

H264Hero

H264Hero is a Python utility that automatically converts videos to **MP4 with H.264 video and AAC audio**. It intelligently detects available hardware acceleration (Intel, NVIDIA, AMD) for faster processing, skips already compatible files, and ensures smooth, streaming-ready output with minimal effort.

Features

- ☒ Converts virtually any video format (`.avi`, `.mkv`, `.mov`, `.wmv`, `.flv`, `.ts`, `.webm`, `.mp4`) to **MP4 H.264 + AAC**
 - ☒ Detects **hardware acceleration**: Intel QuickSync, NVIDIA NVENC, AMD AMF
 - ☒ Skips videos already encoded in H.264 + AAC
 - ☒ Allows **single file, multiple files, or full folder batch conversion**
 - ☒ Adds `_converted` suffix to output files to prevent overwriting originals
 - ☒ Optimized for **fast streaming** with `+faststart` flag
 - ☒ All corrected converted video will be in a folder called "converted"
 - ☒ The one who fails will keep the original file only
-

Installation

1. Make sure **Python 3** is installed
2. Make sure **FFmpeg** is installed and available in your system PATH
3. Clone or download this repository:

```
git clone https://github.com/alessio-scartezzini/H264Hero.git
cd H264Hero
```

4. Run the script:

```
python3 h264hero.py
```

Usage

When you run the script, you'll see three options:

1. **Convert a single file**
Enter the path to your video file
The script will convert it to MP4 H.264 + AAC if needed

2. Convert multiple selected files

Enter the paths of multiple video files separated by commas

3. Convert all videos in a folder

Enter the folder path

The script will process all supported video files in that folder

The output files will have `_converted` appended to their names

How It Works

- **Hardware Detection**

The script runs `ffmpeg -encoders` to check which GPU encoders are available

It uses the best available encoder for faster conversion

- **File Checking**

For MP4 files, it checks if the video stream is already H.264

If yes, the file is skipped

- **Conversion Command**

Uses FFmpeg with the selected encoder, `-preset fast`, AAC audio, and `+faststart` for streaming optimization

Errors during conversion are logged in the console

Supported Video Extensions

```
.avi, .mkv, .mov, .wmv, .flv, .ts, .webm, .mp4
```

Notes & Tips

- Make sure FFmpeg is up to date for best compatibility
 - For Intel QuickSync, the `-hwaccel qsv` flag is automatically used
 - Output files are not overwritten; originals remain untouched
 - Batch conversion can be slow depending on file sizes and hardware; GPU acceleration can drastically speed up the process
 - Works on Windows, Linux, and macOS, as long as Python and FFmpeg are installed
-

License

H264Hero is licensed under GNU GPLv3 with an additional Non-Commercial clause:

- ☒ You can use, modify, and redistribute it for free
 - ☒ You cannot sell or distribute it for commercial purposes
 - ☒ Any modifications must be shared under the same terms
-

See [LICENSE](#) and [LICENSE-NC](#) files for full details.