

Increase the Quality of Audio and Video Recordings

If you want to enable students, partners or customers to access audio and video content with a time delay and at their own speed, you have to record and publish it.

This can be done quickly and easily with a computer or mobile phone. The disadvantage is that the microphones and cameras used can quickly reach their limits and deliver unsatisfactory quality. External microphones, audio interfaces with microphones or the recording with system cameras, DSLR cameras or action cams provide a quick increase in quality.

In addition to the use of powerful hardware, the use of certain formats offers the possibility to deliver good quality relatively easily. It is not possible to increase the quality afterwards with the format, but further quality losses can be avoided by choosing a low compression format. Low-loss publishing is possible for both audio and video files. In the following we present the most common audio and video formats.

What You Should Know about Audio and Video File Compression

A high compression usually causes a low quality, but also requires less storage space. Nevertheless, there are formats that are balanced in terms of quality and size and are particularly suitable for online publishing. Restoring the original quality is no longer possible with most formats and compressions, so you should have decided on a procedure or format beforehand. It is best to choose a format that is free of loss for recording and compress the file into the desired format at the end of editing, before publishing.

How to Influence the file Size of a Recording

Put simply, the more motion, frames or information contained in the file and the longer the video, the larger the file size. A picture without motion only with sound, like the recording of a PowerPoint presentation, requires less storage space than a recorded tutorial with a person in front of a moving background. Selecting a lower resolution also saves storage. Whether you want to provide videos in 4K or SD, i.e. standard definition is sufficient, depends on the intended use.

Providing an audio file without video saves even more storage space than recording with a low-resolution image.

Storage Space and Download Rate

The size of an audio or video file significantly influences,

how it can be edited

The better the quality and the larger the file, the more processing power is required from the processor, RAM and graphics card.

how it may be made available

Some portals or servers have upload restrictions regarding the size of media files.

how fast it can be uploaded and downloaded or streamed

Not only the download speed counts. Especially the upload can take a long time with large files, because the upload speed is lower than the download speed.

Many audio and video networks like iTunes or Youtube optimize the files during the upload process. If you don't want to publish your files in the networks, you can use providers such as Auphonic, which automatically optimize the quality of the files.

An Overview of Common Audio and Video Formats and Their Quality

In the following overview we have listed the most common formats and their characteristics in a table. If you need more information and further formats, you will find a detailed overview with explanations of audio and video formats at [NRWISION](#).

	Name	Format	Compression	Quality	Storage	Use/ Availability
Audio	MP3	.mp3	High	Good	Low	Web & stream, widely spread
Audio	WAV	.wav	Uncompressed	High	High	Not suitable for online / widely spread
Video	MPEG-4	.mp4	High	High (HD quality)	High	Web / widely spread
Video	Windows Media Video (WMV)	.wmv	High	Good	Low	Web & stream / not widely spread