
Technical Procedure for Video Performance Verification

1.0 Purpose – The purpose of this procedure is to ensure that video duplication or analysis equipment is in working order.

2.0 Scope – This procedure describes the steps to be taken by personnel of the State Crime Laboratory to determine that video analysis/duplication equipment is in proper working order. The Video Performance Verification Procedure shall be used each day that analysis is conducted. Most electronic equipment performs a check of key components upon receiving power. Any malfunction of these components will typically prevent the equipment from operating. This check, in conjunction with the procedure below, ensures the equipment is working properly prior to use.

3.0 Definitions – N/A

4.0 Equipment, Materials and Reagents

- Avid Rackmount
- Avid Luggable
- Video Duplication
- Decoder
- StarWitness

5.0 Procedure

5.1 Video Duplication

- 5.1.1** Prior to copying a video, the test pattern video shall be copied using the same media type and equipment that will be used in the duplication of the evidence.
- 5.1.2** A section of the video a few seconds in length shall be copied and the copy examined to ensure that the color bars and test tone are the same on the copy as on the original video.
- 5.1.3** A notation shall be made in the log within the FA system to document the verification of the applicable equipment. In addition, a notation shall be made in the Forensic Scientist's case notes.

5.2 Video Analysis

5.2.1 Analog Video

- 5.2.1.1** Prior to digitizing a videotape, the test pattern videotape shall be digitized using the same video play deck that will be used in the examination of the evidence.
- 5.2.1.2** A section of the videotape a few seconds in length shall be digitized and the digital copy examined to ensure that the color bars and the test tone are the same on the digital copy as on the original videotape.

5.2.1.3 A notation shall be made in the log within the FA system to document the verification of the applicable equipment. In addition, a notation shall be made in the Forensic Scientist's case notes.

5.2.1.4 The digitized test pattern shall be added to the video which is produced to document the results of the examination.

5.2.2 Digital Video

5.2.2.1 A digital file copy of the color bar test pattern obtained from WRAL-TV was created for verification purposes.

5.2.2.2 Prior to capturing a digital video, the test pattern digital file shall be captured and imported using the same equipment and software that will be used in the examination of the evidence.

5.2.2.3 A section of the video a few seconds in length shall be captured and the captured copy examined to ensure that the color bars and the test tone are the same on the captured copy as on the original file.

5.2.2.4 Most digital video surveillance systems do not contain audio. The verification audio need not be captured if no audio is to be captured from the original evidence.

5.2.2.5 A notation shall be made in the log within the FA system to document the verification of the applicable equipment. In addition, a notation shall be made in the Forensic Scientist's case notes.

5.2.2.6 The captured test pattern shall be added to the video which is produced to document the results of the examination.

5.3 Standards and Controls – A color bar test pattern with test tone obtained from the engineering department at WRAL-TV. This video was converted to various types of video media (e.g., DVD, MiniDV, 8mm, etc.).

5.4 Calibrations - N/A

5.5 Maintenance – 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

- Digital Evidence Validation and Calibration Manual

9.0 Records - N/A

10.0 Attachments - N/A

Revision History		
Effective Date	Version Number	Reason
09/17/2012	1	Original Document
10/31/2013	2	Added issuing authority to header
08/29/2014	3	5.1.3 - Removed original statement regarding log sheet document and added FA notation statement 5.2.1.3 – Removed original statement regarding log sheet document and added FA notation statement; all subsequent formatting bullets were renumbered 5.2.2.5 – Removed original statement regarding log sheet document and added FA notation statement; all subsequent formatting bullets were renumbered
06/13/2018	4	Header - Updated Section and Changed Issuing Authority