FUJIFILM

Image Reader FLA-7000

Operation Manual

Version 2.0

2006. Mar

Contents

Part
1

Preparations Before Use

1. Starting the Image Reader

Caution

Please note that the GUI screens may change without notice.

Note1:

The Image Reader FLA-7000 software is available in two types: a Windows version, and a Macintosh version. Both versions have the same functions.
This manual uses the screens of the Windows version. If you are using the Macintosh version, follow the instructions in this manual, except those of OS-related operations (such as starting and exiting the software).

Note2:

The following computers are compatible:
OS: Windows XP Professional SP2 or later, Mac OS X 10.3 or later
Memory: 512 MB Interface: USB 2.0

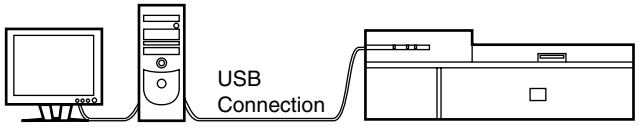
Precautions for Use

Do not connect any USB devices other than the FLA-7000 to the computer in which the Image Reader is installed. Otherwise, it may cause malfunction.
During reading, do not use any USB devices other than the FLA-7000 connected to the computer. If USB devices are used simultaneously, image data may be lost.

1-1 Turn on the FLA-7000 and peripheral devices.

Caution

If an Imaging Plate is inserted in the FLA-7000 before turning it on, its scanned data cannot be guaranteed. The sensitivity of the Imaging Plate may deteriorate, based on the self-diagnosis of the FLA-7000.



1-2 Turn on the computer.

1-3 Make sure that the FLA-7000 has completed the warm-up. (Only the power lamp on the upper left panel on the front of the FLA-7000 is lit up when the warm-up is completed.)
Then, perform the procedures below.

For the Windows version:
Start the Image Reader FLA-7000 software from the Startup menu, or use the shortcut key.

Shortcut Key

For the Macintosh version:
Double-click the alias or the software to start the Image Reader FLA-7000 software.


FLA7000IR
Software

Alias

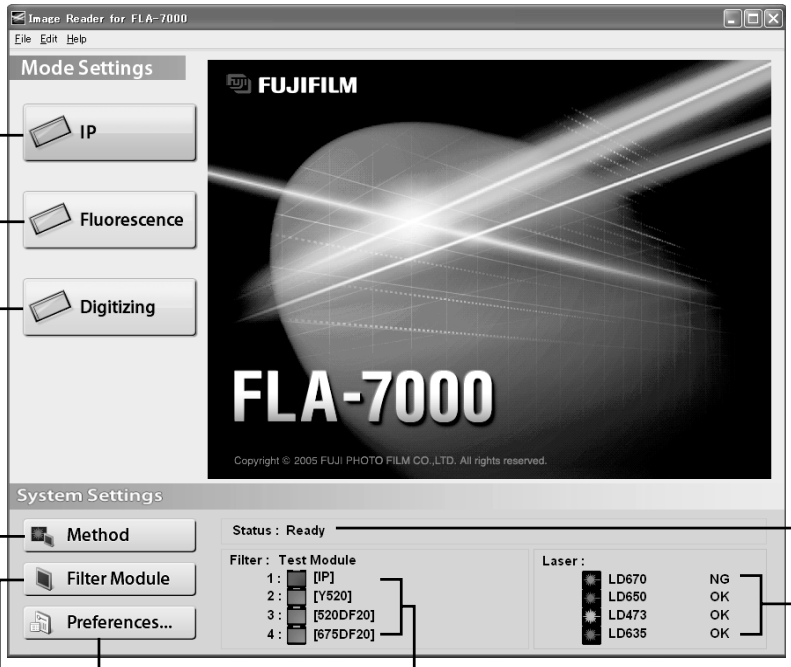
Note:

After starting the Image Reader, its condition is displayed in the Status area.

- When disconnected:
  Cannot recognize FLA-7000. Please check connection and power.
- During warm-up:
  FLA-7000 is in self-diagnosis. Please wait.
- When reading is possible:
  Ready

1-4 The main window of the Image Reader FLA-7000 software is displayed.

2. About the Main Window



IP Mode

Click when reading an imaging plate.

Fluorescence Mode

Click when reading fluorescent samples.

Digitizing Mode

Click when performing digitizing.

Method

Click this button to register or erase combinations of lasers and filters.

Filter Module

Use this button to change or register the filter.

Preference...

Use this button to set the display menu, file format, or the Log/ Square Root of image data type.

Filter

The loaded filters are displayed.

Status

The status of the FLA-7000 is displayed.

Ready

The FLA-7000 is ready for scanning.

Laser

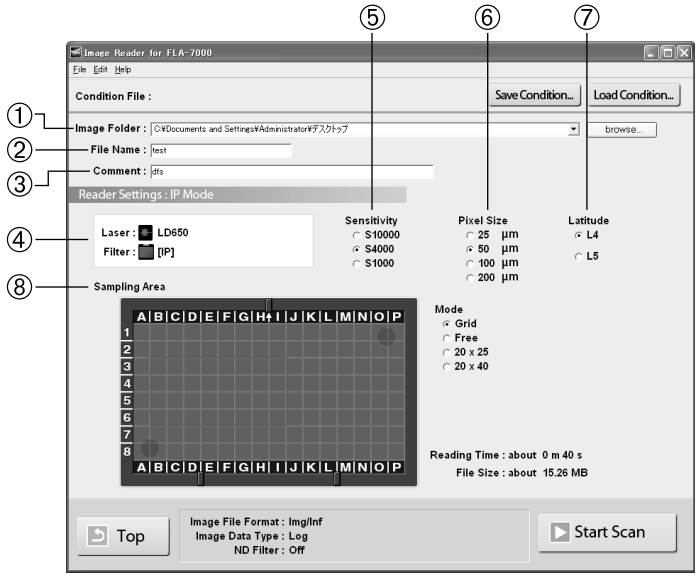
The conditions of the loaded laser units are displayed.
In this example, there are four types of laser units loaded:
LD 670 nm laser,
LD 650 nm laser,
LD 473 nm laser,
LD 635 nm laser.
All the laser units except for the LD 670 nm laser are ready for operation (OK).
The condition of the LD 670 nm laser shows that it cannot be used (NG).

Part
2

Reading Imaging Plates

1. Setting the Reading Conditions

1-1 Click the IP button.
The Reader Settings window for the IP mode is displayed.



Top : Return to the main window from the IP mode.

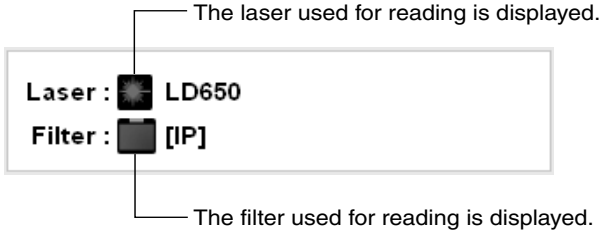
1-2 Make these settings before reading IPs.
Refer to the following explanations of reading conditions when making settings.

① Image Folder : C:¥Documents and Settings¥Administrator¥デスクトップ :
Specify where to save the file after reading.
Click the browse... button.

② File Name : test :
Input the name of a file for saving data of a read image.
You may not start reading unless you input a file name.

③ Comment : dfs :
The comment is saved with the image as a file, and can be viewed with the analyzing software. Input it if necessary.

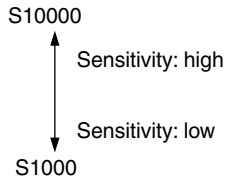
④ Before starting reading, make sure that the LD 650 nm laser is shown and the IP filter is selected in the Setting field as shown below.
In IP reading, the LD 650 nm laser and IP filter are selected automatically.



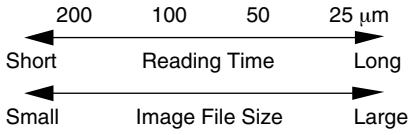
Note:

To use the IP mode, the LD 650nm laser must be loaded, and the IP filter must be set. If these conditions are not fulfilled, the Reader Settings window for the IP mode cannot be accessed.

⑤ Sensitivity ○ S10000 ◉ S4000 ○ S1000 : Click to select from three types of reading sensitivity, as shown on the left.

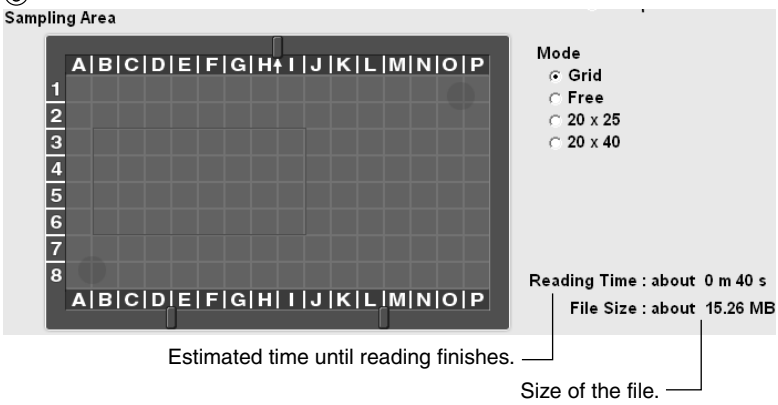


⑥ Pixel Size ○ 25 µm ◉ 50 µm ○ 100 µm ○ 200 µm : Set the pixel size for reading. Click to select from one of the 4 types, as shown on the left. A sample with a smaller pixel size is analyzed more finely.



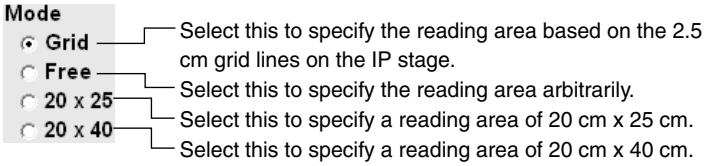
⑦ Latitude ◉ L4 ○ L5 : Specify the dynamic range. The dynamic range that can be detected is bigger with L5 than with L4. If the signals of the sample are in the L4 range, the density gradation is represented more finely if L4 is selected.

⑧



Drag and select the scanning area on the IP stage.

Note:



Save Condition... : Use this button when saving the reading conditions in a file. You may save reading conditions that are used frequently with this function and recall them later with Load Condition....

Load Condition... : Use this button when recalling reading conditions saved with Save Condition... .

Note:

When starting the Image Reader, the settings information from the previous session is displayed.

2. Setting the IP on the IP Stage

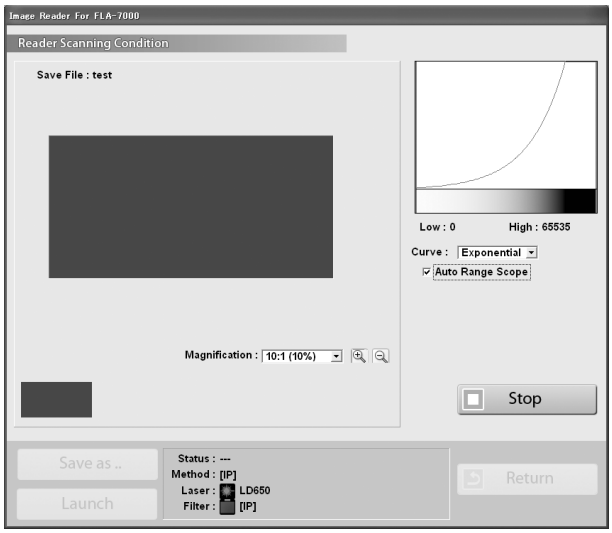
Set the IP on the IP stage.
For instructions on setting the IP, see the Fluorescent Image Analyzing System FLA-7000 Operation Manual.

3. Setting the IP Stage on the FLA-7000

Set the IP stage on the FLA-7000.
For instructions on setting the IP stage on the FLA-7000, see the Fluorescent Image Analyzing System FLA-7000 Operation Manual.

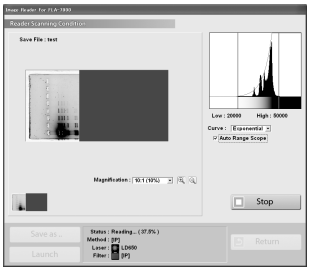
4. Starting Reading

4-1 Click the Start Scan button to start reading.



The scanned area is displayed in the real-time window, as shown below.

The stage is read from the left towards the right.



Reading may be finished at any time before the whole scanning area has completed reading. Click the Stop button when you want to finish reading.

Note1:

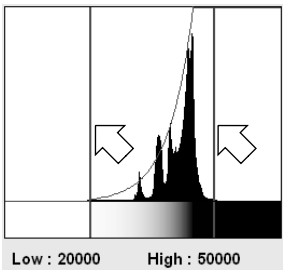
If you click Stop during reading, the part that has not been read yet will be saved as an image with a data value of 0 (light intensity of 0).

Note2:

When you click the Stop button, reading itself is canceled. You cannot start reading again from the location where reading stopped.

4-2 When you want to change the display parameters of the real-time window, refer to the explanations below.

: Select the type of tone curve from the pull-down menu.
Exponential: The exponential tone curve is used to adjust gradations.
Linear: The linear tone curve is used to adjust gradations.
Sigmoid: The sigmoid tone curve is used to adjust gradations.

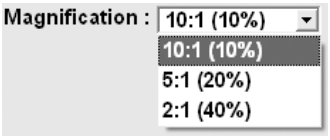


: Drag the adjuster.
You may adjust the density of the read image.
Data of a lower light intensity that the line on the left (Low value) will be displayed as a completely white image, and data of a higher light intensity than the line on the right (High value) will be displayed as a completely black image.

: If Auto Range Scope is checked, the Image Reader automatically corrects the optimum tone.

Note:

The Image Reader converts data read from samples to images that have an information of 65536 tones, with 0 being the value for white, and 65535 being the value for black.
The tones are indicated by the horizontal axis of the tone curve graph.



: You may change the display area by selecting a magnification ratio from the pull-down menu. In addition, after reading, if you click the display area after clicking the buttons, the clicked area can be enlarged or reduced.

4-3 Save as .. : Save the data with a different file name.

Launch : Launch the registered analyzing software to display the image.

4-4 To read a second IP continuously, carry out reading by following the above procedures.
Click the Return button to return to the first Reader Settings window.
Do not open the stage door of the FLA-7000 until the stage has completely returned. If it is opened, close it immediately. When scanning finishes, the Save as .. and Launch buttons become active, but the Return button is grayed out until the stage has completely returned.

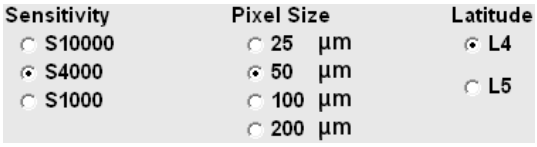
4-5 Finish reading.
Before turning off the power of the FLA-7000, shut down the Image Reader software.

Note:

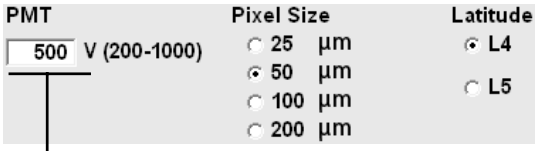
If the photo-multipliers (PMT) are replaced with a multi-alkali PMT, the IP mode switches from that of the regular IP mode to a PMT voltage adjustment mode. The PMT voltage adjustment mode differs from the regular IP mode in that a sensitivity level that matches the scanned sample can be set independently. Replacement of the standard PMT with a multi-alkali PMT is done by a serviceman. For details, contact an authorized dealer.

The Sensitivity settings differ from that of the regular IP mode. The operation procedures for other settings are the same as those of the regular IP mode. Follow the operation procedures of the regular IP mode.

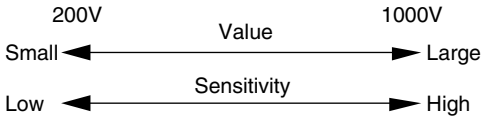
IP mode



PMT voltage adjustment mode



You may set the voltage to be applied to the PMT as an integral value within the predetermined range. The larger the value is, the higher the sensitivity, but noise will be greater.

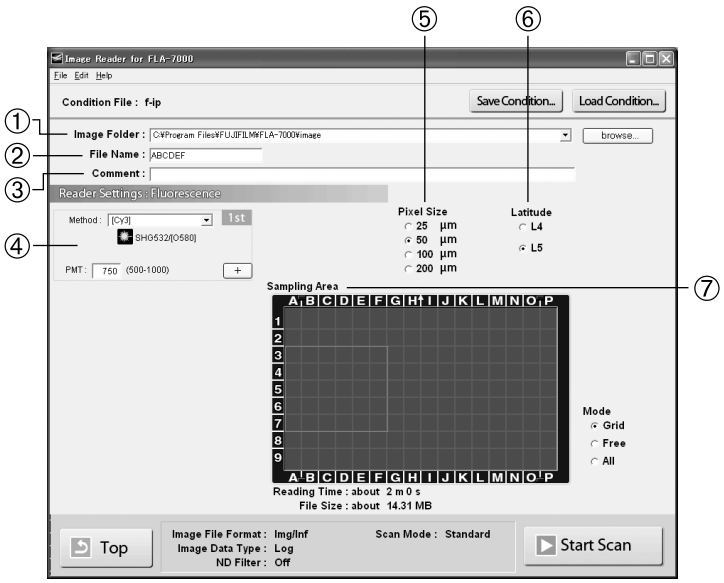


Part
3

Reading Fluorescent Samples

1. Setting the Reading Conditions

1-1 Click the Fluorescence button.
The Reader Settings window for the Fluorescence mode is displayed.



Top : Return to the main window from the Fluorescence mode.

1-2 Make these settings before reading fluorescent samples.
Refer to the following explanations of reading conditions when making settings.

① Image Folder : C:¥Documents and Settings¥Administrator¥デスクトップ :
Click the browse... button and specify where to save the file after reading.

> ***Note:***
> When scanning multiple times, the image data is saved in the folder with the name specified in File Name, which is automatically created in the specified location.

② File Name : test1 :
Input the name of a file for saving data of an image.
You may not start reading unless you input a file name.

Note:

When the number of scans is between 2 and 4, the laser name and scan number are automatically added to the specified name.

000- 635- 1
File name / Laser name / Scan number

Example: If reading is set with the LD 635 nm laser, LD 473 nm laser, LD 635 nm laser, and LD 635 nm laser, with "test" as the file name, then the following files are created in the "test" folder.
test-635-1
test-473
test-635-2
test-635-3

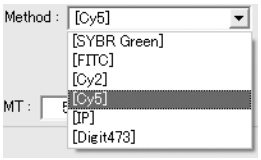
③ 

:
The comment is saved with the image as a file, and can be viewed with the analyzing software. Input it if necessary.

④ 

: Scanning can be performed up to 4 times. The following items can be set.

Note:

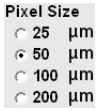


: From the pull-down menu, select the Method that corresponds with the sample. The selected laser and filter combination is displayed below.

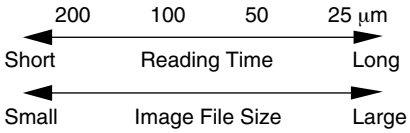
: You may set the voltage to be applied to the photo-multiplier tube (PMT) as an integral value within the predetermined range. The larger the value is, the higher the sensitivity.

200V 1000V
Value
Small ◄——————► Large
Sensitivity
Low ◄——————► High

: Click the + button to increase the number of scans, and click the − button to reduce the number of scans. Up to 4 scans can be performed.

⑤ 

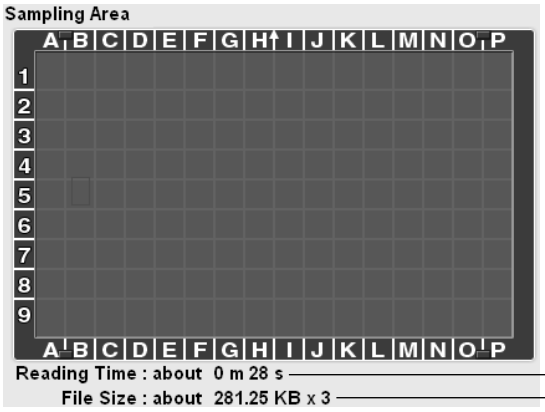
: Set the pixel size for reading. Click to select from one of the 4 types, as shown on the left. A sample with a smaller pixel size is analyzed more finely.



⑥ 

: Specify the dynamic range. The dynamic range that can be detected is bigger with L5 than with L4. If the signals of the sample are in the L4 range, the density gradation is represented more finely if L4 is selected.

⑦



Estimated time until reading finishes.

Size of the file. Expressed as file size per test x number of scans.

Drag and select the scanning area on the FLUOR stage.

Note:

Select this to specify the reading area based on the 2.5 cm grid lines on the FLUOR stage.

Select this to specify the reading area arbitrarily.

Select this to specify the entire FLUOR stage as the reading area.

Save Condition... : Use this button when saving the reading conditions in a file. You may save reading conditions that are used frequently with this function and recall them later with Load Condition....

Load Condition... : Use this button when recalling reading conditions saved with Save Condition... .

> ***Note:***
> When starting the Image Reader, the settings information from the previous session is displayed.

2. Setting a Fluorescent Sample on the FLUOR Stage

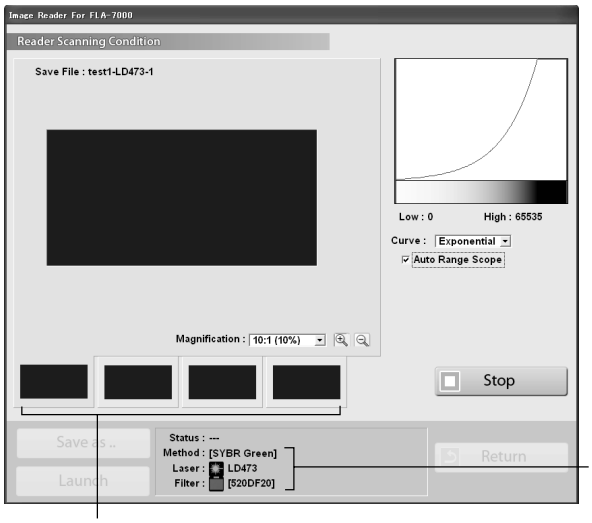
Set the fluorescent sample on the FLUOR stage.
For instructions on setting the fluorescent sample, see the Fluorescent Image Analyzing System FLA-7000 Operation Manual.

3. Setting the FLUOR Stage on the FLA-7000

Set the FLUOR stage on the FLA-7000.
For instructions on setting the FLUOR stage on the FLA-7000, see the Fluorescent Image Analyzing System FLA-7000 Operation Manual.

4. Starting Reading

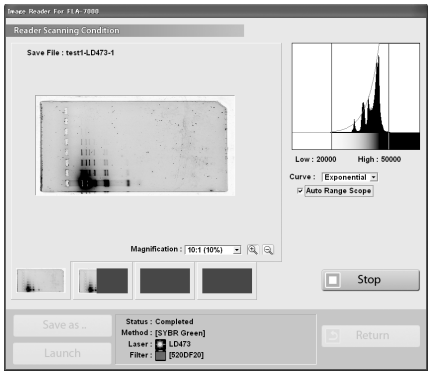
4-1 Click the Start Scan button to start reading.



Displays information related to the contents of the currently displayed scan.

Displays the scan results of the 1st, 2nd, 3rd, and 4th scan, starting from the left.
Click on the thumbnails to switch the display.

The scanned area is displayed in the real-time window, as shown below.
The stage is read from the left towards the right.



Reading may be finished at any time before the whole scanning area has completed reading. Click the Stop button when you want to finish reading.

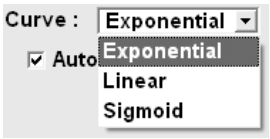
Note1:

If you click Stop during reading, the part that has not been read yet will be saved as an image with a data value of 0 (light intensity of 0).

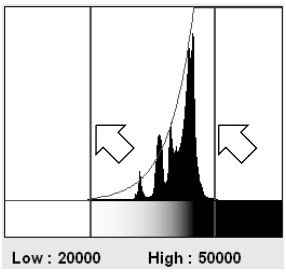
Note2:

When you click the Stop button, reading itself is canceled. You cannot start reading again from the location where reading stopped.

4-2 When you want to change the display parameters of the real-time window, refer to the explanations below and make settings.



: Select the type of tone curve from the pull-down menu.
Exponential: The exponential tone curve is used to adjust gradations
Linear: The linear tone curve is used to adjust gradations.
Sigmoid: The sigmoid tone curve is used to adjust gradations.

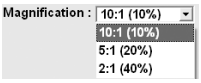


: Drag the adjuster.
You may adjust the density of the read image.
Data of a lower light intensity than the line on the left (Low value) will be displayed as a completely white image, and data of a higher light intensity than the line on the right (High value) will be displayed as a completely black image.

: If Auto Range Scope is checked, the Image Reader automatically corrects the optimum tone.

Note:

The Image Reader converts data read from samples to images that have an information of 65536 tones, with 0 being the value for white, and 65535 being the value for black.
The tones are indicated by the horizontal axis of the tone curve graph.



: You may change the display area by selecting a magnification ratio from the pull-down menu. In addition, after reading, if you click the display area after click  the buttons, the clicked area can be enlarged or reduced.

4-3 Save as .. : Save the data with a different file name.

Launch : Launch the registered analyzing software to display the image.

4-4 To read another fluorescent sample continuously, carry out reading by following the above procedures.
Click the Return button to return to the first Reader Settings window.
Do not open the stage door of the FLA-7000 until the stage has completely returned. If it is opened, close it immediately.
When scanning finishes, the Save as .. and Launch buttons become active, but the Return button is grayed out until the stage has completely returned.

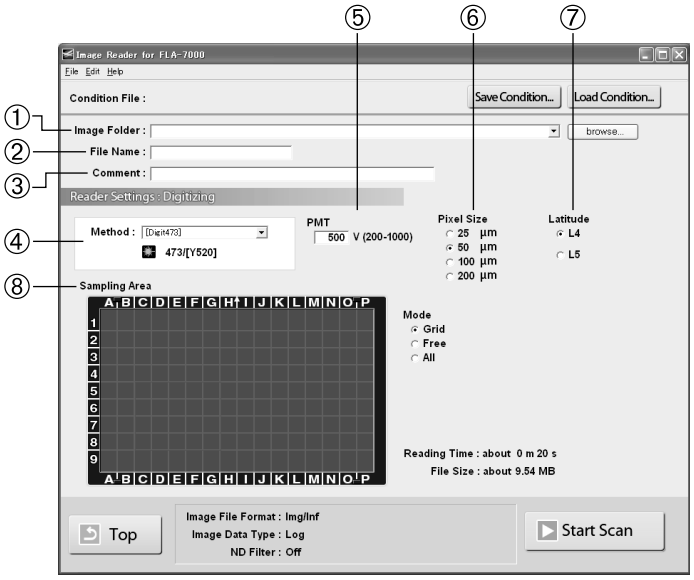
4-5 Finish reading.
Before turning off the power of the FLA-7000, shut down the Image Reader software.

Part
4

Reading Digitized Samples

1. Setting the Reading Conditions

1-1 Click the Digitizing button.
The Reader Settings window for the Digitizing mode is displayed.



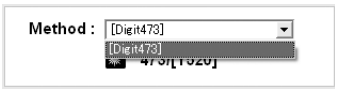
Top : Return to the main window from the Digitizing mode.

1-2 Make these settings before reading digitized samples.
Refer to the following explanations of reading conditions when making settings.

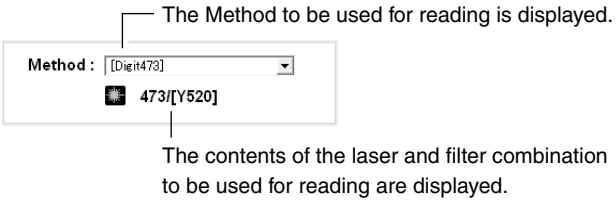
① Image Folder : :
Specify where to save the file after reading.
Click the browse... button and specify where to save the file after reading.

② File Name : :
Input the name of a file for saving data of the image.
You may not start reading unless you input a file name.

③ Comment : :
The comment is saved with the image as a file, and can be viewed with the analyzing software. Input it if necessary.

④ 

: Select the Method that corresponds with the sample from the pull-down menu.

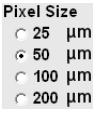


Note:

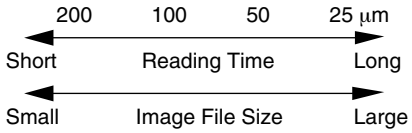
To use the Digitizing mode, the LD 473 nm laser must be loaded and the Y520 filter must be registered, or the SHG 532 nm laser must be loaded and the O580 filter must be registered. If these conditions are not fulfilled, the Reader Condition Settings window for the Digitizing mode cannot be accessed.

⑤ 

: You may set the voltage to be applied to the photo-multipliers (PMT) as an integral value within the predetermined range.

⑥ 

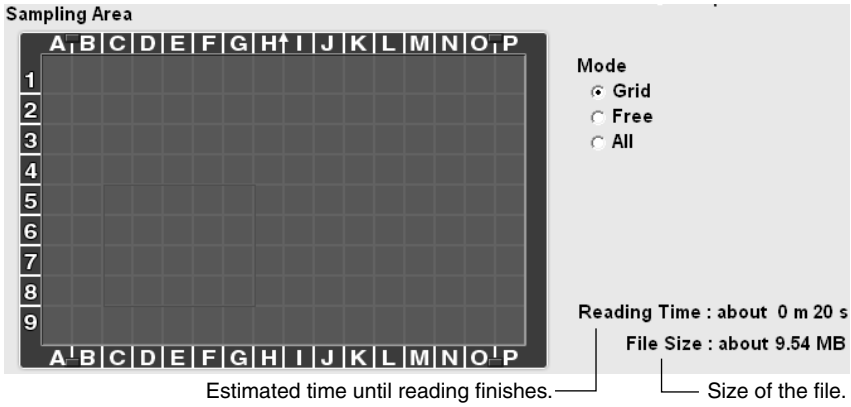
: Set the pixel size for reading. Click to select one of the 4 types, as shown on the left. A sample with a smaller pixel size will be analyzed more finely.



⑦ 

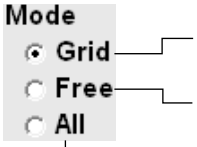
: Specify the dynamic range. The dynamic range that can be detected is bigger with L5 than with L4. If the signals of the sample are in the L4 range, the density gradation is represented more finely if L4 is selected.

⑧



Drag and select the scanning area on the FLUOR stage.

Note:



Select this to specify the reading area based on the 2.5 grid lines on the FLUOR stage.

Select this to specify the reading area arbitrarily.

Select this to set the entire FLUOR stage as the reading area.

Save Condition... : Use this button when saving the reading conditions in a file. You may save reading conditions that are used frequently with this function, and recall them later with Load Condition....

Load Condition... : Use this button when recalling reading conditions saved with Save Condition... .

Note:

When starting the Image Reader, the settings information from the previous session is displayed.

2. Setting a Digitized Sample on the FLUOR Stage

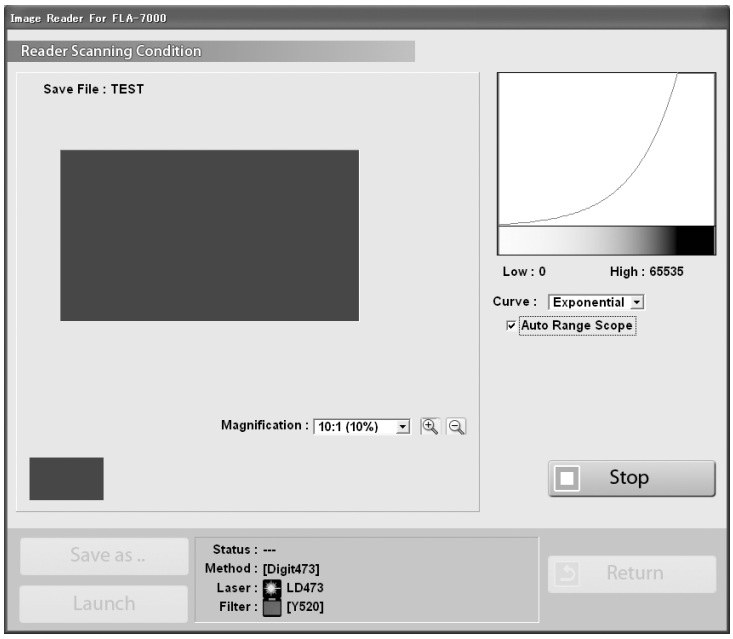
After setting the digitized sample on the FLUOR stage, place the fluorescent plate for digitizing on top of it.
For instructions on setting the digitize sample, see the Fluorescent Image Analyzing System FLA-7000 Operation Manual.

3. Setting the FLUOR Stage on the FLA-7000

Set the FLUOR stage on the FLA-7000.
For instructions on setting the FLUOR stage on the FLA-7000, see the Fluorescent Image Analyzing System FLA-7000 Operation Manual.

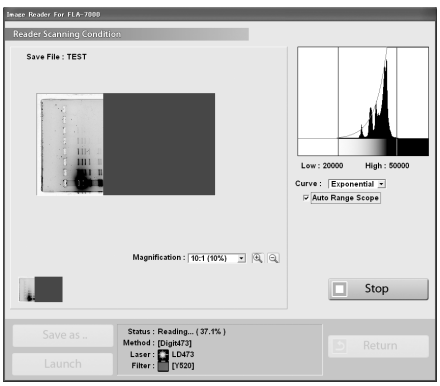
4. Starting Reading

4-1 Click the Start Scan button to start reading.



The scanned area is displayed in the real-time window, as shown below.

The stage is read from the left towards the right.



Reading may be finished any time before the whole scanning area has completed reading. Click the Stop button when you want to finish reading.

Note1:

If you click Stop during reading, the part that has not been read yet will be saved as an image with a data value of 0 (light intensity of 0).

Note2:

When you click the Stop button, reading itself is canceled. You cannot start reading again from the location where reading stopped.

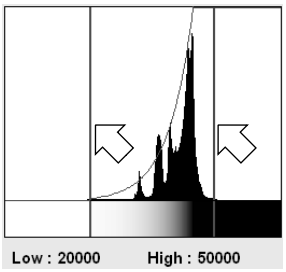
4-2 When you want to change the display parameters of the real-time window, refer to the explanations below and make settings.

: Select the type of tone curve from the pull-down menu.

Exponential: The exponential tone curve is used to adjust gradations

Linear: The linear tone curve is used to adjust gradations.

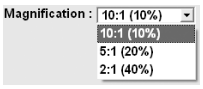
Sigmoid: The sigmoid tone curve is used to adjust gradations.



: Drag the adjuster.
You may adjust the density of the read image.
Data that is lighter than the line on the left (Low value) will be displayed as a completely white image, and data that is darker than the line on the right (High value) will be displayed as a completely black image.

Auto Range Scope : If Auto Range Scope is checked, the Image Reader automatically corrects the optimum tone.

> ***Note:***
> The Image Reader converts data read from samples to images that have an information of 65536 tones, with 0 being the value for white, and 65535 being the value for black.
> The tones are indicated by the horizontal axis of the tone curve graph.



: You may change the display area by selecting a magnification ratio from the pull-down menu. In addition, after reading, if you click the display area after click the buttons, the clicked area can be enlarged or reduced.

4-3 Save as .. : Save the data with a different file name.

Launch : Launch the registered analyzing software to display the image.

4-4 To read another digitized sample continuously, carry out reading by following the above procedures.
Click the Return button to return to the first Reader Settings window.
Do not open the stage door of the FLA-7000 until the stage has completely returned. If it is opened, close it immediately. When scanning finishes, the Save as .. and Launch buttons become active, but the Return button is grayed out until the stage has completely returned.

4-5 Finish reading.
Before turning off the power of the FLA-7000, shut down the Image Reader software.

Part
5

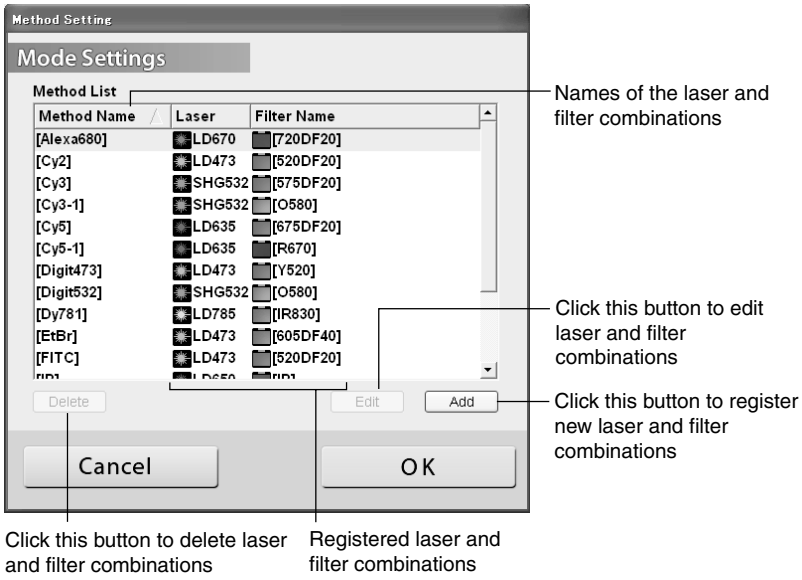
Lasers and Filters, Other Settings

1. Registering Laser and Filter Combinations (Method)

> ***Note:***
> Method settings are registered by a serviceman upon installation. Under normal circumstances, it is not necessary to register these settings.

You may register, change, and delete laser and filter combinations.

1-1 Click the Method button on the main window.
The following dialog box appears.



1-2 Click the Add button.
The following dialog box appears.

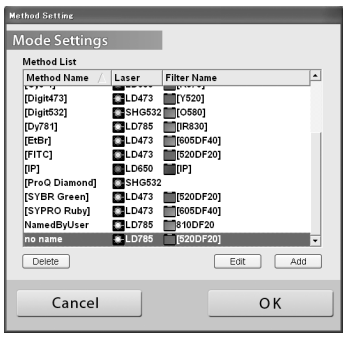
Name:
Input a name for the combination to be registered.
Laser :
Select the type of laser. (You may also select lasers that are not actually loaded.)
Filter :
Select the type of filter. (You may also select lasers that are not actually loaded.)

However, combinations of lasers and filters that are not loaded cannot be selected in the Reader Condition screen.

1-3 Input a name for the combination, select the type of laser and filter, and click the OK button. The laser and filter combination is registered .

Note:

Click the Delete and Edit buttons to delete or change a registered Method.
Methods initially registered as default cannot be deleted or edited.
The Methods marked with [**] are the Methods that are initially set as default.



1-4 Click the OK button.

2. Filter Module Settings (Filter Module)

2a. Registering Filters in the Image Reader

Note:

Filter Module settings are registered by a serviceman upon installation.
Under normal circumstances, it is not necessary to register these settings.

After exchanging the filters of the FLA-7000, you must register the exchanged filters in the Image Reader.

Note:

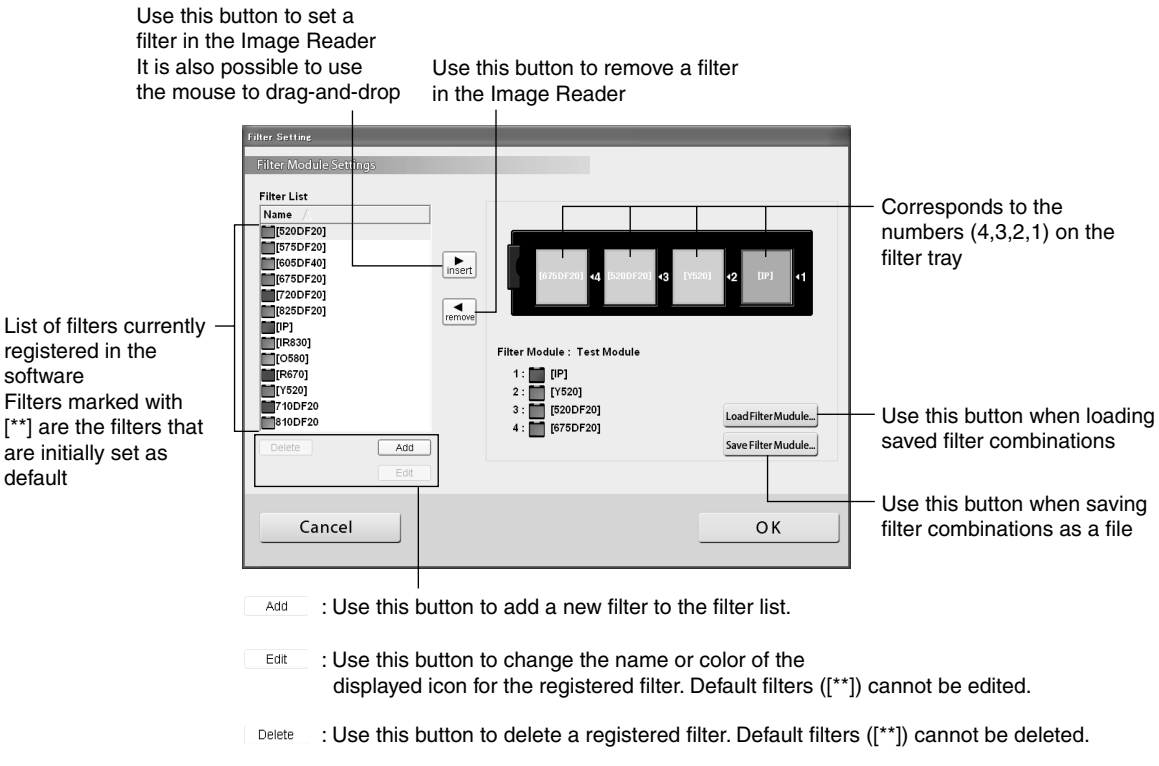
If filters are not registered in the Image Reader, they are not displayed in the Image Reader window, even if they are physically set in the FLA-7000.

The following explains the method for registering filters in the Image Reader when the [605DF40] is set in filter module position No.2 (second from the back).

Caution

When removing the filter module, make sure to press the Filter Module button and remove it after the window changes to the Filter Settings window.
If the filter module is forcibly removed, the part where the filter comes in contact with the photo-multipliers (PMT) will become damaged.

2a-1 Click the Filter Module button on the main window.
The following window appears and the filter module moves to a position where it can be taken out.



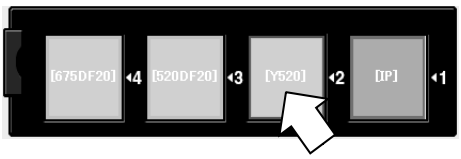
Add : Use this button to add a new filter to the filter list.

Edit : Use this button to change the name or color of the displayed icon for the registered filter. Default filters ([**]) cannot be edited.

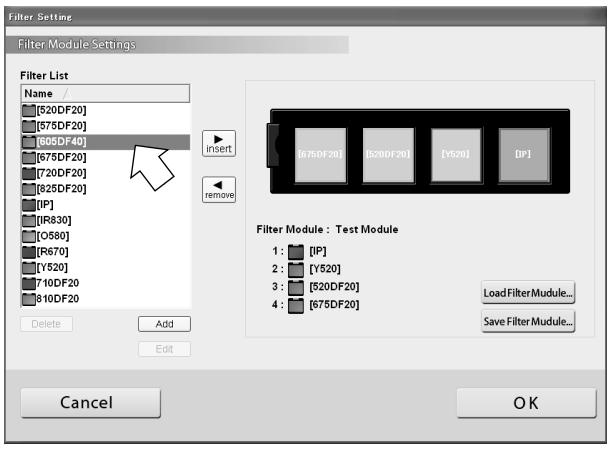
Delete : Use this button to delete a registered filter. Default filters ([**]) cannot be deleted.

2a-2 Exchange the filter of the FLA-7000.
For instructions on exchanging the filter of the FLA-7000, see the Fluorescent Image Analyzing System FLA-7000 Operation Manual.

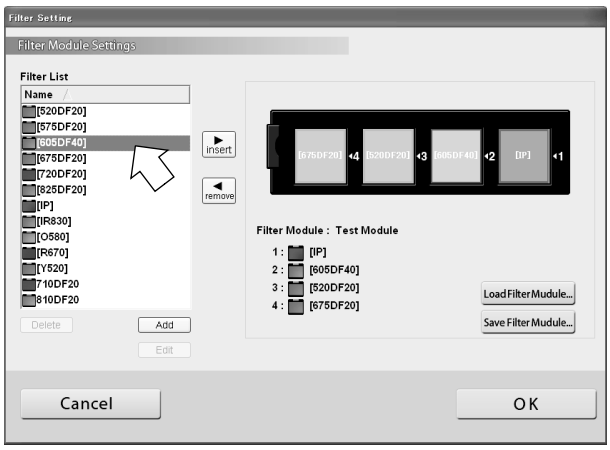
2a-3 Click filter position No. 2.
A red frame appears around the selected filter position.



2a-4 Select [605DF40] from the Filter List.
The selected item is highlighted in blue.



2a-5 Click the insert button.



It is also possible to drag-and-drop the selected filter to filter position No. 2.

Filter position No. 2 changes to [605DF40].

Note:

Click the ◀ remove button to keep the filter position empty after removing a filter.

2a-6 Click the OK button.

2b. Saving the Four Types of Filter Combinations

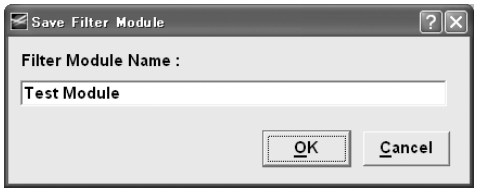
You may save four types of filter combinations that are currently displayed.

Note:

Exchanging the module and saving/recalling filter combinations can be managed more easily if each user has their own filter module.

2b-1 Click the Filter Module button on the main window.

2b-2 Click the Save Filter Mudule... button.
The following dialog box appears.



Filter Module Name:

Input a name for the filter combination.

2b-3 After inputting a name for the filter combination, click the OK button.
The filter combation is saved.

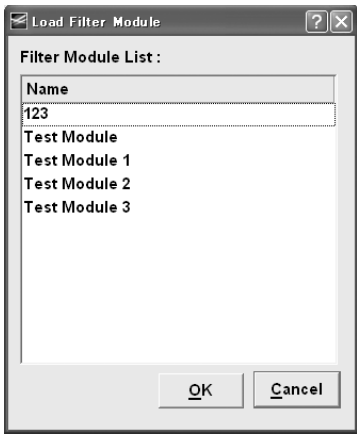
2b-4 Click the OK button.

2c. Recalling Four Types of Filter Combinations

You may recall four types of filter combinations that are currently registered.

2c-1 Click the Filter Module button on the main window.

2c-2 Click the LoadFilterMudule... button.
The following dialog box is displayed.



2c-3 Select the name of the filter combination you want to recall, and click the OK button.
The filter combination is recalled.

2c-4 Click the OK button.

2d. Registering a New Filter Name

You may register a filter name.

2d-1 Click the Filter Module button on the main window.

2d-2 Click the Add button.
The following dialog box appears.

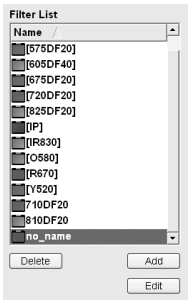
Name:
Input a name for the filter.

Icon:
Select the color of the filter icon to be displayed in the software.

2d-3 Select the filter name and icon color you want to register, and click the OK button.
The filter is newly registered.

Note:

To delete or edit the register filter name, select the filter name and click the Delete or Edit button. Methods initially registered as default cannot be deleted or edited.



2d-4 Click the OK button.

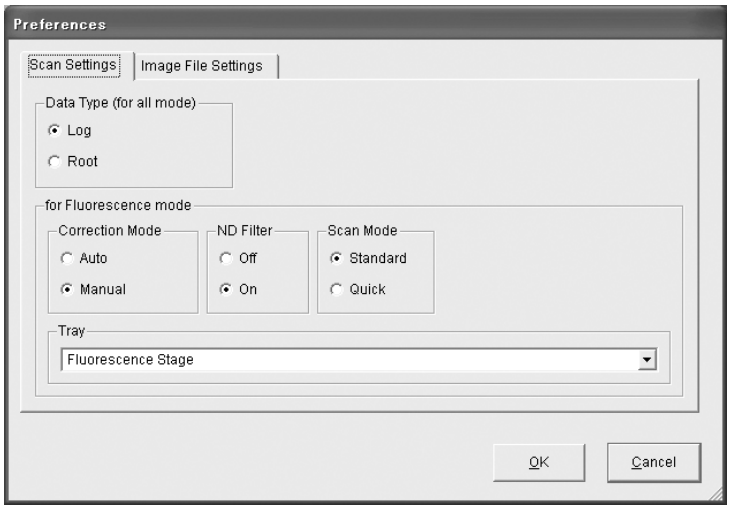
3. Other Settings (Preference...)

These are settings that are carried out when specifying settings for reading samples.
Depending on the reading mode, there may be some functions that cannot be used.

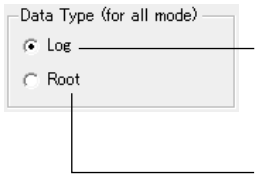
3a. Settings for Scanning (Scan Settings)

3a-1 Click the Preferences... button on the main window.

3a-2 Click the Scan Settings tab.
The following dialog box appears.



3a-3 For each of the following items, refer to the explanations below and click the radio button.

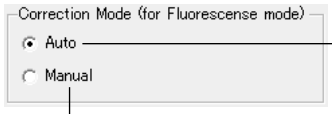


When detecting a very small sample amount, the Log format is more effective, because the low-density areas are converted to the gray scale more finely in the Log format. Log format is also recommended for reading gels stained with CBB or silver in the Digitizing mode.

The image will have a low background and clear differences in density.
If there are large sample amounts in the IP, Fluorescence, or Digitizing modes, the Root format is more effective.

Note:

The following software versions are required for quantitative analysis of images read in the Root format. Root format files cannot be opened properly with older software versions.
For Windows:
Science Lab 2003 (Multi Gauge Ver.2.1, Colony Ver.1.1, L-Process Ver.2.1) or later versions
For Macintosh:
Science Lab 2003 (Image Gauge Ver.4.2, L-Process Ver.2.1) or later versions

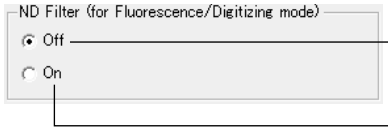


Uses specific image shading correction data that was adjusted in accordance with each laser in the Fluorescence mode.

Correction settings will be added in the Fluorescence mode.
You will be able to select from optional image shading correction data.

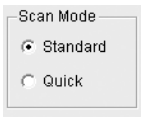
Note:

Registration of the correction settings list is performed by a serviceman. Please contact the dealer where you purchased the FLA-7000, or contact Fuji Photo Film.



Does not use ND filter for adjusting light intensity.

Uses ND filter for adjusting light intensity.



If select Quick, reading time would become shorter.
However, noise would stand out during reading.
The reading time varies depending on the setting image size and the scanning area.
In case of reading the whole area of FLUOR stage, the reading time are as follows:

<Standard Mode>
200um : 210sec, 100um : 210sec, 50um : 330sec, 25um : 450sec

<Quick Mode>
200um : 150sec, 100um : 150sec, 50um : 210sec, 25um : 330sec

3a-4 A function for supporting new stages in the future.

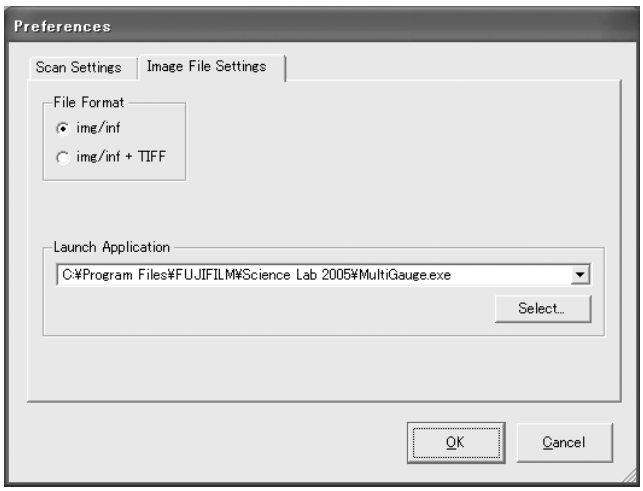
3a-5 Click the OK button.

3b. Selecting the File Format for Saving and the Analyzing Software to Launch (Image File Settings)

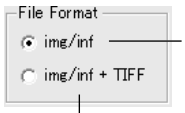
These are settings for saving images. Depending on the scanning mode, there may be some functions that cannot be used.

3b-1 Click the Preferences... button on the main window.

3b-2 Click the Image File Settings tab.
The following dialog box appears.



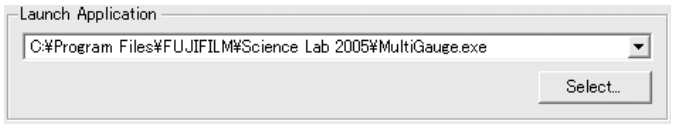
3b-3 Refer to the explanations below and click a radio button.



The standard file format of the Fuji Film BAS/FLA series. Each file is saved as a combination of an information file (inf file) and a raster file (img file).
The Fuji Film Science Lab or Array Gauge may be used for analysis.

In combination with an img file and inf file, a read image can also be saved in TIFF file format. For TIFF files, image data type is always set to Linear format.

3b-4 Click the Select... button, and select the specified analyzing software.



Part
6

Installing and Uninstalling the Software

1. Installation (For Windows®)

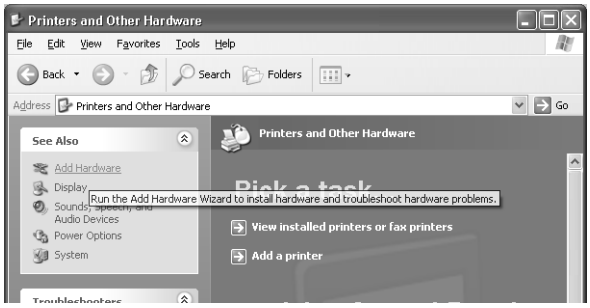
It installs in the following sequence.

1a. Installation of FUJI USB Control driver
1b. Installation of FUJI USB Function driver
1c. Installation of Image Reader FLA-7000 software

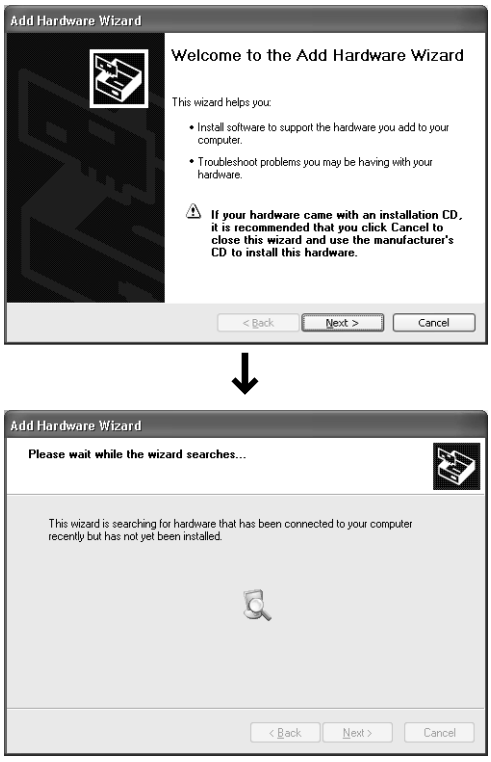
1a. Installation of FUJI USB Control Driver

Note:
The computer and FLA-7000 should not be connected with a USB cable during the operation.

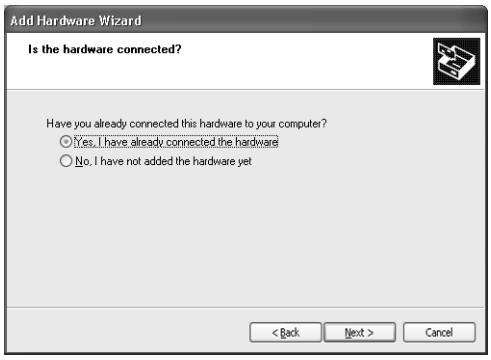
1a-1 Open the control panel and click “Printers and Other Hardware”.
1a-2 Click the “Add Hardware”.



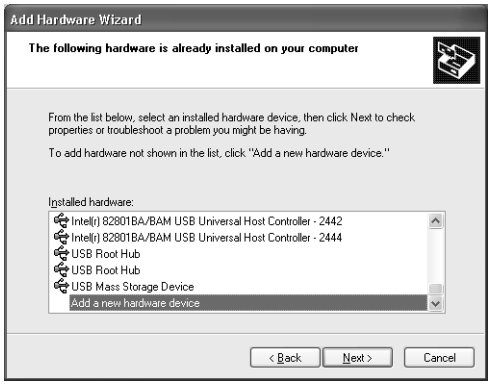
1a-3 Click the “Next” button.



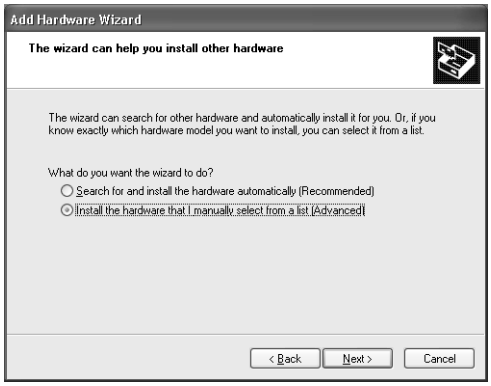
1a-4 Select “Yes, I have already connected the hardware” and click the “Next” button.



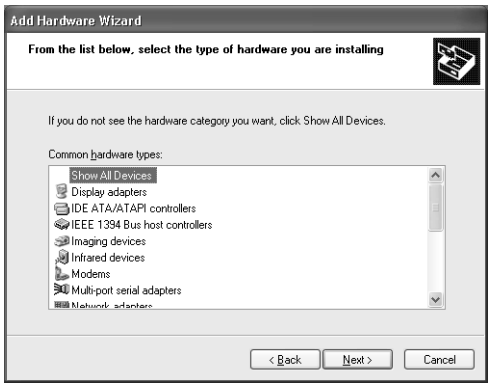
1a-5 Select “Add a new hardware device” and click the “Next” button.



1a-6 Select “Install the hardware that manually select from a list [Advanced]” and click the “Next” button.

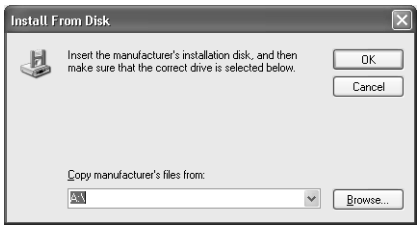


1a-7 Select “Show All Devices” and click the “Next” button.

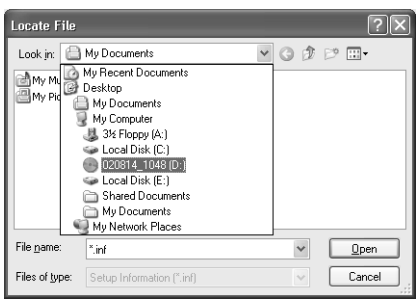


1a-8 Click “Have Disk...” button.

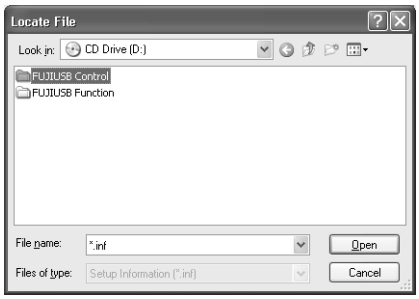
1a-9 Click “Browse...” button.



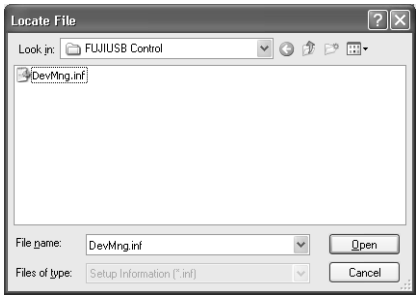
1a-10 Set the folder in which a file is saved to FLA-7000 CD-ROM.



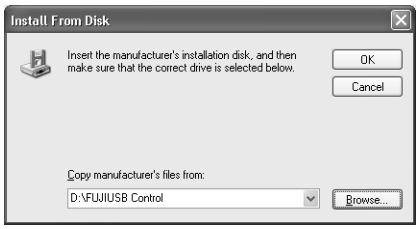
1a-11 Open the FUJIUSB control folder.



1a-12 Select a DevMng.inf file and click the “Open” button.



1a-13 Click the “OK” button.



1a-14 Click the “Next” button.

1a-15 Click the “Next” button.

1a-16 Click the “Continue Anyway” button.

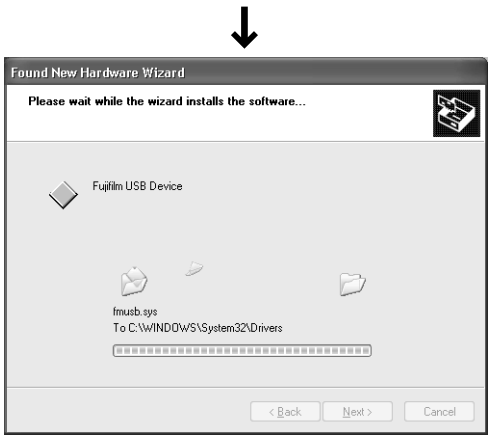
1a-17 Click the “Finish” button.

1b. Installation of FUJI USB Function Driver

1b-1 Connect the USB cable and turn ON the power switch of the FLA-7000.

> ***Note:***
> Perform this operation, or the personal computer may be reset.

1b-2 Click the “Next” button.



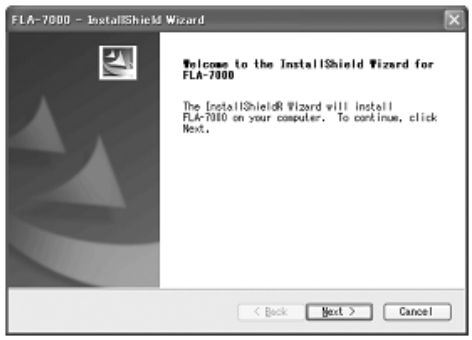
1b-3 Click the “Finish” button.

1c. Installation of Image Reader FLA-7000 Software

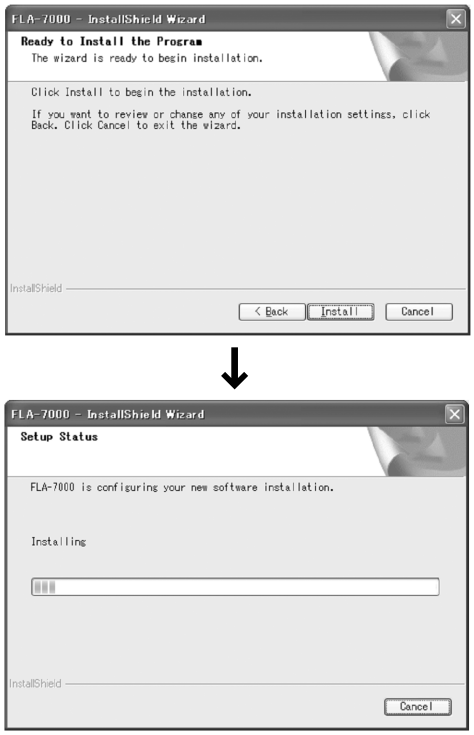
1c-1 Insert the installation CD-ROM of FLA-7000.

1c-2 Click the setup icon.

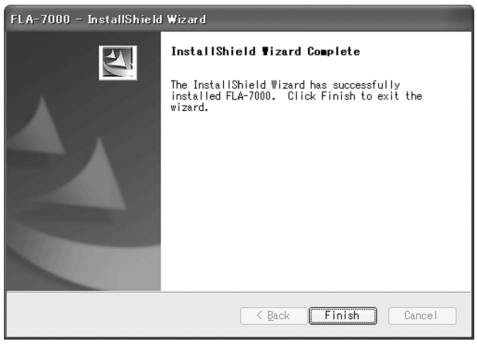
1c-3 Click the “Next” button.



1c-4 Click the “Install” button.

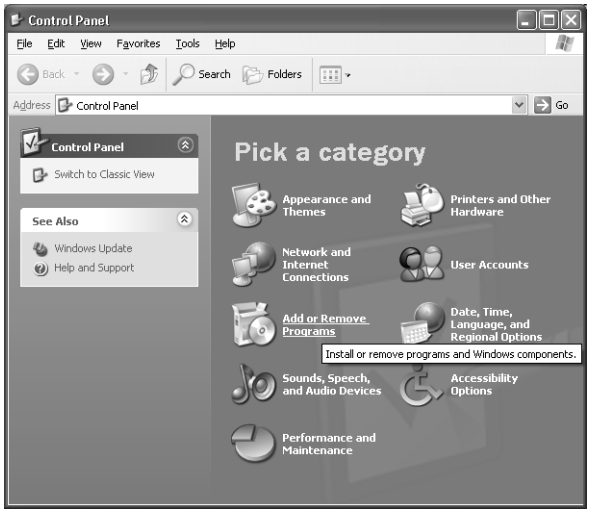


1c-5 Click the “Finish” button.



2. Uninstallation (For Windows®)

2-1 Open the control panel and select “Add or Remove program”.



2-2 Select Image Reader FLA-7000 and click the “Remove” button to be deleted.

➟ A progress bar is displayed and uninstallation is started.

Note:

Connection files created after installation of the reader software are deleted. Correction files such as shading data is required to read by FLA-7000. They arelocated in Data folder of FLA-7000 folder. The files you wish to keep must be saved outside the FLA-7000 folder.

3. Installation (For Macintosh™)

To install Image Reader FLA-7000 software, follow the procedure described below.

Installation of FLA-7000

< For Mac OS10.4 >

3-1 Double-click the “FLA-7000 Install CD” icon to open it.
3-2 Click the “FLA-7000.pkg” icon.
3-3 Click the “Continue” button on the “Introduction” screen.
3-4 Click the “Continue” button on the “Installation Destination” screen.
3-5 Click the “Upgrade” button on the “Installation Type” screen.
3-6 Provide the name and password of the administrator.
3-7 Click the “close” button on the “Finish Up” screen.

4. Uninstallation (For Macintosh™)

Move the FLA-7000 folder contained in the Application folder on the Machintosh HD to your Trash bin.

Note:

Connection files created after installation of the reader software are deleted. Correction files such as shading data is required to read by FLA-7000. They arelocated in Data folder of FLA-7000 folder. The files you wish to keep must be saved outside the FLA-7000 folder.

Part 7

Troubleshooting

1. Errors

An error is the condition in which all of the reading modes of the FLA-7000 cannot be used.
When a warning occurs, the indicator lamps make a sound (“Be-beep, be-beep, be-beep”).

An error message dialog box is displayed on the Image Reader screen displayed on the computer.

Please contact Fuji Photo Film with the 4-digit Error Code and the 8-digit number inside the parentheses.

2. Warnings

The following are examples of warnings that are displayed as a message in the Image Reader window. If a displayed message includes instructions, please follow them.

Message	Meaning and Countermeasure
Filter module has not been setup. Push the filter module button and set up the filter module.	Meaning: • A filter module has not been set. • Press the filter module button, and set a filter module. Countermeasure: Confirm that a filter module is set.
The combination of the lasers and filters could be inappropriate. Check the lasers and filters.	Meaning: There is a possibility that the laser and filter combination is inappropriate. Please check the laser and filter. Countermeasure: • Confirm the Methods registered. It is possible that the laser and filter combination is inappropriate. • Confirm that the filter specified in the Image Reader is actually set.

Laser error occurred. Use other lasers.	Meaning: • A laser error has occurred. • Use a different laser. Countermeasure: • An error has occurred with the laser. • If an error occurs even after restarting the instrument, call a serviceman. • It is possible to scan using a different laser.
Failed to retrive picture data from PC. Check the PC setting.	Meaning • There was a failure in reading the image data from the computer. • Check the computer environment. Countermeasure: • It is possible that the computer's processing ability has degraded. • Check the computer once, when there are no devices connected to it and no software started.
PMT error occurred. Use low sensitivity for the setting.	Meaning: • An overexposure error has occurred. • Scan with low sensitivity settings. Countermeasure: • Overexposure has been detected outside of the scanning area. • If an error occurs even after restarting the instrument, call a serviceman.
The file name is already used. Close the SampleSetDoor or FilterChangeDoor.	Meaning: Close the sample set door or the filter change door. Countermeasure: Close the sample set door or the filter change door.

Note:

If an error message is displayed, a serviceman should take the countermeasures to resolve the trouble.
Please contact the dealer where you purchased the FLA-7000, or contact Fuji Photo Film.

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For technical questions, send an e-mail to the following address.
e-mail: sginfo@fujifilm.co.jp.