# FFmpeg Scaler Documentation

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## 1 Description

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

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).

# 3 See Also

ffmpeg, ffplay, ffprobe, ffserver, libswscale

# 4 Authors

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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