

Burnt-in SRT subtitle based on ffmpeg

ffmpeg provides the straight and easy way to burn-in SRT subtitle. By force_style, you can customize your subtitle format like font, fontsize, outline, outlinecolor, borderstyle and so on. The disadvantage of burnt-in caption is that can make bad TV experience for those who does not want to see the subtitle on top of the screen. On the contrary, the benefit of the burnt-in subtitie is that doesn't require any additional technical tools/modules on the client.

```
ffmpeg -i test_30sec.mov -vf "format=yuv240p, fps=30, subtitles=subtitle_en.srt:force_style='fontsize=25, Outline=2, OutlineColor=&H80000000'" out.mp4
```

Its result will be like below:



If you want to put dark block behind of the subtitle, you can do it easily by adding BorderStyle=4 like below:

```
ffmpeg -i test_30sec.mov -vf "format=yuv240p, fps=30, subtitles=subtitle_en.srt:force_style='fontsize=25, BorderStyle=4, Outline=8, OutlineColor=&H80000000'" out.mp4
```

Below is an example for HLS with burnt-in subtitles

```

ffmpeg -fflags +genpts -hide_banner -re -y -i "test_30sec.mov" \
    -map 0:v:0 -map 0:a:0 \
    -map 0:v:0 -map 0:a:0 \
    -map 0:v:0 -map 0:a:0 \
    -map 0:v:0 -map 0:a:0 \
    -map 0:v:0 -map 0:a:0 \
    -map 0:v:0 -map 0:a:0 \
    -c:v libx264 -profile:v main -x264opts no-scenecut -crf 18 -sc_threshold 0 -g 6 -keyint_min 6 -c:a aac -
ar 48000 \
    -c:s mov_text \
    -filter:v:0 "scale=iw*sar*min(1920/(iw*sar)\,1080/ih):ih*min(1920/(iw*sar)\,1080/ih),pad=1920:1080:(ow-
iw)/2:(oh-ih)/2,format=yuv420p,fps=30" -b:v:0 8M -maxrate:v:0 10M -minrate:v:0 6M -bufsize:v:0 8.5M -b:a:0 192k
-vf "subtitles=subtitle_en.srt:force_style='fontsize=25,Outline=2,OutlineColor=&H80000000'" -muxdelay 0 -
muxpreload 0 \
    -filter:v:1 "scale=iw*sar*min(1280/(iw*sar)\,720/ih):ih*min(1280/(iw*sar)\,720/ih),pad=1280:720:(ow-iw)
/2:(oh-ih)/2,format=yuv420p,fps=30" -b:v:1 3M -maxrate:v:1 5M -minrate:v:1 4M -bufsize:v:1 6M -b:a:1 128k -vf
"subtitles=subtitle_en.srt:force_style='fontsize=25,Outline=2,OutlineColor=&H80000000'" -muxdelay 0 -muxpreload
0 \
    -filter:v:2 "scale=iw*sar*min(960/(iw*sar)\,540/ih):ih*min(960/(iw*sar)\,540/ih),pad=960:540:(ow-iw)/2:
(oh-ih)/2,format=yuv420p,fps=30" -b:v:2 2.5M -maxrate:v:2 2.8M -minrate:v:2 2.2M -bufsize:v:2 5M -b:a:2 128k -
vf "subtitles=subtitle_en.srt:force_style='fontsize=25,Outline=2,OutlineColor=&H80000000'" -muxdelay 0 -
muxpreload 0 \
    -filter:v:3 "scale=iw*sar*min(720/(iw*sar)\,406/ih):ih*min(720/(iw*sar)\,406/ih),pad=720:406:(ow-iw)/2:
(oh-ih)/2,format=yuv420p,fps=30" -b:v:3 2M -maxrate:v:3 2.3M -minrate:v:3 1.8M -bufsize:v:3 4M -b:a:3 128k -vf
"subtitles=subtitle_en.srt:force_style='fontsize=25,Outline=2,OutlineColor=&H80000000'" -muxdelay 0 -muxpreload
0 \
    -filter:v:4 "scale=iw*sar*min(640/(iw*sar)\,360/ih):ih*min(640/(iw*sar)\,360/ih),pad=640:360:(ow-iw)/2:
(oh-ih)/2,format=yuv420p,fps=30" -b:v:4 1.5M -maxrate:v:4 1.8M -minrate:v:4 1.3M -bufsize:v:4 3M -b:a:4 128k -
vf "subtitles=subtitle_en.srt:force_style='fontsize=25,Outline=2,OutlineColor=&H80000000'" -muxdelay 0 -
muxpreload 0 \
    -filter:v:5 "scale=iw*sar*min(480/(iw*sar)\,270/ih):ih*min(480/(iw*sar)\,270/ih),pad=480:270:(ow-iw)/2:
(oh-ih)/2,format=yuv420p,fps=30" -b:v:5 800K -maxrate:v:5 900K -minrate:v:5 600K -bufsize:v:5 1600K -b:a:5 96k -
vf "subtitles=subtitle_en.srt:force_style='fontsize=25,Outline=2,OutlineColor=&H80000000'" -muxdelay 0 -
muxpreload 0 \
    -var_stream_map "v:0,a:0 v:1,a:1 v:2,a:2 v:3,a:3 v:4,a:4 v:5,a:5" \
    -hls_time 5 -start_number 0 -hls_list_size 0 \
    -master_pl_name "hls-manifest.m3u8" \
    -hls_segment_filename sub%v-ts%004d.ts sub%v-ts.m3u8

```