# **Videomass**

Videomass is a free, open source and cross-platform GUI for FFmpeg and Youtube-dl

Videomass is a cross-platform GUI designed for <u>FFmpeg</u> enthusiasts who need to manage custom profiles to automate conversion/transcoding processes. It is based on an advanced use of presets and profiles in order to use most of the FFmpeg commands without limits of formats and codecs.

It features graphical tools for viewing, analyzing and processing multimedia streams and downloading videos via youtube-dl.

Videomass is a project created by Gianluca Pernigotto (jeanslack) and it was written in Python3 with the wxPython4 "Phoenix", then it is cross-platform and work on Linux, Mac-Os, MS-Windows and FreeBSD.

FFmpeg is a separate project, not connected to Videomass. "FFmpeg is a complete, cross-platform solution to record, convert and stream audio and video. It includes libavcodec - the leading audio/video codec library." FFmpeg is a Trademark of **Fabrice Bellard**, originator of the FFmpeg project. FFmpeg is free software and is licensed under the LGPL or GPL. Specifically in the case of versions of FFmpeg packaged with Videomass on the installers for Windows and MacOS, FFmpeg is licensed under the GPL. Complete FFmpeg documentation and sources are available at <u>Ffmpeg.org</u>

<u>youtube\_dl</u> is a command-line program to download videos from YouTube.com and a few more sites. It requires the Python interpreter, version 2.6, 2.7, or 3.2+, and it is not platform specific. It should work on your Unix box, on Windows or on macOS. It is released to the public domain, which means you can modify it, redistribute it or use it however you like.

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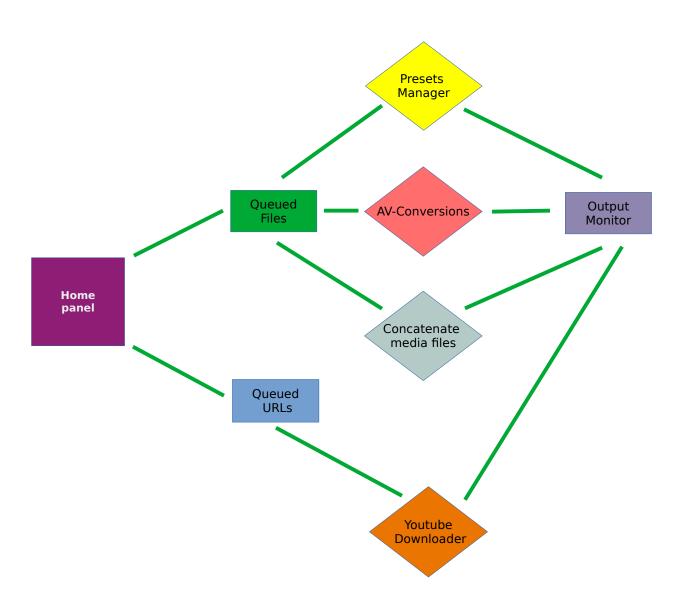
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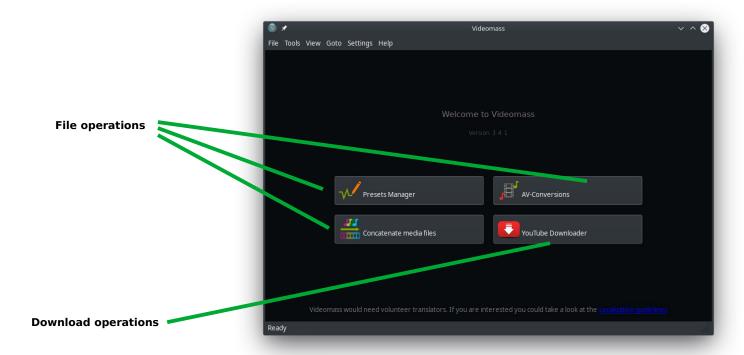
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# **User Interface Overview**



# 1.0 Home panel

Operations chosen by the user start from here.

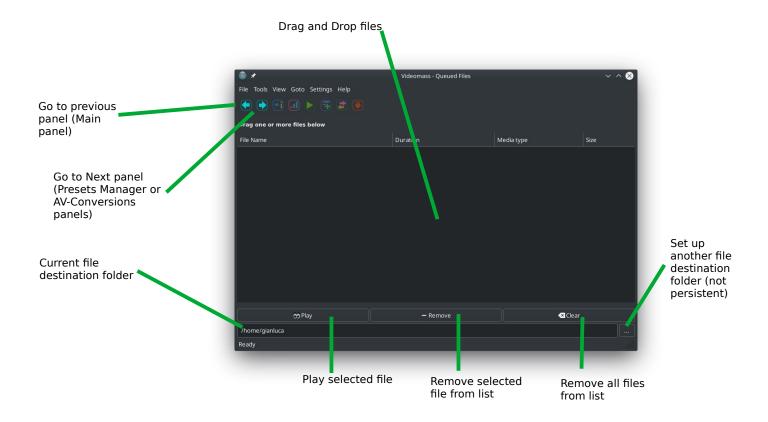


**File operations** are performed by <u>Presets Manager</u>, <u>AV-Conversions</u> and <u>Concatenate media files</u> panels, which share the same <u>queued files</u> panel.

**Download operations** are performed by <u>YouTube Downloader</u> panel, which get the URLs from <u>Queued URLs</u> panel.

## 1.1 Queued files panel

To perform **file operations**, the user is always taken to the Queued Files panel.



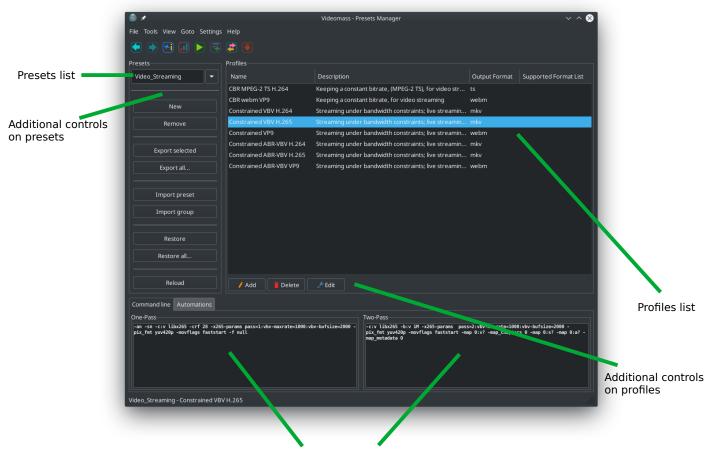
Files added or removed from this panel will be the same ones shared by the <u>Presets Manager</u>, <u>AV-Conversions</u> and <u>Concatenate media files</u> panels. Each queued file can be played by clicking on the play button or by using the context menu (right mouse click upon file control list).

Note that playback here will be affected by the <u>Timeline settings</u> (duration and seeking) and no other settings.

Also, some parameters may change when new files are added and also when they are deleted. So, check the settings again before performing trans-coding/conversion operations.

## 1.2 Presets Manager panel

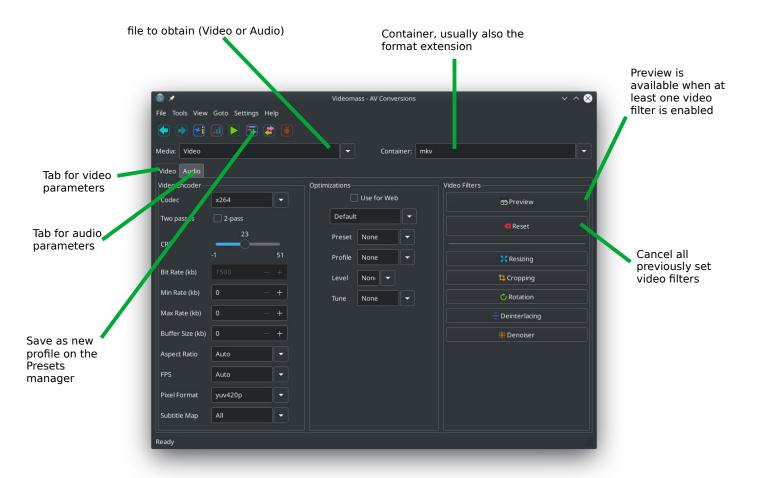
The presets management panel represents what Videomass was created for. In its simplicity it is possible to execute a large number of commands with FFmpeg syntax, which in normal situations would require very complex interfaces with many graphic controls and commands. The downside is that this approach is not very suitable for all users by overstepping the limit of available presets.



Clicking on each profile, displays the command line for one-pass or two-pass process (if provides). The command line can be manually changed on the fly for any adjustments or additions, without changing the source of the stored profile.

## 1.3 AV-Conversions panel

The AV-Conversions panel is the classic alternative to the Presets manager. Although both AV-Conversions and Preset Manager work independently of each other, with AV-Conversions you can make new settings and save them directly as profiles on the Presets Manager. This sharing makes Videomass even more flexible in terms of functionality.



#### 1.4 Concatenate media files (demuxer)

This panel allows a very fast joining of two or more files according to the import order without the need for re-encoding. The media file produced during the file concatenation technique will not have any quality loss.

It is possible to concatenate only audio files or only video files. It is not possible to mix audio and video files at the same time.

To allow correct concatenation, video files must have exactly same audio and video codecs, same streams and same size (width and height); Audio files must have exactly same formats (extension), same sample rate and the same audio codecs.

For more info, refer to the official documentation web page: <a href="https://ffmpeg.org/ffmpeg-formats.html#concat">https://ffmpeg.org/ffmpeg-formats.html#concat</a>



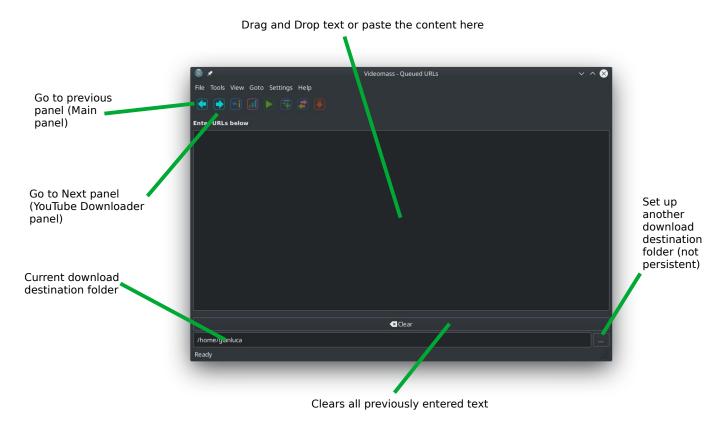
If you want to join multiple files with same size but different codecs, you need to use another concatenation technique, for example the <u>concat filter</u>, see line code example below:

```
-i "file2.mkv" -i "file3.mp4" -i "file4.webm" -filter_complex "[0:v] [0:a] [1:v] [1:a] [2:v] [2:a] [3:v] [3:a] concat=n=4:v=1:a=1 [v] [a]" -map "[v]" -map "[a]"
```

The line of code above has been adapted to be saved as a profile in the Presets Manager. It assumes that there are four files to be concatenated, each with a single audio stream. The first file is implicit and has been imported to the Queued Files panel, while the three remaining files are listed in the command itself.

## 1.5 Queued URLs panel

To perform **download operations**, the user is always taken to the Queued URLs panel.

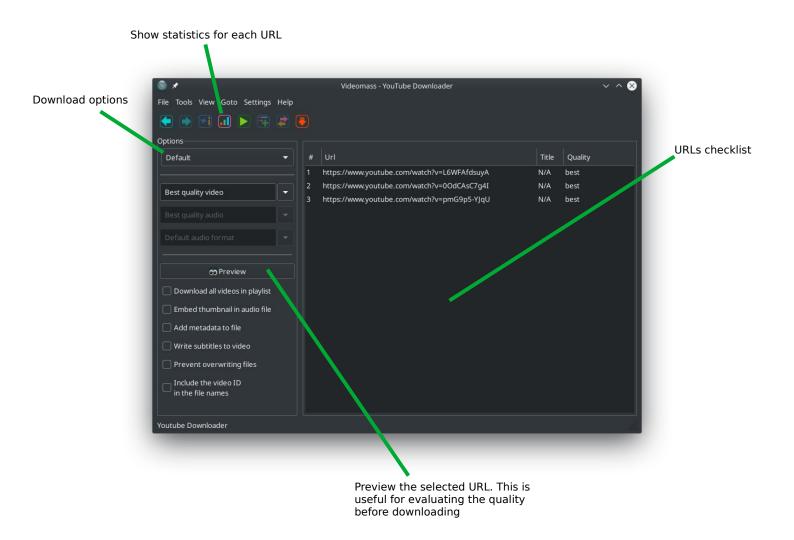


Only URLs in text format can be entered in this panel. URLs can be entered on the same line but separated by at least one white space. Alternatively you can enter each URL as a newline using the enter key.

Any text addition or deletion involves the reset of some parameters on the download panel. So, check the settings again before before starting the download process.

# 1.6 Youtube Downloader panel

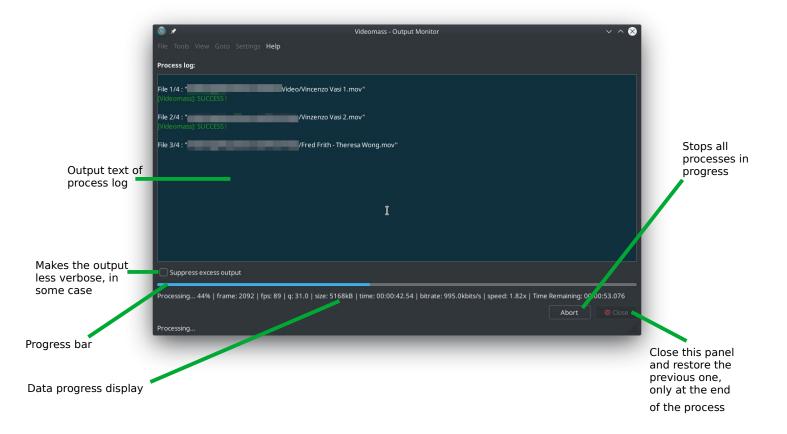
YouTube Downloader is the graphic interface for youtube-dl available on Videomass. It is able to interface both with the library provided by the Python package and with the youtube-dl executable through a subprocess thread (this depends on the user's choice).



# 1.7 Output Monitor panel

The Output Monitor panel, shares all the main execution processes available on Videomass and shows the progression of both file conversions and downloads and all related logs in high-light text format.

#### File conversions



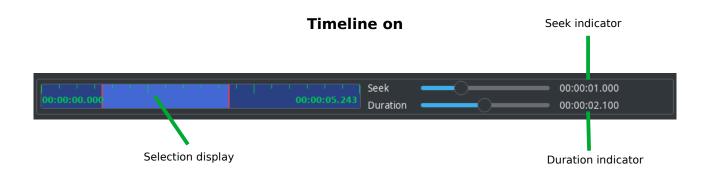
The logs displayed will be saved to file log and can always be viewed through the "Show Logs" window: menu bar > View > Show Logs, or by using the shortcut Ctrl-L

#### **Timeline Overview**

The timeline is a useful tool for setting a specific time period during conversion process. It can be shown or hidden by clicking on the check box located in the menu bar, *View* > *Show Timeline*, or by using the keyboard shortcut Ctrl+T.

#### **Timeline off**





**Note** that showing or hiding the Timeline does not disable its settings. To disable the Timeline settings, move the Duration and Seek sliders to 00:00:00.000

# 1.8 Using the Timeline you need to know that...

The Timeline can only be used in the <u>Presets Manager</u> and <u>AV-Conversions</u> panels and even for file playback. It will have no effect on the <u>Youtube Downloader</u> and <u>Concatenate media files</u> panels.

- Using <u>AV-Conversions</u> it affects video filters preview; Also affects audio filters such PEAK and RMS normalizations during volume detect process. So if you use PEAK or RMS audio normalization, you will have to rerun volume detect with each new Timeline setting, otherwise the detected values of the audio volume may be incorrect.
- Using <u>Presets Manager</u>, the Timeline will have the same settings made on <u>AV-Conversions</u> and vice versa. In fact it is the same Timeline, no difference.
- Timeline settings will be reset every time you add new files and also when they are deleted.
- If you work with two or more media files, each with different durations, while the time period in the Timeline exceeds the duration of some queued files, conversions will not be possible.

## 1.9 Tips and Tricks

Use the Timeline to do some conversion tests before finally processing your files. This way you save a lot of time. For example, first select a short duration 10-30 seconds to quickly evaluate the results.

The slider can be moved normally with the mouse but you have more precise movement with the keyboard arrows. The same effect can be achieved by slowing down the movement of the mouse.