Open Signal Broadcast Specifications

This document contains the technical specifications for videos submitted to Open Signal for playback.

Technical Specifications:

- Video does not contain commercial content (advertising, calls to action, pricing information, etc.).

- No black or bars needed at beginning or end of video.

- Frame Rate: **29.97 fps**.

- Preferred file types for file submission (container formats): `.mov`, `.mpg`, `.mp4`.

- Compression Codecs:
  - **MPEG-2** – Standard Definition (SD) legacy format used for DVD.
  - **H.264** – High Definition (HD) high-quality format but more compressed than Apple ProRes. Results in a much smaller file while maintaining quality. Common for web videos.
  - **Apple ProRes LT** – High Definition (HD) high-quality format with less compression than H.264, however the resulting file size is large and will take longer to upload to Open Signal’s servers.

- Aspect Ratios: **16:9 (HD)**, **4:3 (SD)**.

- Resolution:
  - **HD** – 1920 x 1080
  - **SD** – 720 x 480

- Video Bitrate: **15 - 20 Mbps**

- Audio: **48kHz**
  - Broadcast dynamic range between **-6dB (peak)** and **-20dB**.
    - Audio higher than -6dB may distort.
    - Audio channels must be identical on the left and right channels (for example, what doesn’t work is one channel has the music and the other channel has the microphone – both channels need to have the music and the microphone).

For questions, email playback@opensignalpdx.org.