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|  | <p style="text-align: center;"><i>Latent Procedure</i></p> <p>Pitt County Sheriff's Office Forensics Services Unit <i>Issued by Technical Leader</i></p> | <p>Effective Date: 2018/04/01</p> | <p>Ver: 2</p> |
| <p>Procedure for the Nikon D90 Digital Camera</p> | | | <p>Page #: 1 of 4</p> |

Technical Procedure for the Nikon D90 Digital Camera

1.0 Purpose - This procedure outlines how to photograph evidence with the Nikon D90 digital camera.

2.0 Scope - This procedure applies to photographs taken in the laboratory with the Nikon D90 digital camera. This camera is used to preserve developed latent impressions, allowing the examiners 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 D90 digital camera
- Compact flash media card


4.2 Reagents – N/A

5.0 Procedure – The Nikon D90 camera is relatively simple to operate; however, the examiner 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

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- 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 appropriate filter on the 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 system shall be used to preserve identifiable latent impressions and to create 1:1 prints for comparison purposes (see section Image Processing technical procedure and the procedure for Recording All Analytical Data). **Note:** All images (e.g., photographs, latent lifts, and impressions) shall be retained in the “I” drive image server and 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

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Operators Manual for the Nikon D-90

9.0 Records – N/A

10.0 Attachments – N/A



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REVISION HISTORY

| CURRENT VERSION | EFFECTIVE DATE | SUMMARY OF CHANGES |
|------------------------|-----------------------|--|
| 1 | 2016/07/01 | Original Version |
| 2 | 2018/04/01 | Add procedures to reference; add statement on short wave UV. Change revision history table, issue date to effective date and rev# to ver#. |

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