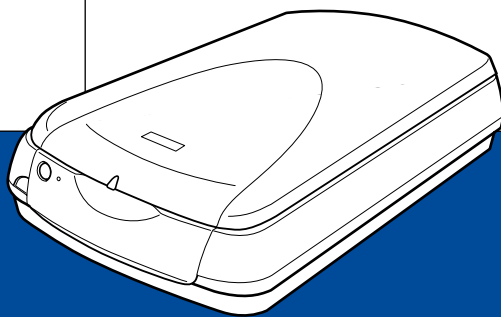


EPSON

Color Image Scanner



EPSON PERFECTION™ 2450 PHOTO

Startup Guide

4014432-00
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Where to Find Information


Startup Guide (this document)

Describes how to use the scanner and perform basic scanning operations.

Setup Sheet

Describes how to set up the scanner. It explains how to install and configure the EPSON scanner software and other applications. It also covers how to open the *Online Reference Guide* and contains important safety instructions. Read this manual first to use your scanner.

Online Reference Guide

Provides basic information about scanning and detailed reference on settings and functions of EPSON TWAIN and other EPSON scanner utility software. It also covers use of the  Start button. Information is also available on maintenance, troubleshooting tips, technical specifications, and customer support.

Information on EPSON Scanner Software (online help)

Provides you with detailed information on EPSON TWAIN. You can access the online help by clicking the Help button in the EPSON TWAIN dialog box.

Information on other Software

Refer to the respective documentation for the information.

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EPSON PERFECTION™ 2450 PHOTO

Color Image Scanner

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Startup Guide

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Getting to Know Your Scanner

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Features

The EPSON Perfection 2450 Photo scanner offers the following features:

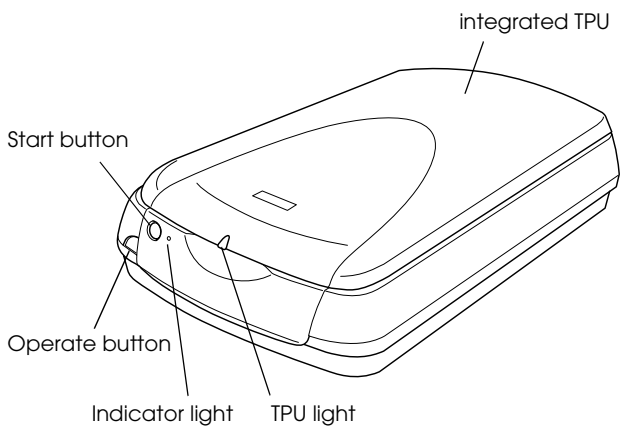
- ❑ Optical resolution of 2400 dots per inch (dpi) for main scanning, and 4800 dpi with micro step for sub scanning (16-bit input, 16-bit output).
- ❑ The EPSON Perfection 2450 Photo has the Film Adapter (hereafter, the Film Adapter is called the “integrated TPU”), which enables slides and film to be scanned. The integrated TPU has also the same function as the document cover.
- ❑ Start Button control for one-step scanning.

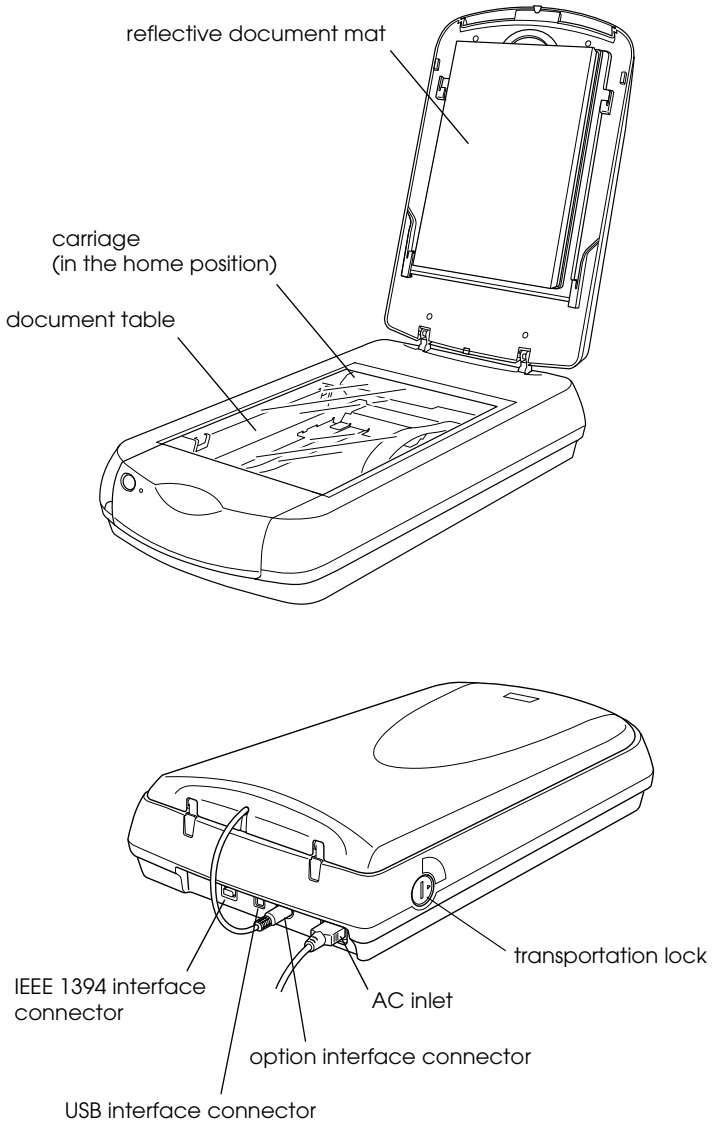
The ↻ Start button can automatically start a scanning sequence by invoking EPSON Smart Panel and EPSON TWAIN, scanning the document, launching an application, and importing the scanned image to the application.

- ❑ Full color or grayscale scanning. Capture your images with up to 281,500 billion colors, or up to 65,536 shades of gray.
- ❑ EPSON TWAIN lets you take full advantage of your scanner's advanced features.
- ❑ EPSON TWAIN's Unsharp Mask option automatically sharpens the image to provide crisp detail.
- ❑ EPSON TWAIN's De-screening option automatically removes unwanted moiré patterns from scanned images for higher quality output.
- ❑ Auto Area Segmentation (AAS) allows you to separate text from photographs on a page so that grayscale images are clearer and text recognition is more accurate.

- ❑ Text Enhancement Technology (TET) enhances text recognition accuracy for optical character recognition (OCR) scanning.

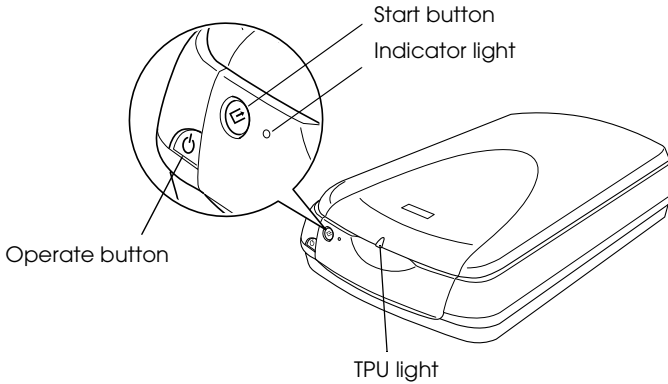
Scanner Parts





Lights and Buttons



The scanner has two indicator lights and two buttons.



Lights

| Light | Color | Indicator Status | Meaning |
|-----------|--------|------------------|---|
| Indicator | Green | On | Ready to scan images. |
| | | Flashing slowly | Initializing or busy scanning. |
| | Red | Flashing rapidly | An error has occurred. See "Troubleshooting" in your Online Reference Guide for more information. |
| | (None) | Off | The scanner is turned off. |
| TPU | Blue | On | The integrated TPU is turned on. |
| | (None) | Off | The integrated TPU is turned off. |

Buttons

| Button | Function |
|--|--|
|  Operate | Turns the scanner on and off. |
|  Start | Scans and sends the captured image to an assigned application in a single step. Before using this feature, make sure you have installed EPSON TWAIN and EPSON Smart Panel. See your Online Reference Guide for more details. |

Scanning Basics

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Scanning Procedure

For reflective documents

You need to perform the following procedure to scan the reflective documents on your scanner using a TWAIN-compliant application. Details are described below.

1. Place a document on the scanner.
2. Start a TWAIN-compliant application.
3. In the application, open EPSON TWAIN 5 using a command such as Acquire.
4. EPSON TWAIN automatically previews the images, and recognizes the document source and type. Images are automatically optimized and scanned.
5. Save the scanned images.

This following sections describe each of these steps in details.

For transparent materials

This scanner is suitable for scanning of slides and film. You need to perform the following procedure to scan the transparent materials using the integrated TPU. Details are described below.

1. Remove the reflective document mat from the integrated TPU.
2. Load slides or film into the film holder and set it with the integrated TPU.
3. Start a TWAIN-compliant application.

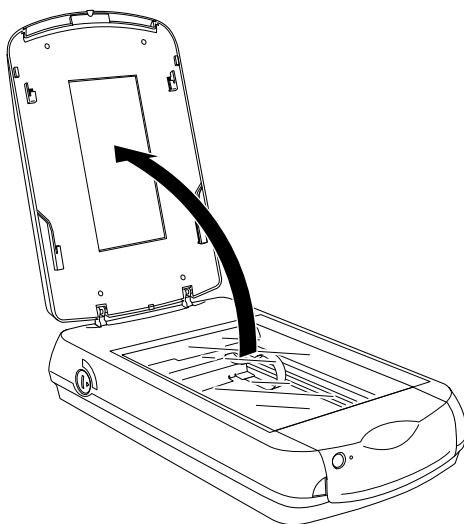
4. In the application, open EPSON TWAIN 5 using a command such as Acquire.
5. EPSON TWAIN automatically previews the images, and recognizes the document source and type. Images are automatically optimized and scanned.
6. Save the scanned images.

Note:

For more details, see your Online Reference Guide.

Placing a Document on the Scanner

1. Open the integrated TPU.



Note:

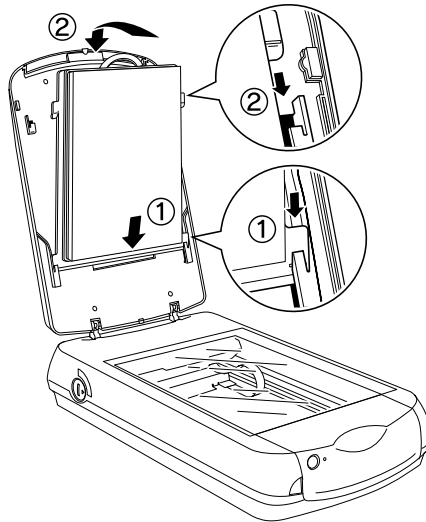
Do not place heavy objects on the glass of the document table. Also, do not press the glass of the document table with too much force.

2. If the reflective document mat is not attached, you need to attach it. Hold the top of the document mat and slide it down gently along the integrated TPU.

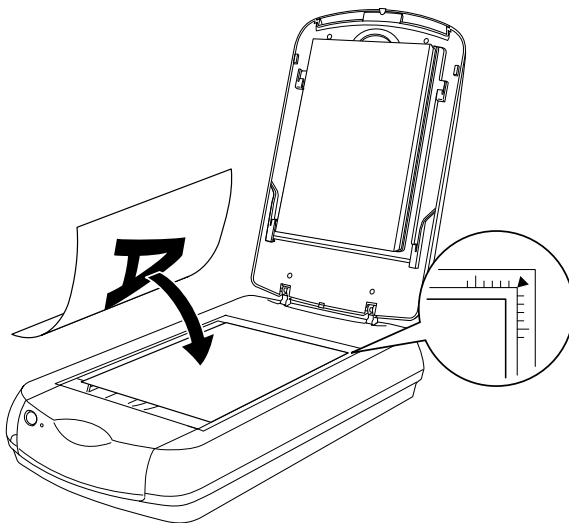
Note:

When scanning reflective documents, make sure the reflective document mat is attached. Otherwise images cannot be scanned as expected.

3. Adjust both bottom corners of the reflective document mat to the position fittings of the integrated TPU and then insert the reflective document mat in the top and bottom position fittings of the integrated TPU.

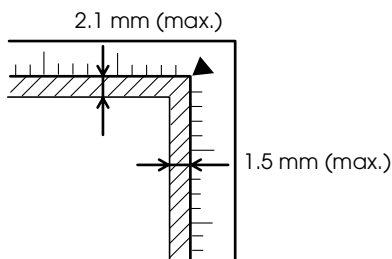


- Place the document on the document table, with the side to be scanned facing down. Make sure that the document is carefully aligned with in the corner of the document table as shown below.



Note:

The area with a width of maximum 2.1 mm from the horizontal guide and 1.5 mm from the vertical guide is not scanned.



5. Close the integrated TPU gently so that the document does not move.


Note:

- ❑ *Do not leave photographs on the document table for an extended period of time as they may stick to the glass.*
- ❑ *Make sure the document is flat against the glass surface, otherwise the image will appear fuzzy and out of focus. Also be sure to close the document cover to prevent interference from external light.*
- ❑ *Always keep the document table clean. See “Maintenance” in your Online Reference Guide.*

Now you are ready to scan. Follow the instructions described in the rest of this chapter, or see your *Online Reference Guide* for more details on using your scanner.

Scanning an Image

Before scanning a document, remember to respect the rights of copyright owners. Do not scan published text or images without first checking the copyright status.

There are two ways to scan: using the  Start button (see your *Online Reference Guide*), or using a TWAIN-compliant application (see the following section).

Note:

- ❑ *You cannot scan an image which exceeds the available memory or disk space. If you try to scan a very large image, an alert appears on the screen.*
- ❑ *After an image is scanned, be sure to save it.*

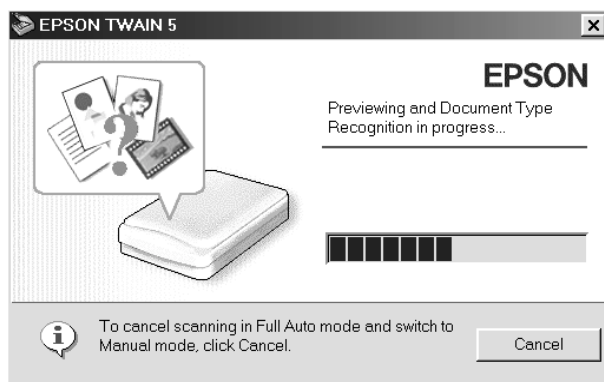
1. Make sure that the scanner is connected to your computer and turned on. Also check that the Indicator light stays on (green), and the image is set to the scanner.

Note:

- ❑ *A flashing indicator light (red) indicates an error; in this case see “Troubleshooting” in your Online Reference Guide to troubleshoot the problem.*
 - ❑ *The fluorescent lamp turns off if no command arrives from the computer within 15 minutes. This is normal and the lamp turns back on once you start scanning.*
2. Start a TWAIN-compliant application. (The example used here is Adobe® Photoshop® Elements.)
 3. Select Import from the File menu, and then select EPSON TWAIN 5.

Note:

Depending on your application, you need to choose EPSON TWAIN 5 only the first time you use the scanner with the application.



EPSON TWAIN automatically previews the image and recognizes the document type.

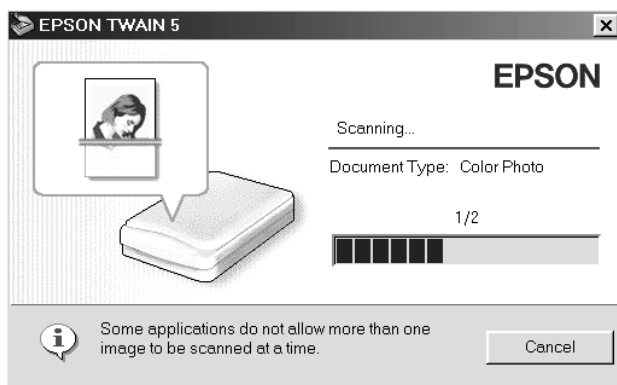
Note:

When the scanner is warming up, you cannot click Cancel.

Note for Macintosh users:

Most illustrations shown in this chapter are for Windows, so they may be different from the actual dialog boxes that appear on your screen. However, you can use the dialog boxes for both Macintosh and Windows reference, as almost all the settings and functions are the same.

4. After EPSON TWAIN has previewed and recognized the document type, the following dialog box appears with a progress bar to indicate the scanning progress. You can see the document type and the icon. When scanning multiple photos, you can also see the number of scanned images.



Images are automatically optimized. You can scan easily and quickly without changing any complex settings. EPSON TWAIN automatically recognizes the image type, locates the target image, detects the skew of the target image, adjusts the exposure, and then starts scanning.

Note:

Depending on your application, you may not be able to scan multiple images.

5. The scanned image is sent to the application.

If you want to change more settings, see your *Online Reference Guide*.

Saving a scanned image

After an image is scanned, be sure to save it, using the steps below. (The example used here is Adobe Photoshop Elements.)

1. Choose **Save As** from the **File** menu.
2. Select the folder where the image will be saved.
3. Type a file name for your image in the **File name** field.
4. Select the file format you want to save the image in from the **Format** list. For the file formats, see the following section.
5. If you need more options, set the **Save Options** field.
6. Click **Save**.

File formats

The following table lists some common image file formats. Please select an appropriate format supported by your image processing application when you save image files.

| Format (File extension) | Explanation |
|--------------------------------|--|
| BMP format (*.BMP) | Standard image file format used in Windows. Most Windows application including word processing application can read and prepare images in this format. |
| TIFF format (*.TIF) | TIFF is a file format designed for data exchange between applications such as graphics software and DTP software. |

| | |
|---------------------------------|---|
| JPEG format (*.JPG) | JPEG is a compressed file, which allows a choice in compression quality. However, if the compression is too high, the image quality deteriorates. The image quality also deteriorates every time the image file is saved in JPEG. If you edit an image file after saving it, the original image should be preserved in a file format other than JPEG. |
| EPS format (*.EPS) | EPS is a PostScript file format. Most illustration and DTP applications are compatible with EPS. |
| PICT format (Macintosh only) | PICT is a standard image file format for Macintosh. Most Macintosh applications including word processing software can read and prepare images in this format. |

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