



**DEPARTMENT OF PUBLIC SAFETY
POLICIES & PROCEDURES**



POLICY NUMBER	
OPR:48	
EFFECTIVE DATE: 04/24/2007	ORIGINAL ISSUED ON: 04/24/2007
REVISION NO:	
ORIGINAL	

SUBJECT: DIGITAL CAMERAS

1.0 PURPOSE

The purpose of this policy is to provide commissioned officers with proper procedures for documenting evidence through the use of digital cameras.

2.0 POLICY

It is the policy of the Department of Public Safety to permit the use of digital cameras for investigative and documentary purposes where reasonable and appropriate. In doing so, it is also the Department’s policy to standardize the capture, storage, processing, and dissemination of digital images by employees utilizing digital cameras to document items of evidentiary value.

3.0 APPLICABILITY

This policy applies to all employees of the Department of Public Safety.

4.0 REFERENCES

A. IACP – National Law Enforcement Policy Center

5.0 DEFINITIONS

- A. Archive Image** – An image stored on media suitable for long-term storage.
- B. Capture** – The process of recording an image.
- C. Digital Imaging** – For purposes of this policy, the process of capturing images using a digital camera.
- D. Digital Image** – An image that is stored in electronic numerical form.
- E. Image Enhancement** – Any process intended to improve the visual appearance of an image, including, but not limited to, cropping, dodging, burning, color balancing, and contrast adjustment.
- F. Image Processing Log** – A log maintained to document any processing or enhancement done to a working copy image. The log will be detailed enough so that another comparably trained individual can repeat the steps and produce the same output. The log will represent every step taken in the process.

- G. Master Image** – An accurate and complete replica of the primary image, irrespective of media.
- H. Master Disk** – A CD-R/CD+R or DVD-R/DVD+R upon which primary images have been transferred to create the master images.
- I. Pixels** – Refers to each individual element of a digital picture to which a specific color or brightness can be assigned. It is short of “picture elements.”
- J. Primary Image** – The first instance in which an image is recorded onto any media, e.g., a digital image recorded on a flash memory card.
- K. Wipe** – A term used to describe the process of deleting the contents of a file or disk space so that none of the content can be recovered.
- L. Working Copy** – A duplicate of the master image used for investigative purposes, forensic analysis, and prosecutorial presentation.
- M. WORM Media** – Storage media, such as CD-R/CD+R or DVD-R/DVD+R, that is used to permanently store or archive images. It stands for Write Once Read Many.

6.0 PROCEDURE

A. Training

1. All agency personnel who are authorized to capture, process or store digital images shall be trained on the function and operation of such equipment in accordance with accepted professional standards and agency requirements.

B. Audit Trail or Chain of Custody

1. Digital images recorded as evidence shall be handled and processed in accordance with departmental policy OPR:17, Evidence Handling, and training prescribed for processing evidence. When master images are preserved on removable WORM media, such as CD-ROM or DVD-ROM, personnel should employ the same procedures as would be used for film and instant print media.
2. The preservation of master images will not be done on rewritable media, such as hard drives, flash memory cards, tape drives, etc.

C. Equipment

1. Absent exigent circumstances, only digital imaging equipment authorized for use by the Department shall be used for operational purposes.
2. In exigent circumstances, personally-owned digital cameras may be used to record incidents. Images recorded shall be the property of the Department and may not be retained by employees, employed for personal use, or distributed without formal departmental approval.

3. Assigned officers shall be responsible for the routine care of their equipment and inspection for proper operation. Designated trained personnel shall also check equipment on a regular basis to ensure functionality. Any equipment that falls outside expected functionality shall be removed from service until deficiencies have been corrected.
4. Prior to use, authorized users shall review a checklist to ensure:
 - a. The operator-adjustable settings are appropriately made.
 - b. The time and date settings are correct.
 - c. There are adequate supplies of recording media.
 - d. The media is blank, i.e., new, reformatted, erased, or wiped.
 - e. The camera functions properly.

D. Capture of Primary Images

1. Where applicable, established departmental procedures and training for conventional photographic recording of crime and incident scenes shall be adhered to with the use of digital image recording.
2. Personnel should select camera settings that will enable them to accurately capture the item or scene. At a minimum, the following should be considered when selecting appropriate capture devices and settings:
 - a. Characteristics (size, movement, location, etc.) of the scene.
 - b. Item of interest.
 - c. Lighting of the item of interest.
 - d. Dynamic range of the scene.
 - e. Time constraints on capture of images and required end product.
3. When documenting major crime scenes, authorized personnel should use conventional single lens reflex cameras with 35mm or larger format film as the primary media, which may be supplemented by digital imaging. However, if a digital camera is used as the primary means of documenting a scene, the digital camera used should be capable of, or include, the following:
 - a. Manual override
 - b. Interchangeable lenses
 - c. Off-camera flash
 - d. Tri-pod mount

4. Image quality settings shall be selected appropriate to operational requirements rather than to maximize storage capacity. Personnel shall ensure that sufficient storage media is available to accomplish documentary objectives.
5. Prior to taking images, the camera shall be reset to “one” (001) if possible, and all images captured sequentially. Unless exigent circumstances exist, separate assignments or events may not be recorded on the same device until all files from previous assignments have been removed from that device.
6. Following capture, primary digital images shall not be deleted, adjusted, processed or manipulated in any way.

E. Master File Creation

1. Digital cameras and volatile memory devices such as flash cards should not be used as permanent storage media. Primary images recorded using digital cameras shall be transferred to a write once read many (WORM) Compact Disk (CD) or Digital Versatile/Video Disk (DVD) to create the master disk.
2. Transfer of primary images to the master disk shall be conducted as soon as reasonably possible to reduce the potential for accidental corruption or deletion of images.
3. Images on the master disk shall not be altered in any manner. To assist in this objective, and to protect its integrity, master images shall be stored on WORM media. Authorized personnel may subject the master disk to such other protections as deemed appropriate, such as limiting access or using encryption on the image files.
4. The master disk shall be securely stored. It shall be:
 - a. Labeled, if feasible, with due care for the longevity of the label and readability of the medium.
 - b. Stored in a form and manner, with software if necessary, to ensure that images will be viewable in the future.
 - c. Kept in accordance with court requirements.
 - d. Never used except to make additional working copies or by order of the court to establish authenticity.
5. Once the master disk has been created, and the successful transfer of all images verified, the flash memory card containing all the primary images may be erased, reformatted or wiped and reused.

F. Working Copy

1. A copy or copies of the master images may be made as necessary to create working copies. These should be identified as “working copies.”

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2. Working copy images may be modified, processed or adjusted accordingly to enhance the visibility, clarity or other aspects of the images in accordance with accepted photographic and forensic standards.
3. Any adjustments to the working copy shall be documented by recording every step used in the process to adjust the working copy image. Adjustments to working copy images shall be recorded on an image processing log, unless the software application used incorporates a logging capability that will automatically record every step of the modification process and the log may be printed out.
4. Software utilized for image enhancement shall be a piece of software that is generally or scientifically accepted in the photography community as a valid tool for the adjustment of images.
5. Working images that are modified, processed or adjusted shall be saved under a file name that indicates they have been modified.

G. Preparation of Prosecution File

1. Copies of all images related to the case should be provided to those parties entitled to such under the rules of discovery and in a format that is compatible with the needs of the court.
2. When releasing images to appropriate parties, all master images should be presented so that the evidentiary content is not compromised. In some cases, such as those involving confidential informants or other situations in which the release of certain data could compromise current or future investigations, image content shall be redacted in a manner that is consistent with law.
3. If needed, the Department will make appropriate arrangements for playback equipment in court if there is pertinent material that can only be seen when images are viewed in their native, digital form and the format is not widespread, thus making the availability of playback equipment limited.

H. Archival or Retention

1. All master images shall be stored in a manner to protect their integrity pending appeal, retrial or civil claims based on the amount of time determined by criminal sentences or law.

7.0 ATTACHMENTS

A. Image Processing Log

8.0 APPROVAL

APPROVED BY: _____ s/John Denko
DPS Cabinet Secretary

DATE: April 24, 2007