

YouTube - PAL vs. NTSC - 24, 25, 30 fps

Submitted by vylaern on Tue, 08/16/2011 - 07:53
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- [Rendering](#) [1]

Hi,

This is a topic for all interested in publishing your film on YouTube. I live in Europe so I use PAL and I have made a video in 24fps (from Nikon D90). When I published it on YouTube, the friend of mine realized it is "choppy". For the beginning I thought it is because of video quality of Nikon D90, but after spending a lot of time and watching a hundreds of videos on YouTube I realized a problem is somewhere else.

I have found that YouTube change original 25fps (PAL from Europe) into 30fps (NTSC) - it repeats every 5th frame, so it means why I find the playback jittery and annoying to watch when you have moving objects (eg. cars).

You can see it in this video:

Comparison Panasonic Lumix ZS3 (NTSC 30fps) vs TZ7 (PAL 25 fps)

<http://www.youtube.com/watch?v=bEIRSbahLnw> [2]

You can see a man in white shirt in about 46-47 sec. it freezes for a bit of second. I have uploaded this video into kdenlive and in 46 sec frame 19 is the same like frame 20, 25 is the same like 26.

It's easy to see the problem here (video in PAL 25fps):

<http://www.youtube.com/watch?v=budXesxddvc> [3]

The cars freeze for second so it doesn't look smooth.

So, because I am interested mainly in publishing on YouTube, I have bought a new body D5100 which supports 24,25,30 fps and both PAL and NTSC.

My question is, if there is any difference in rendering profile in Kdenlive for YouTube or H.264 when we choose NTSC or PAL?

Can anyone find a difference in examples below?

Here is the profile for YouTube from Kdenlive for NTSC:

```
f=mp4 hq=1 acodec=aac ab=128k ar=44100 vcodec=mpeg4 minrate=0 b=2000k s=1280x720 aspect=%dar mbd=2 trellis=1 mv4=1 subq=7 qmin=10 qcomp=0.6 qdiff=4 qmax=51
```

Here is the profile for YouTube from Kdenlive for PAL:

```
f=mp4 hq=1 acodec=aac ab=128k ar=44100 vcodec=mpeg4 minrate=0 b=2000k s=1280x720 aspect=%dar mbd=2 trellis=1 mv4=1 subq=7 qmin=10 qcomp=0.6 qdiff=4 qmax=51
```

Here is the profile for H.264 4k from Kdenlive for PAL:

```
f=mp4 hq=1 acodec=aac ab=128k ar=48000 pix_fmt=yuv420p vcodec=libx264 minrate=0 b=4000k g=250 bf=3 b_strategy=1 subcmp=2 cmp=2 coder=1 flags=+loop flags2=dct8x8 qmax=51 subq=7 qmin=10 qcomp=0.6 qdiff=4 trellis=1 aspect=%dar
```

Here is the profile for H.264 4k from Kdenlive for NTSC:

```
f=mp4 hq=1 acodec=aac ab=128k ar=48000 pix_fmt=yuv420p vcodec=libx264 minrate=0 b=4000k g=250 bf=3 b_strategy=1 subcmp=2 cmp=2 coder=1 flags=+loop flags2=dct8x8 qmax=51 subq=7 qmin=10 qcomp=0.6 qdiff=4 trellis=1 aspect=%dar
```

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Published on Kdenlive (<http://kdenlive.org>)

Another question - which frame rate profile should I chose for Nikon D5100 - 30fps or 29.97fps?

Nikon says it:

A frame rate of 30 p (actual frame rate 29.97 fps) is available when NTSC is selected for video mode. 25 p is available when PAL is selected for video mode. Actual frame rate when 24 p is selected is 23.976 fps.

And which frmae rate use YouTube 30fps or 29.97fps?

Thx for the answers.

p.s. I know that Vimeo has 25fps for 25fps upload film.

Source URL: <http://kdenlive.org/forum/youtube-pal-vs-ntsc-24-25-30-fps>

Links:

[1] <http://kdenlive.org/forum/users-forums/rendering>

[2] <http://www.youtube.com/watch?v=bEIRSbahLnw>

[3] <http://www.youtube.com/watch?v=budXesxddvc>