M498E 08.10.NF.1 (3/4)

Nikon

Nikon ECLIPSE MA200 Setup Tool

Software Manual

Introduction

Thank you very much for choosing Nikon.

This manual explains installation and use of “Nikon ECLIPSE MA200 Setup Tool” application software for the Inverted Metallurgical Microscope.

For trouble-free operation, read this manual before using the program.

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- To use any other equipment with this product, read the manual for that equipment too.
- This manual assumes a basic familiarity with Windows. If you come across unfamiliar terms or operations while reading through this manual, refer to the user's manual for your version of Windows.
- This manual describes various operations in Windows XP and Windows Vista by showing Windows Vista screens as examples. Procedures are virtually identical for Windows XP and Windows Vista. Depending on the specific OS type or version, the actual appearance of the screen or operations may not correspond precisely to the example screens shown at various points throughout the manual. For information on operations or screens specific to your version of Windows, refer to the user’s manual.
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1 Preparations

This chapter describes hardware and software requirements for Nikon ECLIPSE MA200 Setup Tool and how to install and uninstall the software.

1.1 Hardware and Software Requirements

CAUTION

- **Before installing Nikon ECLIPSE MA200 Setup Tool, confirm that your computer meets the minimum requirements given below for memory and available hard disk space.**
- **Install the software before connecting your computer and microscope system (Inverted Metallurgical Microscope ECLIPSE MA200).**

PC main unit

Item	Condition
CPU	Pentium 4 3 GHz or higher
Memory	256 MB or more
Hard disk drive	Minimum of 100 MB free space
Video RAM	16 MB or more
OS	Windows XP (Japanese or English version) Note: Use Windows XP Professional Service Pack 2 or later. Windows Vista (Japanese or English version) Note: Use Windows Vista Business Service Pack 1 or later. Only the 32-bit version of Windows Vista is supported.
Others	"Nikon ECLIPSE MA200 Setup Tool" is supplied in CD-ROM. A CD-ROM drive is required to read and install the software.

"Nikon ECLIPSE MA200 Setup Tool" is not guaranteed to be compatible with all PCs. Please contact your distributor for detailed compatibility information.

Display

Item	Condition
Resolution	1024 x 768 pixels. A monitor/video card capable of True Color output is recommended.

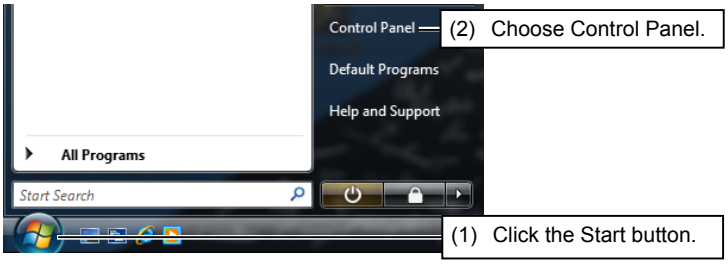
1.1.1 Checking Available RAM

Use the System Properties dialog box to check the amount of free RAM.

[Memory requirements]
256 MB or more

Procedure

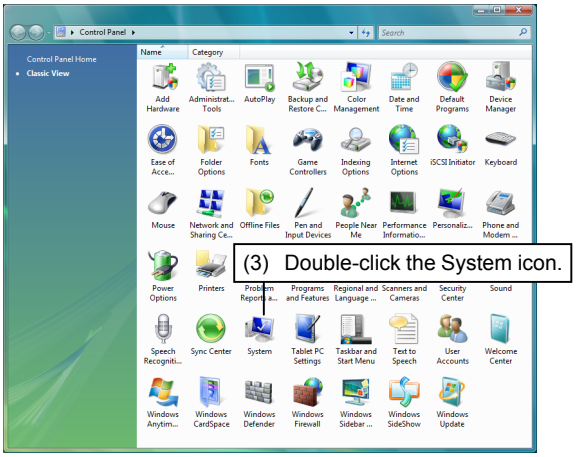
▼ Start menu



(1) Click the Start button.

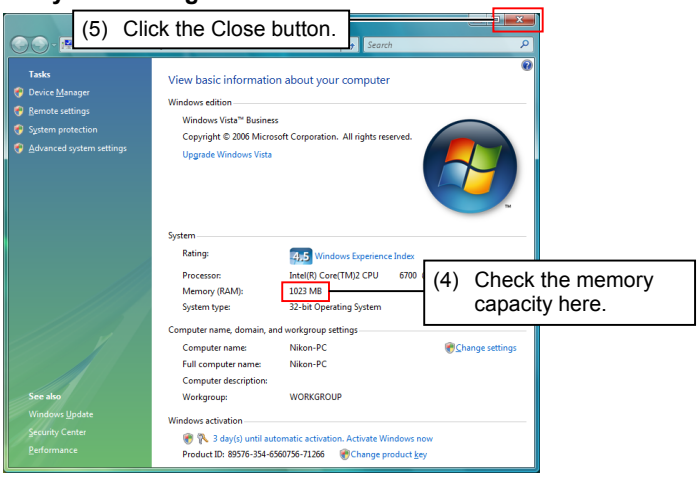
(2) Choose Control Panel to display the Control Panel window.

▼ Control Panel window



(3) Double-click the System icon in the Control Panel window. The System dialog box appears.

▼ System dialog box



(4) Check the System dialog box that 256 MB or more free memory is available.

(5) Click the Close button to close the System dialog box.

1.1.2 Checking the Free Hard Disk Space

The free hard disk space can be confirmed in the Computer window. If you have insufficient hard disk space, remove any unnecessary data or applications from the hard disk to increase available free space.

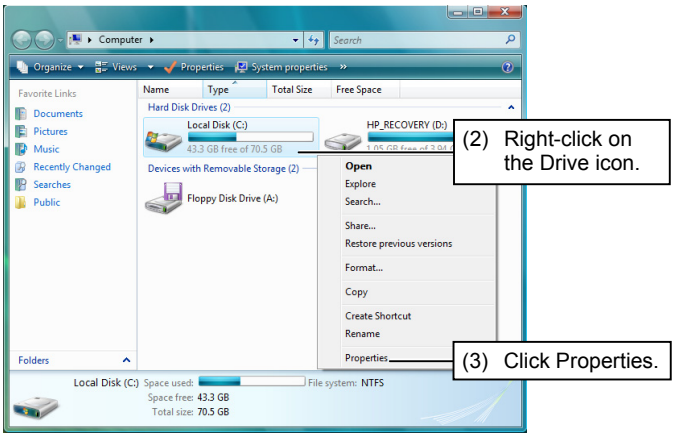
[Hard disk drive]
Must have 100 MB or more free space.

Procedure

▼ Desktop

(1) Double-click the Computer icon.
The Computer window appears.

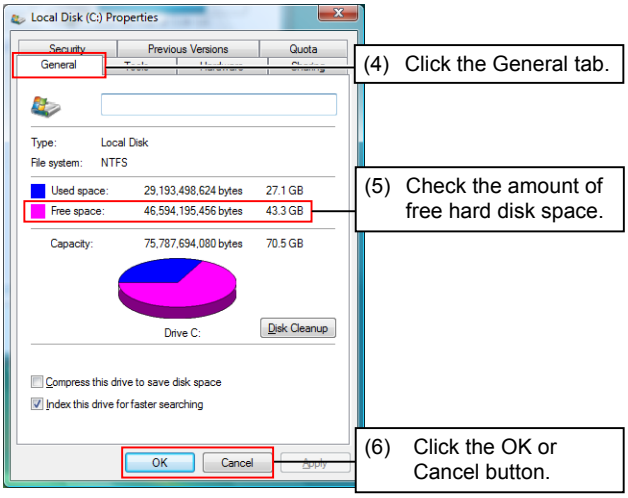
▼ Computer window



(2) Right-click on the Drive icon in the Computer window to which you want to install the application.

(3) Click Properties in the Shortcut menu.
The Properties dialog box for the selected drive appears.

▼ (Drive) Properties dialog box



(4) Click the General tab of the Properties dialog box.

(5) Check that 100 MB or more free space is available on the hard disk.

(6) Click the OK or Cancel button to close the Properties dialog box.

1.2 Installing the Application Software

You are now ready to install Nikon ECLIPSE MA200 Setup Tool.

CAUTION

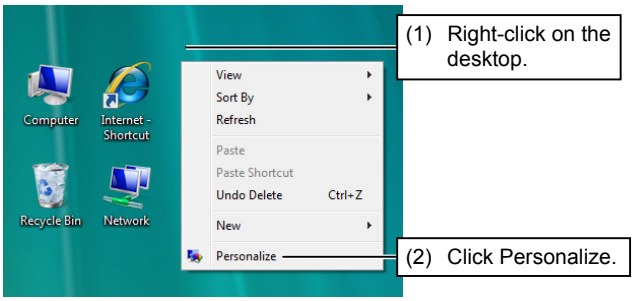
- **Install the application software before connecting the PC and microscope system.**
- **To install the Nikon ECLIPSE MA200 Setup Tool, you must login to your computer with a user account with Administrator rights.**

1.2.1 Closing All Other Application Software

Before installing Nikon ECLIPSE MA200 Setup Tool, close all system-resident programs such as the screensaver and anti-virus utility.

Closing the screen saver

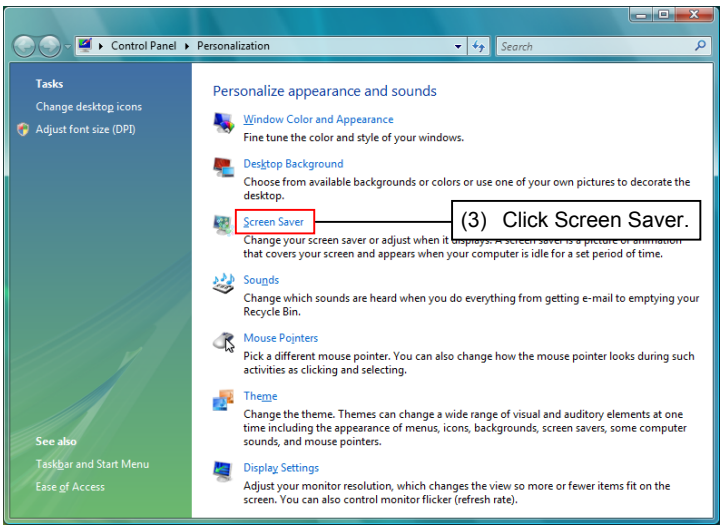
▼ Shortcut menu on the desktop



(1) Right-click on the desktop to display a shortcut menu.

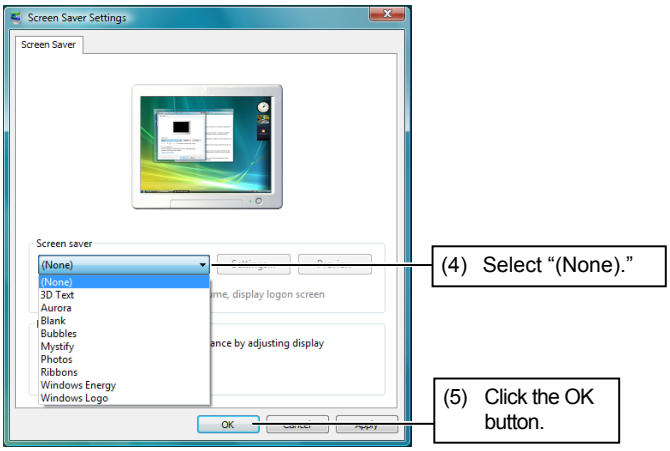
(2) Click Personalize in the shortcut menu. The Personalization dialog box appears.

▼ Personalization dialog box



(3) Click Screen Saver in the Personalization dialog box. The Screen Saver Settings dialog box appears.

▼ Screen Saver Settings dialog box



(4) In the Screen Saver Settings dialog box, select “(None)” from the Screen saver pulldown menu.

(5) Click the OK button.

1.2.2 Running the Setup Wizard

To install the application software, run the setup wizard from the CD-ROM and follow the on-screen instructions.

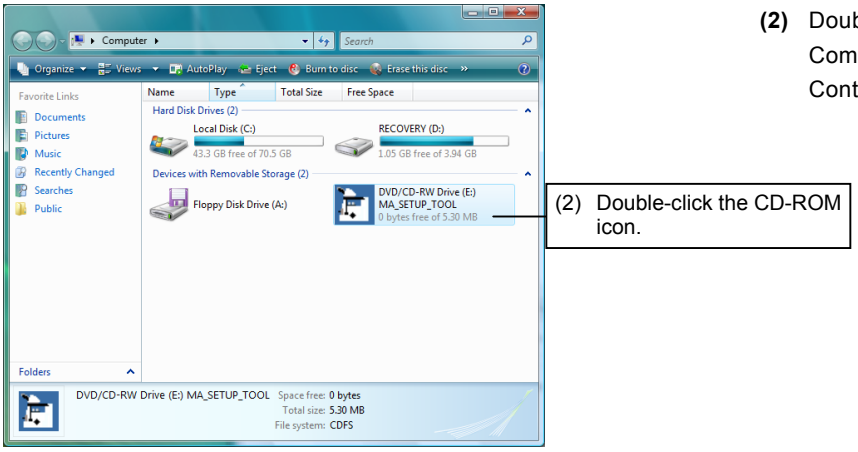
When the CD-ROM is inserted into the CD-ROM drive, the setup wizard should automatically start. If it does not, follow the procedure below and start the setup wizard.

Starting the setup wizard

▼ **Desktop**

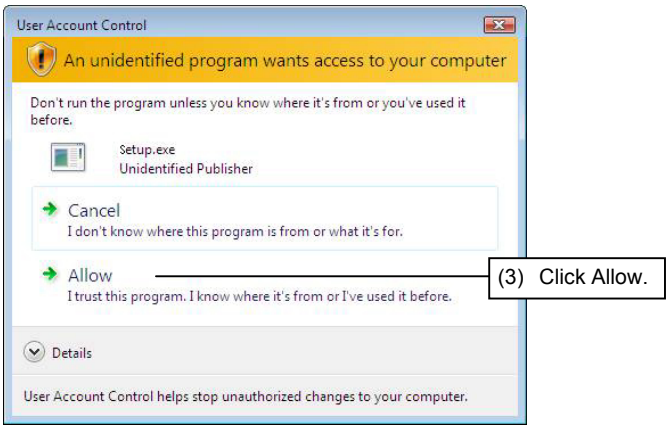
(1) Double-click the Computer icon on the desktop. The Computer window appears.

▼ **Computer window**



(2) Double-click the CD-ROM icon in the Computer window. The User Account Control dialog box appears.

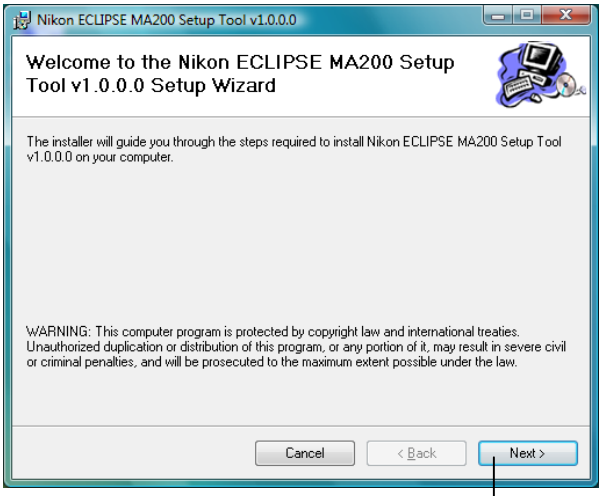
▼ **User Account Control dialog box**



(3) Click Allow in the User Account Control dialog box. The Setup wizard startup screen appears.

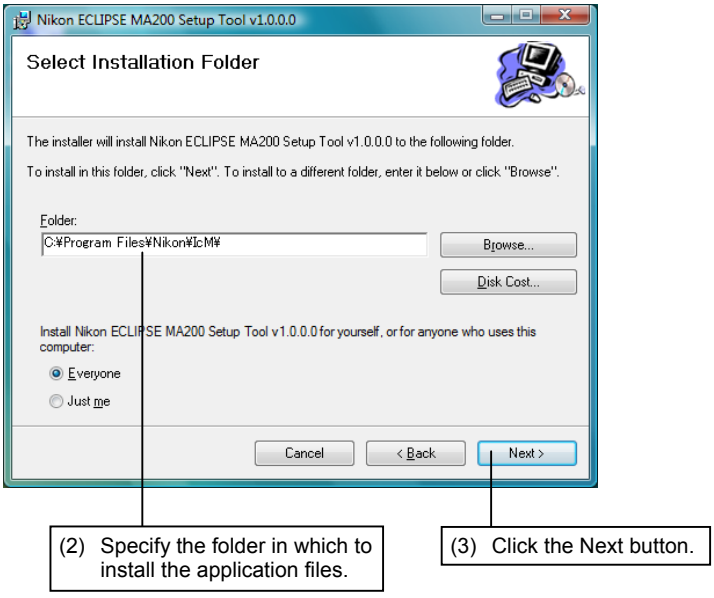
Installation procedure

▼ Setup wizard startup screen



(1) Click the Next button in the Setup wizard startup screen. The Installation folder setup screen appears.

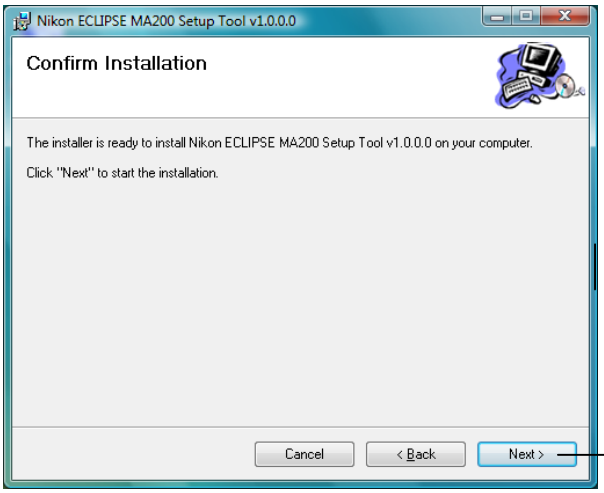
▼ Installation folder setup screen



(2) On the Installation folder setup screen, specify a folder in which Nikon ECLIPSE MA200 Setup Tool is installed.
The default folder is <C:¥Program Files¥Nikon¥IcM¥>
To install the software to a different folder, click the Browse... button.

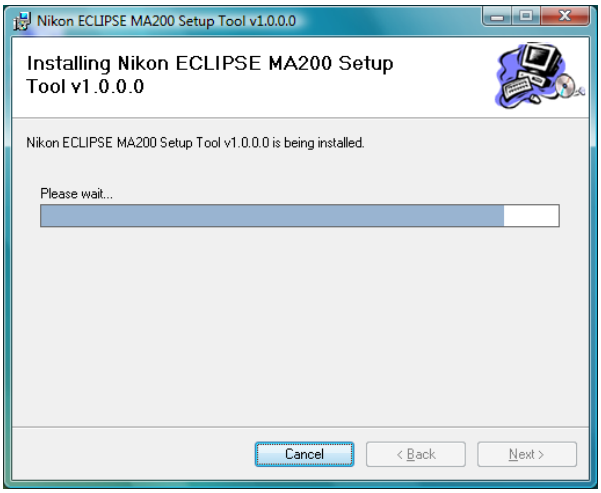
(3) Select a desired folder and then click the Next button. The Confirmation Installation screen appears.

▼ Confirmation Installation screen

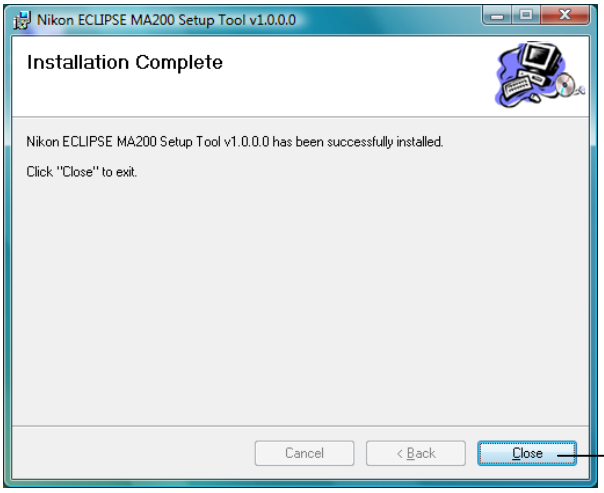


(4) Click the Next button in the Confirmation Installation screen. The application software will be installed into the specified folder.

▼ Screen during installation



▼ Screen when installation is complete



(5) After installing the software, the setup wizard displays the screen shown on the left. Click the Close button to exit the wizard.

You have finished installing Nikon ECLIPSE MA200 Setup Tool.

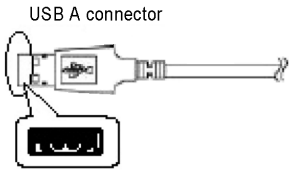
1.2.3 Installing Device Drivers

After installing Nikon ECLIPSE MA200 Setup Tool, connect your computer and microscope system with a USB cable. When you connect the microscope system to your computer for the first time, the Found New Hardware Wizard will start automatically. Follow the screen messages displayed to install device drivers.

CAUTION

- **To install the Nikon ECLIPSE MA200 Setup Tool, you must login as Administrator.**
- **For information on uninstalling Nikon ECLIPSE MA200 Setup Tool, refer to Section 1.3, "Uninstalling the Application Software."**

▼ USB connector

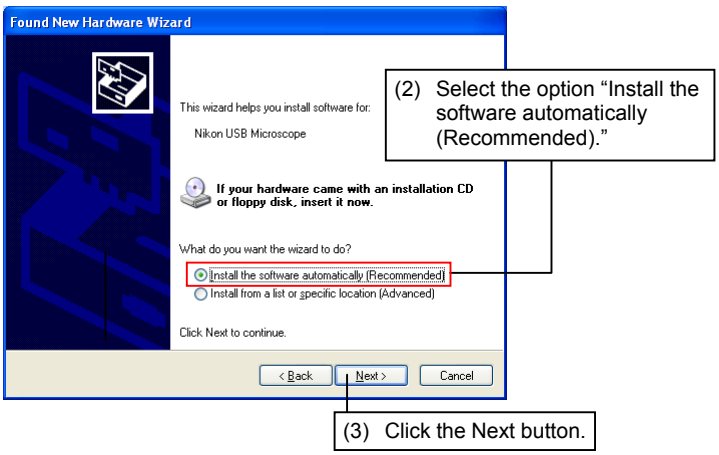


(1) Plug the USB A connector of the USB cable into the connector on your computer and the other end into the USB connector of the microscope system. The Wizard startup screen appears.

CAUTION

If the screen shown on the left appear, select "No, not this time," and click the Next button.

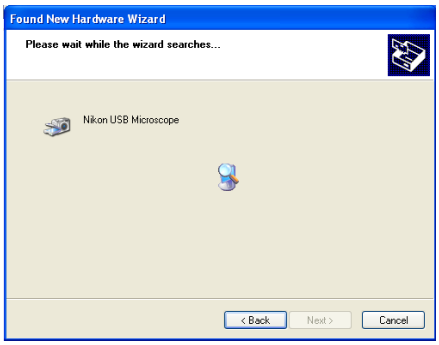
▼ Wizard startup screen



(2) Select the option "Install the software automatically (Recommended)" in the Wizard startup screen.

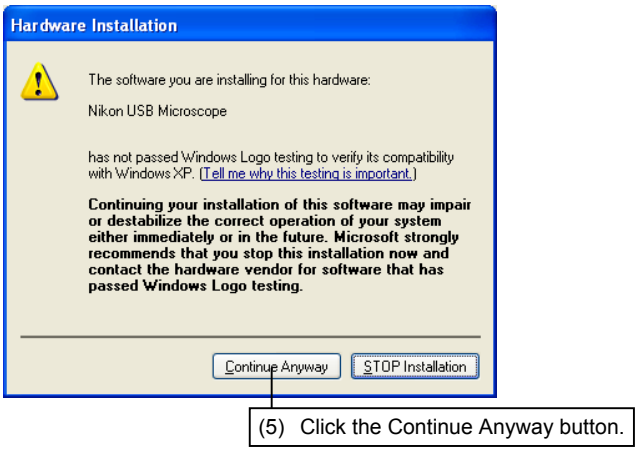
(3) Click the Next button. The hardware search screen appears.

▼ Hardware search screen



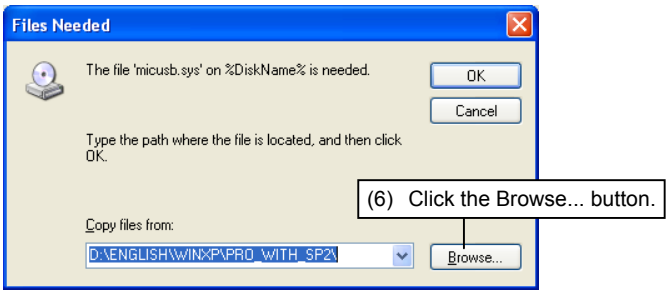
(4) The wizard searches for the necessary device driver information.

▼ Hardware Installation screen



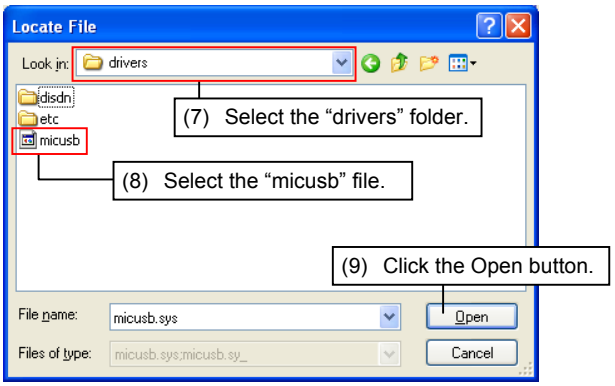
(5) When the necessary device driver information is found, the Hardware Installation screen appears. Click the Continue Anyway button. The Files Needed dialog box appears.

▼ Files Needed dialog box



(6) Specify the folder in which the device driver file (micusb.sys) is located. Click the Browse... button in the Files Needed dialog box.

▼ Locate File screen

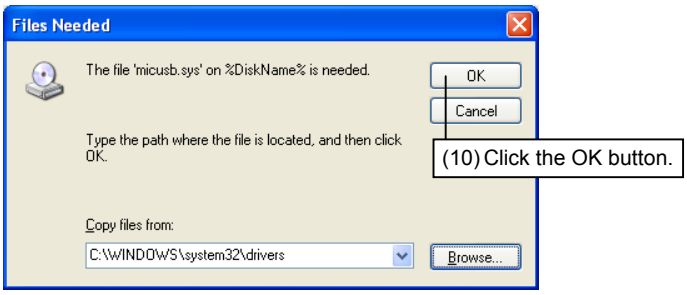


(7) Select <C:\WINDOWS\system32\drivers> from the “Look in” list box.

(8) Select micusb.sys.

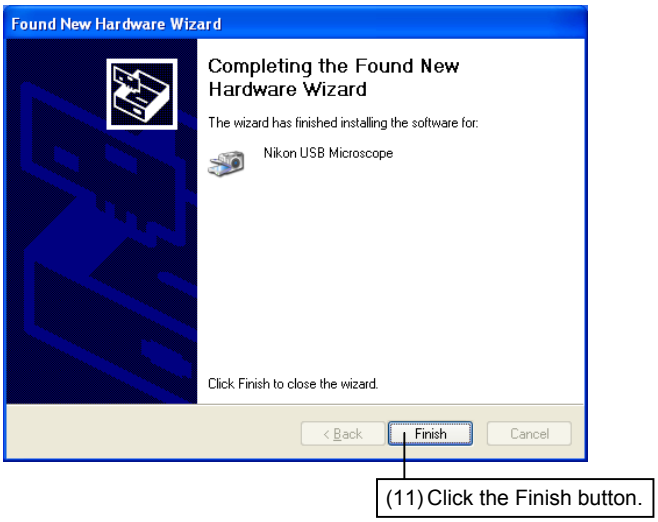
(9) Click the Open button. The Files Needed dialog box appears again.

▼ **Files Needed dialog box**



(10) Click the OK button in the Files Needed dialog box to install the device drivers.

▼ **Screen when installation is complete**



(11) After installing the device drivers, the setup wizard displays the screen shown on the left. Click the Finish button to exit the wizard.

You have finished installing the device drivers.

1.3 Uninstalling the Application Software

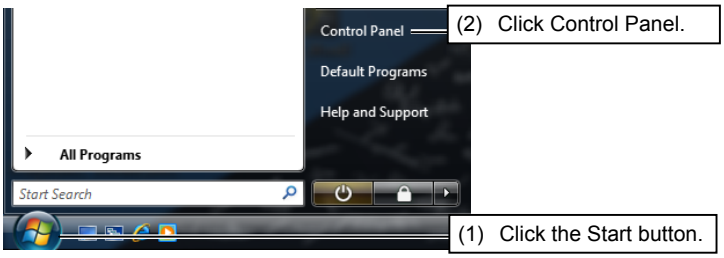
If you no longer need Nikon ECLIPSE MA200 Setup Tool and wish to uninstall it (remove it from the hard disk drive), use the Programs and Features utility in the Control Panel.

CAUTION

- **Once uninstalled, the application software cannot be used unless it is installed again.**

Uninstallation procedure

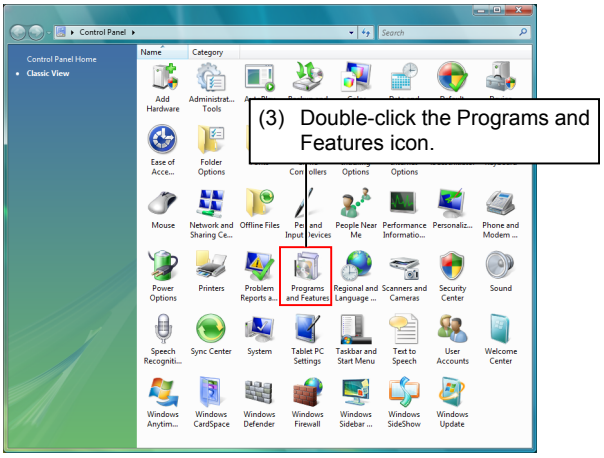
▼ Start menu



(1) Click the Start button.

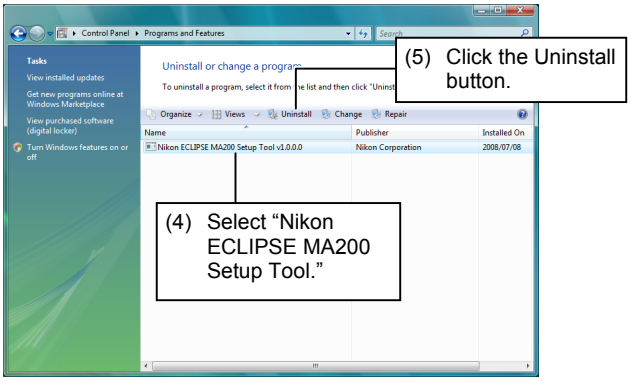
(2) Choose Control Panel to display the Control Panel window.

▼ Control Panel window



(3) Double-click the Programs and Features icon in the Control Panel window. The dialog box to select programs to be uninstalled appears.

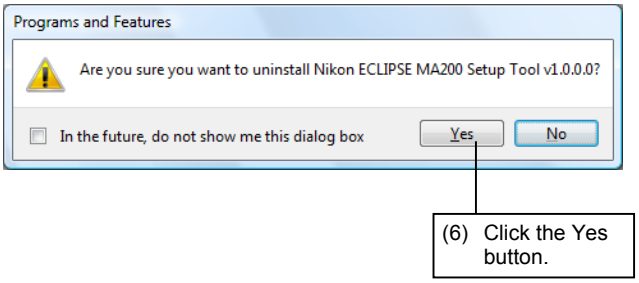
▼ Dialog box to select programs to be uninstalled



(4) Select Nikon ECLIPSE MA200 Setup Tool from the list in the dialog box.

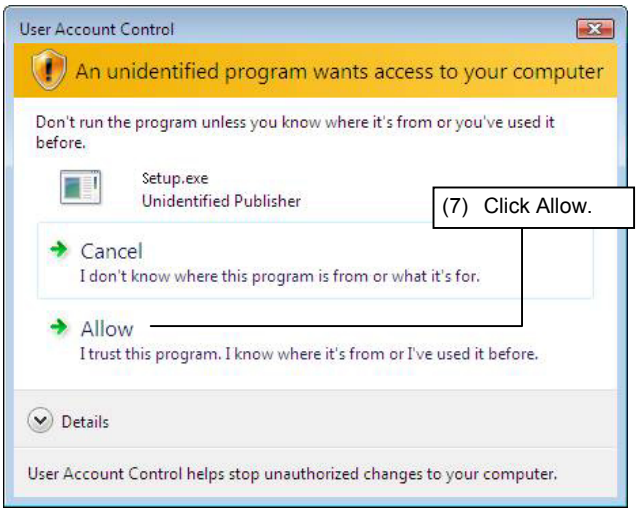
(5) Click the Uninstall button.

▼ Programs and Features dialog box



(6) When the Programs and Features dialog box appears, click the Yes button.

▼ User Account Control dialog box



(7) When the User Account Control dialog box appears, click Allow. Unistallation starts and the application is deleted from the PC.

You have finished uninstalling the application.

2 MA200 Setup Tool Configuration

When you install Nikon ECLIPSE MA200 Setup Tool, **MASetup** software is installed on your computer.

- **MASetup**
  After you connect a PC to the microscope system for the first time or change the microscope system configuration, it is necessary to execute this application software. MASetup allows you to set the microscope system information, transfer the information to the microscope system, and store the information in the microscope system.
  For more details about the software operation, refer to Chapter 3, “MASetup operation.”

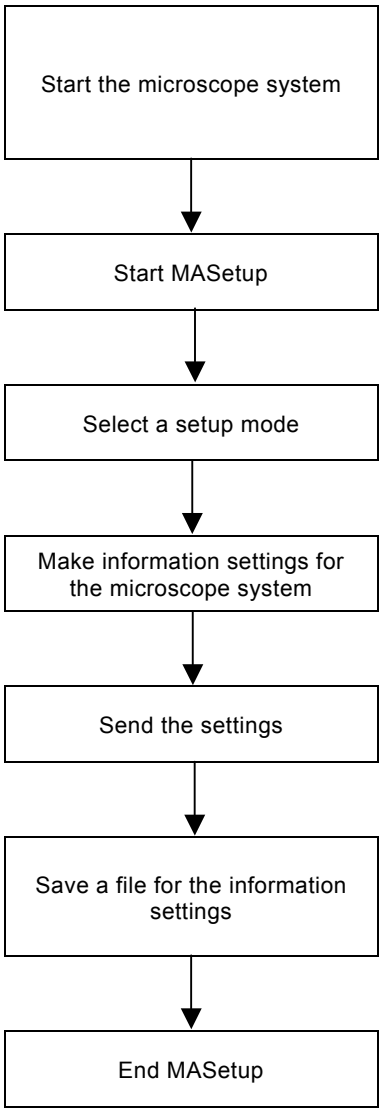
CAUTION

- **If you are using Nikon Inverted Metallurgical Microscope ECLIPSE MA200 for the first time, register the information of the microscope system to the microscope body using MASetup.**
- **Although the transmitted information is stored in memory on the microscope system, transmitting new information will overwrite information previously stored in memory. Nikon recommends saving setup information made in MASetup to a file after assigning the file an appropriate name.**
- **Nikon recommends that one microscope system be connected to one computer (PC).**

3 MASetup Operation

3.1 MASetup Workflow

Shown below is the MASetup workflow when setting information for the microscope system.



Connect the USB cable to the PC and the microscope system, and turn on the power for the microscope system. (It will take 10 seconds at the maximum to initialize the microscope system.)

Note: For details on connecting USB cable and starting the microscope system, refer to the instruction manual for the microscope.

When the initialization of the microscope system is complete, start MASetup.

Select either to enter the microscope system information or to specify settings (files) that are already configured for loading the files.

Make information settings for objectives attached on the microscope system.

Send the settings to the microscope system.
(The information is overwritten on the microscope system memory.)

Save the settings of microscope system information to a file by assigning an appropriate file name.
(You can end MASetup without saving data to a file. But Nikon recommends saving data to a file. The memory on the microscope system will be overwritten.)

End MASetup.

3.1.1 Setup Item List

Shown below is a list of items that MASetup can handle:

Setting Up Objectives (3.5)
- Objective Settings (3.5.1)
- Optional Objective Settings (3.5.2)

Data Transfer Process (3.6)
- Data transfer to the microscope
- Data save to a file

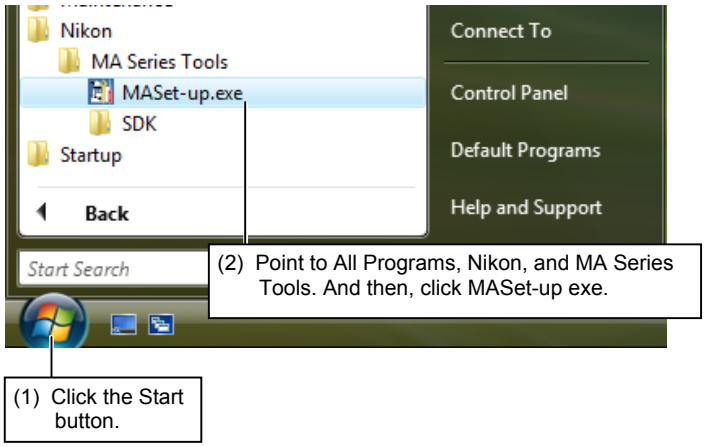
3.2 Starting and Ending MASetup

You can start and end MASetup in several ways. A general method is explained here, using the Start menu to start and the Quit button in the operation window to end.

3.2.1 Starting Up

Procedure

▼ Start menu



Confirm that the microscope is connected before starting the PC.

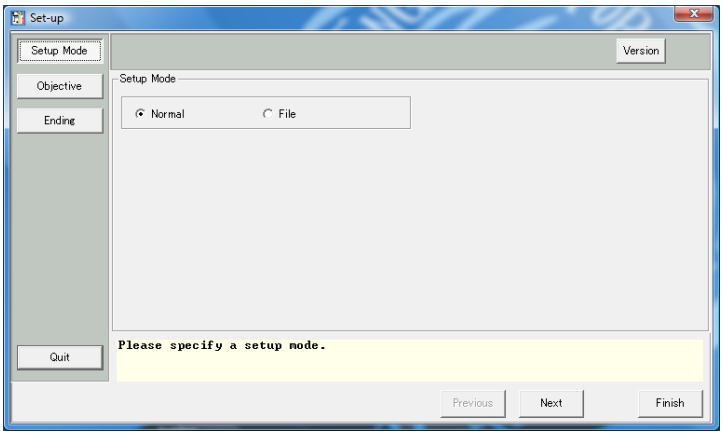
(1) Click the Start button.

(2) Point to All Programs, Nikon, and MA Series Tools. And then, click MASet-up.exe.
The MASetup starts, and then the MASetup main window appears.

CAUTION

Do not unplug the USB cable that connects the microscope with the PC while MASetup is running.

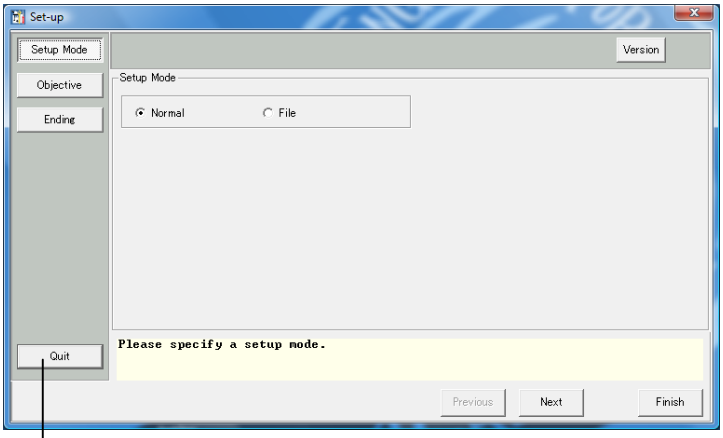
▼ MASetup main window



3.2.2 Ending the Software

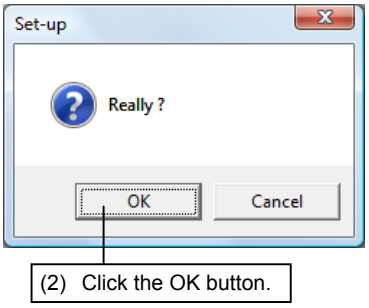
Procedure

▼ MASetup main window



(1) Click the Quit button.

▼ End confirmation dialog box

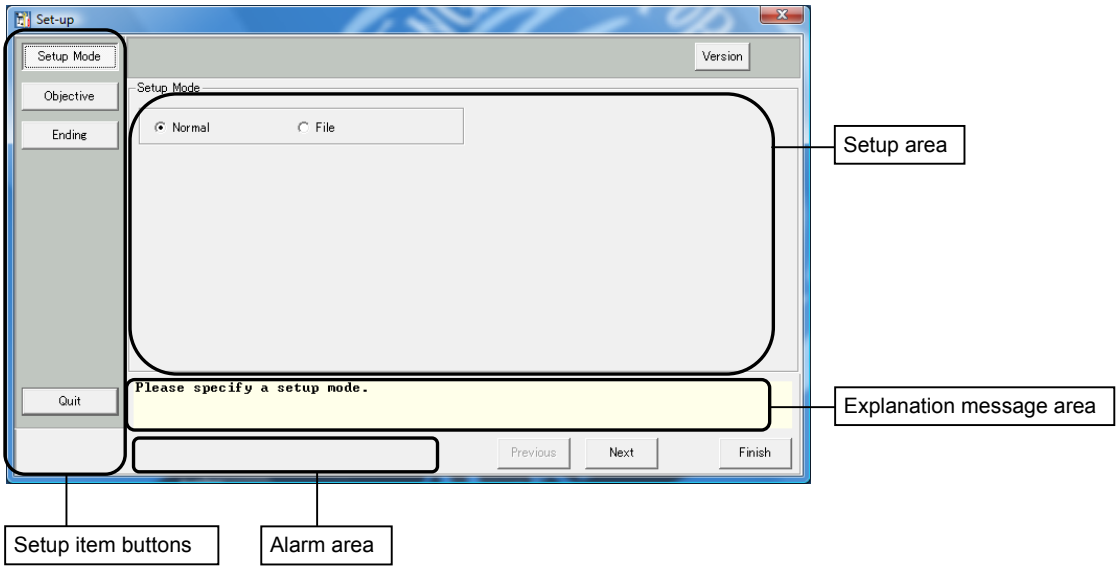


(2) A message of “Really?” appears. Click the OK button to quit the application.

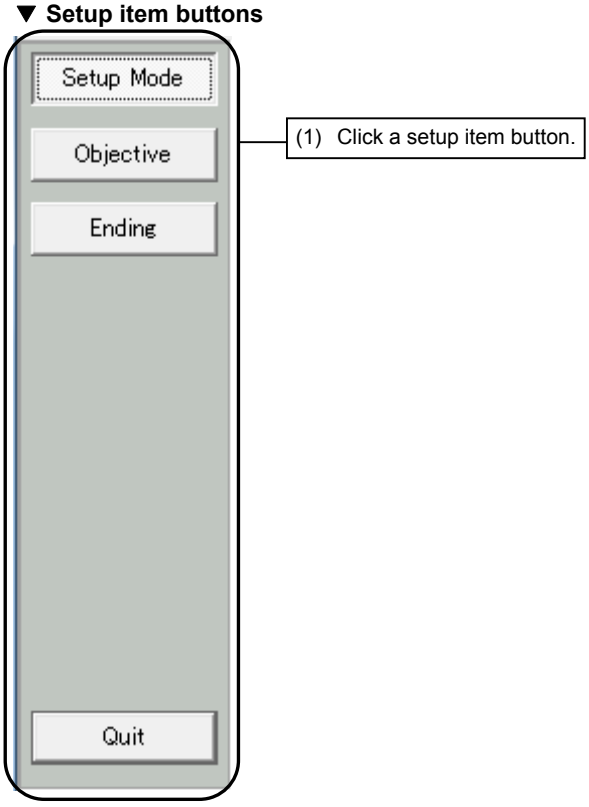
3.3 Layout of the MASetup Main Window

The MASetup main window consists of setup item buttons, explanation message area, alarm area, and setup area.

▼ MASetup main window



▼ Setup item buttons



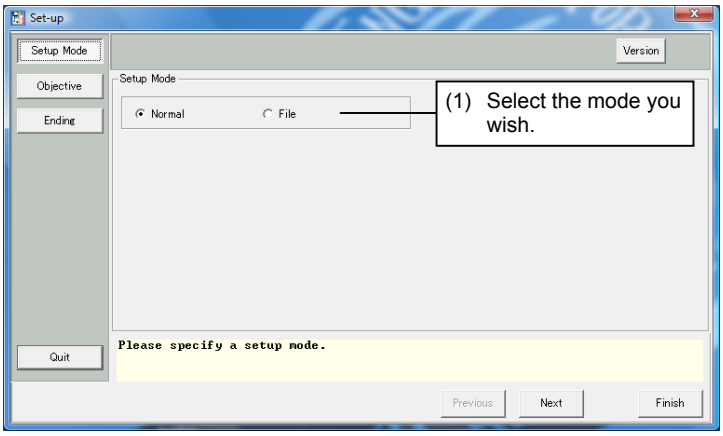
The setup item buttons are shown on the left of the main window and arranged from top to bottom in order of setup sequence. Follow this sequence when setting up items.

(1) When you click a button for any setup item, the setup area (the middle part of the main window) changes to a setup screen for that item.

3.4 Selecting the Setup Mode

In the Setup Mode selection screen, select the way to enter the microscope system information. You can enter new information or load the settings already configured from a file.

▼ Setup Mode selection screen



(1) Select one of the two modes, Normal or File, in the Setup Mode selection screen. For details on each mode, refer to the following.

- **Normal**
  You can enter new information for setup items required for the microscope system.
- **File**
  You can load the saved information of the microscope system from a data file.

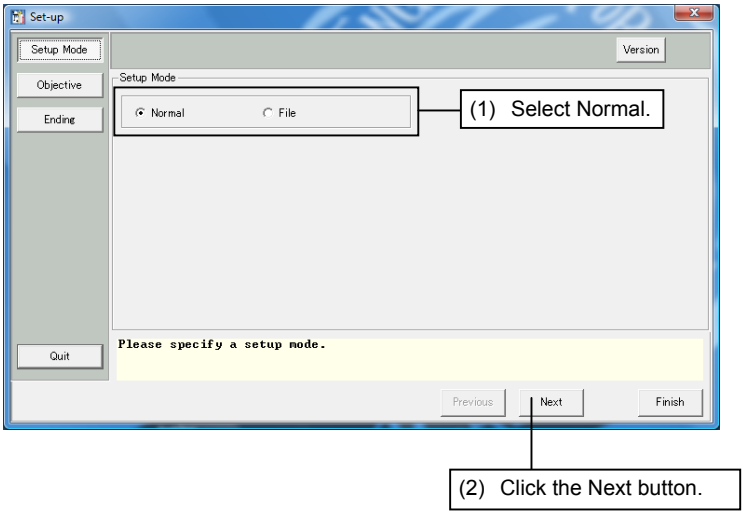
NOTE

If you load the settings from a selected file, you can change the settings.

3.4.1 Normal Setup

The Normal setup mode allows you to enter the setup items for the microscope system.

▼ Setup Mode selection screen



(1) Select Normal in the Setup Mode selection screen.

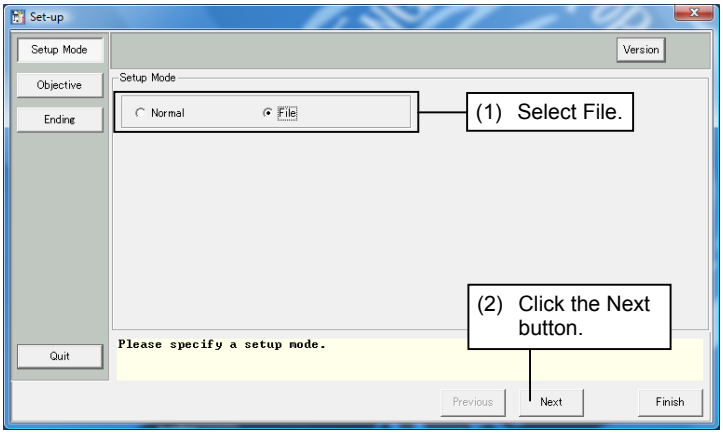
(2) Click the Next button. The screen proceeds to the objective setup screen.

3.4.2 File Setup

Setup with a file

You can load the saved information of the microscope system from a data file. The information of the microscope system can be modified in MASetup.

▼ **Setup Mode selection screen**



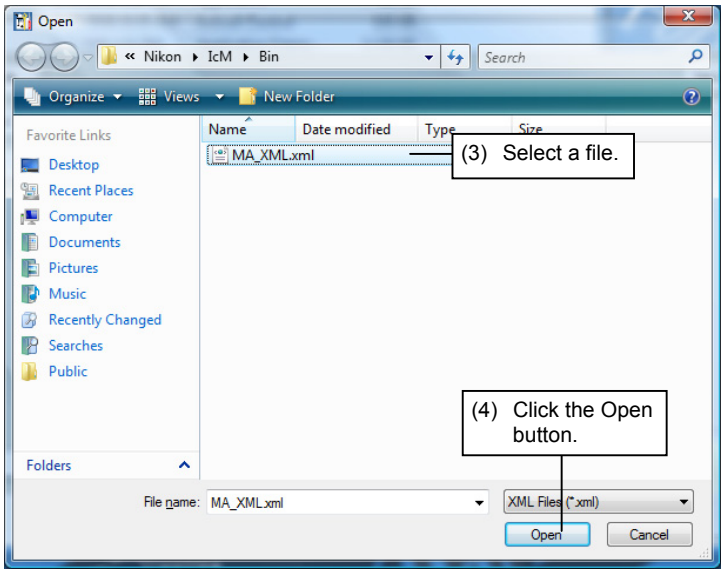
(1) Select File in the Setup Mode selection screen.

(2) Click the Next button to show the file selection screen.

NOTE

The file selection screen appears only when the Next button is clicked. It does not appear when the Finish button, Objective button or Ending button is clicked.

▼ **File selection screen**



(3) Select a file (***.xml) in the file selection screen.

(4) Click the Open button to load the microscope system information (objective information) to be used for MASetup.

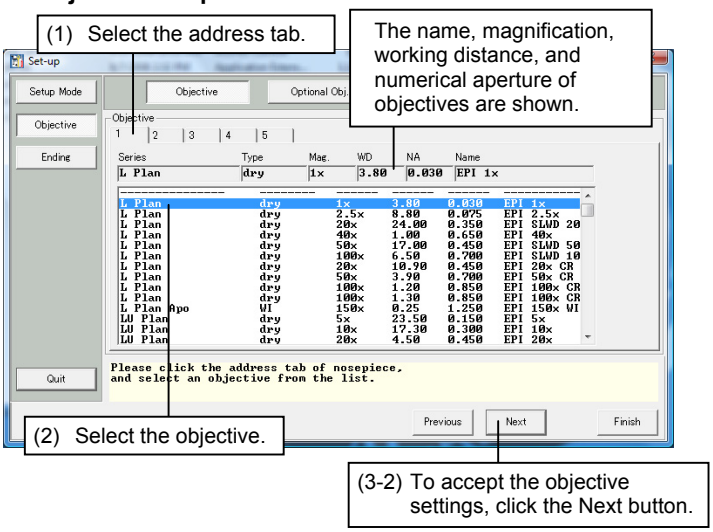
3.5 Setting Up Objectives

Specify objective information for each address (socket) on the nosepiece.

3.5.1 Objective Settings

To show the objective setup screen, click the Next button in the Setup Mode selection screen or click the Objective button (a setup item button).
On the objective setup screen, specify the information on the objective for each address of the nosepiece.

▼ Objective setup screen



(1) Select the address tab of the objective to specify the information.

(2) Select the objective from the list box. When no objective is attached, select [-----].

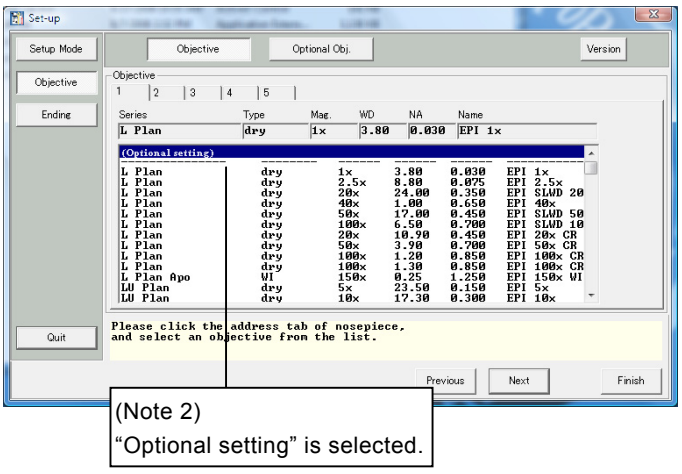
(3-1) To specify information for other nosepiece addresses, return to Step (1), and repeat the setup procedure.

(3-2) To accept the objective settings, click the Next button.

NOTE 1

If the objective to use is not included in the list box, click the Optional Obj. button to switch the screen to the optional objective setup screen. For details, see the next page.

▼ Objective setup screen (when the address already assigned in the optional objective setup screen is selected)



NOTE 2

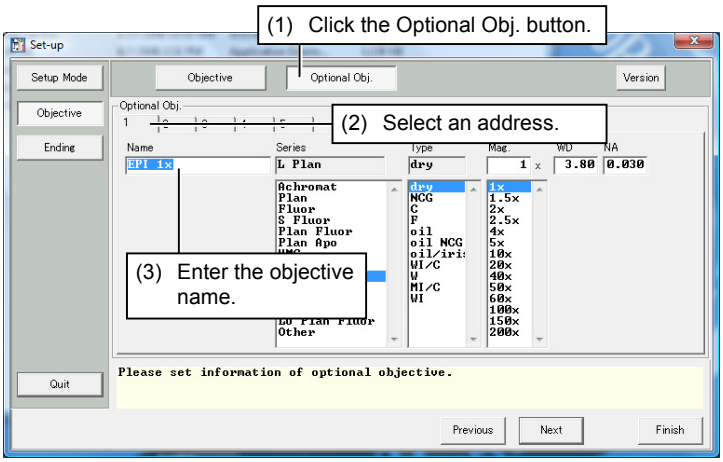
If you select the address which you assigned in the optional objective setup screen (see the next page), "Optional setting" is automatically selected in the list and the details you set in the optional objective settings are shown.

You can change the setting by selecting an objective in the list box.

3.5.2 Optional Objective Settings

To set an objective not included in the list box of the objective setup screen, configure the optional objective settings. Click the Optional Obj. button (a setup subitem button) in the objective setup screen. Then the optional objective setup screen appears to allow you to select or type in the objective's name, series, magnification, type, numerical aperture, and working distance.

▼ Optional objective setup screen

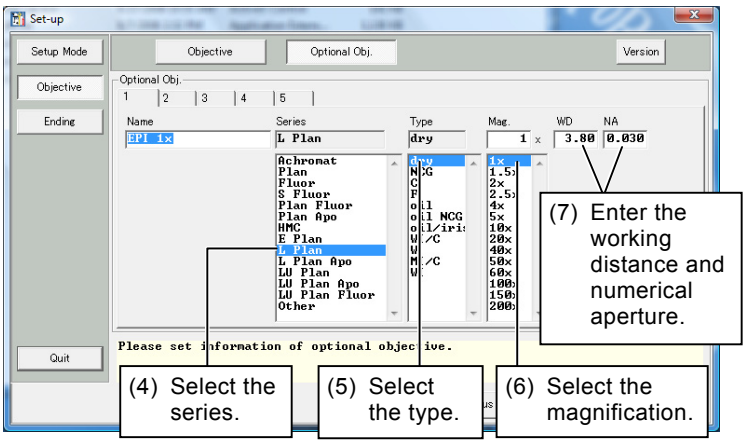


(1) Click the Optional Obj. button (a setup subitem button).

(2) Select an address to assign to the objective from the tab.

(3) Type in the objective's name in the Name text box. (Up to 20 alphanumeric characters can be entered.)

▼ Optional objective setup screen



(4) Select the objective's series in the Series list box.

(5) Select the objective's type in the Type list box.

(6) Select/type in the objective's magnification in the Mag. list box/text box.

(7) Type in numeric values for the objective's working distance and numerical aperture in the WD and NA text boxes.

NOTE

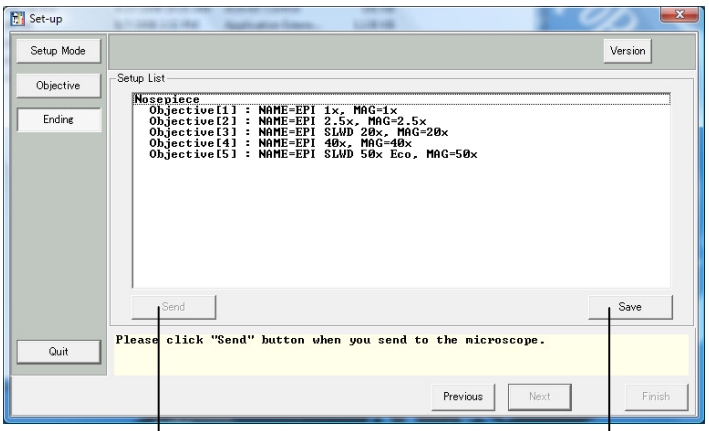
If you select the address which you already assigned in the objective setup screen (see the previous page), the details you set in the objective settings are shown as selected. You can change the settings in the optional objective setup screen.

3.6 Data Transfer Process

When you click the Next button upon completion of all settings or the Finish button in any setup screen, the Ending screen appears.

You can send the data to the microscope system on the Ending screen. You can save the data to a file on this screen if necessary. The data will be registered in the microscope system.

▼ Ending screen



(1) Check the contents and click the Send button.

(2) Click the Save button to save the data to a file.

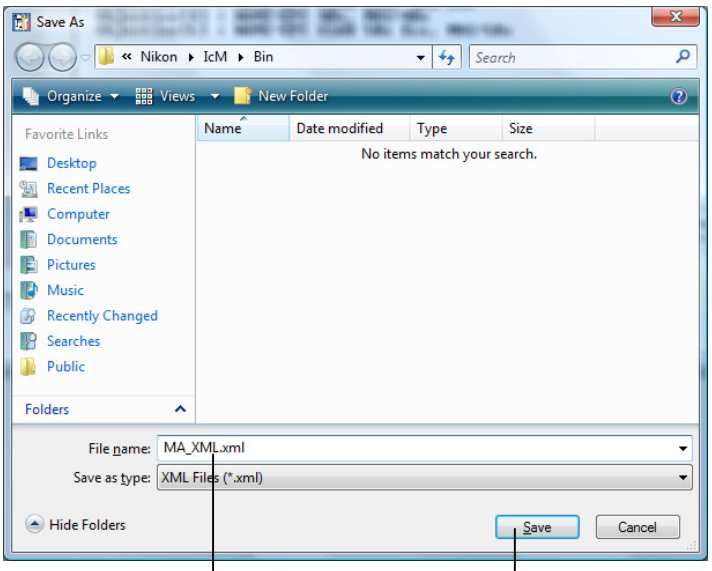
(1) All of the information you have set is displayed in the Ending screen. Check the displayed contents. After checking the contents, click the Send button. This completes the settings, and the information is sent to the microscope system. The data will be registered in the microscope system.

NOTE

If you wish to modify the data, click the Previous button or a desired setup item button.

(2) To save the information to a file, click the Save button. The Save As dialog box appears.

▼ File selection screen

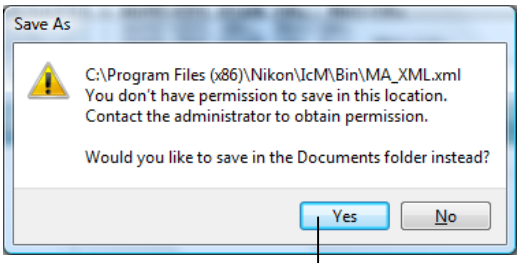


(3) Enter the file name.

(4-1) Click the Save button.

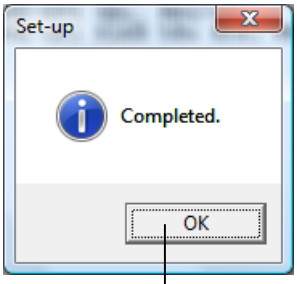
(3) Type in the file name in the File Name text box of the Save As dialog box.

(4-1) Click the Save button to save the information to the file.



(4-2) Click the Yes button.

(4-2) The window shown on the left may appear. If it appears, click the Yes button and then click the Save button.



(4-3) Click the OK button.

(4-3) When the file saving has finished, the dialog box shown on the left appears. Click the OK button.

The file is saved in the following directory:
<C:\user\user-name\Documents\>

NOTE

"user-name" is an account name which you have to enter when you log in the computer.
For example, if you logged in the account named "nikon", the file is saved in the following directory:
<C:\user\nikon\Documents\>

(5) To end MASetup, click the Quit button in the MASetup main window.
A confirmation message appears. Click the OK button to end the software.