

VIDARscanNDTPRO Software

Installation and User's Guide



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Intended Use

VIDARscanNDT*PRO* software is intended for making digital copies of x-ray films for non-destructive testing applications. This software is not intended for medical use.

Installing VIDARscanNDTPRO

Note: The VIDAR NDT*PRO* digitizer must be installed and properly communicating with the computer before this software can be installed. See the VIDAR NDT*PRO* Installation Guide for instructions.

- 1. Insert the **VIDAR NDT***PRO* **Installation & Users CD** into the CD-ROM drive. Browse to the CD and double-click on *Setup.exe* on the CD to launch the installer.
- 2. In the **Welcome** screen, click the **Next** > button.



- 3. In the License Agreement screen:
 - a. Read the license agreement.
 - b. Optional: Click the **Print** button to print a copy of the license agreement.
 - c. Click I accept the terms of the license agreement.
 - d. Click the **Next** > button.

| VidarscanNDTPRO - InstallShield W | izard | × |
|--|--|---|
| License Agreement Please read the following license agr | eement carefully. | |
| | END-USER SOFTWARE LICENSE AGREEMENT FOR VIDAR SYSTEMS CORPORATION SOFTWARE THIS IS A LEGALLY BINDING AGREEMENT BETWEEN YOU (EITHER AN INDIVIDUAL OR A SINGLE ENTITY) AND VIDAR SYSTEMS CORPORATION (VIDAR) FOR THE VIDAR SOFTWARE AND ASSOCIATED MEDIA AND PRINTED MATERIALS, AND MAY INCLUDE ONLINE OR ELECTRONIC DOCUMENTATION SOFTWARE PRODUCT OR SOFTWARE. BY INSTALLING, COPYING, OR OTHERWISE USING VIDAR'S SOFTWARE PRODUCT, YOU ARE AGREEING TO BE BOUND BY THE TERMS AND CONDITIONS OF THIS AGREEMENT. INCLUDING THE SOFTWARE LICENSE AND DISCLAIMER OF SOFTWARE WARRANTY BELOW. PLEASE READ THIS DOCUMENT CAREFULLY BEFORE USING THE SOFTWARE. IF YOU DO NOT AGREE WITH THE TERMS AND CONDITIONS OF THIS AGREEMENT, YOU SHOULD PROMPTLY RETURN THE UNUSED SOFTWARE TO THE PLACE FROM WHICH YOU OBTAINED IT, AND YOU WILL BE GIVEN A FULL REFUND OF ANY LICENSE FEE THAT YOU PAID FOR SUCH SOFTWARE. Inscorpt where of the license agreement Erint | |
| InstallShield | < <u>B</u> ack <u>N</u> ext > Cancel | ٦ |

4. In the Ready to Install the Program screen, click the Install button.



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5. Wait while the program is installed.



6. In the InstallShield Wizard Complete screen, click the Finish button.



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Using VIDARscanNDTPRO

Launch VIDARscanNDTPRO

or

1. Double-click the VIDARscanNDTPRO icon on the desktop.

Click VIDARscanNDTPRO in the Start menu.

- 2. The **VIDARscanNDT***PRO* window will appear. The **Digitizer Information** section displays the digitizer's status:
 - If the digitizer is not ready:

| V VIDARscan NDTPRO |
|---|
| Settings |
| Bit Depth: Bit Depth |
| Resolution: Resolution |
| File Prefix: File Prefix |
| File Suffix Initial Count: 1 |
| Calibrate Eject Start Stop |
| Diaitizer Information |
| Digitizer is warming up, please wait Reading the digitizer's capabilities, please wait |
| |
| |
| |
| <u> </u> |
| Advanced About Exit |
| |

• If the digitizer is ready:

| VIDARscan ND | TPRO | | |
|--|------------------------|----------|----------|
| - Settings | | | |
| Bit D | epth: 8 | - | |
| Dead | | | |
| Resolu | | <u> </u> | |
| File F | Prefix: VidarImag | e | |
| File Suffix Initial C | ount: 1 | | |
| Cathorn | Deat 1 | 0-4 | 1 0 |
| | Eject | Start | Stop |
| Digitizer Informati | on | | |
| Digitizer model: N Serial Number: 3 | DTPRO 70002 | | <u> </u> |
| Firmware version | number: 51.0 | | |
| Current resolution | = 75 | | |
| Optical resolution | = 570 | | |
| Current bit depth | inches = 14.00 = 08 | | |
| Line time range st | art = 9 | | |
| Line time range er | = 20 | | |
| Current line time = | : 20 t available | | |
| Line Filter not ava | ilable. | | |
| Maximum number | of films = 25 |) | • |
| Advanced | | | E.a. |
| Advanced | Ab | | Exit |
| | | | |

Configure VIDARscanNDTPRO

1. Open the **Bit Depth** list and click the desired bit depth.

| V VIDARscan NDTPRO | _ _ X |
|---|--------------|
| Settings Bit Depth: Resolution: Resolution: 12 16 Vidanmage File Suffix Initial Count: 1 | |
| Calibrate Eject Start Start | op de |

2. Open the **Resolution** list and click the desired resolution.

| VIDARscan NDT | PRO | | |
|------------------------------------|------------------------------|----------|------|
| Settings | | | |
| Bit De | oth: 8 | <u> </u> | |
| Resolut | ion: 75 | <u> </u> | |
| File Pri File Suffix Initial Co | efix: 150 unt: 300 570 | | |
| Calibrate | Eject | Start | Stop |

3. Optional: Change the **File Prefix** and/or **File Suffix Initial Count**. These values will be used to name each file the program saves.

| V VIDARscan NDTPRO | _ 🗆 🗙 |
|---|-------|
| Settings Bit Depth: 8 Resolution: 75 File Prefix: VidarImage File Suffix Initial Count: 1 | |
| Calibrate Eject Start | Stop |

File names are constructed using this syntax:

<file prefix><count>.tif

Note: VIDARscanNDT*PRO* saves files in the TIFF format with extension *.tif.*

- 4. Optional: Configure advanced settings.
 - a. Click the Advanced button. This opens the Advanced dialog.

| ۷ | Advanced | ĸ |
|---|----------------------------|---|
| [| Settings | |
| | LUT: Log | |
| | T 12 Bit High DS Mode | |
| | White is Zero | |
| | Directory for image files: | |
| | C:\VIDAR Images\ | |
| | VIDAR Toolkit | |
| | Cancel OK | |

- b. LUT is currently available only in Log format.
- c. To allow 12-bit images to be saved as 16-bit images (for applications that can't display 12-bit images): Activate the **12 Bit High** option.
- d. To invert pixel data: Activate the White is zero option.

Note: By default, a white pixel is represented by the highest number. When **White is zero** is activated, a white pixel is represented by the lowest number, 0.

- e. *To change the mode of operation to DS Mode, activate the DS Mode Button. DS* mode will provide the highest level of image quality with the lowest amount of image noise. Note digitizing a film in this mode will take 32 times longer than a typical scan.
- f. *To change the directory where files will be saved:* Click the **More** button then select the desired directory.
- g. Click the **OK** button.

Note: The **Logging** option is used in troubleshooting. It logs Toolkit communication data for evaluation by VIDAR Engineering.

Digitize Films

- 1. Load a film in the digitizer.
- 2. In **VIDARscanNDT***PRO*, click the **Start** button. The file name and digitizing progress are displayed at the bottom of the window.

| VIDARscan NDTPRO | _ 🗆 🗙 |
|---|-------|
| Settings | |
| Bit Depth: 16 | |
| Resolution: 150 | |
| File Prefix: VidarImage | |
| File Suffix Initial Count: 1 | |
| Calibrate Eject Start | Stop |
| Digitizer Information | |
| Serial Number: 370002 Firmware version number: 51.0 Hardware version number: 112 Current resolution = 75 Optical resolution = 570 Maximum width in inches = 14.00 Current bit depth = 08 Line time range start = 9 Line time range end = 9 Line time current = 20 Current line time = 20 Dark Enhance not available. Line Filter not available. Maximum number of films = 25 | |
| Advanced About | Exit |
| idarImage1.tif Bytes: 0 | |

3. When digitizing is complete, **Scan Done** is displayed at the bottom of the window.



View images with an appropriate application. Recall that image files are stored in the location you selected in step 4 of the "Configure VIDARscanNDTPRO" section.

Troubleshooting

- If image quality isn't optimum, you should calibrate the digitizer.
- 1. In the VIDARscanNDT*PRO* window, click the **Calibrate** button. Wait while the digitizer calibrates.

| VIDARscan NDTPRO | |
|---|------|
| - Settings | |
| Bit Depth: 8 | |
| Resolution: 75 | |
| File Prefix: VidarImage | |
| File Suffix Initial Count: | |
| Calibrate Eject Start | Stop |
| Digitizer Information | |
| Serial Number: 370002 Firmware version number: 51.0 Hardware version number: 112 Current resolution = 75 Optical resolution = 570 Maximum width in inches = 14.00 Current bit depth = 08 Line time range end = 9 Line time range end = 9 Line time current = 20 Current line time = 20 Dark Enhance not available. Line Filter not available. Line Filter not available. Maximum number of films = 25 | |
| Advanced About | Exit |
| Calibrating | |

2. When the digitizer is ready to scan films, **Calibration completed** appears at the bottom of the window.







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