

Technical Procedure for Rimage

1.0 Purpose - The purpose of this procedure is to image CDs and DVDs without making changes to the data on the media and to create duplications of CDs and DVDs.

2.0 Scope - This procedure applies to all personnel of the State Crime Laboratory for use in imaging optical media and performing duplications of optical media.

3.0 Definitions

- **Rimage** – an automated capable computer system used for imaging CDs and DVDs in a read-only environment and duplicating CDs and DVDs.

4.0 Equipment, Materials and Reagents

- Rimage automated imaging/duplication computer system.

5.0 Procedure

5.1 Forensic Media Imaging

5.1.1 Turn on the Rimage by opening door and pressing power button near the bottom.

5.1.2 Allow the Rimage to test the CD/DVD/Blu-Ray drives and the robotic arm. This should take approximately five (5) minutes. The test is complete once the robotic arm has reached the bottom of the Rimage.

5.1.3 Place the evidence items into Bin 1 of the Rimage.

5.1.4 Select the Evidence Disc System shortcut on the Windows desktop.

5.1.5 When prompted the menu as follows: “Would you like to process evidence discs for a new case?” Select “Yes.”

5.1.6 Enter the case number into the field “Case ID” and examiner’s name into the “Examiner” field. Select “Settings” and choose the output folder location (default location is “D:\CDs and DVDs”). Note: changing the output folder to an external drive will dramatically slow the acquisition.

5.1.7 Select as follows:
“Take Photo of Disc”
“Prompt for Last Case on Startup”
“Show Evidence Mode Warning”
“Continue Reading after Errors”
“All Files and Folders”
“HTML Reports”
“OK”

5.1.8 Select “OK” on the “Case Input Form” dialog box.

- 5.1.9** System will prompt with “Case (#) is ready to be processed.” Select “Start Case” when all discs are loaded. Check that discs are loaded into the tray and select “Start Case.”
- 5.1.10** An Evidence Mode Warning will appear. Ensure that only evidence discs are in the Rimage and select “OK.”
- 5.1.11** The Rimage will begin acquisition of the evidence discs. When the final disc has begun processing, the screen will display “There are no discs to read in the input bins. Do you want to continue reading more discs for the case?” Select “No” to create the final report for the case once all discs have been read.
- 5.1.12** The Rimage will display “Case (#) is complete. There are no further discs or reports to be processed.” Select “OK” and close the Evidence Disc system window.
- 5.1.13** The “Evidence Mode Warning” will warn the user that they are no longer in evidence mode and should remove all discs. Remove all evidence discs and select “OK”.
- 5.1.14** Navigate to “D:\CDs and DVDS” in Windows to view the report for the case. If any of the discs list anything other than “Completed” as their status, attempt acquisition using CD/DVD Inspector.

5.2 Media Duplication

- 5.2.1** Turn on the Rimage by opening door and pressing power button near the bottom.
- 5.2.2** Allow Rimage to test the CD/DVD/Blu-Ray drives and the robotic arm. This should take approximately five (5) minutes. The test is complete once the robotic arm has reached the bottom of the Rimage.
- 5.2.3** Determine the format of the media that is to be duplicated.
- 5.2.4** Select the “Rimage System Manager” shortcut on the Windows desktop.
- 5.2.5** Select “Production Server” on the left of the menu and select the “Pause” button.
- 5.2.6** Select “Control Center: RIMAGESYSTEM” on the left of the menu and select “Rimage 8100N Settings”. From this menu, select the type of media to duplicate (CDR, DVDR, DVDR-DL, DVDR-BD, DVDR-BD-DL, or Combination). Note: It is best to use one disc type at a time and avoid using “Combination” as the system will become unresponsive.
- 5.2.7** Select “Production Server” on the left of the menu and select “Play” to resume the system.
- 5.2.8** Close the “Rimage System Manager” window.
- 5.2.9** Open the door on the front of the Rimage and locate the bottom tray. If this is not Tray 1, press the “Cycle Tray” button on the top of the Rimage until Tray 1 has cycled to the front.
- 5.2.10** Insert the blank media that is to be created into Tray 1 and close the Rimage door.
- 5.2.11** Select the “QuickDisc” shortcut on the Windows desktop.

5.2.12 Select the proper tab for the media (CD, DVD, Blu-Ray) that will be used in the “Create a New Project” window. Select “Copy a [CD/DVD/Blu-Ray].” Select “Next.” Select “Next.” Enter the number of copies to be made and select “Copy.”

5.2.13 A window will appear “Do you want to save this Project so you can submit it again later?” - select “No.”

5.2.14 The Rimage will display a system message stating “Open the door of Autoloader1.” Open the door on the front of the Rimage. A disc drive will automatically open for the loading of the original disc to be duplicated. Load the original disc and close the door of the Rimage (the disc drive will close automatically).

5.2.15 If the Rimage displays the error message “Out of blank discs,” select “Retry” in order for the Rimage to check the remaining bins for blank media. Once the Rimage completes this task it will continue with the duplication.

5.2.16 The Rimage will begin reading the disc and performing the duplication. Once the Rimage completes duplication, the original disc will be placed into the exterior bin and the duplications into Bin 4.

5.2.17 The QuickDisc program will display “The order is complete and is in the output bin of your Rimage System” with a “Resubmit” button. Do not select “Resubmit”. Either select “New” to open “Create a New Project” window or close the program.

5.3 Standards and Controls - All forensic computers and forensic tools shall be functioning properly prior to beginning a computer forensic examination (see Technical Procedure for Computer Forensics Performance Verification).

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

- Technical Procedure for Computer Forensics Performance Verification Rimage Evidence Disc System User Guide

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	Grammar correction to 5.1.9
11/07/2016	4	5.3 – edited Standards and Controls to reflect updated procedure 5.4 – removed calibration statement 8.0 – updated references