Glossary on Digital Cinema

2K: A Digital Cinema picture of 2048 pixels wide by 1080 pixels high - 6.67% more pixels than consumer high definition TV 1920 pixels wide by 1080 pixels high.

2K/4K compatibility: The DCI specification the exhibitor provides for seamless interoperability. 2K content is automatically resized for presentation on 4K projectors while extraction enables 4K content to be presented on 2K projectors.

4K: A Digital Cinema picture with four times the pixels of 2K: 4096 wide by 2160 high. The 4K difference is visible, especially to viewers toward the front of the auditorium and especially with stadium seating.

Action: An Action is a physical signal that is sent by the Digital Cinema server to the external devices to do a specific action such as shutting down the lights, opening the curtains or powering the projector lamp.

Alternative content: entertainment programming other than movies that can ebe played in a digital cinema environment. Possibilities include sports and other live events. Alternative sources are usually connnected via the second input of a digital cinema projector and a suitable cinema audio adapter.

Aspect Ratio: the aspect ratio of an image is its displayed width divided by its height. Most common Digital Cinema aspect ratios are:
   - 2.39 or Scope
   - 1.85 or Flat
   - 1.77 or 16/9

Automation Cue: An Automation Cue is a logical signal that is placed inside a show to execute a physical action at a specific moment.

Certificate: The certificate is a digital document establishing the identity of security devices such as the IMB (decoder) or projector in order to create the security key (KDM).

Color Space: the color space is a set of numbers that are used to represent actual colors. Most common Digital Cinema colors are:
- XYZ or X'Y'Z'

XYZ os the color space specified for Digital Cinema content in Jpeg2000.
- RGB or Video 709

RGB is a color space used for Digial Cinema in Mpeg-2.

CPL: The Composition PlayList is a representation of a D-Cinema work, such as a motion picture, or a trailer, advertisement etc. The Composition Playlist consists of an ordered sequence of Reels, each referencing Track Files, e.g a sound or picture. Each Reel is analogous to a film reel and the composition playlist controls the order and timing of the playout of the reels.
CPL is the smallest content element the user can manipulate to creat shows.

Data: Digital information. It has the advantage of being able to be copied or transmitted over a digital network any number of times without adversely affecting quality. In digital cinema, instead of the movie images and sound being stored on celluloid film, they are stored as digital data in a file, usually on a hard disk.

DCDM: The Digital Cinema Distribution Master is the uncompressed and unencrypted electronic file with picture, sound and subtitles.
The DCDM is he equi valent of an interpositive.

DCI specification: Specifications for digital projection agreed to by the Digital Cinema Initiatives. These provided the industry's greenr light for widespread digital cinema deployment.
It provides future proofing and interoperability among multiple equipment vendors and service providers.

DCP (Digital Cinema Package): set of files that are the result of the encoding, encryption and packaging process. The DCP often refers to the media containing the set of files. This DCP is distributed to the theater, and represents mainly the digital cinema content.
The DCP is the digital equivalent of the internegative.

Encoding: the original data are compressed to reduce the size of the content. The compression used can be:
- Jpeg2000: standard format used for Digital Cinema movies compression.
- Mpeg-2: alternative format used for Digital Cinema adverts, trailers or movies compression.

Encrypting: an encrypted content contains ciphered data. Unauthorized people couldn't read these data without a decryption key. Digital Cinema movies are always encrypted and require a decryption key (KDM) to enable the player to decrypt and read the date.

eSATA: this is anexternal computer bus technology designed for transfer of data to and from hard disks, like USB2 or FireWire.

FIPS 140-2: DCI compliant theater systems must be certified to meet this Federal standard for data security, which includes security from physical intrusion.

FM (Forensic Marking) or Fingerprinting: the Forensic Marking is the process of embedding invisible data (date, time, place) into the picture and sound track of digitally projected movies. It enables pirated content to be traced back to a specific auditorium and showing.

JPEG 2000: The DCI specified data compression, JPEG 2000 combines superb picture quality and manageable file sizes.

K: In computer-speak, two to the tenth power or 1,024. In digital film scanning, the width of the image is described as 2K or 4K pixels.

KDM: The Key Delivery Message is a set of data files that unlock the Digital Cinema Package for presentation. For security, the KDM is delivered to the theater separately from the DCP .

ODS: Other Digital Stuff can include policy trailers, commercials, local advertising « slides », live pay per view events and video gaming. To maximize theater revenues, digital projection is open to any digital content.

Production: Digital Cinema can accept any type of movie production, including film, digital animation, HD, 2K and content from the new 4K Digital Cinema cameras.

Projector: A digial projector has an even greater influence on presentation quality than a film projector.

SM: The Security Manager is a software within the projector/media block enclosure that monitors any entry.

SMS: The Screen Management System controls the projector and server of one auditorium. It includes a trusted device list of components within the secure environment.

SPB: Each area of the projection system must include protection and alerts for sensitive signal processing areas. These are called Security Processing Blocks. Depending on the area protected, the system may react by logging and reporting the event, to erasing the stored KDMs, to as extreme as physical destruction of the protected area (just like Mission Impossible).

TMS: The Theater Management System manages content storage, keeps operational logs of what has been played or what will need to be played, movement of content to the auditorium and can interface with ticketing, contract management and keymanagement.