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

## FULLDOME HI-RESOLUTION FILE DELIVERY

Filmmakers whose projects are selected as 2021 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 Tabitha.maconfilmfestival@gmail.com.

# FORMAT INFORMATION FOR 2021 FULLDOME OFFICIAL SELECTION FILMS

The Konica-Minolta Super Media Globe II (SMG2) is a planetarium that can play audio-visual material in only a few formats. Below are three accepted approaches to submitting work. The first two options are designed to require minimum work for everyone involved and require the fewest number of bytes be transmitted.

I. <u>Single File:</u> 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. The video and audio can be encoded with any reasonably popular codec. If the file currently projects with acceptable quality in a planetarium on the planet Earth, this is probably the file to submit.

Macon Film Festival will take the responsibility of transcoding the video and audio streams into formats the SMG2 can accommodate. The main requirement is that the video content is a fisheye projection that has a resolution greater than or equal to 2400 by 2400.

II. <u>Separately Encoded Video and Audio Files</u>: 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 audio WAV or MP3 file. An AC3 (5.1 channel) file can be submitted in ADDITION to the stereo file.

III. <u>As a Domemaster:</u> Each frame of the movie is submitted as a sequentially numbered JPG, PNG, or TIFF file. Audio is submitted as a WAV or MP3 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 on the SMG2. (An AC3 (5.1 channel) file can be submitted in ADDITION to the stereo sound file.)

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\_00000.tif" NO SPACES in filename. NO HYPHENS in filename. Limit filename characters to letters, numbers, or underscores.
- Sound "ProjectTitle.wav" or "ProjectTitle.mp3" or "ProjectTitle.ac3".
- PC based 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 SMG2 documentation. It covers MPEG 2 and MPEG 4 video files formats and the WAV and AC3 audio file formats. MP3 audio files are also compatible with the Konica-Minolta SMG2.

Video file:

Stream type: .mpg, .m2v (for MPEG2) or .mp4 Format: MPEG 2 Video or MPEG 4 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: Migh Level Encode mode: Progressive YUV format: 4:2:0 Bit depth: 8 bits

## Audio file:

[ Wav format] Stream type: .wav format Format: PCM Sampling frequency: 48 kHz or 44.1kHz Channel mode: Stereo (2 channel) Bitrate: 1536Kbps or 1411.2kHz Macon Film Festival – Fulldome Category – Hi-Resolution Submission Instructions

Bit depth: 16bits

[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.