



ScanPro® Reference Manual



ScanPro 3500 Shown with All-In-One™ Film Carrier

www.e-ImageData.com

800-251-2261

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I. Introduction

1. Equipment Overview

**For the latest information, please reference www.e-imagedata.com*

AIO Desktop Footprint: (H x W x L) 7.5in x 17in x 19in / 19cm x 42.5cm x 45.5cm

Operating Systems: Versions, 32 & 64 bit: Win 10; Editions: Enterprise, Professional, Home

Interface: USB 3.1 Gen 1 (also called USB 3.0)

Weight: 32lb / 14.5kg

Power: 100-240VAC 50/60Hz

Film Path: Straight film path minimizes wear (film not pulled across glass edges)

Energy Efficiency: ENERGY STAR® Certified

Product Safety: Certified to UL/CSA standards Warranty: 3-Year factory warranty (includes carriers)

EQUIPMENT FEATURES:

Optical Zoom Range

ScanPro 3500 (and i9500): 5x to 105x optical zoom range, highest in the industry

ScanPro 2500: 5x to 32x optical zoom range

Camera resolution

ScanPro 2500: 6.6 megapixel camera

ScanPro 3500 and ScanPro i9500: 26 megapixel camera using a 6.6 megapixel sensor and pixel-shifting technology to capture and integrate four images, the clearest image in the industry.

PowerScan™ Software Features – See latest equipment brochure for a complete list.

Customizable interface for all controls

Film Selection Wizard: Automatic scanner set up

FOCUS-Lock: Focus is maintained at all times

OCR (powered by ABBYY®): Creates word searchable PDFs

Automatic microfilm scanning (unlimited): All models except ScanPro 2500

Rotate 90 degrees: Clockwise or counterclockwise

Mirror Image

Brightness and Contrast

Scan Mode: Enhanced greyscale, bi-tone selectable

SPOT-Edit™: Edits selected images and text, except ScanPro 2500

Cropping: Custom (scissor snipping), automatic, manual

Straighten: Automatic, line-straighten, manual

Film Type: Positive, negative, opaque

One Click buttons: Print, HD, CD, USB, e-mail, cloud storage

Auto-Adjust: Brightness, contrast, straighten, crop

OPTIONS

ScanPro Advantage (SPA) Membership:

AUTO-Scan® Pro: Adds high-speed scanning

PowerScan™ Productivity Suite: INFO-Link™, WORD-Search™, Copy-to-Clipboard, Word searchable PDFs (multi-page)

AUTO-Carrier™: Adds automatic microfiche scanning and higher roll film scanning speeds (SPA required)

2. ScanPro® Warranty Information

Items Covered: The e-ImageData factory service warranty covers the ScanPro Microfilm Scanners, Roll Film Carriers, AUTO-Carrier, their parts and assemblies.

Length of warranty: Term of warranty is three (3) years from the date of shipment from the manufacturer's factory or warehouse. Equipment serial numbers and proof of purchase is required. The ScanPro film illumination light source is warranted for the useful life of the scanner or twelve (12) years.

Products and items resold by the manufacturer are warranted by the original supplier. The warranty terms and warranty registration materials are included with each item. It is the responsibility of the end user to complete the documentation and to contact the supplier for follow-up service and support. Products in this category, but not limited to, are computers, computer accessories, laser printers and monitors.

Limited warranty: The manufacturer's sole obligation shall be, at the discretion of the manufacturer, limited to the repair or replacement of parts or products manufactured by e-ImageData and which are determined by the manufacturer to be defective within the applicable warranty period. Replacement product or replacement parts may include remanufactured or refurbished parts or components. Defective items must be returned to the manufacturer only after return authorization is obtained from the manufacturer, with shipping and handling charges prepaid.

THE LIMITED WARRANTIES CONTAINED IN THIS AGREEMENT ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY REGARDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, RELATING TO THE USE OR PERFORMANCE OF THE PRODUCTS. THE MANUFACTURER WILL NOT BE LIABLE FOR PERSONAL INJURY OR PROPERTY DAMAGE (UNLESS CAUSED SOLELY BY THE MANUFACTURER'S NEGLIGENCE) LOSS OF PROFIT OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCTS.

This limited warranty does not extend to any product which has been subject to misuse, neglect or accident, damage caused by the use of supplies or parts not technically satisfactory, repairs or modifications not approved by the manufacturer. This limited warranty does not apply to the following: damage caused in shipping, glass breakage, lamps or supplies which requires periodic replacement due to normal use or wear. The manufacturer does not assume responsibility for consequential damages of any nature and shall not be liable for damages resulting from malfunctions or interruptions in the operation or function of the manufacturer's products.

3. Recommended Computer Specifications

The Dell OptiPlex series of computers has been a reliable computer for the last 13 years in the setup and test of the ScanPro products. They have consistently provided excellent performance.

ScanPro® 2500 Minimum Recommended Computer Specifications

Processor Speed Intel® Core™ i5
Computer Memory (RAM) 8GB Memory
Hard Drive 500 GB HD
Monitor VGA/SVGA/XSVGA
Compatible Operating Systems (32bit and 64bit) Win 10
Computer-to-Scanner connection USB3 required

ScanPro® 3500 Minimum Recommended Computer Specifications

Processor Speed Intel® Core™ i5 or i7
Computer Memory (RAM) 8GB Memory
Hard Drive 500 GB - 1TB HD
Monitor VGA/SVGA/XSVGA
Compatible Operating Systems (32bit and 64bit) Win 10
Computer-to-Scanner connection USB3 required

ScanPro® i9500 Minimum Recommended Computer Specifications

Processor Speed Intel® Core™ i7
Computer Memory (RAM) 8GB DDR3
Hard Drive 750 GB SATA, 10,000 RPM 3.0Gb/s Hard Drive with Data Burst Cache™
Monitor VGA/SVGA/XSVGA
Compatible Operating Systems (32bit and 64bit) Win 10
Computer-to-Scanner connection USB3 required

Recommended Computer Specifications when using ScanPro Advantage Membership features: AUTO-Scan® Pro, PowerScan™ Productivity Suite, and AUTO-Carrier™

Recommended Computer System for Scan Speeds up to 20 Images per minute

Processor Speed Intel® Core™ i5 or i7
Computer Memory (RAM) 8GB DDR3 or Higher
Hard Drive 500 GB HD or Higher

Recommended Computer System for Scan Speeds up to 100 (70 for Jackets) Images per minute

Processor Speed Intel® Core™ i7
Computer Memory (RAM) 8GB DDR3 or Higher
Hard Drive 750 GB - 1 TB SATA, 10,000 RPM 3.0Gb/s with Data Burst Cache™ or higher, 1TB SSD

These general minimum recommended requirements should be followed to ensure proper performance.

II. Installation Guide

Please check out our videos for easy unpacking and installation:
www.e-imagedata.com/scanpro-software/

1. Unboxing the ScanPro

- a. Cut the tape and open the outer flaps.
- b. Remove the *Accessories Box* and all Items that are inside. *Figure 1*
 1. Power supply for the ScanPro.
 2. Power cord connects the power supply to local voltage.
 3. USB 3.1 cable that connects the ScanPro to the computer's USB 3.1 port.
- c. **Important:** Software and license keys are no longer included in the packaging. Find them on the web at: www.e-imagedata.com/scanpro-software
- d. Cut the tape on the inner shipping box and open the inner box flaps.
- e. Remove the left and right inserts. *Figure 2*
- f. Grasp the scanner with fingers extending under the top cover and lift the scanner out of the inner shipping box. *Figure 3*.
- g. Place the scanner on a sturdy level surface. Remove the protective plastic bag, the tape on the fiche carrier, and the foam pad between the glass.
- h. Remove the shipping retaining screw by rotating it counterclockwise. Feel free to discard the retaining screw.
- i. See *Figure 4* for port locations.



Figure 1



Figure 2



Figure 3

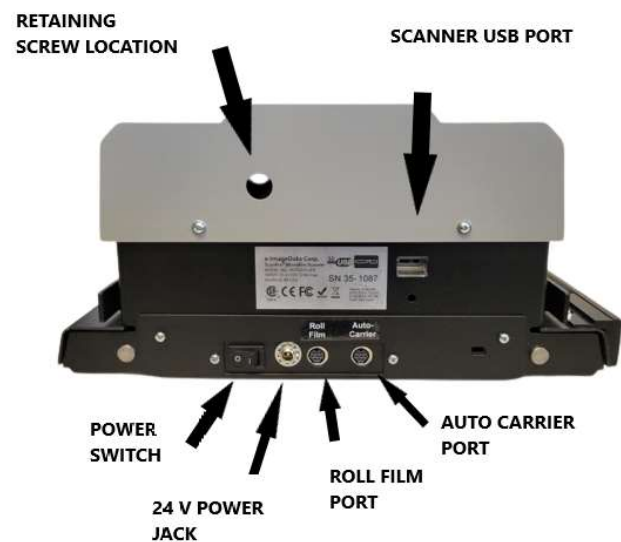


Figure 4

2. Unboxing the ScanPro Roll Film Carrier

- a. Cut the packing tape and open the outer box flaps.
- b. Lift and remove the top retaining cardboard. *Figure 5*
- c. Remove the Roll Film Carrier (1), instructions (2), and accessories package (3). *Figure 6*
- d. Accessories included:
 1. Mini-Din connector cable. *Figure 7*
 2. Bag of screws and star washers to fix the roll film attachment to the ScanPro and aid in static electricity mitigation. *Figure 8*
 3. Combination 16mm and 35 mm take up spool. Allen wrench included to tighten the set screws of the take up spool to prevent removal from the roll film attachment after installation. *Figure 9*

top retaining cardboard



Figure 5



Figure 6



Figure 7



Figure 8



Figure 9

3. Installing the ScanPro Roll Film Carrier

- a. Note the locations of the *roll film retainer holes* (both sides) on the ScanPro *carrier support brackets*. *Figure 10*
- b. Lift the roll film carrier by the sides so that the retainer pins can be held in the extended (outward) position.
- c. Lower the roll film carrier so that it rests on the carrier support brackets with the retainer pins and retainer holes aligned. *Figure 11*
- d. When the retainer pins are aligned with the retainer holes, the retainer pins will snap into the retainer holes, locking the roll film carrier in place (adjust the position of the roll film bracket on the carrier support brackets as necessary).
- e. Using a Phillip's head #1 screwdriver, install the 4 screws and star washers to lock the roll film to the base.
- f. Connect the 8-pin Mini-Din cable into the back of the roll film carrier and the back of the scanner. Make sure the cables are aligned properly. *Figure 11*
- g. Film guide roller assemblies can be adjusted for either 16mm or 35mm film. Move the white roller sleeve to the appropriate location for the film you will be using. *Figure 12*

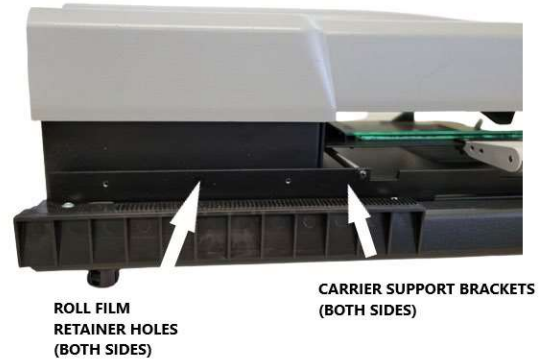


Figure 10

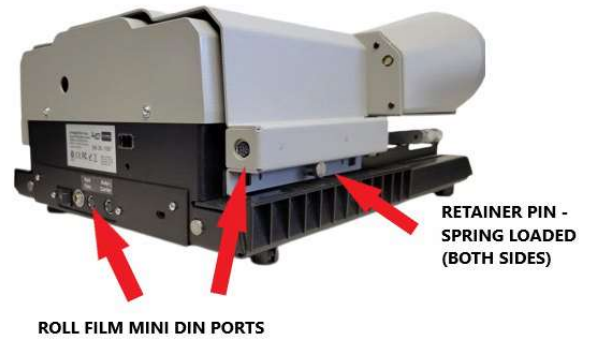


Figure 11

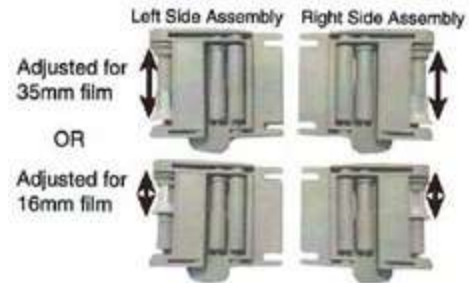


Figure 12

4. Installing the ScanPro AUTO-Carrier™

- a. Unpack the ScanPro AUTO-Carrier from the packaging. Items included in the box shown in *Figure 13*.
- b. Move the ScanPro fiche carrier to the extreme left. *Figure 14*
- c. Note the lead screw and the 2 mounting screws extending from the AUTO-Carrier. *Figure 15*
- d. Note the circular opening of the follower assembly. *Figure 16*

<continued>

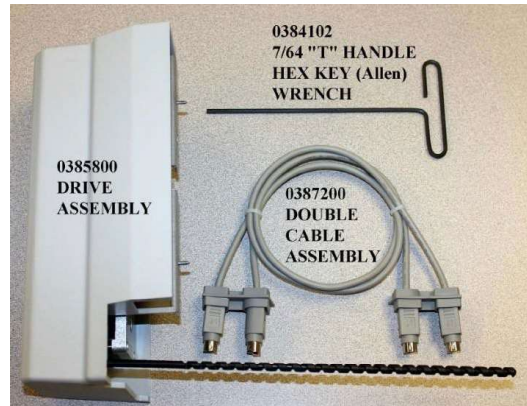


Figure 13



Figure 14

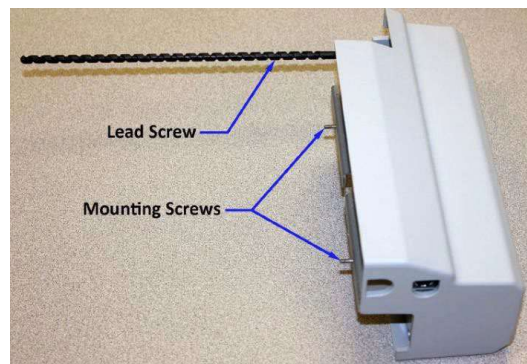


Figure 15

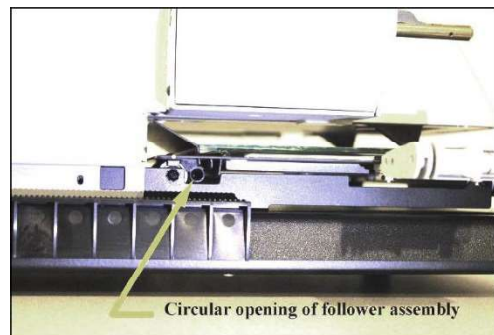


Figure 16

- e. Note the 2 threaded holes of the carrier support bracket. *Figure 17*
- f. Position the AUTO-Carrier to the left of the ScanPro. *Figure 18*
- g. Rotate the lead screw by hand clockwise to thread the lead screw into the circular opening of the follower assembly. Continue to rotate the lead screw until the AUTO-Carrier is within a few inches of the ScanPro.
- h. Push the AUTO-Carrier against the side of the ScanPro. *Figure 19*
- i. Use the included 7/64-inch T handle hex (Allen) wrench to thread the 2 drive assembly mounting screws into the threaded holes of the carrier support and tighten. *Figure 19*
- j. Manually move the fiche carrier front to back and left to right to make certain that nothing is interfering with this movement. The motors of the AUTO-Carrier will resist this movement, but it should move smoothly.
- k. Connect the double cable assembly. The cable will only fit one way. Make sure that the connectors are aligned properly to prevent damage. *Figure 20*
- l. It is recommended that the USB 3.1 cable be routed under the double cable assembly. *Figure 20*

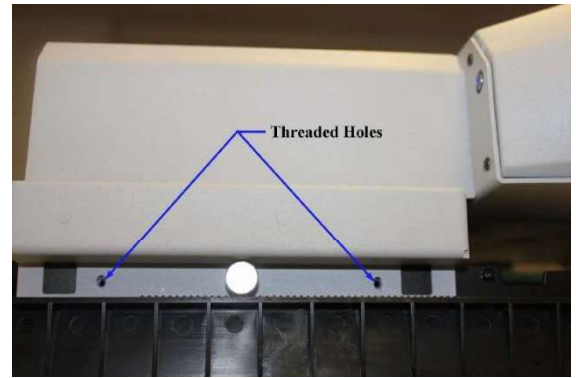


Figure 17



Figure 18



Figure 20

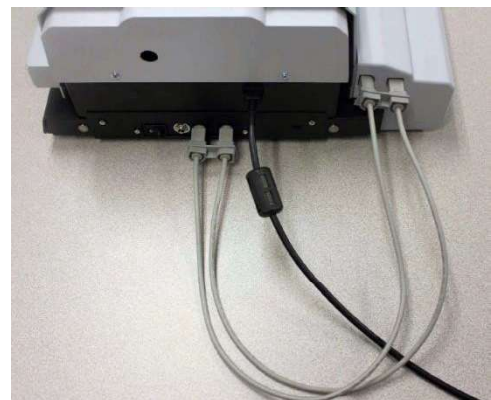


Figure 19

5. Connecting the ScanPro to the computer

- a. Connect the ScanPro to the computer using the included USB 3.1 cable (see *Figure 21*). This cable meets all the specifications for this type of connection and is strongly recommended you use only this cable.
- b. Connect the AC/DC Power Adaptor to the ScanPro and local AC power Source as shown in *Figure 21*.
- c. If there is a motorized Roll Film Carrier installed, connect the Mini-Din Cable as shown in *Figure 21*. If there is also an AUTO-Carrier installed, connect the Dual Mini-Din Cable as shown in *Figure 22*.

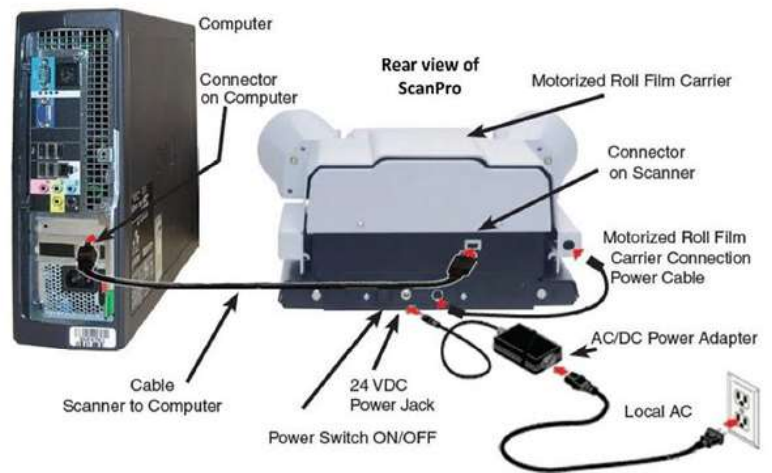


Figure 21



Figure 22

III. Software Setup

1. Software Installation Guide

a. Important notes

1. All users require read/write privileges to the relevant PowerScan Folder to operate the ScanPro.
2. Software media is no longer included in the box. At any time, current software can be downloaded for FREE, from the website: www.e-imagedata.com/scanpro-software
3. All scanners come with a 6-month trial version of the ScanPro Advantage membership (from the date of purchase). The key can be downloaded from the software download page.

b. Best practices

1. Log into the computer as the Local Administrator.
2. Disable User Account control before installing software or connecting the scanner.
3. Disable the Anti-Virus program for installation. After installation, add the PowerScan xxxx folders to the exceptions list of your Anti-Virus program.
 - i. C:\ProgramData\PowerScan xxxx
 - ii. [64-bit] C:\Program Files (x86)\PowerScan xxxx
or [32-bit] C:\Program Files\PowerScan xxxx
4. Ensure that the most current USB 3.1 drivers are installed
5. Ensure that the computer has all the Windows updates installed.
6. Install the software before connecting the scanner to the PC.

c. Installing the software

1. **IMPORTANT:** DO NOT connect the ScanPro at this time.
2. **IMPORTANT:** Exit all programs before installing the software.
3. Open the web browser and navigate to the e-ImageData Software page. www.e-imagedata.com/scanpro-software
4. Select the appropriate ScanPro version from dropdown list. Then click **DOWNLOAD**. *Figure 23*. If prompted, choose to save the file, not run.
5. After the software zip file finishes downloading, open the downloads folder (ctrl + J), or the specified save location. Disable the Anti-Virus now.
6. Right click on the zipped folder, then click *extract all*. *Figure 24*

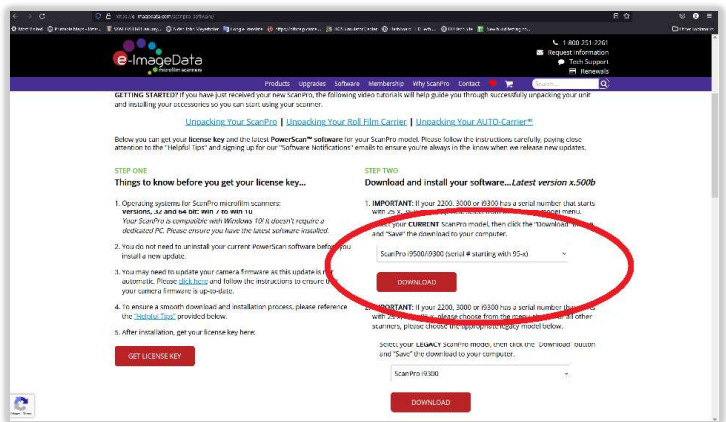


Figure 23

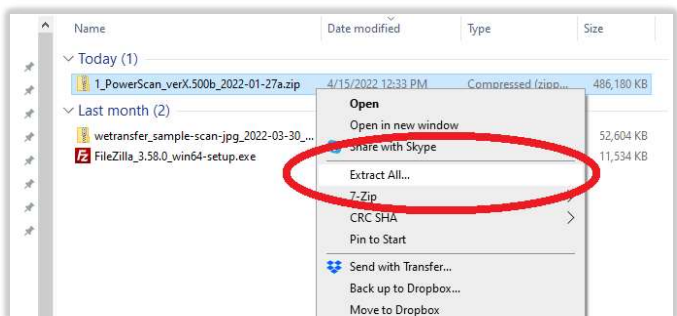


Figure 24

7. In the next window that appears, click *extract*. The files will automatically be collated into a new unzipped folder with the same name and location as the zipped folder, unless otherwise specified here. Leaving the *show extracted files when complete* box checked, will automatically open a new folder showing the extracted files. *Figure 25*
8. In the unzipped folder, right click on the *setup.exe* file and choose *Run as Administrator*. Then follow the on-screen instructions to install the software. *Figure 26*
9. Connect the ScanPro to the computer using the USB 3.1 cable provided.
10. Turn the ScanPro ON. The switch is located in the rear (base) of the ScanPro. A message will appear indicating “searching for the driver” - wait until the driver installs and another message will appear – ScanPro ready to use (this might take a couple of minutes).

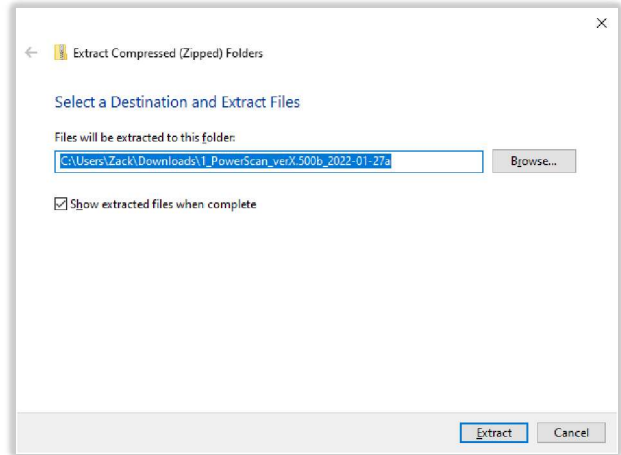


Figure 25

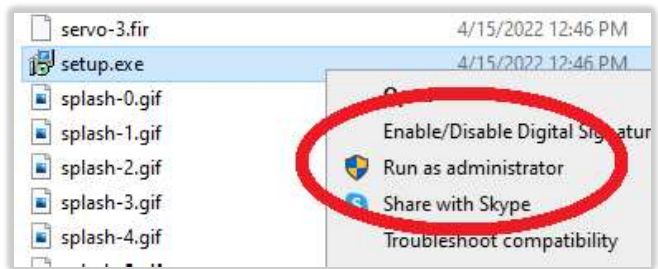


Figure 26

2. Software Updates and Automatic Email Notification

Software updates are no charge for the PowerScan software throughout the life of the product except the ScanPro Advantage Membership license.

New software and firmware updates for the ScanPro series can be downloaded from the manufacturer website for free. Go to the e-ImageData website at <http://www.e-image.com> and select *Software*. (Figure 27) Please be sure to select the correct ScanPro model when clicking on the software *Download* button. It's important to read the Best Practices (Section III.1.b) information first. To back up the settings folder (C:\ProgramData\Powerscan xxx\Settings), copy it to the PC Desktop (or other convenient location) before installing the new software. After the software installation is complete, replace the newly installed default Settings Folder with the saved folder. Add any new features you want to use from the Setup Screen.

NOTE: The latest software versions have a *Check for Updates* button tab in the *Setup Window* on the *About Tab*. Clicking on this button will open the webpage if the PC is connected to the Internet.

Automatic Email Notification

Scroll to bottom of the Software Downloads webpage to see a form for automatic notifications when new software is released. (Figure 28) Fill out the form and click the *SUBMIT REQUEST* button. Whenever new software is released an email notification will be sent.



Figure 27

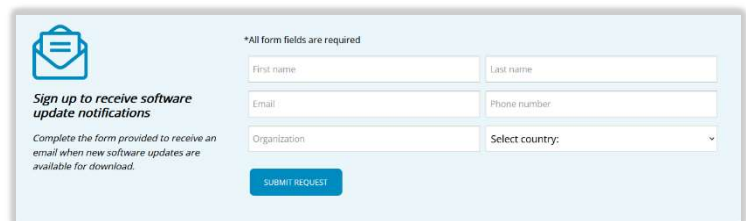


Figure 28

3. Control Panel and BIOS Settings

Control Panel Settings:

- a. Go to the Control Panel *Power Options* settings. Set the computer to *never* goes to sleep. *Figure 29*
- b. Check the USB Power management settings. Make sure all the USB 3.1 Power Management boxes are unchecked so Windows will not turn off the USB 3.1 port to save power and possibly cause a disconnect problem. *Figure 30*
- c. Many new computers are now set to be “green” by default. Go to the BIOS Settings and check the *C States*, *S states*, and *Deep sleep states*. Disable all of these so the computer does not go into a sleep mode. These settings and names may vary from one PC to the next.

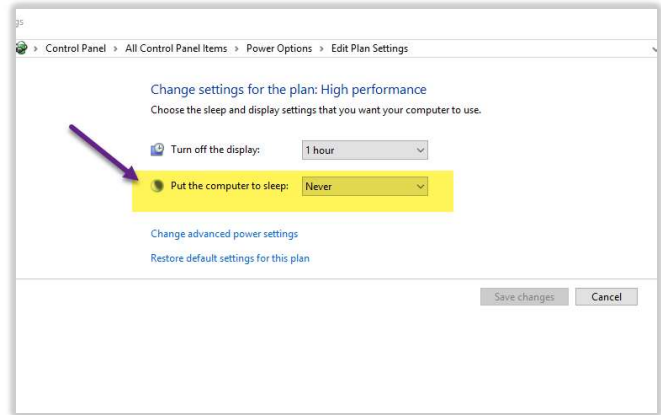


Figure 29

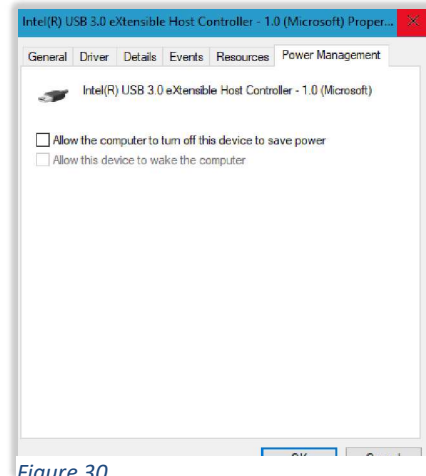


Figure 30

4. Getting Started

- a. Double click on the PowerScan xxxx icon located on the Desktop.
- b. Select the image in the *Film Selection Wizard* that most closely matches the microform being used.
- c. Insert the film into the film carrier and position the film so that it can be viewed on the PC monitor.
- d. Use the buttons on the toolbar to adjust the image.
- e. For quick reference to the button use, please refer to the “ScanPro Quick Start Guide”.
- f. For more information on how a button operates, click the *Help* button followed by clicking on the button in question. A help window will open with more information about that function.

5. Configuring Your PowerScan Software

The PowerScan software can be customized via the *Setup Window*. This includes the four completely customizable *Toolbar Menus: Home, Adjust, File, Setup* (Figure 31), as well as scan to functions and printing presets.

PowerScan Setup Menu

To access the PowerScan Setup window:

- a. Click on the toolbar *SETUP* tab.
- b. Click on *SETUP* icon.
- c. A password screen will open.
- d. Enter the *SETUP Window* default password: 1234

Notes:

- a. The *Setup* button cannot be removed from the *Toolbar*.
- b. The position of the *Setup* button is fixed on the *Toolbar*.
- c. After customizing the toolbars and presets, click the *Save Settings* button.
- d. A NEW PASSWORD IS RECOMMENDED FOR PUBLIC USE APPLICATIONS to prevent the unauthorized modifications to the settings. See "Section III.15. How to Change Your Password" for more details.

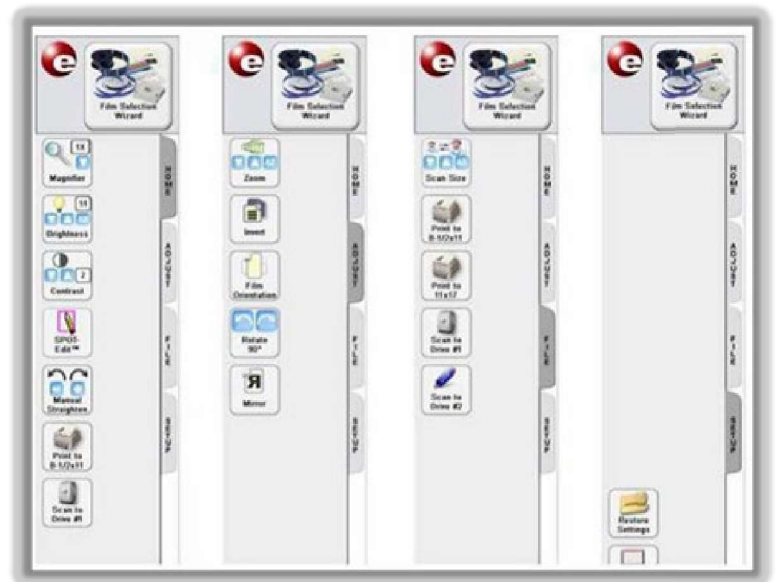


Figure 31

6. Setup Window: Toolbar Tab

The *Toolbar* section provides control over the settings needed to customize the toolbar.

Available Controls

A complete list of all controls that can be added to the toolbar. Entries highlighted in dark blue are presently on the active toolbar tab and appear in the *Selected Controls* list. Entries highlighted in light blue are presently on one or more of the inactive toolbar tabs. To add a control to the active toolbar *Selected Controls* list, either double click the desired control in the *Available Controls* list or single click the desired control to highlight it and then click the *Add* button.

Menu

The toolbar tab that is currently active. Click to change between active tabs.

Menu Name

A text box used to define the name of the active toolbar tab. Click in the text box and type in the desired name for the tab. This happens in real time. Ensure that the new name fits on the tab.

Selected Controls

List of controls that are currently on the active toolbar tab. To remove a control from the active toolbar tab, either double click the control button name in the *Selected Controls* list or single click the control to highlight it and then click the *Del* button. The controls appearing on a particular toolbar tab are arranged in the order in which they appear in the *Selected Controls* list. To change this order, click on the control to be moved in the *Selected Controls* list to highlight it, and then click the *+* to move the control up in the list or *-* to move the control down in the list. This change happens in real time. Observe the toolbar for exact position.

Button Size

The *Button Size* slider provides control over the size of the buttons as they appear on the toolbar. Drag the slider left or right to resize the toolbar.

Location

A drop-down list to direct where the toolbar is to be located (top, bottom right, left). When *Auto* is selected the toolbar will be located at the left of the screen for landscape monitors or the bottom of the screen for portrait monitors.

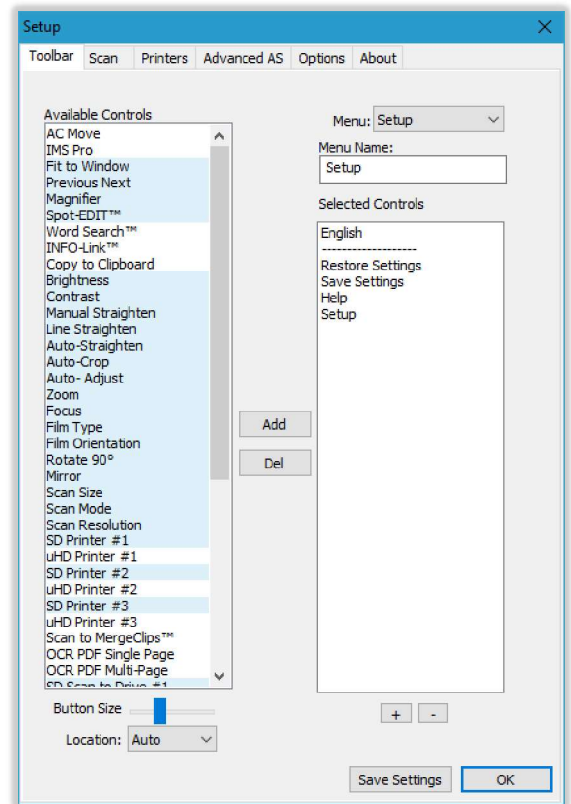


Figure 32

7. Setup Window: Scan Tab

The *Scan* tab provides control over the settings needed to assign file path, name, and file format.

Drive #1/#2/#3

Specifies the file path for *Scan to Drives #1, #2, or #3*. Click the *Browse...* button to open the Windows™ folder list, navigate to the desired folder, and then click *OK*.


File Prefix

Specifies the prefix used for the file name when the *Save As* box is unchecked.

File Suffix Number

Specifies the suffix starting number used in the file name when the *Save As* box is unchecked.

File Format

Specifies the file format of scans when the *Save As* Box is unchecked. Click  to reveal the list of available file formats. Click on the desired file format from the list to select it. *Figure 34*

Save As

When the box is unchecked, the scanned files will automatically be saved with the prefix, suffix and file format selected. When the box is checked, the user will be able to select name, file type and location through a dialog box that will open when a *Scan to Drive* button is clicked on the toolbar. The *Drive #3 Save as Window* doesn't allow you to choose a file location. It uses the location set in the Setup Window.

Email

Leave the file path set as %TEMP%. When the *Built-in Mailer* box is unchecked, the PowerScan Software will use the default MAPI Email program installed on the PC such as MS Outlook. When the *Built-In Mailer* box is checked, an email will be sent directly from the software. See the information on "Setting up Scan to E-mail" for Configuration instructions.

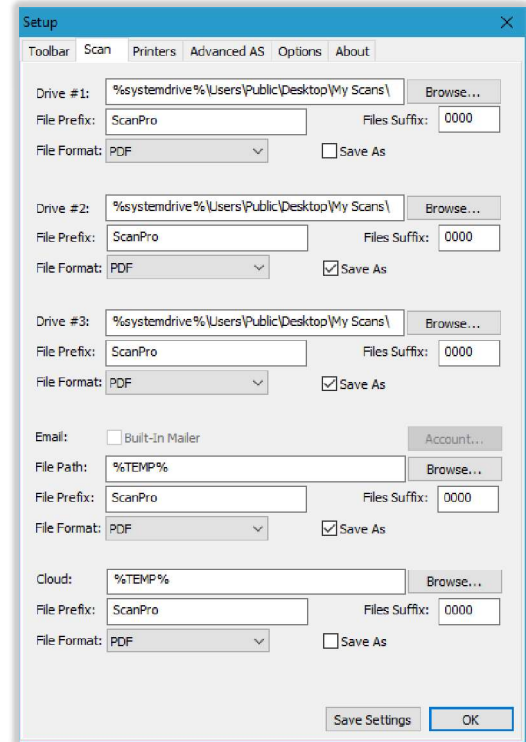


Figure 33

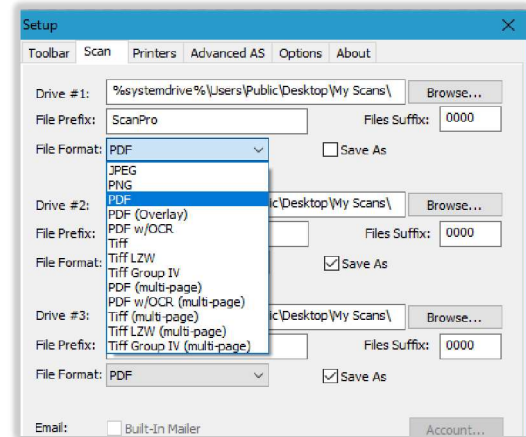


Figure 34

8. Setting up Scan to Email

- a. Create a secure settings password (see “Section III.12 Setup Window: Options Tab”). The email *Account* button will not be active until a Secure settings password has been created. *Figure 35*
- b. Go to the *Scan* tab in the *Setup* window.
- c. Click the *Built-in Mailer* box.
- d. Click *Account* button.
- d. Enter the *Secure Settings* password. *Figure 36*
- e. Enter SMTP server information. *Figure 37*

Note:

To use an external MAPI compliant email software program (i.e. Outlook, etc.), leave the *Built-in Mailer Box* unchecked.

When configuring Gmail and you get the following error:

"TLS required in configuration but server does not support STARTTLS Error (607,0,0" - See article below for information:

If you connect using SMTP, you can only send mail to Gmail or Google Apps users; if you connect using SSL/TLS, you can send mail to anyone. If your device or application supports SSL - connect to smtp.gmail.com on port 465. To connect with SSL, you need to provide a Google username and password for authentication. Your device or app may not support Google’s security standards. Some examples of apps that do not support the latest security standards include desktop mail clients like Microsoft Outlook and Mozilla Thunderbird. To help keep your account secure, we may block these less secure apps from accessing your account. Go to Allow less secure apps and choose *Allow* to let less secure apps access your Google account. We don't recommend this option because it may make it easier for someone to gain access to your account.
<https://www.google.com/settings/security/lesssecureapps>

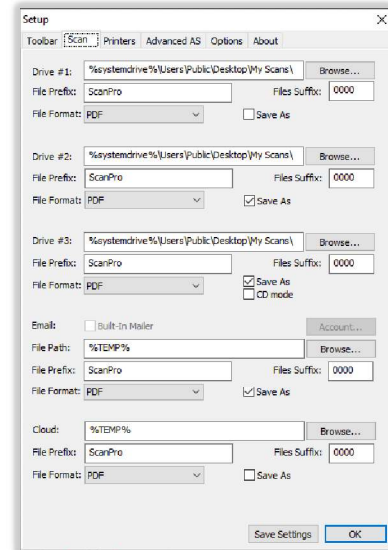


Figure 35

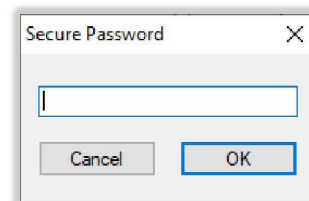


Figure 36

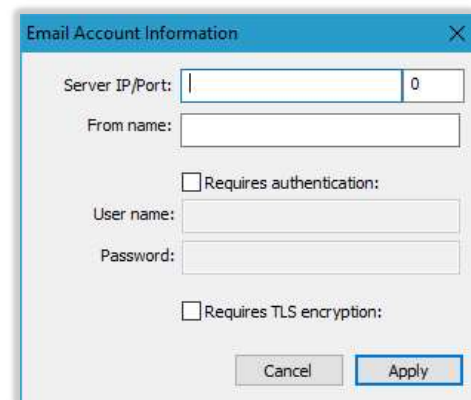


Figure 37

9. Setup Window: Printers Tab

The *Printer #1*, *Printer #2*, and *Printer #3* sections provide controls to define the detailed function of the selected printer. *Figure 38*

Printer

Specifies the printer to be used. Click to reveal the list of installed printers. Click on the desired printer from the list to select it. *Figure 39*

Suppress Printer Dialog

When checked the Windows™ printer dialog window will not be displayed.

Auto-Orient for Printing

When checked the image sent to the printer will automatically be rotated for best fit on the paper.

Center Print Vertically

When checked the image will be printed in the center vertically.

Center Print Horizontally

When checked the image will be printed in the center horizontally.

Print Offset

When checked, the image will be printed using the "Left" and "Top" text box values as the starting point on the paper. Click on the "Left" and "Top" text boxes enter the desired printing offset values. When unchecked, the image will be printed without offset in the upper left corner of the page.

Auto-Size Width & Length Boxes:

Fill in the width and length boxes to match the paper size, less the margin. *Figure 38* shows a letter size 8.5x11 inch setting with a ¼ inch margin around the paper. If the *Auto-Size* function of the *Scan Size* button is active, the cropped image on your PC monitor will automatically be downsized or expanded to fill the size you entered in these boxes.

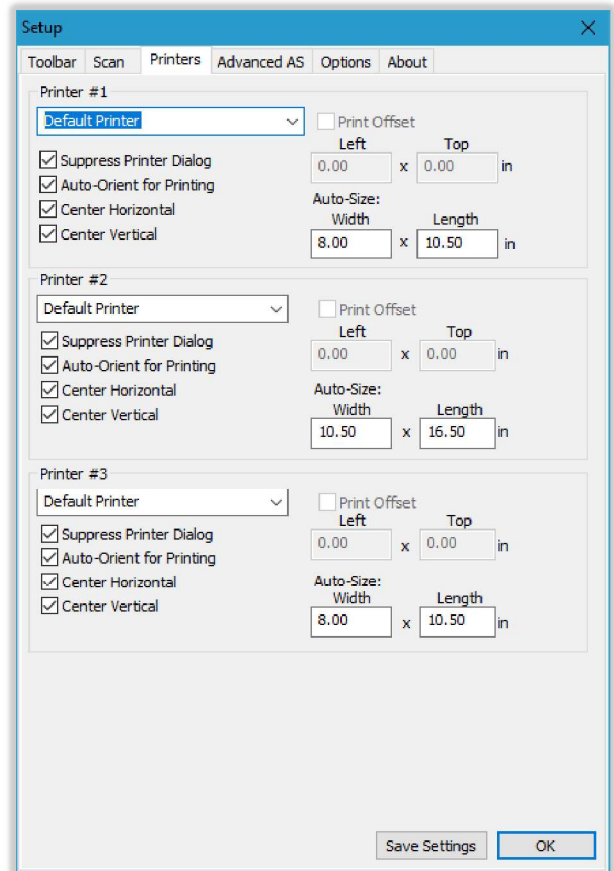


Figure 38

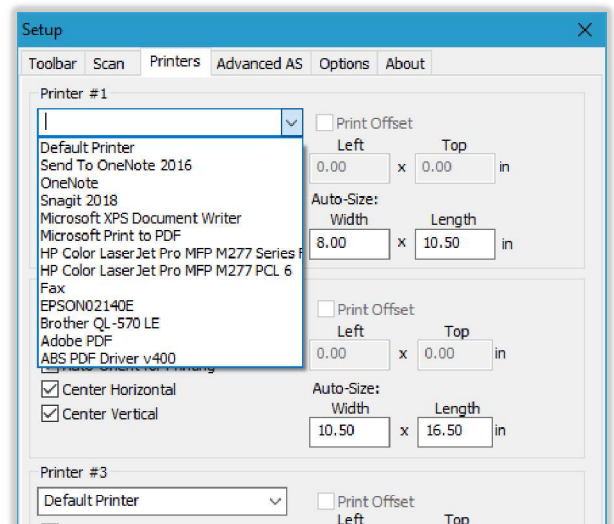


Figure 39

10. Setup Window: Advanced AS Tab

The *Advanced AS* window contains advanced settings used for both *AUTO-Scan (Pro)* and *Previous/Next* settings. (Figure 40) This folder tab can also be accessed by clicking the *Advanced...* button of the *AUTO-Scan (Pro)* control window.

When the *Advanced AS* tab is displayed there will be two red rectangles visible in the image display area. (Figure 41) These rectangles identify the size and location of the *Edge Detection Zone*. This is the zone monitored during *AUTO-Scan* and *Previous/Next* to detect the page, and the gap between pages, so that the film transport can stop reliably.

Note: These settings are stored and recalled via presets.

Prev/Next Speed

This control sets the speed at which the roll film moves from one image to another in *AUTO-Scan*, *AUTO-Scan Pro & QA* as well as when using the *Previous/Next* toolbar button.

AB (Auto-Brightness)

The *AB* button automatically sets the brightness value and the *Page* and *Gap Target levels*. When using this automatic feature be sure to position an image with the page and gap in proximity to the red rectangles of the detection zones. This value can also be manually adjusted. Brightness values of 0 to 100 are allowed. This brightness value has no effect on the brightness and contrast of the displayed, printed, or scanned image.

Edge Detection Zone

The settings of this table adjust the size, location, and the sensitivity levels of the detection zone. The column with the heading *Page* adjusts the zone for detecting the page whereas the column with the heading *Gap* adjusts the zone for detecting the gap between pages. Strategically setting the detection zone size, location, and sensitivity will ensure *AUTO-Scan* and *Prev/Next* work reliably with a wide variety of film formats.

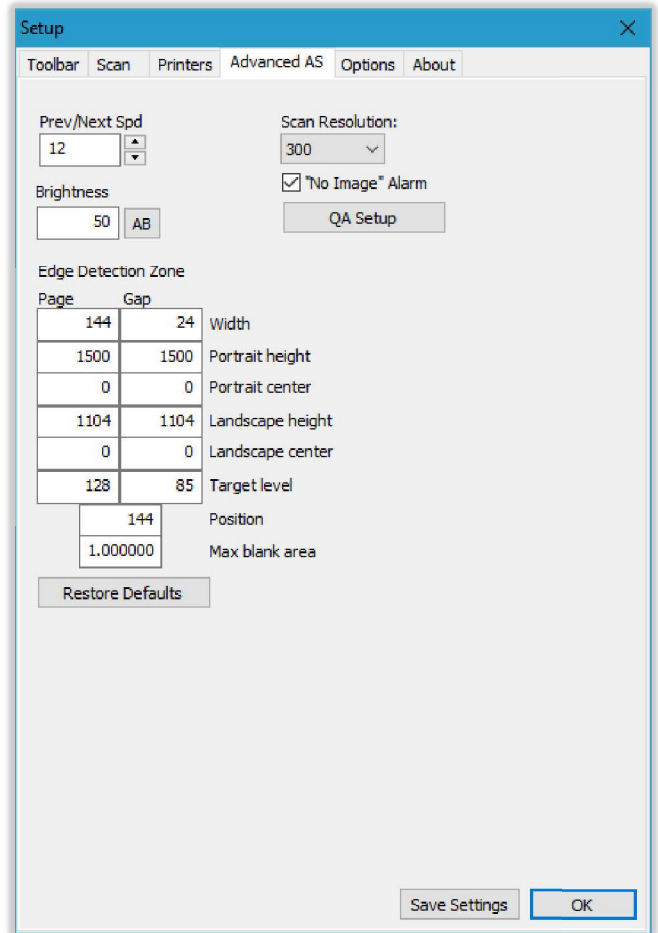


Figure 40



Figure 41

Width

Adjusts the width of the detection zones. Values of 6 to 192 are allowed.

Portrait Height

Adjusts the height of the detection zones when the *Film Orientation* control is in the Portrait position. Values of 24 to 2328 are allowed.

Portrait Center

Adjusts the center of the detection zones when the *Film Orientation* control is in the Portrait position. Values of 750 to -750 are allowed.

Landscape Height

Adjusts the height of the detection zones when the *Film Orientation* control is in the Landscape position. Values of 24 to 2208 are allowed.

Landscape Center

Adjusts the center of the detection zones when the *Film Orientation* control is in the Landscape position. Values of 552 to -552 are allowed.

Target Levels

Adjusts the zone sensitivity. These values are set automatically when the *AB* button of the *Advanced AS* tab is clicked, or they can also be adjusted manually. Values of 0 to 255 are allowed.

Position

Adjusts the location of the detection zones from the edge and consequently affects the stopping position. Values of 0 to 1104 are allowed.

Max Blank Area

Adjusts the maximum gap between pages. Unit of measure is feet. If the film transport drives for the specified value, scanning will stop displaying the message "Unable to find next page".

Restore Defaults

The Restore Defaults button replaces all *Edge Detection Zone* settings with the programmed defaults.

Scan Resolution

Sets the resolution, in DPI, of the output images during *AUTO-Scan*.

No Image Alarm

When checked a tone sounds when the *Max Blank Area* value is exceeded. This usually occurs at the end of a roll of film or when there is a large gap between pages.

QA (Quality Assurance) Setup Button

The *QA Setup* button is only available with an active *ScanPro Advantage* (SPA) membership. Click this button to access *AUTO-Scan Quality Assurance* (ASQA) settings.

11. AUTO-Scan QA Settings Window

AUTO-Scan Quality Assurance (ASQA) is only available with an active *ScanPro Advantage (SPA)* membership. (Figure 42) ASQA employs exclusive multi-mode scanning technology ensuring total image capture by eliminating the possibility of missed images during the high-speed, *AUTO-Scan Pro* scanning process of both roll film and fiche. ASQA's multi-mode scanning analyzes every inch of the film. Document images are immediately scanned, straightened, cropped, and saved in the selected file format. Additionally, areas on the film without images are ribbon scanned and saved to the QA Report for later review.

Note: These settings are stored and recalled via presets.

Enable QA report

The *Enable QA report* checkbox enables or disables the writing of a comma separated value (.csv) report documenting the results of the *AUTO-Scan Pro* process. (Figure 43) This report can be used as a tool to identify and correct any scan exceptions. This report can be viewed in any software supporting the .csv file type. The report gives the roll film odometer location of the scan exception image to aid in quickly finding the image on roll film to rescan, etc. If scanning microfiche, instead of odometer locations, the virtual grid marks the exceptions in red. Figure 44.

Report exceptions only

The *Report exceptions only* checkbox specifies whether the ASQA report will include the scanning results of the entire scanned media or only scan exceptions.

Distance

Distance is a reference to how far the film has traveled in feet. When checked, if the film moves less than the minimum this will be reported in the ASQA report. If the film moves more than the maximum the film drive will automatically stop, and the entire display will be scanned. This too will be reported in the ASQA report. Setting the distance minimum and maximum values can be done manually however these values are also set via the *Load Defaults* button.

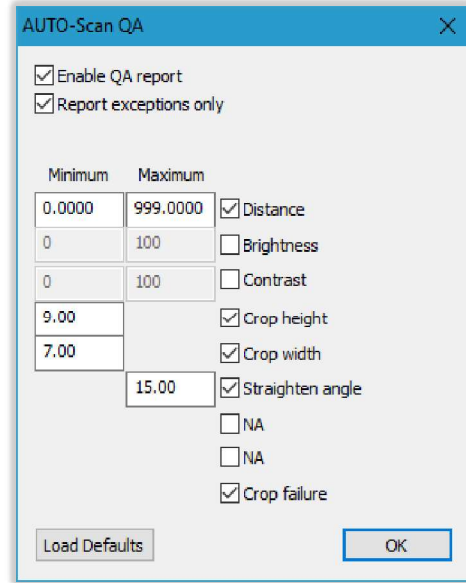


Figure 42

| | A | B | C | D | E | F | G | H | I | J |
|----|-------------|-----------|----------|----------|-------------|------------|-----------|--------|---------|---|
| 1 | hdr | filename | odometer | distance | crop.height | crop.width | crop.miss | deskew | outlier | |
| 2 | outlier_min | | | 0 | 8.5 | 6.25 | | | | |
| 3 | outlier_max | | | 999 | | | 0 | | 15 | |
| 4 | rec | C:\Users\ | 5.390644 | 0 | 12.12636 | 8.925 | 1 | 0 | 0 | 1 |
| 5 | rec | C:\Users\ | 5.436277 | 0.045633 | 8.52483 | 6.059137 | 0 | 0.16 | 1 | |
| 6 | rec | C:\Users\ | 5.476143 | 0.039866 | 12.12636 | 8.925 | 1 | 0 | 0 | 1 |
| 7 | rec | C:\Users\ | 5.554483 | 0.078341 | 7.918512 | 5.586209 | 0 | 0.02 | 1 | |
| 8 | rec | C:\Users\ | 5.629642 | 0.075159 | 12.12636 | 8.925 | 1 | 0 | 0 | 1 |
| 9 | rec | C:\Users\ | 5.638192 | 0.00855 | 8.476325 | 6.135937 | 0 | -0.01 | 1 | |
| 10 | rec | C:\Users\ | 5.716036 | 0.077843 | 6.681624 | 5.727683 | 0 | -2.61 | 1 | |
| 11 | rec | C:\Users\ | 5.797061 | 0.081025 | 8.460156 | 6.135937 | 0 | -0.06 | 1 | |
| 12 | hdr | filename | odometer | distance | crop.height | crop.width | crop.miss | deskew | outlier | |
| 13 | outlier_min | | | 0 | 8.5 | 6.25 | | | | |
| 14 | outlier_max | | | 999 | | | 0 | | 15 | |
| 15 | rec | C:\Users\ | 5.879079 | 0.082019 | 8.411651 | 6.131895 | 0 | 0.03 | 0 | 1 |
| 16 | rec | C:\Users\ | 5.923717 | 0.044638 | 6.491644 | 6.746298 | 0 | -6.8 | 1 | |
| 17 | | | | | | | | | | |

Figure 43

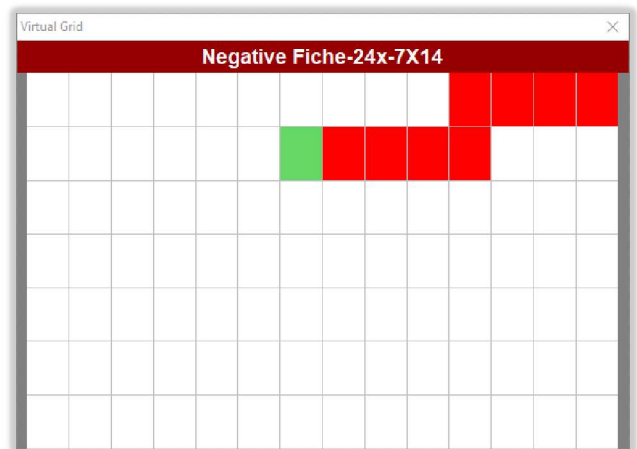


Figure 44

Brightness

When the *Auto-Brightness* checkbox of the *AUTO-Scan Pro* window is checked, each scan will be automatically adjusted for brightness and contrast. If the resultant *brightness* is less than the minimum or greater than the maximum, this will be reported in the ASQA report.

Contrast

When the *Auto-Brightness* checkbox of the *AUTO-Scan Pro* window is checked each scan will be automatically adjusted for brightness and contrast before they are saved. If the resultant *contrast* is less than the minimum or greater than the maximum, this will be reported in the QA report.

Crop height

When the *Straighten/Crop* checkbox of the *AUTO-Scan Pro* window is checked, scanned documents will be automatically straightened and cropped before they are saved. *Crop height* refers to the computed crop height of the scanned document image. If the crop height is less than the minimum the document image will not be cropped but rather the entire display will be scanned, and the event will be reported in the ASQA report. Setting the *crop height* minimum value can be done manually however this value is also set via the *Load Defaults* button.

Crop width

When the *Straighten/Crop* checkbox of the *AUTO-Scan Pro* window is checked, scanned documents will be automatically straightened and cropped before they are saved. *Crop width* refers to the computed crop width of the scanned document image. If the crop width is less than the minimum the document image will not be cropped but rather the entire display will be scanned, and the event will be reported in the ASQA report. Setting the crop width minimum value can be done manually however this value is also set via the *Load Defaults* button.

Straighten angle

When the *Straighten/Crop* checkbox of the *AUTO-Scan Pro* window is checked, scanned documents will be automatically straightened and cropped before they are saved. Straighten angle refers to the computed straighten angle of the scanned document image. If the straighten angle is greater than the maximum the document image will not be straightened but rather the entire display will be scanned, and the event will be reported in the QA report. Setting the straighten angle maximum value can be done manually however this value is also set via the *Load Defaults* button.

N/A

Reserved for future reporting of exceptions.

N/A

Reserved for future reporting of exceptions.

Crop failure

When the *Straighten/Crop* checkbox of the *AUTO-Scan Pro* window is checked, scanned documents will be automatically straightened and cropped before they are saved. If the cropping logic fails to find a document, or the image is touching any edge of the image area, then entire image area is captured and this event will be reported in the ASQA report.

Load Defaults

The *Load Defaults* button replaces all settings with the programmed defaults.

IMPORTANT CHECKS BEFORE SCANNING TO OBTAIN THE BEST RESULTS

- a. Click the *AB* button under the *Advanced AS* tab to automatically set the *brightness* value and the *Page and Gap Target* levels.
- b. When using the ASQA Report, crop the image. If it says the document height and width are 9x7, for example, set the minimum *height* and *width* to around 8x6. You want the height and width to be slightly less than the minimum document size so you will not get an exception error generated if the settings are too close. Setting the *width* and *height* too low may result in exceptions not being flagged.

12. Setup Window: Options Tab

The *Options* tab provides control over a variety of settings. *Figure 45*

Language

Specifies the language used in PowerScan. Click to reveal and select from the list of available languages.

Roll Film Control

When checked the on-screen *Roll Film Control* will be displayed.

Roll Film Threading Helper

When checked the *Film Threading Animation* will display when film carriage is pulled all the way out. *Figure 46*

Fiche Loading Helper

When checked the *Fiche Loading Animation* will display when film carriage is ejected when using an AUTO-Carrier. *Figure 47*

Rewind Reminder

When checked, an attempt to close the software or switch presets before rewinding, results in a dialog box asking *Rewind your film?*. Clicking yes will rewind film.

Auto-Crop

When checked, the scanner will attempt to automatically move the green capture box around subsequent images. The software will not resize the green capture box in this mode.

Odometer

When checked, an odometer will be displayed in the roll film control bar.

Border Straighten

When this radio button is selected, the image borders are detected and used for straightening the image. This is the preferred setting.

Text Straighten

When this radio button is selected the alignment of the text is detected and used for straightening the image. Select this method if images do not have solid black borders.

Secure Settings

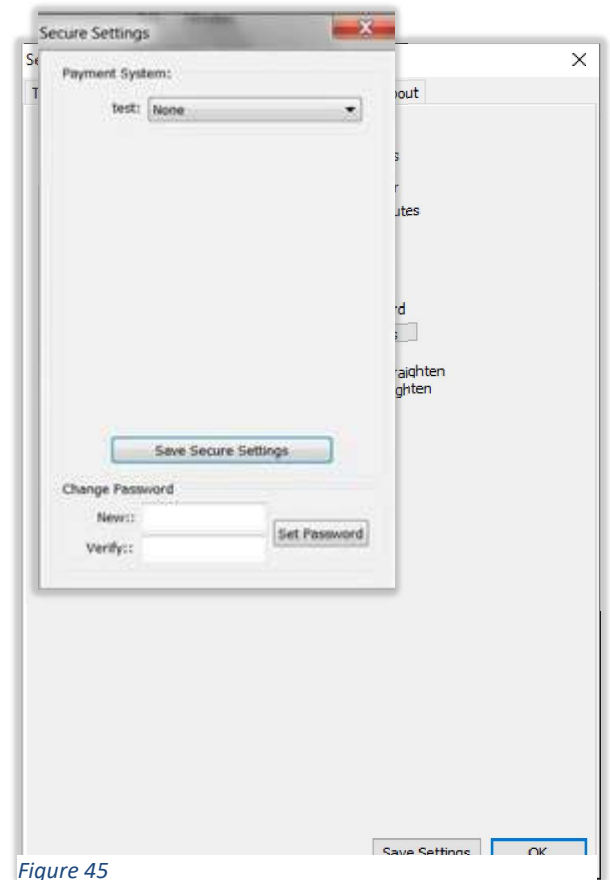


Figure 45



Figure 46



Figure 47

Provides a separate password for payment systems and email settings. To create a secure settings password:

- a. Click *Secure Settings* button.
- b. Enter desired password in *New* and *Verify* fields.
Figure 48
- c. Click *Set Password* button and wait for the fields to go blank (this will take several seconds).
- d. Click *Save Secure Settings*.

If the ScanPro is moved to another PC, or the PC is re-imaged, when launching the software an error message will appear, "Secure Settings corrupted" and no outputs will work (print, save, email).

To reset the secure settings password

- a. Click *Secure Settings* button.
- b. Enter the old secure settings password.
- c. Enter desired password in *New* and *Verify* fields.
This can be the same as the old password. *Figure 48*
- d. Click *Set Password* button and wait for the fields to go blank (this will take several seconds).
- e. Click *Save Secure Settings*.

If the password is lost, or the secure settings window does not open, a "password of the day" is required to unlock the ScanPro. Contact Tech Support at 800-251-2261 or via the *Tech Support* request form online, with the camera serial number. After receiving the password of the day enter it in "Step b" above. This will open the secure settings window.

Watermark

Click on this button to open the *Watermark* window. Browse to the required watermark. Set the opacity with the slider. All saved image files, prints and emails will include the watermark. *Figure 49*

Figure 48

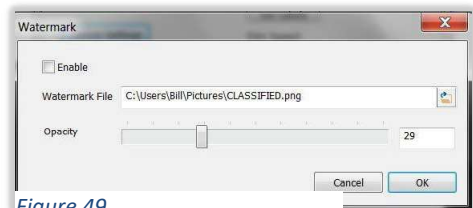


Figure 49

Copyright

Click the *Copyright* button and click the *Enable* box if you wish to have a copyright warning appear before every scan, print or email is made. Slide the *copyright font size* to select how large you want the warning text to be. *Figure 50* If the user clicks on the *Accept* button to acknowledge liability for reproducing the image, the ScanPro will output the image. If the user clicks on the *Decline* button, the box disappears and the ScanPro does not reproduce the image for output. *Figure 51*

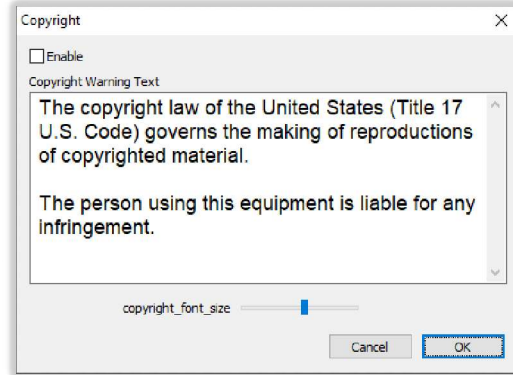


Figure 50

Inches

When this radio button is selected the unit of measure is inches.

Millimeter

When this radio button is selected the unit of measure is millimeters.

Energy Saver

Specifies how long in minutes before the lamp turns off after a period of inactivity with no keyboard or mouse usage. Click in the *number* box and enter the desired value. Maximum value is 240 minutes.



Figure 51

Trim Crop

Specifies a border mask size. This makes it possible for prints and scans to be free of black edges.

Film Wizard

When checked, PowerScan will start to the *Film Selection Wizard* screen and the *Film Selection Wizard* button will be added to the top of the toolbar.

Create Grid (only available on units equipped with an AUTO-Carrier)

Click this button to create a grid matching your microfiche. See "Section III.23 AUTO-Carrier Software" for a more detailed explanation.

Image Marks (ScanPro i9500 only)

Click this button to customize the Image Mark Sensing (IMS) feature of the ScanPro i9500.

13. IMS Settings Window

Access this window by clicking on the *Image Marks* button on the *Options* tab of the *Setup* window. This window allows the customization of the *Image Mark Sensing (IMS)* settings. The *Formatting & Indexing* tab is used to set the configuration for the 16mm film being used. *Figure 52*

Film Modes

Selection for *Simplex* (single image) film or *Duplex* (double image) film.

IM Location

Selection for the location of Image Marks (blips) on the film. Channel A is the bottom of the film. Channel B is the top of the film.

Index Formats

Selection for the Image Mark (blip) formatting.

- Single Level* is for blips that are all the same single size, typically referred to as small (page).
- Level* is for film that has 2 sizes of blips, typically referred to as small (page) and medium (file).
- 3 Level, 2 size* is for film that has 2 sizes of blips, but there is no size difference for files or batches.
- 3 Level, 3 size* is for film that has 3 sizes of blips, typically referred to as small (page), medium (file), and large (batch).

To successfully calibrate the settings on the *Customize* tab, (*Figure 54*) load in the film being used for calibration and advance to the appropriately sized blip. *Figure 53*

Brightness

The number value of the *Brightness* used for identifying blips during motion. This value does not affect the output image. This can be manually changed. Values from 0-100 are acceptable.

Auto

Automatically sets the *Brightness* value for blip searching.

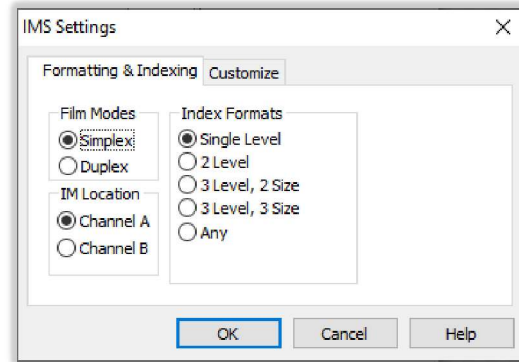


Figure 52

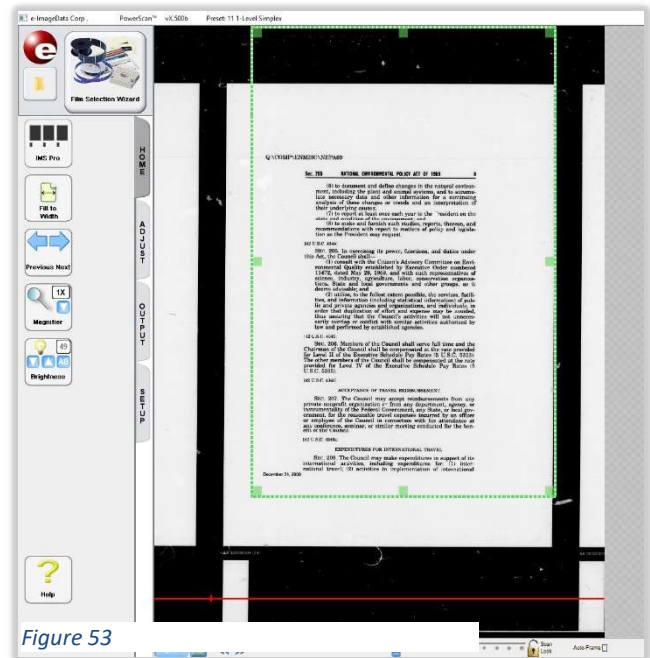


Figure 53

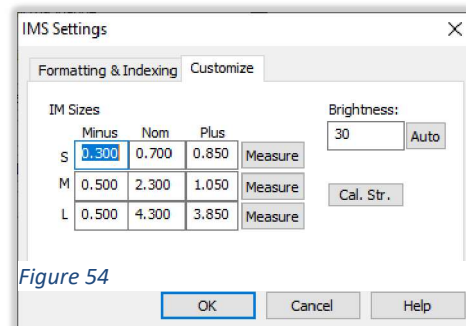


Figure 54

Cal. Str.

Allows a user to calibrate the straightness of the film. Click this button, the cursor will change to a + for a 2 point click straighten. Click once on the left side of a horizontal line, and then once on the right to make the line flat. The edge of the film is the preference.

IMS Sizes

This table specifies blip size for *S (small)*, *M (medium)*, and *L (large)* blips:

- a. The measured dimension, *Nom*, of the Image Mark (blip).
- b. The lower limit of blip size, *Minus*, is the $Nom - Minus$. In this example the lower limit is .400 ($.700 - .300 = .400$) for small blips.
- c. The upper limit of blip size, *Plus*, is the $Nom + Plus$. In this example the upper limit is 1.550 ($.700 + .850 = 1.550$) for small blips.

With the small blip on-screen, click the *Measure* button in the *S* line. The *Nom* value will change to the calculated size. To set the size for medium or large blips, move to the relevant blip. Then click the *Measure* button on the corresponding line.

All fields can be manually changed. The blip size ranges should never overlap. In this example there is a buffer of .250 between small and medium blips. The buffer between medium and large is .450.

OK

Clicking the *OK* button will implement any changes made in the *IMS Settings* window.

Cancel

Clicking the *Cancel* button will close the *IMS Settings* window without implementing any changes.

14. Setup Window: About Tab

The *About* tab provides information for the camera serial number, firmware and software versions and licensed features. *Figure 55*

Register/Renew (Requires internet connection)

When this button is clicked the web browser will open to the ScanPro Advantage Membership renewal page <https://www.e-imagedata.com/scanpro-membership/>. Use this page to register the ScanPro or renew the SPA membership.

Check for Updates (Requires internet connection)

This button makes it easy to check for software updates. When this button is clicked the web browser will open to the Software Downloads page. <https://www.e-imagedata.com/scanpro-software/>

Save Settings Button

After the ScanPro has been configured for a particular microform, many of the controls, once set, are no longer needed by the operator. The ability to setup, save, and restore these customized configurations of the user interface greatly simplifies the use of the ScanPro. Click on the *Save Settings* button to create a preset which contains the configuration of the toolbar and the *Setup Window*. A *Save As* window will open allowing you to select a name for your preset. *Figure 56*

Failure to save settings will result in customizations to the configuration being lost.

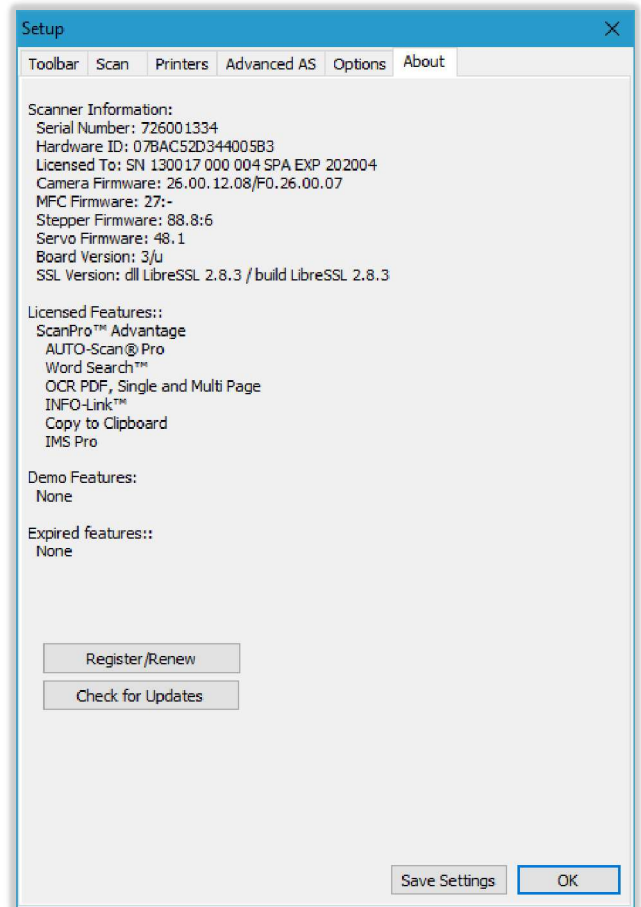


Figure 55

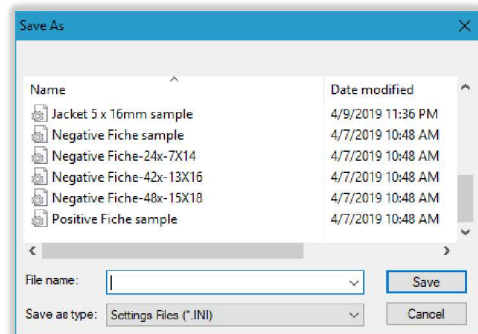


Figure 56

15. Film Selection Wizard

The PowerScan software is extremely powerful providing users with unmatched features and flexibility. Having the ability to set up the software, save the settings, and then easily recall the settings, makes the ScanPro not only the most powerful microfilm reader/scanner available but also the easiest to use. The software will automatically open to the *Film Selection Wizard* each time the software is launched. Return to the *Film Selection Wizard* screen by using the *Film Selection Wizard* button at the top of the toolbar.

Film Selection Wizard Screen

The PowerScan Software is shipped with standard presets. Click on any of these images to recall the associated preset. *Figure 57*

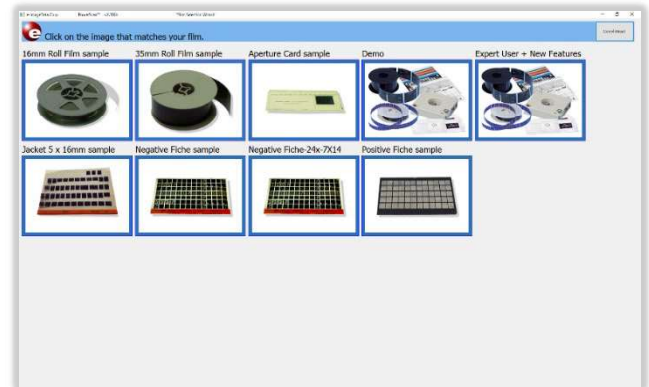


Figure 57

Customizing the Film Selection Wizard

- Ensure that the PowerScan software is closed.
- Navigate to `C:\ProgramData\PowerScan xxx\Settings` folder. *Figure 58*
- If there is a .PNG image file and an .INI settings file with the same name present in this folder location, the PNG image will be displayed on the *Film Selection Wizard* screen. When clicked, the INI preset file will be loaded.
- To add a preset to the *Film selection Wizard*
 - Custom images can be created by using a photo editing program to create a 340 x 250 pixel .PNG image file.
 - To use a new .PNG image file, move the file to this folder. Existing .PNG files are 340 x 250 pixels. Using a file of the same size will preserve the even grid layout.
 - To reuse an existing .PNG image file, copy and paste it in this folder. Then rename the file to the name you would like to appear above it on the *Film Selection Wizard*.
 - Repeat this process for a similar .INI settings file. Be sure to use the exact same name as the .PNG image file.
 - Launch the PowerScan software, and choose the preset just created from the *Film Selection Wizard*.
 - Use the software setup window to customize this setting for use.

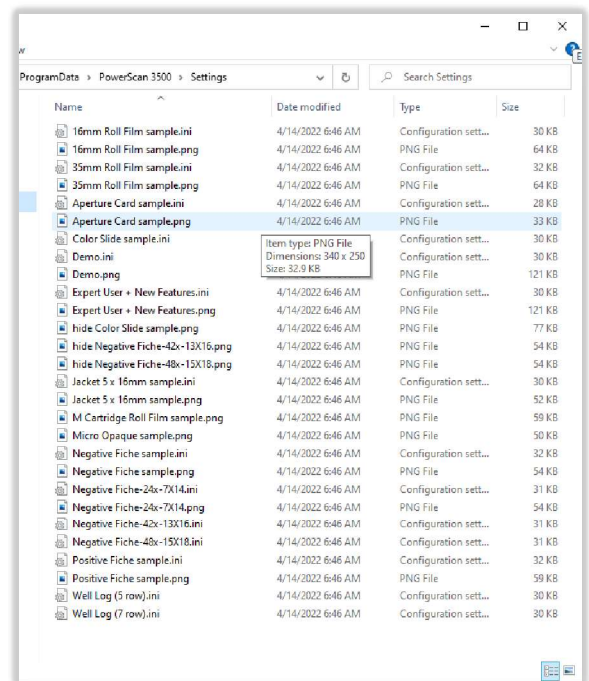
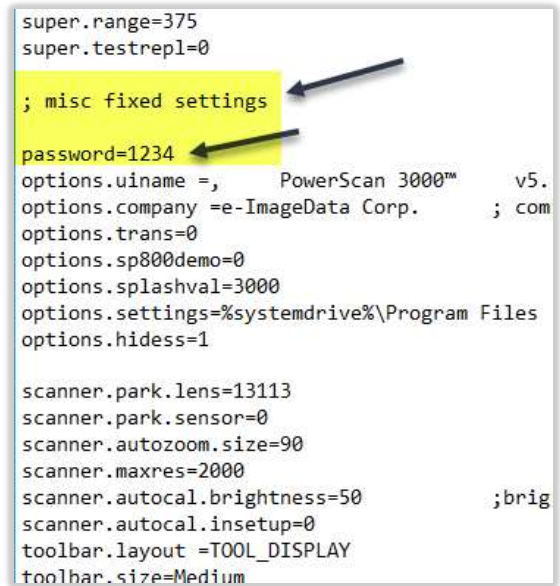


Figure 58

- e. To remove a preset from the *Film Selection Wizard*
 1. To save the presets for future use, change the name of the .PNG image file to be different from the corresponding .INI settings file. Click once to edit then name, then type *hide* at the end of the name.
 2. To eliminate presets completely, delete the unused files.

16. How to Change Your Password

- a. Ensure that the PowerScan software is closed.
- b. Browse the computer and find the following folder: *C:\ProgramData\PowerScan xxxx* (Note: This is a hidden folder. If the computer is not set up to show hidden folders and locations, contact the IT department for help)
- c. Double click on the *PowerScan xxxx.ini* configuration file to open it in Notepad.
- d. Scroll down to the section *; misc fixed settings*. *Figure 59*
- e. Find the line *Password=1234*. On the right side of the equal (=) sign change the existing text *1234* to the desired password. This password will be case sensitive, and special characters are accepted.
- f. Save and close the file.
- g. Changes will take effect when launching the software.



```
super.range=375
super.testrepl=0

; misc fixed settings

password=1234
options.uiname =,      PowerScan 3000™      v5.
options.company =e-ImageData Corp.      ; com
options.trans=0
options.sp800demo=0
options.splashval=3000
options.settings=%systemdrive%\Program Files
options.hidess=1

scanner.park.lens=13113
scanner.park.sensor=0
scanner.autozoom.size=90
scanner.maxres=2000
scanner.autocal.brightness=50      ;brig
scanner.autocal.insetup=0
toolbar.layout =TOOL_DISPLAY
toolbar.size=Medium
```

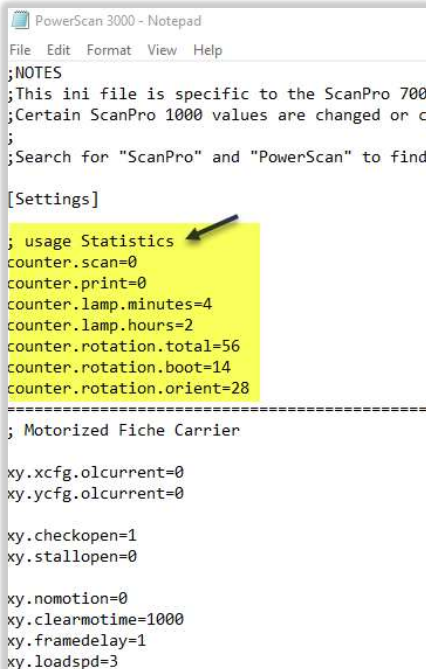
Figure 59

IMPORTANT: Do not change any other settings in this configuration file. Damage may occur to the ScanPro Microfilm Scanner.

17. Usage Statistics

- a. Ensure that the PowerScan software is closed.
- b. Browse the computer and find the following folder: *C:\ProgramData\PowerScan xxxx* (Note: This is a hidden folder. If the computer is not set up to show hidden folders and locations, contact the IT department for help).
- c. Double click on the *PowerScan xxxx.ini* configuration file to open it in Notepad.
- d. Scroll down to the section *; usage statistics*.
Figure 60
- e. To reset these statistics, change the number to the right of the equal (=) sign to a 0.
- f. Save and close the file.
- g. Changes will take effect when launching the software.

IMPORTANT: Do not change any other settings in this configuration file. Damage may occur to the ScanPro Microfilm Scanner.



```
PowerScan 3000 - Notepad
File Edit Format View Help
;NOTES
;This ini file is specific to the ScanPro 700
;Certain ScanPro 1000 values are changed or c
;
;Search for "ScanPro" and "PowerScan" to find

[Settings]

; usage Statistics
counter.scan=0
counter.print=0
counter.lamp.minutes=4
counter.lamp.hours=2
counter.rotation.total=56
counter.rotation.boot=14
counter.rotation.orient=28

=====
; Motorized Fiche Carrier

xy.xcfg.olcurrent=0
xy.ycfg.olcurrent=0

xy.checkopen=1
xy.stallopen=0

xy.nomotion=0
xy.clearmotime=1000
xy.framedelay=1
xy.loadspd=3
```

Figure 60

18. Adding a Company Name to the Title Bar

- a. Ensure that the PowerScan software is closed.
- b. Browse the computer and find the following folder: *C:\ProgramData\PowerScan xxxx* (Note: This is a hidden folder. If the computer is not set up to show hidden folders and locations, contact the IT department for help).
- c. Double click on the *PowerScan xxxx.ini* configuration file to open it in Notepad.
- d. Scroll down to the section *; misc fixed settings*.
- e. Find the line *options.company=e-ImageData Corp.* *Figure 61*
- f. Replace *e-ImageData Corp.* in this line with the desired company information.
- g. Save and close the file.
- h. The change will take effect when launching the software.

IMPORTANT: Do not change any other settings in this configuration file. Damage may occur to the ScanPro Microfilm Scanner.

```
super.range=375
super.testrep1=0

; misc fixed settings

password=1234
options.uiname =, PowerScan 3000™ v5.343a ; a
options.company =e-ImageData Corp. ; company name for titlebar
options.trans=0 ; 0 disable
options.sp800demo=0 ; 0=operate
options.splashval=3000
options.settings=%systemdrive%\Program Files (x86)\PowerScan 3000\S
options.hidess=1

scanner.park.lens=13113 ; position of lens
scanner.park.sensor=0 ; position of senso
scanner.autozoom.size=90 ; how much to zoom
scanner.maxres=2000
scanner.autocal.brightness=50 ;brightness value to use fo
scanner.autocal.insetup=0 ;0=hide, 1=show cal
toolbar.layout =TOOL_DISPLAY
toolbar.size=Medium
preset.buttonfactor=170
toolbar.tipwidth=300
rollfilm.enabled=0
smtp.noext=0 ; 0 enables
noeepromcal=0
reset = 0 ; 0
touch=0 ; 0
brightarea.autoclosedist=50 ;sets automatic clo
```

Figure 61

19. Installing a New License Key

For 32 bit operating systems:

- Ensure that the PowerScan xxxx software is closed.
- Navigate to the PowerScan xxxx Folder. (c:\Program Files\PowerScan xxxx)
- Delete any files that have a .lic extension.
- Copy (DO NOT OPEN) the license key and paste it into this folder.

For 64 bit operating systems:

- Ensure that the PowerScan xxxx software is closed.
- Navigate to the PowerScan xxxx Folder. (c:\Program Files (x86)\PowerScan xxxx)
- Delete any files that have a .lic extension.
- Copy (DO NOT OPEN) license key and paste it into this folder.

Note: When the PowerScan xxxx software is started it checks for the existence of a valid .lic file in the PowerScan xxxx folder. If this file exists, the licensed features will automatically be enabled. The software will not ask for a number.

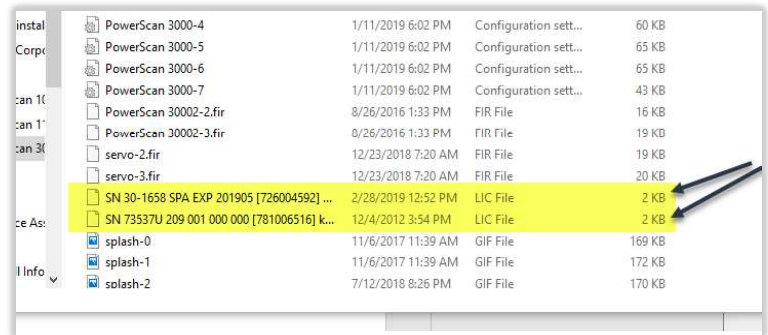


Figure 62

Figure 62 shows two license keys. This is incorrect and may cause problems. Be sure to **delete** the old key. There shouldn't be multiple keys in the PowerScan xxxx Folder.

20. How to Change the Names on Toolbar Buttons

- Ensure that the PowerScan software is closed.
- Go to the following folder:
for 32 bit OS: `C:\Program Files\PowerScan XXXX`
Or for 64 bit OS: `C:\Program Files (x86)\PowerScan XXXX`
- To modify the English language file, double click on the `PowerScan xxxx-0.ini` configuration file to open it in Notepad.
- Find the button name to be changed under the `; Button Names` section. *Figure 63*
- Type new name to the right of the equal (=) sign. **WARNING DO NOT ENTER INFORMATION TO THE LEFT OF THE EQUAL (=) SIGN.** In this example screen the “Scan to Drive #2” button name (*Figure 65*) has been changed to “USB” (*Figure 64*).
- Save and close the file.
- Changes will take effect when you launch the software.

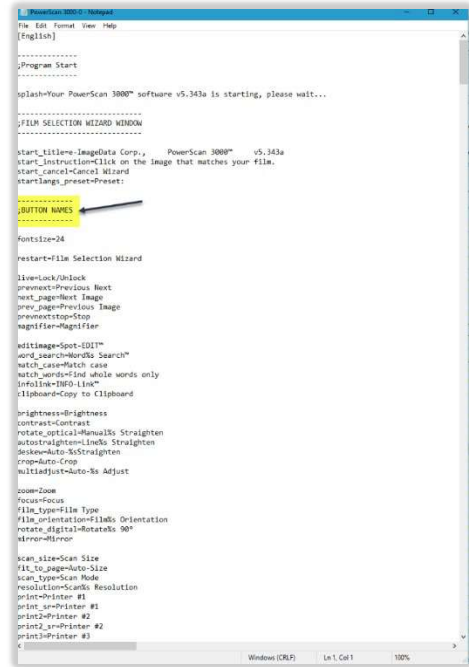


Figure 63

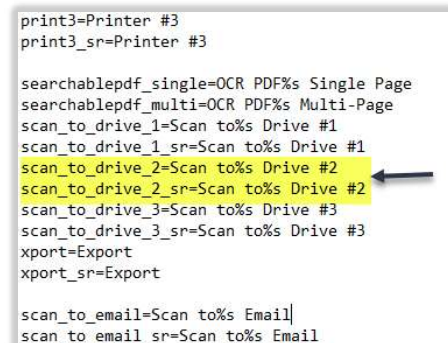


Figure 65

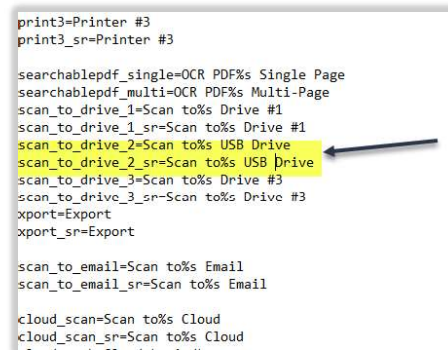
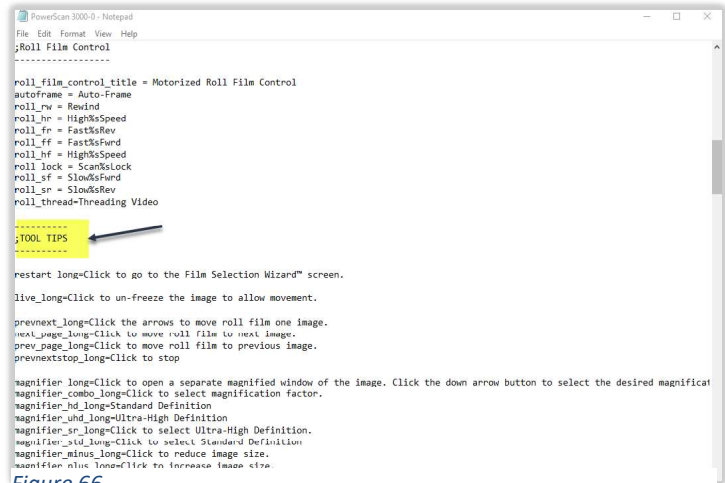


Figure 64

21. How to Change the Mouseover Tooltips for Toolbar Buttons

- Ensure that the PowerScan software is closed.
- Go to the following folder:
for 32 bit OS: C:\Program Files\PowerScan XXXX
for 64 bit OS: C:\Program Files (x86)\PowerScan XXXX
- Double click on the *PowerScan xxxx-0.ini* configuration file to open it in Notepad.
- Scroll down to the "TOOL TIPS" section. *Figure 66*
- Find the button tool tip to be changed.
- Type a new tool tip to the right of the Equal (=) sign. **DO NOT ENTER INFORMATION TO THE LEFT OF THE EQUAL (=) SIGN.**
- Save and close the file.
- Changes will take effect when you launch the software.



```

PowerScan 3000-0 - Notepad
File Edit Format View Help
;Roll Film Control
-----
roll_film_control_title = Motorized Roll Film Control
autoframe = Auto-Frame
roll_rw = Rewind
roll_hr = High%Speed
roll_fr = Fast%Rev
roll_ff = Fast%Fwd
roll_hf = High%Speed
roll_lock = Scan%Lock
roll_sf = Slow%Fwd
roll_sr = Slow%Rev
roll_thread=Threading Video

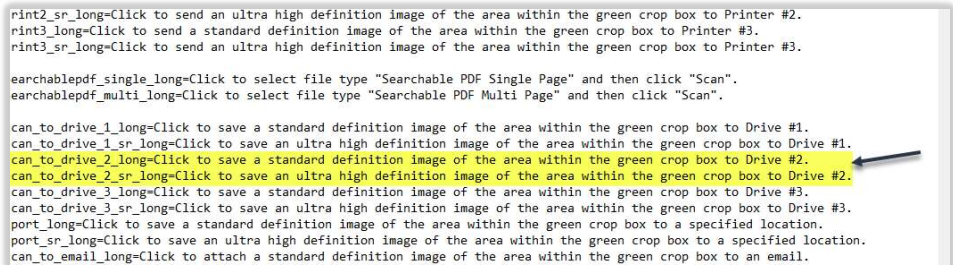
;TOOL TIPS
-----
restart_long=Click to go to the Film Selection Wizard" screen.
live_long=Click to un-freeze the image to allow movement.
prevnext_long=Click the arrows to move roll film one image.
next_page_long=Click to move roll film to next image.
prev_page_long=Click to move roll film to previous image.
prevnextstop_long=Click to stop

magnifier_long=Click to open a separate magnified window of the image. Click the down arrow button to select the desired magnification factor.
magnifier_combo_long=Click to select magnification factor.
magnifier_hd_long=Standard Definition
magnifier_uhd_long=Ultra-High Definition
magnifier_sr_long=Click to select Ultra-High Definition.
magnifier_std_long=Click to select Standard Definition
magnifier_minus_long=Click to reduce image size.
magnifier_plus_long=Click to increase image size.
    
```

Figure 66

Figure 67 shows the original Tool Tip for scanning to Drive #2.

Figure 68 shows the wording changed to "the USB Drive" to inform the user where the drive 2 destination will be.



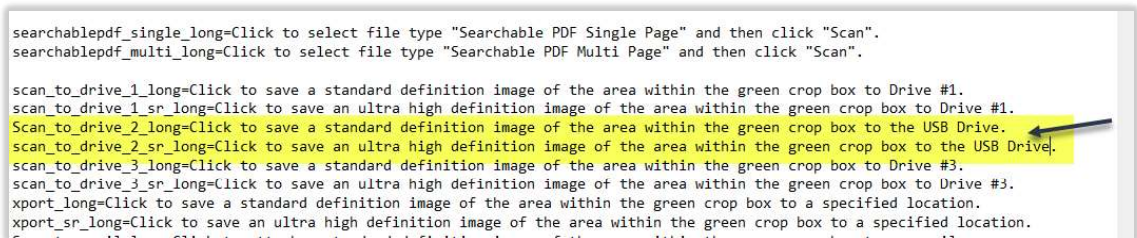
```

rint2_sr_long=Click to send an ultra high definition image of the area within the green crop box to Printer #2.
rint3_long=Click to send a standard definition image of the area within the green crop box to Printer #3.
rint3_sr_long=Click to send an ultra high definition image of the area within the green crop box to Printer #3.

earchablepdf_single_long=Click to select file type "Searchable PDF Single Page" and then click "Scan".
earchablepdf_multi_long=Click to select file type "Searchable PDF Multi Page" and then click "Scan".

can_to_drive_1_long=Click to save a standard definition image of the area within the green crop box to Drive #1.
can_to_drive_1_sr_long=Click to save an ultra high definition image of the area within the green crop box to Drive #1.
can_to_drive_2_long=Click to save a standard definition image of the area within the green crop box to Drive #2.
can_to_drive_2_sr_long=Click to save an ultra high definition image of the area within the green crop box to Drive #2.
can_to_drive_3_long=Click to save a standard definition image of the area within the green crop box to Drive #3.
can_to_drive_3_sr_long=Click to save an ultra high definition image of the area within the green crop box to Drive #3.
port_long=Click to save a standard definition image of the area within the green crop box to a specified location.
port_sr_long=Click to save an ultra high definition image of the area within the green crop box to a specified location.
can_to_email_long=Click to attach a standard definition image of the area within the green crop box to an email.
    
```

Figure 67



```

searchablepdf_single_long=Click to select file type "Searchable PDF Single Page" and then click "Scan".
searchablepdf_multi_long=Click to select file type "Searchable PDF Multi Page" and then click "Scan".

scan_to_drive_1_long=Click to save a standard definition image of the area within the green crop box to Drive #1.
scan_to_drive_1_sr_long=Click to save an ultra high definition image of the area within the green crop box to Drive #1.
Scan_to_drive_2_long=Click to save a standard definition image of the area within the green crop box to the USB Drive.
scan_to_drive_2_sr_long=Click to save an ultra high definition image of the area within the green crop box to the USB Drive.
scan_to_drive_3_long=Click to save a standard definition image of the area within the green crop box to Drive #3.
scan_to_drive_3_sr_long=Click to save an ultra high definition image of the area within the green crop box to Drive #3.
xport_long=Click to save a standard definition image of the area within the green crop box to a specified location.
xport_sr_long=Click to save an ultra high definition image of the area within the green crop box to a specified location.
    
```

Figure 68

22. Automatic Roll Film Scanning: AUTO-Scan & AUTO-Scan Pro

Automatic Scanning is included with the standard PowerScan Software except the ScanPro 2500. AUTO-Scan Pro (optional software) is available on the 2500, 3500 and i9500 with an active *ScanPro Advantage* (SPA) membership.

- Click the *Auto-Scan™ Pro* icon to open the *AUTO-Scan* window.
- AUTO-Scan* (Figure 69) runs at up to 20 IPM for both film and fiche (requires an AUTO-Carrier).
- AUTO-Scan Pro* (Figure 70) scans at up to 100 IPM for both film and standard fiche, or 70 IPM for Jacketed fiche when equipped with an AUTO-Carrier.

Notes

- All images must appear in the display with black borders for the *AUTO-Scan* to work properly.
- A zoom setting which allows for space to the right and to the left of the displayed image is necessary for *AUTO-Scan* to work reliably. *Figure 71*.
- For best performance, make sure the *file path* has been added to the exceptions list of the anti-virus software.
- If scanning images that were originally larger in size (for example newspaper pages) try setting the scan size to the original image size. When the scan size is set to auto size, the saved image will be automatically reduced to the printer paper size (usually 8.5" x 11"). This can affect the output quality.

File Path

Specifies the location where the scan will be saved. Enter this location by typing or by using the *Browse...* button to navigate through the Windows folder structure and select the desired folder.

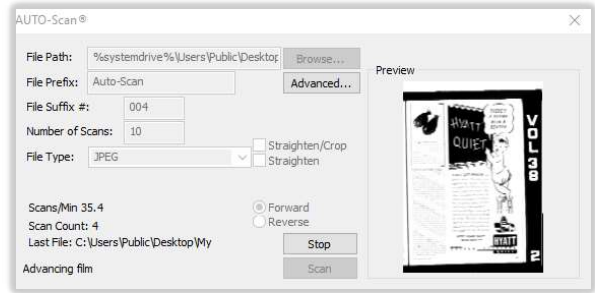


Figure 69

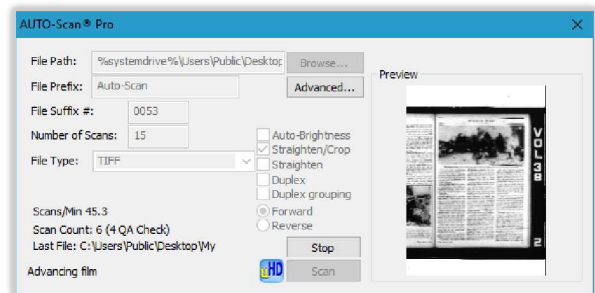


Figure 70

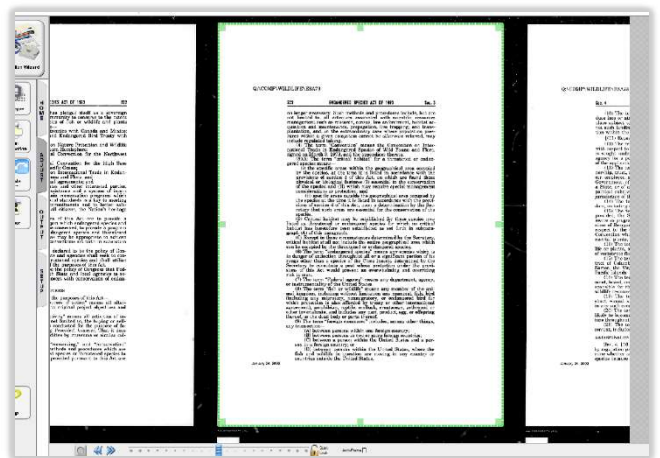


Figure 71

File Prefix

Specifies the filename prefix of the saved scan.

File Suffix

Specifies the starting filename suffix number of the saved scan. The number will increment by one with each scan.

Number of Scans

Specifies the number of scans that will be made before stopping. If left blank, it will continue to scan until no further images can be found on the roll of film.

File Type

Specifies the file format of the saved scan. When using a *Scan Mode* setting of *Enhanced Grayscale*, the smallest file size can be achieved by using *File Type* JPEG. When scanning using a *Scan Mode* of *Black and White*, the smallest file size can be achieved by using *File Type* TIFF (Group IV). *AUTO-Scan* creates the following selectable file formats: TIFF, TIFF (Group IV), TIFF (LZW), JPEG, PNG, PDF. *AUTO-Scan Pro* additionally can create multipage TIFF, TIFF (Group IV), TIFF (LZW), and PDF.

Advanced

- Click on button to access the *Advanced AS* window of the setup window. A password window will open. *Figure 72*
- Enter your *Setup* password and the *Advanced AS* tab of the *Setup* window will open to adjust advanced settings. *Figure 73*
- See “Section III.10 Setup Window: Advanced AS tab” for more information.

Film Speed

Adjust film speed for reliable scanning. If images are stopping to the right of center, increasing the speed will move the stopping position left. If the images are not stopping in time, or are left of center, decrease the speed.

Auto-Brightness

If unchecked, the initial brightness and contrast settings will be used for all scans. If checked, brightness and contrast adjustments will be made automatically for each individual image prior to scanning. This will slow down the scanning process.

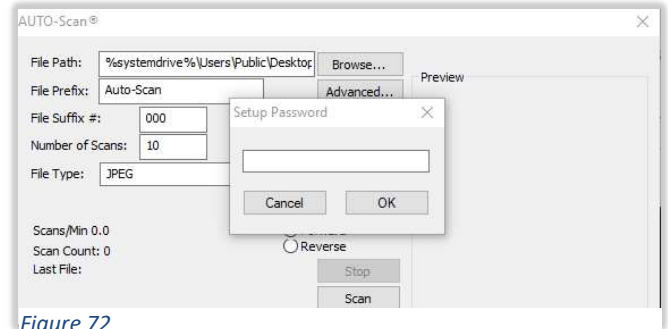


Figure 72

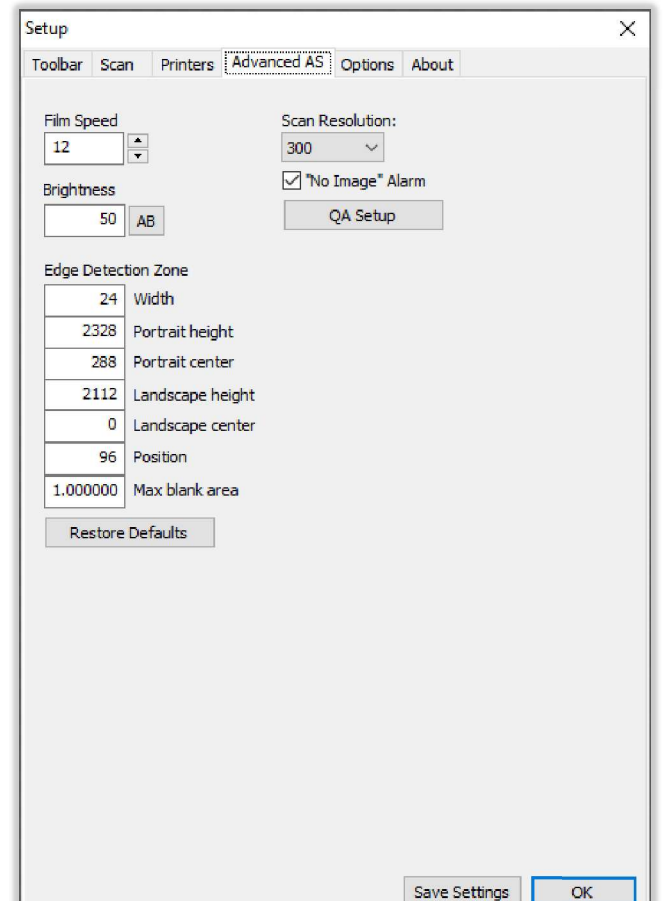


Figure 73

Straighten/Crop

If unchecked, the green capture box is scanned without any attempt to center, straighten or crop the image prior to being saved. If checked, the scanned image will be straightened and cropped prior to being saved.

Straighten

If unchecked, the green capture box is scanned without any attempt to center, straighten, or crop prior to being saved. If checked, the scanned image will be straightened prior to being saved. The green capture box specifies the capture area.

Duplex

Check box for using duplex film. Used to capture both front and back of images separately. Make sure that the film is right reading (rotate if necessary) as the images will be scanned left (front) then right (back of image).

Duplex Grouping

Group front and back of duplex image into one multi-page file. Make sure you select a multi-page file format.

Forward or Reverse

Specifies direction of film travel.

Stop

Aborts an *AUTO-Scan* scanning session.

Start

Starts an *AUTO-Scan* scanning session.

23. Automatic Roll Film Viewing: AUTO-Review

Available with the *ScanPro Advantage (SPA)* Membership, this *Previous/Next* mode is used to perform a quality review of a newly processed roll of film by automatically moving from one image to the next and displaying each image for a customizable period of time.

AUTO-Review is activated by holding the *CTRL* button on the keyboard and clicking the *Previous* or *Next* button. The film will advance automatically until you click the *Stop* button. Adjust the speed in the *Setup* window on the *Advanced AS* tab.

24. AUTO-Carrier Software – Automatic fiche scanning

Selectively Choosing Which Pages to Scan on Your Microfiche

- In the *AUTO-Scan Pro* window, leave number of scans box blank to scan the entire microfiche.
- Hold the keyboard *CTRL* key and left mouse click on *Virtual Grid* locations to select multiple single images.
- Hold the keyboard *SHIFT* key to select a range of images (from the last selected image) to your current grid selection.
- Press the keyboard *CTRL + A* to select all the marks and then hit *CTRL + A* again to clear the display.

How to Create a Virtual Grid

- Click a fiche preset on the *Film Selection Wizard* that resembles your film. It will open with the *AUTO-Carrier* in the eject position (glass open).
- Click the *Setup* toolbar folder tab.
- Click the *Setup* button and the *Setup Password* window will open.
- Enter *setup* password (default password is 1234 unless you changed it) and click *OK*. The *Setup* window will open.
- Click the *Setup window Options* tab. *Figure 74*
- Click the *Create Grid* button on the *Options* tab and the *Create Virtual Grid* window will open. *Figure 75*
- Select the type of microfiche from the drop down list. If selecting jacketed fiche, skip to “Step I”.
- Count the number of rows & columns on your fiche.
- Convert row count to a letter (1=A, 2=-B, 3=C, etc.).
- Enter the row letter and the column count into the *Create Virtual Grid* window.
- Enter the cell identifier of the lower right fiche image into the *Create Virtual Grid* window.
- Place fiche in carrier pushed to the back with fiche header toward the front and right reading (not mirrored). *Figure 76*

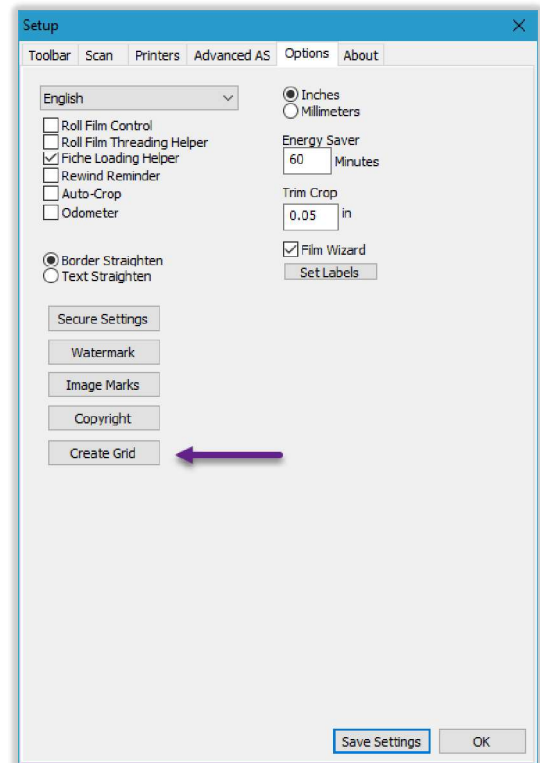


Figure 74

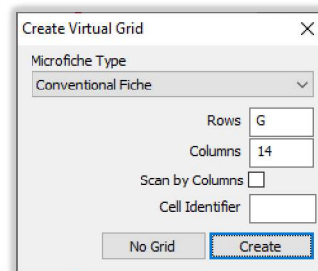


Figure 75



Figure 76

- m. Click the fiche control *Load* button. The AUTO-Carrier will move to the center. *Figure 77*
- n. Use keyboard arrow keys to center an image in the display.
- o. Use the *Film Type*, *Mirror*, *Straighten*, *Orient*, and *Rotate* toolbar buttons as needed.
- p. Use the toolbar *Zoom* button to size the images within the viewing area with an approximate 1" border. *Figure 78*
- q. Click the *Set Home* button. The AUTO-Carrier will move to the general location of image A1. *Figure 79*

<continued>

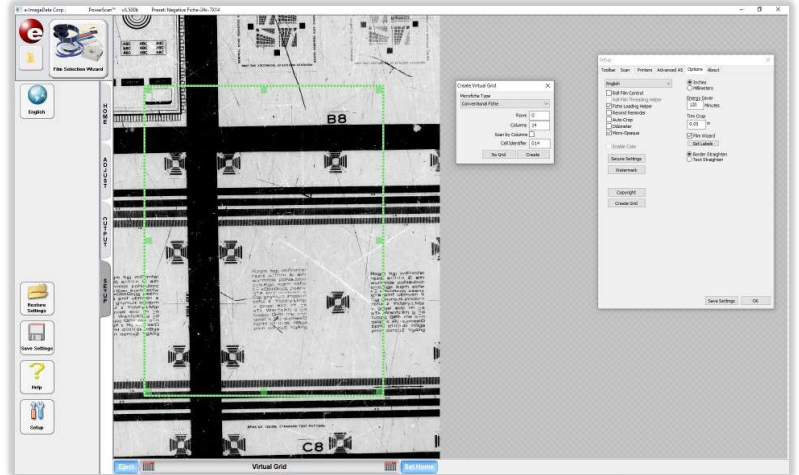


Figure 77

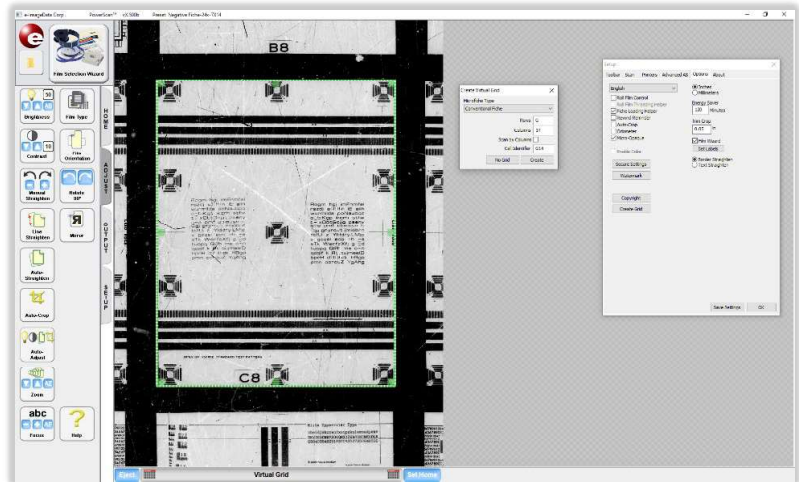


Figure 79

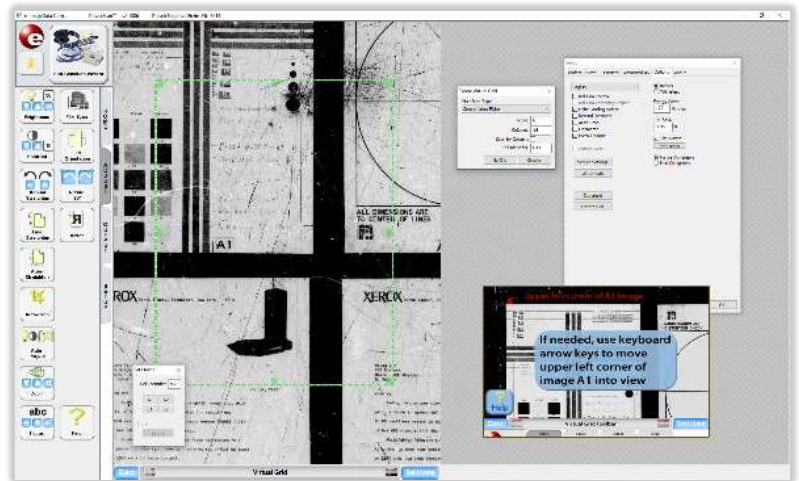


Figure 78

- r. Use keyboard arrow keys to bring the upper left corner of image A1 into the display area. Centering image A1 is not necessary.
- s. Click upper left corner of A1 with the special double arrow cursor that appeared. *Figure 80*
- t. The AUTO-Carrier will move to the right side of the fiche. Using the double arrow click anywhere on the top border of the image on the screen. *Figure 81*
- u. The fiche carrier will move to the area of the last image. If the whole last image is not visible on the screen, use the keyboard arrow keys to position the fiche so all four sides of the last image are visible. This should be the same image as the cell identifier from step k.
- v. Carefully move the green crop box around the last image. *Figure 82*
- w. In the *Create Virtual Grid* window, click on the *Create* button. Your new grid will now be configured for use.

<continued>

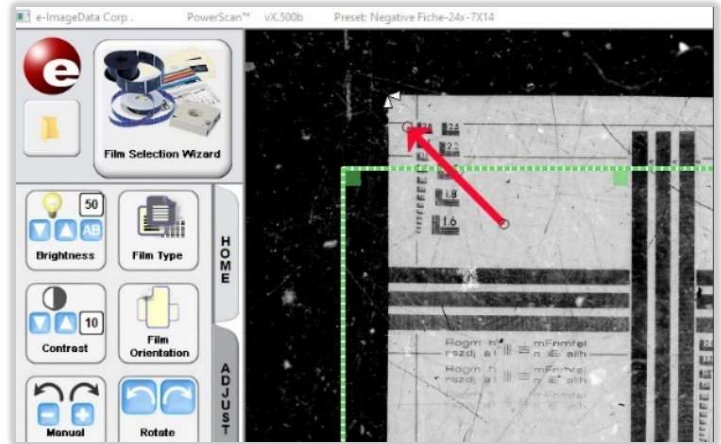


Figure 80

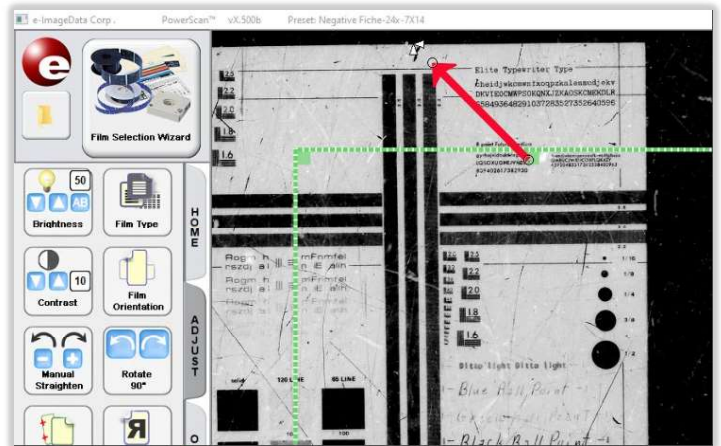


Figure 82

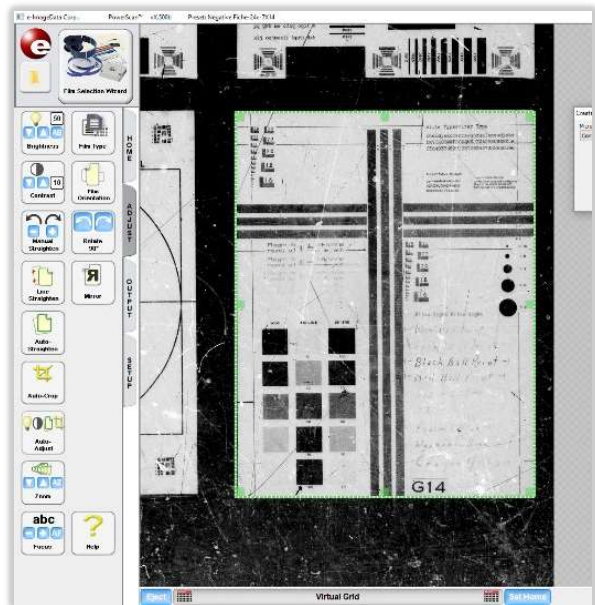


Figure 81

- x. Move about the *Virtual Grid* by clicking on various virtual grid cells to confirm the accuracy of the grid. Make sure the images fall completely within the image area. *Figure 83*
- y. Click the *Save Settings* button of the setup window to name and save this new preset. *Figure 84*

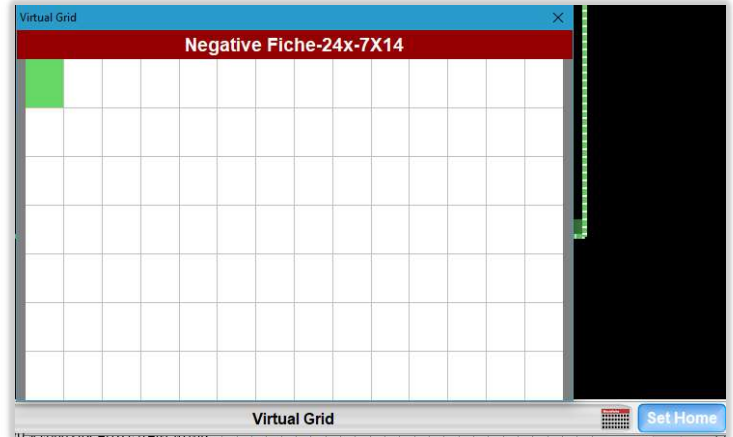


Figure 83

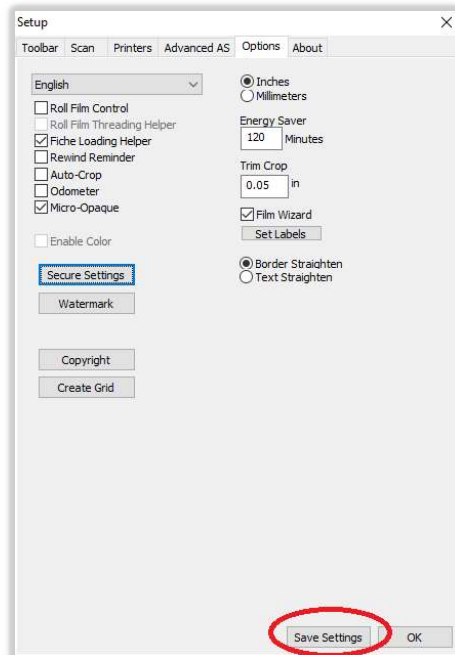


Figure 84

25. IMS Pro – Single Level Blips

Image Mark Sensing (IMS) Pro is only available on a ScanPro i9500 with an active ScanPro Advantage membership license key. A more basic IMS is available on a ScanPro i9500 without an active SPA membership license key. IMS (Pro) searches and scans or prints from 16mm film using Image Marks (blips), not borders, to identify image locations on the film.

- Launch the software then choose the *Film Selection Wizard* preset for *1-Level Simplex*, or *1-Level Duplex*, depending on the film.
- Load the film, following the on-screen animation. Click the blue *Load* button at the bottom of the screen.
- Adjust *brightness* and/or *contrast* so that the edge of the film is visible.
- If the film is not centered in the image area, use the keyboard up or down arrow key to center it.
- When clicking on the *IMS Pro* button for the first time, the *Calibrate Straightness* window appears. *Figure 85*
 - If the film is perfectly horizontal click *Accept*.
 - If the film is not perfectly horizontal, click the *Calibrate* button. The cursor changes to a +. On the top edge of the film, click once on the left and once on the right. The corresponding red line will be used to straighten the sensor. *Figure 86*
 - Repeat if necessary. Otherwise, click *Accept*.
- Click the *IMS Pro* button again to open the *IMS Pro* window. *Figure 87*
- The red IMS track will appear on the bottom of the image area if IMS has been calibrated for *Channel A*. See “Section III.13 IMS Settings Window” for more information. Click the *Load* button in the *IMS Pro* window. The film will advance past the first few images, then will back up to the first Image Mark (blip).
- Alternatively, if film has already been loaded, and the blip currently on screen is a known value, use the *Set* button to manually enter the *Image Counter* window. *Figure 88* Type in the current mark value, then click the *Set* button.
- The red IMS track should run through the center of the blips. The small vertical tick mark on the

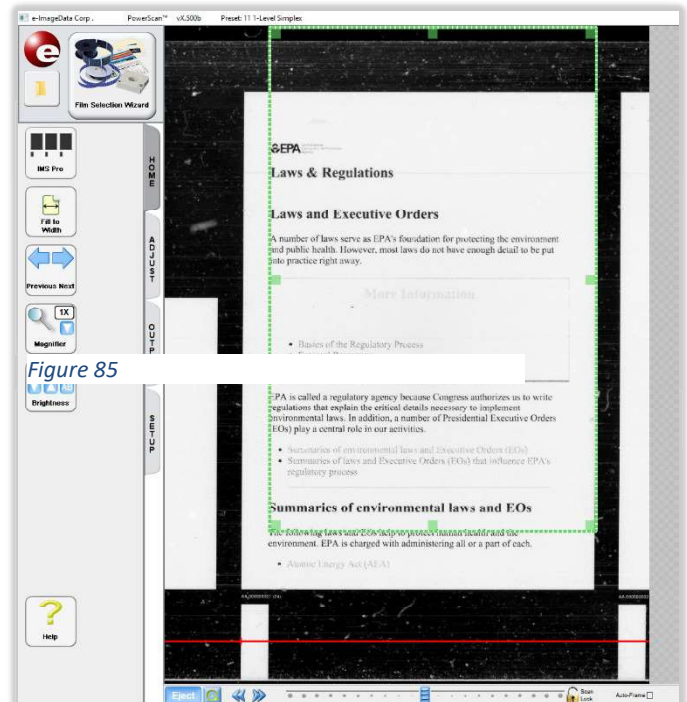


Figure 85

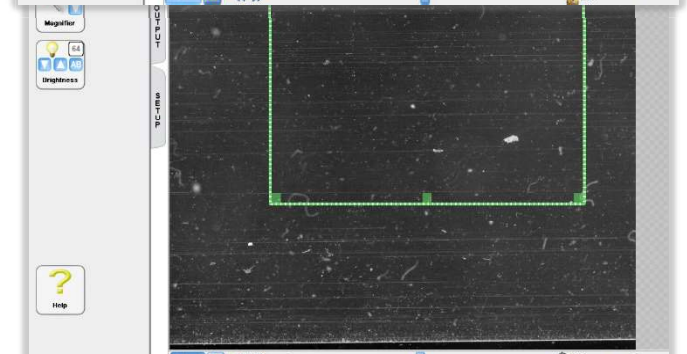


Figure 86

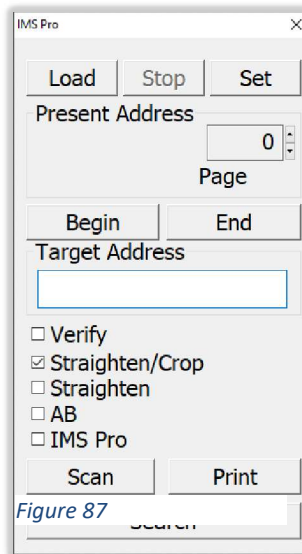


Figure 87

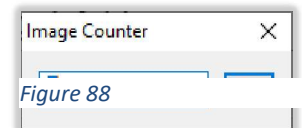


Figure 88

track is the approximate stopping position of the blip. This should be set so that the image is centered in the image area.

1. Before moving the track/tick mark, center the IMAGE on the screen horizontally. Center the FILM vertically on the screen.
 2. Press and hold the *CTRL* button on the keyboard and left click on the leading edge of the blip, approximately in the vertical center. The red track and the tick mark will move to this position. *Figure 89*
 3. Image Marks (blips) will stop approximately at this tick mark moving forward.
- j. The *Stop* button is used to instantly stop film motion, or to cancel any currently running IMS function.
- k. The *Target Address* field is used to navigate the roll of film. *Figure 90*
1. To quickly advance to a particular image, type the Image Mark (blip) value in this field, then click the *Search* button.
 2. To scan a single document, type the blip value in this field, then click the *Scan* button.
 3. To scan a series of pages, type the range to be scanned (example: 4-257), then click the *Scan* button.
 4. To scan all images on the film, input an asteric (*) into the field, then click the *Scan* button.
 5. To scan images from a particular page to the end of the film, type the address-* (example: 28-*), then click the *Scan* button.
 6. To print a single document, type the blip value in this field, then click the *Print* button.
 7. To print a series of pages, type the range to be scanned (example: 4-257), then click the *Print* button.
 8. To print all images on the film, input an asteric (*) into the field, then click the *Print* button.
 9. To *Print* images from a particular page to the end of the film, type the address-* (example: 28-*), then click the *Print* button.
- l. The *Verify* check box can be used to ensure that an image(s) exist(s) and look correct before scanning. The ScanPro will move to the selected image, and the *Scan* button will turn yellow.

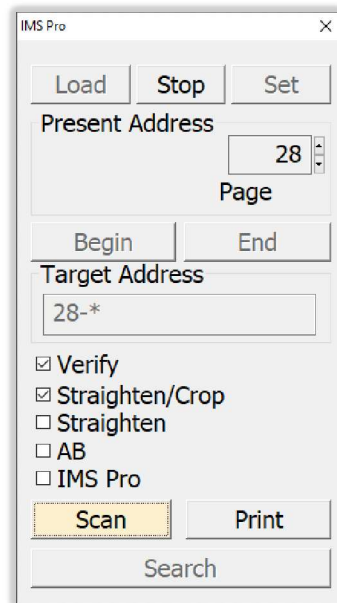


Figure 89

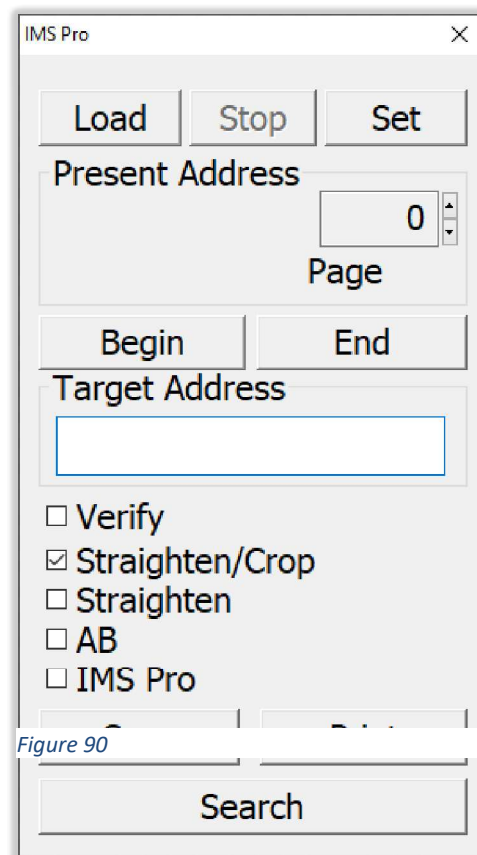


Figure 90

Click the *Scan* button to move to the next image.

Figure 91

- m. The *Straighten/Crop* check box enables/disables the auto-straighten and auto-cop function. If checked, the green capture box is ignored. If unchecked, the green capture box is used for capturing all scans. **NOTE:** The green capture box **will not** move to center an image within it. If the image stops outside this box, the portion outside the green box will not be captured.
- n. The *Straighten* check box enables/disables the auto-straighten function. If checked, the software will attempt to straighten the image, then the green capture box will be used for capturing the scans. If unchecked, the green capture box is used for capturing all scans. **NOTE:** The green capture box **will not** move to center an image within it. If the image stops outside this box, the portion outside the green box will not be captured.
- o. The *AB* check box enables/disables the auto-brightness function. If checked, the software will attempt to set the brightness and contrast for every scan. **NOTE:** This will dramatically slow down the scanning process. If unchecked, the brightness and contrast set for the first image will be used for the entire roll.
- p. The *IMS Pro* checkbox enables/disables additional features for scanning film. This requires an active SPA membership. If this box is checked, when the *Scan* button is selected the *IMS Pro* window will open. *Figure 92*

Figure 91

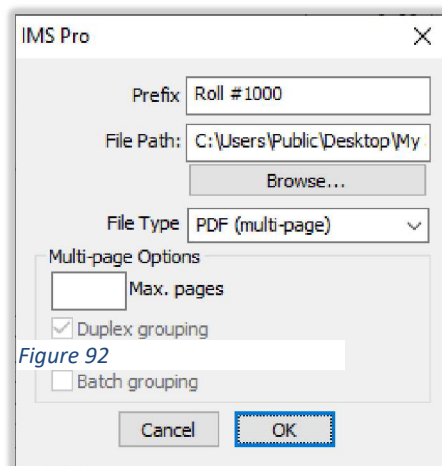


Figure 92

1. *Prefix* specifies the filename prefix of the saved scans.
2. *File Path* specifies the location where the scan will be saved. Enter this location by typing or by using the *Browse...* button to navigate to the desired folder.
3. *File Type* specifies the file format of the saved scans.
4. *Multi-Page Options* are only available when a multi-page file format is chosen.
 - i. *Max pages* specifies a maximum number of pages before a new file is started.
 - ii. *Duplex grouping* will be active if *IMS Pro* is configured for Duplex film. See “Section III.13 IMS Settings Window” for more information. This selection will make 2 page multi-page files with the front and back images in one file.

26. IMS Pro – Two Level Blips

Image Mark Sensing (IMS) Pro is only available on a ScanPro i9500 with an active ScanPro Advantage (SPA) membership license key. A more basic IMS is available on a ScanPro i9500 without an active SPA membership license key. IMS (Pro) searches and scans or prints from 16mm film using Image Marks (blips), not borders, to identify image locations on the film.

- a. Launch the software then choose the *Film Selection Wizard* preset for *2-Level Simplex*, or *2-Level Duplex*, depending on the film.
- b. Load the film, following the on-screen animation. Click the blue *Load* button at the bottom of the screen.
- c. Adjust *brightness* and/or *contrast* so that the edge of the film is visible.
- d. If the film is not centered in the image area, use the keyboard up or down arrow key to center it.
- e. When clicking on the *IMS Pro* button for the first time, the *Calibrate Straightness* window appears. *Figure 93*
 4. If the film is perfectly horizontal click *Accept*.
 5. If the film is not perfectly horizontal, click the *Calibrate* button. The cursor changes to a +. On the top edge of the film, click once on the left and once on the right. The corresponding red line will be used to straighten the sensor. *Figure 94*
 6. Repeat if necessary. Otherwise, click *Accept*.
- f. Click the *IMS Pro* button again to open the *IMS Pro* window. *Figure 95*
- g. The red IMS track will appear on the bottom of the image area if IMS has been calibrated for *Channel A*. See “Section III.13 IMS Settings Window” for more information. Click the *Load* button in the *IMS Pro* window. The film will advance past the first few images, then will back up to the first Image Mark (blip).
- h. Alternatively, if film has already been loaded, and the blip currently on screen is a known value, use the *Set* button to manually enter the *Image Counter* window. Type in the current mark value in the format *file.page (1.0)*, then click the *Set* button. *Figure 96*
- i. The red IMS track should run through the center of the blips. The small vertical tick mark on the

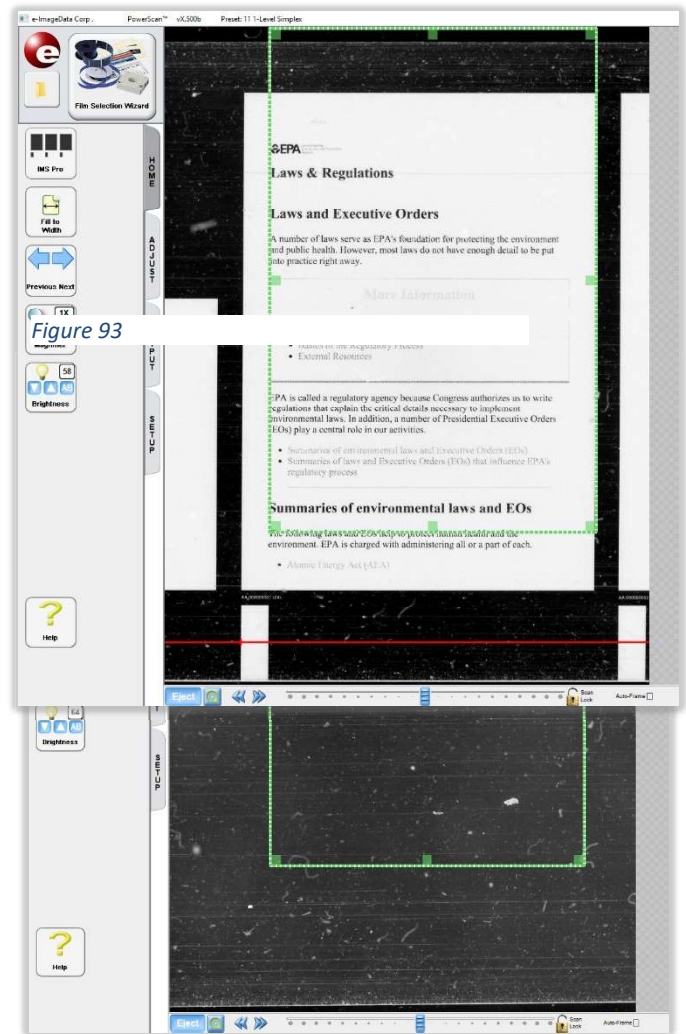


Figure 93

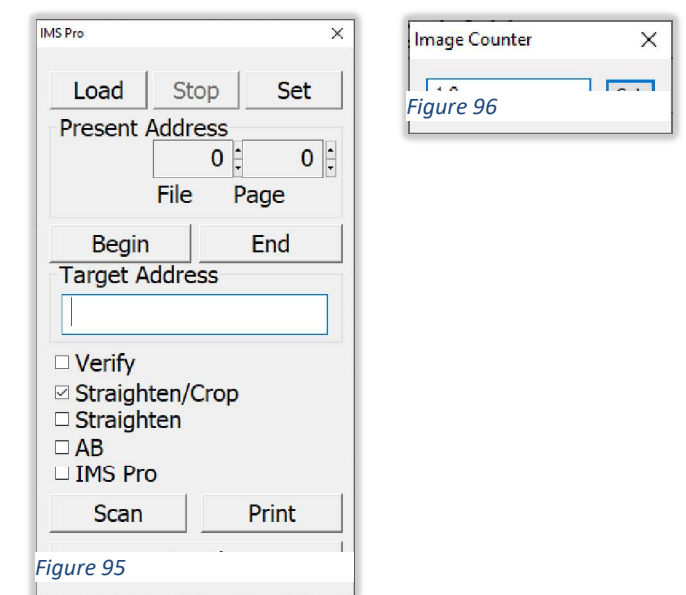


Figure 94

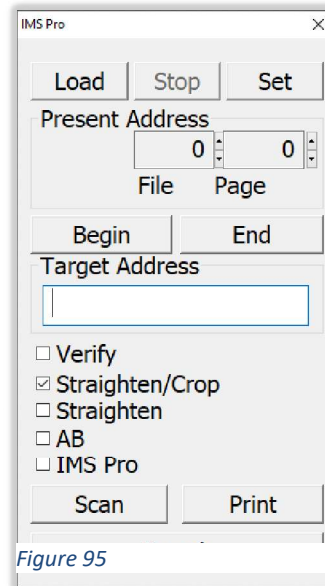


Figure 95

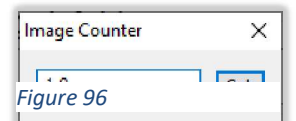


Figure 96

track is the approximate stopping position of the blip. This should be set so that the image is centered in the image area.

1. Before moving the track/tick mark, center the IMAGE on the screen horizontally. Center the FILM vertically on the screen.
 2. Press and hold the *CTRL* button on the keyboard and left click on the leading edge of the blip, approximately in the vertical center. The red track and the tick mark will move to this position. *Figure 97*
 3. Image Marks (blips) will stop approximately at this tick mark moving forward.
- j. The *Stop* button is used to instantly stop film motion, or to cancel any currently running IMS function.
- k. The *Target Address* field is used to navigate the roll of film. *Figure 98*
1. To quickly advance to a particular image, type the Image Mark (blip) value in this field in the format *file.page*, then click the *Search* button.
 2. To scan a single document, type the blip value in this field in the format *file.page*, then click the *Scan* button.
 3. To scan a series of pages, type the range to be scanned (example: *2.1-3.100*), then click the *Scan* button.
 4. To scan all images on the film, input an asteric.asteric (*.*) into the field, then click the *Scan* button.
 5. To scan images from a particular page to the end of the film, type the address-*. (example: *4.1-*.*)*, then click the *Scan* button.
 6. To print a single document, type the blip value in this field in the format *file.page*, then click the *Print* button.
 7. To print a series of pages, type the range to be scanned (example: *2.1-3.100*), then click the *Print* button.
 8. To print all images on the film, input an asteric.asteric (*.*) into the field, then click the *Print* button.

Figure 97

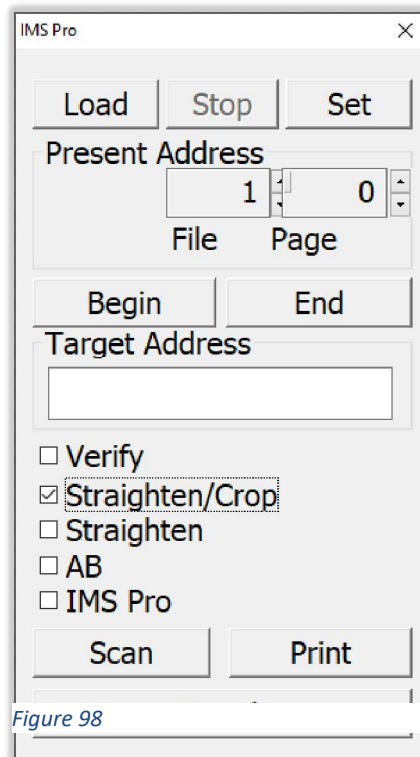


Figure 98

9. To print images from a particular page to the end of the film, type the address-*. * (example: 4.1-*. *), then click the *Print* button.
- l. The *Verify* check box can be used to ensure that an image(s) exist(s) and look correct before scanning. The ScanPro will move to the selected image, and the *Scan* button will turn yellow. Click the *Scan* button to move to the next image. *Figure 99*
- m. The *Straighten/Crop* check box enables/disables the auto-straighten and auto-cop function. If checked, the green capture box is ignored. If unchecked, the green capture box is used for capturing all scans. **NOTE:** The green capture box **will not** move to center an image within it. If the image stops outside this box, the portion outside the green box will not be captured.
- n. The *Straighten* check box enables/disables the auto-straighten function. If checked, the software will attempt to straighten the image, then the green capture box will be used for capturing the scans. If unchecked, the green capture box is used for capturing all scans. **NOTE:** The green capture box **will not** move to center an image within it. If the image stops outside this box, the portion outside the green box will not be captured.
- o. The *AB* check box enables/disables the auto-brightness function. If checked, the software will attempt to set the brightness and contrast for every scan. **NOTE:** This will dramatically slow down the scanning process. If unchecked, the brightness and contrast set for the first image will be used for the entire roll.

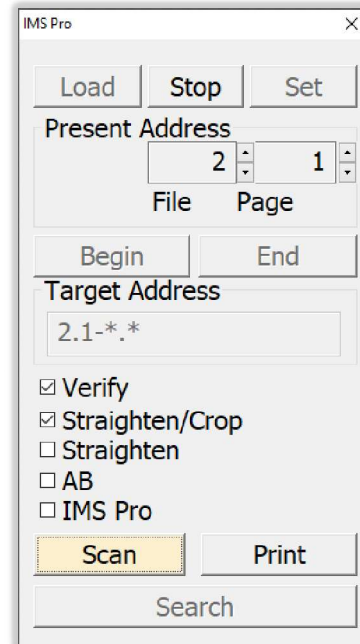


Figure 99

- p. The *IMS Pro* checkbox enables/disables additional features for scanning film. This requires an active SPA membership. If this box is checked, when the *Scan* button is selected the *IMS Pro* window will open. *Figure 100*
1. *Prefix* specifies the filename prefix of the saved scans.
 2. *File Path* specifies the location where the scan will be saved. Enter this location by typing or by using the *Browse...* button to navigate to the desired folder.
 3. *File Type* specifies the file format of the saved scans.
 4. *Multi-Page Options* are only available when a multi-page file format is chosen.
 - i. *Max pages* specifies a maximum number of pages before a new file is started.
 - ii. *Duplex grouping* will be active if *IMS Pro* is configured for Duplex film. See “Section III.13 IMS Settings Window” for more information. This selection will make 2 page multi-page files with the front and back images in one file.
 - iii. *File grouping* allows the creation of multi-page files based on the medium (*File*) sized blips on the film. If *max pages* is left blank, all pages with small (*page*) sized blips will be included in the file.

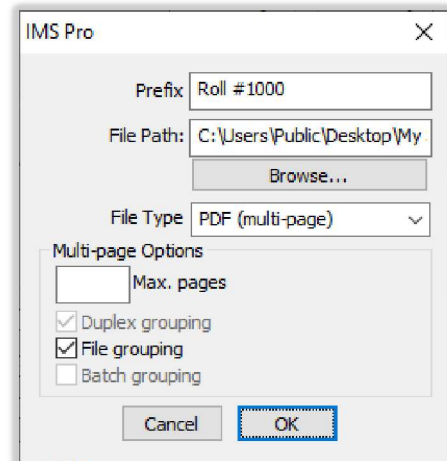


Figure 100

27. IMS Pro – Three Level Blips

Image Mark Sensing (IMS) Pro is only available on a ScanPro i9500 with an active ScanPro Advantage (SPA) membership license key. A more basic IMS is available on a ScanPro i9500 without an active SPA membership license key. IMS (Pro) searches and scans or prints from 16mm film using Image Marks (blips), not borders, to identify image locations on the film.

- a. Launch the software then choose the *Film Selection Wizard* preset for *3-Level Simplex*, or *3-Level Duplex*, depending on the film.
- b. Load the film, following the on-screen animation. Click the blue *Load* button at the bottom of the screen.
- c. Adjust *brightness* and/or *contrast* so that the edge of the film is visible.
- d. If the film is not centered in the image area, use the keyboard up or down arrow key to center it.
- e. When clicking on the *IMS Pro* button for the first time, the *Calibrate Straightness* window appears. *Figure 101*
7. If the film is perfectly horizontal click *Accept*.
8. If the film is not perfectly horizontal, click the *Calibrate* button. The cursor changes to a +. On the top edge of the film, click once on the left and once on the right. The corresponding red line will be used to straighten the sensor. *Figure 102*
9. Repeat if necessary. Otherwise, click *Accept*.
- f. Click the *IMS Pro* button again to open the *IMS Pro* window. *Figure 103*
- g. The red IMS track will appear on the bottom of the image area if IMS has been calibrated for *Channel A*. See “Section III.13 IMS Settings Window” for more information. Click the *Load* button in the *IMS Pro* window. The film will advance past the first few images, then will back up to the first Image Mark (blip).

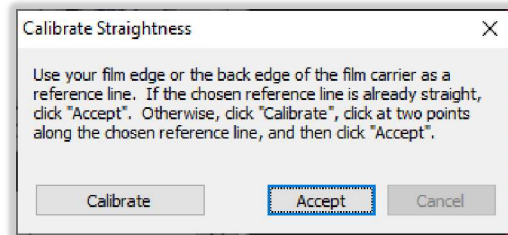


Figure 101

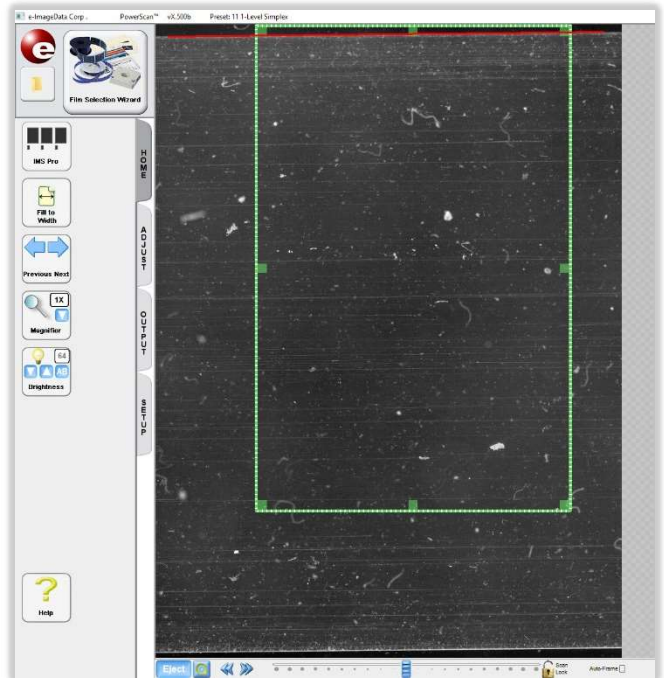


Figure 102

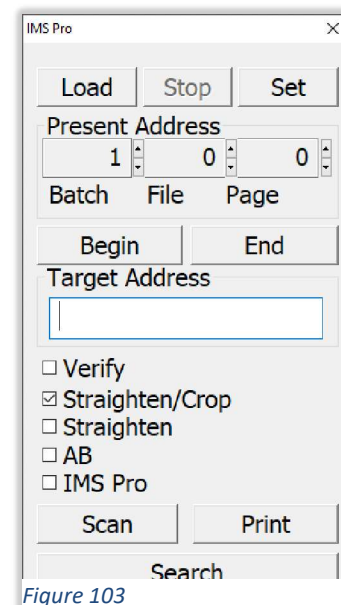


Figure 103

- h. Alternatively, if film has already been loaded, and the blip currently on screen is a known value, use the *Set* button to manually enter the *Image Counter* window. Type in the current mark value in the format *Batch.file.page (1.0.0)*, then click the *Set* button. *Figure 104*
- i. The red IMS track should run through the center of the blips. The small vertical tick mark on the track is the approximate stopping position of the blip. This should be set so that the image is centered in the image area.
1. Before moving the track/tick mark, center the IMAGE on the screen horizontally. Center the FILM vertically on the screen.
 2. Press and hold the *CTRL* button on the keyboard and left click on the leading edge of the blip, approximately in the vertical center. The red track and the tick mark will move to this position. *Figure 105*
 3. Image Marks (blips) will stop approximately at this tick mark moving forward.
- j. The *Stop* button is used to instantly stop film motion, or to cancel any currently running IMS function.
- k. The *Target Address* field is used to navigate the roll of film. *Figure 106*
1. To quickly advance to a particular image, type the Image Mark (blip) value in this field, then click the *Search* button.
 2. To scan a single document, type the blip value in this field in the format *Batch.File.page*, then click the *Scan* button.
 3. To scan a series of pages, type the range to be scanned (example: *1.1.1-3.1.10*), then click the *Scan* button.
 4. To scan all images on the film, input an asteric.asteric.asteric (*.*.*) into the field, then click the *Scan* button.
 5. To scan images from a particular page to the end of the film, type the address-*.*. (example: *1.2.10-*.*. **), then click the *Scan* button.
 6. To print a single document, type the blip value in this field in the format *Batch.file.page*, then click the *Print* button.

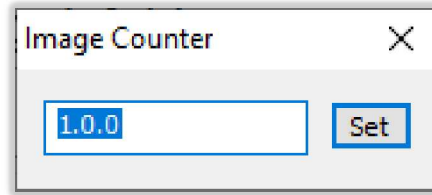


Figure 104

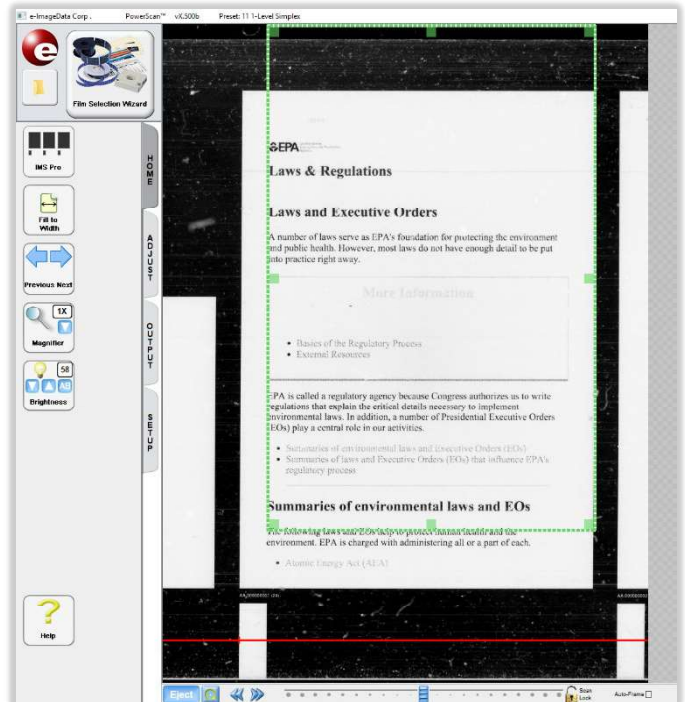


Figure 105

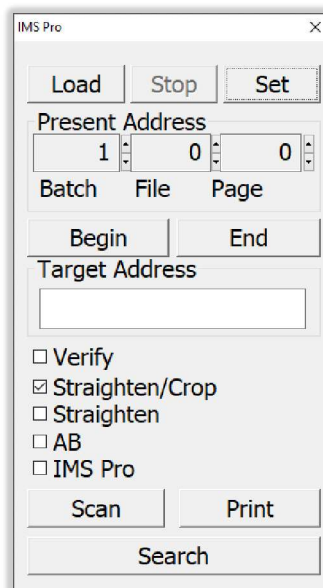


Figure 106

7. To print a series of pages, type the range to be scanned (example: *1.1.1-3.1.10*), then click the *Print* button.
 8. To print all images on the film, input an asteric.asteric.asteric (*.*.*) into the field, then click the *Print* button.
 9. To print images from a particular page to the end of the film, type the address-*.*. (example: *1.2.10-*.*.*)*, then click the *Print* button.
- i. The *Verify* check box can be used to ensure that an image(s) exist(s) and look correct before scanning. The ScanPro will move to the selected image, and the *Scan* button will turn yellow. Click the *Scan* button to move to the next image. *Figure 107*
 - m. The *Straighten/Crop* check box enables/disables the auto-straighten and auto-cop function. If checked, the green capture box is ignored. If unchecked, the green capture box is used for capturing all scans. **NOTE:** The green capture box **will not** move to center an image within it. If the image stops outside this box, the portion outside the green box will not be captured.
 - n. The *Straighten* check box enables/disables the auto-straighten function. If checked, the software will attempt to straighten the image, then the green capture box will be used for capturing the scans. If unchecked, the green capture box is used for capturing all scans. **NOTE:** The green capture box **will not** move to center an image within it. If the image stops outside this box, the portion outside the green box will not be captured.
 - o. The *AB* check box enables/disables the auto-brightness function. If checked, the software will attempt to set the brightness and contrast for every scan. **NOTE:** This will dramatically slow down the scanning process. If unchecked, the brightness and contrast set for the first image will be used for the entire roll.

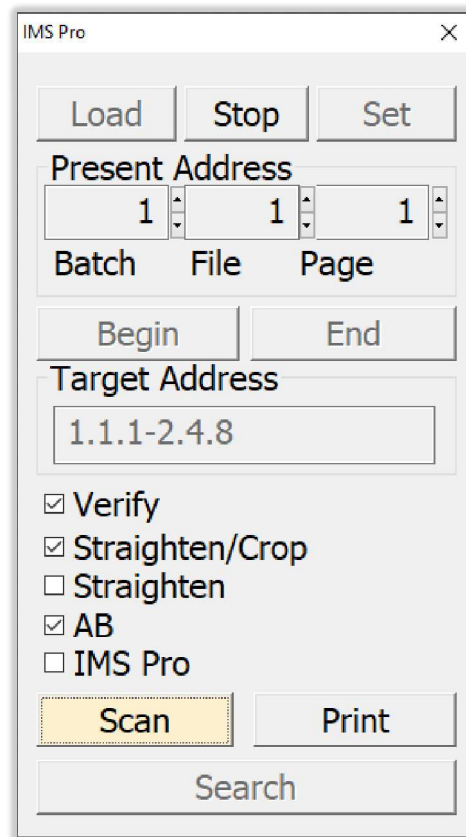


Figure 107

- p. The *IMS Pro* checkbox enables/disables additional features for scanning film. This requires an active SPA membership. If this box is checked, when the *Scan* button is selected the *IMS Pro* window will open. *Figure 108*
1. *Prefix* specifies the filename prefix of the saved scans.
 2. *File Path* specifies the location where the scan will be saved. Enter this location by typing or by using the *Browse...* button to navigate to the desired folder.
 3. *File Type* specifies the file format of the saved scans.
 4. *Multi-Page Options* are only available when a multi-page file format is chosen.
 - i. *Max pages* specifies a maximum number of pages before a new file is started.
 - ii. *Duplex grouping* will be active if *IMS Pro* is configured for Duplex film. See “Section III.13 IMS Settings Window” for more information. This selection will make 2 page multi-page files with the front and back images in one file.
 - iii. *File grouping* allows the creation of multi-page files based on the medium (*File*) sized blips on the film. If *max pages* is left blank, all pages with small (*page*) sized blips will be included in the file.
 - iv. *Batch Grouping* allows the creation of multi-page files based on the large (*Batch*) sized blips on the film. If *max pages* is left blank, all pages with small (*page*) and medium (*file*) sized blips will be included in the file.

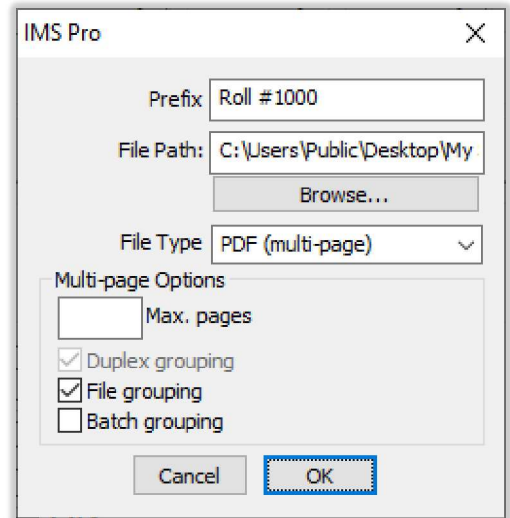


Figure 108

IV. Routine Care

There is no recommended scheduled maintenance for the ScanPro scanners. Periodically new software is released for the ScanPro. Sign up for automatic notifications or check the site (www.e-imagedata.com/scanpro-software) periodically for updated software.

Occasional cleaning should be done when visibly necessary.

To clean the glass:

- a. Pull the fiche carrier forward until the glass is about to open but is still closed.
- b. Use a lint free cloth and glass cleaner, apply a light amount of cleaner to the cloth.
- c. Then carefully wipe the dust and debris off the top of the glass.
- d. Pull the fiche carrier forward until the glass opens fully.
- e. If necessary, apply a small amount of cleaner to the lint free cloth and carefully remove any dust or debris from the inside surfaces of the glass.
- f. There may be some dust on the bottom of the glass. If this is the case, carefully move the ScanPro to the edge of the table.
- g. Pull the fiche carrier all the way to the open position.
- h. Using the lint free cloth, carefully wipe the bottom surface of the glass.

If the machine is dusty, furniture polish and a lint free cloth can be used to clean the plastic and metal surfaces.

V. Troubleshooting Tips

1. Scanner Not Found Errors

- a. Ensure that the scanner is connected to a fully operational USB 3.1 port on the computer.
- b. Ensure that Windows updates are current, and USB 3.1 drivers are up to date.
- c. Disconnect the USB cable from the back of the ScanPro, then re-seat it. Ensure that the cable is orientated correctly. The USB symbol on the cable should be facing the floor.
- d. Verify the correct driver loaded by checking the Imaging Devices in the Device Manager. The correct driver should be *e-ImageData Corp. ScanPro*. If a *USB3 Vision Device* driver loaded instead, the ScanPro will not work. This is usually caused by the user account control settings and/or anti-virus not being disabled when the software was installed (see *Best Practices* in Section III.1.b). If a Vision driver loaded instead of e-ImageData do this:
 1. Go to Device Manager.
 2. Delete the USB 3 Vision Device driver.
 3. Right click on the *USB 3.1 Host Controller* and choose un-install. Make sure the box for *uninstall drivers* is unchecked and click *OK*.
 4. Click the *scan for hardware changes* button on the top of the screen. If mouse control was lost during step 4, then restart the computer.
 5. The ScanPro should now appear under imaging devices.

2. Software Runs Slow

Occasionally there are settings on the computer that can cause the PowerScan software to have lag, and the image refresh rate to be choppy.

- a. Add the PowerScan xxxx folders to the exceptions list of the Anti-Virus program.
 1. *C:\ProgramData\PowerScan xxxx*
 2. [64-bit OS] - *C:\Program Files (x86)\PowerScan xxxx*
or [32-bit OS] - *C:\Program Files\PowerScan xxxx*
- b. Ensure that the computer has all the Windows Updates installed.
- c. For HP Computers, access the BIOS->OS POWER MANAGEMENT->IDLE POWER SAVINGS. Change this setting from *Extended* to *Normal*.
- d. Access the BIOS of the computer. Search for and disable ALL:
 1. C-States
 2. S-States
 3. Deep-Sleep-States

3. Film/Fiche Advance Movement Issues

Film will not advance or rewind

Check the connections on the Mini-Din cable(s) from back of Roll film/AUTO-Carrier to back of ScanPro base and see if it came loose or off one of the connectors. Placing a loop in the cable may help prevent the cable from hitting other cables, the wall, etc. and prevent future occurrences.

Film continues to move after control is stopped

Check to see if *Auto-Frame* box is checked on Roll Film Control. *Auto-Frame* requires vertical black borders to be visible on the screen. Adjust Zoom or un-check the box.

Film Movement not detected immediately when moving the glass carrier

- a. Ensure that you are using the most current software.
- b. Adjust the brightness and contrast. Low contrast can cause motion to not be detected.
- c. Press *CTRL + L* keys at the same time to make the image go live.

AUTO-Carrier chatters at either end of front/back motion

To operate correctly, the AUTO-Carrier must drive smoothly and consistently. If there is any chatter in the front to back motion, fiche motion will not operate correctly. Loosen the 2 mounting screws $\frac{1}{2}$ -1 full turn, then reset the ScanPro.