

FULLDOME HI-RESOLUTION FILE DELIVERY

Filmmakers whose projects are selected as 2024 fulldome official selection films are asked to send hi resolution versions of the selected projects for festival screening. Below are two delivery options for the hi-resolution files.

1. External Hard Drive: The fulldome team recommends this approach for those who are submitting from a United States or Canada. External hard drives should be mailed to the address below.

The Museum of Arts and Sciences
Attn: Paul Fisher (Film Festival)
4182 Forsyth Rd.
Macon, Georgia 31210

Please note, filmmakers who wish to have the drives returned must include a self addressed, pre-paid envelope. See Rules & Terms for additional information and instructions governing submitted hard drives.

2. Download links should be forwarded to pfisher@masmacon.com.

FORMAT INFORMATION FOR 2024 FULLDOME OFFICIAL SELECTION FILMS

Below are three accepted approaches to submitting artistic material. The first two options are designed to require minimum effort for everyone involved and require the fewest number of bytes be transmitted.

- I. Single File: Submit your work in a single file in which the video stream is combined with the audio stream in a container file such as .AVI, .MP4 or Quicktime. (Just about any popular container is acceptable.) The video and audio can be encoded with any reasonably popular codec. If you already have a file that currently projects your film with acceptable quality in a planetarium somewhere on the planet Earth, that is probably the file to submit.

Macon Film Festival will take the responsibility of transcoding the video and audio streams into formats the Konica-Minolta Sigma planetarium can accommodate. The **primary requirement** is that the video content is a **fisheye projection** that has a **resolution greater than or equal to 2400 by 2400**.

- II. Separately Encoded Video and Audio Files: Submit your work in the form of two encoded files:

(1) A fisheye projection video file, with resolution greater than 2400 by 2400, encoded with any reasonably common codec.

(2) A stereo WAV, AAC or MP3 file.

And/or an AC3 (5.1 channel) file.

And/or a 5.1 WAV file.

And/or 6 separate mono files which contain the Left, Right, Low Frequency, Center, Left Side and Right Side sound files of a 5.1 channel sound-scape.

Macon Film Festival – Fulldome Category – Hi-Resolution Submission Instructions

- III. As a Domemaster: Each frame of the movie is submitted as a sequentially numbered JPG, PNG, or TIFF file. The Macon Film Festival is then responsible for encoding this material into a video/audio format that will play with the highest possible quality.

The audio file requirements are the same as shown above in item II. (2).

Additional Domemaster Information:

- Images: Azimuthal equidistant projection, also known as a fisheye projection.
- 24 bit RGB color model
- Frame Rate: 30 fps or 60 fps. If 60 fps video is sent, please specify this somewhere in writing so that the fulldome projection team won't have to infer frame-rate based on the number of frames supplied versus the duration of the sound file.
- Image Sequence Format: PNG, JPEG, TIF
- Suggested File Titles for Image Sequence:
"ProjectTitle_000000.png" or "ProjectTitle_000000.jpg" or "ProjectTitle_000000.tif"
NO SPACES in filename. NO HYPHENS in filename. Limit file name characters to letters, numbers, or underscores.
- Sound file names – "ProjectTitle.wav" or "ProjectTitle.mp3" or "ProjectTitle.ac3".
- FFMPEG is used to convert films provided in 8k, 4k, 3k, or 2K image format down to 2400 x 2400. Images of less than 2k will not be accepted for dome projection.

Additional Encoding Instructions:

This information is excerpted from Konica-Minolta Sigma planetarium documentation. It covers MPEG 2, MPEG 4 and H.264 video files formats. It also covers WAV and AC3 audio file formats. MP3 files, AAC, WMA, and OGG sound files are also compatible with the Konica-Minolta Sigma system.

Video file:

Stream type: .mpg, .m2v (for MPEG2) or .mp4

Format: MPEG 2 Video, MPEG 4, or H.264.

Format version: Version 2

Size: 2400x2400

Aspect ratio 1:1

Frame rate: 30fps or 60fps

Bitrate: 36,000 kbits/sec recommended (K-M says 20,000 to 100,000 kbits/sec)

Profile: Main Profile

Level: High Level

Encode mode: Progressive

YUV format: 4:2:0

Bit depth: 8 bits

Audio file:

[Wav format]

Stream type: .wav format

Macon Film Festival – Fulldome Category – Hi-Resolution Submission Instructions

Format: PCM

Sampling frequency: 48 kHz or 44.1kHz

Channel mode: Stereo (2 channel) or 5.1 (consists of 6 channels)

Bitrate: 1536Kbps or 1411.2kHz

Bit depth: 16bits or 24bits

[AC3 format]

Stream type: .ac3 format

Format: AC-3

Mode extension: CM (complete main)

Sampling frequency: 48 Khz

Channel mode: 5.1 channels (Front L, Front R, Low Freq Effect, Center, Rear L, Rear R)

Bitrate Mode: Constant

Bitrate: 640Kbps

Bit depth: 16bits

WHAT NOT TO DO

Please do not use spaces, hyphens or any other special characters in filenames. Please use only letters, numbers, and underscores.