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# Apteryx ScanX TWAIN User Guide



This document provides an overview of the installation and use of the Apteryx ScanX TWAIN driver.



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# **REVISION HISTORY**

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### **1 OVERVIEW**

#### **1.1 General Information**

1.1.1 The Apteryx ScanX TWAIN is designed to allow users to capture images using the AirTechniques ScanX phosphor plate system from any TWAIN capable 3<sup>rd</sup> party imaging application. This TWAIN driver allows users to capture, filter, and return images to their 3<sup>rd</sup> party application.

#### **1.2** System Requirements

- 1.2.1 The AirTechniques ScanX drivers must be installed in order for the device to work properly with the Apteryx ScanX TWAIN. If you do not have the Driver disk that was included with the ScanX unit, please contact AirTechniques at 1-800-AIR TECH.
- 1.2.2 The Apteryx Imaging Product Suite (Apteryx ScanX TWAIN) and its related tools; components; and plug-ins are designed for 32- or 64-Bit Windows® XP (SP2 or above), Windows Vista®, Windows® 7, Windows Server® 2003, and Windows Server® 2008 operating systems including Terminal Services and Citrix®.
- 1.2.3 Ideal System Recommendations
  - 1.2.3.1 1.0 Gigahertz (GHz) or higher processor (faster is always better, especially for servers)
  - 1.2.3.2 256 MB of RAM (again, more is always better)
  - 1.2.3.3 40GB of available space on the hard disk
  - 1.2.3.4 Name-brand video capture card (ATI; Hauppauge; etc.) for analog intraoral camera support
  - 1.2.3.5 Powered USB 2.0 port(s) for USB capture support
  - 1.2.3.6 Keyboard and a computer mouse device, or some other compatible pointing device
  - 1.2.3.7 Video adapter and monitor with 1024 x 768 or higher resolution
- 1.2.4 Minimum System Requirements

The system must conform to the minimum requirements specified by Microsoft® for the operating system installed. At minimum, Apteryx Imaging requires Windows® XP (SP2 or above) which has the following minimum requirements:

- 1.2.4.1 Pentium 233-megahertz (MHz) processor or faster (300 MHz is recommended)
- 1.2.4.2 At least 64 megabytes (MB) of RAM (128 MB is recommended)
- 1.2.4.3 At least 1.5 gigabytes (GB) of available space on the hard disk
- 1.2.4.4 Keyboard and a computer mouse device, or some other compatible pointing device
- 1.2.4.5 Video adapter and monitor with 1024 x 768 or higher resolution

# **2** INSTALLATION

#### 2.1 Installing Apteryx ScanX TWAIN Driver

- 2.1.1 If installing from a CD, insert the installation CD into the CD-ROM drive. If the Windows Auto Play feature is enabled on the computer, the Setup program will automatically start. If not, use Windows Explorer to navigate to the CD drive letter and double-click on the "setup.exe" file. Skip to Step 3.
- 2.1.2 If installing using the self-extracting executable file, double-click on "ApteryxScanXTWAINSetup.exe". Click on the **Setup** button to extract and run the installer program.
- 2.1.3 The install wizard launches. Click **Next** to continue with the installation.

2.1.4 Review the License Agreement. Click on **Yes** to accept the terms and continue with the installation.





2.1.5 The install program will attempt to install to the default directory, C:\Windows\Twain\_32\Ap teryxScanX. To choose an alternate destination folder (locally or on a network), click on the Browse button to open the 'Choose Folder' dialog box, and then double-click to select the desired install folder. Click Next to continue.







#### 2.2 Installing the AirTechniques ScanX Drivers

- 2.2.1 If installing from a CD, insert the installation CD into the CD-ROM drive. If the Windows Auto Play feature is enabled on the computer, the Setup program will automatically start. If not, use Windows Explorer to navigate to the CD drive letter and double-click on the "AutoRun.exe" file. Skip to Step 3.
- 2.2.2 If installing using the self-extracting executable file, double-click on "AutoRun.exe". Click on the **Install the ScanX Drivers and Utilities** to extract and run the installer program.
- 2.2.3 The install wizard launches. Click **Next** to continue with the installation.



< Back

Next > Cancel

2.2.4 Select the **Typical** installation, and click **Next**.



InstallShield

- 2.2.5 The installer will run automatically.
- ScanX ILE Drivers and Utilities InstallShield Wizard

  Installing ScanX ILE Drivers and Utilities
  The program features you selected are being installed.

  Please wait while the InstallShield Wizard installs ScanX ILE Drivers and
  Utilities. This may take several minutes.
  Status:
  InstallShield

  (Back Next > Cancel
- 2.2.6 Click **Next** to continue and **Install** to start the installation process. When complete, the screen shown below will display. Click **Finish** to exit the setup program.

2.2.1 The installer will run automatically.



< Back Next > Cancel



2.2.2 Click **Finish** to complete the installation. The Configure DR utility will launch automatically after clicking finish.



#### 2.3 Configuring Dynamic Rendering (DR)

- 2.3.1 Once the AirTechniques ScanX driver utility is complete, the Configure DR utility will automatically launch, allowing the Dynamic Rendering settings to be configured. Dynamic rendering provides post processing to Air Techniques specifications to provide optimal image quality when using the ScanX system.
- 2.3.2 When the driver installer has completed, the ConfigureDR utility will launch automatically. If it does not launch automatically, it can be accessed by clicking Start > Programs > ScanX Utilities.
- 2.3.3 The ConfigureDR utility appears. Click **Next**.

) 📱	ScanX Dynamic Rendering Configuration	
This wizi ScanX.	ard will help you enable or disable Dynamic Rendering Enhancement fo	or optimal performance of your
quality.	ynamic Rendering works with your Image Management Software to he Any post processing applied by your Image Management Software ma 1g and should be disabled.	
		Next Cancel



2.3.4 Select ScanX Image with Dynamic Rendering for intraoral images. Click Next.



2.3.5 Select ScanX Image with Dynamic Rendering for extraoral images. Click Next.





2.3.6 The configuration process will then complete. Click **Finish** to close the ConfigureDR utility.



### 

# **3 SETTING UP AND REGISTERING THE SOFTWARE**

#### 3.1 Registering the Software

Once the installation has been completed, upon first and each use of the TWAIN driver until it's registered, a Trial Version window will appear, prompting the user to register the program. To register the Apteryx ScanX TWAIN, launch the TWAIN from any 3<sup>rd</sup> party imaging application that will be used with the ScanX TWAIN.

3.1.1 The Trial Version Licensing Information screen displays.

Version Licensing Information	
Apteryx, inc a software development company	APTERYX.COM
Apteryx ScanX TWAIN Version You have 18 day(s) left on th	
Apteryx ScanX TWAIN Trial Version 1 (1.0.0.2)	
Apteryw, Inc. Icenses this software to you only upon the condition that you accept gareement. Please read the terms carefully before using this software package, a to them. If you do not agree to the terms of this license agreement, then Apteryw. in which event you must destroy all copies of the SOFTWARE PRODUCT and all Cautionary Note. This cautionary note, which is part of this license, is addressed to the person who	si using the package will indicate your assent Inc. is unwilling to license the software to you, of its component parts.
Inc.'s software on a computer. Such installation and any subsequent use of such user license agreement and all amendments thereto (FEULA'). Before going further terms of this EULA. When reading it, please remember that -	
A. Apteryx, Inc. (Apteryx') developed, exclusively with its own funds, each of the p software, a copy of which your organization has received and that you are consid	
B. Hereinafter, the organization that you are a member of or that employs you, and copy of the Software was purchased, is referred as the 'End-User'.	for whose benefit the license to use a single
C. Apteryx does not offer the Software for sale and has not sold the Software to ar military ("Organization")), including any of the following:	ny organization (commercial, governmental, or
1. an Organization that the End-User is a member of or employee of:	
🚱 Register 🧬 Extend Trial	V I Agree X I Disagree

- 3.1.2 To run the software as a trial, select the **I Agree** button.
- 3.1.3 To register the software, select the **Register** button. The 'Register' dialog box displays.

TEP 1: REGISTRAT	ON INFORMATI	ON	
Please enter the following in on either a	formation in order to re registration card or or	gister this product. Yo a label located on the	ur registration number can be found CD-ROM sleeve.
egistration Number:			
nstall ID:	80752C3A		
ser Name:			
ser Company:			
ser Email:			
ser Phone:			
TEP 2: ACTIVATION	CODE		
🖅 Get Activation Code			
			visiting http://apteryx.com/register; both chnical Support during business hours.

3.1.4 Enter the registration number provided (including the dashes) in the 'Registration Number' field.

**U** To avoid confusion, Apteryx avoids the use of the letter "O" in registration numbers. Always enter a "0" in these instances.

- 3.1.5 Enter, at minimum, a first and last name in the 'User Name' field.
- 3.1.6 Enter the name of the dental facility in the 'User Company' field.
- 3.1.7 Enter the email address of the registered user in the 'User Email' field. (Optional but recommended.)
- 3.1.8 Enter the phone number of the dental facility in the 'User Phone' field.
- 3.1.9 Once the registration information has been entered, activate the software by obtaining an Activation Code. An internet connection is required to activate the software. If connected to the internet click on the **Get Activation Code** button.

Refer to <u>How to Obtain an Activation Code if You Are not Online</u> if the workstation is not connected to the internet.

3.1.10 Once the activation code has been received or manually entered click on the **Done** button to complete the registration process.

#### 3.2 How to Obtain an Activation Code if You're Are Not Online

If the computer you are working from is not connected to the internet, you may register your software either from another computer that is connected, or by contacting someone else who has internet access and providing them the following instructions.

- 3.2.1 Go to <u>http://www.apteryx.com/register</u>
- 3.2.2 Once opened, a registration page with information fields identical to the imaging software's registration screen will display.
- 3.2.3 Enter the registration number (including the dashes) and install ID (which is displayed on your registration screen), as well as User Name, User Company, Email and Phone into the Registration form. It is very important to double check all numbers and letters in the Registration Code and Install ID before clicking on the **Register Now** button and obtaining your Activation Code.
- 3.2.4 Enter the Activation Code provided into the 'Get Activation Code' field of the imaging application's registration screen and click the **Done** button to complete the registration process.

If you are unable to activate your software or obtain an activation code, please contact your Dealer or Apteryx Technical Support during normal business hours and they will be happy to assist.

# **4 THE TWAIN INTERFACE**

#### 4.1 General Overview

The Apteryx ScanX TWAIN interface is designed to be as simple as possible. Several options are available, which allow the user to choose the Film Type, Thumbnail display settings for returned images, as well as some capture and image processing settings.

🛃 Apte	ryx ScanX TWAIN		x
<b>E</b>	ScanX Film Type Enables you to select the film type that will be scanned by the ScanX hardware.	Apteryx ScanX TWAIN Version 2 (20.02) 18 day(s) let on this trial      What Is This Message Area?     A she TWAIN source progresses through the various stages of image capture, status messages indicating the current step in the acquisition process will be	
Û	Delete Selected Click on this option to delete the selected images.	As the TWAIN source progresses through the various stages of image capture, status messages indicating the current step in the acquisition process will be displayed in this area. After an image has been acquired, this area will change into an image display area. To acquire an image from the ScarX hardware, be sure that the scanner correctly initializes and then simply insert your films into the unit.	
Û	Delete All Images Click on this option to delete all of the currently acquired images.		
	Options This option permits you to change the preferences and settings.		
	Thumbnails Sets the number of rows and columns of thumbnails that should be displayed simultaneously.		
			2
		To view or edit images, double-click on them with the left mouse button.	



#### 4.2 ScanX Film Type

- 4.2.1 This menu allows the user to change the film type that will be used for scanning. AirTechniques currently does not manufacture any film types other than 'Standard'.
- 4.2.2 Once a film type has been selected, it will maintain that setting until it is changed.

#### 4.3 **Options**

4.3.1 The **ScanX TWAIN Options** menu allows users to change various aspects of the ScanX TWAIN.

🕵 Digital X-ray Options	×
ScanX TWAIN Options ScanX These options permit you to change various aspects of the ScanX TWAIN source interface in addition to modifying how images are acquired and returned from the various digital	ScanX TWAIN Options These options permit you to change various aspects of the ScanX TWAIN source interface in addition to modifying how Images are acquired and returned from the various digital x-ray systems.
×-ray systems.	TWAIN Specific Options
Image Processing ScanX Image processing options and preferences.	Return immediately after capture Returns to the calling application immediately after images have been acquired from the hardware.
	Return immediately if cached images are available
	Returns to the calling application immediately if cached images are available.
	Always indicate that only one image is available When enabled, this options indicates that this TWAIN source should only indicate that one image is available even if there are multiple images available.
	Generate a log file
	K Check for conflicts
	Display the 'Generate Test Image' option during image acquisition
	TWAIN Scan To Location
	C:\SCANXTwain
	The "scan to location" indicates the directory that is to be used to archive images that are not utilized by calling applications.
	U I I I I I I I I I I I I I I I I I I I

- 4.3.1.1 **Return immediately after capture** allows images to be returned to the 3<sup>rd</sup> party imaging application automatically after images have been acquired, rather than clicking the Return Images button in the ScanX TWAIN interface.
- 4.3.1.2 The **TWAIN Scan To Location** directory is the directory that is to be used to archive images that are not utilized by the calling application.
- 4.3.1.3 **Image Bit Depth** allows the user to choose what bit depth of image should be returned to the calling application. Users may choose between 8-bit and 16-bit images.



4.3.2 The **Image Processing** menu allows various post processing settings that can be applied to images captured using the ScanX TWAIN.

ScanX TWAIN Options ScanX These options permit you to change various aspects of the ScanX TWAIN source interface in addition to modifying how images are acquired	Contemporation Contemporatio Contemporation Contemporation Contemporation Contemp	
and returned from the various digital ×-ray systems.	ScanX Image Processing	
Image Processing ScanX Image processing options and preferences.	Noise Reduction: Fast Noise Reduction	Defaults
	Brightness, Contrast and Gamma	
	🔆 Brightness:	0
	Contrast:	0
	G Gamma:	100
	Allow sharpening	
	Mask Size: 3×3 💌 Factor:	50
	Allow Laplace edge enhancement	
	Mask Size: Tector:	3
	Allow smoothing	
	Mask Size: 3×3 💌 Factor:	
	Invert	

4.3.2.1 By default, the only post-capture filtering that is applied is Fast Noise Resolution. It is recommended that users first enable <u>Dynamic Rendering</u> within the AirTechniques ConfigureDR utility BEFORE applying any additional filtering within the ScanX TWAIN interface.

#### 4.4 Thumbnails

4.4.1 The thumbnails menu allows the user to adjust how images captured with the ScanX TWAIN are displayed within the ScanX TWAIN interface.



- 4.4.1.1 Drag their mouse over the chart until the desired dimensions are highlighted in black, and then left-click to apply their selection.
- 4.4.1.2 This setting may be changed at any time, and is not a permanent setting.

# **5 USING THE SCANX TWAIN**

#### 5.1 Capturing Images Using the ScanX TWAIN

Although the calling and invoking of the ScanX TWAIN will vary between different 3rd party imaging applications, the capture process will always remain the same using this interface.

#### 5.1.1 Capturing an Image

- 5.1.1.1 Expose the Phosphor Storage Plates (PSP) as instructed in the ScanX hardware manual provided by Air Techniques.
- 5.1.1.2 Launch the ScanX TWAIN through the calling application
- 5.1.1.3 Scan each of the PSP's through the ScanX as instructed in the ScanX hardware manual provided by Air Techniques
- 5.1.1.4 As the PSP's are scanned through the ScanX, they will populate in the ScanX TWAIN interface, as seen below:



- 5.1.1.5 Once all of the plates have finished scanning through the interface, click the **Return Images** button.
- 5.1.1.6 Images will be returned to the calling application, and the ScanX TWAIN interface will close automatically.



\*\*\* END OF DOCUMENT \*\*\*