



SUBMISSIONS GUIDELINES FOR FULLDOME FILMS

Hello Fulldome fans! The following guidelines are for submitting your fulldome film to FDUK 2023. We define fulldome films as pre-rendered or linear fulldome works. After reading these guidelines, please submit your film using the online form on our website. The link is here:

<https://www.fulldome.org.uk/film-submission-form/>

In addition to fulldome films, we are also accepting submissions for live performances and presentations. To make things easier this year, we have created dedicated submission forms for each of these. If you would like to submit a live performance (real-time or interactive fulldome works) or a presentation (talks, demos or workshops) then please apply using the appropriate form. You can find links to all of the online submission forms here:

<https://www.fulldome.org.uk/submissions>

You are welcome to make more than one submission! And you can make more than one type of submission. So for example, you could submit two films, or a film plus a presentation about your work. If you would like to make multiple submissions, please only submit one item per form, and use the different forms as necessary.

In this document you will find the following:

- Submission Deadlines
- Submissions Procedure
- Submissions Technical Specifications:
 1. Frame Format
 2. File Format (Submission Preview Video)
 3. File Format (Final Delivery Video)
 4. File Format (Final Delivery Audio)
 5. Final Delivery Summary
- Submission Terms and Conditions



SUBMISSION DEADLINES

The submission deadlines for FDUK 2023 are listed below. Please note that FDUK 2023 is taking place one month earlier than last year's festival - so you will need to be quick with your submissions!

June 14th	Online Submissions Open
July 14th	Online Submissions Close
August 14th	Notification of selected films
August 21st	FDUK 2023 film line-up announced
September 14th	Delivery of final full-resolution video files for selected films
October 13th	FDUK 2023 begins!



SUBMISSIONS PROCEDURE

1. All films must be submitted by July 17th 2023 in order to be considered for screening at the festival. This requires two actions: You must fill in the online submission form and then upload a preview version of your film. The online submission form is available here:

<https://www.fulldome.org.uk/film-submission-form/>

Please provide a link to an online streamable version of your film and also a persistent link to a downloadable copy of your film. You can find guidelines for hosting and sharing your video files later in this document.

2. All of the submitted films will be reviewed by the curation team of FULLDOME UK. This team will decide which films will be selected to be shown as part of the FDUK 2023 screening programme.

3. The FULLDOME UK curation team will inform all film producers whether their film has been shortlisted for screening, before the FDUK 2023 line-up is publicly announced on August 21st 2023.

4. If your submitted film is selected for screening at FDUK 2023, then you will need to deliver the finished full-resolution version of your film before the final delivery deadline of **September 14th 2023**.

Juried Film Competition

All films selected by the FULLDOME UK curation team for screening at FDUK 2023 will be entered into the FDUK 2023 Awards competition. An independent jury panel, made up of fulldome industry experts, will decide the winning films in the following five awards categories:

- Best of Show
- Best use of Dome
- Best Experimental Work
- Best Sonic Experience
- Best Narrative Work



SUBMISSIONS TECHNICAL SPECIFICATIONS

1. Frame Format

All films submitted to FDUK 2023 must have been especially created for display on hemispherical, curved dome screens. This is a fulldome festival after all. Films that were originally created for a flat screen of any kind cannot be accepted.

Dome Master Format

The preferred frame format for all submitted videos is Dome Master, also known as a circular fisheye. The video appears as a circular image on a square background. This is the standard frame format for fulldome films.

The field of view should be either 180-degrees or 210-degrees. The first option is most common for fulldome films intended to be played in planetariums, as they commonly have a 180-degree screen located above the audience.

Some fulldome venues have a 210-degree screen, where the video image reaches all the way down to the floor. Two venues in particular: the Satosphere in Montreal, Canada and the Market Hall Dome in Plymouth, UK have 210-degree screens.

VR Equirectangular Format

While our preferred frame format is Dome Master, we can accept some alternative frame formats. If your film was created for VR in equirectangular format and you would like to submit it to FDUK 2023, then please let us know via the online submission form. We are able to play this format directly in the dome, but there are some additional technical requirements for delivering your film.



SUBMISSIONS TECHNICAL SPECIFICATIONS

2. Submission Preview Video

Please provide a link to an online streamable version of your film (which could be hosted on a website such as YouTube, Vimeo or Dropbox) and also a persistent link to a downloadable copy of your film (via FTP, Dropbox, Google Drive or another file hosting platform of your choice). This link can be unlisted or password protected as necessary.

If you plan to use an online file transfer service (such as WeTransfer or Hightail), to share the downloadable copy of your film, please be aware of the following:

You need to ensure the download links are persistent and will not expire until after the submission deadline (**September 14th 2023**). This generally means that you cannot use a free account, as the download links are normally time-limited.

Please use the following file format specifications for the preview video. The file size should ideally be no larger than 2GB.

Resolution:	2k (2048 x 2048 pixels)
Frame Rate:	30fps or 60fps
Video Format:	MPEG-4
Video Codec:	h.264 (AVC) or h.265 (HEVC)
Video Bitrate:	10 Mbit/s (minimum)
Audio Format:	Stereo or 5.1 channels, embedded in the MPEG-4 file



SUBMISSIONS TECHNICAL SPECIFICATIONS

3. Final Delivery Video

If your submitted film is selected for screening at FDUK 2023, please send the final delivery version as a high quality, full resolution MPEG-4 file, using the specifications below. We will accept files encoded using either the h.265 (HEVC) codec or the older h.264 (AVC) codec, but please note the different bitrate requirements for the two codecs.

MPEG-4 / h.265

Resolution: 4k (4096 x 4096 pixels)
Frame Rate: 30 or 60fps
Video Format: MPEG-4
Video Codec: h.265 (HEVC)
Video Bitrate: 60 Mbit/s (for 30fps content) or 120 Mbit/s (for 60fps content)
Audio Format: Two-channel (stereo) embedded in the MPEG4 file.
Multi-channel (5.1) supplied as six separate single-channel files.
(uncompressed WAV or AIFF)

MPEG-4 / h.264

Resolution: 4k (4096 x 4096 pixels)
Frame Rate: 30 or 60fps
Video Format: MPEG-4
Video Codec: h.264 (AVC)
Video Bitrate: 100 Mbit/s (for 30fps content) or 200 Mbit/s (for 60fps content)
Audio Format: Two-channel (stereo) embedded in the MPEG4 file.
Multi-channel (5.1) supplied as six separate single-channel files.
(uncompressed WAV or AIFF)

Encoding your film at the correct bitrate is really important. In previous years we have received quite a lot of 'Final Delivery' films where the bit rate was set far too low. Unfortunately the films suffered from very visible compression artefacts when viewed on the big dome. We want your film to look its best - and we are sure you do too!



SUBMISSIONS TECHNICAL SPECIFICATIONS

Final Delivery Video (continued)

If you use software such as Adobe Media Encoder to encode your MPEG-4 files, you will find that there are an enormous amount of different encoding settings to choose from. Here are some of the important ones to check:

- Square Pixels
- Main Profile, Level 6.2
- Key Frame every frame
- CBR (constant bitrate)
- Higher or Highest Quality

When submitting your Final Delivery video, please also provide an up-to-date copy of the Submission Preview video file on the same storage device or download link. We appreciate that the submission preview video is not always the final version of the film, and the film may still be being worked on right up to the final delivery deadline. Having an up-to-date preview video file helps us to manage the programming schedule, and helps to ensure audio and video will remain in sync during the festival screening. This is especially important if you have made any changes to the duration of your film between the initial submission and the final delivery.

You can send us your Final Delivery video on physical media (HDD, SSD or USB drive) but we much prefer that you send us the data electronically, via an internet link. We are unable to return any physical media unless it is sent in secure packaging with a pre-paid return address label. With physical media, there is always a risk of it being lost or damaged in transit. But we will accept physical submissions if there is no other practical option.



SUBMISSIONS TECHNICAL SPECIFICATIONS

4. Final Delivery Audio

If your film is stereo, please embed the two audio channels within your Final Delivery MPEG-4 file. We suggest the following audio encoding settings:

Audio Codec: AAC
Sample Rate: 48 kHz
Audio Quality: High
Audio Bitrate: 320 kbit/s

If your film is multi-channel (5.1 Surround) then please embed the stereo (Left and Right) channels within your Final Delivery MPEG-4 file as per above. This will allow us to check audio sync. Please also supply all the audio channels as separate uncompressed 48kHz WAV or AIFF mono audio files. The 5.1 Surround standard uses the following six channels:

Left, Centre, Right, Surround Right, Surround Left, Low-Frequency

These channels are abbreviated as: L, C, R, Rs, Ls, LFE

Your individual audio files should be named using the following convention:

FilmName_(version)_(channel name).(file extension)

So for example, if you are submitting version two of your film which has the title MyFilm, and the files are in WAV format, your files should be named like this:

MyFilm_v2_L.wav
MyFilm_v2_C.wav
MyFilm_v2_R.wav
MyFilm_v2_Rs.wav
MyFilm_v2_Ls.wav
MyFilm_v2_LFE.wav



SUBMISSIONS TECHNICAL SPECIFICATIONS

Final Delivery Audio (continued)

Your audio files must be exactly the same duration as your video file. This is very important. To ensure synchronisation, the audio file must begin with the first frame of the video. Please add black frames at the beginning of your video or add silent sections at the beginning of the audio files as necessary, in order to ensure correct audio-visual sync. Be aware of any changes to the overall duration of your audio or video files. For example, if you add opening titles after you have completed your film, please ensure that the audio files have been extended to accommodate this.

Custom Audio Formats

CULTVR Lab in Cardiff has a 15.1 channel spatial audio sound system. Each of the 15.1 channels in the dome can be addressed individually. If you would like to supply a custom multi-channel or spatial audio soundtrack for your film then please let us know via the online submission form.

5. Final Delivery Summary

In addition to the Final Delivery video file, the Submission Preview video file and any separate audio files (if your film features more than stereo audio), please could you also share a few still frames that we can put in the festival programme and use to promote your film at the event. A short film synopsis and an artist biography (maximum 200 words each) supplied as a plain text file would also be appreciated.



SUBMISSION TERMS AND CONDITIONS

The following terms and conditions apply to all submissions to the festival:

1. All entries must have been completed or released after 1st August 2022.
2. You must own the rights for the distribution and use of the work (both video and audio) and ensure that no copyrights or third-party rights are infringed. If you are not the copyright holder, you must be authorised to approve exhibition of the work on behalf of the copyright owner. The participating content provider indemnifies FULLDOME UK against action by law in regard to the breach of any national or international copyright law(s) as the result of the exhibition of the work(s) through FULLDOME UK.
3. You hereby give FULLDOME UK non-exclusive, royalty-free rights to screen your work at the festival and to advertise that fact on our website and in publicity materials. Each content provider will remain the copyright holder of the provided media. Each production will be properly credited during screening at FULLDOME UK.
4. You are welcome to submit more than one film for consideration. Please complete a separate Film Submission Form for each work submitted.
5. FULLDOME UK requests permission to keep an archive copy of your submitted film. Following previous festivals, we have been approached with commercial and non-commercial opportunities which we have been able to pass on to the film makers. Keeping an archive of the work makes the whole process a lot easier, should this opportunity arise. We will never share your work, pass it on to any third-party, or allow it to be viewed outside of FULLDOME UK events without your express prior permission. If you do not wish to agree to this, please check the relevant box on the Film Submission Form.
6. FULLDOME UK is not responsible for any late or missing materials pertaining to the festival.
7. The submitted works must meet the minimum technical specifications for data formats outlined on the previous pages.
8. The submission deadline for the Final Delivery full-resolution media for all films that have been selected for screening is 14th September 2023. Any films received after this date may not be screened at the festival.
9. Selected films festival programme will be screened on Sunday 15th of October 2023 at CULTVR Lab, as part of two curated sessions featuring the best family-friendly shows and the best experimental works.
10. By submitting work(s) to FULLDOME UK and signing the Entry Form, you agree to all of the above Terms and Conditions.