

# Video Guidelines

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## MP4 Video Format

This document provides general guidelines for encoding videos to MP4. All video destined for the journals platform **MUST** be encoded in MP4 Video (.mp4) format. This format allows for embedded, streaming playback through the journal website and also works on iOS and Android mobile devices.

## H.264 Video Codec

Video should be encoded using the H.264/Advanced Video (AVC) codec with the extension as (.mp4). H.264 is an excellent codec for desktop video and can be played in wide variety of mobile browsers including the iPhone/iPod/iPad and Android. Its compression quality is better than any other widely available codec on the market, meaning that at the same bitrate, a H.264 video will generally look better than a video in another codec (and conversely, at the same visual quality, a H.264 file will generally be smaller).

## MP3 Audio Codec

Audio should be encoded using the MPEG Layer III (MP3) codec. Videos with people talking and no music can be encoded in mono. Videos using music should be encoded in stereo.

## MP4 Encoding Recommendations

The following charts are guideline for edit editing and output formats for video and audio:

### Video

<b>Format/Container</b>	<b>MP4</b>
<b>Compression Type/Codec:</b>	H. 264
<b>Bit Rate:</b>	1500 – 2500kbps
<b>Frame Rate:</b>	Default for recording device, 29.97
<b>Frame Size:</b>	Default for recording device, No more than <b>1280x720 or 1920x1080</b>
<b>Keyframes:</b>	Automatic
<b>Encoding:</b>	Best/Multi Pass (if available)
<b>Web Optimized</b>	Ensure that MOOV header/atom is at the beginning of the file. This allows larger videos to play immediately while still downloading the rest of file.

### Audio

<b>Format/Container</b>	<b>AAC</b>
<b>Sample Rate:</b>	Default for recording device, 48/44.1 kHz
<b>Bit Rate:</b>	128-256kbps
<b>Channels:</b>	Front L/R 1 or 2 channels only (i.e. mono or stereo)
<b>Render Quality:</b>	Normal

## File Size

### Stand Alone

For standalone video that will be posted in the video gallery video size should be limited to **(1) GB in size**. Given the encoding recommendation for 1280x720, this would allow for around 45 minutes of video. It is advised to break videos more than 45 minutes into multiple parts for the best user experience.

### SDC

For Supplemental Digital Content (SDC) video size should be limited to **(100) MB in size**.