



DIGITAL CINEMA GLOSSARY

2K – 4K: **4K** is the term used to describe images that have approximately 4K vertical lines. In digital cinema, a 4K image with a 2.39:1 ("scope") aspect ratio is delivered having 4096 x 1716 pixels. A 4K image with a 1.85:1 aspect ratio is delivered having 3996 x 2160 pixels. **2K** is the term used to describe images that have approximately 2K vertical lines. In digital cinema, a 2K image with a 2.39:1 ("scope") aspect ratio is delivered having 2048 x 858 pixels. A 2K image with a 1.85:1 aspect ratio is delivered having 1998 x 1080 pixels.

BITRATE: The amount of data (bits) per second that passes through a digital system. Normally expressed in kilobits per second (kb/s), Megabits per second (Mb/s) or Gigabits per second (Gb/s).

CODEC: A **Codec** is a device or program capable of encoding and/or decoding a digital data stream or sign

COMPRESSION: **Data compression** or **source coding** is the process of encoding information using fewer bits (or other information-bearing units) than an unencoded representation would use through use of specific encoding schemes. Most compressed files need a device or software to decompress files in order to play them back.

COMPOSITION: A single element used for a Dcinema presentation i.e., a feature, trailer or advertisement. A composition contains everything required for a successful screening of the content including image, audio, subtitles, and a Composition Playlist.

COMPOSITION PLAY LIST (CPL): A text file that contains all the information on how the files for a specific Composition should be played back, including how the audio and subtitles are synchronized with the picture. The CPL could contain one reel or many reels, and there are different CPLs for each soundtrack or version that would play back. The CPL is created by the Digital Cinema Packaging Facility.

D-CINEMA: **Digital cinema** refers to the use of digital technology to distribute and project films via hard drives, DVDs or satellite and using a digital projector.

DCI: **Digital Cinema Initiatives** is a consortium of studios formed to establish a standard for digital cinema systems. The organization was formed in March 2002 by the following studios: Buena Vista Group (Disney), 20th Century Fox, Paramount Pictures, Sony Pictures Entertainment, Universal Studios and Warner Bros. Pictures.

DCDM: The **Digital Cinema Distribution Master** is the output of the Digital Cinema post-production process, - a master set of files which have not yet been compressed, encrypted or packaged then becoming a DCP. The image DCDM is color corrected for Digital Cinema projection and will be used to create the compressed files for Digital Cinema distribution.

DCP : Digital Cinema Package corresponds to the DCDM when it has been compressed, encrypted and packaged for distribution. A generic term for a container/collection of Digital Cinema files (compressed image files, uncompressed audio files, subtitles files) and its associated Packing list. More specific types of DCPs include the Feature DCP (contains all the files for a feature), a trailer DCP (contains all the files for a trailer) and a Distribution DCP.

DISTRIBUTION DCP (Distribution Package): A DCP developed by the distributor to the exhibitor. A Distribution DCP usually contains several composition for exhibition of a show. A distribution package may contain pieces of a Composition, or one complete Composition, or replacement/update files. The Distribution DCP would always contain a Packing List for all the elements in its distribution package.

DIGITAL INTERMEDIATE: The **Digital Intermediate** refers to the digital files that results from the scanning of the films source material.

DIGITAL ROLL OUT or DEPLOYMENT: Digital cinema roll out stands for the switch-over to digital screens.

DSM: The **Digital Source Master** is created in post-production and can be used to convert into a DCDM, a home video master, and/or a master for archival purposes.

ENCODING: The process of transforming from one format/type to another (such as compression). Normally, after something is encoded, the piece needs to be decoded for play back.

ESSENCE: Picture, sound or subtitle information contained in a file; contract with Metadata.

FRAMES PER SECOND (FPS): The rate at which images are displayed (typically 24 FPS for Cinema)

JOINT PHOTOGRAPHIC EXPERTS GROUP (JPEG): The group responsible for the developing standards for JPEG compression schemes for images only.

JPEG 2000: JPEG 2000 is a DCI compliant wavelet-based image compression and decoder standard.

KDM or Key Delivery Message: Contains all the information necessary to allow the playback of a composition on a specific server during a certain time period. The KDM is ordered by a specific CPL ID#. The KDM is delivered separately from the DCP shipment that it is associated with.

MEDIA BLOCK / INTEGRATED MEDIA BLOCK: The hardware device(s) that convert(s) the packaged content into the streaming data that ultimately turns into pictures and sound in a theatre. The Media Block is a secure entity that is not field serviceable and may reside inside the server or the projector.

MOVING PICTURES EXPERTS GROUP (MPEG): The group responsible for the developing standards for MPEG compression schemes for digital audio and video (MPEG-1, MPEG-2, MPEG-4, MP3).

MATERIAL EXCHANGE FORMAT (MXF): A file format that holds essence combined with metadata that describes the essence. MXF is intended to be a standardized way to move video and audio files between systems regardless of operating system and/or hardware.

PACKING LIST: Like a packing list for deliveries, the Packing List contains the identification of each individual file included in the DCP. This list also includes information about each file that allows the receiver to verify that they have every file in its entirety.

PROJECTOR CONFIGURATION FILE (PCF): A file that is put into the TI Dcinema projectors in order to configure the projector to a standardized set-up.

SCREEN MANAGEMENT SYSTEM (SMS): The user interface that a theater manager would use to control a single screen's system including start, stop, the creation or selection of a Show Playlist and editing of a Show Playlist. It is required that each auditorium has one SMS.

SECURITY MANAGER (SM): The controlling device of a security system in either the encoding system, distribution system or the theater playback process.

SHOW PLAYLIST: A playlist that describes the order of how the Composition should play back and is typically created by exhibition and transferred to the equipment controlling a particular screen. The exhibitor could have multiple Show Playlists.

SMPTE: The **Society of Motion Picture and Television Engineers** is an international professional association based in the USA of engineers working in the motion imaging industries. An internationally-recognized standards developing organization, SMPTE has over 400 standards, Recommended Practices and Engineering Guidelines for television, motion pictures, digital cinema, audio, etc.

VPF or VIRTUAL PRINT FEE: Virtual Print Fee is a fee paid for each digital screening by distributors and exhibitors to a third party who has paid for the digital cinema equipment.