**

Order Subtitles Order Audio Add Subtitles Chapters	Advanced
Validate19. Reset Chapters 18.	01:25:00.000 01:30:00.000 01:35:00.000 01:40:00.000 01:45:00.000 01:45:00.000 01:50:00.000
<u>e</u> revious	01:52:00.420

The bitrate indication is a nice feature that is very useful. Based on your selections the bitrate will change. The higher the bitrate the better the result will be. This will not be the final bitrate but it is an indication. At the next chapter you will find how it works.

Now I told you the basic settings and you are ready to add this item to a disc. Just click on the Add button. (11.)

# 3. Output

AC AVCHDCoder				
File Options Tools Help				
Output size	Disc			
USB (4.0GB)	Number of items on disc: 1 / 3221.			
<ul> <li>DVD-R DL (8.5GB)</li> <li>BD-25 (25GB)</li> <li>BD-50 (50GB)</li> </ul>	Title:     Test     22.       ✓     Force subtitles track #131.       Add menu and intro 32.     ▼     Edit 34.			
○ Custom 8.000 🗭 MB	Output settings			
1MB = 1.000.000 bytes Split will not be applied!!	○ Folder ● ISO 24. Auto select 26.           Save .iso file as         25.			
23.				
	27 V Delete temp folder after conversion			
	Bitrate			
Average bitrate: ~9201 Kbp Quality 🚛 Very High 0 Mbps	28. Minimum recommended bitrate: 4500 Kbps			
<u>R</u> emove last item	29. 30. Add Item			

#### **Bitrate/Quality**

This is a very important part. To maximize the video quality it is recommended to have a bitrate above 5000 Kbps. You can find the expected bitrate at 28. If the bitrate is below 5000 you can select a bigger disc size at 23. to higher the bitrate. The higher the bitrate the higher the quality. Choosing a bigger disc size isn't the only solution to get a higher bitrate. Converting DTS streams to AC3 will also help to get a higher bitrate.

#### **More items**

To add more items to the disc click 29. and the process will start over again. Start with chapter one to add an item. Keep in mind that the more items you add the lower the bitrate will be. Notice: Each item will get a percentage of the total available space. It's is based on time. Example: 1 item of 60 minutes and 1 item of 30 minutes. The disc space for each item will be 66 and 33%. Audio sizes will not influence this. To get the best bitrate for each item make sure you use the same audio settings for each item.

#### **Disc settings**

At 22. you have to enter your disc name. This will also be the disc volume label. It will also be used for the temp directory and the Queue name. At 31. you can choose if you want to force subtitles track number 1. The subtitles will be visible without turning them on with your remote control. At 32. you can choose if you want to add a menu and intro. You can also choose for "no menu and no intro".

No menu and no intro: All items that are added to the disc will be played 1 by 1. Add menu and intro: A menu will be created however it is not possible to edit the menu. The items you can select in the menu will have no name. Only a number. If you can't live with that choose No menu or use other software to make a custom menu. But the intro can be edited. If you don't customize it a default intro video will be added.

#### **Custom Intro (Optional)**

Click on Edit (34.) to open up the intro editor screen and then click on Custom intro (102.).

Intro Intr	o - Audio Menu	
<ul> <li>Default in</li> </ul>	tro Ocustom intro Ocustom intro + playlist	
Background:	● No ◯ Local 📂 ◯ Internet 🛛 🛊 / 0	🔍 Search Movie
Cover:	● No ◯ Local 📂 ◯ Internet 🛛 🚔 / 0	Preview
Title:	%i_title%	berne Refresh
Row 1	Genre: %i_genre%	TMDb Title
Row 2	Runtime: %runtime_1% mins	%i_title%
Row 3	Year: %i_year%	
Row 4	tools.twanwintjes.nl	Close



Now you are ready to edit the intro movie. You can add your own background and cover. A cover will be visible at 118. The background image will be visible at 117. Just click on the browse button (112. and 104.) to open up a png or jpeg picture. At 105. You can enter the title. %title% will copy the name that you entered in the Disc settings (22.) but you can also change it to something else or even fill it in dynamically but this will be explained later. At 106. You can enter your custom text. In total there are 5 rows you can customize. Row 1 - 4 and the title. This will be visible at 119. You will see AVCHDCoder in the background. This image will be replaced with a intro movie when the conversion starts.

The preview button (109.) will open up an image with a preview. For now it is an image but in the future this will be a motion sample. But for now you are be able to see if you like the result. Now I will explain you how to use movie information from the internet. This way you don't need to enter this information by hand. Click on Search Movie (108.) to open up this feature.

#### Now you see this:

1	G Search Movie	-PEA 8		×
		themoviedb.org		
	Title	Alternative Title	Date	Rating
	1	32.		
	Example: Awake or use a wildca	d: Awa* 130. Search tt 08927	'69 IMDb :	Search
		Movie information		
	Country Genre Duration Overview			
		Use select	ed movie	Cancel

You can search for a movie by entering (a part of) a title at 130. Then click on the Search button (131.) to get the search results. All found results will appear at 132. For example search for Shrek:

	th	emoviedb.org			
Title		Alternative Title	Date	Rating	
Shrek		Shrek 1	2001-04-22	8.2	
Shrek the Third		Shrek 3	2007-05-18	7.0	
Shrek The Halls			2007-11-28	7.0	
Shrek Forever After		Shrek 4	2010-05-21	7.6	1
Shrek 2	132.	Shrek 2 - Der tollkühne Held kehrt z	2004-05-15	7.2	Y
Shark!	102.		1969-10-08	3.4	Ш
Chrigu				9.0	E
Shrek 4-D		Shrek's Never Before Seen Adventu	2003-01-01	0.0	Ш
Shrek In The Swamp Kara	oke Dan		2001-01-01	0.0	
Sharky's Machine			1981-12-18	0.0	T
Steel Sharks			1996-01-01	6.0	v
Shrek		130. Search tt 0892	2769 IMI	Db Searc	h

After clicking on a result the movie information will be downloaded:



At 135. you will find some details about this movie. And at 136. you will see an image of the movie. If you think you found the correct movie click on 133. Now we are back at our intro editor. You may notice that 2 extra items are available to use: you can also use a background image and a cover from the internet. This is an example:



The movie information is now visible in the preview window (119.). If you click on 120. and 121. you are be able to use an image from the internet. You can browse through the available images. It is also possible to use other information of the movie in this intro. Click on 110. and you will see all available options. Choose one from the list and the tag will appear at 111. You can enter this tag in one of the 5 editable rows. (106.)

# **Custom intro + playlist (Optional)**

If you click on 103. You will notice this in the upper left corner:

AG I	ntro Editor
	1, Test 3 MKV H264 DTS SRT ASS

By default the name of your source file will be visible. You can edit these names at 37. Close this screen(107.) and the click on Playlist (35.). You will now see this:

AC Playlist	editor	×
Test 3 M	KV H264 DTS SRT ASS	1 Move Up
Source:	34 DTS SRT ASS (D:\Samples\Test 3 MKV H264	DTS SRT ASS.mkv)
Item title: Close	)	ОК

Just enter a Item title and hit OK. Close the screen and open the editor. You will now see the name you just entered.

#### **Output settings**

You can choose between 2 output settings (24.). To make it burn ready choose .iso. After conversion you can easily burn the iso to a disc. It is also possible to write a folder to your disc without making the iso. At 25. you can choose a save location but it is not necessary to choose this over and over again. Just click at the "Auto select" button (26.) and a default save location will be chosen. Now you are ready to add the disc to the queue. Just hit the "Add to Queue" button (30.)

Output size	Disc
USB (4.0GB)	Number of items on disc: 1 / 32 21.
O DVD-R (4.7GB)	Title: Test 22.
DVD-R DL (8.5GB)	✓ Force subtitles track #131.
<ul> <li>BD-25 (25GB)</li> <li>BD-50 (50GB)</li> </ul>	Add menu and intro32. Edit 34 Playlist 35.
O Custom	Output settings
8.000 MB	⊖ Folder
Split will not be applied!!	Save .iso file as 25.
23.	
	27 J Delete temp folder after conversion
	Bitrate
Average bitrate: ~9201 Kbp	15
Quality 🚛 Very High	28. Minimum recommended bitrate: 4500 Kbps
0 Mbps	10 Mbps
Remove last item	29. 30. Add Item

# **Start conversion**

AVCHDCoder	
File Options Tools Help	
Input Select Streams Output Queue	
Qu	eue
Test         Progress current converting item	Move Up Move Down Move
Extracting     0%       Converting audio     0%       Converting subtitles     0%       Encoding pass 1     0%       Encoding pass 2     0%       Muxing item     0%	Currently converting: Item 0/1 Muxing disc 0% Building iso 0% Average bitrate: - kbps

At the queue tab there is only 1 thing to do. Just hit the big "Start" button (33.) and the conversion will start. You can add more items if you want.

# 4. Preset Editor

AC Preset Editor			
Preset name: Low	•		
Font name: Verdana		Char	nge <u>f</u> ont
Font color: 0x00ffffff		<u>C</u> han	ge color
	1080p/i:	720p/i:	SD:
Size:	52 🗘	35	23
Additional border, pixels:	3 🔺	2	1
Bottom offset, pixels:	36 🔹	24	16
Save			
Save As New Preset			
Remove current preset			

This is the place where you can add more presets. (Options --> Subtitles Preset Editor) Presets are a set of values. 1 preset will contain the settings for 1920x1080, 1280x720, 720x576 and 720x480. So you don't have to make different presets for each resolution. The 1920x1080 settings are 50% larger than the 1280x720 settings. You can choose fonts and you can choose a color. You can remove, add or change presets.

If you messed up the default presets and you want to recover them Just remove the following file:

"C:\Users\Your username\AVCHDCoder\Application Settings\Subtitlespreset.xml" then restart AVCHDCoder.

# **5. More information**

This guide didn't tell you everything but I think after reading this guide you are able to found out the other options yourself. After leaving a donation you are be able to use some more features.

# 6. Some nice extra's that will make life easy (Extra)

This guide doesn't tell you all functions. But there are some things I would like to tell you.

#### 6.1 Shutdown after completion

AC AVC	HDCoder	
File	Options Tools Help	
	🗖 Language: 🕨 🕨	
	Finished     CPU Priority	◆ 💁 Do Nothing
Inp	O Pattingo	O Shutdown Exit AVCHDCoder
	💬 Subtitles Preset Editor	urce file
6	Ffdshow Settings	
	♂ Remove temp files ☆ Open default output folder Ctrl+U	en movie file

In the image above you can see how you can shut down your computer when conversion is completed.

#### 6.2 Automatically choose streams and settings

C Settings	×
Application Item Output Misc.	
1280x720 output by default	
☑ High Quality subtitles by default	
If found automatically choose the following audio stream:	und (Undetermined)
-Multiple languages can be selected.	nid (Nederlands)
	eng (English)
	fra (Français)
If found automatically choose the following subtitles stream:	und (Undetermined)
-Multiple languages can be selected.	nld (Nederlands)
	eng (English)
	fra (Français)
Default encoding speed:	High Quality (Medium)
Default subtitles preset:	Low
Export Import	💾 Save 🛛 💻 Cancel

Almost all options will make your life easy. At the Item settings you can choose what the default selections will be after you added an item. For example: If you select "1280x720 output by default" each time you add an item the output resolution will be set to 1280x720 so you don't have to make the selection over and over again.

#### **6.3 Change output settings**

Settings	P and take	X			
Application Item	Output Misc.				
Add a menu to the	e disc by default				
✓ Delete temp files	☑ Delete temp files by default				
Default output type:	○ Folder				
Default output folder:	D:\Films AVCHD\AVCHDCoder Output\	📂 <u>B</u> rowse			
Temp folder:	Q:\AVCHDCoder Temp\	📂 B <u>r</u> owse			
Default output s	ize				
O USB (4.0GB)					
O DVD-R (4.7GE	3)				
OVD-R DL (8.3)	5GB)				
O BD-25 (25GB)	)				
O BD-50 (50GB)	)				
O Custom:					
8.000 🖨	МВ				
1MB = 1.000.000	bytes				
Export Import	Save	e Cancel			

Here you can find all default output settings. Example: If you change the output type to Folder. Each time you make a disc Folder will be chosen instead if ISO. Same for your output directory. Each time you hit the "Auto select" button this location will be used.

#### **6.4 Subtitle Conversion**

Subtitle conversion is now multithreaded which means AVCHDCoder can convert multiple subtitles at the same time. This saves a lot of time when converting Subtitles at High Quality. You see the following setting:

Nun	nber of Threads to use when con	verting subtitles on High Quality: 6 💌 Help	
	ove image you can choose how r that will help you find the mo	w many threads that will be used. Click on Help to o ost optimal value:	open up the
	Currently AVCHDCoder will us	e 6 threads.	
	Choose your CPU:	Dual Core	
	How much RAM do you have?	4 GB	

Recommended number of Threads to use when converting subtitles on High Quality: 2