HandBrake CLI Video transcoder

Source -i file or disc → `-t / -c` → **Title** chapters, tracks → `filters, size` → **Picture** crop, scale, deinterlace → `-e / -q` → **Encode** video, audio, subs → `-f` → **Output** mp4 / mkv / webm

CONCEPTS

Pick a preset first, then override single options after it; the preset only sets defaults.

Constant quality (-q) beats a fixed bitrate for most files; lower numbers mean better quality and bigger files.

BASICS

`HandBrakeCLI -i <in> -o <out>`
Encode a file

`-Z <preset>`
Use a preset by name

`-z`
List all presets

`--preset-import-file <file.json>`
Import a preset file

`-f <format>`
Set container (av_mp4, av_mkv, av_webm)

`-O`
Optimize MP4 for web streaming

`--json`
Print machine-readable progress

SOURCE AND TITLES

`-t 0`
Scan all titles, then exit

`--scan`
Scan only the chosen title

`-t <n>`
Encode title number n

`--main-feature`
Auto-select the main title

`-c <a-b>`
Encode only chapters a to b

`--min-duration <s>`
Ignore titles shorter than s seconds

`--start-at <unit:n> --stop-at <unit:n>`
Encode a time range

VIDEO

`-e <encoder>`
Choose video encoder

`-q <rf>`
Constant quality value

`-b <kbps>`
Average video bitrate

`--multi-pass`
Use two-pass encoding with -b

`--encoder-preset <name>`
Set speed/efficiency preset

VIDEO (cont.)

`--encoder-tune <name>`
Tune for content type

`-r <fps> --cfr`
Constant frame rate

`--vfr`
Variable frame rate

PICTURE

`-w <px> -l <px>`
Set width and height

`-X <px> -Y <px>`
Limit maximum width and height

`--crop-mode <mode>`
Crop: auto, conservative, none, custom

`--crop <t:b:l:r>`
Crop by pixel amounts

`--rotate <angle>`
Rotate 90, 180 or 270 degrees

FILTERS

`--deinterlace`
Deinterlace with yadif

`--decomb`
Deinterlace only combed frames

`--hqdn3d <preset>`
Denoise (ultralight to strong)

AUDIO

`-a <list>`
Select audio tracks (1,2 or none)

`-E <encoder>`
Audio encoder (av_aac, opus, ac3, copy)

`-B <kbps>`
Audio bitrate per track

`-6 <mixdown>`
Mixdown: mono, stereo, 5point1

`--all-audio`
Take all tracks in the language list

`--audio-lang-list <codes>`
Filter audio by language code

SUBTITLES AND CHAPTERS

`-s <list>`
Select subtitle tracks (1,2 or none)

`--subtitle-burned[=n]`
Burn a subtitle track into the video

`--subtitle-default[=n]`
Mark a track as default

`-F[=n]`
Show forced subtitles only

SUBTITLES AND CHAPTERS (cont.)

`--subtitle-lang-list <codes>`
Filter subtitles by language

`--all-subtitles`
Take all subtitles in language list

`--srt-file <file>`
Add an external SRT file

`--srt-lang <code>`
Language of the SRT file

`-m`
Add chapter markers

RECIPES

Small MKV, HEVC

```
HandBrakeCLI -i movie.mkv -o small.mkv \
  -e x265 -q 24 --encoder-preset slow \
  -a 1 -E opus -B 128
```

Batch a folder

```
for f in *.mkv; do
HandBrakeCLI -i "$f" -o "${f%.mkv}.mp4" \
   -Z "Fast 1080p30" </dev/null
done
```

Upload-ready 720p MP4

```
HandBrakeCLI -i in.mov -o out.mp4 -e x264 -q 23 \
   -X 1280 -Y 720 -O -a 1 -E av_aac -B 160
```