

How to Install and Configure DaVinci Resolve in Linux

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If you're a content creator, especially a video editor, you've certainly heard of DaVinci Resolve. DaVinci Resolve is known for its color correction capabilities in major film studios, and comes with a powerful video and audio editor and editor, like Adobe After Effects, making it a creative piece of software. for Linux creators. Unlike other creative software, DaVinci Resolve supports the Linux platform, so you don't need any Windows API translation layer like Wine to install DaVinci Resolve.

Download Linux binaries

Download the latest version of DaVinci Resolve from the link above. At the time of writing, the latest version is version 18. DaVinci Resolve comes in two versions: free and paid. Select and download Linux binaries and save them in your downloads folder.

Picture 1 of How to Install and Configure DaVinci Resolve in Linux

Required driver installation

DaVinci Resolve relies heavily on GPU processing. If you have a recent Intel or AMD APU, your integrated GPU can run DaVinci Resolve on the device. In most cases, you need an Nvidia GPU to run this software. Install the latest Nvidia and CUDA drivers for your Nvidia GPU in your Linux machine.

Install the latest Nvidia driver in Ubuntu

For Ubuntu-based distributions, it is very easy to install the GPU driver. Run these commands to reboot and install the Nvidia GPU for you.

```
sudo apt search nvidia-driver sudo apt update && sudo apt upgrade sudo apt install
```

Install the latest Nvidia drivers in Debian

For Debian-based distributions, you have to do more than just run some commands. Open the file `/etc/apt/sources.list`:

```
sudo nano /etc/apt/sources.list
```

Add this line to the **sources.list** file. If it's already there, add the **contrib** and **non-free components**.

```
deb http://deb.debian.org/debian/ bullseye main contrib non-free
```

Picture 2 of How to Install and Configure DaVinci Resolve in Linux

Save this file and exit. Run the following command in Terminal to install the Nvidia driver.

```
sudo apt update sudo apt install nvidia-driver firmware-misc-nonfree
```

To install Cuda, you just need to run one command:

```
sudo apt install nvidia-cuda-dev nvidia-cuda-toolkit
```

Once installed, reboot your device for the changes to take effect.

```
sudo systemctl reboot
```

Install the latest Nvidia drivers in Fedora

To install Nvidia drivers in Fedora Linux, you first need to enable the RPM composite repository.

```
sudo dnf update sudo dnf install https://download1.rpmfusion.org/free/fedora/rpm
```

Detect Nvidia GPU and install necessary drivers.

```
lspci | grep VGA sudo dnf install akmod-nvidia
```

Once installed, reboot the machine and you're good to go.

```
sudo reboot
```

Build a deb package

The DaVinci Resolve Linux build was released to run on CentOS, a distribution owned by RedHat. Therefore, if you are using Fedora or another RedHat distribution, you do not need to follow the build steps below.

For Fedora users, you have to unzip the downloaded file and double-click the installer. It automatically installs and sets up all the files for you.

For Debian and Ubuntu-based distributions, you must convert the .run DaVinci Resolve file to a .deb file.

1. To do this conversion, download and extract the **MakeResolveDeb script**.
2. Create a folder and copy the DaVinci Resolve Installer and MakeResolveDeb scripts into the folder.
3. Before converting, install some required dependencies to build and run DaVinci Resolve perfectly.

```
sudo apt install libssl1.1 ocl-icd-ocl-dev fakeroot xorriso
```

4. Run the following command to convert your .run file into a .deb file, assuming that you put both the script and the .run installer in the same directory.

```
./makeresolvedeb*.sh DaVinci_Resolve*_Linux.run
```

This is a pretty intensive process, so give your computer some time to unzip and build the .deb package for you. When it's done, you'll be greeted with a .deb file that's ready to install.

Install the Deb . package

Installing the .deb file is really easy in Debian and Ubuntu derivatives. Run this command to install the package:

```
sudo dpkg -i
```

If this command runs without any errors, you can see the DaVinci Resolve icon in your application grid. Open the app and you will see a splash screen as shown below.

Picture 3 of How to Install and Configure DaVinci Resolve in Linux

Transcoding video for use in Davinci Resolve

In the free version of DaVinci Resolve, the H264 codec is not supported. Therefore, if you record video with this codec, you must transcode the video to another format that DaVinci Resolve supports. To transcode video, the article will use FFmpeg.

FFmpeg is a very powerful video transcoding and processing library and has many customization options. You can read the documentation for customizing FFmpeg. To install it on your device, run the following command:

```
sudo apt update sudo apt install ffmpeg
```

To edit video inside DaVinci Resolve, you must convert it to .mov format.

```
ffmpeg -i input.mp4 -vcodec dnxhd -acodec pcm_s16le -s 1920x1080 -r 30000/1001 -f mov -i
```

In the above command, suppose your input file is '**input.mp4**' and the output file name is '**output.mov**'. You can change the name according to your preference.

To convert .mkv to .mp4, run the following command.

```
ffmpeg -i input.mkv -map 0:0 -map 0:1 -map 0:2 -vcodec dnxhd -acodec:0 pcm_s16le
```

Setting up OBS Studio for Davinci Resolve

If you want to edit your screen recording with DaVinci Resolve and don't want to transcode your recorded file every time you want to edit, then you have to change some settings in your OBS application.

Inside your OBS settings, navigate to the '**output**' option and change the output mode to **advanced**.

Switch to the **Recording** tab and change the output type to a custom output option (FFmpeg). Select '**MOV**' as the container format and '**mpeg4**' as the video encoder. In the audio encoder options select the '**pcm_s16le**' option. You can refer to the settings below and make changes in your OBS software accordingly.

Picture 4 of How to Install and Configure DaVinci Resolve in Linux

Save the settings and restart the OBS software. You can test if the settings are working by capturing a small clip and importing it into the DaVinci Resolve software.

Transcoding to upload online and save space

You may find that when transcoding files for editing in DaVinci Resolve, the file size is huge - sometimes up to hundreds of gigabytes. Therefore, it takes a lot of time to edit and upload a dump file with a size of several hundred gigabytes. Even if you want to store files on your hard drive, those sizes are still huge.

To work around this issue, the article is using FFmpeg to transcode and compress files. Run the following command in the terminal:

```
ffmpeg -i input.mov -vf yadif -codec:v libx264 -crf 1 -bf 2 -flags +cgop -pix_fmt
```

'**Input.mov**' is the .mov file from DaVinci Resolve and '**output.mp4**' is your output .mp4 file. You can change these names according to your preference.

You can change the output and compression quality by adjusting the **-crf flag**. By default, for example set it to **1**, the highest quality. You can set this flag up to **25** for maximum compression. It also degrades the video quality when **-crf** is set to a very high number.

You finished reading the article "**How to Install and Configure DaVinci Resolve in Linux**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.