Scanner User's Guide
OpticFilm 135/135i

Trademarks

Liability

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Attention for recycling (For EU country only)

Protect your environment! This product should not be thrown into the household waste container. Please give it to the free collecting center in your community.

Table of Contents

Introduction

Welcome to the world of Plustek scanners – the ultimate in computer imaging. Your new scanner will improve the professionalism of your day-to-day computing tasks by allowing you to input images into your computer system.

Like all of our products, your new scanner is thoroughly tested and backed by our reputation for unsurpassed dependability and customer satisfaction.

Thank you for choosing us as your scanner supplier. We hope you will continue to turn to us for additional quality products as your computing needs and interests grow.

A Note about Icons

This guide uses the following icons to point out information that deserves special attention.

Danger	**Danger:** A procedure that must be followed carefully to prevent injury, or accidents.
Caution	**Caution:** Information that, if not followed, may result in data loss or damage to the product.
Attention	**Pay Special Attention:** Instructions that are important to remember and may prevent mistakes.

Safety Precautions

Before using this device, please read the following important information to eliminate or reduce any possibility of causing damage and personal injury.

1. Usage, the product is for indoor use in dry locations. Moisture condensation may occur inside this device and cause malfunction at these conditions:

    - when this device is moved directly from a cold to a warm location;

    - after a cold room is heated;

    - when this device is placed in a damp room.

    To avoid moisture condensation, you are recommended to follow the procedure:

    i. Seal this device in a plastic bag for it to adapt to room conditions.

    ii. Wait for 1-2 hours before removing this device from the bag.

2. Do use the power adapter and USB cable provided with the scanner. Use of other power adapters and cables may lead to malfunction.

3. Keep the space around the AC adapter clear in case you need to quickly unplug the AC adapter during emergencies.

4. Damaged wire could cause fire or electrical shock. Keep the power cord straight and without being twisted, bended, or scraped.

5. Unplug this device if you don't need to use for a certain period of time, such as, during night or long weekend, to avoid any risks of causing fire.

6. Do not attempt to disassemble the scanner. There is danger of an electrical shock and opening your scanner will void your warranty.

7. Be sure not to bump or knock the scanner as it is fragile and could break.

8. Before installing the device drivers, please disconnect all other imaging devices (other scanners, printers, digital cameras, web cameras) from the PC.

9. Save the Setup/Application USB stick. You may need to reinstall the driver and software in the future.

10. Please make sure your hands are clean before handling slides and negatives. If there is dust on your film material, please clean it by blowing it off or wiping with non-abrasive cloth.

11. Please keep your slides and negatives in a cool, dry place out of direct sunlight. Handling with care as improper storage and handling can lead to deterioration and ultimately affect your scan results.

Maintenance

Caution	To keep your scanner working smoothly, take a moment to review the following maintenance tips.

- Avoid using the scanner in a dusty environment. When it is not in use, keep the scanner covered. Dust particles and other foreign objects may damage the unit.

- Do not attempt to disassemble the scanner. There is danger of an electrical shock and opening your scanner will void your warranty.

- Do not subject the scanner to excessive vibration. It may damage the internal components.

- Your scanner operates best in temperatures between 10° C to 40° C (50° F to 104° F).

Product Overview

Box Contents[1]
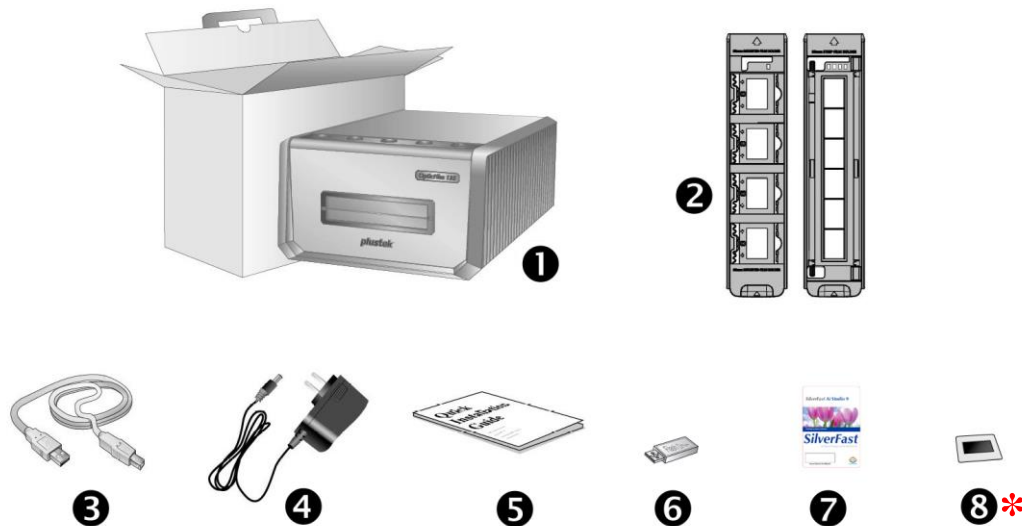
1. Scanner

2. Mounted Film Holder and Filmstrip Holder

    A. For scanning 35mm mounted films (max. 4)

    B. For scanning 35mm filmstrip (max. 6 frames)

3. USB Cable

4. Power Adapter

5. Quick Guide

6. Setup / Application USB stick

7. Activation card

＊8. 35 mm IT-8 Target (35 mm IT-8 Target is not included in all scanner models)

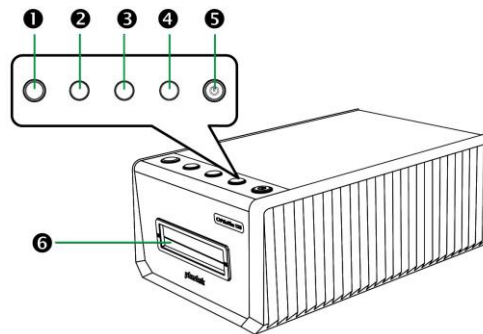|		
Attention	You may find the scanner hardware serial number on the activation card, please keep the card in a safe place.	

[1] Save the box and packing materials in case you need to transport this scanner in the future.

Box contents may change at any time without prior notice.

Scanner Overview

1. **Eject Button (with indicator light)**

   Press this button to eject the currently inserted film holder.

2. **Positive Button** *Available for Plustek QuickScan Plus only

   Press this button to scan positive source material with the currently defined settings.

3. **Negative Button** *Available for Plustek QuickScan Plus only

   Press this button to scan negative source material with the currently defined settings.

4. **Custom Button** *Available for Plustek QuickScan Plus only

   Press this button to perform a custom scan with the currently defined settings.

5. **Power Saving Button (with indicator light)**

   Press the button to wake the scanner up from sleep mode. Press and hold the button for 2 seconds to put the scanner into sleep mode.

6. **Front Film Holder Slot**

   Insert the film holder into the scanner through the dust cover.
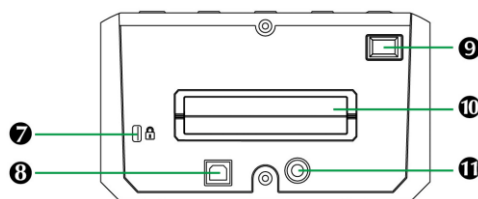
7. **Kensington Security Slot**

   Used for attaching lock-and-cable apparatuses to prevent device theft.

8. **USB Port**

    It connects the scanner to a USB port on your computer by the included USB cable.

9. **Power switch**

   Use this to turn the scanner ON or OFF.

10. **Rear Film Holder Slot**

    Please leave about 15 cm in the back of the scanner to allow the film holder to go through.

11. **Power Receptor**

    It connects the scanner to a standard AC power outlet by the included power adapter.

Before Installing the Scanner

Connecting the Scanner to Your Computer
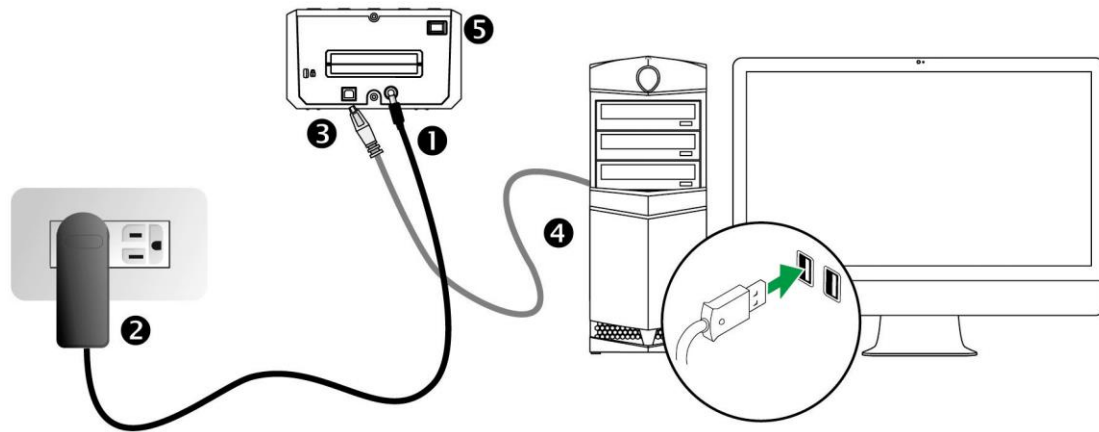
1. Plug the power adapter into the scanner's power receptor.

2. Plug the other end of the power adapter into a standard AC power outlet.

3. Plug the square end of the included USB cable to the USB port at the rear of the scanner.

4. Plug the rectangular end of the USB cable to the USB port on the back of your computer.

5. Switch the scanner power on.

LED Indicator

The Power Saving button LED and Eject button LED indicate different scanner status.

Eject button LED	Power Saving button LED	Status
Off	Blue	The scanner is turned on and operating normally, no film holder has been inserted.
Blue	Blue	The film holder has been inserted and the scanner is ready to scan.
Blue	Blinking Blue	The film holder is being scanned.
Orange	Blue	The film holder has been ejected and can be removed, or the film holder cannot be inserted because there is no USB connection.
Off	Orange	The scanner is in sleep mode.
Off	Off	The scanner is off, either because the power is not turned on, or because the AC adapter is not properly plugged into an AC power outlet.

Power Save

To save power consumption, the scanner light source always automatically turns itself off after the scanning process is finished. The scanner will enter the sleep mode after it is idle for a few minutes. Simply press any button on the scanner and the scanner will return to the normal status. You can adjust the idle time to set when the scanner will enter the sleep mode through the QuickScan Plus application.
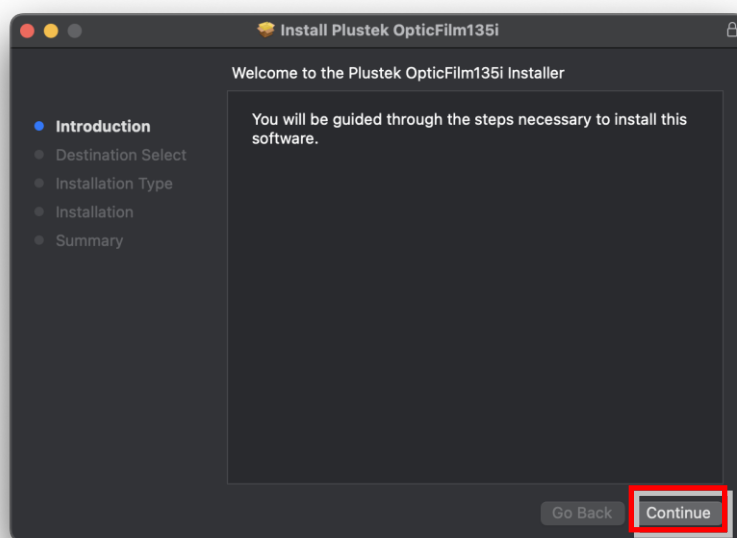
Installing the Scanner

Please follow the step-by-step procedures described below to install the USB scanner.

Or you may find the latest driver on our official website www.plustek.com -> Support & Download -> Drivers and Downloads
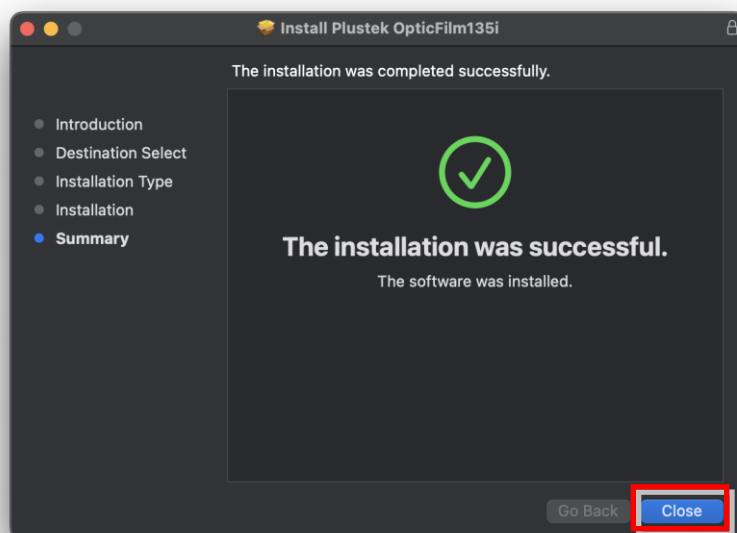
1. Insert the Setup / Application USB stick into your computer.
2. Install the scanner driver by the following path:
   Mac OS X: **OPTICFILM** ＞ **Mac** ＞ **Plustek OpticFilm 135i** ＞ **Setup.dmg**
   Windows OS: **OPTICFILM** ＞ **Windows** ＞ **Plustek OpticFilm 135i** ＞ **Setup.exe**

3. Follow the on-screen instructions to complete the installation.

Film Holders

2 film holders are included in the package. They guarantee correct scanning results.

Attention	♦ The scanner automatically detects the type of film holder you have inserted and will automatically define the crop areas according to the film holder. ♦ These 2 film holders can be used for both positive and negative source material, you just have to select the responding button to scan.

Using 35mm Mounted Film Holder

Insert mounted film into slots with emulsion (non-glossy) side down.

There are arrows and illustrations on the frame of each slot. Please follow the illustrations to insert the mounted film.
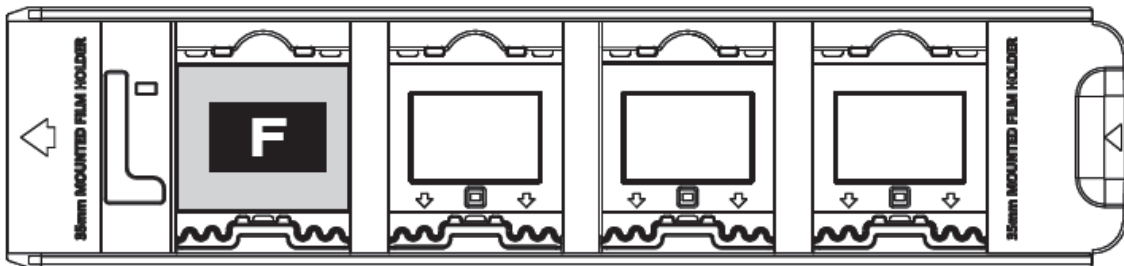
Using 35mm Strip Film Holder

Open the film holder and place the filmstrip in the film holder with the emulsion (non-glossy) side down, then close the film holder cover. Always align the film towards the direction of insertion. The direction of insertion is indicated by an arrow.
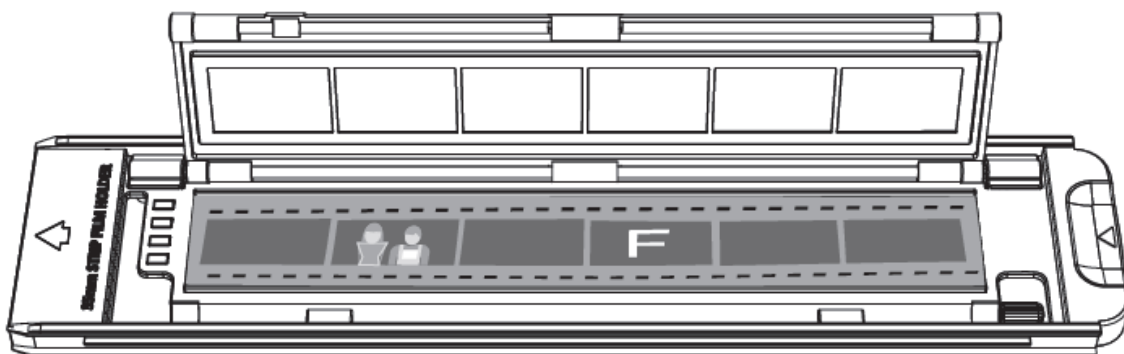
Insert the Film Holder

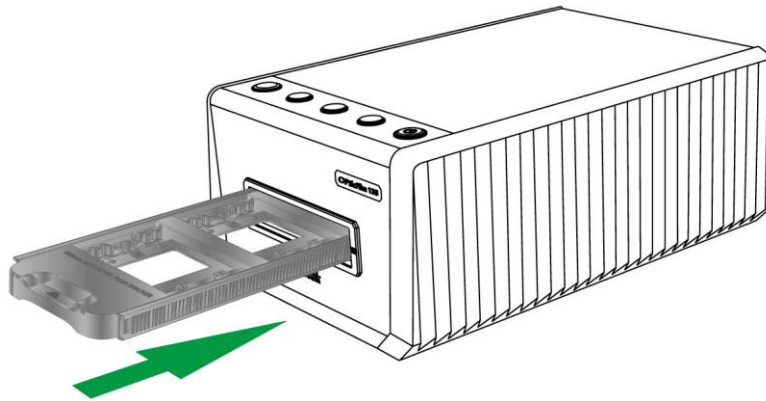Insert the film holder into the scanner through the Front Film Holder Slot until it is automatically pulled in by the scanner. The scanner will not pull in the film holder if the USB cable is disconnected.

Please allow about 35 cm in front of the scanner to insert and remove the film holder.

Attention	• The film holder should be able to be inserted into the scanner smoothly. Do not push the film holder hard. • On the top side of the film holder you can see '35 mm Mounted Film Holder' or '35 mm Strip Film Holder'. Always keep this side up for correct scan results.
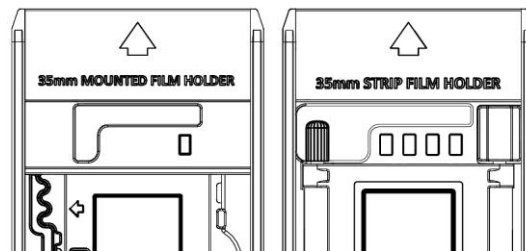
Scan with QuickScan Plus Application

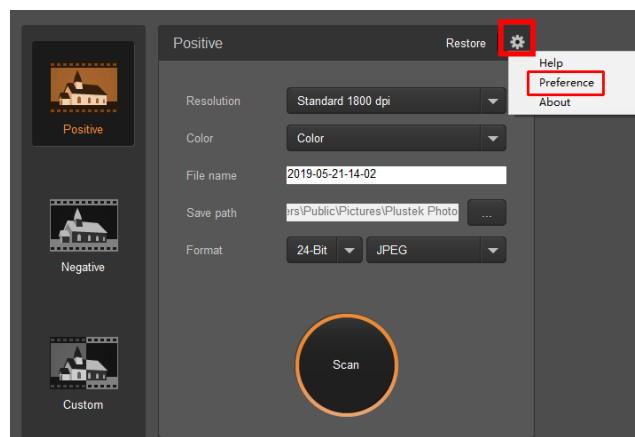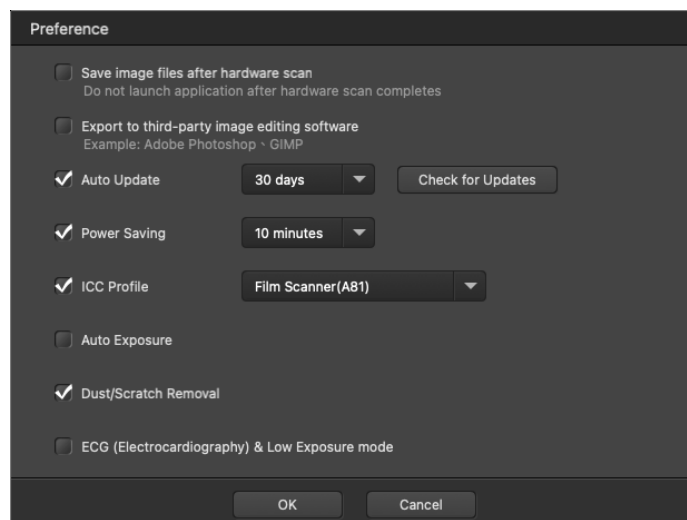Launch QuickScan Plus using the QuickScan Plus shortcut on your Desktop. Adjust the scan settings. Please refer to the QuickScan Plus on-line help for more information about available scan settings.
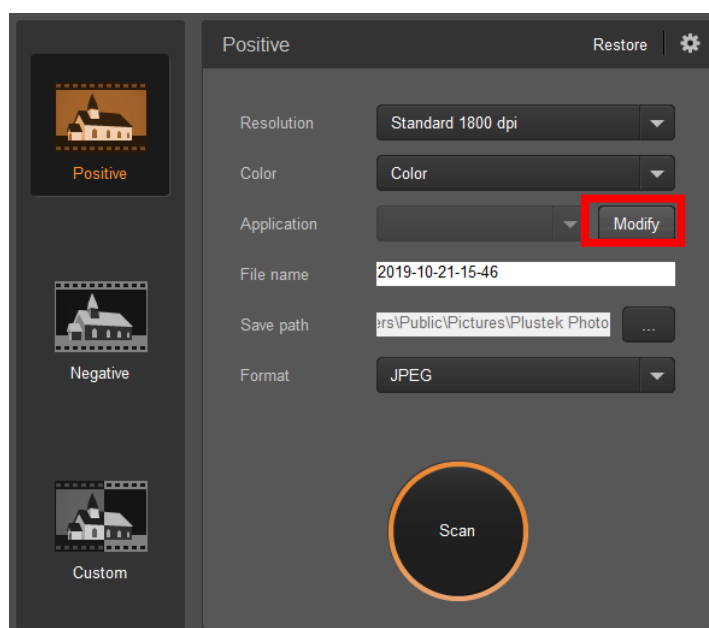

Preference Settings

Click on ![gear] button and select **Preference** to open the **Preference** settings dialog.

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- **Save image files after hardware scan**: Activate this checkbox if you do not want the QuickScan Plus program to launch after scanning images.

- **Export to third-party image editing software**: Activate this checkbox to export the scanned images to third-party image editing software for further editing. The scanned images will be opened directly on third-party image editing software.

  Note: The negative film scanned images will be exported to third-party image editing software without any image processing.

Attention	If you activate this checkbox, the main window will appear as following:
	Click the **Modify** button to add desired applications, for example: Photoshop, GIMP. You may add up to 5 applications.
	• **App Name**: Enter the application name.
	• **App Location**: Click on the ⟨...⟩ button to browse to the desired program folder and select the executable file (*.exe) of the desired application.
	• **Command Line (Optional)**: It is recommended that you leave this field blank if you will not use or are unsure of the command line.
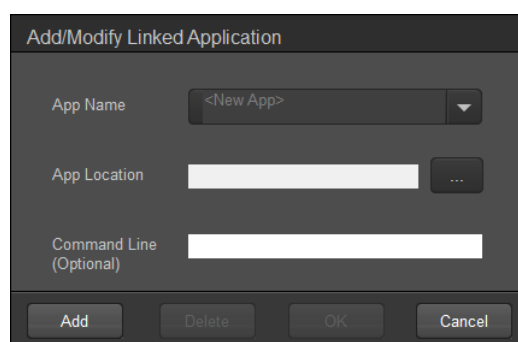
- **Auto Update**: Activate this checkbox and select a value from the drop-down list to set how often this program should automatically check for updates. Click the **Check for Updates** button to check if there is any update.

- **Power Saving**: Activate this checkbox and select a value from the drop-down list to set when the scanner will enter power saving mode. Simply press on any of the scanner 's physical buttons to wake it.

- **ICC Profile:** Activate this checkbox and select a profile from the drop-down list to set device output color standard.

- **Auto Exposure:** Activate this checkbox to perform auto exposure.

- **Remove Scratch/ Dust:** Activate this checkbox to remove scratch/dust. This function is only for the infrared built-in model.

- **ECG (Electrocardiography) & Low Exposure mode:** Activate this checkbox to scan ECG (Electrocardiography) and low exposure film.

The Scan Screen
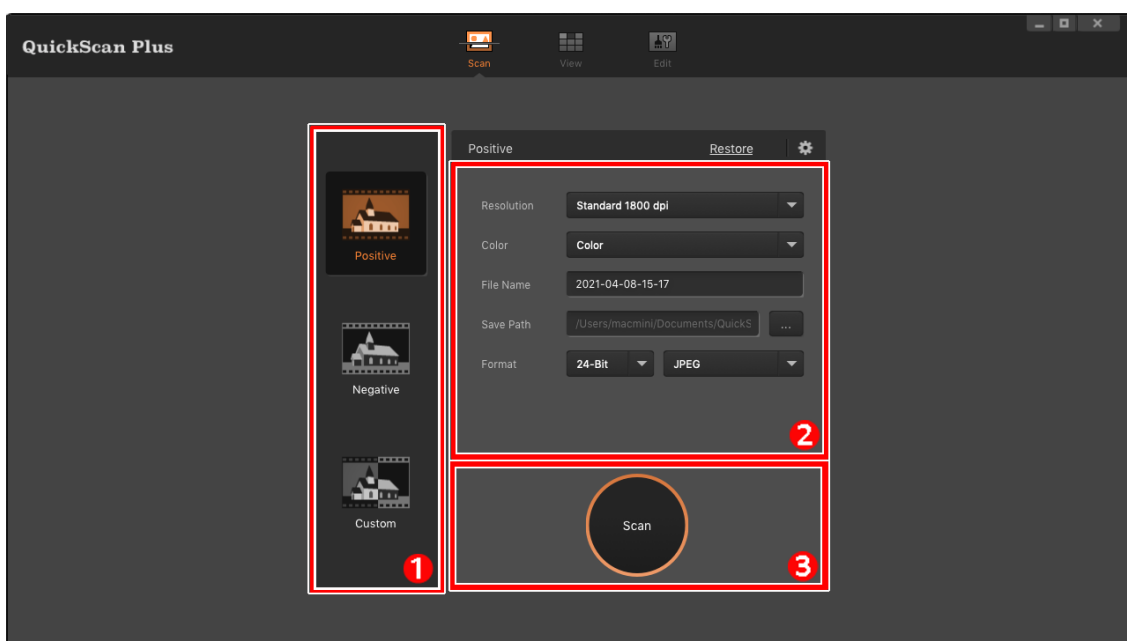
The **Scan** screen is where you set your scanning parameters. These scanning parameters will also be used when you initiate a scan using the physical buttons on your scanner.

- **Scan mode**: Selected by clicking on the respective button on the left side, you can choose between **Positive**, **Negative** and **Custom**. Basically this allows you to create 3 scan profiles; one for positives, one for negatives and one for either positives or negatives.

- **Resolution**: Select a desired resolution from the drop-down list. The higher the resolution, the more detailed the scan and the resulting file will be.

| Resolution	Windows & Mac
7200 dpi*	Approx. 9000 x 6200 dots
3600 dpi	Approx. 4500 x 3100 dots
2400 dpi	Approx. 3000 x 2000 dots
1800 dpi	Approx. 2250 x 1500 dots
1200 dpi	Approx. 1500 x 1000 dots
600 dpi	Approx. 750 x 500 dots
* 7200 dpi is only available for Windows 64-bit operating system.	

- **Color**: Select a desired color mode from the drop-down list.

- **File name**: Enter the desired file name into the field. The default uses your computer's date and time.

- **Save path**: Click on the **Browse** button [...] and use the dialog to select the folder where you wish to store your scanned images. For example, the default saving path in Windows 7 is **Users** > **Public** > **Public Pictures** > **Plustek Photo**.

- **Format**: Select the desired bit rate and file format you wish to use from the drop-down lists. The higher the bit rate, the more detailed the scan and the larger the resulting file will be. Available format options are: **JPEG**, **TIFF**, **PNG**, **Windows Bitmap**.

- **Scan**: Insert your film tray and click on the **Scan** button when you are ready to scan.

After the scan is completed, the **View** screen will be shown. Click on the **Save** button, your images are already saved and can be found in the folder you set under **Save path** on the **Scan** screen.
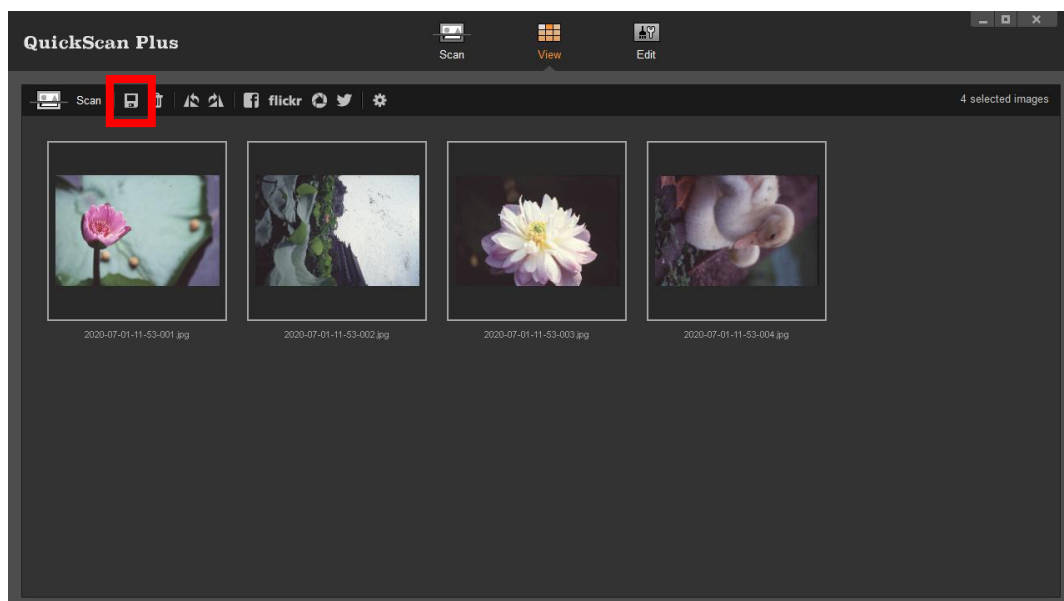
The Edit Screen

You may select one or multiple images to delete, rotate or share at the same time. Selected images will be highlighted with a gray rectangle around the images. Simply click an image to remove a picture from your selection. Click on the **Edit** button above the frames to switch to the **Edit** screen to apply various filter effects and make more detailed adjustments to your images.
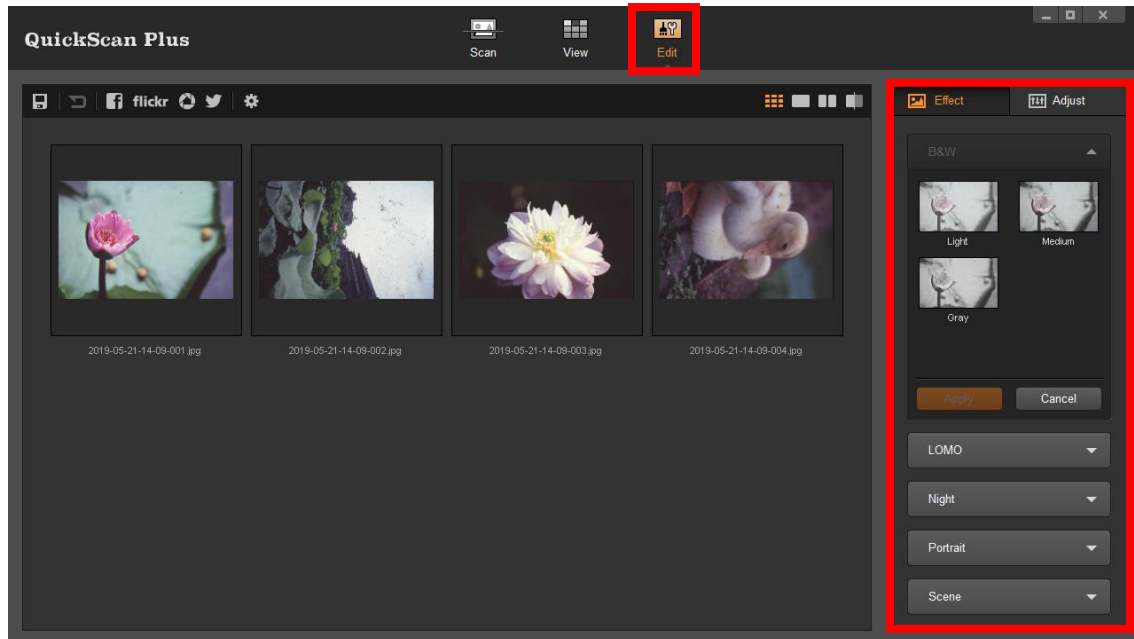
Eject the Film Holder

Press the **Eject** button to eject the currently inserted film holder.
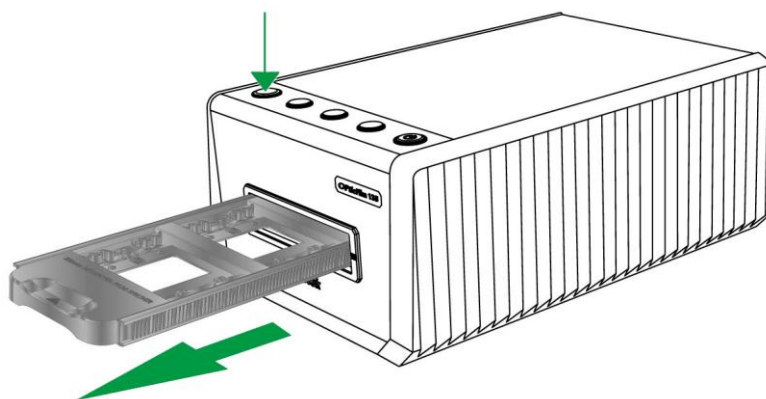
SilverFast Software

Your scanner comes with the advanced and feature rich scanning application SilverFast, it's an optional bundled software for you to install on your system. You may get familiar first with your OF 135i, then choose to install the SilverFast software.

<table>
<tr>
<td style="background-color:yellow">Attention</td>
<td>

It takes about 10 mins to install SilverFast software.
You have to create and login with a MySilverFast account.
Please make sure there is internet connection while you're installing SilverFast software.

</td>
</tr>
</table>

Request for SilverFast License

1. Visit the website **www.silverfast.com/activation-plustek** and follow the instructions. You will need your scanner 15-digit hardware serial number.

*The webpage content may subject to change without prior notifications.

❶ Select your scanner model.

❷ Enter the scanner serial number.

❸ Click the [**Check**] button.

2. Enter the necessary information to create a MySilverFast account. You have to login to the SilverFast software with this MySilverFast account later.

*The webpage content may subject to change without prior notifications.

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3. If the registration is completed, you will receive an email to inform you that the license has already been added to your MySilverFast account.

Installing SilverFast Software

You can install SilverFast from your MySilverFast portal (page 21) or from USB stick:

1. Insert the Setup / Application USB stick into your computer.
2. Install the **SilverFast** software by the following path:
   Mac OS X: **OPTICFILM** ＞ **Mac** ＞ **SilverFast** ＞ **SF-Installer.dmg**
   Windows OS: **OPTICFILM** ＞ **Windows** ＞ **SilverFast** ＞ **SF-Installer.exe**
3. Follow the on-screen instructions.
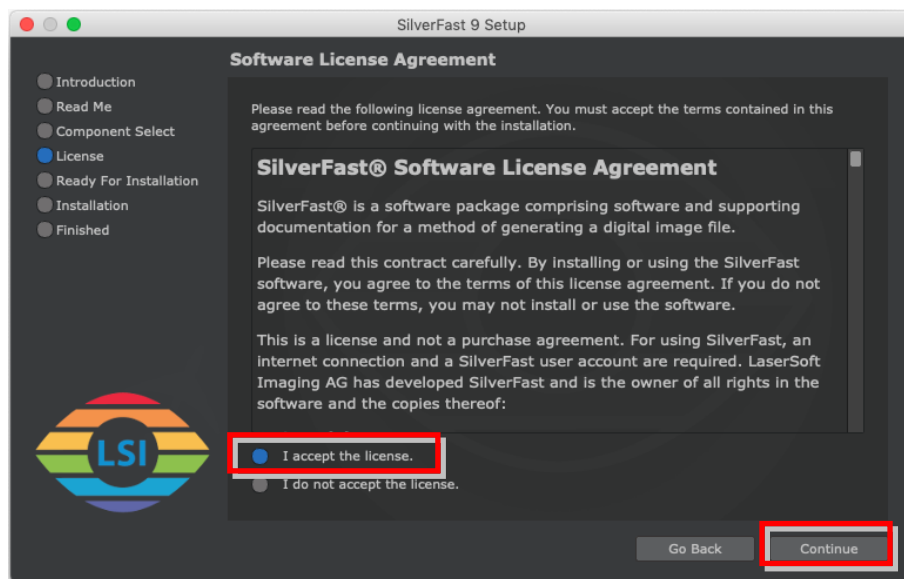
4. After the installation finishes, click on [Done] to exit the installer.
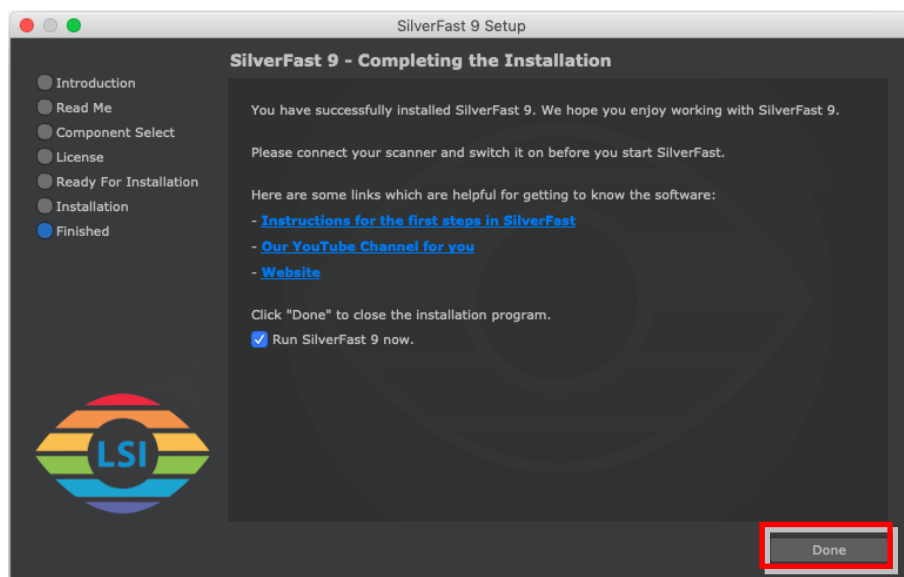
You may download the SilverFast software from your MySilverFast account.

1. Log in to your **MySilverFast portal** and click [**Manage licenses**]
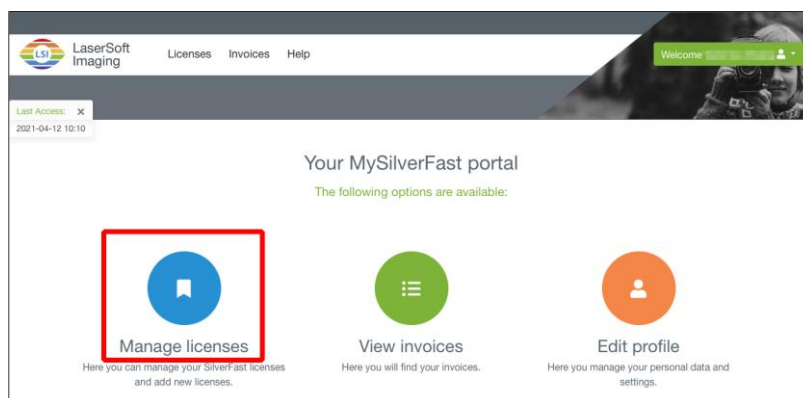
2. Click [**Download**] button to download the SilverFast software.
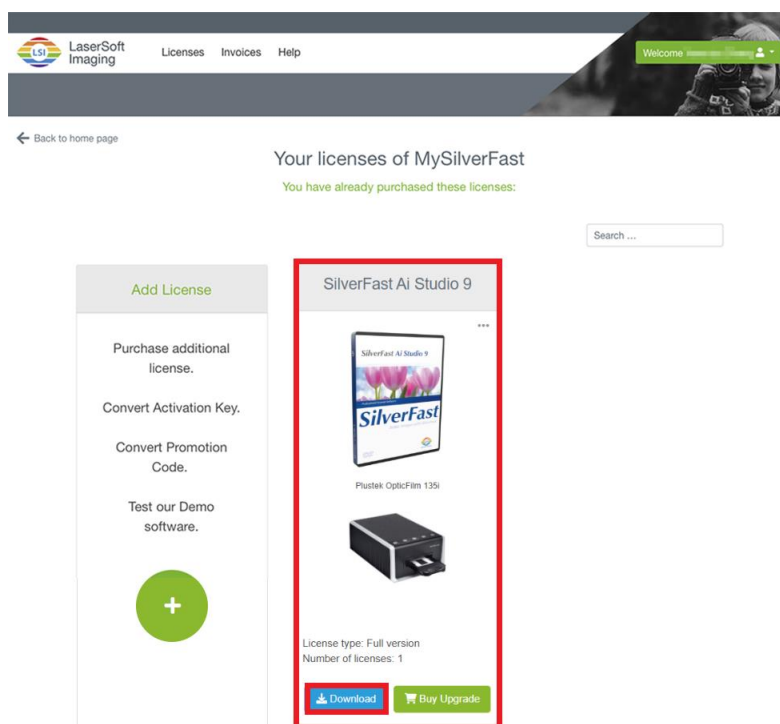
3. When the download is completed, run the installer and follow the on-screen instructions. After the installation finishes, click on [Done] to exit the installer.

Scan with the SilverFast application

Launch the SilverFast launcher using the SilverFast shortcut on the Desktop. Login to the SilverFast software with your MySilverFast account, then click on [**Start**] to launch the program.

Attention	• Please make sure there is internet connection while login to the SilverFast software. • After log in to your MySilverFast account, you can use the software offline for three months, and you need to log in again every three months.
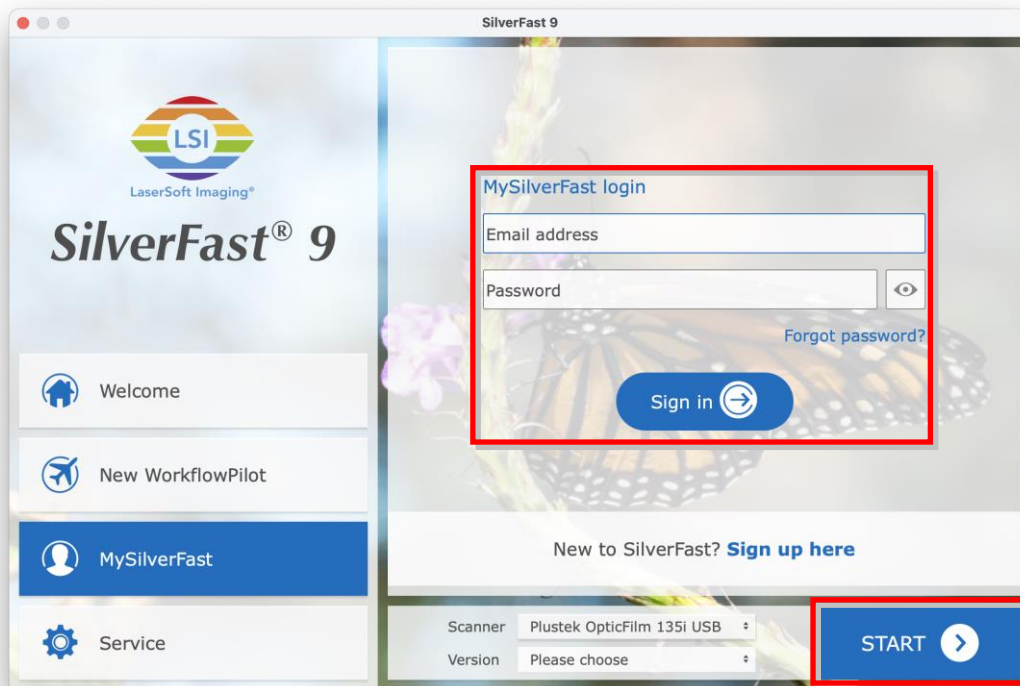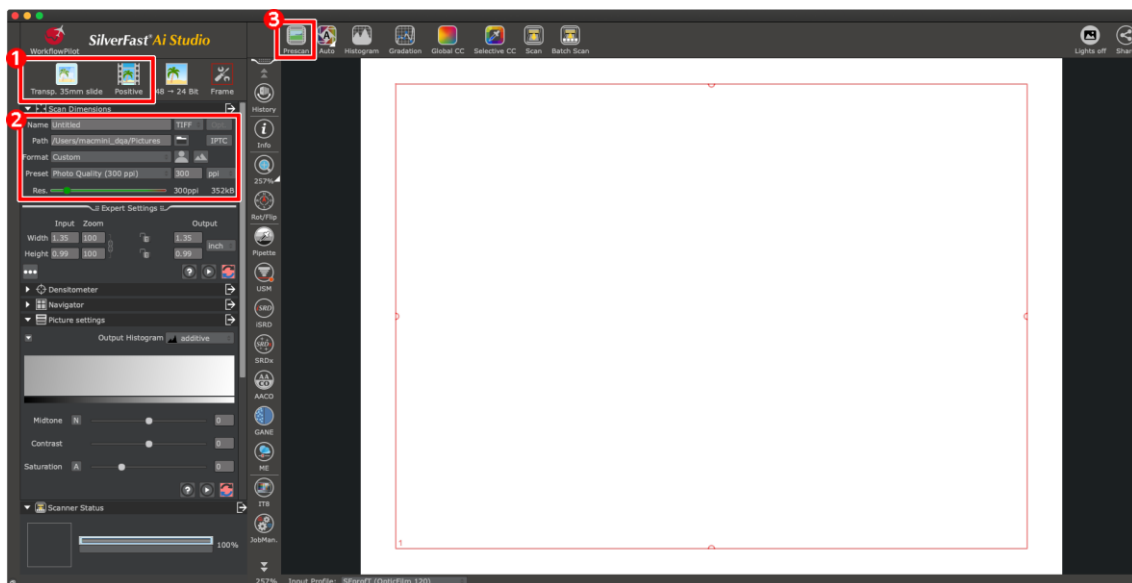
❶ Select film type.

❷ Adjust the scan settings, ex.: resolutions.

❸ Click the [**Prescan**] button. You may adjust scan settings with the prescan image, if you're satisfied with the image, click the [**Scan**] button.

Please refer to the SilverFast manual for more information about available scan settings.

Appendix A: Troubleshooting

Scanner Connection

The first step to take when troubleshooting connection problems with your scanner is to check all physical connections.

<table>
<tr>
<td>Attention</td>
<td>

Manually Installing the Software

For Windows OS: If you are facing difficulty in installing the scanner driver, please try manually installing the software.

1. Please open [Start] > [Control Panel] > [System] > [Hardware] > [Device Manager]. In the [Device Manager] window, right-click on this scanner under [Other devices] and select [Update Driver Software] from the pop-up menu.

2. Click [Browse my computer for driver software] in the window that appears, and click the [Browse] button. In the [Browse For Folder] window, select the folder that contains this scanner's driver and click the [OK] button to return to the previous screen. Click the [Next] button and click [Install this driver software anyway] if the [Windows Security] window appears.

3. Browse your USB stick and manually run the [Setup.exe] file from OPTICFILM ˃ Windows ˃ Plustek OpticFilm 135i. Click on the [Yes] button if the [User Account Control] dialog pops up. Follow the on-screen instructions to install all software that your new USB scanner requires.

</td>
</tr>
</table>
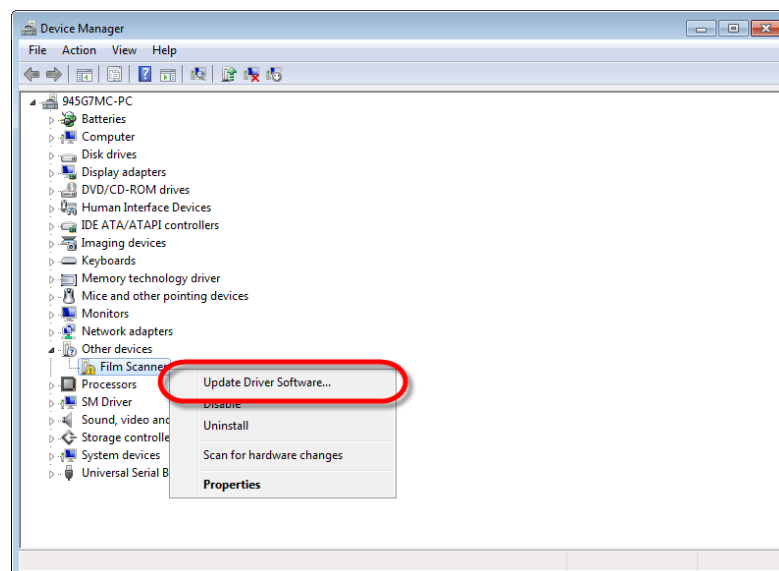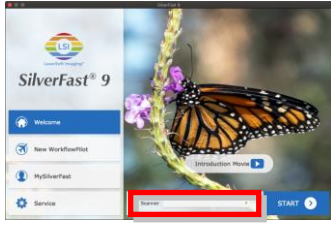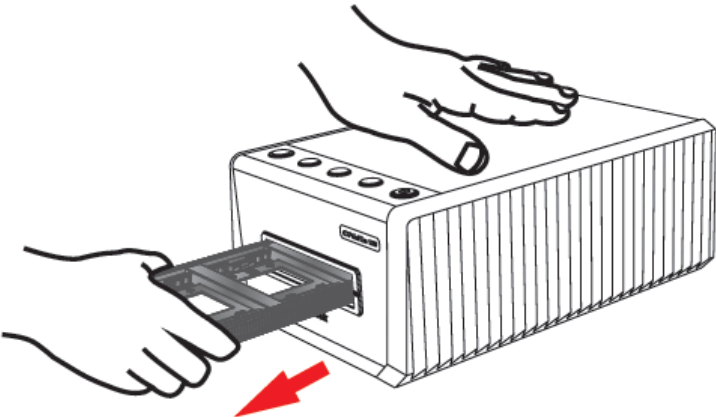
Scanning Problems

Most problems are easily solved, and some of the most common questions and their recommended solutions are listed below.

	Symptom	Cause & Solution
1.	The Scanner source is blank	• **The scanner is not detected by the OS.** Please refer to the solutions of the following "**The scanner cannot be found**".
2.	The scanner cannot be found	• **The USB cables are not connected properly** Make sure that the cables are connected tightly and to the proper port. • **The USB cable might be too long** Please use the USB cable that comes with your scanner. • **The scanner's power cord is not connected properly** Make sure that the AC adapter is connected to an outlet. If the scanner is connected to a Surge Protector, make sure that the Surge Protector is turned on. • **Windows didn't detect the scanner** 1) Please open [Start] > [Control Panel] > [System] > [Hardware] > [Device Manager]. 2) Please check if your scanner is properly listed under [Imaging Devices]. If it is not listed there or the device icon has an exclamation mark, please refer to "**Manually Installing the Software**" to install the device drivers.
3.	The scanned film appears abnormal	• **The scanner or the surface it is placed on was bumped into during the scanning process** Please press the Eject button on your scanner to eject the film holder, then reinsert the film holder. Please scan the film again and make sure the scanner or the surface it is placed on is not bumped into.

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4.	The film holder is stuck inside the scanner	• **The scanner's power or USB cable got disconnected during the scan or some other error cause the scan to fail while the scanner was scanning** Disconnect and reconnect the power and USB cables to the scanner. The scanner will attempt to eject any inserted film holder automatically when turned on. If the film holder is not ejected automatically, please eject the film holder by manually pulling it out from the front.
5.	The film holder is automatically ejected	• **You pressed a button to bring the scanner out of sleep mode or you just connected the USB cable after accidently disconnecting it** The scanner will eject any inserted film holder when coming out of sleep mode or when connection with a computer has been established. This behavior is normal.
6.	The film holder is not pulled into the scanner, and the Eject button LED is Orange	• **The scanner and computer are not connected via USB cable** Please make sure the scanner and your computer are connected via USB cable. The scanner will not pull in the film holder if the USB cable is disconnected. • **The scanner installation is not complete** Please complete the scanner installation.
7.	The scanner scans very slowly	• **You are running other applications in the background** Close all the other applications that are running in the background. • **You are scanning at a high resolution (DPI)** Reduce the resolution.

8.	There is a grinding or rattling noise at the beginning of each scan	• **The scanner engages the gears and it initializes itself before scanning** This noise is normal to the operation of the scanner.

FAQ

1. How to open the scan images in third-party image editing software?

Please activate **Export to third-party image editing software** option in **Preference** dialog.
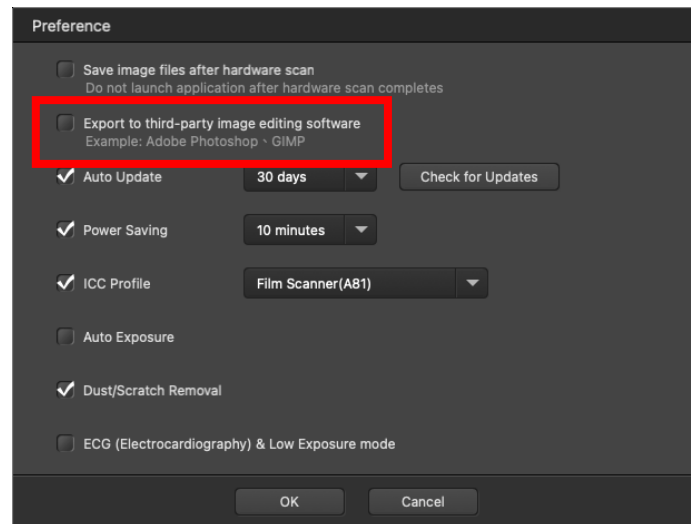
And configure the **Application** settings in the main window.
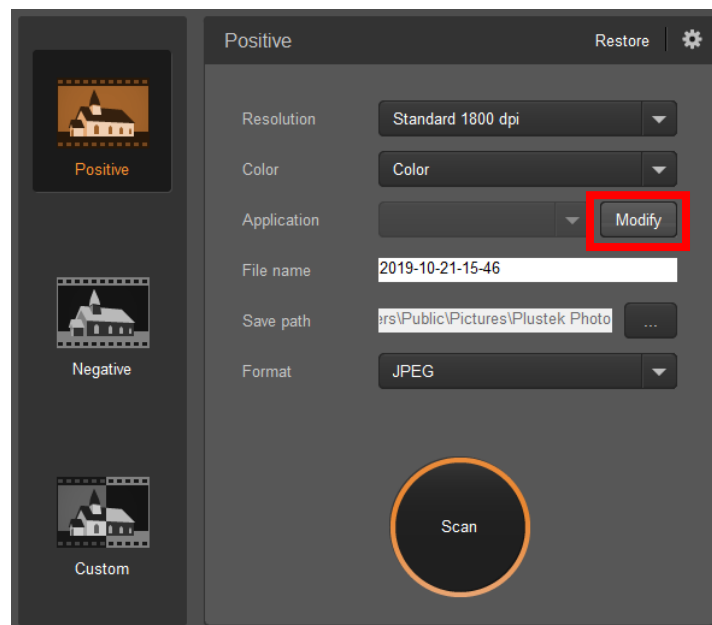
2. How to select non consecutive images on View screen?

Selected images will be highlighted with a gray rectangle around the images. You may click on one image, hold down the **Command** (Mac) or **Ctrl** (Windows) key and click one or more other images to deselect.

3. How to reset the modified images to the original status?

Just click on the **Reset** button to reset the selected images to their original state.
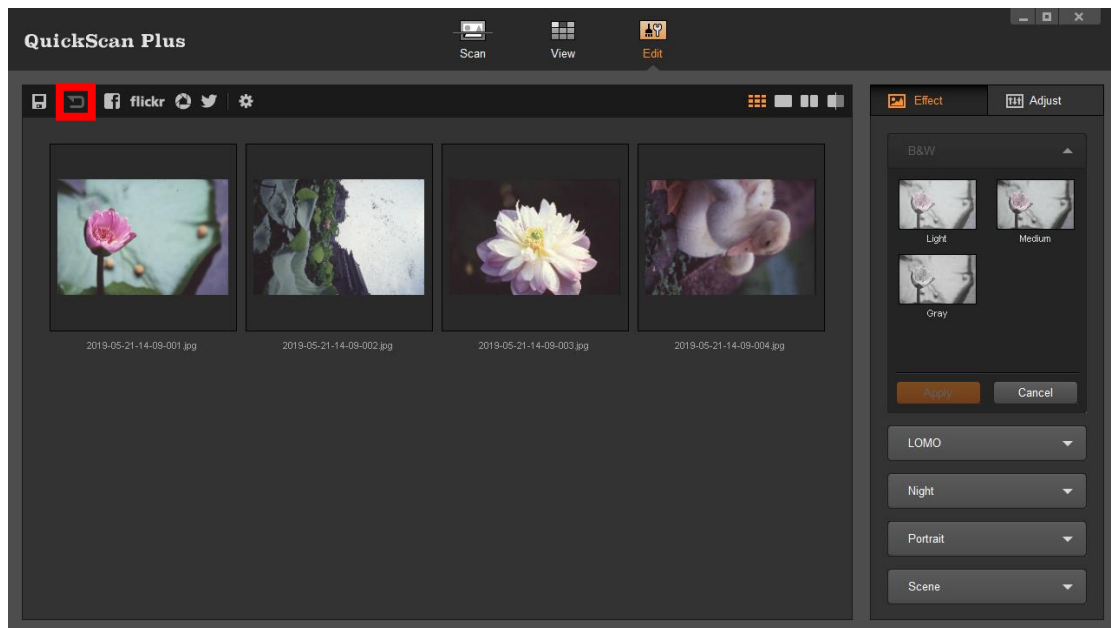
4. Why the scanner buttons are not functioned?

Please make sure the scanner is not in power saving mode, and the QuickScan Plus program is executed.

5. How to adjust the cropping areas?

You may select **Custom** scan mode to adjust the cropping areas if necessary.
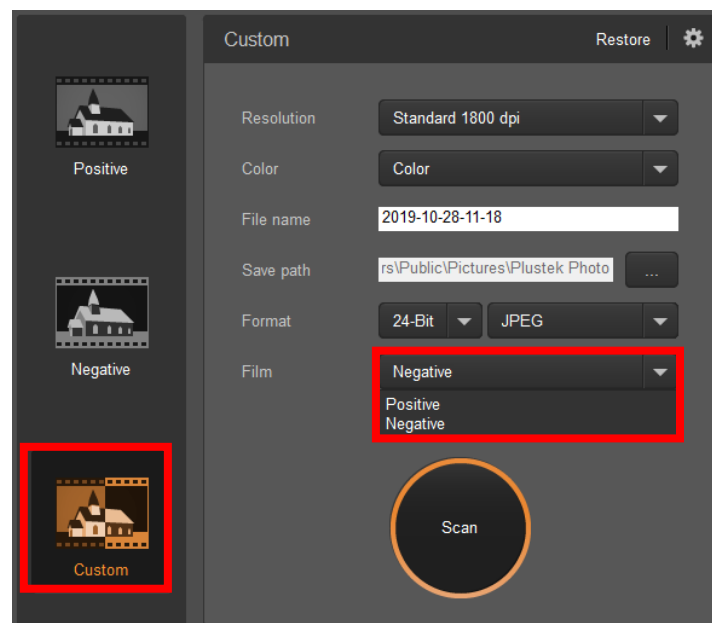
Appendix B: Specifications[2]

	OpticFilm 135i	OpticFilm 135
Image Sensor	CCD	
Light Source	LED	
Hardware Resolution	7200 dpi	3600 dpi
Scan Modes	Color: 48-bit input, 24/48-bit output Grayscale: 16-bit input, 8/16-bit output	
Dynamic Range	3.4	
Infrared	Built-in	N/A
Action Button	Eject button, Scan buttons x 3 (Positive, Negative, Custom)	
Scanning Speed	Approx. 52 seconds for maximum scanning area color at 600 dpi (IR enabled) Approx. 360 seconds for maximum scanning area color at 3600 dpi (IR enabled) Remark: Approx. 25 minutes for maximum scanning area at maximum resolution: 7200dpi (IR enabled)	Approx. 40 seconds for maximum scanning area color at 600 dpi Approx. 205 seconds for maximum scanning area color at 3600 dpi
Net Weight	1.56 Kgs (3.49 Lbs)	
Scanning Area (W x L)	35 mm x 226 mm (1.37" x 8.9") Remark: 35 mm film strip and slide	
Dimensions (D x W x H)	175 mm x 259.2 mm x 104.3 mm (6.9" x 10.2" x 4.1")	
OS	Windows 7 (64bit) / 8 (64bit) / 10 (64bit) / 11 Mac OS X 10.10.x/ 10.11.x/ 10.12.x/ 10.13.x/ 10.14.x/ 10.15.x/ 11.x/ 12.x/ 13.x/ 14.x/ 15.x	
Power Supply	24 Vdc/ 0.75A	
Interface	USB 2.0	
Hardware Requirements	Windows PC & Mac Intel i5 CPU or faster 4 GB RAM main memory (8 GB RAM recommended) 20 GB free space on hard disk drive CD/ DVD drive or internet connection	

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[2] Hardware specifications may change at any time without prior notice.

Appendix C: Customer Service and Warranty

If you encounter problems with your scanner, please review the installation instructions and troubleshooting suggestions contained in this guide.

Visit our website www.plustek.com for more customer service information. To avoid delays, please have the following information available:

- **Scanner name and model number**
- **Scanner serial number (located at rear of scanner near port connectors)**
- **A detailed description of the problem**
- **Your computer manufacturer and its model number**
- **The speed of your CPU**
- **Your current operating system and BIOS (optional)**
- **Name of software package(s), version or release number and manufacturer of the software**
- **Other USB devices installed**

Service & Support Information (For EU country only)

Where appropriate, the period of availability of spare parts and the possibilities of upgrading products information. Please ask local distributors and suppliers for spare parts information and product upgrade information.

Information requested by relevant Implementing Measure. Please ask local distributors and suppliers for the related information of Implementing Measure test report.

Do not dispose anything of products before you ask local distributors and suppliers to get correct information for decreases of environmental impact with right methods and procedures.

If you want to disposals the product and/or an accessory, please ask local distributors and suppliers to get the contact information of nearest disposal manufactures.

If you have any maintenance inquiry, please ask local distributors and suppliers to get the contact information of nearest maintenance center in order to extend the product usage life time.

If you want to maintain and clearance the product, please ask local distributors and suppliers to get the right information of nearest stores.

Statement of Limited Warranty

This Statement of Limited Warranty applies only to the options you originally purchase for your use, and not for resale, from an authorized reseller.

The manufacturer warranty includes all parts and labor, and is not valid without the receipt of original purchase. To obtain warranty service, you may contact the authorized dealer or distributor, or visit our website to check out the available service information, or send a request via E-mail for further help.

If you transfer this product to another user, warranty service is available to that user for the remainder of the warranty period. You should give your proof of purchase and this statement to that user.

We warrant that this machine will be in good working order and will conform to its functional descriptions in the documentation provided. Upon provision of proof of purchase, replacement parts assume the remaining warranty of the parts they replace.

Before presenting this product for warranty service, you must remove all programs, data and removable storage media. Products returned without guides and software will be replaced without guides and software.

This Limited Warranty service does not provide for carry-in exchange when the problem results from accident, disaster, vandalism, misuse, abuse, unsuitable environment, program modification, another machine or non-vendor modification for this product.

If this product is an optional feature, this Limited Warranty applies only when the feature is used in a machine for which it was designed.

If you have any questions about your Limited Warranty, contact the approved retailer from whom you bought the product or the manufacturer.

THIS LIMITED WARRANTY REPLACES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABLITY AND FITNESS FOR A PARTICULAR PURPOSE. HOWEVER, SOME LAWS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES. IF THESE LAWS APPLY, THEN ALL EXPRESS AND IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO OTHER WARRANTIES APPLY AFTER THAT PERIOD.

Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply.

Under no circumstances are we liable for any of the following:

- Third party claims against you for losses or damages.

- Loss of, or damage to, your records or data; or

- Economic consequential damages (including lost profits or savings) or incidental damages, even if we are informed of their possibility.

Some jurisdictions do not allow the exclusion or limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This Limited Warranty gives you specific legal rights, and you may also have other rights that vary from jurisdiction to jurisdiction.

To obtain the warranty service, you may:

- contact the authorized dealer or distributor.

- visit our website to check out the up-to-date service.

- send a request via E-mail for further help.

FCC Radio Frequency Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular television reception (which can be determined by turning the equipment off and on), the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment to an outlet on a circuit different from that which the receiver is connected.

- Shielded interconnect cables and shielded power cord which are supplied with this equipment must be employed with this equipment to ensure compliance with the pertinent RF emission limits governing this device.

- Consult the dealer or an experienced radio/TV technician for help if the conditions persist.

- Changes or modifications not expressly approved by the manufacturer or authorized service center could void the user's authority to operate this equipment.