

# How to Encode & Mux a Video with StaxRip using x265/AAC

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## Introduction

Video encoding can be a complex task that seems daunting at first; however, the increased compression will allow you to store more files on disk and quickly move them around as needed. Since StaxRip bundles all the required utilities to get started, you only really need to download one thing!

Following the steps here will get you up and running quickly, with no need to memorize complex command-line programs or worry about adding things to your path. Additionally, since the two encoders shown, x265 for video and AAC for audio, are both widely supported, you will be able to play your videos on nearly any modern device.



Do ensure you are following local laws regarding copyright. In most cases it is illegal to circumvent copy protection. This manual **does not** teach you how to do this.

## Requirements

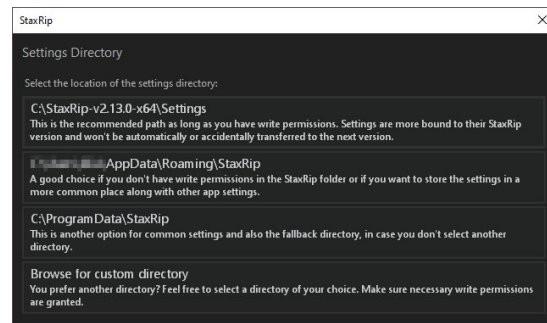
- General experience working with GUI software
- Ability to find and manipulate files in Windows Explorer
- Ability to extract .zip and .7z archives
- System – Minimum Requirements
  - 64-bit CPU with at least 4 cores
  - 8 GiB RAM
  - 64-Bit Windows 8/10/11
  - 50+ GB of free disk space
- Software
  - [StaxRip](#)
- Files you wish to encode, at least one out of these options:
  - Single file containing video and audio, in an mkv or mp4 container
  - Folder extracted from a Blu-Ray disc
  - Folder extracted from a DVD Disc

## Getting Started

If you haven't already, download and extract StaxRip to a location of your choosing. There is no installer, since it's fully portable, but you may wish to create a shortcut on your desktop or launcher of choice for easy access.



You may see a dialogue on first launch, asking where you would to store the settings. In most cases, you should choose the first option.



## Basic Terminology



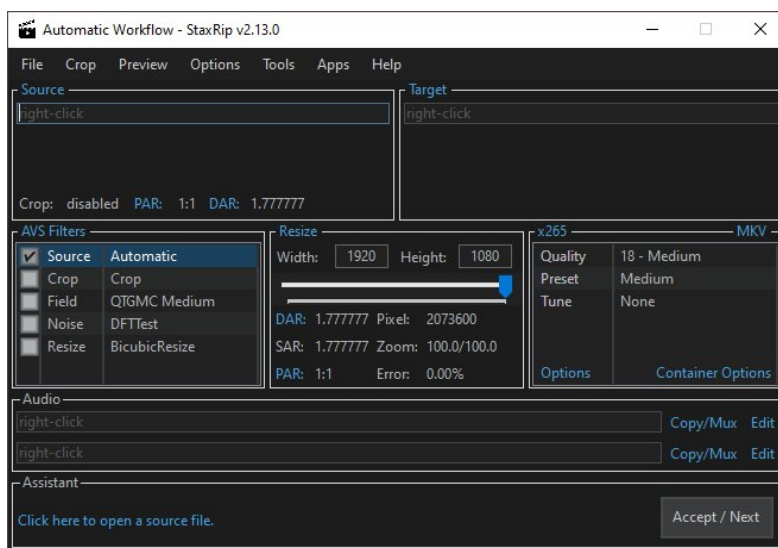
Throughout this manual you will run across a variety of terms related to the tasks at hand. To avoid unnecessary clutter during the steps, the most important ones are defined here. You may also refer to the glossary at the end.

- **Encoding** is a process undertaken by humans, with the help of computers, to compress a larger video/audio file into a smaller final product.
- A **codec** is a technical specification of a compression algorithm which is implemented in either hardware or software, allowing for encode and/or decode capabilities.
- **x265** is an open-source software encoder based on the H.265 video codec standard which allows for very efficient compression of high-definition sources.
- **Advanced Audio Coding (AAC)** is a lossy audio codec which has seen widespread adoption and is playable by nearly any computing device with sound capabilities.
- A **frame** is a single still digital image from a video which is fed into the encoder by a frameserver or captured for later comparison.
- A **frameserver** is a highly specialized piece of software which reads input video, applies filters, and then feeds the result to the video encoder.
- **Avisynth+** is one of the two most popular frameservers, supporting a wide array of plugins which allow for much control over the final look and feel when encoding.
- A **track** is a single file of any compatible format which is added to a container.
- A **container** is a standardized file format that holds raw media files, allowing one film, for example, to have multiple synced audio tracks at once.
  - **Matroska Video (MKV)** is a widely used video and audio container format which allows for an effectively unlimited number of tracks.
  - **MPEG-4 Part 14 (MP4)** is a widely used video and audio container format; while it is not as flexible as MKV, more devices have native support for it.
- **Muxing** is the process of writing concurrent interleaved tracks into a container, which allows the end user to skip around the final product without loading the entire file each time.
- **Demuxing** is the process of extracting the interleaved tracks from a container, which allows manipulation on them by another piece of software such as an encoder.

- A **chapter** is digital indicator, either named or numbered, which is applied to container and allows the end user to easily skip between scenes in a video.
- **NTSC** refers to the standard-definition television format in North America which supports the resolutions 480i and 480p.
- **PAL** refers to the standard-definition television format in much of Eurasia and South America which supports the resolutions 576i and 576p.

## Step 1: How to Load Your Input File(s) into StaxRip

1. Double-click the **StaxRip.exe** program or shortcut to launch it. *You will be greeted with this screen.*



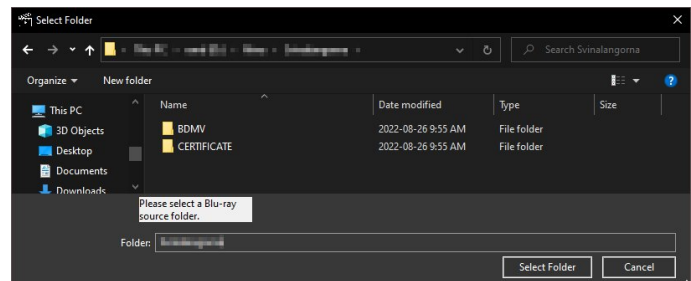
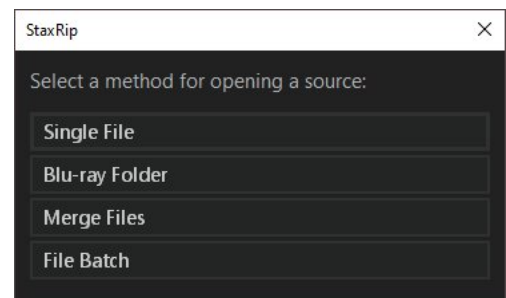
2. Click **File** in the top left of window, then select the option **Open Video Source File...**
3. *Proceed to a., b., or c., as appropriate.*




If you are unsure of which to choose, a Blu-Ray disc folder will contain a subfolder called **BDMV**, while a DVD Disc folder will contain a subfolder called **VIDEO\_TS**.

### a. Full Blu-Ray Disc

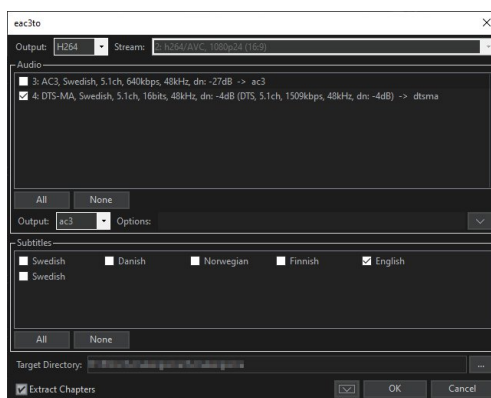
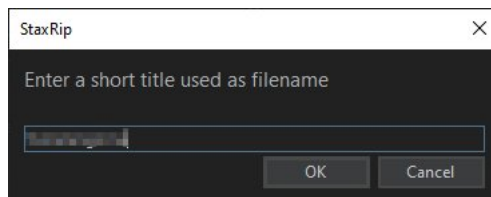
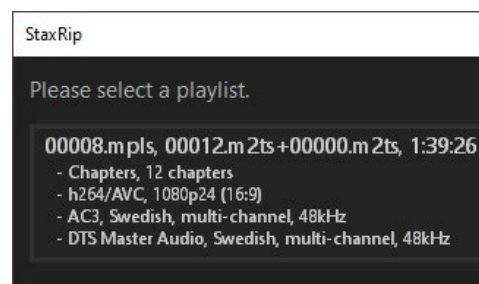
- i. In the **Open Video Source File** dialogue, click **Single File**. A *Windows Explorer dialogue will pop up*.
- ii. Using the explorer Dialogue, navigate to **the root folder**



### of the Blu-Ray.

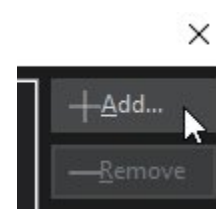
- iii. Click **Select Folder**. *StaxRip will open a new dialogue box for you to select the playlist.*
- iv. Click anywhere on the **box corresponding to the playlist** you'd like to work with. *StaxRip will then open another dialogue box asking you to select a short name.*
  -  If you are unsure what to select, it's usually the longest one you can see.
- v. Using your keyboard, type a short name in the **text box** and then click **OK**. *A window called eac3to will pop up.*
- vi. Click the appropriate **checkboxes** to select which audio and subtitle tracks you would like to work with, leaving everything else as is.
- vii. When you are done making your selections, click **OK** to proceed.


StaxRip will then open a new window and begin processing everything automatically, you don't need to do anything, and have successfully loaded a Blu-Ray folder to process! *Grab yourself a coffee and proceed to Step 2 when it has finished.*

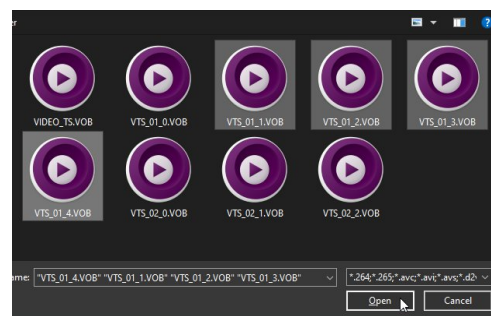


### b. Full DVD Disc

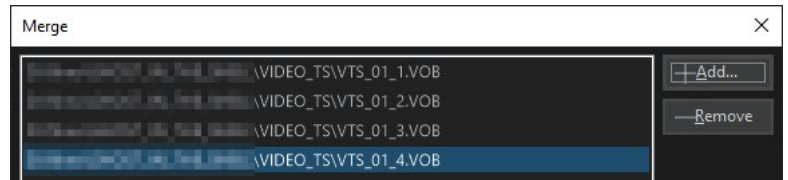
- i. In the **Open Video Source File** dialogue, click **Merge Files**. *StaxRip will open a window called Merge.*
- ii. Click **+Add...**, which will open a Windows explorer dialogue.
- iii. Using the explorer dialogue, **navigate** to the VIDEO\_TS folder where your DVD is located.
- iv. Click on the **second file** (e.g., VTS\_01\_01.VOB) in the main playlist to select it, then hold shift and click on the **final one** (e.g., VTS\_01\_04.VOB). *It will look something like this.*



-  If you are unsure which files comprise the main playlist, look for the largest/longest collection that share the same VTS\_XX name, and open in your favourite media player to confirm.



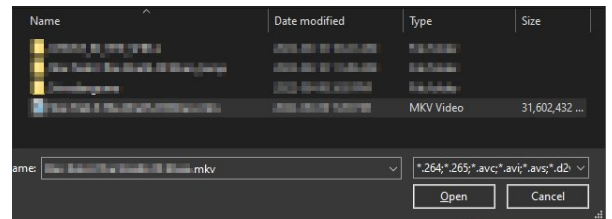
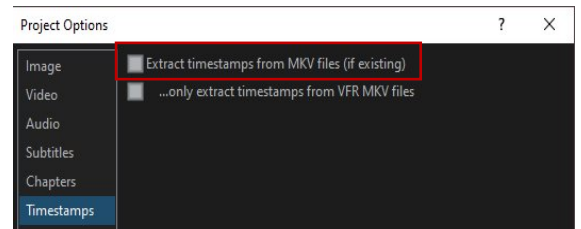
- v. In the explorer dialogue, click **Open**, and you will back at the **Merge** window.
- vi. Ensure the files are ordered correctly in the window, then click **OK**.



Excellent, StaxRip will now be automatically processing the files! *Head on over to Step 3 when it's complete.*

### c. Single File

- i. In the main StaxRip window, click **Options** from the top bar. *It will load the Project Options window.*
- ii. Click **TimeStamps** from the side tabs.
- iii. Click the **Extract timestamps from mkv files (if existing)** option to uncheck it.
- iv. Click **OK** to confirm, *returning you to the main window.*
- v. In the **Open Video Source File** dialogue, click **Single File**. *StaxRip will open a Windows explorer dialogue.*
- vi. Using the explorer dialogue, **navigate** to the file you wish to encode, then select it.



Ensure you are selecting an appropriate file. Generally speaking, it should be an mkv or mp4 container.

- vii. Click **Open**.

StaxRip will then open another window and begin automatically processing it, there's nothing else to do here. *Good stuff! Proceed to Step 2 once it is complete.*

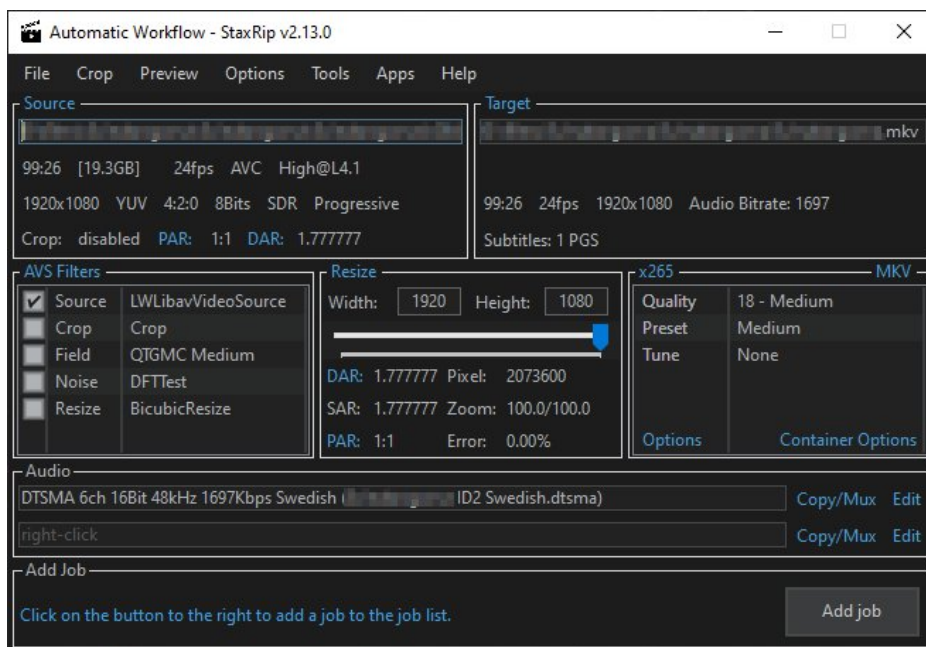


## Step 2: How to Prepare Your Encode

At this point you should have successfully loaded files via StaxRip's Automatic Workflow in Step 1. *You should have a window that looks something like this.*



The procedures here can generally be completed in any order, just be sure to not miss anything important and **save your project!**

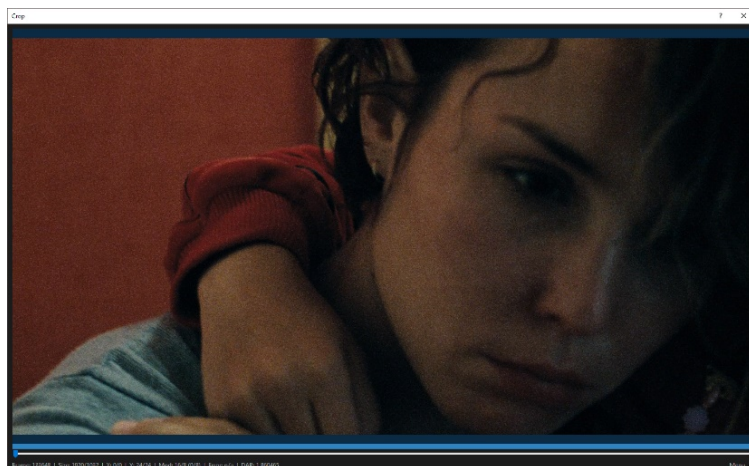


### 1. How to Apply a Crop



Certain videos will contain black bars, and it's generally good practice to crop (remove) them out. If yours does not, then you can *safely skip this step*.

- a. In the StaxRip main window, click **Crop** in the top menu bar. *A new window will load after a few seconds.*

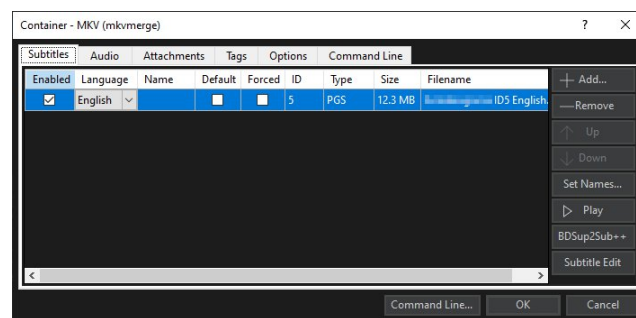


- b. Press **A** on your keyboard to initiate Auto-Cropping.
- c. Review the results once complete, indicated by the blue bars. *If it looks right, proceed to the next step; if not, then manually adjust them by moving your mouse near the edge(s) of the frame that appear wrong and pressing the +/- keys on your keyboard to adjust.*

- d. Press **ESC** on your keyboard to exit the Crop window, returning you to main StaxRip window.
2. How to Add and Adjust Subtitles, Chapters, and Other Container Properties
    - a. Click **Container Options** near the middle right of the main StaxRip window. A new window will open, defaulting to the **Subtitles** tab.



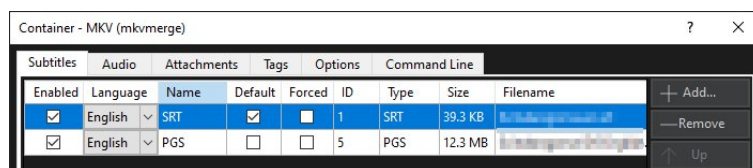
The following steps will guide you through a few important tabs in this window, with common operations. You are by no means limited to what's described, *feel free to explore and play around with options!*



- b. If your file(s) had subtitles already, they will already be in this window; however, you may wish to add more (perhaps in a format such as SubRip), in which case: Click **+Add...**, which will open a Windows explorer dialogue.

- i. In the explorer dialogue, **navigate** to the subtitle file(s) you wish to add, then click **Open**.

- ii. If you wish to adjust their position: click on the **subtitle row** to select it, then click **Up/Down** on the right side of the window.



- iii. If you wish to set one of them as Default or Forced: click on the **appropriate check box**.
- iv. If the language is undefined or wrong for any of the subtitles: Using the **drop-down** box under each subtitle, select the appropriate language
- v. Double-click the **text box** for each subtitle, and type in a descriptive title using your keyboard.

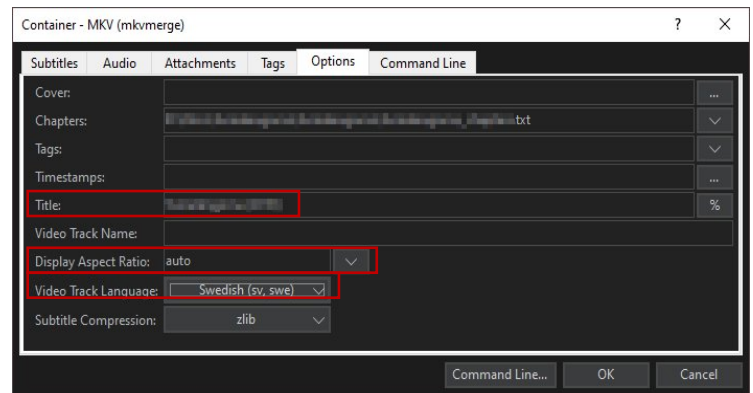
*You have now successfully added and configured subtitles to your project!*

- c. How to Give Your Video a Title
  - i. In the **Container Options** window, click on the **Options** tab.


- ii. In the **Title text box**, type in an appropriate title.  
*This will be the one displayed by your video player when it loads.*

d. How to Select the Video Track Language

- i. In the **Options** Tab of the **Container Options** window, use the **Video Track Language drop-down box** to select the language.




e. How to Set the Display Aspect Ratio (DAR)

-  Display Aspect Ratio (DAR) is a property (tag) applied in the container which instructs the eventual player software what final display dimensions should be.

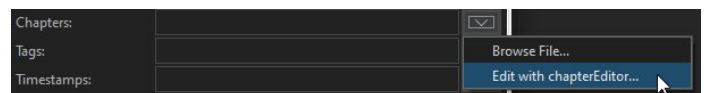
In most cases, selecting **Auto** will suffice; However, with some DVDs you will have to set this value manually.

- i. In the **Options** Tab of the **Container Options** window, use the **Display Aspect Ratio drop-down box** to select an appropriate DAR.

f. How to Extract DVD Chapters

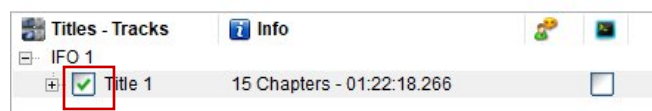
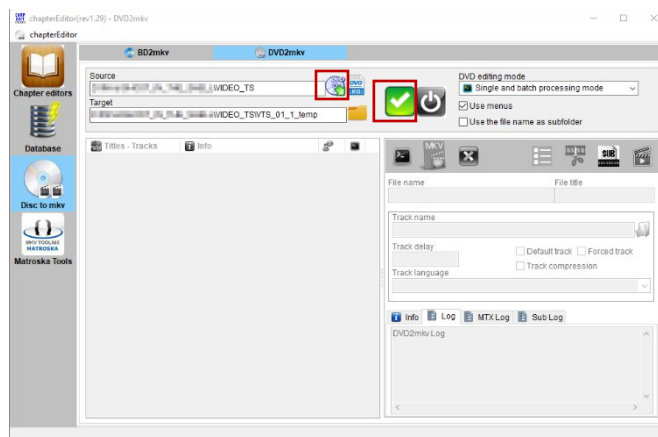
-  StaxRip will automatically extract and load chapters if they exist in your source, except in the case of a raw DVD.

- i. In the **Options** Tab of the **Container Options** window, click the **drop-down arrow** beside **Chapters** and click **Edit with ChapterEditor...**  
*This will open an external program.*



- ii. In the main window of **ChapterEditor**, click **Disk to mkv** tab, which is on the left sidebar.
- iii. Click the **DVD2mkv** tab, which is near the top of the interface.
- iv. Click the **DVD icon with a green arrow** beside **Source**. *This loads a Windows explorer dialogue.*

- v. Navigate to the **VIDEO\_TS** folder of your DVD and click **select**. *You should now have a path in the Source text box.*
- vi. Do the same two steps to specify a **destination directory**. Consider using StaxRip's working directory. *Your window should now look something like so.*
- vii. Click the **large green checkmark button** to begin Processing. *ChapterEditor will discover all playlists on the disc.*
- viii. Click the **left checkbox** to select the appropriate playlist, usually the longest one which has chapters included.



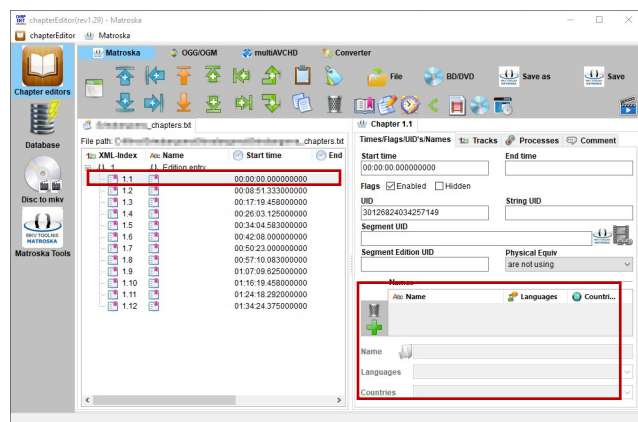
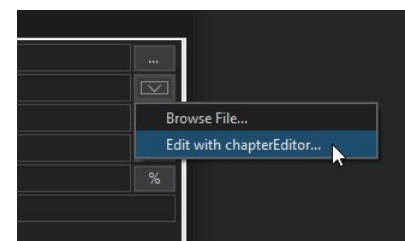
StaxRip will automatically begin processing, *move onto the next step to name and save them when you are ready!*

- g. How to Name Chapters in ChapterEditor



If you're wondering how to find chapter names, the only reliable way to is play the disc and check if they are present in the menus. If they are not and your file already has numbered chapters, then *skip this and the next step, proceeding directly to 3 (audio options).*

- i. If you don't already have ChapterEditor open and wish to name or otherwise edit chapters, then click the **drop-down arrow beside Chapters** in the **Options tab** of the **Container Options window**. *This will open the ChapterEditor external program.*
- ii. If it isn't already selected, click the **Chapter Editors button** on the **left sidebar** of the interface. *You will have a window that looks something like this.*
- iii. Click the line **corresponding to Chapter 1** (1.1 in the example) to select it.

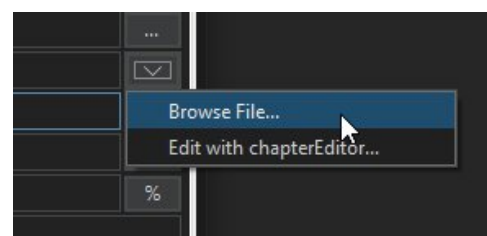


- iv. If there is no current name for the selected chapter, then click the **green + button to the right**.
- v. In the name field to the **bottom right of the interface**, type in the name you wish to use, using your keyboard.
- vi. Repeat steps iii-v for **each chapter** you'd like to name.
- vii. When you are finished, click the **Save button in the upper right**.  
*This will open a windows explorer dialogue.*
- viii. Navigate to **your project folder**, and type a name for your **file** using your keyboard.
- ix. Click **Save**. *You will be returned to the ChapterEditor program.*
- x. Click the **X in the far top-right corner** of ChapterEditor to exit it.



*Congrats, you've successfully named some chapters, now move onto the next step to add them to your project!*

- h. How to Add Edited Chapters to Your Project
  - i. In the **Options Tab** of the **Container Options** window in StaxRip, click the **drop-down arrow beside Chapters** and click **Browse File...** This will open a Windows explorer dialogue.
  - ii. Using the explorer dialogue, navigate to **where you saved the .xml file in the previous step**.
  - iii. Click **your edited file** to select it.
  - iv. Click **Open**. *This will close the explorer dialogue.*

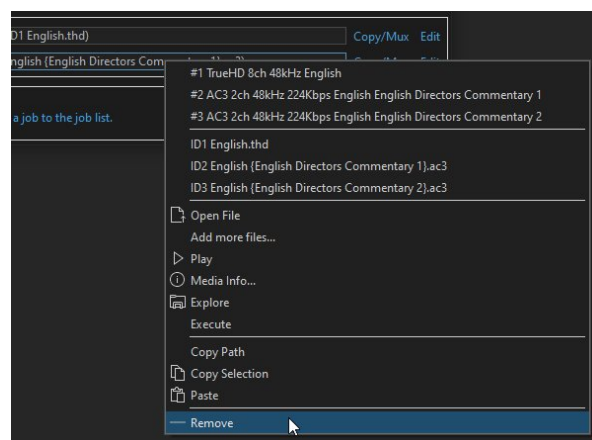


*Great, now your edited chapters will be applied to your final project!*

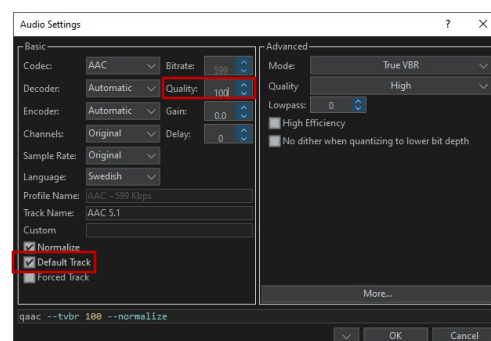
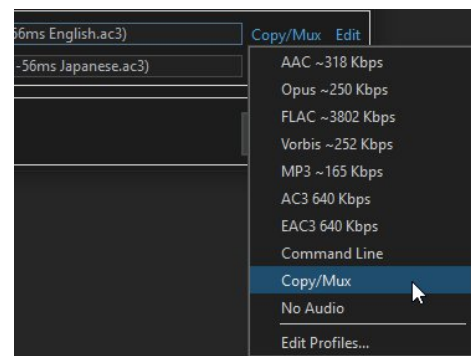
### 3. How to Setup Your Audio Options



By default, StaxRip will load up to two audio tracks, usually the first two in the source. *You can select different ones, or remove them by right clicking on the Audio Track name, like so.*



- If you are still in the **Container Options** window, click **OK** to confirm your changes. *It will close and you will be back at the main StaxRip window.*
- If you would like to encode the audio to a different format, and it lossless, then move onto the proceeding steps. Otherwise, click the **blue text button** and select **Copy/Mux** for each track. You can then *skip the rest of the audio section.*
- Click the **blue text button** beside the **audio track** you wish to encode, and then click **AAC**.
- Click the **blue text button** labelled **edit** beside the audio track you wish to encode. *This will open a new window.*
- In the **Audio Settings** window, type the value you wish to use in **text box beside Quality**. Anything between 50-100 is appropriate.
- If you wish to give your track a title, type the name, using your keyboard, in the **text box beside Track Name**.
- If this is the track you wish to make default, then click the **Default Track checkbox**.
- Click **OK**. This will confirm your changes and close the **Audio Settings** window.
- If you wish to encode another track, then **repeat steps c-h for each other track**.



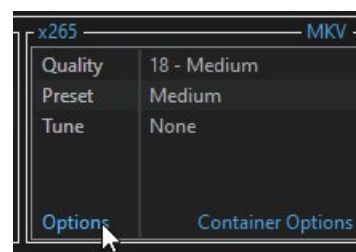
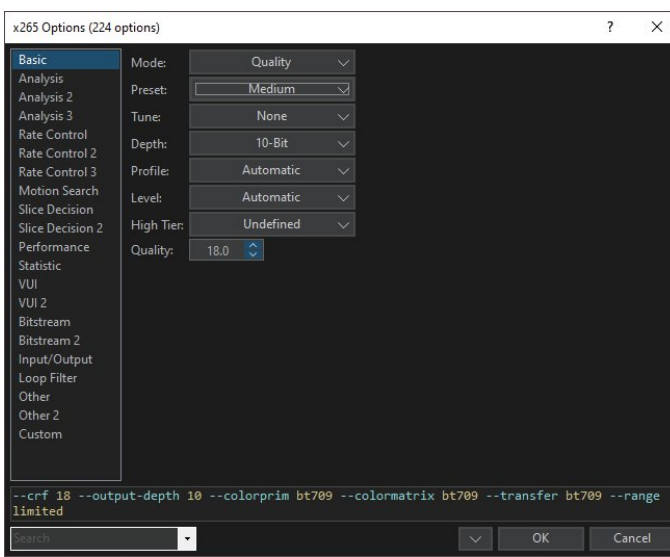
*Great, you've successfully setup your audio settings for the project!*

#### 4. How to Set Your x265 Video Options

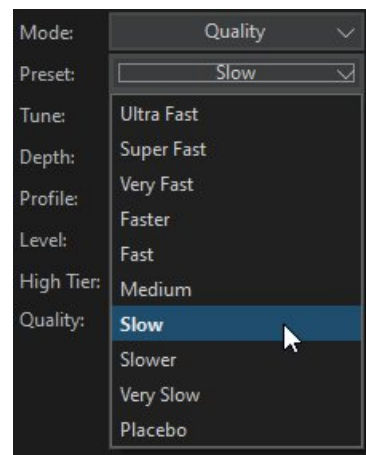


These settings are only provided as a guideline. See the **Additional StaxRip Resources** section in order to learn more about x265.

For details on some of the terms used in this section, please the glossary.



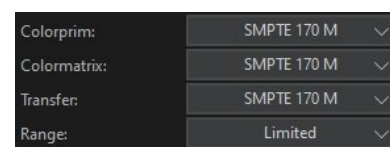
- a. In the main StaxRip window, click the **blue options text button**, located to the left of **Container Options**. This will open the **x265 Options** window.
- b. Click the **drop-down box beside preset**, then click **Slow** to select it. This will give you very good quality at the cost of time spend encoding.
- c. If you wish, change the CRF (Constant Rate Factor) setting by typing, using your keyboard, the new value in the **text box beside quality**. Anywhere between 16-22 will be okay. Lower values correspond to higher quality (larger file).
- d. If you don't see values for colormatrix, colorprim, and transfer in the in box near the bottom of the window, you will need to set them. *If you do, then skip this step.*



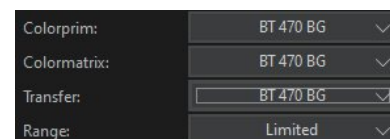
**i** If you're not sure whether your DVD is PAL or NTSC, simply check the resolution in the main StaxRip window, underneath the source section (top left). 480i/480p is NTSC, while 576i/576p is PAL.

- i. Click the **VUI button** in the left sidebar.
- ii. For each value, click the **corresponding drop-down box** to select the correct one. See the images on the right for reference.

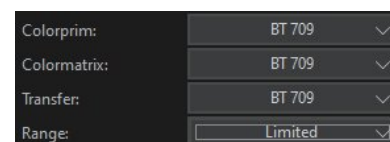
*You have finished setting up the colour settings for your video.*



3 - NTSC DVD Settings



3 - PAL DVD Settings



3 - HD (Blu-Ray) Settings

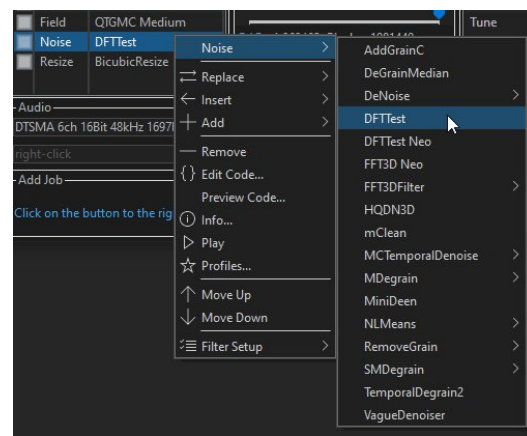
**i** There are many more settings to explore and change here (224, to be exact). If you like, spend some time looking things over and adjust any values you feel appropriate.

- e. Click **OK**. This will close the x265 Options window.

*You have successfully configured the x265 encoder, sweet!*

## 5. How to Add or Adjust Avisynth+ Filters

**i** This section is entirely optional, but describes how to add the dfttest denoise filter to your project. The same process can be used to add or edit other filters, depending on your preference and source.



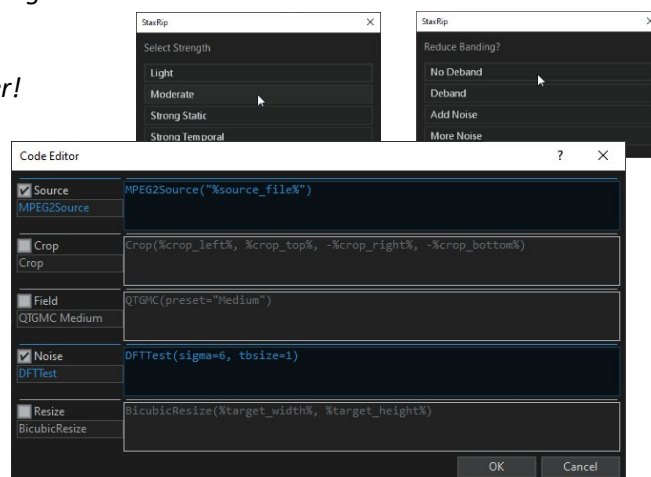
- In the main StaxRip window, right click on the **column under AVS Filters titled Noise**.
- Follow the noise sub-menu with your mouse, then click DFTTest. It will open a dialogue box.
- Click to select a **strength setting**. Medium, for example. *It will load another dialogue box.*
- Click to select a **banding setting**. *The dialogue box will close.*

*You've successfully added a denoise filter!*



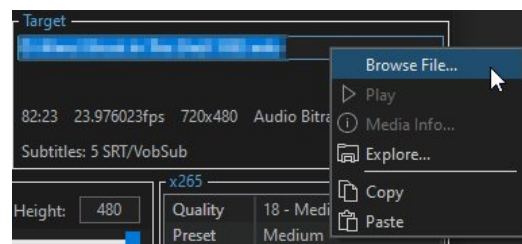
Not all filters have automatic dialogue boxes like this. In fact, for most you need to manually edit the code. To do this, right click on the **filter you've added** and click **Edit Code...**

References for most of them can be found in the [Avisynth Wiki](#). Here is the [dfttest page](#), for example.



## 6. How to Set the Destination Directory

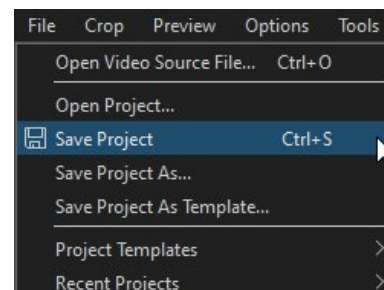
- In the **main StaxRip window**, right click the box underneath **Target**. *A Windows explorer dialogue will open.*
- Using the explorer dialogue navigate the **directory where you would like your final output**.
- Type a **name for your file**, using your keyboard. Make it something descriptive!
- Click **Save**. *This will close the explorer dialogue.*



*You've now set the target (output) file, awesome.*

## 7. How to Save Your Project

- In the **main StaxRip window**, click **File** in the top bar.
- Click **Save Project**. *This will open a Window explorer dialogue.*
- If you've set the target (output) name already, then simply click **Save**. Otherwise, type, using your keyboard, a **descriptive name** before clicking **Save**.

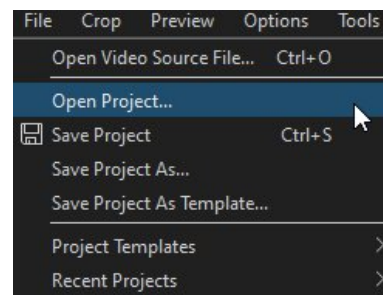




Your project is now saved and can be re-loaded at any time!

## 8. How to Load a Previously Saved Project

- In the **main StaxRip window**, click **File** in the top bar.
- Click **Open Project...** This will open a Windows explorer dialogue.
- Navigate to **where you saved your project**, and select the **.srip** file. By default, this is inside the **\_temp** directory that StaxRip creates when processing incoming files.
- Click **Open**. The explorer dialogue will close.



You've now loaded your project, time to pick up where you left off!

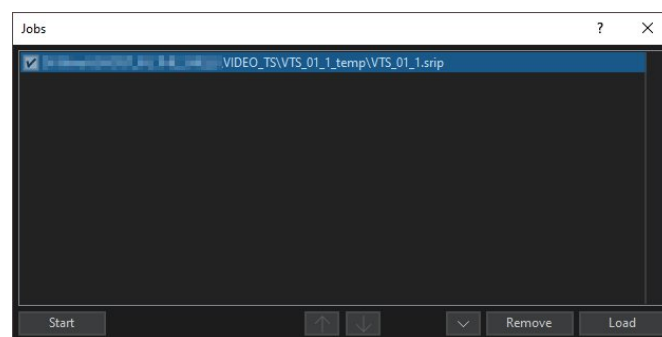
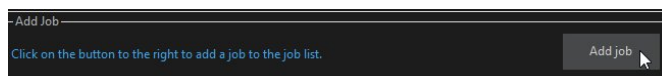
## Step 3: How to Queue Up or Run Your Encode



Now that everything is setup, you are ready to start. Be warned, this will likely take some time.

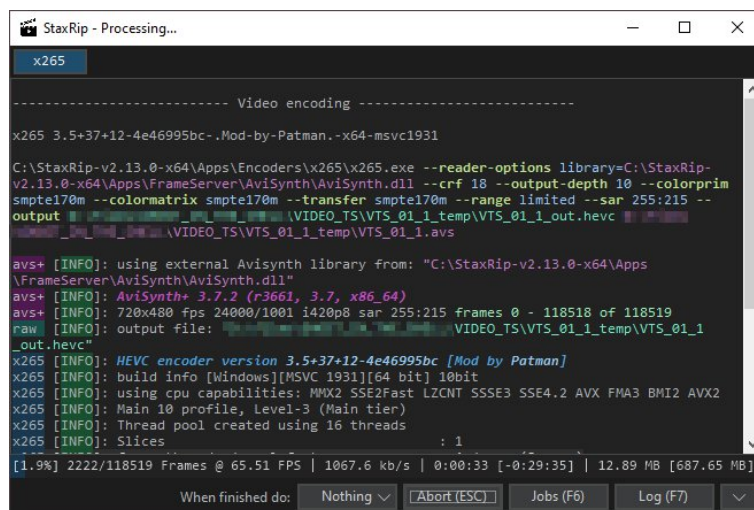
- In the **main StaxRip window**, click **Add Job**, located on the bottom right. It will open the **Jobs window**.
- Click **Start**. By default, your current project is selected and ready to go!

StaxRip will open its tabbed encoding window, where you can watch the process. Come back when it's done! Your finished file will be where you set earlier.



You can also queue up multiple jobs using this system. Simply close the Jobs window, and follow the steps to prepare another project.

Here is what the encoding window for x265 looks like. If you are also encoding audio, you may have more tabs near the top.



## Step 4: How to Locate and View Your Logs (optional)



A log is a file created by one or more pieces of software which records both what the software attempted to do and the outcome of that action.

You may wish to view the log file for your project when it is finished, to check if there were any errors, or perhaps, to find the final QP (Quantization Point) values. *You can safely skip this step if you felt everything went well.*

1. In the **main StaxRip window**, click **Tools** in the top bar.
2. Click **Log File**. This will open the log file viewer.
3. Click on sections in the left navigation bar to skip to various outputs, or just **scroll down in the main display box**.

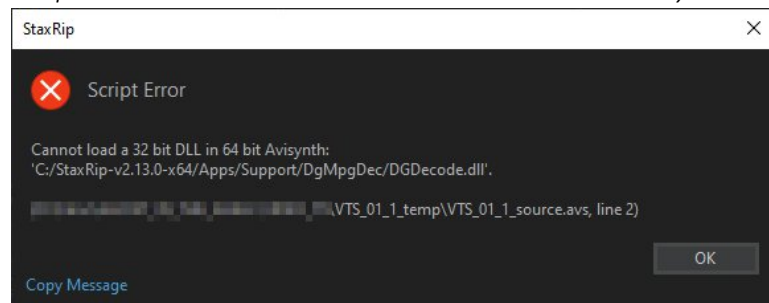
## Additional StaxRip Resources

- [Technical Documentation](#) (web)
- [Technical Manual](#) (pdf)
- [GitHub Wiki](#)
- [Doom9 Forum Thread](#)
- [VideoHelp Forum Thread](#)
- [x265 Official Documentation](#) (web)

## Troubleshooting

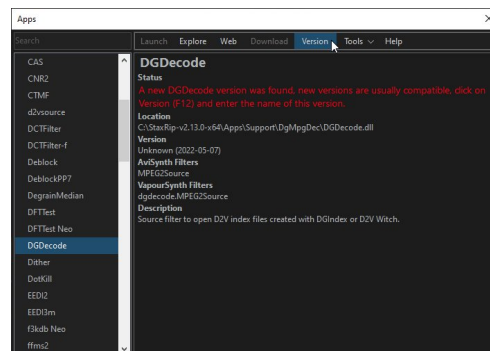
Error when trying to load a DVD

*Script Error – Cannot Load a 32-bit DLL in 64 bit Avisynth.*



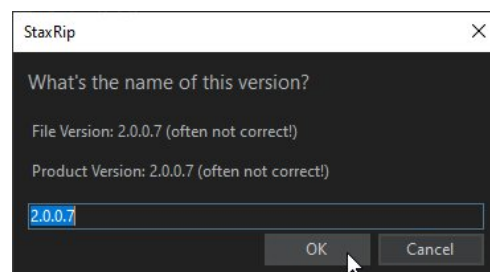
**To correct this error:**

1. Download the **most recent version of dgmpgdec** from [here](#).
2. Extract the **zip file** you downloaded.
3. Locate the **DGDecode.dll** inside the x64 folder you extracted.
4. Overwrite the original **DGDecode.dll** with the one you downloaded. The exact location is in the second line of the error window.



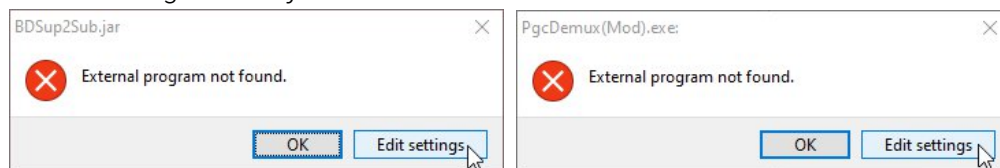
5. Load the **DVD files** in StaxRip again. It will prompt you to set the version of the new file.
6. Set the version by clicking **Version** in the top bar of the prompt. It will open a dialogue.
7. Ensure the version number matches what you downloaded, then click **OK**.

*Now, next time you go to load DVD file(s), it will work as expected. Problem solved!*



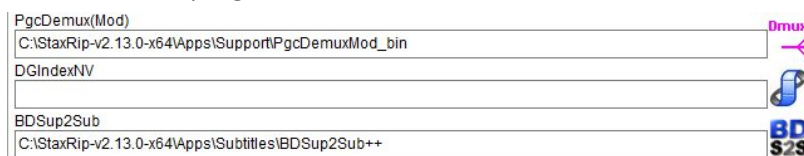
## Errors in ChapterEditor

*External Program not found.*



If this is the first time you've used ChapterEdit and attempt to click the green arrow in the DVD2MKV tab, you might see this. **To fix it:**

1. Download [this specific version](#) of **bdsup2sub++**
2. Download [this specific version](#) of **PgcDemuxMod**
3. Extract **both archives** to folder(s) of your choosing.
4. Return to the ChapterEdit program and click **Edit Settings**. This will open the ChapterEdit settings to a specific page.
5. Using the respective buttons on the right of each missing program (or by pasting the path), point program to the **directory** where you extracted each program, like so.

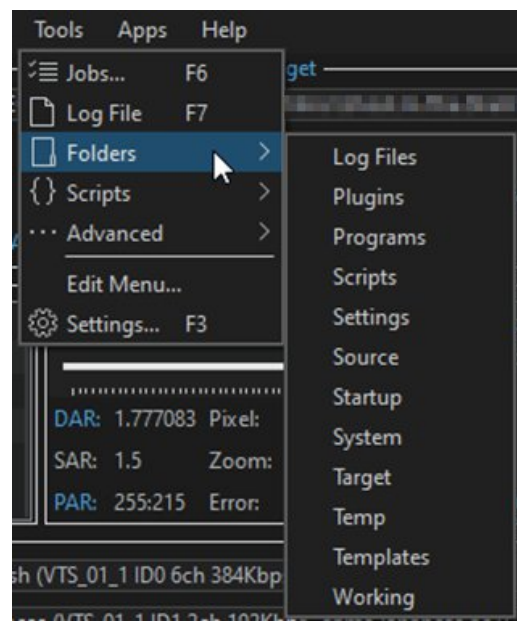


6. Click **Back to Editor**, located near the bottom of the window.

*You will now be able to extract DVD chapters in peace, enjoy!*

## Help – Where are all my files?

It can be hard to keep track of the directories, both in use by StaxRip itself and your project. No fear, you can always find them by clicking **Tools** in the **top menu bar** of the **main StaxRip window**, then navigating to **Folders**. From here, click any of them will open the respective folder in Windows explorer.



*Easy, right?*

## Glossary

### Advanced Audio Coding (AAC)

AAC is a lossy audio codec which has seen widespread adoption and is playable by nearly any computing device with sound capabilities.

### Avisynth+

Avisynth+ is one of the two most popular frameservers, supporting a wide array of plugins which allow for much control over the final look and feel when encoding.

### Chapter

A chapter is metadata which serves as digital indicator, either named or numbered, which is applied to a container and allows the end user to easily skip between scenes in a video.

### Codec

A codec is a technical specification of a compression algorithm which is implemented in either hardware or software, allowing for encode and/or decode capabilities.

### Colour Matrix / colormatrix

A colour matrix is a transformation matrix used in digital imaging to switch between colour information that can be easily stored and colour information which will be fed into a display.

### Colour Primaries / Colour Space / colorprim

A given colour space is a standard which, in simple terms, defines how many colours (or rather, the range of colours) that can be stored in, or displayed from a digital file.

### Constant Rate Factor (CRF)

CRF is a quality-control command-line option in the x265 video encoding software which attempts to automatically adjust internal parameters to meet a certain perceived quality metric (specified by the user) based on the complexity of the input.

## Container

A container is a standardized file format that holds raw media files, allowing one film, for example, to have multiple synced audio tracks at once.

## Crop / Cropping

Cropping is the process of selecting and cutting out portions of a frame when encoding a video, which produces a stream without black bars or dirty lines.

## Demuxing / Demux

Demuxing is the process of extracting the interleaved tracks from a container, which allows manipulation on them by another piece of software such as an encoder.

## Display Aspect Ratio (DAR)

DAR is a piece of metadata often added to containers with video tracks which specifies at what final dimensions the video playing software should display it.

## Encoding

Encoding is a process undertaken by humans, with the help of computers, to compress a larger video/audio file into a smaller final product.

## Frame

A frame is a single still digital image from a video which is fed into the encoder by a frameserver or captured for later comparison.

## Frameserver

A frameserver is a highly specialized piece of software which reads input video, applies filters, and then feeds the result to the video encoder.

## Log

A log is a file created by one or more pieces of software which records both what the software attempted to do and the outcome of that action.

## Matroska Video (MKV)

MKV is a widely used video and audio container format which allows for an effectively unlimited number of tracks.

## Metadata

In the context of media encoding, metadata is any information (outside of the raw encoded video, audio, or subtitles) that is included in the output streams or container.

## MPEG-4 Part 14 (MP4)

MP4 is a widely used video and audio container format; while it is not as flexible as MKV, more devices have native support for it.

## Muxing / Mux

Muxing is the process of writing concurrent interleaved tracks into a container, which allows the end user to skip around the final product without loading the entire file each time.

## National Television System Committee (NTSC)

NTSC refers to the standard-definition television format in North America which supports the resolutions 480i and 480p.

## Phase Alternating Line (PAL)

PAL refers to the standard-definition television format in much of Eurasia and South America which supports the resolutions 576i and 576p.

## Quantization Point (QP)

QP is a measure of how much lossy compression is applied by the video encoder during the encode process, which can serve as a general guide of the resulting quality (low QP = higher quality, less compression).

## Range

In the context of video encoding, range refers to either full (computer monitor) or limited (television), which indicates on what device the content was designed to be viewed; typically, all consumer video is limited range.

## Stream

A stream is a single, contiguous video or audio file which is output from a piece of encoding software. See also: Track.

## Track

A track is a single file of any compatible format which is added to, or extracted from, a container. See also: Stream.

## Transfer Function / transfer

In the context of video encoding, an electro-optical-transfer-function (transfer function) refers to one of the standards supported by displays, which use this function in conjunction with the input video stream to produce the visible video.

## Video Usability Information (VUI)

VUI refers to a class of video encoding command-line options which specify colour characteristics and are typically injected into the header of resulting stream (metadata).

## x265

x265 is an open-source software encoder based on the H.265 video codec standard which allows for very efficient compression of high-definition sources.