

Mira Scan

User's Manual

Welcome to MiraScan 7!

In the “For Beginners” section, we will walk you through your first scan. You don’t need to know much about scanners and digital imaging. Just follow the steps in this section and you’ll be able to scan images and save them as files, copy a photo or document, or put them on a web page..., etc.

Before you start, check the following items:

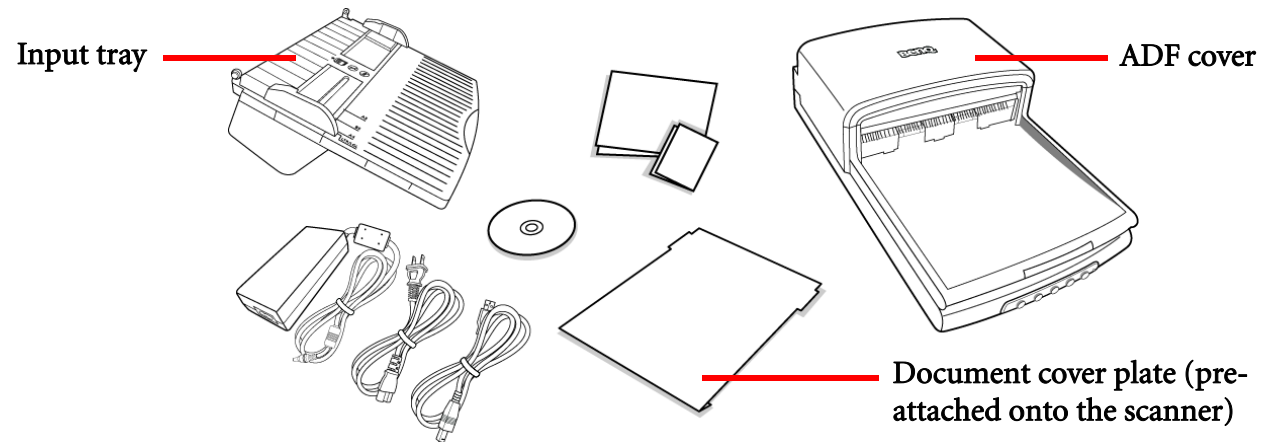
- Check if the scanner is correctly installed and connected to your computer. For details, please see the scanner quick installation guide in the package.
- If you want to use the “Scan to PDF”, “Scan to E-mail” and “Scan to Printer” functions, make sure related software programs are installed.
- Check if the printer is correctly installed and turned on before using the “Copy a photo/document” function.

Prepare your originals for scanning

Scanning the originals


Follow below steps before starting to scan the originals.

Step 1: Before scanning the originals, make sure the following components are in the box. If any item is missing or damaged, contact your local dealer immediately.



Step 2: Check whether the scanner is in good condition and then connect power to your scanner.

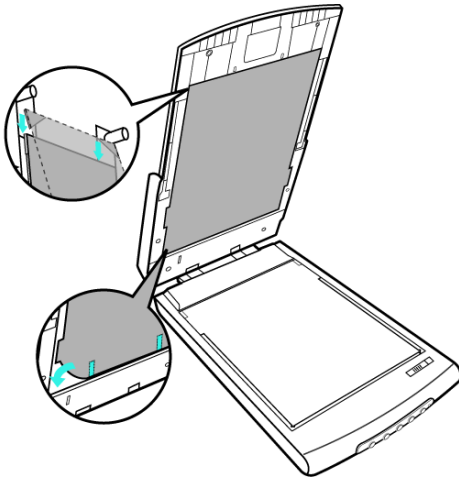
Step 3: Attach the ADF input tray onto your scanner and attach/remove the document cover plate according to the scanner source that you select. Place the originals on the input tray. Refer to the illustrations below for detailed operations.

Step 4: Close all applications that are not in use now (**recommended**). To open MiraScan 7, click **Start** > **Programs** > **MiraScan V7** > **MiraScan 7** on the Windows desktop toolbar, or double-click the MiraScan 7  icon on the desktop.

Note: We strongly recommend that you use a computer which supports USB 2.0 for connection with the ADF scanner to bring out the scanner's optimum performance. The scanner illustrated here may be different from the one you purchased. However, the procedures to place your originals are the same. For more details on the installation of your scanner, refer to the scanner quick installation guide.

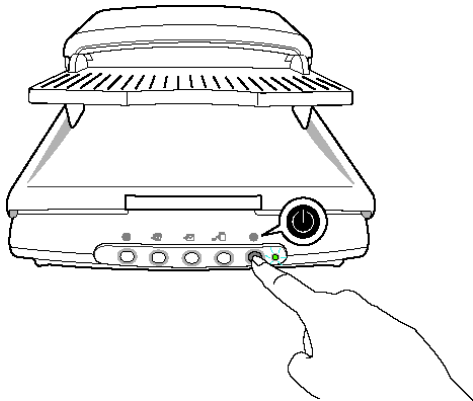
Scan your originals using the flatbed scanner


Attach the document cover plate and turn on the power



Lift the scanner cover and hook the top of the document cover plate onto the inside top of the scanner cover.

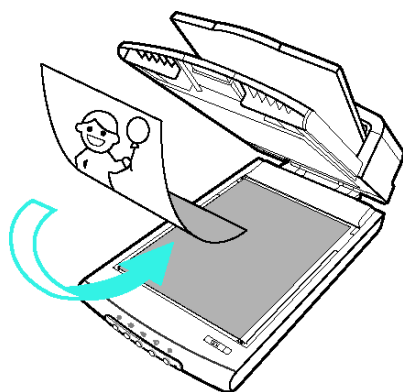
Secure the bottom of the document cover plate onto the inside of the scanner cover with the attached hook-and-loop fasteners.



1. Press the  (Power) button for one second to turn on the scanner power.
2. The LED on the scanner lights up and the scanner is ready to scan.

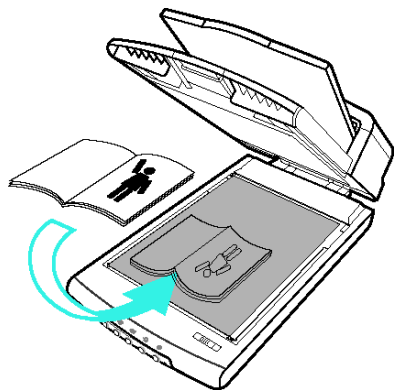
Note: If the LED does not light, check if the power adapter is securely connected. If the LED still does not light, contact your local dealer or BenQ customer service department.

Place the originals and launch MiraScan 7



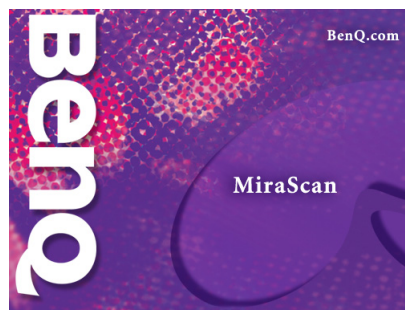
If you want to scan a photograph


Place the photograph with the side to be scanned facing down on the scanner glass plate and align it against the edge of the scanner. Note the direction of the photograph so that you will not scan the photograph in the wrong direction. Close the scanner cover.



If you want to scan a picture on a book or magazine

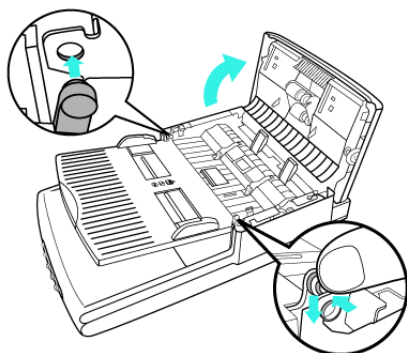
Open the book to the page that contains the picture you want to scan and put it on the scanner with the picture against the glass plate. Note the direction of the picture so that you will not scan the picture in the wrong direction. Close the scanner cover.



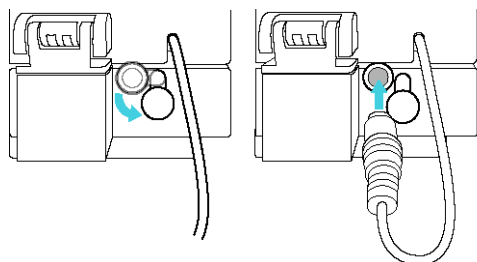
From your computer, double-click the MiraScan 7  icon or select **Start > Programs > MiraScan V7 > MiraScan 7** to activate MiraScan 7.

Scan your originals using ADF (Automatic Document Feeder)

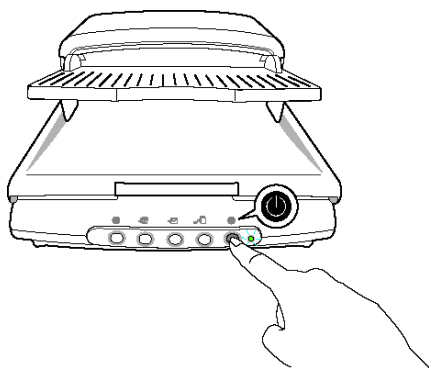
Attach the input tray to your scanner and turn on the power




Open the ADF cover. Insert the left tab on the input tray onto the left slot on the ADF. Slightly press against the right tab on the ADF input tray in the illustrated direction and slide it onto the right slot on the ADF to lock the input tray in place. Close the ADF cover upon completion.



Open the connector dust cover. Connect the ADF connector cable into the connector socket on the back of the scanner with the arrow sign facing upwards.

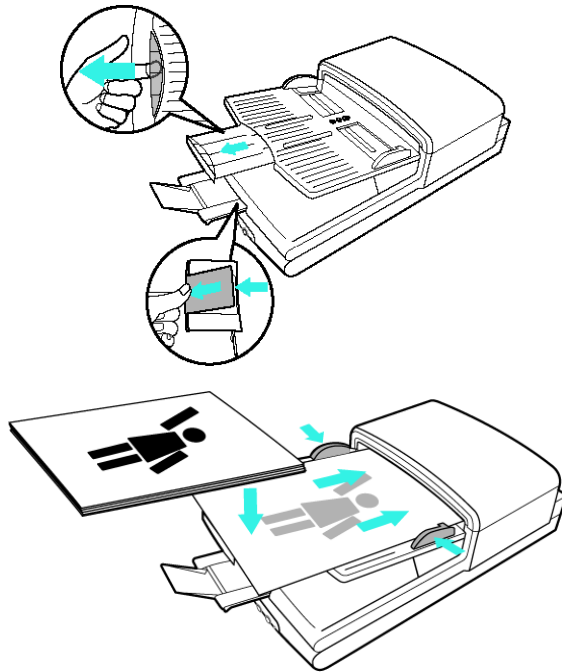


1. Press the  (Power) button for one second to turn on the scanner power.
2. The LED on the scanner lights up and the scanner is ready to scan.

Note: If the LED does not light, check if the power adapter is securely connected. If the LED still does not light, contact your local dealer or BenQ customer service department.

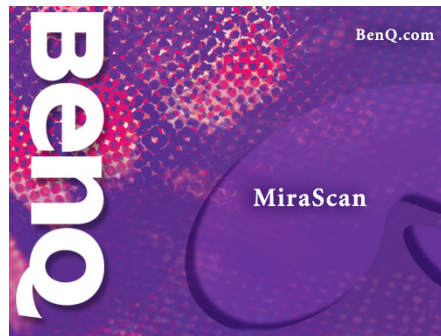
Place the originals and launch MiraScan 7


Note: Before using ADF for scanning, be sure to remove the document cover plate from the inside of the scanner cover as well as the paper from the glass plate of the flatbed scanner. For detailed operations, refer to the scanner quick installation guide.



Pull out the output paper tray extension and flip up the paper catch at the end of the tray extension. Then pull out the input paper tray extension to hold large and thick documents firmly if necessary.

Collect a stack of papers you wish to scan and pile them in good order. With the side to be scanned facing upwards, carefully slide the paper pile onto the input tray. Adjust the guide levers to fit the originals completely in the illustrated direction.

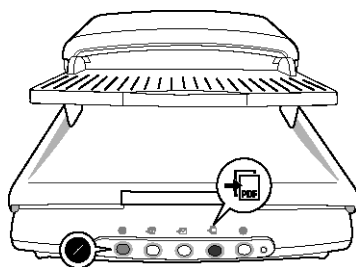



From your computer, double-click the MiraScan 7  icon or select **Start > Programs > MiraScan V7 > MiraScan 7** to activate MiraScan 7.

Scan your originals using the Quick Scan buttons

Note: Before using the Quick Scan buttons, make sure to close MiraScan 7 completely. To set up more settings when using the Quick Scan buttons, refer to “Button Mode” on page 66.

Scan to PDF




1. Press the  (Scan to PDF) button, and your scanner will detect first whether any documents are placed on the ADF input tray. If no documents are detected, proceed to step 4.

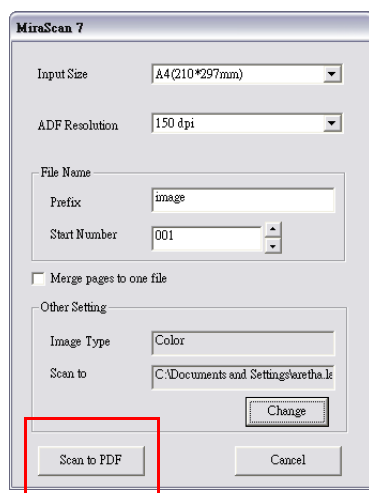
2. A setup dialog appears on the screen. Select the file input size, scan resolution, edit file name and whether to merge all the scanned images into one file. Click “Change” if you wish to set up further settings in Button Configuration. Upon completion, click “Exit” to leave Button Configuration.

Note: For more information about settings in Button Configuration, refer to “Button Mode Settings” on page 67.

3. Click “Scan to PDF”.

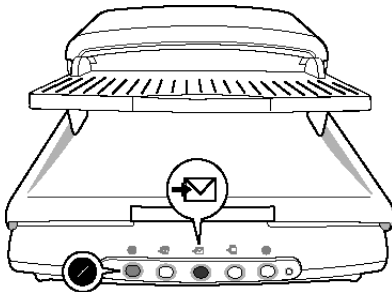
4. MiraScan 7 will start scanning images. Upon completion, a dialog box indicating the path to store the scanned images appears. The default path is: C:\My Documents\My Pictures\Scan Pictures.

Note: Press the  (Stop) button during the scanning process if you want to forcibly stop the action.

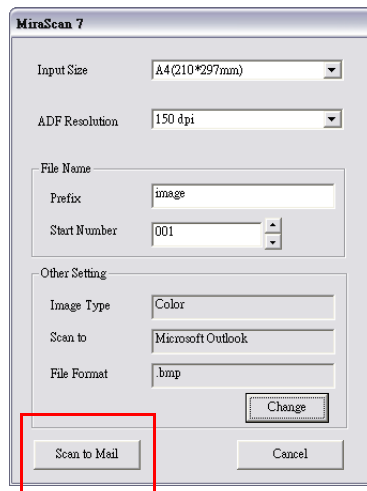


Scan to E-mail

Note: First be sure to set up at least one E-Mail account in your system.



1. Press the ➔✉ (Scan to E-mail) button, and your scanner will detect first whether any documents are placed on the ADF input tray. If no documents are detected, proceed to step 4.



2. A setup dialog appears on the screen. Select the file input size, scan resolution and edit file name. Click “Change” if you wish to set up further settings in Button Configuration. Upon completion, click “Exit” to leave Button Configuration.

Note: For more information about settings in Button Configuration, refer to “Button Mode Settings” on page 67.

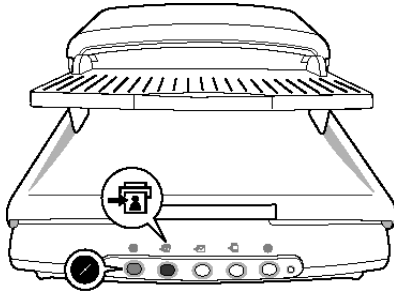
3. Click “Scan to Mail”.


4. MiraScan 7 will automatically start scanning images. Upon completion, MiraScan 7 will transfer the scanned image to a new E-mail as an attachment.

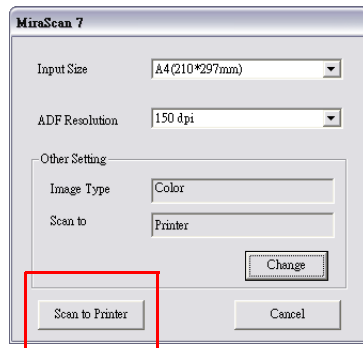
Note: Press the ⊗ (Stop) button during the scanning process if you want to forcibly stop the action.

Scan to Printer

Note: First be sure that the default printer in your system is ready.



1. Press the  (Scan to Printer) button and your scanner will detect first whether any documents are placed on the ADF input tray. If no documents are detected, proceed to Step 4.




2. A setup dialog appears on the screen. Select the file input size and scan resolution. Click "Change" if you wish to set up further settings in Button Configuration. Upon completion, click "Exit" to leave Button Configuration.


Note: For more information about settings in Button Configuration, refer to "Button Mode Settings" on page 67.

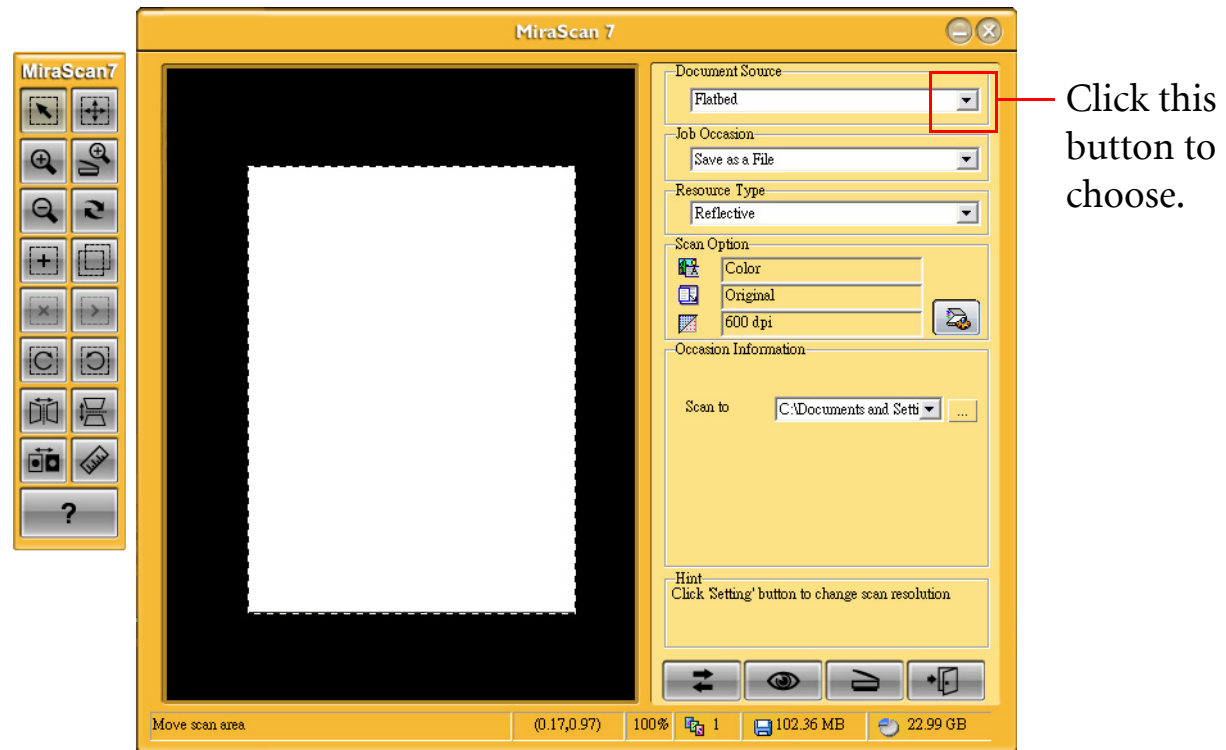
3. Click "Scan to Printer".

4. MiraScan 7 will automatically start scanning images. Upon completion, the scanned image will be printed out automatically from your printer.

Note: Press the  (Stop) button during the scanning process if you want to forcibly stop the action.

Activate MiraScan 7

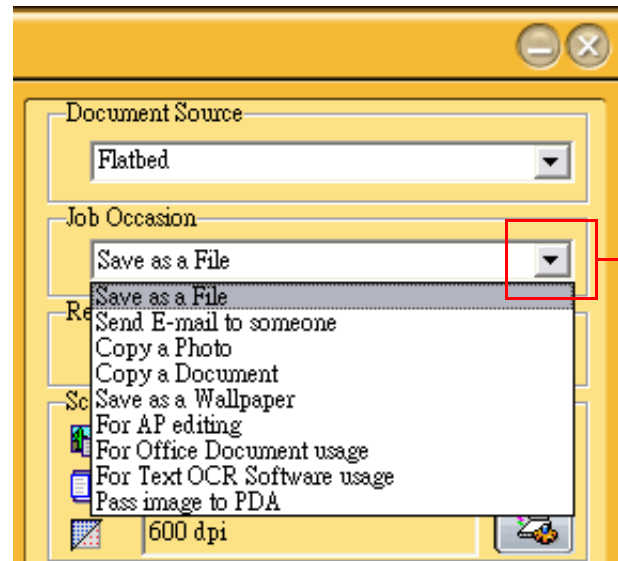
Double-click the MiraScan 7  icon on your desktop. MiraScan 7 will be launched in Wizard Mode. Prior to starting Wizard Mode, Your scanner will automatically detect whether any documents are placed on the ADF (Automatic Document Feeder) input tray. You can still select the document source manually after launching MiraScan 7.



Now you are ready to use the scan functions listed in “Job Occasion”.

Save as a File

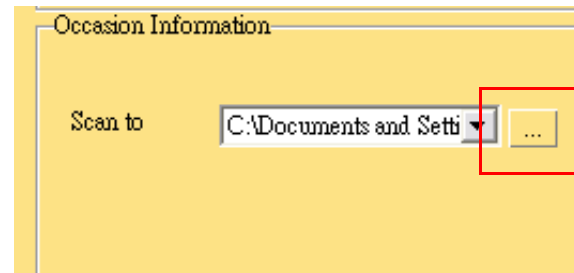
- 1 Click the button indicated below and a list of job occasions will appear on the screen. Choose “Save as a File”.



Click this button.


2

In this occasion information menu, click the button indicated below to choose the path where you wish to store your scanned images. The default path is:
C:\My Documents\My Pictures\Scan Pictures.



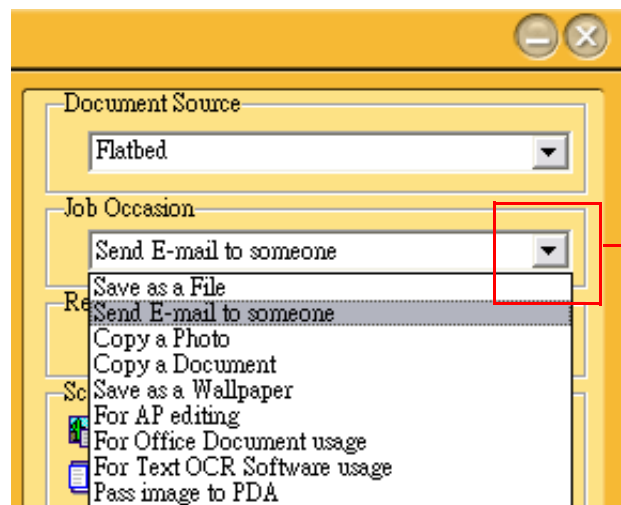
Click this button
to change the path.

3

Then click the  (**Scan**) button on the screen. The scanner will start scanning the original. When finished, the scanned image file will be saved to the default file folder or the file folder you select.

Send E-mail to someone

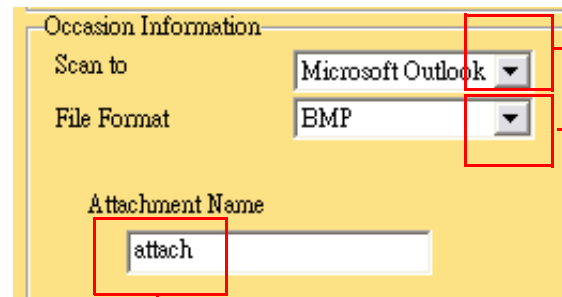
- 1 Click the button indicated below and a list of job occasions will appear on the screen. Choose “Send E-mail to someone”.



Click this button.

2

In this occasion information menu, you can set up related E-mail settings. In the “Scan to” item, you can choose to scan the file to **Microsoft Outlook** or **Outlook Express**. In the “File Format” item, you can set the file format of the scanned file. In the “Attachment Name” item, you can name or rename the prefix of the scanned file name.


The image shows a yellow dialog box titled "Occasion Information". It contains three sections: "Scan to" with a dropdown menu showing "Microsoft Outlook", "File Format" with a dropdown menu showing "BMP", and "Attachment Name" with a text input field containing "attach". Red boxes highlight the dropdown arrows for "Scan to" and "File Format", and the text input field for "Attachment Name". Red lines connect these boxes to external text labels.

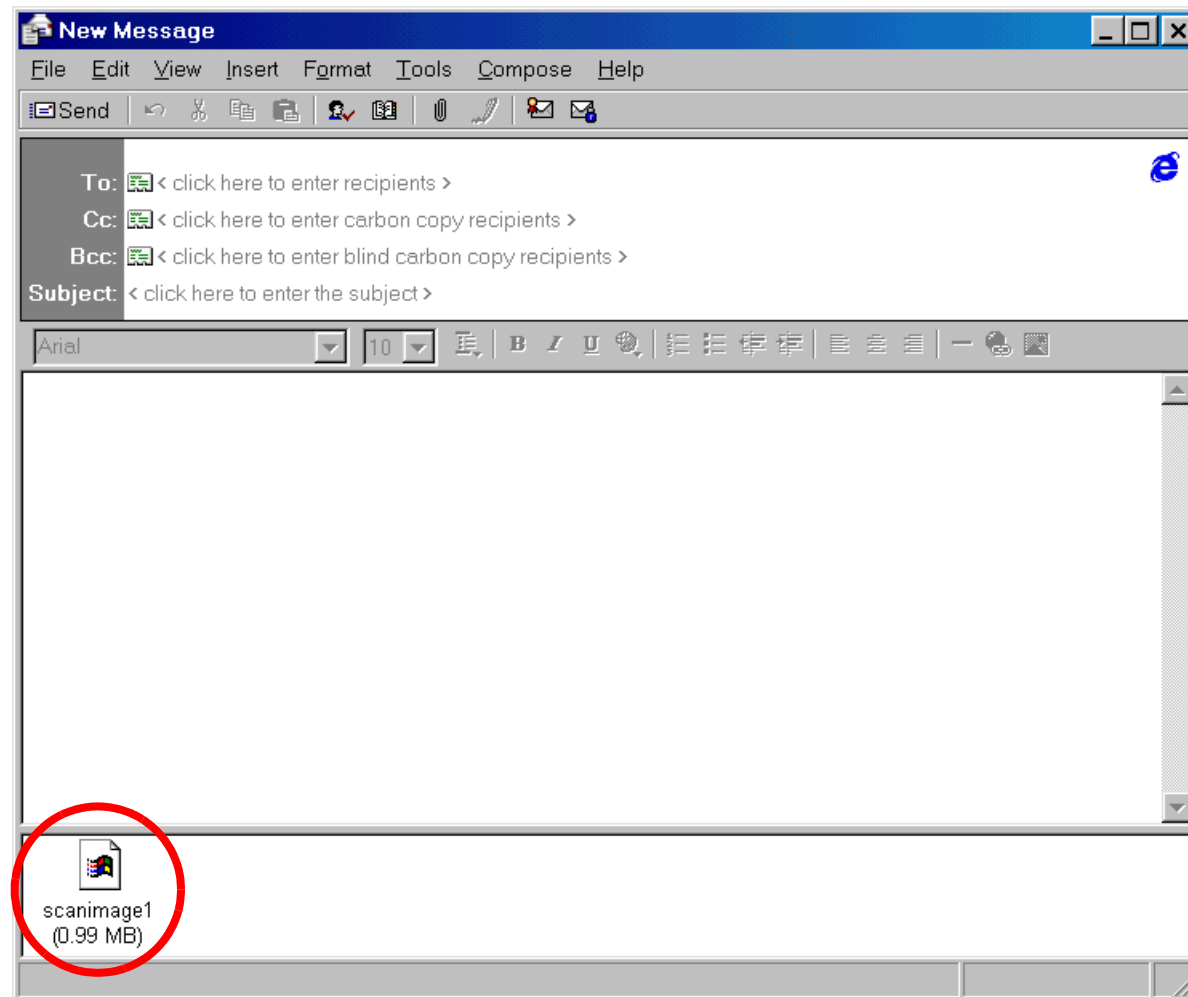
Click this button to choose.

Click this button to choose.

You can name or rename the prefix of the scanned file name in this column.

3

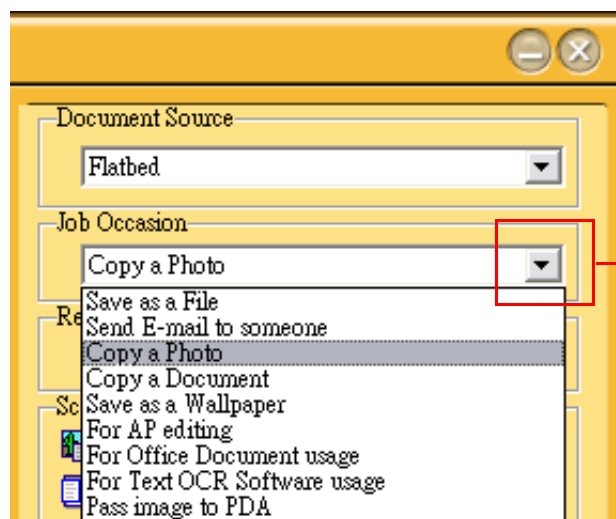
Then click the  (Scan) button on the screen. MiraScan 7 will scan the original and transfer the scanned image to a new E-mail as an attachment.



Copy a Photo

Note: This function does not support using ADF as the document source.

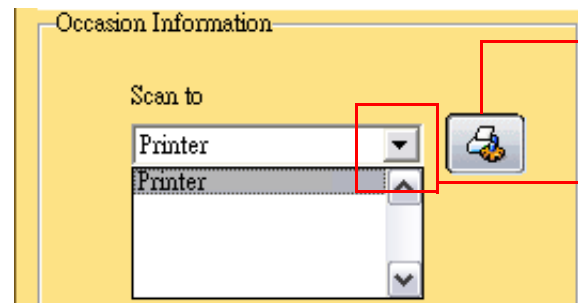
- 1 Click the button indicated below and a list of job occasions will appear on the screen. Choose “Copy a Photo”.



Click this button.

2


In this occasion information menu, you can select a printer to print out your scanned photo.



Click this button to set up your selected printer.

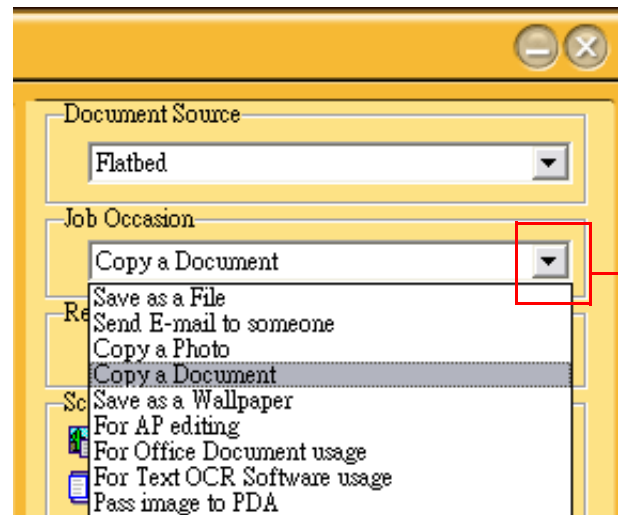
Click this button to choose a printer.

3

Then click the  (**Scan**) button on the screen. MiraScan 7 will start scanning the original. When finished, the image will be printed out by the printer you select.

Copy a Document

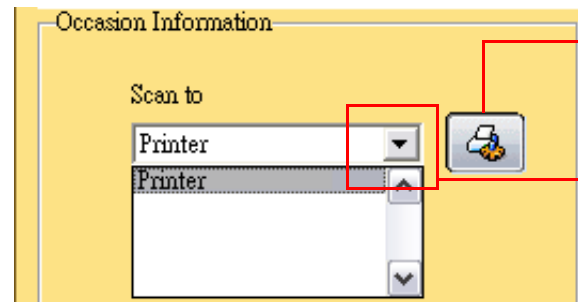
- 1 Click the button indicated below and a list of job occasions will appear on the screen. Choose “Copy a Document”.



Click this button.

2


In this occasion information menu, you can select a printer to print out your scanned document.



Click this button to set up your selected printer.

Click this button to choose a printer.

3

Then click the  (**Scan**) button on the screen. MiraScan 7 will start scanning the original. When finished, the scanned document will be printed out by the printer you select.

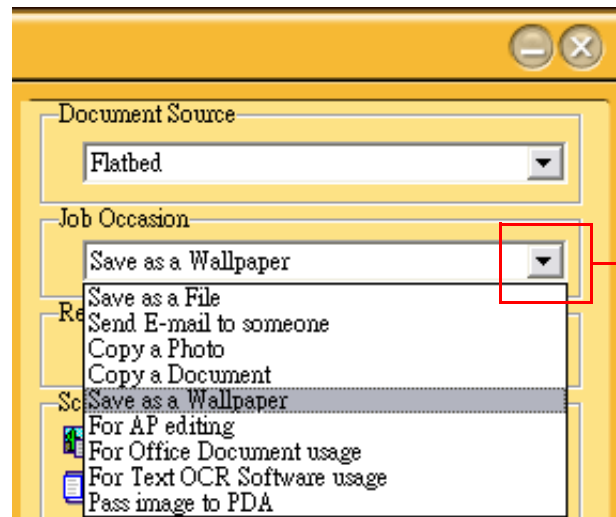
Save as a Wallpaper

Note: This function does not support using ADF as the document source.

This function enables you to scan images and replace your current Windows wallpaper with the new scanned image.

1

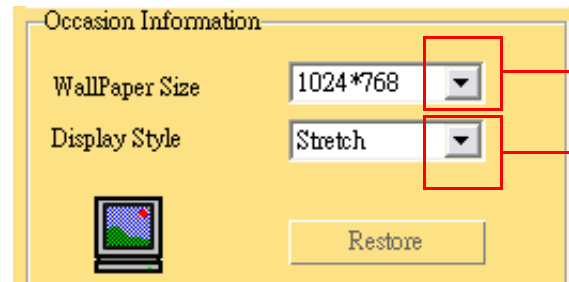
Click the button indicated below and a list of job occasions will appear on the screen. Choose “Save as a Wallpaper”.



Click this button.

2


In this occasion information menu, you can change your wallpaper setup. In the “Wallpaper Size” item, you can choose the size of your wallpaper. In the “Display Style” item, you can change the wallpaper display in three styles: Stretch, Center and Tile.



Click this button to select.

Click this button to select.

3

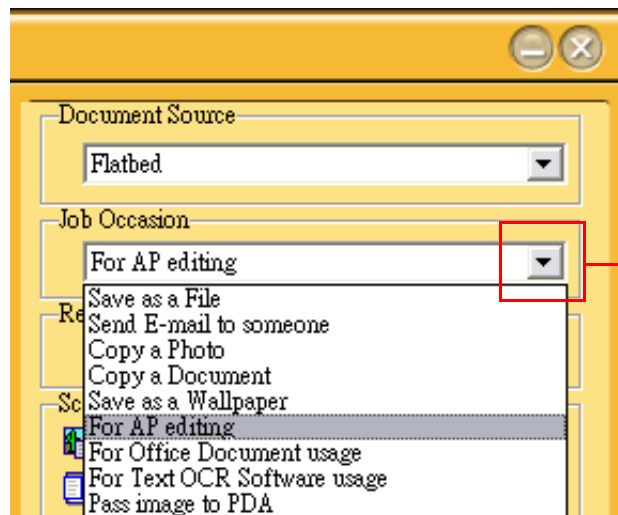
Then click the  (**Scan**) button on the screen. MiraScan 7 will start scanning the original. When finished, your wallpaper will be replaced by the scanned image.

For AP editing

If you have installed application programs that MiraScan 7 can recognize and work with, you can use this function to scan and transfer the scanned images to those application programs.

1

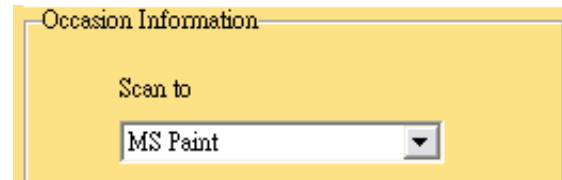
Click the button indicated below and a list of job occasions will appear on the screen. Choose “For AP editing”.




Click this button.

2

In this occasion information menu, you can choose the application program to which you want to scan and transfer the scanned images.



3

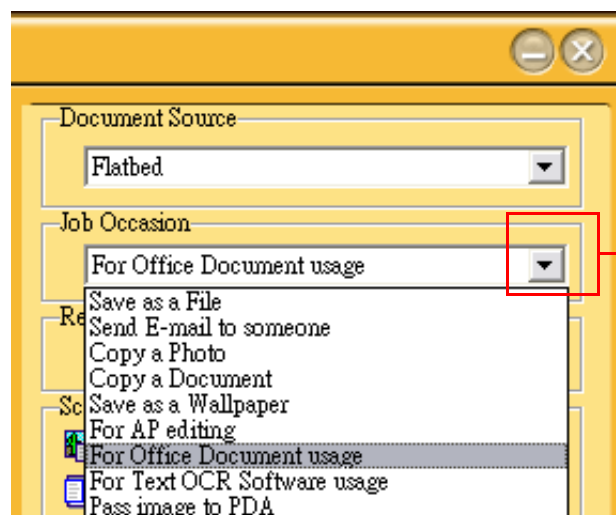
Click the  (**Scan**) button on the screen. MiraScan 7 will start scanning the original and transfer the scanned image to the application program you select.

For Office Document usage

Note: Before using this function, make sure to install the OCR software that came with your CD first.

This function enables you to scan documents as a Microsoft Office program file.

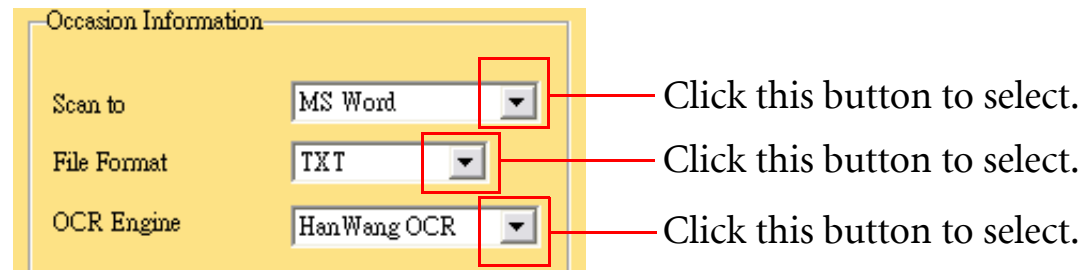
- 1 Click the button indicated below and a list of job occasions will appear on the screen. Choose “For Office Document usage”.




Click this button.

2

In this occasion information menu, you can change your scanned document setup. In the “Scan to” item, you can choose to scan the document to Microsoft Excel or Microsoft Word. In the “File Format” item, you can set the file format of the scanned document. In the “OCR Engine” item, you can select a proper OCR engine which has been installed in your computer.



3

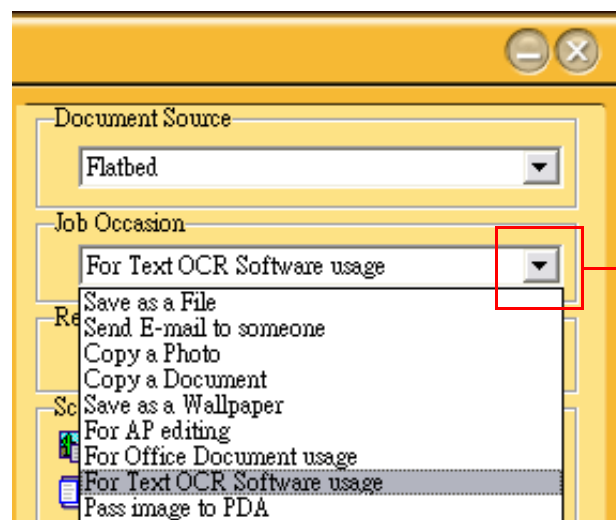
Then click the  (**Scan**) button on the screen. MiraScan 7 will start scanning the document and save it as a Microsoft Office program file.

For Text OCR (Optical Character Recognition) Software usage

Note: Before using this function, make sure to install the OCR software that came with your CD first. It is strongly recommended that you use the bundled OCR software to ensure its best performance when selecting ADF as the document source; using other OCR software may cause malfunctions of any kind.

The “For Text OCR Software usage” function allows you to scan documents and transfer the scanned document images into editable text files. This will save you a lot of time re-typing the text.

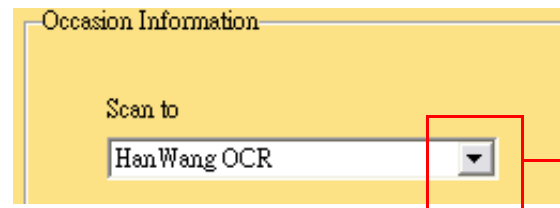
- 1 Click the button indicated below and a list of job occasions will appear on the screen. Choose “For Text OCR Software usage”.



Click this button.

2

In this occasion information menu, you can select a proper OCR engine which is already installed in your system to perform Optical Character Recognition.



Click this button to select.

3

Then click the  (Scan) button on the screen.

4

MiraScan 7 will start scanning the image. A dialog box will then appear to show the scanning process.

5

The OCR software will recognize the scanned image and save the result.

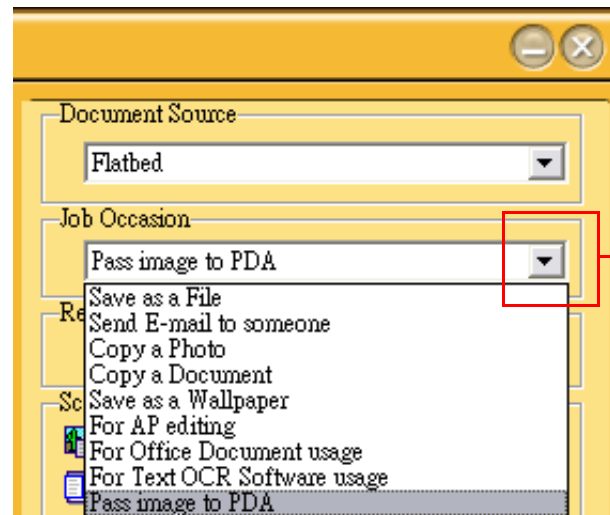
Send images to your PDA

Note: This function does not support using ADF as the document source.

If you have installed and connected PDA to your computer, you can use this function to scan and send the scanned images to your PDA.

1

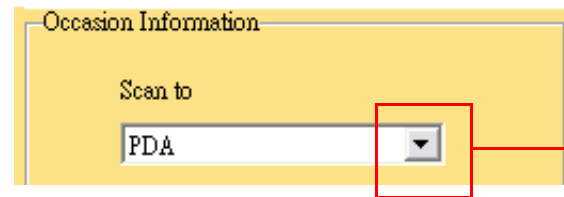
Click the button indicated below and a list of job occasions will appear on the screen. Choose “Pass image to PDA”.



Click this button to select.


2


In this occasion information menu, select a PDA to which you want to scan and transfer the scanned images.

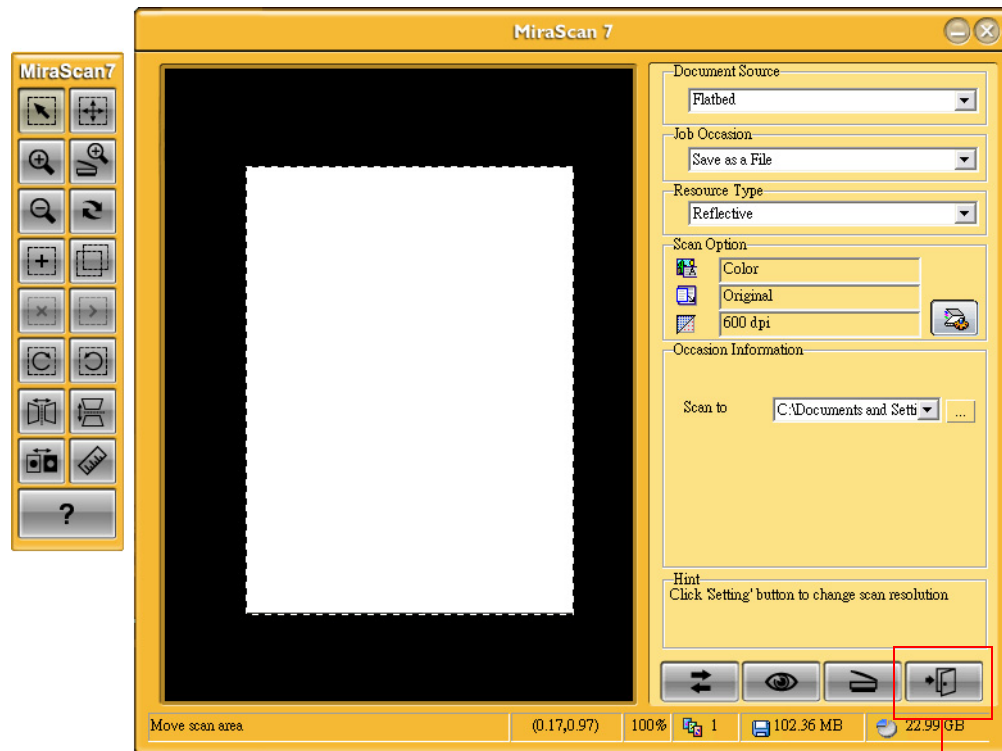


Click this button to select.

3

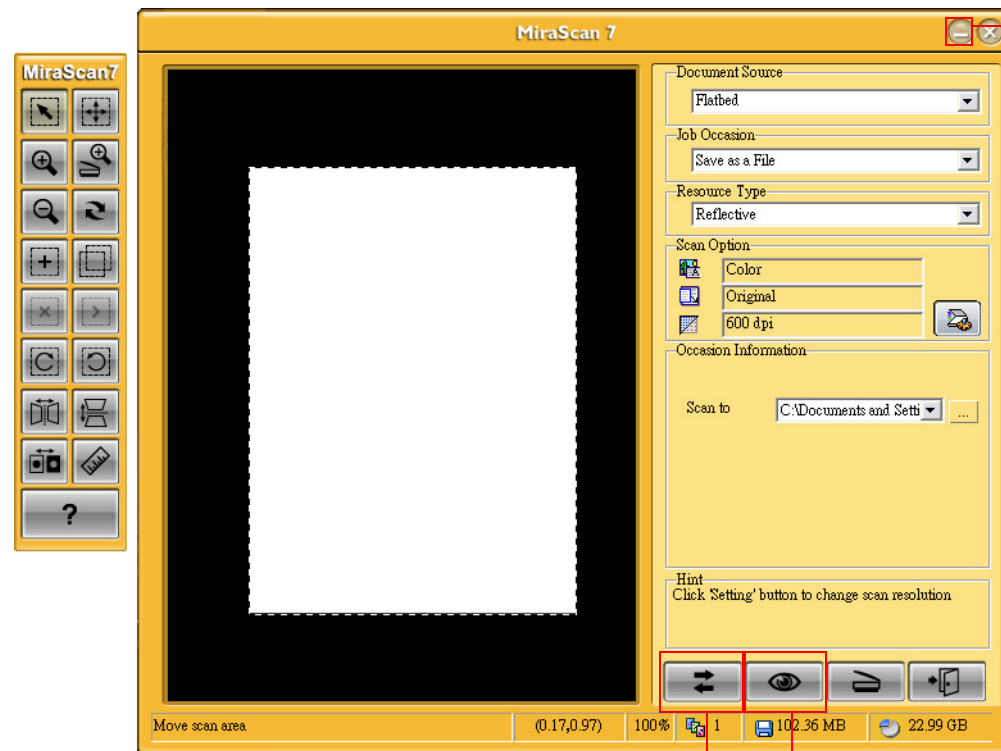
Then click the  (**Scan**) button on the screen. MiraScan 7 will start scanning the original and send the scanned image to the PDA you select.

To close MiraScan 7, click the  (Exit) button.



Click this button to exit.

Additional Operations



Click this button to minimize MiraScan 7.

Click this button to switch to Classic Mode.

Click this button to preview the scanned image, but this function does not support using ADF as the document source.



For more information on how to access other powerful and convenient features provided by MiraScan 7, you can go to the “For Experienced Users” section for details.

Introduction to MiraScan 7

With its advanced design and ultra-friendly interface, MiraScan 7 gives you a radically new user experience.


What is new in MiraScan 7?

MiraScan 7 provides “ADF” as the new document source, which makes it easy to scan multiple documents at one time. We also provide 3 major modes for different usage: **Button Mode**, **Wizard Mode** and **Classic Mode**. For optimum personalization, this version offers the following advanced features:

Button Mode --- Under this mode, users can do their scanning jobs only by pressing the real buttons on the scanner without any operations on the screen.

Wizard Mode --- Wizard Mode combines both basic and advanced functions of this application program. For easy operation, MiraScan 7 provides Wizard Mode in the form of easily recognizable buttons. This allows you to swiftly locate the button linked to a certain sub-task and helps you better understand the relationship between the operations MiraScan 7 supports.

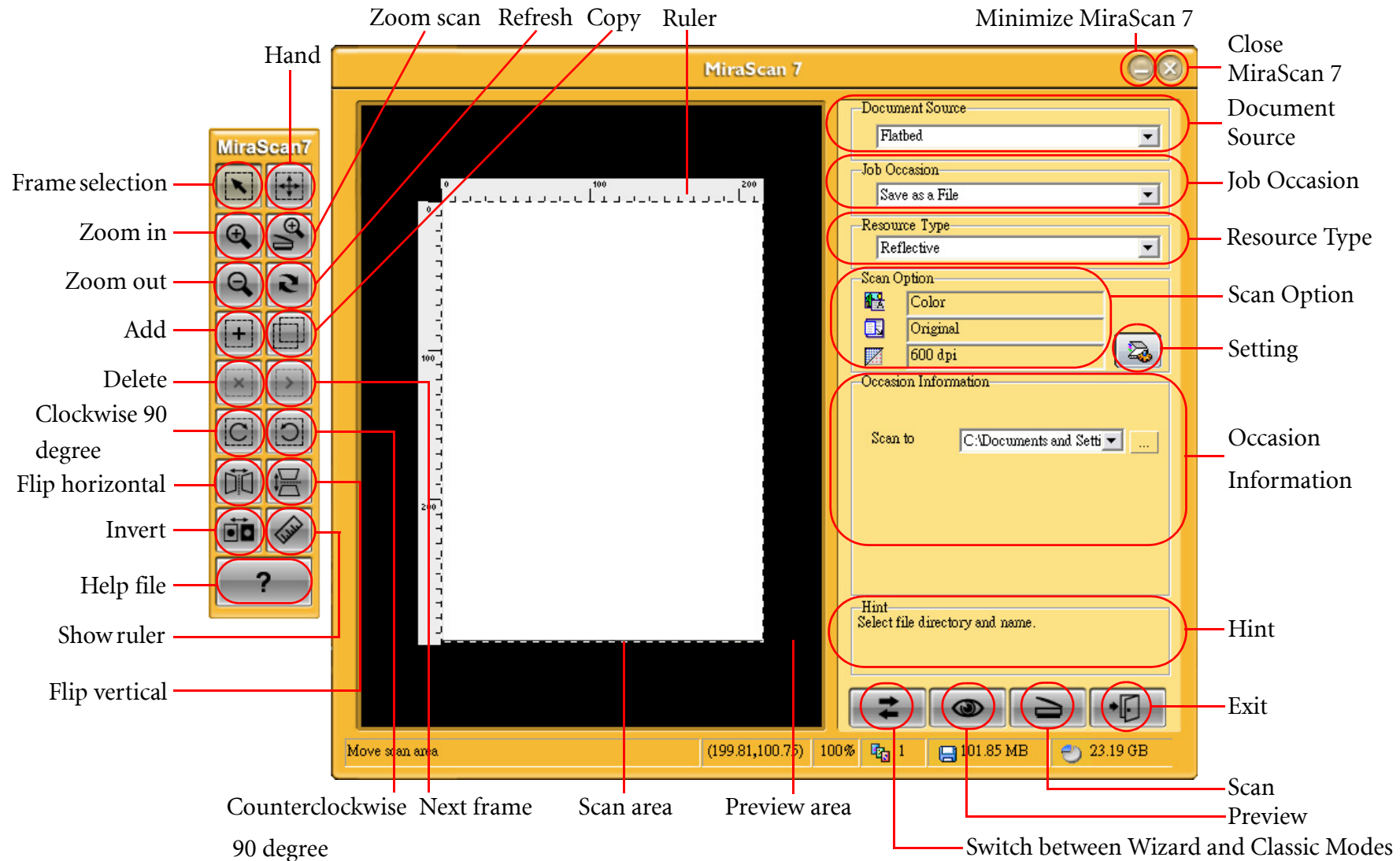
Classic Mode --- This is the classic UI scanning mode (Stand alone AP/TWAIN dual mode). In driver stand alone AP mode, you can set up the parameters and further applications. In TWAIN mode, you can only set up the parameters to specific AP and other applications. Both Button and Wizard Modes will be disabled temporarily.

Shift between Wizard Mode and Classic Mode --- You can shift between Wizard Mode and Classic Mode by clicking the  (**Switch**) button. Button Mode is an off-line tool only for changing the button settings. Any button function should be disabled temporarily if Wizard or Classic Mode is opened.

Scan Jobs Menu --- You can specify a scanning job sequence in the novel Scan Jobs Menu. The Job List offers you an overview of your workflow. All information on browsing, scanning, variables and operation, etc. are available in this menu. You can define properties for various items to best suit your needs.


MiraScan 7 user interfaces

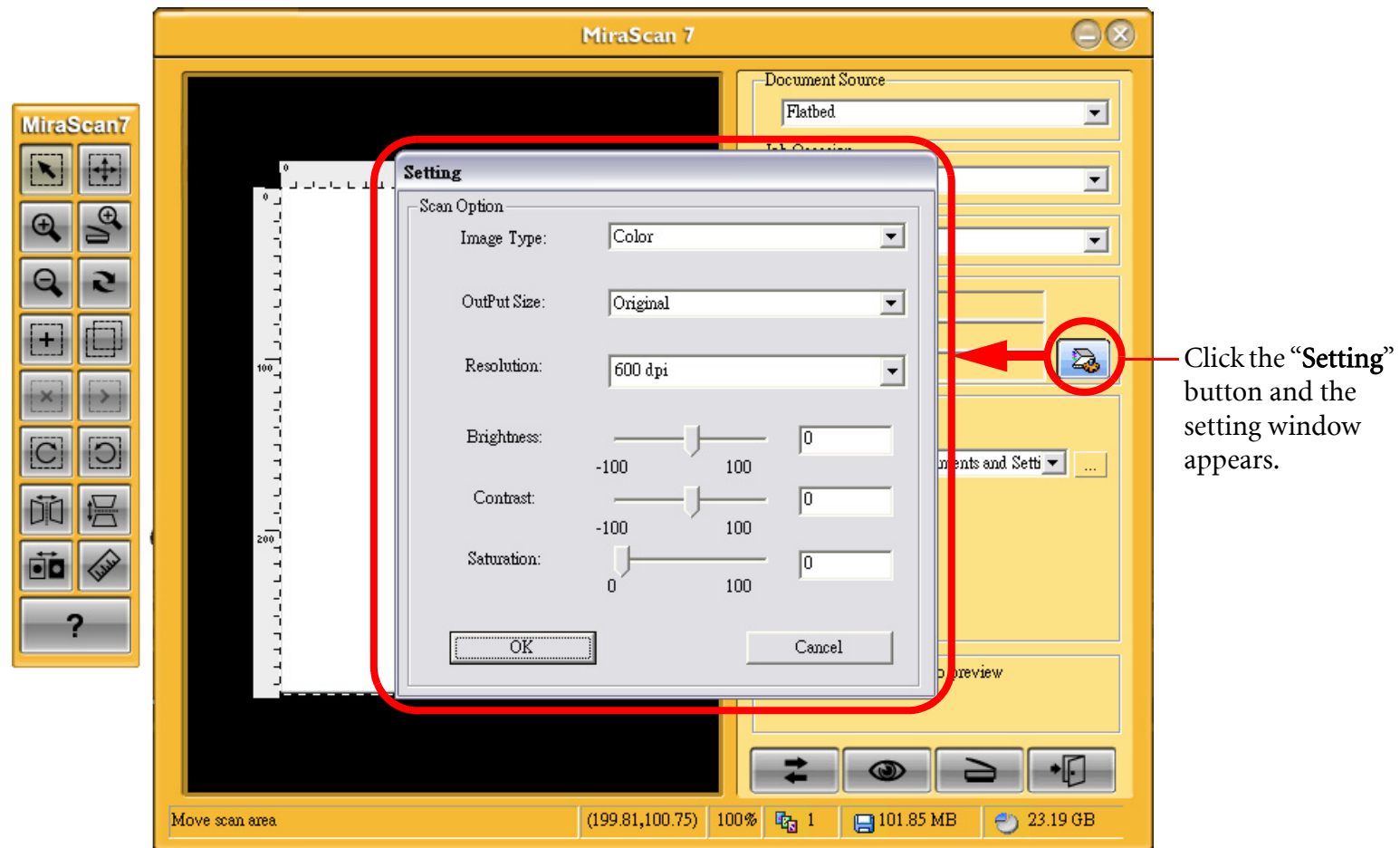
Wizard Mode



For Experienced Users

How to adjust settings in Wizard Mode

Click the  (**Setting**) button and a setting window will appear in which you can define various items. There are six items in this setting window, including: Image Type, Output Size, Resolution, Brightness, Contrast and Saturation.



Setting options (Please note that the parameter values mentioned below may change among different job occasions)

Image Type

This item allows you to select the color mode which you wish to apply to the scanned images. Options for this item include Color, Gray, BW, Color 48 bits and Gray 16 bits.

Output Size

Selects the exact size to which you wish to output your scanned images.

Resolution

Selects scan resolution. Options for this item include 75, 100, 150, 200, 300, 600, 1200, 2400, 4800, 9600 or 19200 dpi. The scan resolution options for ADF include 150, 200 or 300 dpi.

Brightness

You can adjust the brightness of the scanned images. The brightness value is between 100 and -100. You can choose to increase or decrease the brightness value of the scanned images.

Contrast

This item allows you to adjust the contrast of the scanned images. The contrast value is between 100 and -100. You can choose to increase or decrease the contrast value of the scanned images.

Saturation

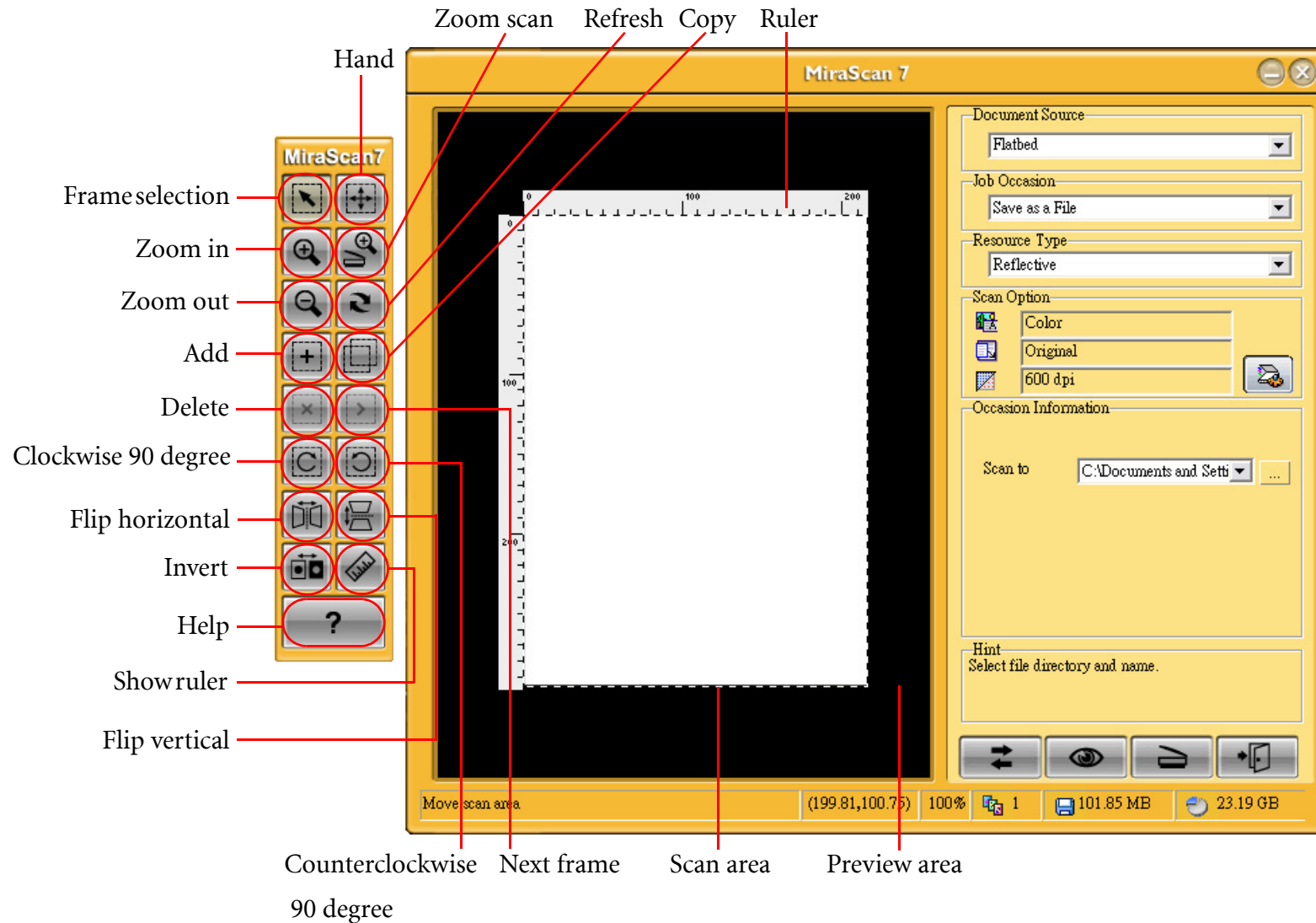
This item allows you to adjust the color saturation of the scanned images. The color saturation value is between 0 and 100. You can choose to increase or decrease the color saturation value of the scanned images.

Getting Help

To help you better understand and operate MiraScan 7, you can access the Help system by clicking the **(Help)** button.



Preview Window



For Experienced Users

Frame tool buttons

Frame Selection

Click this button to select a single or multiple frames.

Hand

Click this button to display a hand to drag the image when it does not entirely fit in the Preview Window.

Zoom in

Click this button to zoom in an image.

Zoom scan

Click this button to display the active frame to fit the Preview Window and view it at the highest resolution.

Zoom out

Click this button to zoom out an image.

Refresh

Click this button to refresh the frames.

Add

Click this button to draw a new frame in the Preview Window.

Copy

Click this button to copy the frames.

Delete

Click this button to delete the active frame. It will be removed when you exit the program.

Next frame

Click this button to activate the next frame.

Clockwise 90 degree

Click this button to turn the frame 90 degree clockwise.

Counterclockwise 90 degree

Click this button to turn the frame 90 degree counterclockwise.

Flip horizontal

Click this button to flip the frame horizontally.

Flip vertical

Click this button to flip the frame vertically.

Invert

Click this button to invert the color of the scanned image.

Show ruler

The ruler helps you locate the image and calculate its size. Click this button repeatedly to show the ruler in different units of measurement or to hide the ruler. If you choose to show the ruler and move the cursor back to the Preview Window, crossed lines will appear to help you position the cursor more accurately. There are three units for you to choose from: millimeter, inch and pixel.

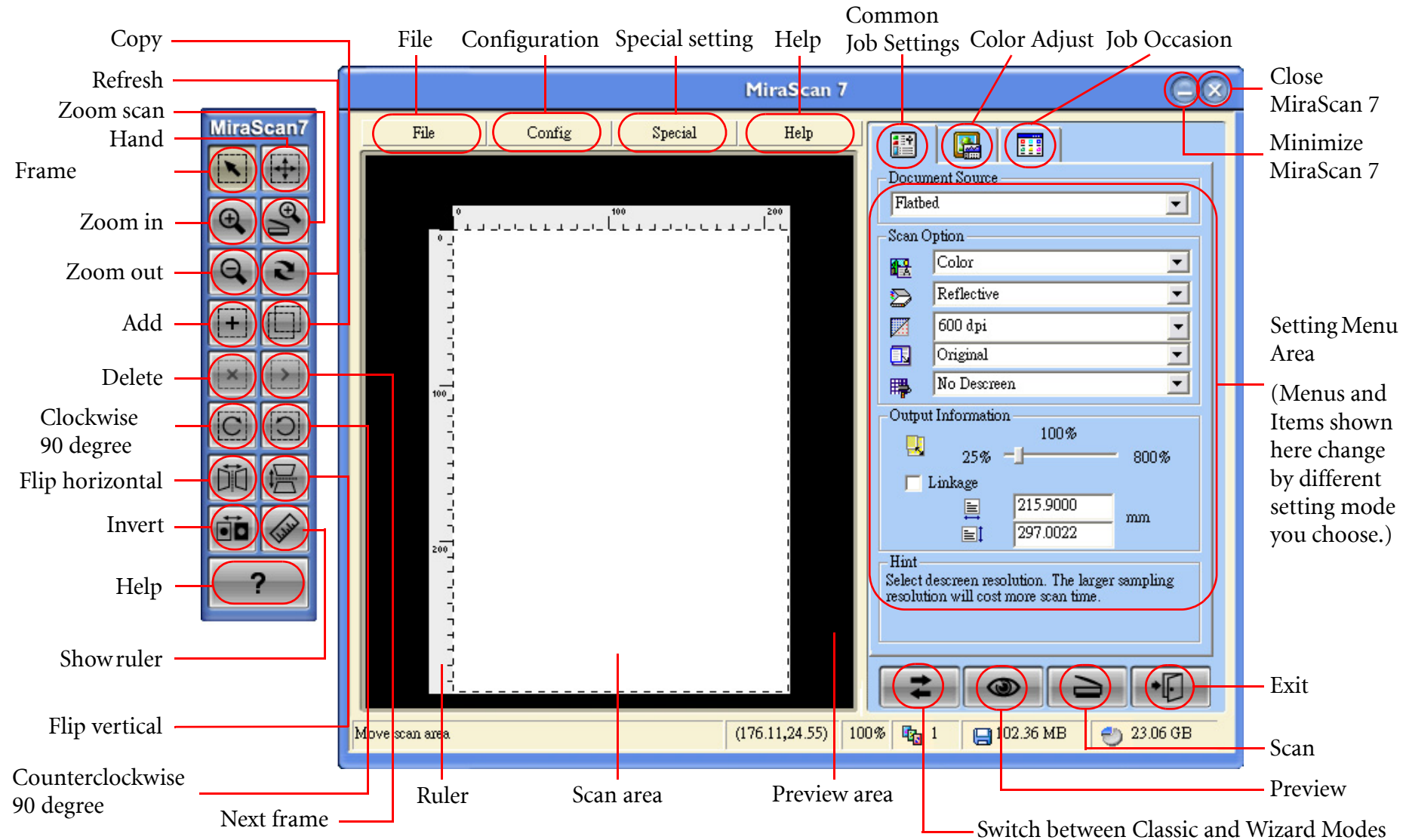
Help

Click this button to access the Help file.

Preview area

All pre-scanning results will be displayed in this area for you to preview.

Classic Mode

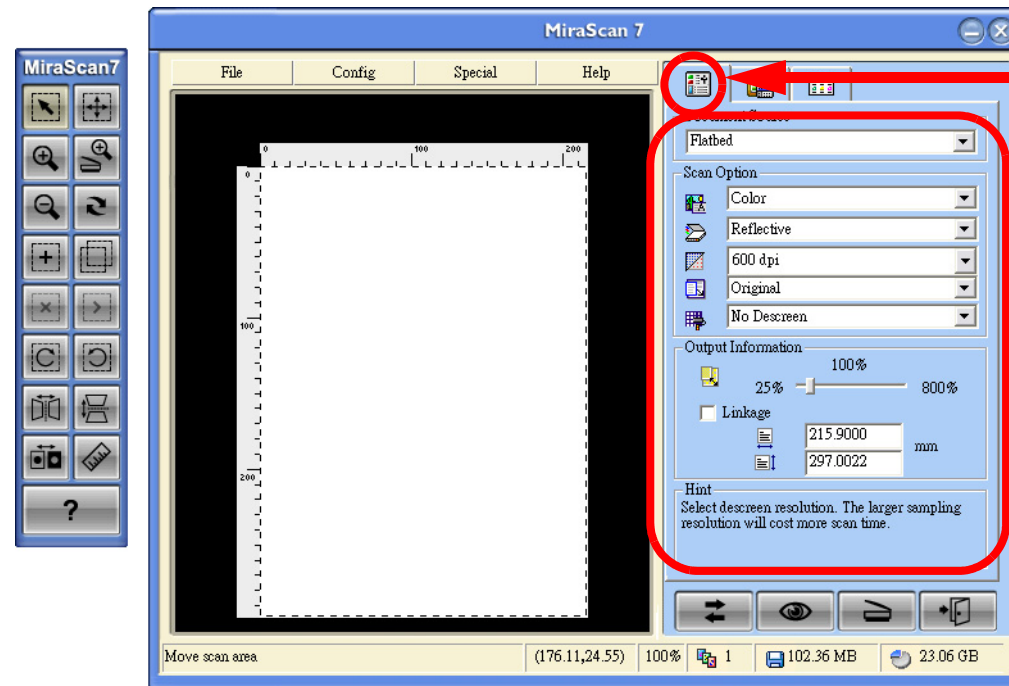


For Experienced Users

How to adjust settings in Classic Mode

I. Common Job Settings

Click the “**Common Job Settings**” button and the settings menu will appear in which you can define various items. There are three main items in this setting menu, including: Scan Option, Output Information and Hint.



Click the “**Common Job Settings**” button and the setting menu appears.

Scan Options



Color Mode

This item allows you to select the color mode which you wish to apply to the scanned images. Options for this item include Color, Gray, BW, Color 48 bits and Gray 16 bits.



Resource Type

Selects the resource type of the original.



Scan Resolution

Selects scan resolution. Options for this item include 75, 100, 150, 200, 300, 600, 1200, 2400, 4800, 9600, 19200 dpi and Custom. The scan resolution options for ADF include 150, 200 or 300 dpi.



Output Size

Selects the exact size in which you wish to output your scanned images.

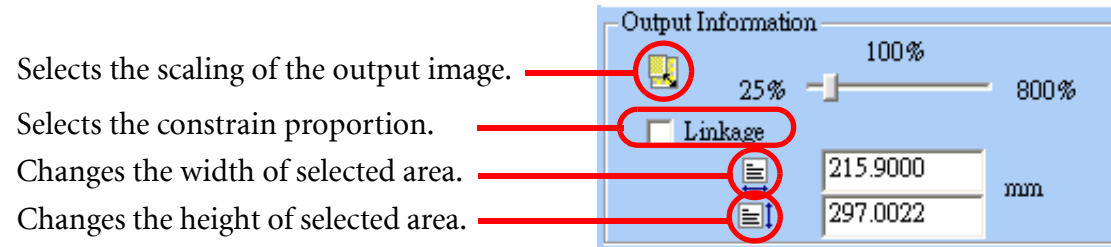


Descreen Selection

If you are scanning images from magazines, newspapers or other printed materials, you will find that the scanned image appears to be covered by tiny screen patterns. To eliminate this screen pattern, you can use the options and choose the kind of original you want to descreen. MiraScan 7 will descreen the scanned image automatically.

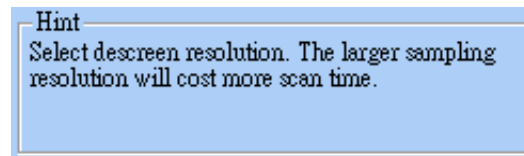
Output Information

This sub-menu allows you to define various items concerning the output image. There are four items in this setting window, including: Scaling, Constrain Proportion, Document Width and Document Height.



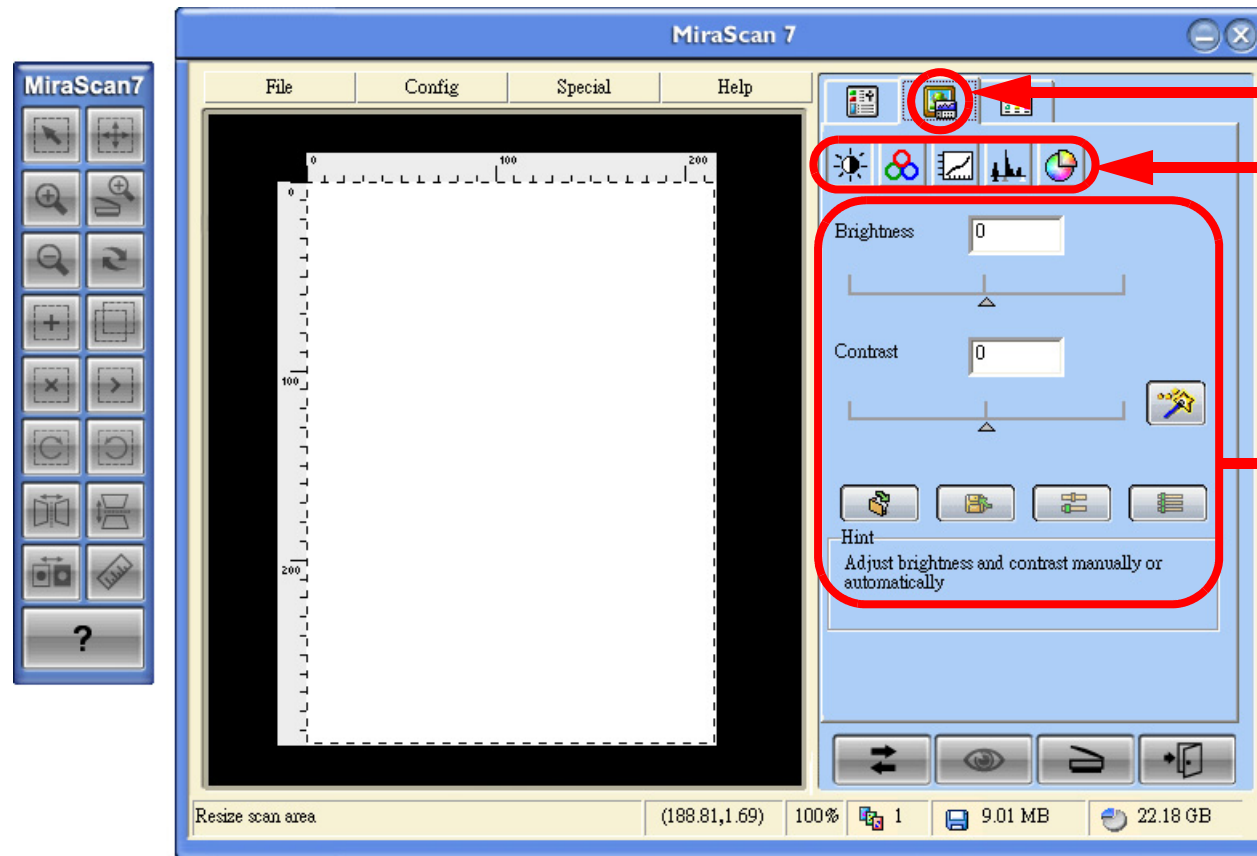
Hint

This sub-menu offers you the hint of each function. With the descriptions, you can easily understand how to operate those functions.



II. Color Adjustment

Click the “Color Adjust” button and the settings menu will appear in which you can define various items concerning the image color. There are five main items in this setting menu, including: Brightness and Contrast Adjustment, Color Balance, Curve Adjustment, Level Adjustment and Hue, Saturation and Lightness Adjustment.



Click the “Color Adjust” button and the setting menu appears.

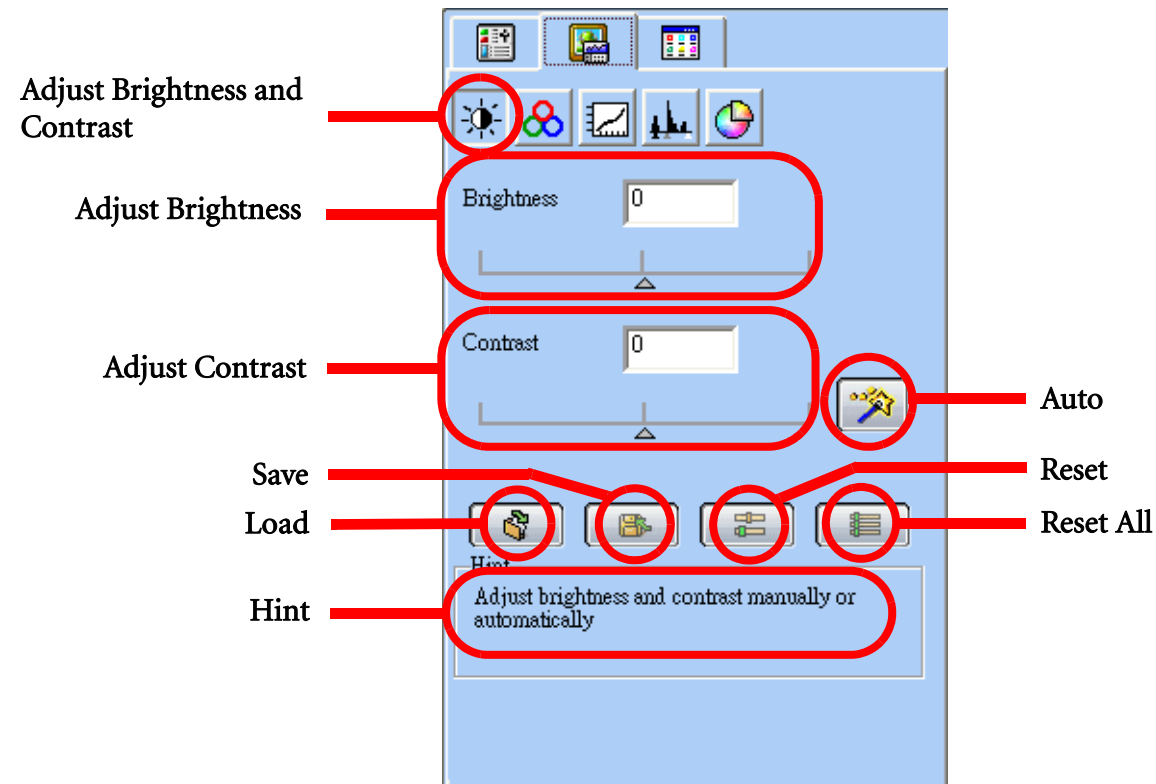
Color Adjust Settings: Click to choose Brightness and Contrast Adjustment, Color Balance, Curve Adjustment, Level Adjustment, or Hue, Saturation and Lightness Adjustment.

Setting Menu Area

Adjust Brightness and Contrast

This item allows you to adjust the brightness and contrast of the scanned image.

You can manually type the values between -100 and 100 (the default is 0) into their text boxes. You can also drag the scroll bar left to decrease or right to increase the effect. We recommend that you click the "**Auto**" button to let the software adjust the effect automatically.



**Load**

Load setting value.

**Save**

Save current setting value.

**Reset**

This item allows you to reset the brightness or contrast value.

**Reset All**

Reset both brightness and contrast value.

**Auto**

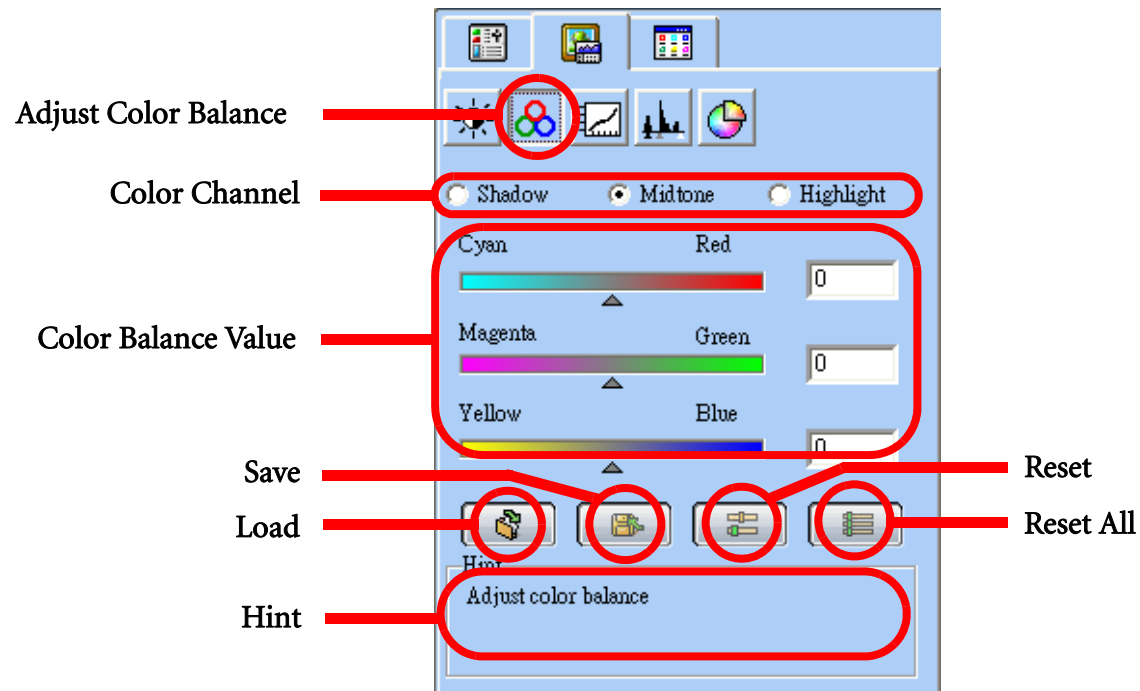
Click this button to let the software adjust the effect automatically.

Adjust Color Balance

With the Color Balance menu, you can change the mixture of colors of an image and emphasize or diminish certain colors.

The **color channel** is where you can select the channel to be adjusted.

Color Balance Value: You can drag the triangles or enter the value (from 0 to 100) in the box directly to adjust.



To adjust the color balance, first, select the channel you want to adjust, and then drag the triangles under the color bars. You can also enter the desired values directly into three entry boxes to the right of the color bars to adjust the color balance.

For example, if the color of the brighter area in the original you scan appears to be bluish, you can first choose **Highlight** as the channel, and then drag the triangle below Cyan-Red bar to the right, or drag the triangle below the Yellow-Blue bar to the left to eliminate the bluish effect.

Default parameters are:

Item	Range	Default value
Color channel		Mid-tone
Cyan and red	-100~100	0
Magenta and green	-100~100	0
Yellow and blue	-100~100	0



Load

Load setting value.



Save

Save current setting value.



Reset

This item allows you to reset the color balance value.



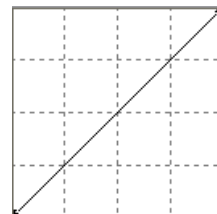
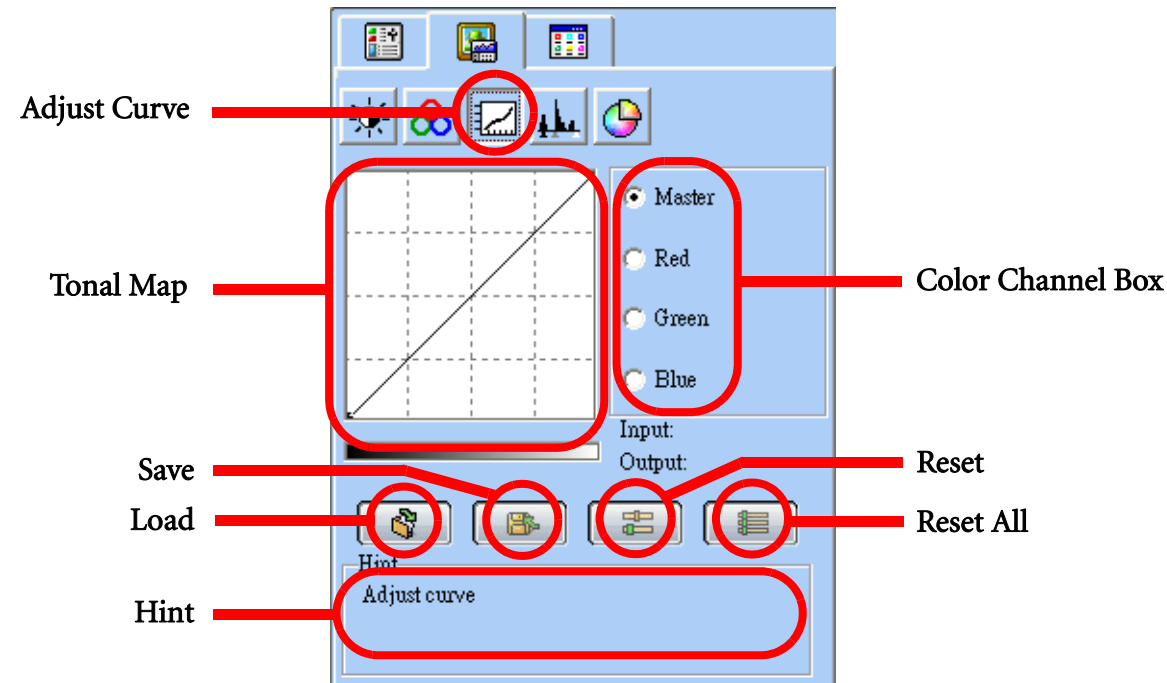
Reset All

Reset all color balance value.

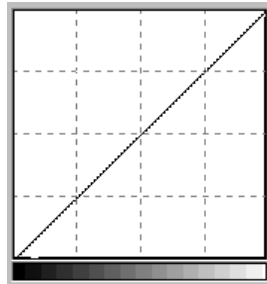
Adjust Curve

The Curve tool is used to adjust the brightness properties of midtone pixels in an image.

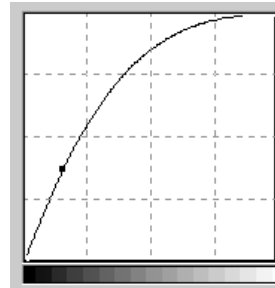
Use the **Color Channel box** to select the color channel to be adjusted. This allows you to adjust the curve property of each color channel respectively.



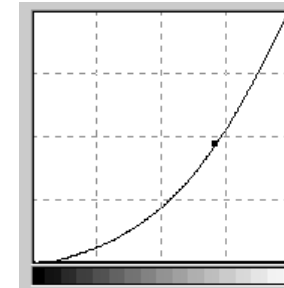
The x-axis in the **Tonal Map** represents the input brightness level of the pixels in an image. The y-axis represents the output brightness level of the image. By clicking and dragging the curve to change its shape, you can adjust the differences between input and output brightness level of an image without extensively modifying the dark and bright areas. If we compare the following images and their Tonal Maps:



The original image and its Tonal Map. The curve is straight and diagonal.

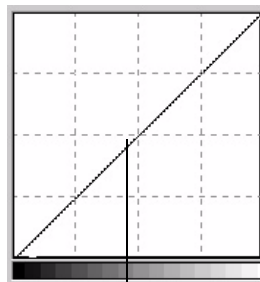


Drag the curve to the left, and the mid-tone area of the image becomes brighter.

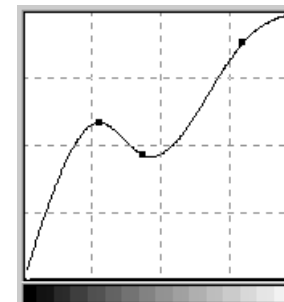


Drag the curve to the right, and the mid-tone area of the image becomes darker.

You can also click the curve to add new points and further change the shape of the curve:



Click to add a new point



Input: 121
Output: 139

You can read the precise input/output value in the **Input/Output Status Area**.

For Experienced Users

**Load**

Load setting value.

**Save**

Save current setting value.

**Reset**

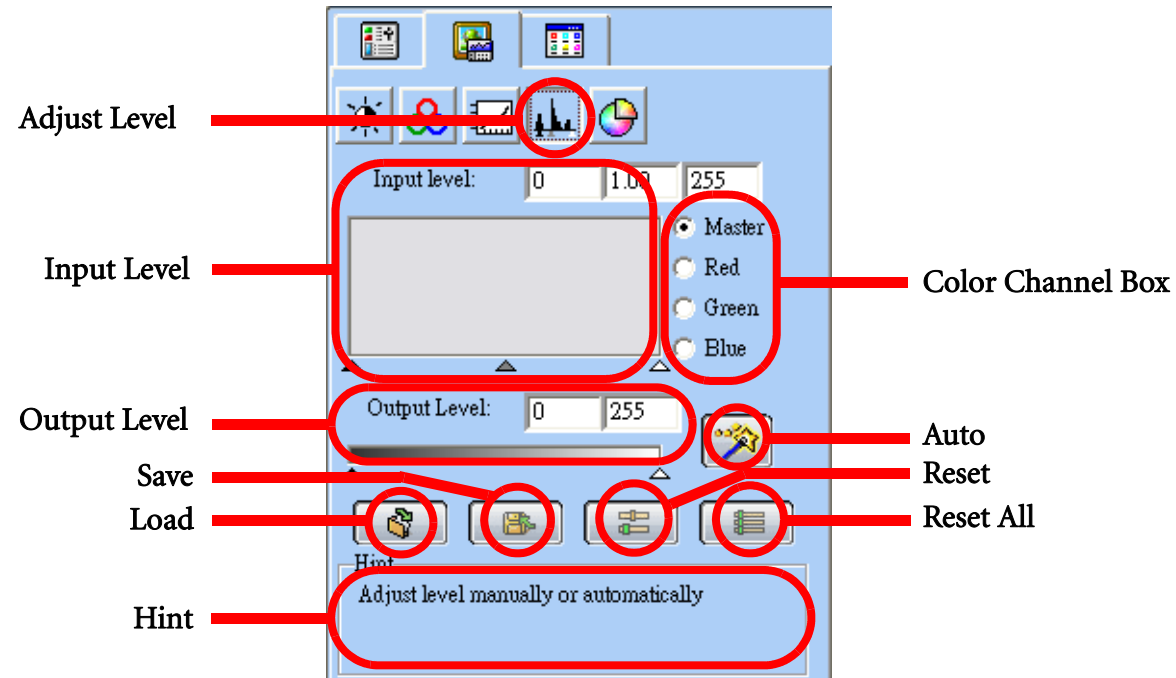
This item allows you to reset the curve value.

**Reset All**

Reset all curve values.

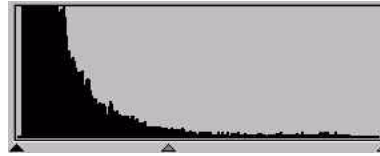
Adjust Level

The Color Level dialog box shows the distribution of brightness levels of an image and its values classified into the Input Level and the Output Level.

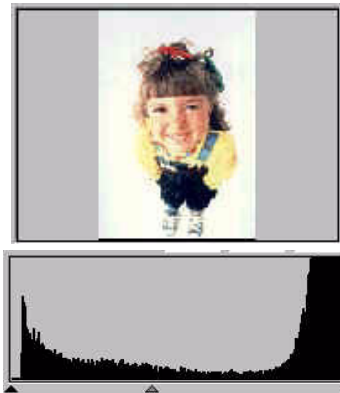


- ☒ Master
- ☐ Red
- ☐ Green
- ☐ Blue

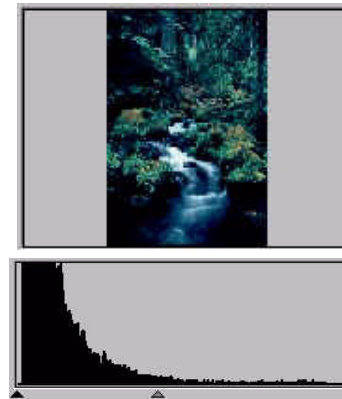
Use the **Color Channel** box to select a color channel to adjust. This will allow you to adjust the histogram property of each color channel respectively.



A **Histogram** displays the distributing status of dark and bright pixels in an image. The x-axis is divided into 256 equal portions, representing the brightness level of 0 to 255. The y-axis is used to represent the quantity of pixel in each brightness level. The following is a comparison of four images and their histograms:



Brighter images have brighter pixels, therefore the bars in the right are higher than that in the left.



Darker images have darker pixels, therefore the bars in the left are higher than that in the right.

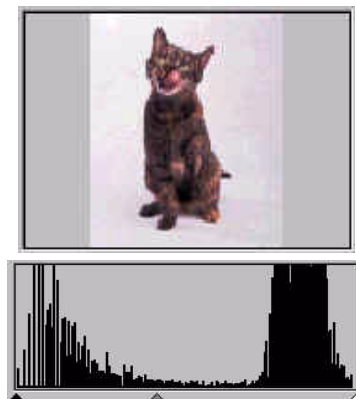


Image 1

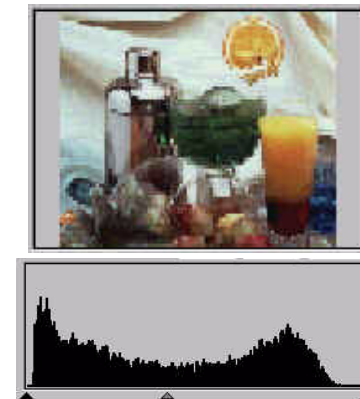


Image 2

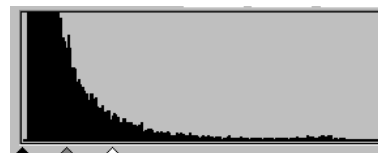
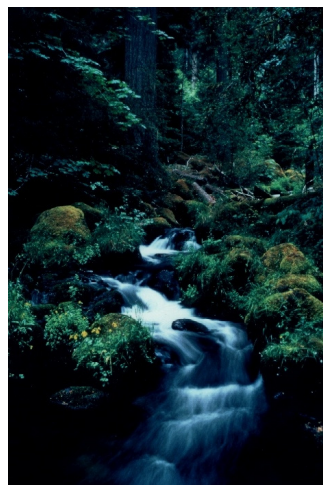
As we can see in Image 1, there is a higher contrast between the brighter and darker part of the image. Bright and dark pixels occupy a larger portion of the total image. Therefore, in the histogram, there are higher bars in the left (darker side) and right (brighter side), while in the center, the bars are relatively much lower, which means that there are only a few midtone pixels in the image.

In image 2, pixels in objects possess greater levels of brightness and darkness. The distribution is more even than that in Image 1. Therefore, the brighter, midtone and darker pixels share evenly the total pixels in the image. This will make the histogram for Image 2 appear smoother.

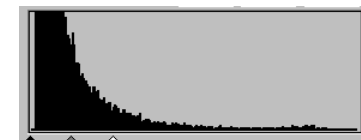
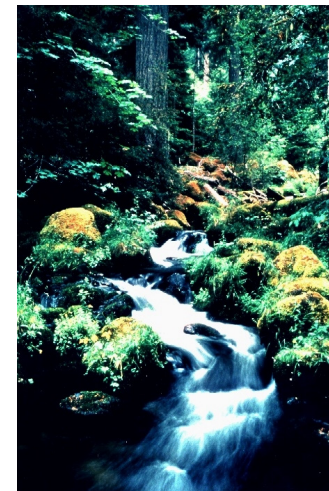
To adjust level, first choose the color channel. There are four radio boxes for the selection of channels. If you select the Master, the level of all three color channels (red, green and blue) will be adjusted simultaneously. If you select one of the Red, Green, or Blue boxes, only the selected color channel will be adjusted.

Next, you can adjust the level by dragging the triangle under the diagrams. The Black handle (the left one) is for the adjustment of shadow of input/output level, the gray handle (the middle one) is for mid-tone, and the white handle (the right one) is for highlight. In addition, you can adjust the values by directly entering the desired values in the text boxes. You can also press the "Auto" button to let MiraScan 7 automatically adjust the color level according to the color of the whole image.

Below is an example of using the histogram tools to enhance the image and to add details:



Before adjustment



After adjustment

Default parameters are:

Item	Range	Default value
Input level max	Input level min+2~255	255
Input level min	0~input level max-2	0
Gamma	0.1~9.9	1.5
Output level max	0~255	255
Output level min	0~255	0



Load

Load setting value.



Save

Save current setting value.



Reset

This item allows you to reset the level value.

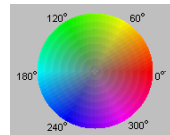
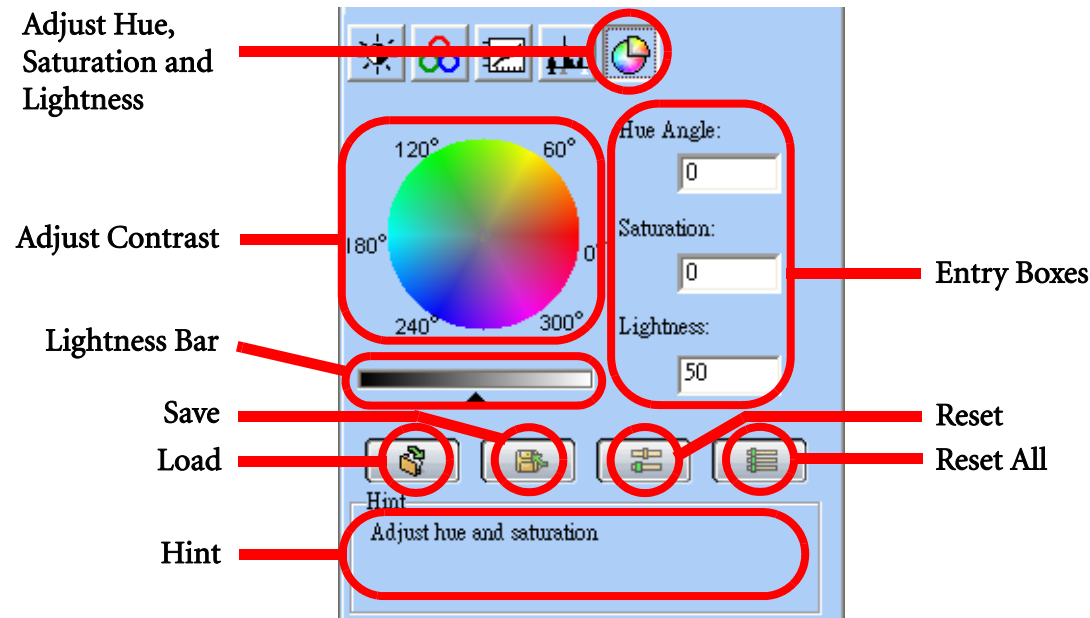


Reset All

Reset all level values.

Adjust Hue, Saturation and Lightness

Hue is a characteristic that distinguishes one color from another, while Saturation and Lightness decide the intensity and lightness of a color.



You can use the **Color Wheel** to specify the hue and saturation of the color you want to use. Move your mouse cursor on the Color Wheel and then click on it. Drag within the Color Wheel to select the hue of the color you want to use. The distance from the center of the wheel decides the saturation of the color: the farther you drag your mouse cursor from the center of the Color Wheel, the higher the saturation.



You can drag the triangle below the Lightness Bar to adjust the lightness of the color you choose. To increase the lightness, drag the triangle to the right. Otherwise, drag the triangle to the left to reduce the lightness.

Hue Angle: 0

Saturation: %

Lightness: %

While you drag within the **Color Wheel** to choose the hue and saturation of the color or drag the triangle below the Lightness Bar to specify the lightness of the color, the related information will also be shown in the **Entry Boxes**. You can also enter the values here directly.

Default parameters as:

Item	Range	Default value
Hue	0~359	0
Saturation	0~100%	0%
Lightness	0~100%	50%



Load

Load setting value.



Save

Save current setting value.



Reset

This item allows you to reset the hue, saturation and lightness value.

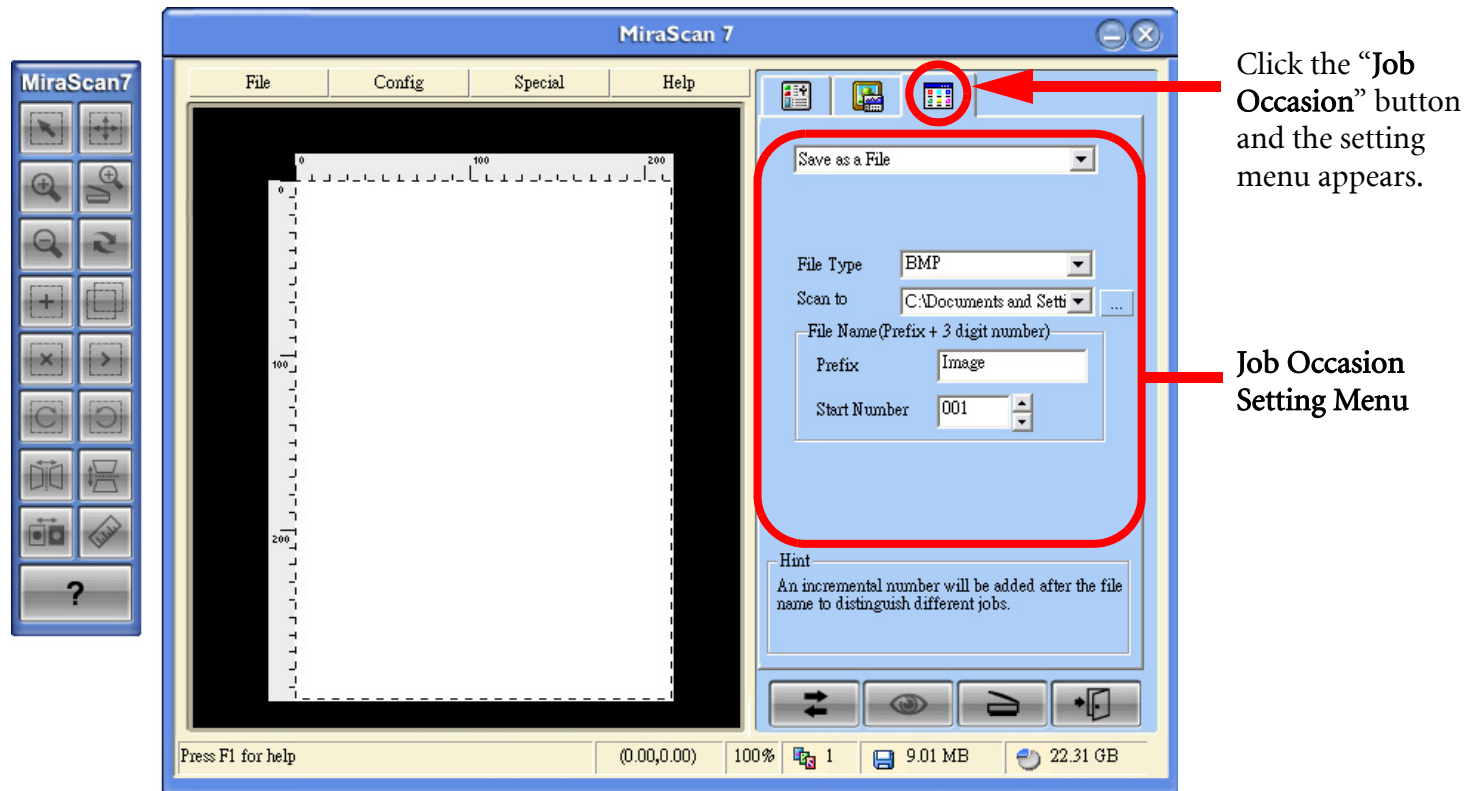


Reset All

Reset all hue, saturation and lightness values.

III. Job Occasion

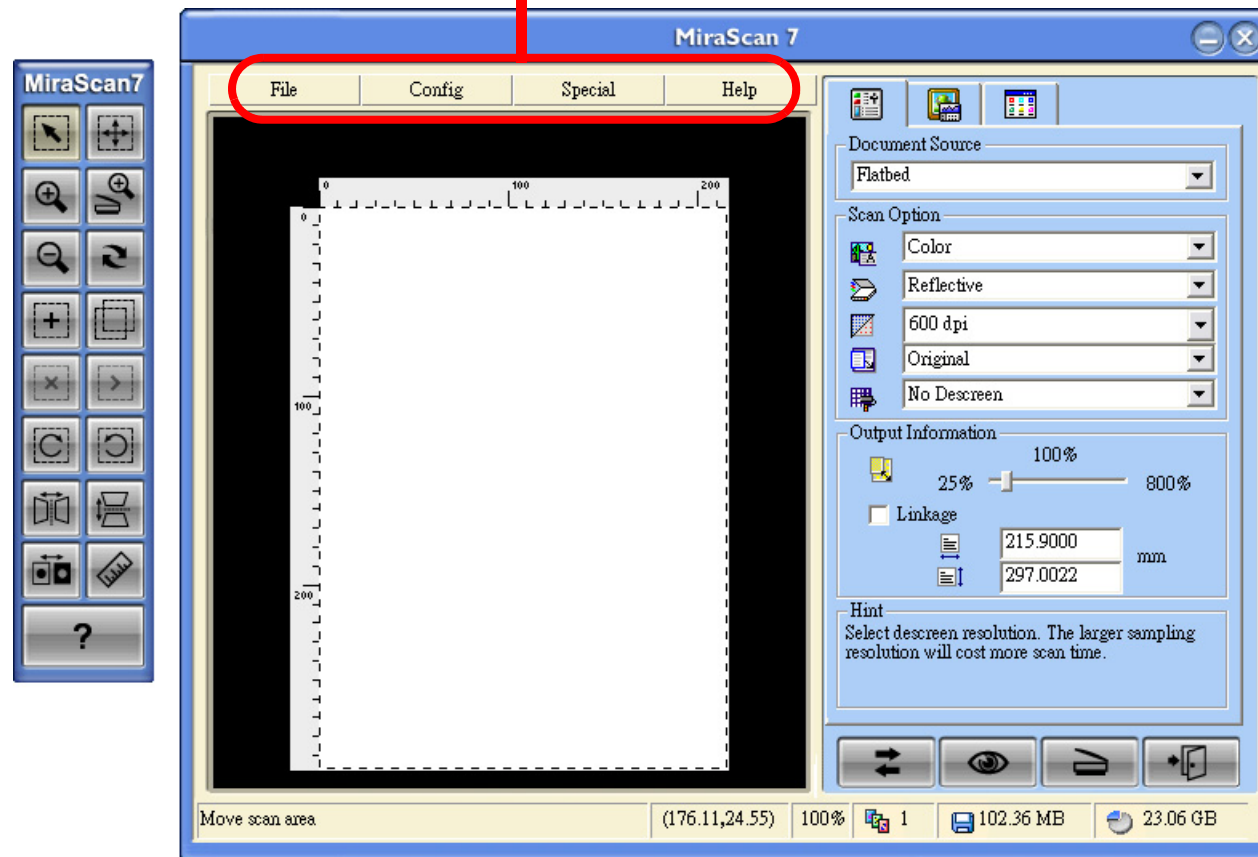
Click the “**Job Occasion**” button and the settings menu will appear. Note that these functions of Job Occasion in Classic Mode are just the same as those in Wizard Mode. Please refer to the instructions in “Wizard Mode” on page 34.



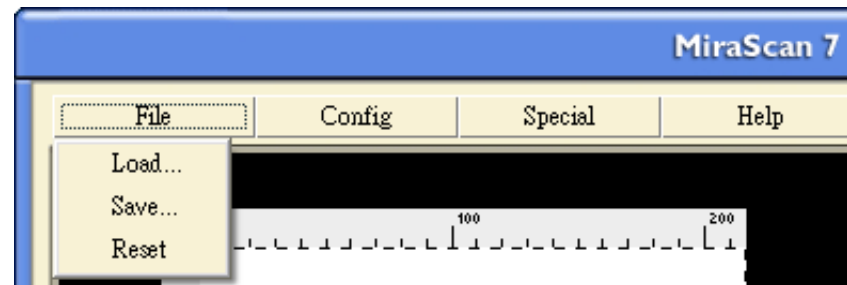
IV. Setting Tool Bar

In Classic Mode, we provide you with the setting tool bar functions. There are four main items in the tool bar, including: File, Config, Special and Help.

Setting Tool Bar



File



Load

Load setting value.

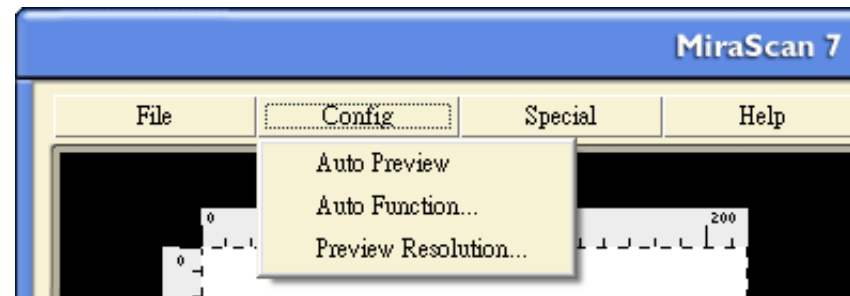
Save

Save current setting value.

Reset

This item allows you to reset setting value.

Configuration

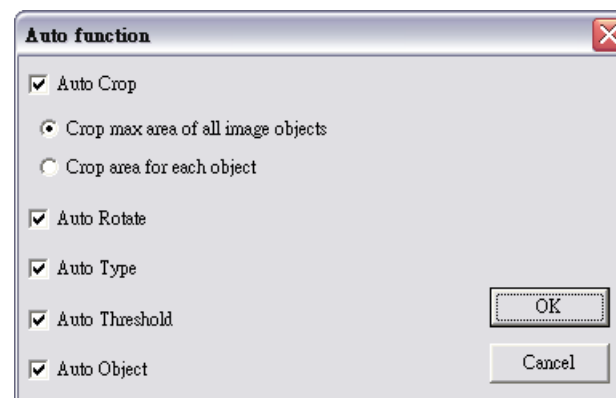


Auto Preview

If you check this item, MiraScan 7 will perform a preview when the modes are shifted.

Auto Function

Check this item to display the Auto Function Menu. There are five items to choose from: Auto Crop, Auto Rotate, Auto Type, Auto Threshold and Auto Object.



1. Auto Crop

Check this check box and MiraScan 7 will crop the scanned images. With this function, you can choose to crop the maximum area(s) of all image objects or for each object.

2. Auto Rotate

Check this item and MiraScan 7 will automatically rotate the scanned image to a correct position.

3. Auto Type

Check this item and MiraScan 7 will choose an appropriate image type to scan. You can also uncheck the check box and select an image from the drop-down list box.

4. Auto Threshold

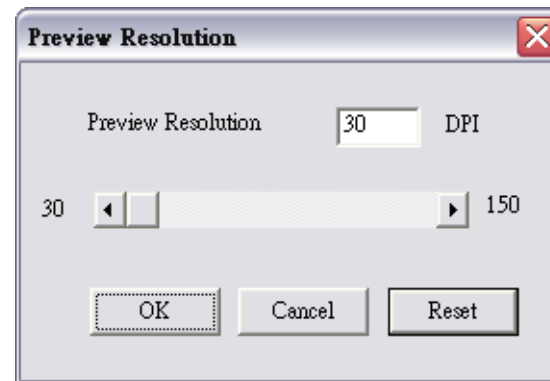
Check this item and MiraScan 7 will scan an image with black and white image type in its optimum effect.

5. Auto Object

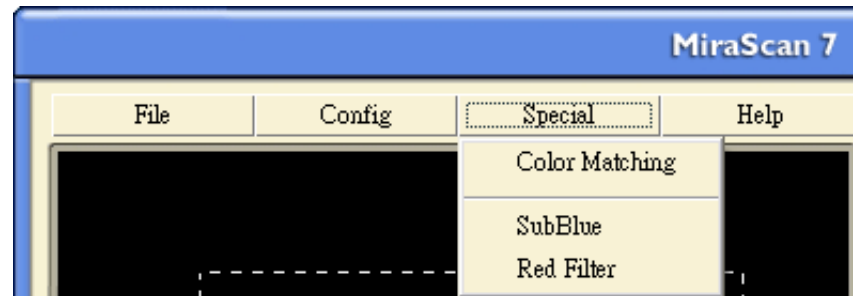
Check this item and MiraScan 7 will automatically recognize whether the scanned object is reflective original or positive/negative film.

Preview Resolution

You can change the preview resolution by inputting a value into the edit box or by dragging the slider.



Special



Color Matching

Check this item to enable the Color Matching function.

Sub-Blue

When scanning an ultra-thin paper, such as a voucher or a receipt, the scanned image tends to be bluer as a result of less absorption and thus more reflection of the blue light from the paper. Check this item to reduce the blue light from your document for a cleaner background and clearer texts. This function is not available when selecting "ADF" as your document source.

Red Filter

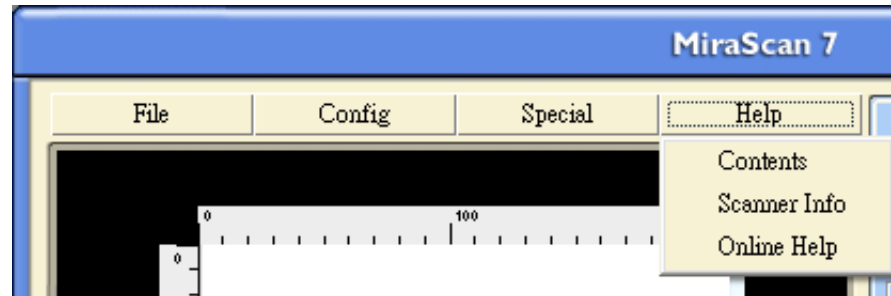
Check this item to filter out the red color on your document for a cleaner background and clearer texts.

This function is available only when selecting "Gray" or "Gray 16 bits" as the image type.

Calibration

Enable this function to calibrate your scanner again. (Only for CIS models.)

Help



To help you better understand and operate MiraScan 7, you can access the Help system provided in Classic Mode.

Click the **Help** button and a submenu with the following items will appear.

Contents: Load the help file and display the MiraScan 7 Help page. You can also press the “F1” key on the keyboard.

Scanner Info: Display the scanner's information in a dialog which includes "Scanner Model", "Firmware version", "Driver version", "Device Manager", "USB Info", "Max resolution" and "Max Scan area". Before you ask for technical support, please have these details ready.

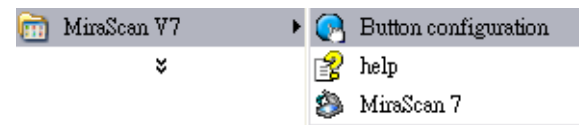
Online Help: Visit the BenQ web site to get further customer service.

Button Mode

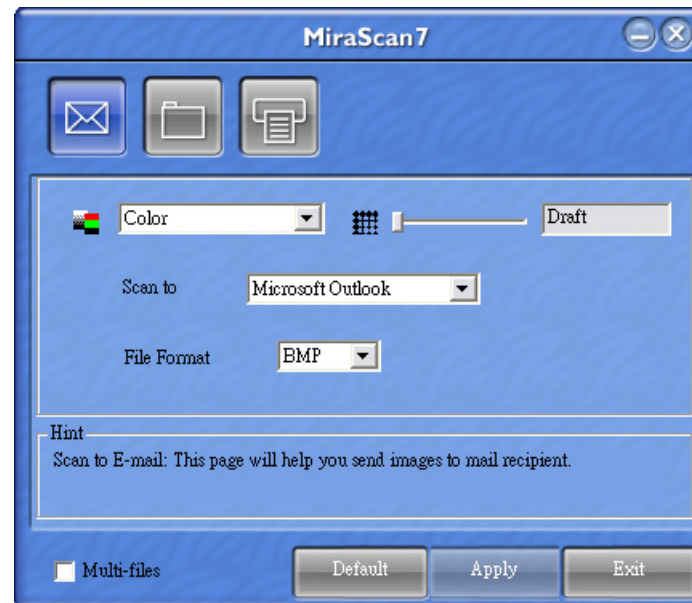
There are three Quick Scan buttons on the scanner that provide three scan functions, including: Scan to E-mail, Scan to PDF and Scan to Printer. You can perform your scanning job simply by pressing these buttons. For details on how to operate the Quick Scan buttons, refer to “Scan your originals using the Quick Scan buttons” on page 7.

Button Configuration

To set up detailed settings in Button Mode, click the “**Start**” button on the system tray and follow the path: Programs\MiraScan V7\Button configuration to run Button Configuration.

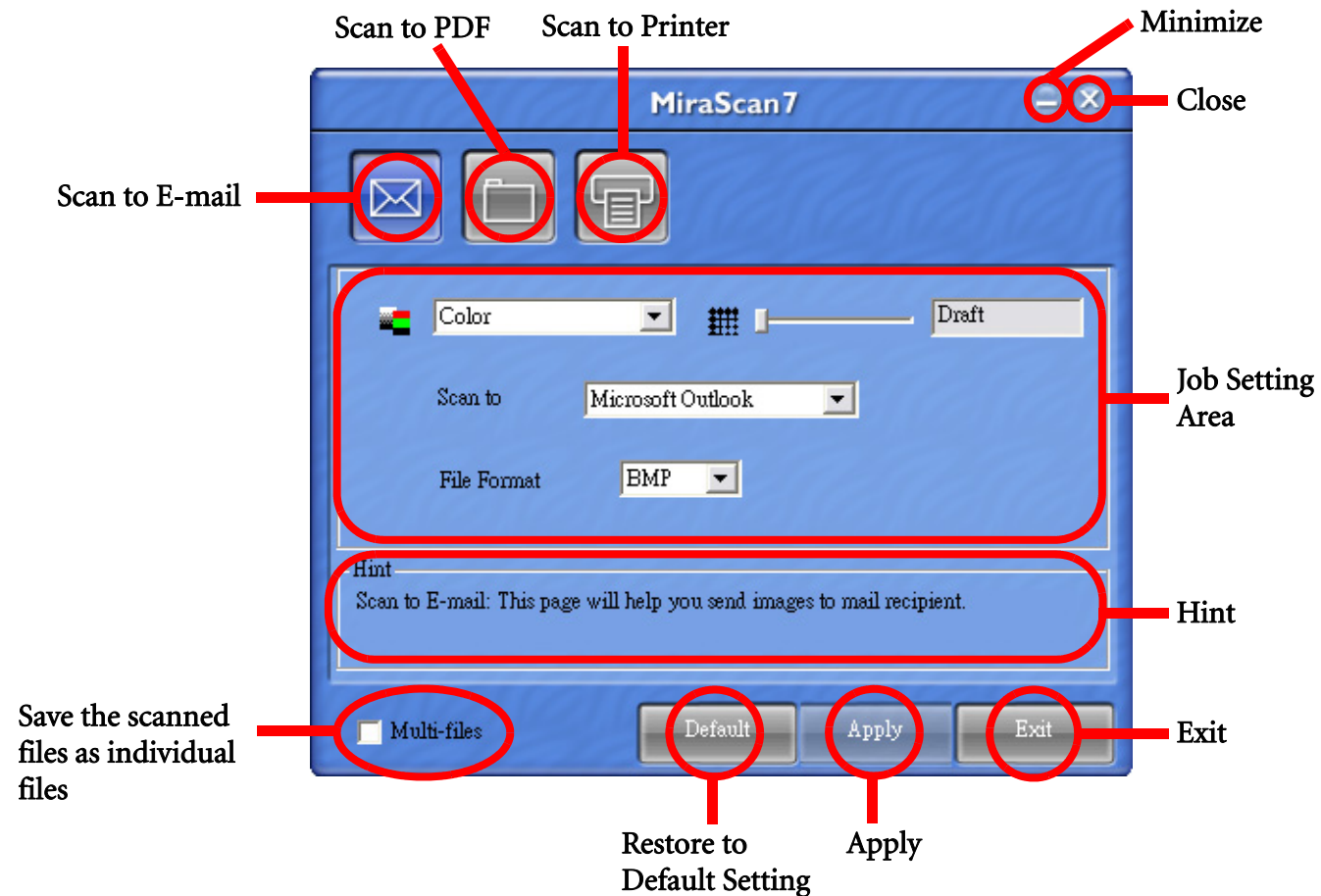


Click “Button Configuration” and the Button Mode Configuration Menu appears.



Button Mode Settings

There are three major functions for you to set up their settings, including: Scan to E-mail, Scan to PDF and Scan to Printer. Click these buttons to set up Button Mode settings.



Note: If you select ADF as the document source when using the Quick Scan buttons, you will be prompted to set up necessary settings each time before the scanning starts. To view these settings, refer to "Scan your originals using the Quick Scan buttons" on page 7.

Problems and Solutions

Installation and uninstallation problems

Installation Problems

How to install MiraScan 7?

First check the system requirements. When you first install the program, we recommend the following installation sequence:

Automatically: Put the CD into the CD-ROM drive, and follow every command or prompt in Autorun and the Setup guide.

Manually: If the automatic setup is not successful, try the following steps:

Step 1: If the scanner and your PC are connected, disconnect the scanner.

Step 2: Install the scanner driver.

Step 3: Reboot the PC.

Step 4: Plug the USB cable into the scanner and your PC. Then plug the AC adapter of the scanner to a power outlet.

Though I followed the above steps, the installation was not successful. What should I do?

If all of the above actions fail, there are five possible causes:

Causes	Solution
There's something wrong with the Windows 2000 system in your PC.	Format the hard drive and install Windows XP or higher. Windows XP or higher has much better compatibility to support USB.
There is a hardware conflict.	Send the hardware to your local dealer for repairs.
Former version error	Manually delete all files of the former version of MiraScan 7 and keywords of "MiraScan" in the regedit file. Or re-set your system.
Disk space error (insufficient)	Clear the Disk or choose another Disk which has enough space. See System requirements.
RAM error (Too small RAM to run Setup)	Add RAM or appoint enough virtual RAM. See System requirement.

During installation, the scanner was not found.

Please make sure to move the lock switch located at the bottom of the scanner. If you are sure the lock is already moved, check the scanner as follows:

- Power on the scanner.
- The white lamp inside the imaging carriage should come on.
- The imaging carriage moves a little forward or backward.
- When the imaging carriage moves, the light indicator (green or red) at the front of the scanner blinks for about 15 seconds.
- The indicator should stay lit. If the indicator blinks periodically, then the scanner is out of order.
- Is the USB port in your PC active? Windows supports USB, but please make sure to activate the USB ports from the BIOS. If "Universal serial bus controller" is shown under "Start -> Setting -> Control Panel -> System -> Device Manager", the scanner will be installed successfully.

When the installation program asks to reboot, my computer does not respond.

The rebooting process during the MiraScan 7 Quick Install works with most computer systems. However, if you encounter any difficulty, simply reboot your system, and everything will return to normal. The files have already been copied to your hard drive and the installation is complete. Simply reboot and try scanning.

Can I set up MiraScan 7 in Windows NT?

No. Windows NT does not support USB. Please read System Requirements carefully before installation.

After I have connected a USB CD-RW, my scanner can't work. What should I do?

If the problem happens after you set up the USB CD-RW, an unknown software conflict may have happened. Disconnect the USB CD-RW and re-install the program.

Uninstallation Problems

How to uninstall MiraScan 7?

Follow this path: Start - > Settings -> Control Panel -> Add/Remove Programs -> Setup/Uninstalltion -> "MiraScan 7" -> button of "Add/Remove" or double-click file of Uninstall in MiraScan 7's folder.

Why can't I uninstall MiraScan 7?

Cause	Solution
System error: You did not uninstall MiraScan 7 before you setup the operating system again. So in the new system, there's an error in regedit file.	Import the former system's regedit or delete all MiraScan 7 files manually.
The uninstallation file is corrupt.	Delete all files in the folder and "MiraScan" references in the regedit manually.
The last uninstallation is unsuccessful.	Delete "MiraScan 7" in Add&Remove Programs in the Control Panel. If that doesn't work, use other system edition programs such as Tweak Tools.

Troubles in starting MiraScan 7

Why can't I start up MiraScan 7?

Cause	Solution
Installation is blocked or interrupted accidentally	Uninstall it or delete all files manually, and then reinstall it.
File is destroyed	Copy intact file or do as above
Shortcut is changed	Redefine shortcut's path
Pirated software	Purchase authorized software

Why does MiraScan 7 start slowly?

RAM and virtual RAM are very important to image processing programs, MiraScan 7 needs large RAM to complete image processing. It is better for you to equip the computer with more than 512MB RAM. We urge you to close other programs before opening MiraScan 7 so that it will run faster.

My system locks up and MiraScan 7 cannot find the scanner. Sometimes after I start MiraScan 7, the crop box and the select box will not move.

MiraScan 7 stores your last settings in its resource files. If your computer locks up while you are using the scanner, it is possible that the resource files have been corrupted. Try holding down the Alt key when you Acquire MiraScan 7. This will reset the defaults in our software and you will be able to use it. If you still cannot get into your software, simply reload MiraScan 7 software from the original disk.

Why can't I call MiraScan 7 in other programs such as Photoshop?

In other application programs such as Photoshop, only the TWAIN Mode of MiraScan 7 can be called. If this is your first time to run MiraScan 7 in an application program, you must define TWAIN source.

Follow these steps to define MiraScan 7 as TWAIN source (take Photoshop as example): File - > Import -> Select TWAIN_32 Source -> in dialog box.

How to set scanner as one can be used by all users in Windows2000?

During the installation of the scanner driver, the installer will modify some system files, and only "Administrator" is authorized to do so in Windows 2000.

Please follow these steps to authorize all users to access the scanner:

- Click "Start -> Settings ->Control Panel -> System"
- Click "User Profiles -> Copy to"
- Click "Everyone -> OK"

Where do the files go, after finishing the "Scan to" applications?

After activating the "Scan to" operations, the files are sent to the appropriate application, such as Microsoft Word. if something goes wrong during transfer, you can retrieve the files in a temporary folder: c:\windows\temp\.

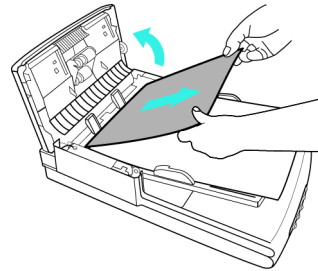
Operation problems

How to clear a paper jam in the ADF?

Step 1: Open the ADF cover.

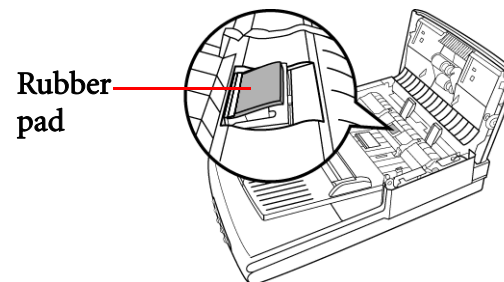
Step 2: Hold both sides of the stuck paper with both hands and carefully pull it out.

Step 3: Close the ADF cover.



What should I do when document double-feeds occur constantly?

The rubber pad in your ADF is designed to smooth the movement of document feeding. After scanning approximately 40,000 sheets through the ADF, the rubber pad may become worn out. When this happens, contact your local dealer for replacement of the rubber pad.



Why can't I set preview action under Auto Function?

If all check boxes in Auto Function Settings Dialog are unchecked, it will be disabled. You can check any of the boxes in that dialog to activate it.

Why the button of "Auto-function" doesn't work?

The "**Auto-function**" button is disabled if all of its sub-items in Advanced settings are unchecked. Checking any of the sub-items will enable the button.

Why the buttons of "Add" and "Duplicate" in preview window don't work?

If the number of frames or jobs in preview window is more than 28, the "**Add**" and "**Duplicate**" buttons will be disabled.

When I send E-mail with image scanned from MiraScan 7, it's too slow and no response. Why?

Considering the present transmission speed on the Internet, each E-mail should not exceed 1MB, and each image is better less than 300kb for an E-mail. If the size of a scanned image is too large, it will slow down the transmission speed. Before adding a scanned image to an E-mail, you can reduce its size by adjusting its resolution or format in MiraScan 7 or in other image processing programs. Normally, 150dpi is good enough and JPG or GIF is very small compared with other formats. You can compress images with Winzip or others.

How to add a program to "Destination"?

You can drag-drop a short-cut in desktop into relative scan classes or define your program's path in the Settings Dialog.

How to change MiraScan 7's default settings to meet my special needs?

Please carefully read references to change settings in How to make Settings in Button Mode and in Console Mode. And see to How to improve an image's quality.

When I scanned material, its background would be scanned and printed. How to prevent?

- Crop the desired scanning area in the preview window. The black background will not be scanned.
- Place a white A4 paper and stick it on the inner side of the top cover of the scanner. Then the background color will become white.

Why can't I choose a scanning destination when MiraScan 7 TWAIN Mode is run in an image-processing application program?

When the TWAIN Mode is activated in an image-processing program, the selection for a scanning destination is not available. The scanned image will be automatically sent to the application program.

Additional tips on improving image quality

How to enhance image's definition and verisimilitude?

Resolution is used to measure an image's definition, but definition and size contradict each other. In order to enhance image definition and reduce file size, we recommend the following methods:

- Classify material into corresponding scanning types, such as color, line-art, reflective.
- Choose the smallest and most efficient resolution.
- Choose the right scanning destination, such as file, web page, OCR.
- Use default settings unless you are an advanced user.
- Use pre-defined macros to optimize operation.
- Adjust images adequately.

How to darken or brighten an image?

You can simply adjust an image's brightness and contrast to reach the desired effect. For details see Brightness and Contrast.

How to enlarge or diminish an image?

Do as follows:

Involved item	Enlarge	Diminish
Color	more than 16 bits	less than 16 bits or art-line
Resolution	more than 300 dpi	less than 150 dpi
scaling	scaled	not scaled
Crop area	full area	only desired area
file format	BMP	JPG or GIF
compress	uncompressed	Winzip or others

How to change the color balance?

You can adjust the color balance (red/blue/green) in Hue, Saturation and Lightness, Color Balance and Level Tabs.

How to rotate image?

You can click in the Preview window to rotate an image clockwise or counterclockwise.

How to apply advanced skills?

Please carefully read the chapters about Image adjustment and Settings.

Service Information

Technical support

If you encountered problems using MiraScan 7 and the scanner, please send an E-mail (containing detailed descriptions of the problem you came upon, the hardware and software environment of your system) to the following address:

<http://www.BenQ.com.cn/Service/>

For free driver program updates, product information and news release, please visit the following web address:

<http://www.BenQ.com.cn/Service/DownDriver.shtml>

Re-packing directions

To avoid potential damages during transportation, before you send the scanner for repair, please follow these guidelines when repacking your scanner:

- Lock the scanner: side the scanner lock to the lock position before you put the scanner in the box.
- Use the original shipping carton and packing materials for repacking.
- Send only the product and other hardware required to complete the repair.
- Enclose a document describing the problems you encountered.

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IMPORTANT SAFETY INSTRUCTIONS ON USING YOUR SCANNER

Read these instructions carefully. Save these instructions for future reference.

Follow all warnings and instructions marked on the scanner and related accessories.

Unplug the scanner from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

Do not use scanner near water.

Do not place scanner on an unstable cart, stand, or table. The scanner may fall, causing serious damage to the scanner.

Openings in the scanner are provided for ventilation; to ensure reliable operation of the scanner and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the

scanner on a bed, sofa, rug, or other similar surface. This scanner should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.

The scanner should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.

Do not allow anything to rest on the power cord. Do not locate the scanner where persons will walk on the cord.

If an extension cord is used with the scanner, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.

Never push objects of any kind into the scanner through cabinet openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the scanner.

Do not attempt to service the scanner yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power cord or plug is damaged or frayed
- If liquid has been spilled into the product
- If the scanner has been exposed to rain or water
- If the scanner does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.
- If the scanner has been dropped or the cabinet has been damaged
- If the scanner exhibits a distinct change in performance, indicating a need for service.
- Use only the power cord or power adapter which is of the same type as the one originally included with the scanner.