## NAME

openmovim - Command-line interface to encode, decode, play and analyse moving images using **libmovim**

## SYNOPSIS

**openmovim** (**-e**|**-d**|**-p**|**-a**|**-m**|**-s**) **-i** *input_file* [**-o** *output_file*]

**openmovim** (**-c**|**-u**) **-i** *input_file* [**-o** *output_file*]

**openmovim -h**

## DESCRIPTION

**MovIm** is a video codec specifically designed for both conservation and restoration of moving images.

The **MovIm** package includes the **libmovim** C library implementing the **MovIm** video codec and its associated **movimenc**, **movimdec** and **movimplay** utilities, as well as the **openmovim** Bash command-line interface to **libmovim** allowing to encode, decode, play and analyse virtually any moving images.

## OPTIONS

### GENERAL OPTIONS

Select a mode:

**-e, --encode**

encoding mode: use **movimenc** to encode an *input_file* to an *output_file*

**-d, --decode**

decoding mode: use **movimdec** to decode an *input_file* to an *output_file*

**-p, --play**

playing mode: use **movimplay** to play an *input_file*

**-a, --analyse, --analyze**

analysing mode: use **movimdec** to analyse the validity of an *input_file* and write a report to an *output_file* if specified or to the Terminal otherwise

**-m, --metadata**

metadata mode: use **movimdec** to extract the technical metadata of an *input_file* (without analysing its validity) and write a report to an *output_file* if specified or to the Terminal otherwise

**-s, --scan**

scan mode: use **movimenc** to encode the *input_file* (i.e. the stream coming from a sensor) into an *output_file*

or select an action:

**-c, --compress**

use **movimenc** to compress an *input_file*

If no *output_file* is specified, then the *input_file* is overwritten.

**-u, --uncompress**

use **movimenc** to expand an *input_file*

If no *output_file* is specified, then the *input_file* is overwritten.

and select the file(s):

**-i** *input_file*, **--input=***input_file*

In encoding mode all container formats supported by FFmpeg should work as wrapper.

In decoding, analysing or metadata mode the container formats NUT (.nut), MP4 (.mp4), QuickTime (.mov), AVI (.avi) and Matroska (.mkv) have been tested as wrappers for the MovIm video codec. Yet the uncompressed or lossless compressed MovIm data can be used directly as a file (.movim), which may be easier to handle.

In scanning mode the stream from the sensor is read as *input_file*.

**-o** *output_file*, **--output=***output_file*
>  In encoding mode the container formats NUT (.nut), MP4 (.mp4), QuickTime (.mov), AVI (.avi) and Matroska (.mkv) have been tested as wrappers for the MovIm video codec. Yet the uncompressed or lossless compressed MovIm data can be used directly as a file (.movim), which may be easier to handle.
>
>  In decoding mode all container formats supported by FFmpeg should work as wrapper.
>
>  In analysing or metadata mode the output file format can be plain text (.txt), JSON (.json) or XML (.xml).
>
>  In scanning mode the uncompressed MovIm data are stored directly as a file (.movim).

### ANALYSING AND METADATA EXTRACTION OPTIONS
**--report-fmt=**(*json*|*plain*|*xml*)
>  report format can be *json*, *plain* text (default) or *xml*

### SCANNING OPTIONS
**--bayer2rgb=**(*bggr*|*rggb*|*gbrg*|*grbg*)
>  transform a Bayer-encoded *input_file* into a half-resolution RGB *output_file*
>
>  This allows to generate on the fly a full RGB file with a Bayer-filter scanner. If the option is not passed and no information is send by the camera, then the program tries to find the correct pattern.

### INFORMATIVE OPTION
**-h, --help**
>  display a help message

## NOTES
>  The current **openmovim** command-line interface is a work in progress. Foremost, no validity check of the passed parameters has been implemented so far.
>
>  4:2:2 chroma subsampling is now supported, as requested by the video community.

## SEE ALSO
>  **movimdec**(1), **movimenc**(1) and **movimplay**(1); **libmovim**(1).

## COPYRIGHT
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