

# FILMLOOK<sup>INC.</sup> NEWSLETTER

FALL

[www.filmlook.com](http://www.filmlook.com)

2007

## FOCUSING ON DIGITAL CINEMA MASTERING FOR DIGITAL CINEMA RELEASE

**S**o now you have your finished project on a tape (or drive) and are ready for nationwide digital theatrical display. Now what? Well, unlike a cable or network television station, if a theatre chain is set up for digital cinema it most likely will not have tape machines ready to play back your motion picture. Instead, there will be a theatre management system comprised of digital projectors, playback servers equipped with decryption systems to read forensic watermarking, and other security devices that are necessary to play a movie out in a digital theatre.

With the elimination of film projectors and videotape machines, the content itself must be “packaged” in the form of a DCP - a DCI compliant, JPEG 2000 file. This will ensure compatible playback across a wide range of equipment worldwide at any DCI compliant theatre.

To start, a finished project must comply with the specifications created by the DCI, or Digital Cinema Initiative; a consortium of movie studios and digital media facilities whose goal is to provide a standardized way to assure that universal playback capability, image quality and security is maintained between digital cinema mastering and the theatrical distribution journey.

At the end of the digital mastering process, not to be confused with digital cinema mastering, when all of the creative manipulation is finalized, a DSM, or Digital Source Master is created. A DSM can exist as any audio and image file format, including a set of image, audio, subtitle and auxiliary data, which complies, with the specifications of a Digital Cinema Distribution Master. A DCDM is simply an image sequence of uncompressed 12 bit TIFF files in XYZ color space and sized to fill the proper container format for scope or flat aspect ratios. And audio is a single uncompressed 24 bit WAV file at 24fps, sampling at 48 kHz.

Whether a DSM or DCDM, content must be encoded and may be encrypted before it is packaged and played back. It is here that the image portion of a movie is compressed in JPEG 2000 and then ready to be packaged. From the resulting encoded video and wrapped audio, a Digital Cinema Package is created. The DCP is simply a set of MXF files containing the essence (picture and sound) and a set of XML files (Composition Play List and Packing List) containing information for each of the individual files which dictate the reel order for playback.

Additionally, if the JPEG 2000 encode was encrypted, a key is necessary to “unlock” the movie for presentation. The purpose of encryption is to protect the digital data and prevent piracy by securing

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playback with a key. The key is contained within a Key Delivery Message or KDM. A KDM is generated for every DCP and is specific to each digital cinema server at every theatre. The KDMs will determine and authorize who can play the movies, on which projection systems, how many times they can be played and at what times and dates.

Distributing copies of the DCP to a digital cinema or several digital cinemas can involve physical delivery of assets via hard drive or by satellite transmission or fiber network.

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## JACKSON'S LEGACY IN FILMLOOK

PBS and Red Hill Productions have used FILMLOOK Inc.'s editorial, da vinci 2K Plus with the FILMLOOK® gray scale for its latest documentary, "Andrew Jackson: Good, Evil & the Presidency." The documentary reveals the turbulent and groundbreaking moments of Andrew Jackson's controversial life and presidential term. Shot on film and tape, the documentary was brought to FILMLOOK for final online assembly, color correction, titling and up conversion to HD. This is the newest Red Hill documentary brought to us, following the critically acclaimed PBS series "The Great War" "Chasing the Sun," "Kingdom of David" and "Woodrow Wilson." "Andrew Jackson" will air on PBS beginning in January.

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## FILMLOOK ON THE NIGHT SHIFT

The original hit series "Night Shift," a limited run series spin off of "General Hospital" on SoapNet, is using our exclusive FILMLOOK®/da vinci 2K Plus simultaneous session to create a unique "look". "Night Shift" is a faster, slightly more naughty look at what happens on the overnight shift at General Hospital. The show is currently SoapNet's most watched series.

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## FILMLOOK BACK STAGE

TV One is using FILMLOOK Inc. for da vinci 2K color enhancement for its new series "Stage Black," a reality television show from executive producers Blair Underwood and David E. Talbert. Ten contestants compete for a coveted role in a new Talbert stage production, but only one can win as each is eliminated based on the strength of their performances on stage. The series is using da vinci for color enhancement and color legalization according to TV One standards. "Stage Black" is currently on the TV One network.

## FILMLOOK HAS THE ANSWER

Congratulations to Scott Sternberg on the premiere of his second season with “That’s The Question” on the game show network. Part Jeopardy and part Wheel of Fortune, “That’s the Question” is a hangman-like trivia show in which contestants must answer pop culture and history questions in order to gain points and fill in the letters of a puzzle.

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## UNDER THE SEA WITH FILMLOOK

EC Productions and underwater photographer Tom Cambell have teamed up again for an underwater HD adventure, “The Undersea World of Sheikh Abdulmohsin,” the latest project from Save our Seas Foundation. The Sheikh is well known for his fascination with undersea life and world-wide conservation efforts. Shot in HDCAM in various underwater locales, the special profiles such creatures as the giant manta rays of Mexico and the basking shark of Scotland. The documentary specials are brought to FILMLOOK for final HD mastering and da vinci 2K color timing.

*If you have a news item for the FILMLOOK Newsletter,  
please email us at [anna@filmlook.com](mailto:anna@filmlook.com) and it will be included in our next issue.*

*Happy Halloween*

