# FFmpeg Scaler Documentation

## Table of Contents

## 1 Description# TOC

The FFmpeg rescaler provides a high-level interface to the libswscale library image conversion utilities. In particular it allows one to perform image rescaling and pixel format conversion.

## 2 Scaler Options# TOC

The video scaler supports the following named options.

Options may be set by specifying *-option value* in the FFmpeg tools. For programmatic use, they can be set explicitly in the `SwsContext` options or through the `libavutil/opt.h` API.

`sws_flags`

> Set the scaler flags. This is also used to set the scaling algorithm. Only a single algorithm should be selected.
>
> It accepts the following values:

`'fast_bilinear'`

> Select fast bilinear scaling algorithm.

`'bilinear'`

> Select bilinear scaling algorithm.

`'bicubic'`

> Select bicubic scaling algorithm.

`'experimental'`

> Select experimental scaling algorithm.

`'neighbor'`

Select nearest neighbor rescaling algorithm.

'`area`'

Select averaging area rescaling algorithm.

'`bicublin`'

Select bicubic scaling algorithm for the luma component, bilinear for chroma components.

'`gauss`'

Select Gaussian rescaling algorithm.

'`sinc`'

Select sinc rescaling algorithm.

'`lanczos`'

Select Lanczos rescaling algorithm.

'`spline`'

Select natural bicubic spline rescaling algorithm.

'`print_info`'

Enable printing/debug logging.

'`accurate_rnd`'

Enable accurate rounding.

'`full_chroma_int`'

Enable full chroma interpolation.

'`full_chroma_inp`'

Select full chroma input.

'`bitexact`'

Enable bitexact output.

`srcw`

Set source width.

`srch`

Set source height.

`dstw`

Set destination width.

`dsth`

Set destination height.

`src_format`

Set source pixel format (must be expressed as an integer).

`dst_format`

Set destination pixel format (must be expressed as an integer).

`src_range`

Select source range.

`dst_range`

Select destination range.

`param0, param1`

Set scaling algorithm parameters. The specified values are specific of some scaling algorithms and ignored by others. The specified values are floating point number values.

`sws_dither`

Set the dithering algorithm. Accepts one of the following values. Default value is 'auto'.

'auto'

automatic choice

'none'

no dithering

'bayer'

bayer dither

'ed'

error diffusion dither

'a_dither'

arithmetic dither, based using addition

'x_dither'

arithmetic dither, based using xor (more random/less apparent patterning that a_dither).

alphablend

Set the alpha blending to use when the input has alpha but the output does not. Default value is 'none'.

'uniform_color'

Blend onto a uniform background color

'checkerboard'

Blend onto a checkerboard

'none'

No blending

# 3 See Also# TOC

ffmpeg, ffplay, ffprobe, ffserver, libswscale

# 4 Authors# TOC

The FFmpeg developers.

For details about the authorship, see the Git history of the project (git://source.ffmpeg.org/ffmpeg), e.g. by typing the command `git log` in the FFmpeg source directory, or browsing the online repository at http://source.ffmpeg.org.

Maintainers for the specific components are listed in the file MAINTAINERS in the source code tree.

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