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

Revision: 1

Effective Date: 8/18/2014

Status: Published

Document ID: 1231

Approved by Director: Dr. Guy Vallaro

Page 1 of 3

A. Purpose:

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

B. Responsibility:

Forensic Science Examiners

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 and 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. Import and analyze the digital files using one of the following software applications:
 - Adobe Photoshop
 - Adobe Premiere Pro
 - Camtasia

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

Revision: 1

Effective Date: 8/18/2014

Status: Published

Document ID: 1231

Approved by Director: Dr. Guy Vallaro

Page 2 of 3

Cognitech

dTective

Other similar software

These software applications may be used to apply the following filters: adjusting audio levels, deinterlacing, demultiplexing, exporting single or multiple frames, changing fields to frames, playback speed adjustment, frame averaging, sharpening, levels or brightness/contrast adjustment, highlighting, magnifying, inverting or inserting informational text into a video or photographic file.

- 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 compact disk 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)

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.

State of Connecticut Department of Emergency Services and Public Protection
Division of Scientific Services

Documents outside of Qualtrax are considered uncontrolled.

MMIE SOP-08 CD-DVD or Other Digital Media

Enhancement

Document ID: 1231

Revision: 1

Effective Date: 8/18/2014

Status: Published

Approved by Director: Dr. Guy Vallaro

Page 3 of 3

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

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.

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* (13th 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* (5th ed.). New York: McGraw-Hill.

Salient Stills Corporation. (2006). *Video Focus Version 2.0 Windows User Guide*. Cambridge: Salient Stills Inc.

SWGIT Guidelines. (2007). Special Working Group of Imaging Technology

