

**MMIE SOP-08 CD-DVD or Other Digital Media  
Enhancement**

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Status: Published  
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*Approved by Director: Dr. Guy Vallaro*

**A. Purpose:**

General operating procedure for handling CD/DVD or other digital evidence for enhancement.

**B. Responsibility:**

Forensic Science Examiners assigned to the Multimedia and Image Enhancement Unit or performing casework in the Unit

**C. Procedure:**

1. Inspect the digital media to ensure that there is no damage present and it is in good working condition.
2. If the media is damaged, note the damage on the worksheet and with photographs if possible. If necessary, contact the submitting agency. Repair the damage if possible and note the repairing measures on the applicable worksheet. If damage is observed, an effort will be made to notify the submitting agency/customer and this communication will be noted in the case file according to GL-1 Section 4.4.2.

Precautions should be taken to ensure that the digital media is virus-free and malware-free prior to opening files in a computer.

3. Make a duplicate/working copy of the submitted media and all work performed will be made off of this copy.
4. In the examiner's computer documents, a working folder should be created with the laboratory case number as the identifier for all files/media generated.
5. Use the Laboratory software programs (Adobe Photoshop, Adobe Premiere Pro, Cognitech) or if applicable the pre-installed viewer software present to access and view the video or photo files.
6. Document all files and sub-files located on the digital evidence submitted.
7. If possible, import and analyze the digital files using editing software, refer to MMIE SOP-06 for guidance.  
In some circumstances, due to the nature of the video, enhancements may need to be conducted on screen captures.

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8. Any files generated from the digital media should be saved using the highest quality setting.
9. Save any captured segment as a video (.avi/.wmv) file using the Laboratory identification number as the file identifier (*ID-06-12345 capture 1.avi*) or any other descriptor (*bank robbery.avi*).
10. Exported files can be created and labeled in the following manner: camera/time/date stamp information (*c# mmddyy hhmmss.tif, c# hhmmss.tif, mmddyy hhmmss.tif or hhmmss.tif*) or submission number (*Example: S001 1.tif (graphic files)*) or other case descriptor.
11. After analysis of the video evidence is completed, save any image or video files in the examiner's case folder on the computer and a copy of this file should be transferred onto a CD/DVD for archiving.
12. The submitting agency may receive a set of printed images or a CD/DVD containing the image files.
13. If photographs or a media containing electronic files are generated to be disseminated to the requesting agency or retained as archives, a sub-item will be created in the *LIMS JusticeTrax System*. This sub-item will be retained as Submission #-M# (*e.g. 1-M1*).
14. A report will be issued reflecting any enhancements/clarifications made on the submitted evidence.

**D. Sources of Error:**

Equipment malfunction or condition of evidence submitted.

**E. References:**

- Adobe Corporation. (2005). *Adobe Photoshop CS2 User Guide*. San Jose: Adobe Systems Incorporated.
- Adobe Corporation. (2005). *Adobe Premiere Pro 2.0 User Guide*. San Jose: Adobe Systems Incorporated.
- Adobe Corporation. Adobe Production Suite CS5 on-line help. [www.adobe.com](http://www.adobe.com)
- Ang, T. (1999). *The Art of Digital Photography*. New York: Octopus Publishing Group.
- Camtasia Online Help: <http://techsmith.custhelp.com>
- Cognitech Corporation. (1998). *Cognitech Video Investigator User Guide*. Pasadena: Cognitech Inc.

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- Corel Corporation. (2008). *Corel Draw Graphics Suite X4 User Guide*. Ottawa: Corel Corporation.
- Diamond Cut Productions Corporation. (2009). *User's Manual for DC Live/Forensics and Diamond Cut DC 7* (13<sup>th</sup> ed.). Hibernia: Diamond Cut Productions Inc.
- Galer, M. & Horvat, L. (2001). *Digital Imaging*. Oxford: Butterworth-Heinemann.
- Johnson, S. (2006). *On Digital Photography*. Cambridge: O'Reilly Media Inc.
- Ocean Systems - dTective 6.1.2 - 06/2011 <http://www.oceansystems.com/dtective/>
- Pohlmann, K. C. (2005). *Principles of Digital Audio* (5<sup>th</sup> ed.). New York: McGraw-Hill.
- Salient Stills Corporation. (2006). *Video Focus Version 2.0 Windows User Guide*. Cambridge: Salient Stills Inc.
- SWGIT Guidelines. (2013). Special Working Group of Imaging Technology