

Technical Procedure for the Nikon D70 Digital Camera

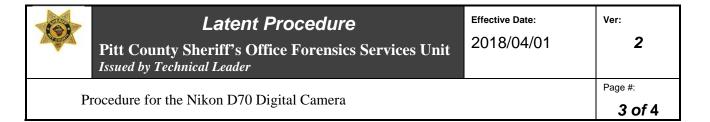
- **1.0 Purpose** This procedure outlines how to photograph evidence with the Nikon D70 digital camera.
- **2.0 Scope** This procedure applies to photographs taken in the laboratory with the Nikon D70 digital camera. This camera is used to preserve developed latent impressions, allowing the Examiner to maintain the developed impressions, use them for examinations and disseminate them to the appropriate agencies in a permanent manner. This particular camera may also be used in overall photography at crime scenes or to record unique items of evidence.
- 3.0 Definitions -N/A
- 4.0 Equipment, Materials and Reagents
 - 4.1 Equipment and Materials
 - Nikon D70 digital camera
 - Compact flash media card
 - 4.2 Reagents N/A
- **5.0 Procedure** The Nikon D70 camera is relatively simple to operate. The examiners shall consult and follow the owner's manual. The following procedures apply to photography of latent impressions for comparison purposes.

5.1 Standard Photography

- **5.1.1** Ensure that the camera contains a compact flash card with enough free space to record the impressions or areas of interest.
- **5.1.2** Set the camera mode to "P" for Program mode (P: Program mode has the camera calculate both shutter speed and aperture (given a manually or automatically selected ISO). The difference between Program mode and Full Auto mode is that in Program mode, only the *exposure* is automatic, while other camera settings (e.g. Shooting mode, exposure compensation, flash) can be set manually; in Full Auto mode everything is automatic.
- **5.1.3** Examiners may set the focus switch on the lens to "M" for Manual focus.
- **5.1.4** Place a scale near the impression to be photographed.
- **5.1.5** Align the impression and the scale in the viewfinder, set the focus and take the photograph.
- 5.2 Photography with alternate light sources



- **5.2.1** Ensure that the camera contains a compact flash card with enough free space to record the impressions or areas of interest.
- **5.2.2** Place the orange filter (or other appropriate filter) on the 60mm lens.
- **5.2.3** Set the camera mode to "P" for Program Priority P: Program mode has the camera calculate both shutter speed and aperture (given a manually or automatically selected ISO). The difference between Program mode and Full Auto mode is that in Program mode, only the *exposure* is automatic, while other camera settings (e.g. Shooting mode, exposure compensation, flash) can be set manually; in Full Auto mode everything is automatic.
- **5.2.4** Examiners may switch lens to "M" for Manual focus.
- **5.2.5** Place a scale near the impression to be photographed.
- **5.2.6** In the case of short wave UV Light the examiner must observe the subject of the photograph to ensure that the scale is readable.
- **5.2.7** Align the impression and the scale in the viewfinder, set the focus and take the photograph.
- **5.2.8** A tripod and shutter release must be utilized when photographing latent impressions to avoid camera movement.
- **5.3 Preservation of Photographed Impressions** The image processing systems shall be used to preserve identifiable latent impressions and to create 1:1 prints for comparison purposes (see Section Image Processing technical procedure and procedure for Recording of all Analytical Data). **Note:** All images (e.g., photographs, latent lifts, and impressions) shall be retained in both the image server and the master case file.
- 5.4 Standards and Controls N/A
- 5.5 Calibration N/A
- **5.6 Sampling** N/A
- 5.7 Calculations N/A
- **5.8** Uncertainty of Measurement N/A
- **6.0 Limitations** N/A
- **7.0 Safety** N/A
- 8.0 References



Duncan, C.D. Advanced Crime Scene Photography. CRC Press, New York (2010).

Krauss, T.C. and S.C. Warlen. "The Forensic Science Use of Reflective Ultraviolet Photography." *Journal of Forensic Sciences*. (1984): 262 – 268.

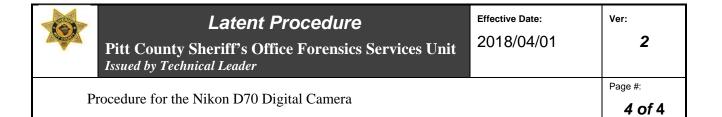
McDonald, J.A. Close-Up & Macro Photography. 2nd Edition. Phototext Books (1992).

Redsicker, D.R. The Practical Methodology of Forensic Photography. Second Addition, CRC Press (2001)

Adrian Davies and Phil Fennessy, Digital Imaging for photographers, 4th edition Elsevier LTD. 2001

9.0 Records – N/A

10.0 Attachments – N/A



REVISION HISTORY		
CURRENT VERSION	EFFECTIVE DATE	SUMMARY OF CHANGES
1	2016/07/01	Original Version
2	2018/04/01	Put statement in on Short Wave UV, change revision history table, issue date to effective date, rev# to ver#