

**NAME**

make\_h264 - Generate an MP4/H.264 file

**SYNOPSIS**

```
make_h264 -i input_path -o output_file
make_h264 (-h|-x)
```

**DESCRIPTION**

**Bash AVpres** is a collection of Bash script for audiovisual preservation. One of these small programs is **make\_h264**. It encodes an H.264 stream of a video file or a folder containing single images and muxes it into an MP4 container (.mp4).

**OPTIONS****BASIC OPTIONS**

**-i** *input\_path*, **--input=***input\_path*  
input file if stream-based content, or input folder if single-image-based content

When a folder is passed, the script extracts the regular expressions ("regex") for processing all the files and determines the actual number of the first frame. The naming must follow one of the two formats:

```
path/to/filename_digits.extension
path/to/digits.extension
```

where *digits* is the numbering, which must be either alone or at the end of the filename, divided by an underscore from the rest of the filename and by a period from the extension (the filename can contain other underscore signs). The numbering can start at any number, but all successive frames must be present, from the beginning to the end of the interval.

**-o** *output\_file*, **--output=***output\_file*  
output file

**ADVANCED OPTIONS**

The default arguments of the advanced options can be overwritten by the user. Note that any string containing spaces must be quoted. To cancel a default argument use:

```
--<option>=' #'
```

**--ff\_glo\_opt='y'**  
A possibly already existing output file is overwritten.

The following two input file default parameters are used only when single-image-based content is provided:

**--f='image2'**  
Probably this parameter should never be modified. It forces the use of the image file demuxer for the input.

**--framerate='24'**  
The default frame rate is 25. Silent films or amateur films have often a different projection speed than the standardised 24 frames per second of sound films, for example 18.

Video codec options with their default parameters:

**--filter\_v=""**  
This can be used, for example, to provide a scaling and/or a padding video filter.

**--c\_v='libx264'**  
video codec

**--preset='veryslow'**  
A slower encoding preset means a better compression rate. Possible values include:

```
veryslow
slow
medium
fast
```

veryfast

**--crf='18'**

constant rate factor (CRF)

**--qp='18'**

The quantisation parameter (QP) is used only when CRF value is cancelled.

**--pix\_fmt='yuv420p'**

pixel format for 8-bit encoding

Audio codec options with their default parameters:

**--filter\_a=""**

This can be used to provide audio filters.

**--c\_a='aac'**

The AAC audio codec is the most compatible with the MP4 container.

If no sound stream is present, then the **ffmpeg** parameter '-an' is used instead.

Output file default parameters:

**--movflags='+faststart'**

This flag allows to start playing before the whole file is loaded.

**--suffix='\_H264'**

The suffix is inserted at the end of the filename, immediately before the period and the extension. Note that a preceding underscore, if wished, must be added.

**--extension='mp4'**

Please change the extension only if you know exactly what you are doing.

## INFORMATIVE OPTIONS

**-h, --help**

display a help message

**-x, --options**

display the advanced options with their default arguments

## NOTES

Temporary log files are stored at:

/tmp/AVpres/make\_h264.XXXXXXXXXX

The log files can be used for debugging, for example by running **cat** on the address prompted with fatal error messages:

cat /tmp/AVpres/make\_h264.XXXXXXXXXX

## SEE ALSO

FFmpeg Cookbook for Archivists, entry "Video into H.264 / MPEG-4 AVC"

[https://avpres.net/FFmpeg/im\\_H264.html](https://avpres.net/FFmpeg/im_H264.html)

FFmpeg Cookbook for Archivists, entry "Image sequence into H.264 / MPEG-4 AVC"

[https://avpres.net/FFmpeg/sq\\_H264.html](https://avpres.net/FFmpeg/sq_H264.html)

**make\_ffv1(1)** and **make\_prores(1)**.

**ffmpeg(1)** and **ffprobe(1)**.

## COPYRIGHT

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