88th Academy Awards
DIGITAL QUALIFICATION AND SUBMISSION RULES
Informal Notes

Most of the Academy's Award categories allow for eligibility for award consideration by means of digital presentation, as outlined in "Rule Two—Eligibility" in the Academy's **"Rules for Distinguished Achievements."**

Here is the language (in bold type) in **Rule Two** that applies to **digital presentation:**

"All eligible motion pictures must be publicly exhibited using 35mm or 70mm film, **or in a 24- or 48- frame progressive scan Digital Cinema format with a minimum projector resolution of 2048 by 1080 pixels, source image format conforming to ST 428-1:2006 D-Cinema Distribution Master— Image Characteristics; image compression (if used) conforming to ISO/IEC 15444-1 (JPEG 2000), and image and sound file formats suitable for exhibition in commercial Digital Cinema sites.**

The audio in a typical Digital Cinema Package (DCP) is 5.1 channels of discrete audio and that is the preferred audio configuration, although up to 7.1 channels is acceptable. The minimum for a non-mono configuration of the audio shall be three channels as Left, Center, Right (a Left/Right configuration is not acceptable in a theatrical environment).

The audio data shall be formatted in conformance with ST 428-2:2006 D-Cinema Distribution Master – Audio Characteristics and ST 428-3:2006 D-Cinema Distribution Master Audio Channel Mapping and Channel Labeling.

What does this mean for filmmakers?

The first thing that you will need is what is now called a Digital Cinema Package, commonly abbreviated as **DCP**. The SMPTE and ISO/IEC documents mentioned in the general rule are international standards that define the technical characteristics of the DCP. As a practical matter, you can rely on specialized digital cinema mastering facilities to provide you with a DCP that will comply with these standards. Your original image capture can be whatever you want (film, digital video, CGI, and so on), but ultimately you will need individual, "one per frame" digital image files for the compression step of the mastering process.

Once you choose a mastering facility, you may discuss with them the most efficient and cost-effective method of conversion for your project. Your finished DCP will be provided to you on a computer Linux-formatted HDD (hard disk drive)—typically a USB drive or *preferably* a SATA drive in a CRU drive carrier.

OK. I have a DCP. What next?

For your qualification screenings, as defined in Rule Two and the special rules for the various categories, you will need to find a commercial theater equipped with a digital cinema projector that meets the requirements outlined in Rule Two, as well as a digital cinema server that will play the SMPTE DCP you have received from your mastering facility.

In practice, there are only two types of DCI-compliant digital cinema projectors that are acceptable for your qualification screenings. The first type uses DLP Digital Cinema technology licensed by Texas Instruments to projector manufacturers. Be sure your cinema has a true DLP Digital Cinema projector, one that has a pixel count of **2048 x 1080**, and not one of the industrial grade DLP projectors that typically have pixel counts of 1920 x 1024 with reduced color and other image performance characteristics. The second type of projector is the **Sony SXRD Ultra HiRes Cinema "4K"** series intended for digital cinema applications.

There are several companies who manufacture digital cinema servers or integrated media blocks (IMB) that meet the applicable SMPTE specifications, and will play DCPs that are mastered according to these specifications.

Be sure the server system in your cinema can play a SMPTE DCP as defined in Rule Two above.
If you are not sure, you may confirm with the manufacturer that the server you plan to use is a SMPTE/DCI compliant digital cinema or IMB server.

I've heard about encrypted DCPs and KDMs. What do these terms mean for me?

ENCRYPTED DCPS WILL NOT BE ACCEPTED! NO KDM KEYS.

I've completed my qualification screenings. What do I need to submit to the Academy?

You will need to submit a copy of your DCP, as supplied to you by your mastering facility. As noted above, this will be a computer hard drive—***preferably an appropriately formatted SATA drive in a CRU drive carrier or a USB drive.***

The encoding format of your DCP should be JPEG2K/Interop.
The image size for a "Flat" 1.85 aspect ratio should be **1998 x 1080.**
For a 2.39 "Scope" aspect ratio, image size should be **2048 x 858.**
Please specify the Target Color Gamut Data (TCGD). We prefer X'Y'Z'

** Please include only one version of one film per hard drive.

Where can I find a mastering facility to make my DCP?

There are DCP mastering facilities worldwide. Please contact us for facilities in the Los Angeles area who can convert your submission to that of a compliant DCP package playable on standard theater playout equipment.

** Please note that the Academy is not responsible for fixing corrupt data on supplied media.

Remember, Digital content on a hard drive is fragile! Please ship carefully!

For more info on DCI specifications and the state of the Digital Cinema progress please go to:
http://www.dcimovies.com/DCIDigitalCinemaSystemSpecv1_2.pdf
http://www.dcimovies.com/DCI_Stereoscopic_DC_Addendum.pdf

And for up to date Digital Cinema goings on go to: www.dcinematoday.com