

1 Solutions in Melt Framework?

MLT

- Read through MLT FX User Guide [1]
- Can MLT FX be used in the terminal/through commands or is it an application with UI only? Look into <https://www.mltframework.org/docs/fxcut/>? on FX Cut (but this page is from 2005)
- Apply filter?
- Look into <https://www.mltframework.org/plugins/PluginsFilters/>
- `melt [options] [producer [name=value]*]+ Options:`
 - `attach filter[:arg] [name=value]*` Attach a filter to the output
 - `attach-cut filter[:arg] [name=value]*` Attach a filter to a cut
 - `attach-track filter[:arg] [name=value]*` Attach a filter to a track
- Collected information about melt <https://superuser.com/questions/358082/command-line-video-editing-in-linux-cut-join-and-preview>
- Promising sounding filters:

- `avfilter.colorbalance`

<https://www.mltframework.org/plugins/FilterAvfilter-colorbalance/>

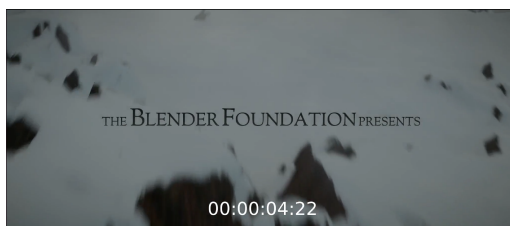
title: colorbalance

media types: Video

description: Adjust the color balance.

→ looks promising

Execution of melt <https://s3.eu-central-1.amazonaws.com/accurate-player-demo-assets/timecode/sintel-2048-timecode-stereo.mp4>
`-filter avfilter.colorbalance av.rs=1 av.gm=1 av.bh=1:`



Original colours



Colours with `av.rs=1 av.gm=1 av.bh=1`

Float parameters with komma instead of dot, f.ex. 0,5

Adding filter to `local_melt.py` to execute it in the Accurate Player using JIT:

```

108 logging.info("Command line arguments for melt application: ")
109 logging.info(melt_args)
110 melt_args.append('-filter')
111 melt_args.append('avfilter.colorbalance')
112 melt_args.append('av.rs=1')
113 logging.info("Modified command line arguments for melt application: ")
114 logging.info(melt_args)
115 LOCAL_MELT["process"] = Popen(melt_args, close_fds=True, env=env, stdin=PIPE)
116 logging.info("Melt process spawned")
93
94 melt_args += [
95     "-filter",
96     "avfilter.colorbalance",
97     "av.rs=1"
98 ]
99

```



- `avfilter.colorchannelmixer`

<https://www.mltframework.org/plugins/FilterAvfilter-colorchannelmixer/>

title: `colorchannelmixer`

media types: `Video`

description: `Adjust colors by mixing color channels.`

→ looks promising

- `avfilter.colorcontrast`

<https://www.mltframework.org/plugins/FilterAvfilter-colorcontrast/>

title: `colorcontrast`

media types: `Video`

description: `Adjust color contrast between RGB components.`

→ looks kind of promising

- `avfilter.colorlevels`

→ Maybe – Adjust the color levels with black point and white point.
(The Black point is the Darkest set of pixels in an image, while the White point is the Brightest.)

- `avfilter.colortemperature` → Maybe – adjust color temperature of video.

- `frei0r.coloradj_RGB`

https://www.mltframework.org/plugins/FilterFrei0r-coloradj_rgb/

title: `coloradj_RGB`

media types: `Video`

description: `Simple color adjustment`

→ looks promising

- `frei0r.colorize`

<https://www.mltframework.org/plugins/FilterFrei0r-colorize/>

title: `colorize`

media types: `Video`

description: `Colorizes image to selected hue, saturation and lightness`

→ looks promising

References

- [1] Snell Advanced Media (SAM). *MLT FX - User Guide*. Accessed 12.02.2024. 2016. URL: <https://wwwapps.grassvalley.com/docs/Manuals/sam/Post%20and%20Editing/MLT%20FX%20User%20Guide.pdf>.