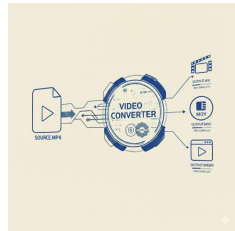


Video and Audio Tools and Files



File Types and Converters

Editing Audio and Video

DVD's and Devices

Free Tools

1

What is an Audio or Video File?

- ▶ These are Digital files that with an appropriate player will reproduce the content.
- ▶ **Common Audio File Formats:**

MP3 (.mp3)	The universal standard for music and podcasts; compatible with almost every playback device.
AAC (.aac)	Standard for Apple Music and YouTube; provides higher sound quality than MP3 at similar bitrates.

The following Video types can also play audio

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Common Video File Formats

File Type	Description & Usage
MP4 (.mp4)	The most popular and universal format; used for internet streaming, YouTube, social media (Instagram, TikTok), and general playback.
MOV (.mov)	Standard Apple QuickTime format; primarily used by Apple users, professional video editors, and on macOS.
AVI (.avi)	A Windows format popular for high-quality playback on older PCs, with larger file sizes.
WebM (.webm)	Designed for HTML5 and the web; used for browser-based applications and memes.
MKV (.mkv)	A flexible, open-source used for high-definition movies or projects with multiple audio and subtitle tracks.
WMV (.wmv)	Developed by Microsoft for video streaming specifically within the Windows ecosystem.

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How can we Convert One Type to Another

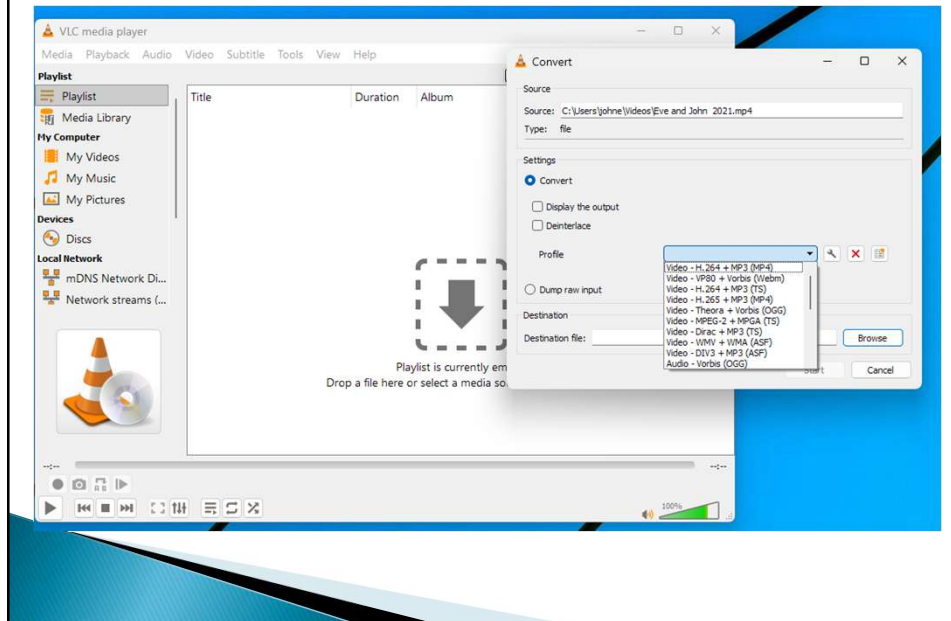
- ▶ Here are three useful programs that are free:
- ▶ Videolan (VLC)
 - VLC is a free and open source cross-platform multimedia player and framework that plays most multimedia files as well as DVDs, Audio CDs, VCDs, and various streaming protocols. Use this link:

<https://www.videolan.org/>

In addition to playback of most video files, it offers capture of an internet stream and conversion between file types. A detailed guide to all functions is on the website.

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VLC Converter

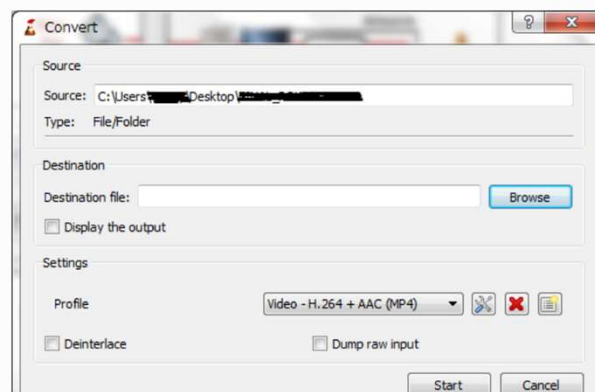


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Converting a Media File Format

VLC can convert media files from one format to another. To do that, follow the steps below:

1. Select **Media** • **Convert/Save** . The **Open** media dialog window appears.
2. Click **Add** . After you do that, a file selection dialog window appears.
3. Select the file you want to convert and click **Open** . The **Convert** dialog window appears.
4. In the **Destination** file text box, indicate the path and file name where you want to store the converted file.
5. From the **Profile** drop-down, select a conversion profile.
6. Click **Start** .



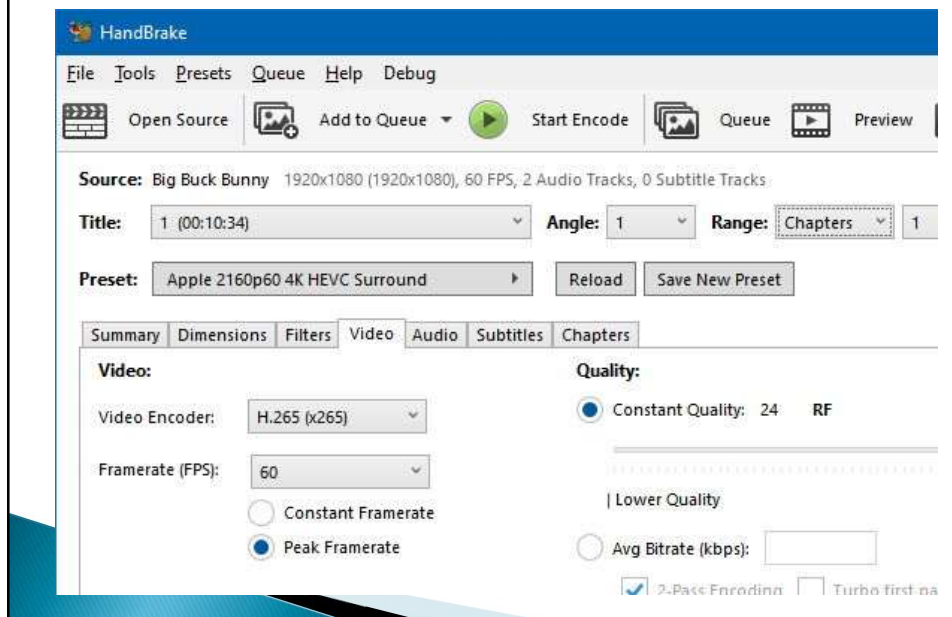
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HandBrake: The open source video transcoder

- ▶ HandBrake is an open-source tool, built by volunteers, for converting video from nearly any format to a selection of modern, widely supported codecs.
- ▶ Reasons you'll love HandBrake: (Version 1.10.2)
 - ▶ Convert video from nearly any format
 - ▶ Free and Open Source
 - ▶ Multi-Platform (Windows, Mac and Linux)
 - ▶ A Complete .pdf guide can be downloaded.
 - Site: <https://handbrake.fr/>

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It Looks Like This:



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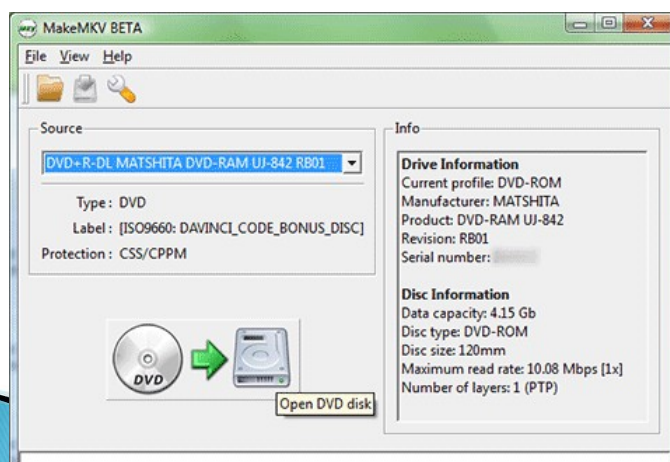
MakeMKV is your one-click solution to convert video

- ▶ MakeMKV is your one-click solution to convert video into a format that can be played everywhere.
- ▶ MakeMKV is a format converter, otherwise called "transcoder". It converts the video clips from proprietary (and usually encrypted) disc into a set of MKV files, preserving most information but not changing it in any way.
- ▶ The MKV format can store multiple video/audio tracks with all meta-information and preserve chapters. There are many players that can play MKV files nearly on all platforms, and there are tools to convert MKV files to many formats, including DVD and Blu-ray discs.
- ▶ Additionally MakeMKV can instantly stream decrypted video without intermediate conversion to wide range of players, so you may watch Blu-ray and DVD discs with your favorite player on your favorite OS or on your favorite device.

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Get MakeMKV Here:

- ▶ <https://www.makemkv.com>
- ▶ The Beta version is free for the beta version (beta key).



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Which is better, HandBrake or MakeMKV?

- ▶ MakeMKV and HandBrake serve different purposes: MakeMKV is for fast, lossless ripping of DVD/Blu-ray discs (including DRM removal) into large MKV files.
- ▶ HandBrake is for transcoding/compressing those files into smaller, more compatible formats (MP4/MKV).
- ▶ **Key Differences:**
- ▶ **Function:** MakeMKV copies the video directly without re-encoding (1:1 copy). HandBrake re-encodes (compresses) the video.
- ▶ **Quality & Size:** MakeMKV offers original quality but huge file sizes. HandBrake provides smaller, compressed file sizes at the cost of slight quality loss.
- ▶ **Speed:**
 - ▶ MakeMKV is fast (limited only by drive speed)
 - ▶ HandBrake is slow (depends on CPU/encoding settings)
- ▶ **DRM Support:** MakeMKV bypasses Blu-ray/DVD protection. HandBrake cannot directly handle encrypted discs.

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Audio Tools

1. Audacity (Microsoft Store)

- **Best for:** General-purpose editing, multi-track recording, and large projects.
- A completely free, open-source, tool that has been the industry standard for free audio editing for years. There are countless online tutorials available for almost any task you want to perform. It can handle basic tasks like cutting, splicing, and applying effects (like noise reduction). Its interface is intimidating.

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Audio Tools

2. Ocenaudio (Ocenaudio.com)

- **Best for:** Quick, simple, and clean single-track edits.
- It has a more modern and user-friendly interface than Audacity, making it less intimidating for newcomers. It also allows you to apply effects and listen to them in real-time before finalizing the change.

3. WavePad (Microsoft Store)

- **Best for:** Beginners who want a lot of built-in audio effects.
- It has a simple interface and a wide range of powerful tools and effects that are easy to access and apply, including noise reduction and compression.

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Audio Tools – Online

AudioMass

Online, browser-based editing for simple, quick tasks. You don't need to download or install anything. You can simply open the website, load your audio file, perform basic edits (cut, trim, fade in/out), and download the result.

MyEdit

Excellent for fast, AI-powered tasks like removing background noise, trimming, and voice changing.

Wavacity

A direct web-based port of the popular Audacity software, offering familiar functionality without needing to install anything.

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Capturing Streaming Audio

- ▶ **Audacity (Free):**

Set the host to "Windows WASAPI" and the recording device to your speakers (loopback) to capture internal sound.

- ▶ **OBS Studio:** (Microsoft Store)

Ideal for capturing and mixing desktop audio.

- ▶ **Web Audio Recorder – Audio to MP3 & WAV** (Chrome Web Store)

Quickly record browser audio from any tab directly into high-quality MP3 or WAV files — capture streaming audio, internet radio, webinars, lectures, podcasts, and music.

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Capturing Streaming Audio

- ▶ **Chrome Audio Capture:**

Another browser-based option to capture tab sound.

- ▶ **Windows 10/11:** Use the built-in Sound Recorder or Voice Recorder app.

- ▶ Online tutorials will give you detailed instructions.

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