



Glossary:

DLP

Digital Light Processing is a display device based on optical micro-electro-mechanical technology that uses a digital micro mirror device.

DCI

Digital Cinema Initiatives, was created in March, 2002, and is a joint venture of Disney, Fox, Paramount, Sony Pictures Entertainment, Universal and Warner Bros. Studios. DCI's primary purpose is to establish and document voluntary specifications for an open architecture for digital cinema that ensures a uniform and high level of technical performance, reliability and quality control.

SXRD

Silicon X-tal Reflective Display is Sony's proprietary variant of liquid crystal on silicon (also known as LCOS), it competes directly in the cinema market with Texas Instruments' DLP.

Contrast ratio

The Contrast ratio is a property of a projector, defined as the ratio of the luminance of the brightest colour (white) to that of the darkest colour (black) that the projector is capable of producing. A high contrast ratio is a desired aspect of any projector.

Screen gain

Gain is a measurement of the reflectivity of any screen or projection surface. The gain number represents a ratio of the light that is reflected from the screen as compared to the light reflected from a standard white (magnesium oxide) board. A matt screen surface normally has a gain of 1.0 and 'silver' screens used for some 3D systems have a gain of up to 3.

Screen ratio

The aspect ratio of an image describes the proportional relationship between its width and its height. Most feature films released today are in a 'flat' ratio of 1.85:1 or a 'Cinemascope' ratio of 2.39:1

2K Resolution

A Texas Instruments DCinema 2K DLP chip has 2048 x 1080 micro mirrors mounted on the surface of each chip and there are three chips in each light engine – one for each primary colour.

4K resolution

A Texas Instruments DCinema 4K DLP chip has 4096 x 2160 micro mirrors mounted on the surface of each chip and there are three chips in each light engine – one for each primary colour.

Sony DCinema projectors offer 4K resolution playback with 4096 x 2160 pixel resolution.

Lumens

A measurement of the amount of light leaving a projector. Typically a projector manufacturer will specify a Lumens light output level for each model.

Foot Lamberts

A measurement of the amount of light being reflected from the cinema screen to a member of the cinema audience.

HFR

High Frame Rate. Frame rates are the number of images (frames) displayed by a projector in one second. 24 frames per second (fps) is the current standard in cinemas worldwide. HFR 3D productions of 48 fps record and play visuals at twice the current rate. There are plans to release feature films in 60 fps frame rate in the near future and there have been private demonstrations of 120 fps material.

DCP

A Digital Cinema Package is a collection of digital files used to store and convey digital cinema (DC) audio, image, and data streams. The term has been defined by Digital Cinema Initiatives. A single DCP can contain many different image versions, audio tracks, subtitles and other content.

CPL

A Content Play List is part of a DCP and details what is included in the package – image versions, soundtracks, subtitles, immersive audio tracks etc. A single DCP may contain many different CPLs – for example one CPL may have a UK release version with Hard of Hearing Subtitles shown on screen and a different CPL has subtitles turned off while a third has a French audio track.



Glossary:

SPL

A Show Play List is held on the cinema server and is a collection of CPLs and a play order along with any required automation cues. A cinema will typically create a SPL for each feature presentation that consists of a number of CPLs for Adverts, trailers and a feature CPL which is then scheduled to be shown at different times of the day.

KDM

Each DCP comes with what is called a Key Delivery Message. The KDM unlocks the content of the file and allows the cinema to play the film. It is time sensitive and often is only valid from around 10 minutes prior to the screening time and expiring as close to 5 minutes after the scheduled time. A KDM is generated specifically for a server/feature film/time period combination. A KDM only unlocks a specific CPL within a particular DCP.

IMB

An Integrated Media Block is a component in a digital cinema projection system. Its purpose is to transfer the image data from a DCP server to the projector's imaging device provided that there is a valid KDM to permit playback on that particular device.

IMS

Integrated Media Server – the same as an Integrated Media Block but with On Board hard drives for storage of feature films and other content.

ICMP

Integrated Cinema Media Processor – also with on board storage. Typically an ICMP has on-board scheduling software and is configured to provide a complete self-contained playback system.

TMS

Theatre Management System – the heart of a modern multi-screen cinema that allows film playback schedules to be created on a screen by screen and day by day basis. The TMS handles the distribution of feature films, adverts and trailers to each auditorium along with playback schedules.

Event Cinema

Also known as Alternative Content or ODS (Other Digital Stuff). This name describes all content shown on a digital cinema projection system that is not a feature film and could consist of live opera, theatre performances, gaming etc. Some Event Cinema performances are transmitted live via a Satellite and other pre-recorded performances might be sent to a cinema as a DCP.

Encore performances

Some cinemas will show a particular live performance and then a number of 'Encore' screenings within a short time after the main broadcast.

Satellite

Event Cinema live broadcasts are typically broadcast using either Intelsat 9.05 or Intelsat 10.02 satellite. A 1.2m satellite receiving dish with suitable receiver will need to be installed and aligned to pick up these broadcasts and permission to show these broadcasts to an audience will need to be obtained from the content rights holder or distribution partner.