

# How can I rotate a video?

Asked 13 years, 1 month ago Modified 4 years, 9 months ago Viewed 151k times



Is there a way to change the rotation angle of a video file?

151

I have a couple of videos in the wrong direction so all I wanted is to correct it.



video

video-editor



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edited Nov 29, 2011 at 17:20

asked Nov 29, 2011 at 11:19



Michael K

14.2k 2 21 21



maniat1k

8,260 10 39 52

## 7 Answers

Sorted by: Highest score (default)



You can also use ffmpeg and the commandline (taken from [Rotating videos with FFmpeg](#)):

190

Rotate 90 clockwise:



```
ffmpeg -i in.mov -vf "transpose=1" out.mov
```



For the transpose parameter you can pass:

```
0 = 90CounterClockwise and Vertical Flip (default)
1 = 90Clockwise
2 = 90CounterClockwise
3 = 90Clockwise and Vertical Flip
```

And to flip it horizontally ([ffmpeg documentation](#)):

Flip the input video horizontally.

For example to horizontally flip the video in input with `ffmpeg`:

```
ffmpeg -i in.avi -vf "hflip" out.avi
```

## Nota bene 1

Older versions of Ubuntu supplied `avconv` instead of `ffmpeg`. In this case just change `ffmpeg` to `avconv`:

```
avconv -i in.mov -vf "transpose=1" out.mov
```

## Nota bene 2

If the output is a `.mp4` video you has to add `strict -2` before the output file [to avoid error message](#):

```
ffmpeg -i in.mp4 -vf "transpose=1" -strict -2 out.mp4
```

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edited Apr 3, 2020 at 18:36



loved.by.Jesus

627 12 24

answered Dec 13, 2012 at 10:54



franzlorenzon

2,977 4 21 23

4 [-sameq](#) [doesn't mean 'same quality'](#), it is actually a very limited option that is almost never practically useful, and has been removed from recent versions of `ffmpeg` precisely because its name causes confusion. – [evilsoup](#) Sep 16, 2013 at 9:14

@evilsoup thank you for the comment. I've rolled back the changes. However, a better link to provide is this: [trac.ffmpeg.org/wiki/...](http://trac.ffmpeg.org/wiki/...), which is from the `ffmpeg` site itself. – [Alaa Ali](#) Sep 17, 2013 at 4:29

2 N.B. that `ffmpeg` is now deprecated in favour of `avconv` "\*\*\* THIS PROGRAM IS DEPRECATED \*\*\* This program is only provided for compatibility and will be removed in a future release. Please use `avconv` instead." See a the answer for `avconv`: [askubuntu.com/questions/269429/...](http://askubuntu.com/questions/269429/...) – [Sparhawk](#) Feb 10, 2014 at 6:50

1 @Sparhawk You are right --- but it seems that `ffmpeg` has a chance of doing a comeback. [lwn.net/Articles/607591](http://lwn.net/Articles/607591) ;-)- [Rmano](#) Sep 8, 2014 at 9:37

2 To add to your answer (maybe some people might find this useful): To rotate an `x264` video with `ffmpeg` I had to specify the codec / library explicitly: `ffmpeg -i in.mp4 -vcodec libx264 -vf "transpose=2" out.mkv`. If it says `Unknown encoder libx264`, you need to install [the appropriate libavcodec-extra package](#). – [balu](#) Nov 5, 2015 at 14:00



If you are asking for rotate a video 90° or 180°, you should use avidemux.

89

```
sudo apt-get update
sudo apt-get install avidemux
```



1. open the video in avidemux
2. select a new video format and don't choose copy
3. Under "Video" click on Filters



1. Choose "Transform" and scroll down until you see rotate.
2. Add it
3. select the right angle
4. select preview
5. ok.

4. Go to file

5. save

6. save video

And you're done.

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edited Aug 11, 2015 at 0:01



Wilbur Whateley

111 4

answered Nov 29, 2011 at 11:53



Infernodot

922 7 2

- 
- 4 Not sure what video format i should choose? Can i keep original video format? – [Dziamid](#) Dec 4, 2012 at 9:47
- 
- 1 I have rotated videos (.MOV) in Windows XP, using Apple Quicktime Pro ("QTP"). If done correctly the file remains rotated for other Windows machines and on my wife's iMac, but appears unrotated in Dragon Player ("DP") using Kubuntu 12.04.1. DP doesn't claim to be more than a "Simple" player, but I suspect that the problem is that QTP rotates files in a way that is accessible only in QT. Does Avidemux do better? – [WGCman](#) Dec 9, 2012 at 12:14
- 
- 3 What does "select a new video format and don't choose copy" mean, exactly? – [Jeff Trull](#) Jul 6, 2014 at 4:57
- 
- 2 Echoing @JeffTrull, can you elaborate on the steps? I found that 'Click on Filters' means 'Select Video → Filters from the menu', but then it says 'To apply filters the video must be transcoded'... whatever that means... – [Michael Scheper](#) Apr 28, 2015 at 4:38
- 
- 16 Sadly, "avidemux" is no longer in the standard repo. – [Cerin](#) Oct 24, 2017 at 4:13
- 

Do you mean rotation on playback or converting it to a rotated version?



As a commandline-user I normally use mplayer:

19

Playback: `mplayer -vf rotate=1 videofile.mp4` (rotate can have values from 0 to 7, 1 rotates 90deg clockwise)



Convert (requires transcoding): `mencoder -vf rotate=1 videofile.mp4 -oac copy -of lavf -lavfopts format=mp4 -ovc lavc -lavcopts vcodec=mpeg4 -o newfilename.mp4` (you can use other video codecs as well, this is just an example)



And here is a graphical tool to do the latter: kdenlive (a kde application from the universe)

- import your video as a clip
- draw the clip into the timeline
- rightclick onto the video chunk in timeline
- select "Add Effect" -> "Crop and Transform" -> "Rotate (Keyframable)"
- The effect can be configured in the upper central section of the window, set X to 900 (thats 90 deg clockwise)
- Render your project (Project -> Render in the main menu)
- Be careful to choose a video resolution for the resulting portrait format
- select any video codec you like, i recommend x264 or vp8 (webm)

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edited Oct 26, 2012 at 17:02

answered Oct 26, 2012 at 16:44



Paul Hänsch

3,217 22 15

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convert to a rotated form. – [Bennett](#) Oct 26, 2012 at 16:46

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Out of curiosity: did you use mencoder in the end or kdenlive? There is a lot of documentation available online for tweaking mencoder options btw. Also some recommendations for "the perfect mencoder command line"(TM), most of them good. – [Paul Hänsch](#) Oct 27, 2012 at 13:01

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3 If you want to rotate by 180 degrees, you have to use option flip and mirror at the same time, thus `mplayer -vf flip,mirror videofile.mkv` – [erik](#) Jan 20, 2017 at 16:40

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@erik Nice hint. Strange, though, when I run my video using `mplayer -vf flip,mirror` everything is fine. But when I try to convert it, using `mencoder -vf flip,mirror`, it is still rotated by 90°. Is there a different syntax for `mencoder` to flip a video by 180°? – [Würgspaß](#) Aug 2, 2018 at 17:11

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**11**

If you just want to view a movie in a different orientation, as of Totem 3.1.4 (in Raring 13.04 and beyond), there is a "rotation plugin" which you can turn on (edit/plugins), and then rotate e.g. via ctrl-r.



I think proper rotation should be automatic when there is rotation metadata, and I commented on a relevant Totem bug here: [Bug 701950 – Iphone Movies](#)



There are also ways to do this in mplayer (and to convert to a rotated movie with mencoder), e.g.

```
mplayer -vf rotate file.mov
```

or

```
mencoder file.mov -oac lavc -ovc x264 -vf rotate=1 -o file-rotated.mov
```

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edited Feb 28, 2015 at 22:05

answered Jul 9, 2014 at 21:11



**nealmcb**

3,685 3 44 61

- 
- 1 I found that this only did 90 degrees rotation, but with various combinations of flip and mirror. To get a 180 degree rotation, I have to run `mplayer -vf rotate=1,rotate=1 file.mp4` that is, two 90 degree rotations in a row. – [Criggie](#) Nov 22, 2020 at 4:46
- 

**6**

The best option (in my opinion!) is OpenShot, you simply follow these easy steps:

1. Start OpenShot
2. On the File Tab, Import the video file you need to rotate
3. Drag the imported video to the timeline field at the bottom (either one will do!).
4. Once the videoclip is in the timeline field, right click on it and choose rotate to the desired angle
5. Then on the File Tab choose Export video and set the preferred format and location to it!
6. And presto!! That's it



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edited Nov 14, 2013 at 4:23

answered Nov 13, 2013 at 5:52



**ADOLFO HERNANDEZ**

79 1 2

- 
- 2 You don't really explain how to acutally rotate it. Please [edit your answer](#) and add that information.  
– [MadMike](#) Nov 13, 2013 at 7:20
-

- 4 No, it rotates the video but keeps the aspect ratio vertical, making the video cropped and square  
– [Magnetic\\_dud](#) Mar 4, 2015 at 9:16
- 



OpenShot crops the video when rotated from landscape to portrait. To compensate, I tried these steps and it worked. Hope it works for you too.

4



1. place video on a track, right click and select properties
2. Under videos tab, uncheck "maintain aspect ratio" and "stretch full screen"
3. Under videos tab, put 90 for rotating clockwise, or -90 to rotate anti-clockwise
4. Under Layout tab, decrease width % to lower value (say 70) for both "start of clip" and "end of clip". This value should depend upon aspect ratio of shooting, so try accordingly. Mine was 16:9 and value of 70 was fine.



In this way, you would find the video least cropped and it should not be noticeable.

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edited May 4, 2016 at 9:47

answered May 3, 2016 at 14:18



[sbharti](#)

266 1 11



A simple tool that can also rotate is transmageddon. Install it with

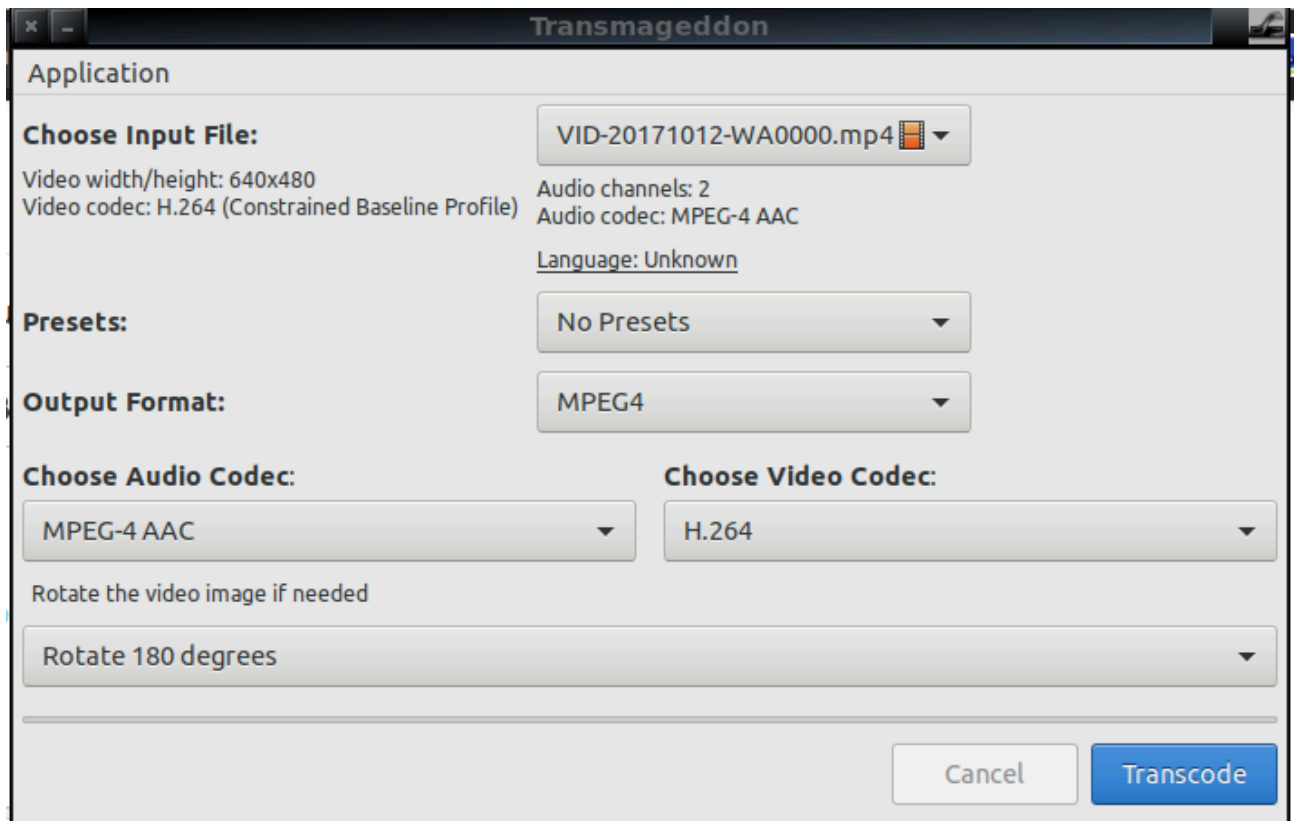
3

```
sudo apt install transmageddon
```



then load your file into it and choose the rotation position





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answered Dec 31, 2018 at 14:20



[ptetteh227](#)

2,004 17 27

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Same codecs, but the output file became more than 10 times smaller... Is it because of quality degradation? – [HEKTO](#) Jan 19, 2020 at 3:11

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This is the best answer. And HEKTO, the quality of the output is dependent on the output format and codecs you choose. – [Nav](#) Jul 14, 2020 at 4:38

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ModuleNotFoundError: No module named 'gi' – [rclyde](#) Nov 17, 2020 at 14:17



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