

AutoGK Guide

Welcome to a new generation of MPEG-4 encoding utilities! Forget the times where you had to learn about resolutions and bitrates, worry about finding a suitable splitting point, perform compressibility tests and adjust resolutions accordingly, bother with interlaced and progressive content, etc. AutoGK does all that for you (but it still won't hurt if you get to know the basics of digital video so that you know what goes on behind the scenes). AutoGK is inspired by Gordian Knot, probably the most popular DivX/XviD encoding tool of the past two years, but where GKnot still required long preparation, a lot of preparation and quite a bit of manual interaction, AutoGK automates all this, hence the name. AutoGK is meant to be a one-click tool. While it won't get you from DVD to burned CD in one click (you cannot compare an audio CD -> MP3 ripping program with a video program, video has a lot more variables), it requires almost no manual interaction. For the time being, AutoGK can output only XviD, but DivX5 is going to be added in the future. Since the tool is meant for easy DVD backups that work on a standalone player, it won't allow you to pick options that are incompatible with standalone players (in other words: you cannot configure the codec on your own), and if you're looking for more options, you'll have to wait until AutoGK supports manual configuration via a configuration file (there will not be a GUI for this).

You'll need the following software for this guide

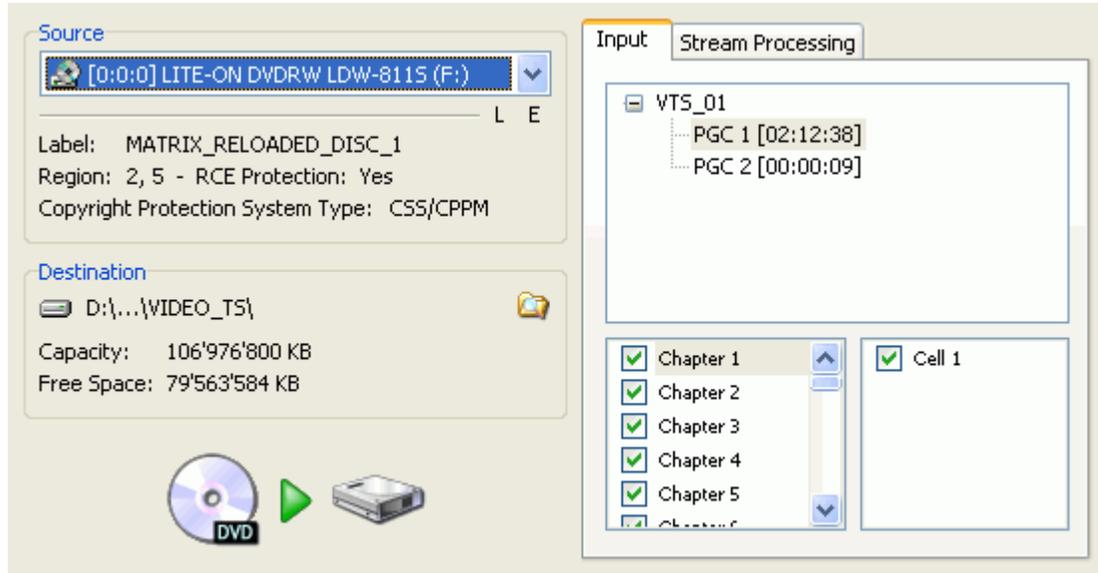
[AutoGK 1.0+](#)
[DVD Decrypter](#)

Step 1: Ripping the DVD

Enter the DVD you want to back up, and then start DVD Decrypter and press the I button on your keyboard.

By default, the longest PGC is preselected. This works for most discs. In rare cases, you'll have several PGCs that have the same (or roughly the same length). If they have the same length, there's usually no reason to worry. If some are a bit shorter, you are dealing with a seamless branching movie. This means, the disc contains multiple versions of a movie (for instance the theatrical cut (what you saw in the movie theater), and the director's cut (usually longer, containing

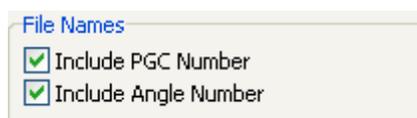
scenes the director thought should be in the movie but the studio wanted cut out because a theatrical release must not be too long). In this case, select the PGC that corresponds to the cut you want to see.



Sometimes, a PGC contains sub-items: angles. By default, Angle 1 is selected, which is usually the way to go. Angles are mostly used to have multi-language end credits (Disney and Miramax use those quite a lot). Angle 1 is normally the English release. When in doubt, play the DVD, then press the angle button during the end (or beginning) credits to find out which angle is in the language you want.

Last but not least, series on DVD. Those DVDs usually contain between 3 and 6 episodes on one DVD. They are either all in the same VTS, as different PGCs, or in different VTS sets. Their length should make them pretty obvious to spot (usually 2x, or 4x minutes). You'll have to rip each episode manually by selecting the proper PGC.

Last but not least, access the *Settings*, click on the *IFO Mode* tab, and make sure that both options in the *File Names* section are checked:

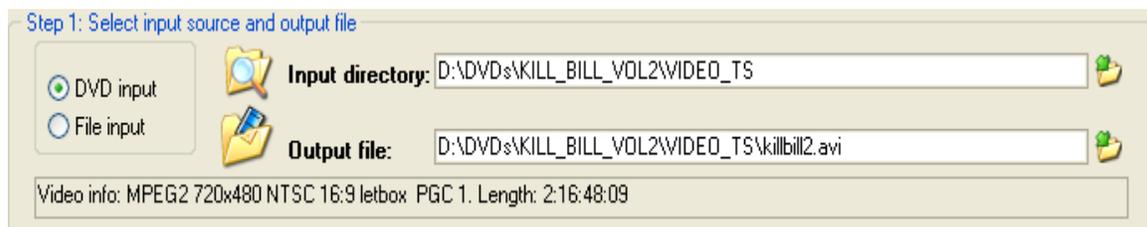


Press the big button on the left that has a DVD on it to get started.

Step 2: AutoGK

If you want to play your encoded movies on a standalone using the ESS chipset (check our hardware players forum to find out which players use that chipset), you should install the *ESS based standalone* component as well. And there's another option that you can install: *bitrate spike control*. It can help reduce bitrate spikes in the video that might cause playback problems on certain standalones. Then start up AutoGK.

AutoGK's GUI is divided into parts that correspond to the order you have to configure it. First, you have to select the source path, that is the path where DVD Decrypter copied the disc to. You'll also have to provide a path and name for the output file. Make sure the output file resides in a place that has enough free space (if you use one CD, having 1.4 GB free should be enough, for a 2 CD rip, 3.5 GB should do, for a 3 CD rip you need 5 GB to be on the safe side).



As soon as you select the source path, AutoGK will show some additional information about the source below the input directory line.

It is also possible to select File input. In that mode, you can select specific MPEG-2 input files rather than a directory where a ripped DVD resides, or for instance MPEG-2 transport streams that you captured (digital TV). In the future, it'll even be possible to use AVI files (from instance from your DV camera) as source in this mode.

Step 2 involves the selection of audio and subtitle track. Select the audio track you want to keep from the dropdown list, and then do the same for the subtitle track. Note that since AutoGK creates files for standalone players, the subtitles will be encoded as part of the video and cannot be deactivated. As an alternative you could create external VobSub subtitles, which cannot be played on a standalone DVD player, but are playable on a standard PC. If you want a second audio track to be included in the output, just select one from the lower dropdown list.



In Step 3 you select the output size. When doing a regular movie, select the appropriate number of CDs from the dropdown list. When doing a DVD that contains episodes, there are presets that allow you to put a certain number of episodes on a CD: For instance, if you want to put 4 episodes on a CD, select *1/4 CD* from the dropdown list. If you don't care about the size, select *Maximum Quality (unlimited size)* and AutoGK will encode your movie in the best quality possible (note that this doesn't mean DVD quality.. encoding a DVD will always decrease quality unless you're encoding to a lossless format - but

those would require more than 100 GB per movie).



If the predefined presets are not good enough for you, you can select *Custom size (Mb)* and enter the desired output size by

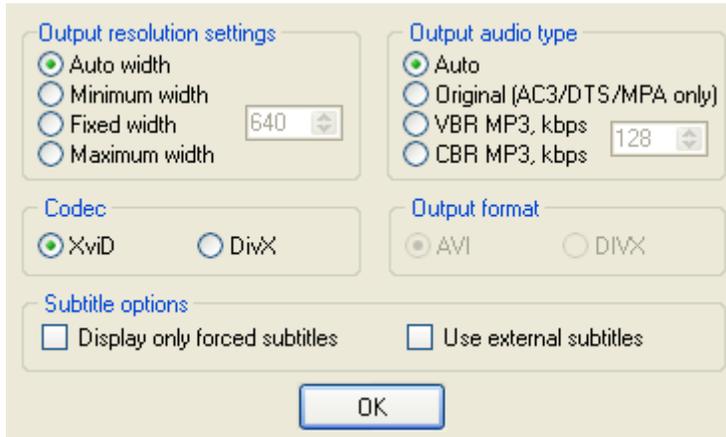
yourself. For instance, if you want to put 5 episodes on a 700 MB CD, you'd enter 140 in the size field.

Finally, instead of encoding the video twice for optimal quality given your target size, you can use quality based encoding by selecting *Target quality*. In quality based encoding, your video will be encoded once using a quality factor on a scale from 1 to 100, where 100 means the quality is as good as it gets and the lower the value, the lower the quality will be. Obviously a lower quality also means a smaller file size. In quality based encoding there is no control over the output size; you'll get what you get once the movie has been encoded.

Step 4 is optional. You can press the Preview button to preview the output. Keep in mind that you will not see which resolution AutoGK will pick unless you force a certain resolution in the Advanced Settings.



If you get more proficient with the tool, you might want to have a look at the *Advanced Settings* as well.



First we have the *Resolution settings*. Auto width will leave it up to AutoGK to select the resolution that looks best given your selected size (number of CDs). Or, you could also select either a *Minimum width* or *Fixed width* by selecting the appropriate option and

using the width field to enter the width. Note that both options could potentially degrade the quality of your output (for instance you could select a width that is too large, and your movie would look better if AutoGK could select a lower width). For some more info about resolution selection and other behind the scenes procedures, click [here](#).

When we have the *Codec* option, where you can decide between the XviD or DivX codec. Use whichever codec you like best. If in doubt which codec to choose, there's a [codec comparison](#) that might give you some pointers. Keep in mind that you have to use the XviD version that comes with AutoGK. XviD 1.1, for instance, is currently not supported.

Then, we have the *Audio* options. The *Auto* option will use 128kbit/s VBR MP3 audio for 1 CD rips and keep the original AC3 Dolby Digital soundtrack for 2 CD (or larger) rips. If you want to keep the AC3 or DTS no matter what, select the *AC3/DTS* option. Or you can select the *VBR MP3, kbps* or *CBR MP3, kbps* option and set a fixed bitrate. If you don't care about the original soundtrack, I suggest that you set the audio option to *VBR MP3, kbps* and select a bitrate of 128kbit/s (or 160kbit/s for 2+ CDs).

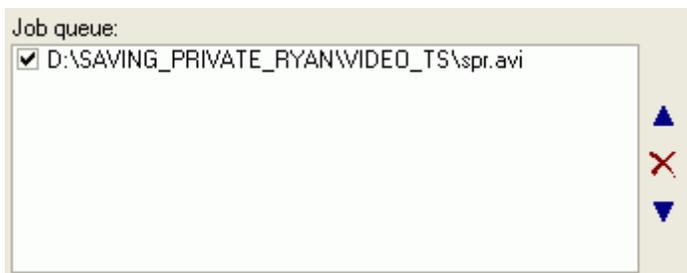
Finally we have two subtitle options: *Display only forced subtitles* will process only the forced subtitles on the original DVDs - i.e. the subtitles you cannot switch off. Forced subtitles are often used for dialogue parts which are not in the same language the movie is on. *Use external subtitles* will use the VobSub format for subtitles rather than encode the subtitles as part of the video. External subtitles

cannot be used on a standalone DivX/XViD capable DVD player. External subtitles will be automatically split at the proper position (assuming you're going for more than 1 CD) so you don't have to worry about splitting anything.

Press OK to get back to the main AutoGK screen and press Add Job. This adds the currently configured movie to the job queue.



Now the Start button has become active and you can start the process pressing Start. Or, you could configure another movie, and then also add it to the job queue. Every job you add shows up in the *Job queue*. You can use the 3 buttons to the right of the list of jobs, to move a job up or down and to remove it.



Once you've configured all jobs, you're ready for the magic. Press Start and AutoGK will start encoding. This will take quite a while, and while AutoGK will also work if you're using your computer while it is working, this will obviously slow AutoGK down.

If you're feeling like configuring a bit more, you can press Control-F9 to [launch AutoGK assistant and configure the current job](#).

If you're not using your PC, and want it to shut down once the movie has been encoded, check *Shutdown when done*.



Last but not least, AutoGK will report what it is doing at the moment in the Log window. The same information is also stored in a file called `movienamename-agk.log` that is in the same directory as your output file (movienamename is the name of your movie as set in step 1, in this case the logfile would be called `trainingday-gk.log`). You'll need that logfile in case something goes wrong. Don't make a report without that file!

```
[29.11.2003 13:13:49] Indexing input for preview.  
[29.11.2003 13:17:15] Indexing subtitles for preview.  
[29.11.2003 13:20:37] Analyzing source.  
[29.11.2003 13:30:06] Source is considered to be progressive.
```

If you have selected an output size larger than 1 CD, the output file will be split at the proper position. The split files will be called moviename.CDx.avi. In our example, we'd get two files: trainingday.CD1.avi and trainingday.CD2.avi.

For problems and support, please turn to the [Gordian Knot forum](#).

Gordian Knot Download Site:

<http://www.autogk.me.uk/modules.php?name=Downloads>

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