

---

# **TWAIN driver**

# ***User's Guide***

---



---

# Contents

<b>1</b>	<b>Introduction</b>	
1.1	System requirements .....	1-1
<b>2</b>	<b>Installing the TWAIN Driver</b>	
2.1	Installation procedure .....	2-1
	To install the software .....	2-1
2.2	Uninstalling .....	2-1
<b>3</b>	<b>Importing Images</b>	
3.1	To import images .....	3-1
	Import procedure .....	3-1
3.2	Scanning Using the PUSH Scan Function .....	3-4
	To scan using the PUSH Scan function .....	3-4
3.3	Scanning Using the Prescan Function .....	3-6
	To scan using the Prescan function .....	3-6
3.4	With user authentication .....	3-8
	To perform the user authentication operation .....	3-8
3.5	With account track .....	3-10
	To perform the account track operation .....	3-10
3.6	Settings in the Main Window .....	3-11
3.7	Parameters on the Settings tab .....	3-12
3.8	Parameters on the Image tab .....	3-14
3.9	Parameters on the Area tab .....	3-15
<b>4</b>	<b>Selecting the Scanning Device</b>	
	To select a device .....	4-1
<b>5</b>	<b>Registering a New Scanning Device</b>	
	To register a device .....	5-1
5.1	Checking Authentication Information .....	5-4



## About this Product

With the TWAIN driver, a multifunctional product (MFP) can be used as a network scanner. The scan data can be imported into an image-processing application on the computer, where the data can be processed or edited.

## Trademarks and registered trademarks

### Trademark acknowledgements

Microsoft® and Windows® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

RSA® is a registered trademark or trademark of RSA Security Inc. RSA BSAFE® is a registered trademark or trademark of RSA Security Inc. in the United States and/or other countries.



License information

This product includes RSA BSAFE Cryptographic software from RSA Security Inc.

All other company and product names are either trademarks or registered trademarks of their respective companies.

### Dialog boxes

The dialog boxes shown in this manual are those that appear in Windows XP.



#### Note

*The dialog boxes that appear in this document may differ from those that appear on your computer, depending on the installed devices and specified settings.*



#### Note

*Unauthorized reproduction, translation or duplication of this document, whether in its entirety or in part, is strictly prohibited.*

*The content of this document is subject to change without notice.*

Copyright © 2005 KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. All rights reserved.



---

## LICENSE ISSUES

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact [openssl-core@openssl.org](mailto:openssl-core@openssl.org).

### OpenSSL License

Copyright © 1998-2001 The OpenSSL Project. All rights reserved.  
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment:  
"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"
4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact [openssl-core@openssl.org](mailto:openssl-core@openssl.org).
5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
6. Redistributions of any form whatsoever must retain the following acknowledgment:  
"This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY

---

WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

## Original SSLeay License

Copyright © 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com).

The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed.


If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used.

This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:  
"This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)"  
The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related.
4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement:  
"This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

---



THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence].

# 1 Introduction

## 1.1 System requirements

In order to use this software, a TWAIN-compatible image-processing application must first be installed on the computer.

- Operating system
  - Windows NT Workstation 4.0 (SP6a or later)
  - Windows NT Server 4.0 (SP6a or later)
  - Windows 2000 Professional (SP4 or later)
  - Windows XP Home Edition (SP3 or later)
  - Windows XP Professional (SP3 or later)
  - Windows Vista Home Basic (SP1 or later)\*
  - Windows Vista Home Premium (SP1 or later)\*
  - Windows Vista Business (SP1 or later)\*
  - Windows Vista Enterprise (SP1 or later)\*
  - Windows Vista Ultimate (SP1 or later)\*
- \* 32-bit (x86) editions of Windows Vista are supported.
- Computer
  - According to the environment recommended for the operating system
- Memory
  - According to the environment recommended for the operating system
- Network
  - Computer with TCP/IP protocol settings correctly specified
- Hard disk
  - 20 MB or more of available space

## 2 Installing the TWAIN Driver

### 2.1 Installation procedure

Follow the procedure described below to install the TWAIN driver.

The enclosed User Software CD-ROM is required to install the software.

#### To install the software

- 1 Turn the computer on and start Windows.
- 2 Insert the User Software CD-ROM into the computer's CD-ROM drive.
  - The CD menu is displayed.
- 3 Select "TWAIN Driver" from "Scanner Install" and follow the instructions on the screen.

Installation begins and the necessary files are copied to the computer. When all of the necessary files have been copied to the computer, the Installation Completed dialog box appears.

- 4 Click [Finish].

The installation of the TWAIN driver is complete.

### 2.2 Uninstalling

The TWAIN driver can be uninstalled using either of the following two methods.

- Using "Add or Remove Programs" ("Add/Remove Programs" with Windows 2000)
- Using Setup.exe again



#### Note

*Before uninstalling, quit the TWAIN driver.*

## 3 Importing Images

### 3.1 To import images

Images can be imported from the image-processing application compatible with the TWAIN driver. Here, an example is given using Adobe Photoshop.

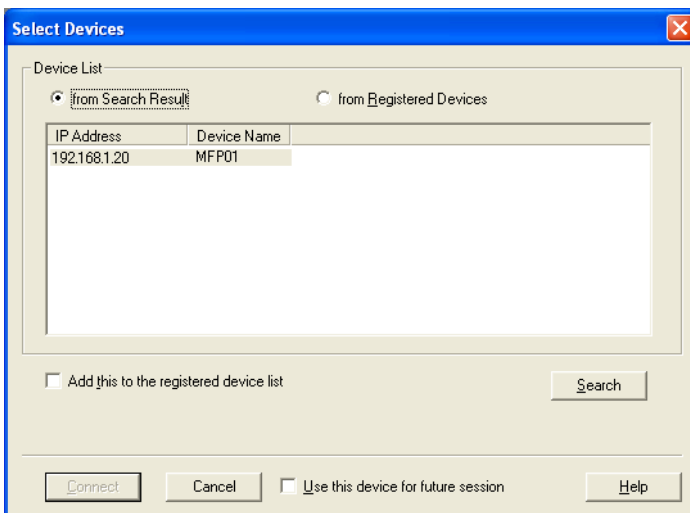


#### Note

*If the multifunctional product is not set to allow scanner transmissions, it will not be possible to scan an image with the TWAIN driver.*

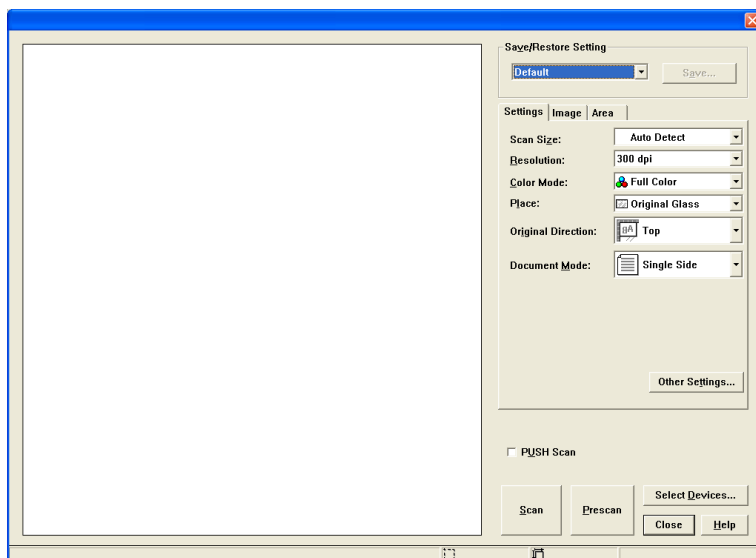
#### Import procedure

- 1 Start up the application to be used for processing the image.
- 2 From the [File] menu, point to [Import], and then select the TWAIN driver.
  - Depending on the program, the command "Select Device" may be available.  
If this is the case, click "Select Device" and select the TWAIN driver.  
Then, carry out the import operation.  
The Select Devices dialog box appears.
- 3 Select the device to be connected, and click [Connect].



- If user authentication or account track settings have been specified from the device, the corresponding authentication dialog box appears. For details, refer to "With user authentication" on page 3-8 and "With account track" on page 3-10.
- If the multifunctional product is set so that scanner transmissions cannot be performed by the user that is logged on, it will not be possible to scan an image.

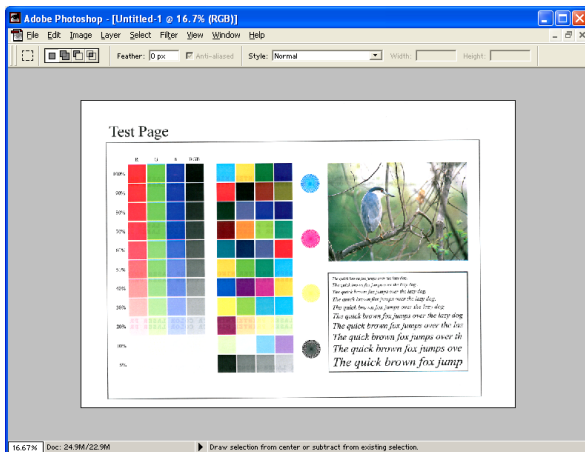
The main window appears.



- 4 Specify the scan settings.
  - For detailed descriptions of the main window, refer to "Settings in the Main Window" on page 3-11.
- 5 Load the document into the ADF or position it on the original glass.

## 6 Click [Scan].

The document data appears in the main window of the software.

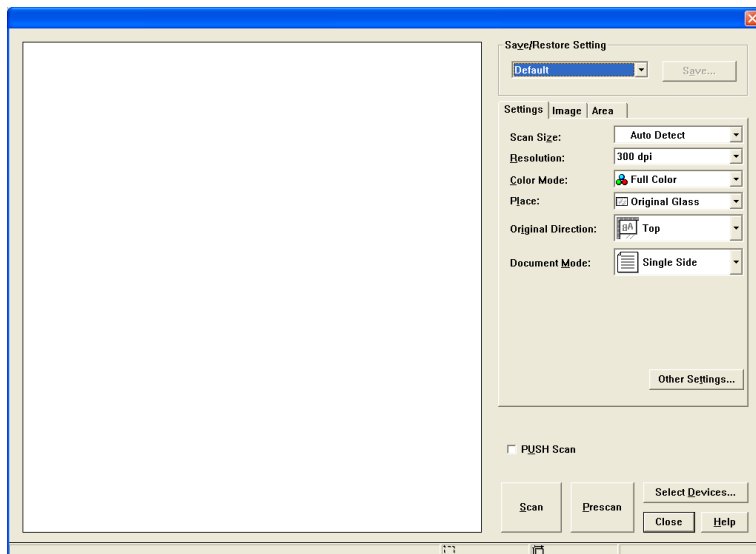


## 3.2 Scanning Using the PUSH Scan Function

With this method, scanning begins when the [Start] key in the control panel is pressed to scan the document.

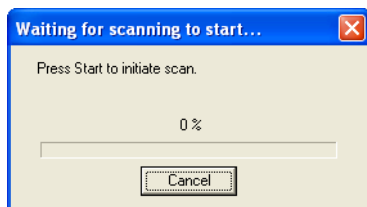
### To scan using the PUSH Scan function

- 1 Display the main window.
  - For details on displaying the main window, refer to "Import procedure" on page 3-1.



- 2 Select the [PUSH Scan] check box.
- 3 Specify the scan settings.
- 4 Click [Scan].

When scanning is ready, a message appears prompting you to set the document.



- 5 Load the document into the ADF or position it on the original glass.
- 6 Press the [Start] key on the control panel.
  - If user authentication or some other authentication is specified, enter the user name and password also on the control panel of the machine before pressing the [Start] key.The document is scanned, and the image is displayed.

### 3.3 Scanning Using the Prescan Function

If you wish to specify the scan area or adjust the image quality before actually scanning the document, do a prescan first.

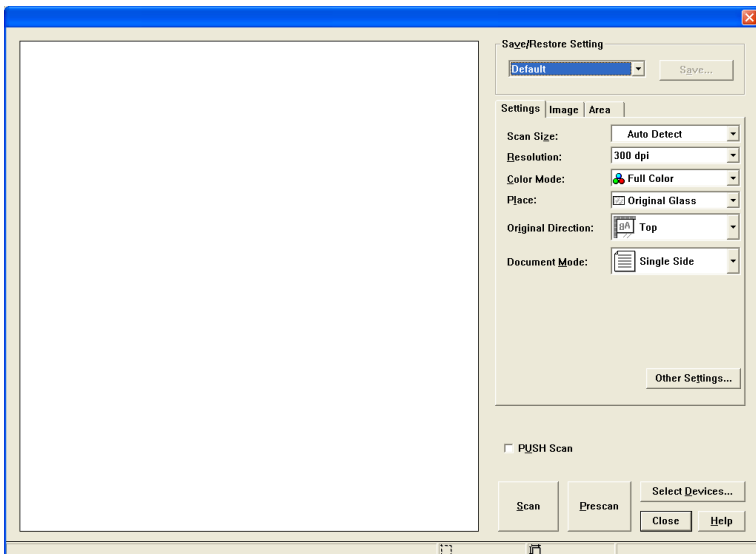


#### Reminder

*Position the document on the original glass. The ADF cannot be used.*

#### To scan using the Prescan function

- 1 Display the main window.
  - For details on displaying the main window, refer to "Import procedure" on page 3-1.



- 2 In the [Settings] tab, set [Place] to [Original Glass].
- 3 Position the document on the original glass.



## 3.4 With user authentication

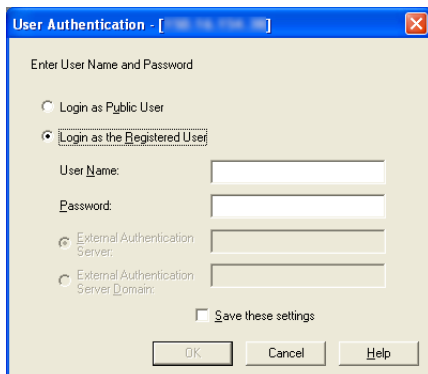
Before the main window appears, the User Authentication dialog box appears.

The user name and password specified for user authentication must be entered.

For details, consult with the machine's administrator.

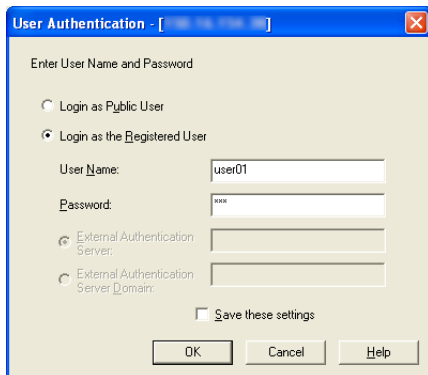
### To perform the user authentication operation

- 1 Select "Login as the Registered User".



- If user authentication was set to allow a public user, this scan function can be used without entering a user name and password. Select "Login as Public User".
- To save the entered information, select the "Save these settings" check box. This allows the machine to be accessed the next time without entering the account name.

- 2 Enter the user name and password and click [OK].



- If external server authentication was selected for the user authentication setting on the device and if multiple domains have been registered, enter "@domain\_name" after the user name. For example, "user01@domain" when the user name is "user01" and the domain name is "domain".

## 3.5 With account track

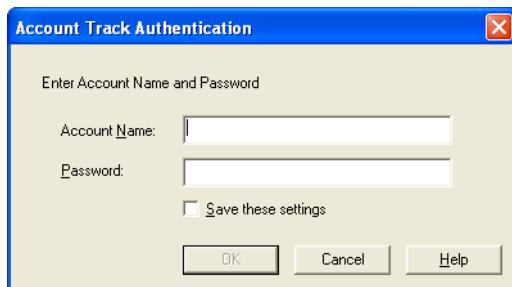
Before the main window appears, the Account Track Authentication dialog box appears.

The account name and password specified for account tracking must be entered.

For details, consult with the machine's administrator.

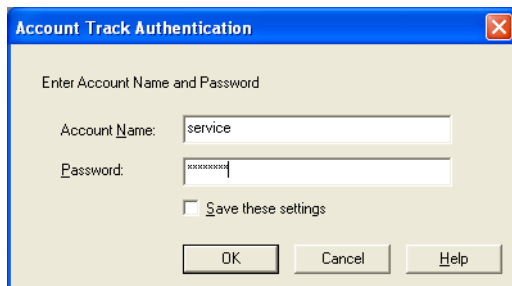
### To perform the account track operation

- 1 Enter the account name and password.



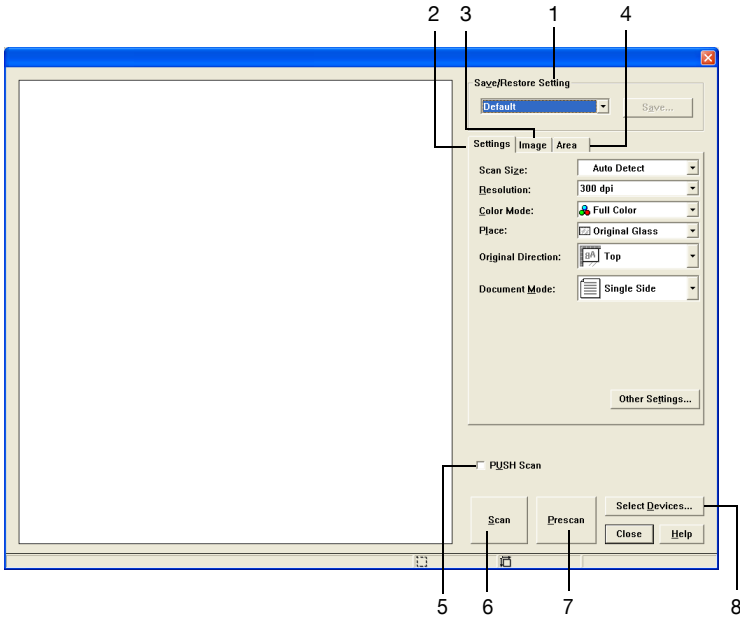
- To save the entered information, select the "Save these settings" check box. This allows the machine to be accessed the next time without entering the account name.

- 2 Click [OK].



### 3.6 Settings in the Main Window

The following settings and operations are available from the main window.



No.	Item	Description
1	Save/Restore Setting	Settings can be saved and loaded at a later time.
2	Settings	Set basic scan parameters. For details, refer to "Parameters on the Settings tab" on page 3-12.
3	Image	Set image-processing parameters. For details, refer to "Parameters on the Image tab" on page 3-14.
4	Area	Specify the area to be scanned. For details, refer to "Parameters on the Area tab" on page 3-15.
5	PUSH Scan	Select this check box to start scanning when the [Start] key in the control panel is pressed.
6	Scan	Begins scanning the selected document.
7	Prescan	When the document is placed on the glass, a preview of the scanned image can be shown at a coarse resolution. Documents can be scanned efficiently by performing a prescan and adjusting the image or specifying an area to be scanned before clicking [Scan].
8	Select Devices	Click this button to change the scanning device. For details, refer to "Selecting the Scanning Device" on page 4-1.



## 3.7 Parameters on the Settings tab

The items that can be specified are as follows:

The screenshot shows a dialog box with three tabs: 'Settings', 'Image', and 'Area'. The 'Settings' tab is active. It contains the following settings:

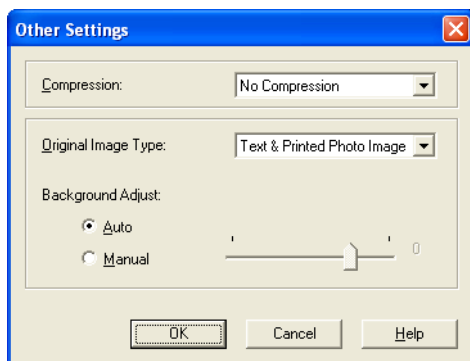
- Scan Size:** Auto Detect
- Resolution:** 300 dpi
- Color Mode:** Full Color
- Place:**  Original Glass
- Original Direction:** Top
- Document Mode:** Single Side

At the bottom right of the dialog is a button labeled 'Other Settings...'.

Item	Description
Scan Size	Select the paper size to be scanned.
Resolution	Set the resolution.  ... <b>Reminder</b> <i>If a document was scanned with a resolution of 100 dpi specified from the TWAIN driver, it will appear as 200 dpi in the control panel of the multifunctional product and in job list of the multifunctional product.</i>
Color Mode	Select the color mode.  ... <b>Reminder</b> <i>If the multifunctional product is set so that transmissions of color documents cannot be performed by the user or account that is logged on, "Full Color" will not appear.</i>
Place	Select where the document is placed, ADF or glass.
Original Direction	Select the orientation of the loaded document.
Document Mode	Select 1-sided scanning or 2-sided scanning.

If you click [Other Settings], the additional items below can be specified.

Item	Description
Compression	Select the type of compression applied to the scanned data.
Original Image Type	Select the quality of the original such as text or photo.
Background Adjust	Adjust the background density. To adjust manually, select "Manual" and drag slider to set the value.



...

### Note

*Depending on the multifunctional product, some compression methods may not be available. For details, refer to the User's Guide for your multifunctional product.*

### 3.8 Parameters on the Image tab

The items that can be specified are as follows:

The screenshot shows a software window with three tabs: 'Settings', 'Image', and 'Area'. The 'Image' tab is active. Inside, there is a section titled 'Image Enhancement' which contains five dropdown menus, each with 'Off' selected. Below this section is a 'Deskew' checkbox, which is unchecked. At the bottom of the window is a button labeled 'Apply to Prescan Image'.

Item	Description
Full Enhancement	Select this check box to automatically adjust all quality parameters on this tab.
Adjust Contrast	Select the contrast level.
Remove Undercolor	Select the level to which the background color is removed.
Remove Background	Select the level to which the background is removed.
Remove Halftone	Select the dot removal level.
Deskew	Automatically adjust the slanted image.
Apply to Prescan Image	This button is available when a prescanned image is displayed. The settings under "Image Enhancement" are applied to the image in the display area.

### 3.9 Parameters on the Area tab

An area can be specified only when the prescanned image is showing. The coordinates and position of the dotted line area that is currently in view can be verified or specified.

The screenshot shows a software window with three tabs: 'Settings', 'Image', and 'Area'. The 'Area' tab is active. Inside, there is a section titled 'Scan Area' with a light gray border. It contains five input fields:

- Origin X: 0
- Origin Y: 0
- Width: 5100
- Height: 3507
- Unit: Pixel (selected from a dropdown menu)

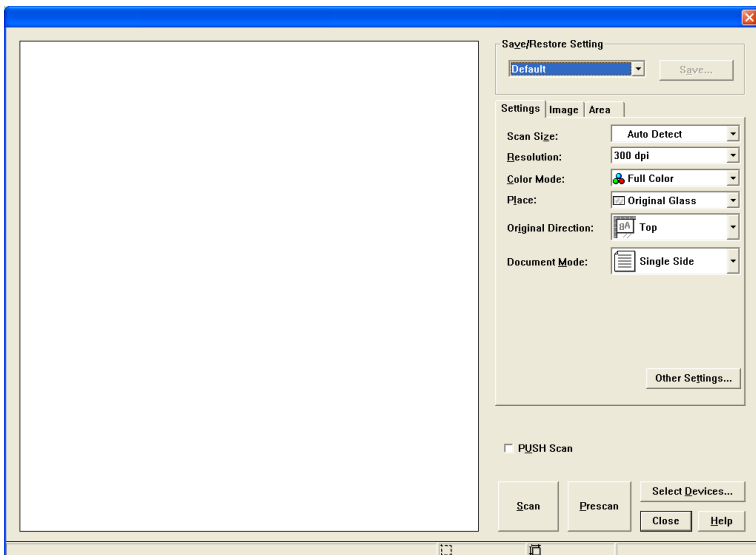
Item	Description
Origin X	Displays the X value of the origin.
Origin Y	Displays the Y value of the origin.
Width	Displays the image width.
Height	Displays the image height.
Unit	Select the unit for the value.

## 4 Selecting the Scanning Device

Scanning devices on the network can be searched and selected. This is used when searching for devices for the first time on the network or when searching for newly added devices.

### To select a device

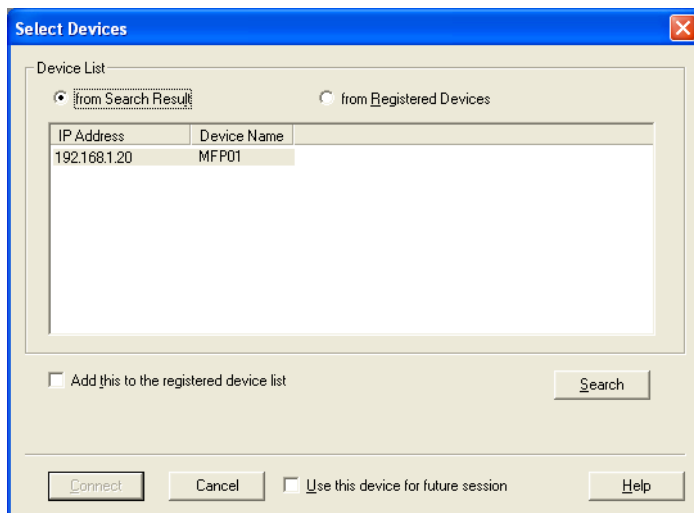
- 1 Display the main window.
  - For details on displaying the main window, refer to "Import procedure" on page 3-1.



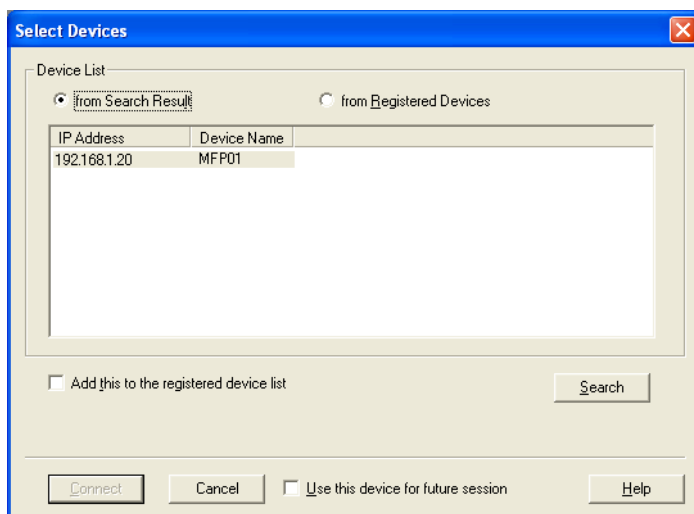
- 2 Click [Select Devices].

The Select Devices dialog box appears.

- 3 Select how the device is to be selected. Select either "from Search Result" or "from Registered Devices".

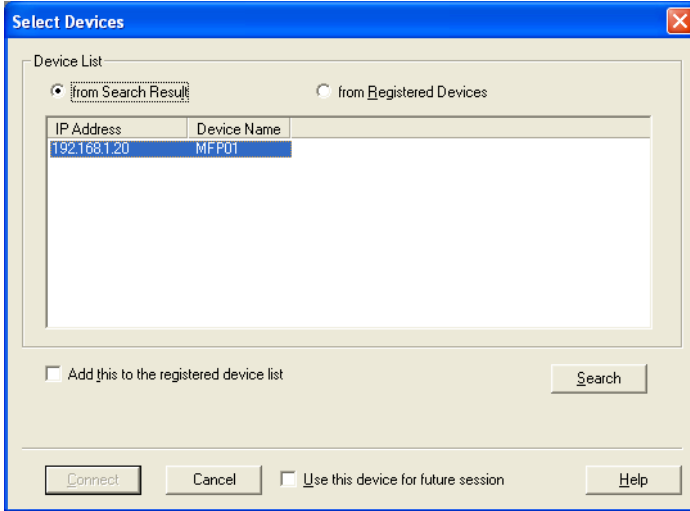


- 4 When "from Search Result" is selected, searching automatically starts. A list of selectable devices is displayed.



- 5 Click the name of a device to select it, and then click [Connect].
- To register the device when a connection is established, select the "Add this to the registered device list" check box.
  - If user authentication is enabled on the scanning device, enter the user name or password.

The Select Devices dialog box is closed and the main window appears again.



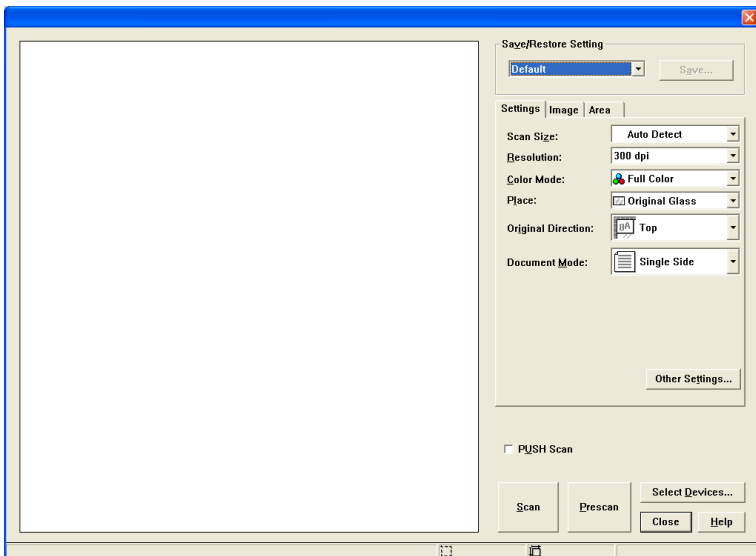
## 5 Registering a New Scanning Device

Devices that are currently connected can be registered to a list. This list eliminates the hassle of having to search the network every time to make a connection.

A maximum of 20 devices can be registered in the list.

### To register a device

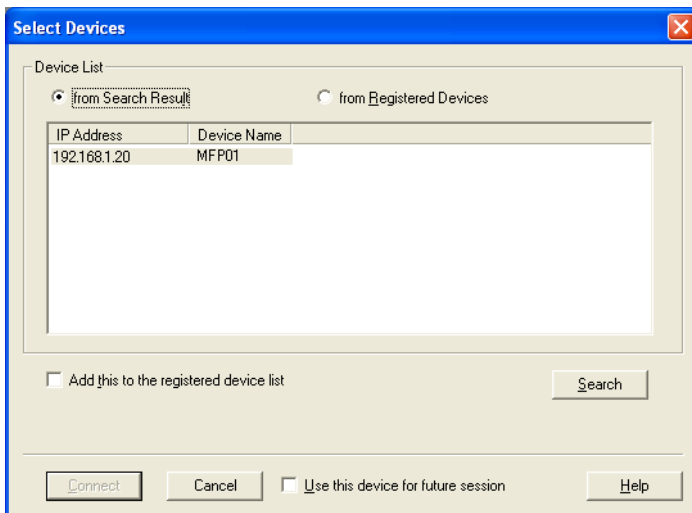
- 1 Display the main window.
  - For details on displaying the main window, refer to "Import procedure" on page 3-1.



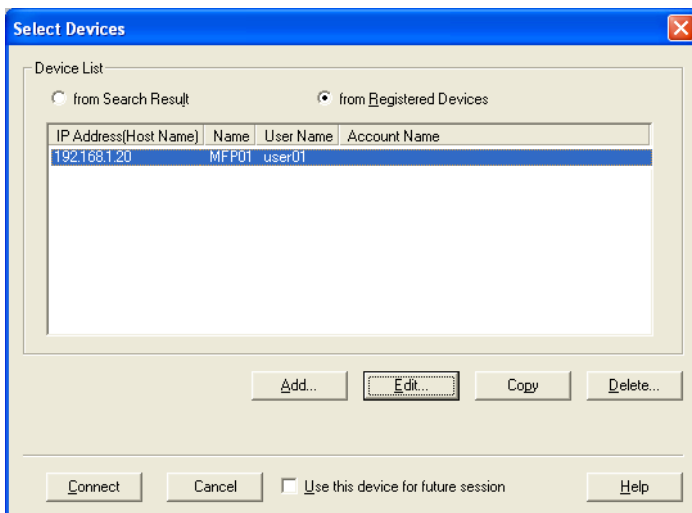
- 2 Click [Select Devices].

The Select Devices dialog box appears.

### 3 Select "from Registered Devices".

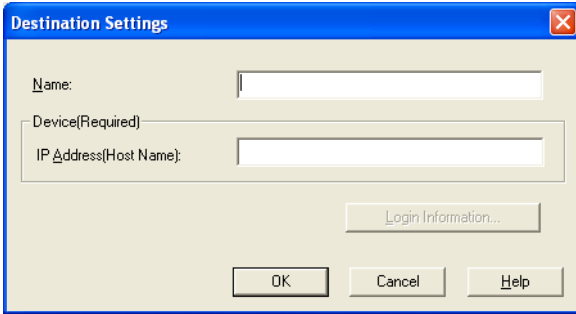


### 4 Click [Add].



The Destination Settings dialog box appears.

## 5 Type in the device information.

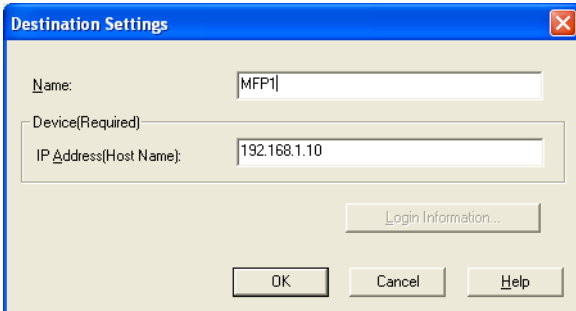


The image shows a dialog box titled "Destination Settings" with a blue title bar and a close button (X) in the top right corner. The dialog has a light beige background. It contains the following fields and buttons:

- A "Name:" label followed by an empty text input box.
- A "Device(Required)" label followed by a "Device(Required)" group box containing an "IP Address(Host Name):" label and an empty text input box.
- A "Login Information..." button, which is disabled (greyed out).
- Three buttons at the bottom: "OK", "Cancel", and "Help".

- The items that are entered are as follows:
  - In the "Name" box, type in the name of the device.
  - In the "IP Address (Host Name)" box, type in the IP address or host name for the device.
  - Login Information: If user authentication or account track settings have been applied, the information can be verified.

## 6 Click [OK].

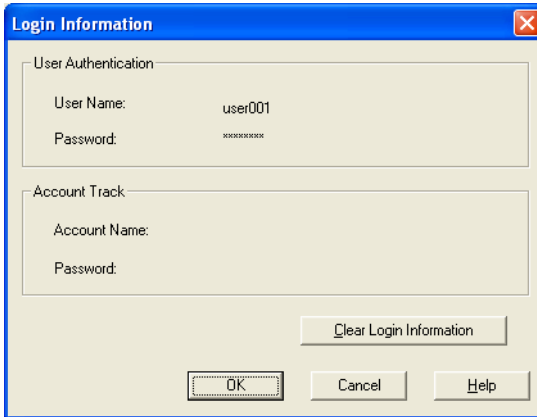


The image shows the same "Destination Settings" dialog box as in the previous image, but with the following values entered:

- The "Name:" text input box contains the text "MFP1".
- The "IP Address(Host Name):" text input box contains the text "192.168.1.10".
- The "Login Information..." button remains disabled.
- The "OK", "Cancel", and "Help" buttons are still present at the bottom.

## 5.1 Checking Authentication Information

Click [Login Information] in the Destination settings dialog box to display the specified authentication information.



Item	Description
User Authentication	Shows the user name and password specified for user authentication. The password appears as "xxxx".
Account Track	The department name and password for volume track are displayed. The password appears as "xxxx".
Clear Login Information	Click to clear the currently specified authentication information.

**Copyright**

**2005 KONICA MINOLTA BUSINESS TECHNOLOGIES, INC.**

**All rights reserved.**