Avid systems and dTective are available on Avid's GSA Schedule. Avid also offers a municipal leasing option for government agencies that require the system immediately and plan to finance the cost over two or three budget years.

For more information about these products,
visit www.avid.com/forensic or call
800 497 AVID (2843) or 202 756 7724.

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AFBR00804

Forensic Video Tools from Avid and Ocean Systems

A More Complete Picture

Forensic video solutions from Avid and Ocean Systems offer much more than advanced image enhancement. They help law enforcement make an airtight case with technology designed to coordinate and present a wide range of digital exhibits, including video, audio, testimony, documents, profiles, and case notes. Avid and Ocean Systems stand ready to serve the law enforcement community.

- Demultiplex and isolate cameras on security tapes

- Capture, process, and output uncompressed video in real time

- Clarify dark or noisy video

- Magnify and enlarge license plates

- Stabilize shaky video

- Highlight or mask faces

- Print, e-mail, and distribute still images

- Digitally archive video evidence

OCEAN SYSTEMS

Avid

dTective® Powered by Avid Systems

The complete solution for today's forensic video analyst. Avid and Ocean Systems combine industry-leading digital video processing technology with proven applications developed specifically to help law enforcement professionals turn raw images into real evidence. dTective® from Ocean Systems provides a comprehensive toolset that enables investigators and analysts to extract the best evidence possible from their video. With dTective, it's easy to collect, organize, and clarify video evidence – in the lab or at the crime scene. A dTective solution is even available as a mobile system designed for on-scene evidence collection and courtroom presentation.

Avid puts the muscle behind every dTective solution. Avid's advanced video and audio processing technology and media management tools are used by more than 75,000 professionals around the world. Today, these same tools are being used by forensic video analysts to refine and analyze surveillance video captured from a wide range of sources. They offer law enforcement video specialists two things they really need in the fight against crime: accuracy and reliability.

dTective software, powered by an Avid® system, gives forensic video analysts the power to capture, process, and output uncompressed multiplexed images, highlight and track suspects, and clarify video to reveal hidden details recorded within field-based images. An unlimited number of still images can then be pulled instantly from the video evidence for disclosure purposes. Avid systems also provide powerful asset management tools, enabling the analyst to quickly and precisely categorize evidence for case organization, archive visual evidence, and deliver fast, accurate, and complete disclosure on CD-ROM or DVD.

Experienced analysts demand professional tools.

dVeloper

Clarify dark or noisy video. dVeloper allows the analyst to apply a process called frame averaging to a user-defined segment of video. Frame averaging helps to reveal hidden information in dark or noisy video images using advanced image clarification techniques such as gamma correction, brightness, contrast, and monochrome adjustments. With the majority of crimes captured on tape occurring at night, frame averaging using dVeloper can deliver eye-opening results.

dPlex and dPlex Pro

De-multiplex and isolate CCTV video. Most video seized by police is generated by multiplexed recording systems. Multiplex machines encode several cameras to a single videotape. dPlex is a universal multiplex decoder that enables the analyst to isolate a specific camera and then play it back in real time, without the compression artifacts or cropping loss typical with other multiplex decoders.

dPlex Pro represents the next generation in multiplex decoding of analog security video. This unique tool automatically separates all camera views for a more exacting analysis. Suspects can be tracked easily as they move between camera views. dPlex Pro decodes an unlimited number of cameras for examination and presentation of complicated, multiplexed video investigations.

MAGNIFi

Zoom in on critical details. MAGNIFi enlarges a section of video and displays the result either full-screen or at a user-defined size. Once the target area is defined and an output mode is selected, the analyst magnifies the image using a zoom control. The analyst can then leave the enlarged image as is or select a mathematical filter to further clarify the results. MAGNIFi provides independent controls of both target and output borders, which are especially useful when presenting the results in court.

SpotLight

Highlight or mask details. SpotLight allows an analyst to highlight an area of video or to just as easily obscure it, hiding sensitive information. The analyst selects an area with a user-defined shape. The size and position of this shape can change over time to track a moving object. By darkening the outside area, SpotLight focuses attention on critical portions of the image. SpotLight can be used to hide specific sensitive information, such as license plates, faces of undercover officers, or juvenile offenders.

DVR dCoder

Convert digital files to analog video. With the migration from analog to digital video security systems in the CCTV industry, police agencies are often unable to properly recover the relevant data in a criminal investigation. DVR dCoder is a universal decoder for use with digital video security systems, converting proprietary digital video clips into usable video evidence for further examination. Once the digital video images have been captured, the full power of dTective can be used to analyze, process, and archive the data. DVR dCoder makes it possible to output digital video files to videotape for disclosure and courtroom presentation.

"A police department serious about forensic video needs to ensure their investment will provide the true depth of analysis tools they will quickly learn are critical for this science."

- **Constable Steve Jones,** Edmonton Police Services Forensic Video Unit, Canada.

Avid Bin Architecture

The Avid bin architecture allows an analyst to quickly create a searchable database of all video and audio assets. User-definable fields can be added to each forensic case to track a broad range of data like incident number, suspect name, weapon, type of offense, or motive. A custom search engine instantly locates video evidence matching the targeted elements of the investigation, linking cases that might otherwise have gone unsolved.

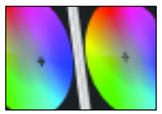
Locators

Locators assist the analyst in the preparation of case reports. A simple click of a button adds a color-coded, on-screen annotation to a specific image. These on-screen case notes help to identify evidence and mark specific actions. Locators make it easy for an analyst to instantly return to a specific frame of interest. The Avid locator tool displays all of the annotated frames, complete with images.

Timecode AVX Plug-in

With the Avid Timecode AVX™ plug-in, an accurate time stamp can be added to security video images to within 1/60th of a second of the actual event. Once timecode has been applied to the image, field-accurate reference is easy during trial, allowing all parties to follow the timeline. Timecode takes the guesswork out of locating vital visual evidence.

Color Correction



Color correction is a powerful, real-time process that greatly expands the forensic capabilities of an Avid system. The easy-to-use color correction tools analyze and correct poor lighting and compensate for camera dome filters to recover the accurate colors of the original scene. Grayscale correction overcomes inaccurate reproduction of dark or light pigment in a suspect's features – even when captured on black-and-white video.

Image Stabilization

Avid image stabilization can correct unwanted pans, tilts, and zooms as well as unstable in-car or hand-held video. Image Stabilization automatically compensates for distracting horizontal and vertical movement. Applying image stabilization can result in the discovery of important evidence that could have gone undetected.

Picture-in-Picture

The ability to display one moving image within another offers dynamic, side-by-side comparisons, demonstrating consistencies between known images and suspect images. Time and date stamps can also be moved to a magnified area of the video for accurate image reference during trial. Picture-in-picture helps to reveal the truth behind the video.

Reverse Projection

Reverse projection and reliable height analysis are made easy with the Avid superimpose feature. After isolating a suspect on video, an analyst can superimpose a calibrated measurement standard over the suspect's picture and then 'look through' one video track into another. This simple comparison clearly determines the suspect's actual height.

Script-Based Editing

Avid's Script-Based Editing tool provides valuable functionality not found in other forensic video systems. A transcript of a suspect or witness interview or of an undercover operation can be aligned to the audio and video. A simple word search can locate a specific word, phrase, or sentence and then cue and play the video from that point. The analyst can also click and drag over any part of the transcript and play the video related to that portion of the document, making court-ordered redactions easy.

MetaSync

Avid systems provide twenty-four tracks for synchronized metadata, linking any digital investigative asset directly to the video evidence. Assets include word processing documents, spreadsheets, e-mail, digital photos or virtually any digital file that can be accessed on a computer. As the video exhibit is played, hotspots on the Avid timeline guide the analyst, investigator, or prosecutor to evidence relevant to that point in the video clip. With the click of a button, the digital asset is launched.The Avid MetaSync® system can even link a video sequence to a live Web site, providing dynamic access to covert surveillance cameras.

"Allowing me to search, sift, and sort video evidence based on my own criteria and to consolidate files to save storage space saves time and money and helps me link cases where their relationship might not otherwise have been discovered."

– **Jim Kennedy,** New York State Police
Forensic Video/Multimedia Services Unit

Media Composer Adrenaline

At the heart of dTective is the Avid Media Composer® Adrenaline™ system, a powerful and versatile video acquisition and analysis solution that captures, edits, and exports a wide range of video and audio evidence, including uncompressed analog video, MPEG, and DV25. Analysts can mix video, audio, and other digital media in a single timeline using an intuitive, easy-to-use interface – and take full advantage of the complete range of forensic tools from Avid and Ocean Systems.

Avid Xpress Pro

Avid Xpress® Pro software offers portability and unmatched price performance to agencies challenged by budget constraints. Boasting the full palette of dTective filters and the legendary Media Composer interface, Avid Xpress Pro software provides DV-quality image processing. When combined with portable Avid Mojo™ hardware, analysts turn their Avid Xpress Pro dTective system into a powerful forensic video package, capable of examining both DV25 and uncompressed video.

Forensic Video Tools from Avid and Ocean Systems.

There is no more effective arsenal in the fight against crime.