

Video file format and codec basics.

Because video files can be large, programs called codecs were developed to make them easier to store and share. Codecs encode data to compress it for storing and sharing. Then they decode that data to decompress it for viewing and editing. The most common codec for video compression is H.264 or AVC.

Audio file formats or file extensions are the containers or wrappers for these codecs. As with lossy audio file formats, most video formats lose data in compression. Which format you choose depends on the balance you want to strike between quality and ease of use.

Understand the top video file extensions.

These are the most common digital video formats and their most frequent uses.

MP4

MP4 (MPEG-4 Part 14) is the most common type of video file format. Apple's preferred format, MP4 can play on most other devices as well. It uses the MPEG-4 encoding algorithm to store video and audio files and text, but it offers lower definition than some others. MP4 works well for videos posted on YouTube, Facebook, Twitter, and Instagram.

MOV

MOV (QuickTime Movie) stores high-quality video, audio, and effects, but these files tend to be quite large. Developed for QuickTime Player by Apple, MOV files use MPEG-4 encoding to play in QuickTime for

Windows. MOV is supported by Facebook and YouTube, and it works well for TV viewing.

WMV

WMV (Windows Media Viewer) files offer good video quality and large file size like MOV. Microsoft developed WMV for Windows Media Player. YouTube supports WMV, and Apple users can view these videos, but they must download Windows Media Player for Apple. Keep in mind you can't select your own aspect ratio in WMV.

AVI

AVI (Audio Video Interleave) works with nearly every web browser on Windows, Mac, and Linux machines. Developed by Microsoft, AVI offers the highest quality but also large file sizes. It is supported by YouTube and works well for TV viewing.

AVCHD

Advanced Video Coding High Definition is specifically for high-definition video. Built for Panasonic and Sony digital camcorders, these files compress for easy storage without losing definition.

FLV, F4V, and SWF

Flash video formats FLV, F4V, and SWF (Shockwave Flash) are designed for Flash Player, but they're commonly used to stream video on YouTube. Flash is not supported by iOS devices.

MKV

Developed in Russia, Matroska Multimedia Container format is free and open source. It supports nearly every codec, but it is not itself supported by many programs. MKV is a smart choice if you expect

your video to be viewed on a TV or computer using an open-source media player like VLC or Miro.

WEBM or HTML5

These formats are best for videos embedded on your personal or business website. They are small files, so they load quickly and stream easily.

MPEG-2

If you want to burn your video to a DVD, MPEG-2 with an H.262 codec is the way to go.

Editing and exporting video files.

Whether you shoot your footage with a DSLR camera, CinemaDNG, or other HD video camera, you can work with your native camera format in Adobe Premiere Pro. With lightweight workflows and seamless integration with other Adobe apps, Premiere Pro allows you to create the video you want, even on mobile workstations. Once you've made your final cut, you can export to the latest broadcast formats.

FAQs on video file formats.

What's the difference between an MP3 and an MP4?

While similar in name, these two file types are very different. MP3 stands for MPEG-1 Audio Layer III, and it is an audio-only container. This format compresses audio files for an easy and versatile way to store sound bites and music. An MP4 (MPEG-4 Part 14), on the other hand, is a multimedia container that can store audio, video, still images, subtitles, and text.

What's the difference between an MOV and an MP4?

MOV is a proprietary video file format made for Apple's QuickTime player. This large format is great for editing videos or viewing on a larger screen. MP4s are a universal file format compatible with most streaming platforms, and their compressed nature makes them smaller and easier to handle. To share videos, it's often necessary to convert from an MOV to an MP4.

How do you convert popular file types?

With Premiere Pro, you can easily convert MP3 audio files into MP4 video content. Simply upload them to your editing timeline to make them a part of your latest video project. Converting videos into different file types is also easy, such as going from an MOV to an MP4. Upload almost any type of video file to your project timeline, and then export your project in your desired format.