M869EN03 24.7.12.NX_EN

Nikon

Application for ECLIPSE Ji Microscope

Ji Tool

Instruction Manual

Introduction

Thank you for purchasing a Nikon product.

This manual describes how to install and use the application software “Ji Tool” for Nikon Microscope ECLIPSE Ji.

To ensure correct usage, read this manual carefully before operating this product.

Refer to the hardware manual for detailed information on how to connect your microscope and explanations about system configuration.

- No part of this manual may be reproduced or transmitted in any form without prior written permission from Nikon.
- The contents of this manual are subject to change without notice.
- The equipment described in this manual might differ in its appearance from that of the actual product.
- Although every effort has been made to ensure the accuracy of this manual, errors or inconsistencies might remain. If you notice any points that are unclear or incorrect, please contact your local Nikon representative.
- If you intend to use any other equipment with this product, read the manual for that equipment too.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment might be impaired.
- The images shown in this document are for reference only, and may appear somewhat different from those actual application images.

Prerequisite knowledge

This manual assumes a basic familiarity with Windows.
If you come across unfamiliar terms or operations while reading through this manual, see the user's manual for your version of PC.

About the example screens used in the manual

The screens of each operating system (OS hereafter) used for preparation operations may differ depending on the OS. Other operation methods are almost the same regardless of the OS. 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.

Trademarks

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and other countries.
Products and brand names are trademarks or registered trademarks of their respective companies.
“TM” and ® marks do not appear beside registered trademarks and trademarks in this manual.

Disclaimer

Nikon shall not be liable for any damage or problems experienced by a user or third-party caused by the use of this software.

Notes on Using “Ji Tool”

- This application is used to make settings, control, and display the status of the Ji.
- For the first use of the microscope main body, always perform microscope system settings with the setup function, and transfer this information to the microscope system using “SEND.”
- When setup information is transferred to the microscope system, the previous information held in memory is overwritten.
- We recommend that the information (including arbitrary registrations performed with the setup function or other setting function) be assigned a file name and saved on the application side using the [Backup] function in the [Backup/Restore] area on the setup screen.

Screens used in this manual

Menus and items displayed in “Ji Tool” vary depending on the microscope system configuration and the connected motorized devices.

Contents

Introduction i

Notes on Using “Ji Tool” ii

Chapter 1 Preparation (for Windows 10) 1

1.1 Hardware and Software Requirements 2
1.2 Installing the Application 3
1.3 Starting Up and Exiting the Application 6
1.3.1 Starting Up the Application 6
1.3.2 Exiting the Application 6

Chapter 2 Preparation (for Windows 11) 7

2.1 Hardware and Software Requirements 8
2.2 Installing the Application 9
2.3 Starting Up and Exiting the Application 13
2.3.1 Starting Up the Application 13
2.3.2 Exiting the Application 13

Chapter 3 Setup 15

3.1 Basic Setup Operations and Screens 16
3.1.1 Configuration of the Setup Screen 16
3.1.2 Setting Items 17
3.1.3 Sending Microscope System Information 17
3.2 [System] Display of the Microscope Configuration 18
3.3 [Optical Device] Setting the Optical Devices 19
3.3.1 Setting the Nosepiece 19
3.3.2 Setting the Filter Cube 20
3.3.3 Setting the BA Filter 21
3.4 [Movement] Setting the Movement 22
3.4.1 Operating the XYZ Panel (Common to [Movement] and [Link]) 22
3.4.2 Operating the DIA Lamp/Exposure Time Panel (Common to [Movement] and [Link]) 23
3.4.3 Setting the Optical Path 24
3.4.4 Setting the Nosepiece Rotation 24
3.4.5 Setting the Focusing Device (Z Drive) 24
3.4.6 Setting the Rotation Speed of FL Turret 25
3.4.7 Setting the Observation Chamber Light 25
3.4.8 Setting the Access Window Light 25
3.4.9 Setting the Reference Position for the Focusing Device 26
3.5 [Link] Setting the Linking Function 27
3.5.1 Setting the Parfocal Correction 27
3.5.2 Setting the Parcentricity Correction 28
3.6 [Backup/Restore] Importing and Saving the Settings 29
3.6.1 Importing the Settings 29

3.6.2 Saving the Settings 29
3.7 [Information] Version Information 30

Chapter
1

Preparation (for Windows 10)

This chapter describes the hardware and software required for “Ji Tool” and how to install this application software when Windows 10 is used.

1.1 Hardware and Software Requirements

CAUTION

Install the application before connecting your PC and the microscope system.

Item	Specifications
Processor	1GHz or faster processor
LAN	1000 Base-T
RAM	2GB or more (64-bit OS)
Storage	There shall be 100 MB or more free space.
Resolution	Shall support 1280×1024-dot true color mode (recommended).
Video RAM	128 MB or more
Platform	Windows 10 Pro (64-bit Japanese or English)
Remarks	Installer The “Ji Tool” installer program can be downloaded from the Internet. “Ji Tool” is not guaranteed to be compatible with all personal computers. Contact your distributor for detailed compatibility information.

1.2 Installing the Application

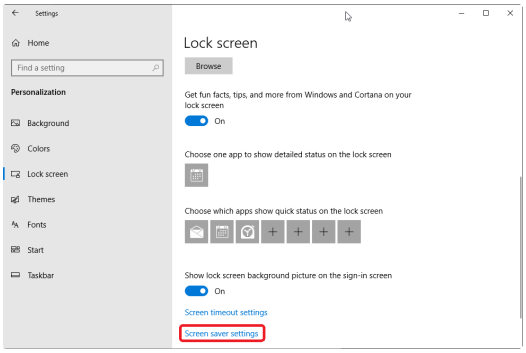
This section describes how to install the application.

CAUTION

- Be sure to install the application before connecting a PC to the microscope system using a USB. Connection using a USB before the installation may disable the correct installation of the device driver, making microscope system recognition by the PC impossible.
- To install “Ji Tool,” you must log in to your PC with a user account with administrator rights.
- The uninstallation procedure for “Ji Tool” is the same as that for other Windows applications.
- Uninstalling “Ji Tool” from a PC in which both “Ji Tool” and NIS-Elements are installed deletes the device driver, making Ji microscope recognition by NIS-Elements impossible.
  Do not uninstall “Ji Tool” from a PC in which both “Ji Tool” and NIS-Elements are installed.

1. Before installing “Ji Tool,” end all system-resident programs, such as the screen saver and anti-virus software.

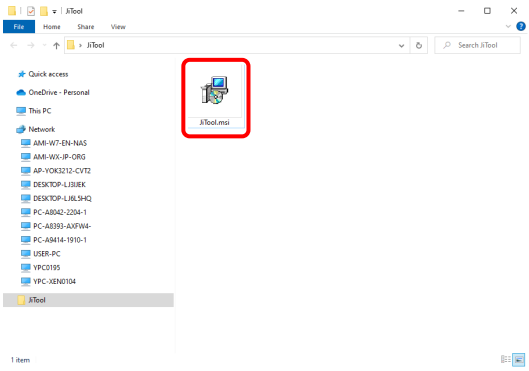
▼ **Preparing for installation**



2. Execute the setup wizard.

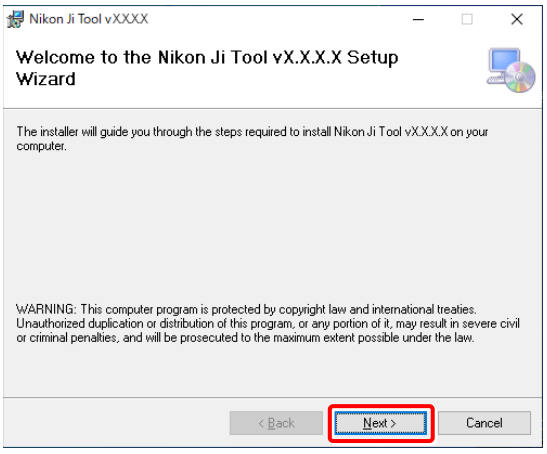
To install “Ji Tool,” start the downloaded setup wizard (JiTool.msi) and follow the displayed messages.

▼ **Starting the setup wizard**



3. The installation destination setting screen appears when [Next] is clicked on the welcome screen of the setup wizard.

▼ **Welcome screen of the setup wizard**



4. On the installation destination setting screen, specify a folder to install “Ji Tool.”

The default installation destination folder is as follows:

C:\Program Files\Nikon\JiTool

To change the folder, click [Browse…].

5. Specify the user of “Ji Tool.”

Everyone: All users that will use this PC are applicable.

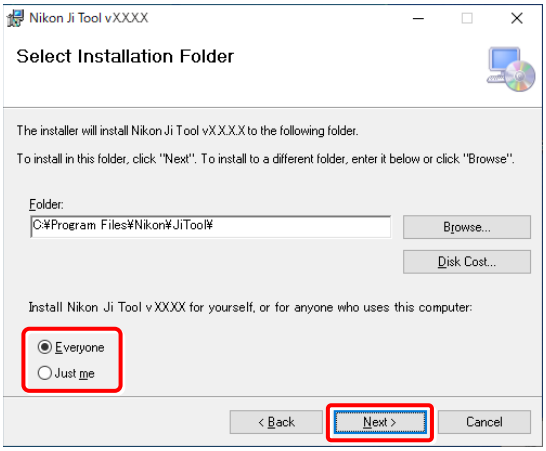
Just me: Only the user who is currently logged in is applicable.

6. After specifying a folder, click [Next] to display the installation screen.

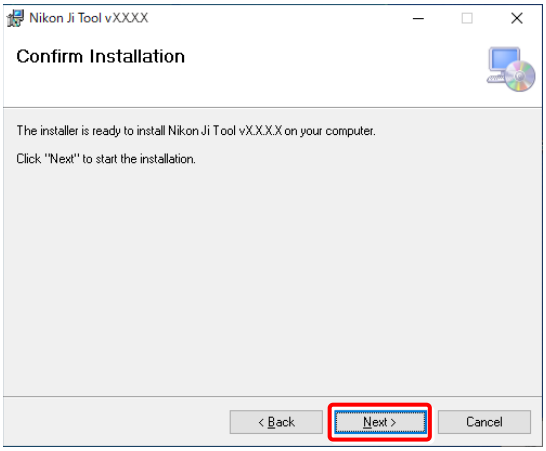
7. Click [Next] on the installation confirmation screen to start the installation.

If the [User Account Control] confirmation screen is displayed, click [Yes] to start the installation.

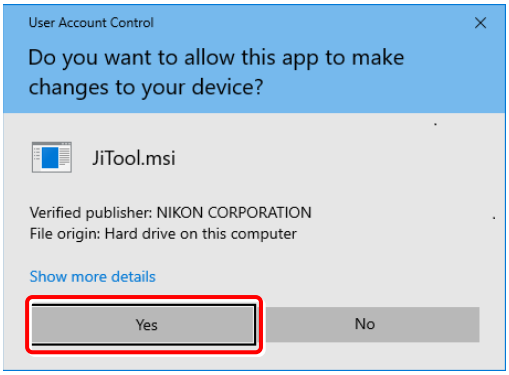
▼ Installation destination setting screen



▼ Installation screen

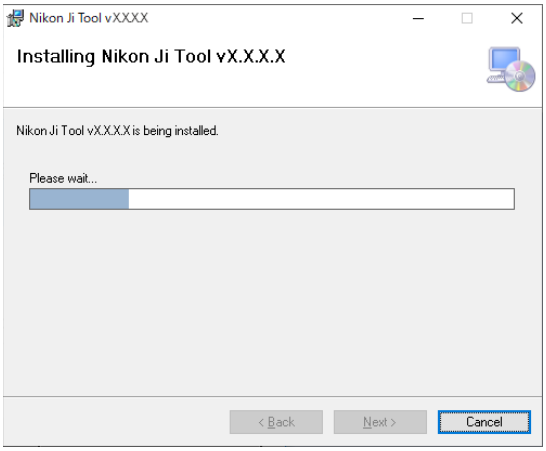


▼ [User Account Control] confirmation screen



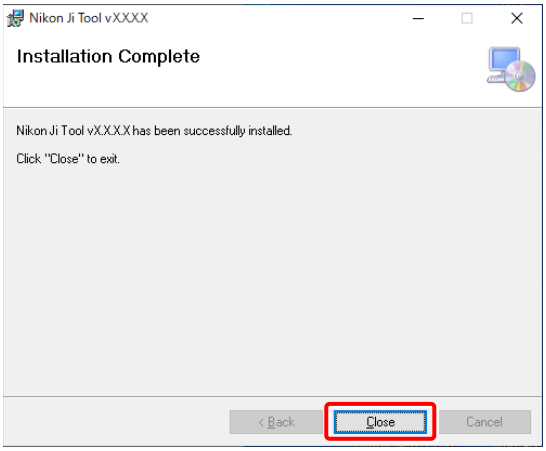
The installation progress screen appears.

▼ **Installation progress screen**



When installation is completed, the screen as shown on the right appears.
Click [Close] to end the installation procedure.

▼ **Installation Complete screen**



This completes the installation of “Ji Tool.”

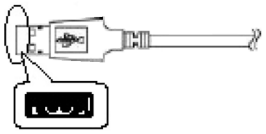
Installing the driver

After the “Ji Tool” installation, connect the PC to the microscope system (JI-CN Ji controller and the microscope main body) via a USB connector.

The driver is installed automatically if the microscope system is connected to the PC for the first time.

1. **Connect USB connector A of the USB cable to the PC.**

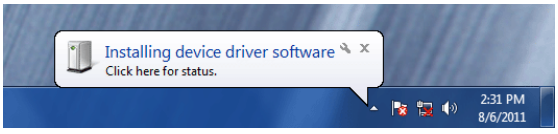
▼ **USB connector A**



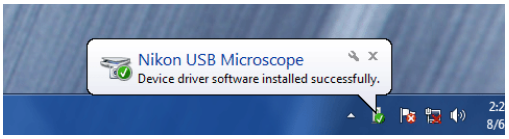
2. **Connect the other end of the cable to the USB connector of the microscope system.**

The detection wizard start screen appears.

When they are connected, the driver is installed automatically.



Installation is completed.



1.3 Starting Up and Exiting the Application

This section describes how to start up and exit the application.

There are several ways to start or exit the application. Here is explained the typical method of starting from the [Start] menu and exiting by clicking [x] in the upper right corner of the operation screen.

1.3.1 Starting Up the Application

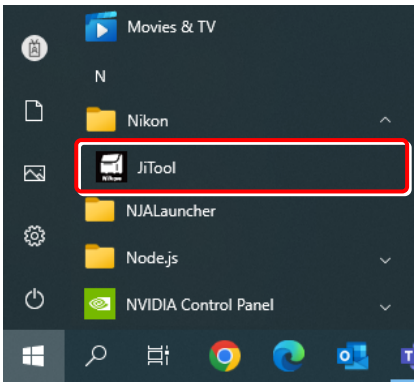
Make sure that the microscope system is connected to the PC, and then start the PC.

1. Click the [Start] button.

2. Click [All Programs], [Nikon], and then [Ji Tool].

The “Ji Tool” splash screen appears.

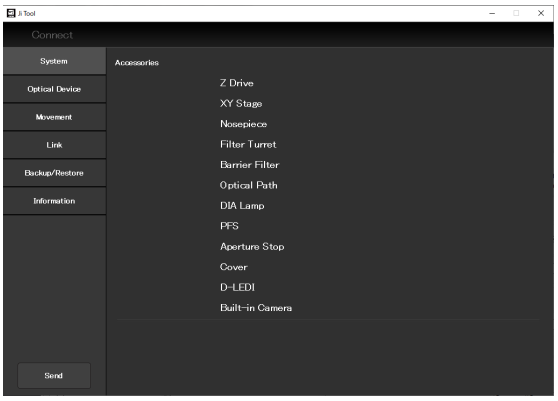
▼ Starting up the application



3. The microscope information is read and “Ji Tool” starts.

> **CAUTION**
> Do not unplug the USB cable that connects to the microscope after starting “Ji Tool.”

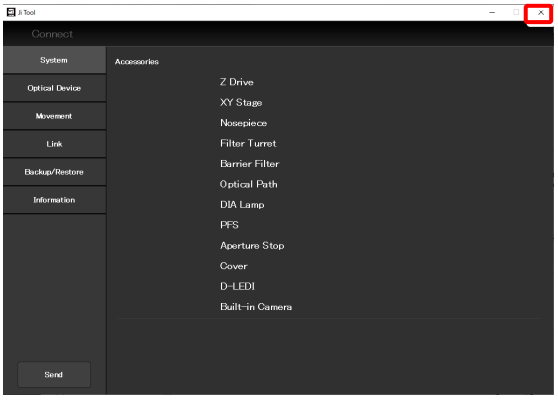
▼ Starting the application



1.3.2 Exiting the Application

1. Click the [x] button in the upper right corner of the screen.

▼ Exiting the application



Chapter
2

Preparation (for Windows 11)

This chapter describes the hardware and software required for “Ji Tool” and how to install this application software when Windows 11 is used.

2.1 Hardware and Software Requirements

CAUTION

Install the application before connecting your PC and the microscope system.

Item	Specifications
Processor	1GHz or faster processor
LAN	1000 Base-T
RAM	2GB or more (64-bit OS)
Storage	There shall be 100 MB or more free space.
Resolution	Shall support 1280×1024-dot true color mode (recommended).
Video RAM	128 MB or more
Platform	Windows 11 Pro (64-bit Japanese or English)
Remarks	Installer The “Ji Tool” installer program can be downloaded from the Internet. “Ji Tool” is not guaranteed to be compatible with all personal computers. Contact your distributor for detailed compatibility information.

2.2 Installing the Application

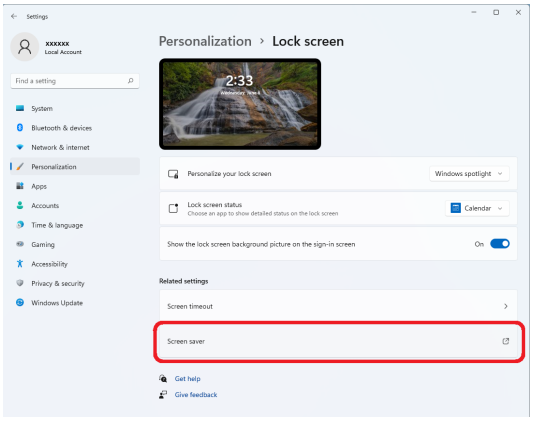
This section describes how to install the application.

CAUTION

- Be sure to install the application before connecting a PC to the microscope system using a USB. Connection using a USB before the installation may disable the correct installation of the device driver, making microscope system recognition by the PC impossible.
- To install “Ji Tool,” you must log in to your PC with a user account with administrator rights.
- The uninstallation procedure for “Ji Tool” is the same as that for other Windows applications.
- Uninstalling “Ji Tool l” from a PC in which both “Ji Tool” and NIS-Elements are installed deletes the device driver, making Ji microscope recognition by NIS-Elements impossible.
  Do not uninstall “Ji Tool” from a PC in which both “Ji Tool” and NIS-Elements are installed.

1. Before installing “Ji Tool,” end all system-resident programs, such as the screen saver and anti-virus software.

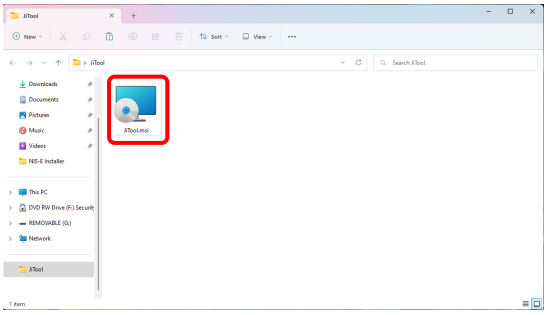
▼ **Preparing for installation**



2. Execute the setup wizard.

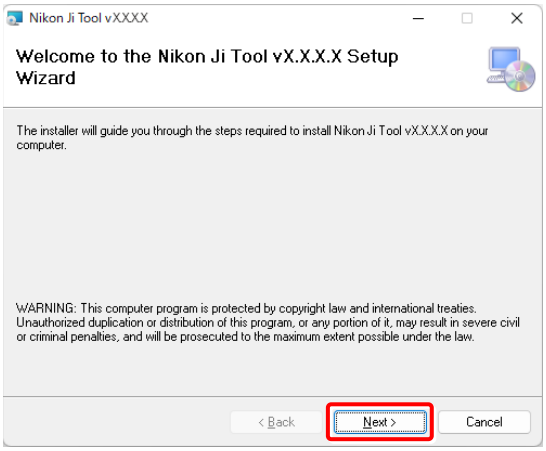
To install “Ji Tool,” start the downloaded setup wizard (JiTool.msi) and follow the displayed messages.

▼ **Starting the setup wizard**



3. The installation destination setting screen appears when [Next] is clicked on the welcome screen of the setup wizard.

▼ **Welcome screen of the setup wizard**



4. On the installation destination setting screen, specify a folder to install "Ji Tool."

The default installation destination folder is as follows:

C:\Program Files\Nikon\JiTool

To change the folder, click [Browse…].

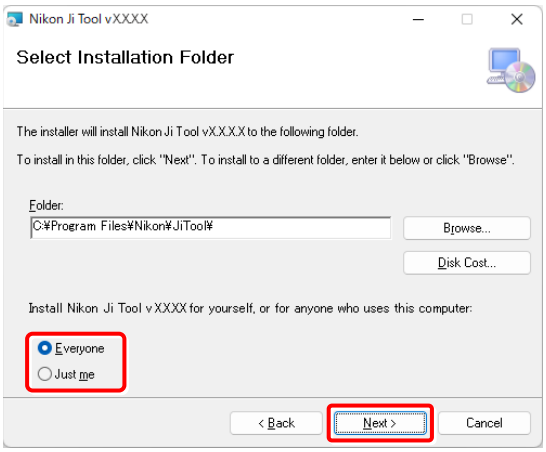
5. Specify the user of "Ji Tool."

Everyone: All users that will use this PC are applicable.

Just me: Only the user who is currently logged in is applicable.

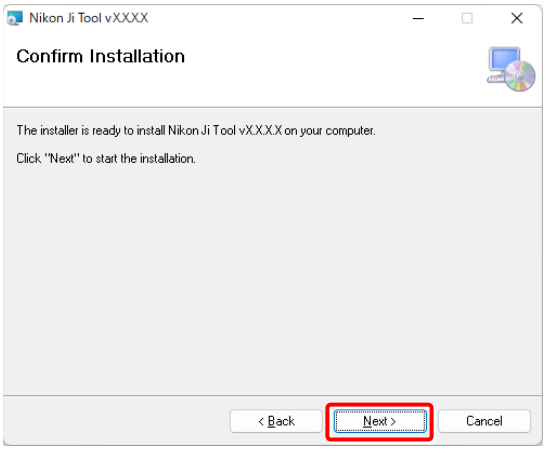
6. After specifying a folder, click [Next] to display the installation screen.

▼ **Installation destination setting screen**



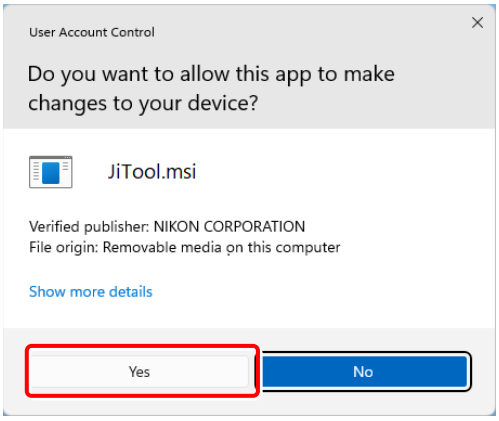
7. Click [Next] on the installation confirmation screen to start the installation.

▼ **Installation screen**



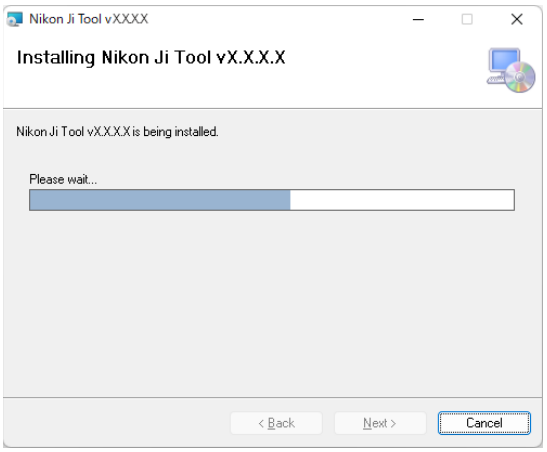
If the [User Account Control] confirmation screen is displayed, click [Yes] to start the installation.

▼ **[User Account Control] confirmation screen**



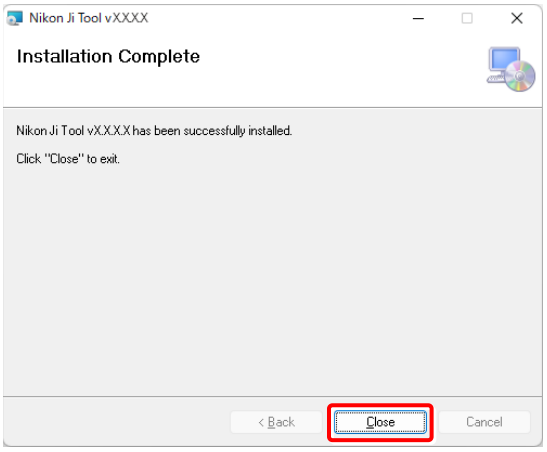
The installation progress screen appears.

▼ **Installation progress screen**



When installation is completed, the screen as shown on the right appears.
Click [Close] to end the installation procedure.

▼ **Installation Complete screen**



This completes the installation of “Ji Tool.”

Installing the driver

After the “Ji Tool” installation, connect the PC to the microscope system (JI-CN Ji controller and the microscope main body) via a USB connector.

The driver is installed automatically if the microscope system is connected to the PC for the first time.

1. Connect USB connector A of the USB cable to the PC.

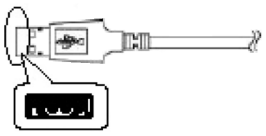
2. Connect the other end of the cable to the USB connector of the microscope system.

The detection wizard start screen appears.

When they are connected, the driver is installed automatically.

Installation is completed.

▼ USB connector A



2.3 Starting Up and Exiting the Application

This section describes how to start up and exit the application.

There are several ways to start or exit the application. Here is explained the typical method of starting from the [Start] menu and exiting by clicking [x] in the upper right corner of the operation screen.

2.3.1 Starting Up the Application

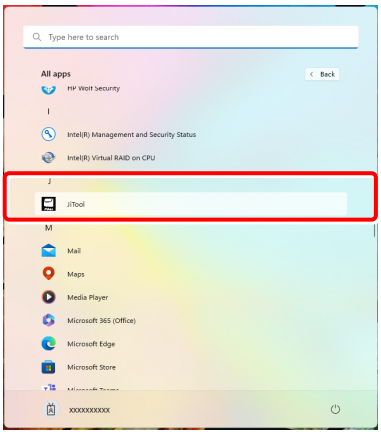
Make sure that the microscope system is connected to the PC, and then start the PC.

1. Click the [Start] button.

2. Click [All apps], and then [Ji Tool].

The “Ji Tool” splash screen appears.

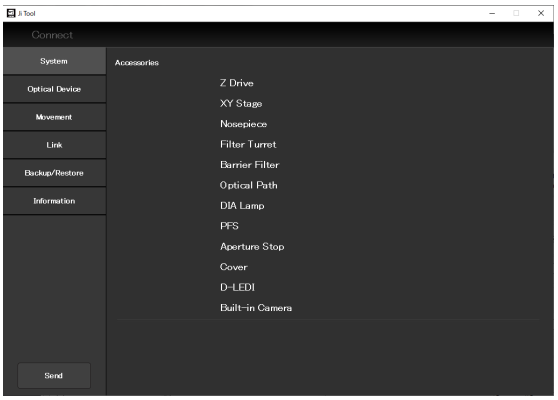
▼ Starting up the application



3. The microscope information is read and “Ji Tool” starts.

> **CAUTION**
> Do not unplug the USB cable that connects to the microscope after starting “Ji Tool.”

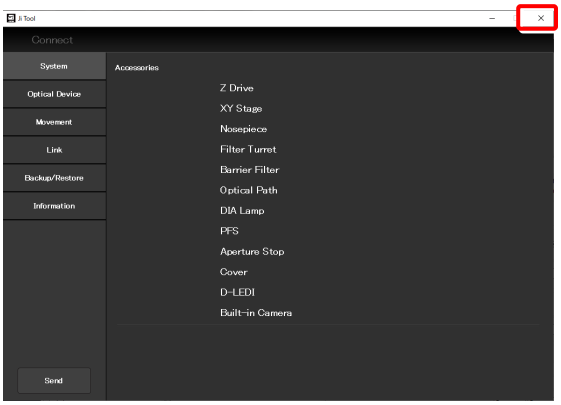
▼ Starting the application



2.3.2 Exiting the Application

1. Click the [x] button in the upper right corner of the screen.

▼ Exiting the application



This page is intentionally blank.

Chapter
3

Setup

This chapter describes how to register new microscope system settings when using the “Ji Tool” application for the first time.

3.1 Basic Setup Operations and Screens

3.1.1 Configuration of the Setup Screen

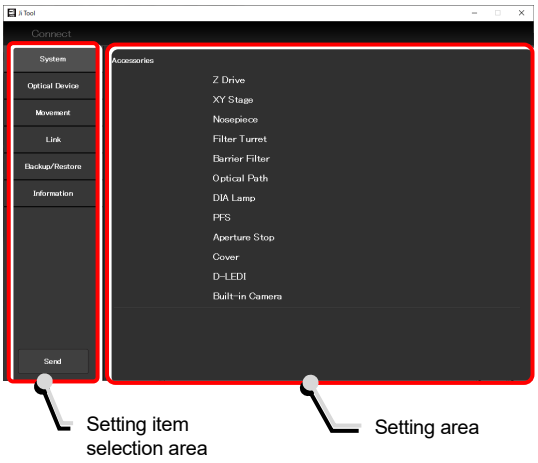
■ **Setting item selection area**

Click each button to change a setting item.

■ **Setting area**

Click a desired button in the setting item selection area to change the display items and settings.

▼ **Configuration of the setup screen**



3.1.2 Setting Items

The setup function consists of 8 setting screens and one button:

> **SUPPLEMENTAL REMARKS**
> Depending on the window size, not all items may be displayed.
> Scroll the setting item selection area to select [System] or [Information].

- [System]: Display connected accessories
- [Optical Device]: Optical device settings
  - Nosepiece: Objective settings
  - Filter cube: Filter cube settings
  - Barrier filter: BA filter settings
- [Movement]: Settings of microscope movement
  - Nosepiece: Nosepiece rotation settings
  - Z Drive: Focusing device settings
  - FL Turret Speed: Settings of FL turret movement speed
  - Internal light: Internal lights settings
  - Reference Z: Selecting the sample configuration
- [Link]: Settings of coordinated motorized device movement
  - Parfocal Correction: Settings of parfocal correction
  - Parcentricity Correction: Settings of parcentricity correction
- [Backup/Restore]: Reading and saving the settings
- [Information]: Display of the version information

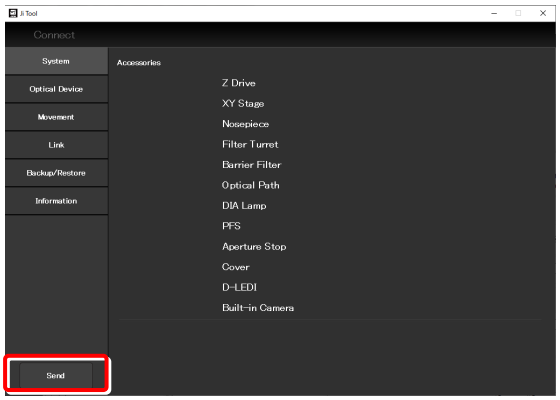
▼ Setting items

3.1.3 Sending Microscope System Information

■ Sending information to the microscope system

Click [Send] in the setting item selection area to display the confirmation screen.
Click [OK] to send the information set by the application to the microscope system.

▼ Setup screen



3.2 [System] Display of the Microscope Configuration

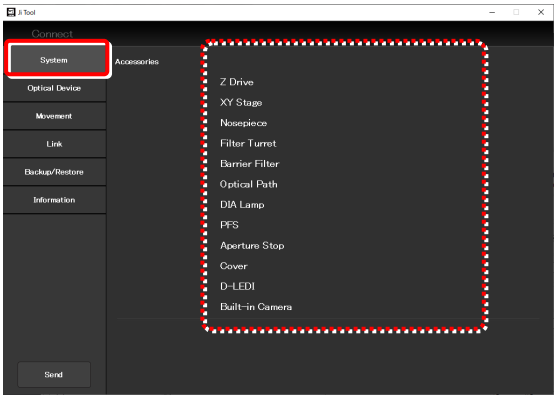
Clicking [System] displays a list of accessories mounted on the microscope system.

1. Select [System] from the setting item selection area.

A list of accessories connected to the microscope system is displayed.

2. Confirm the items displayed in the [Accessories] area.

▼ Display of the microscope configuration



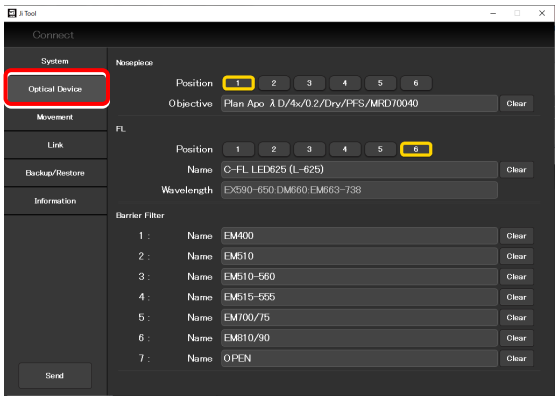
3.3 [Optical Device] Setting the Optical Devices

This section describes how to set objectives, fluorescent filter cubes, and barrier (BA) filter.

1. **Select [Optical Device] from the setting item selection area.**

   The optical device setting screen appears.

▼ **Setting optical devices**



3.3.1 Setting the Nosepiece

Specify which objective is attached to each address of the nosepiece.

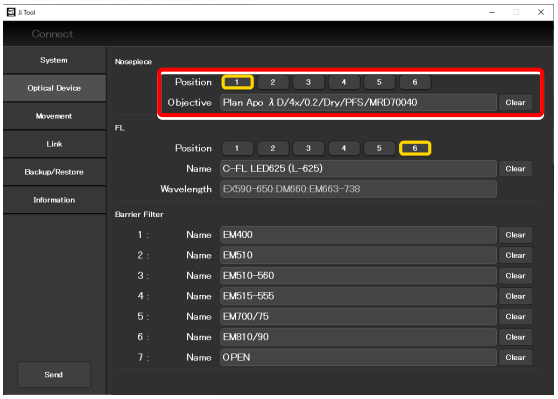
1. **In the [Nosepiece] area, click one of [1] to [6] in the [Position] field to select the address at which you need to specify an objective.**

   The nosepiece address you selected moves into the optical path.

2. **Click the [Objective] field in the [Nosepiece] area.**

   The list of the objectives is displayed.

▼ **Setting the nosepiece**



3. **Select an objective.**

   Selecting [Series], [Mag.], or [PFS] displays a list of objectives that match the conditions.

   Series:

   Allows a list of objectives to be narrowed down by specifying a series name.
   (If the series name is unknown, select “---.”)

   Mag.:

   Allows a list of objectives to be narrowed down by specifying a magnification.
   (If the magnification is unknown, select “---.”)

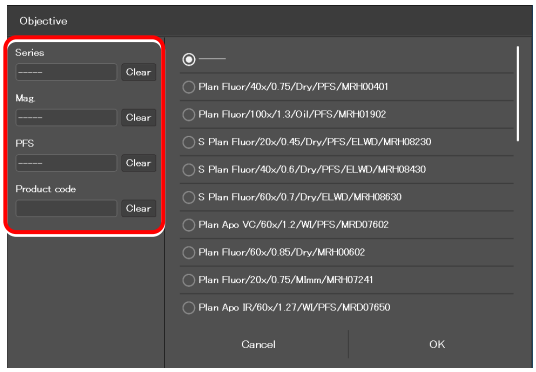
   PFS:

   Allows a list of objectives that support PFS.

   Product code:

   Enter the product code of the objective.

▼ **List of objectives**



4. Click [OK].

The information about the objective is registered and displayed in the [Objective] field.

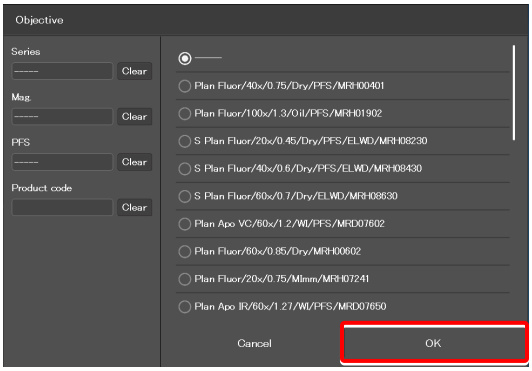
5. Repeat steps 1 to 4 for each address of the nosepiece to be registered.

> **When using the Smart Experiment**
>
> When using the Smart Experiment, specify objectives as follows. Without correct settings, the Smart Experiment will not operate normally.
>
> - Address 1: Plan Apo λD 4X (MRD70040)
> - Address 2: Plan Apo λD 10X (MRD70170)
> - Address 3: Plan Apo λD 20X (MRD70270)
> - Address 4: S Plan Fluor 20X (MRH08250)

6. Click [Send].

The set objective information is sent to the microscope.

▼ List of objectives



3.3.2 Setting the Filter Cube

Specify which filter cube is attached to each address of the FL turret.

1. In the [FL] area, click one of [1] to [6] in the [Position] field to select the address at which you need to specify a filter cube.

The filter cube address you selected moves to the filter cube access window.

2. Click the [Name] field in the [FL] area.

The list of the filter cubes is displayed.

3. Select a filter cube from the list, and then click [OK].

When a filter cube name is selected, the [Wavelength] field is filled automatically.

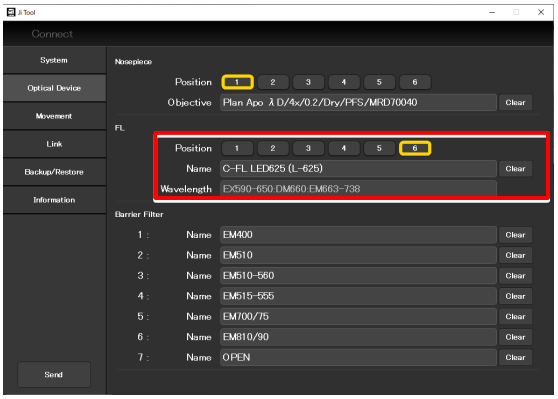
4. Repeat steps 1 to 3 for each FL turret address for which filter cube information is to be set.

> **When using the Smart Experiment**
>
> When using the Smart Experiment, specify filter cubes as follows. Without correct settings, the Smart Experiment will not operate normally.
>
> - Address 1: OPEN
> - Address 2: C-FC-Q quad band FL filter cube 378/474/554/635

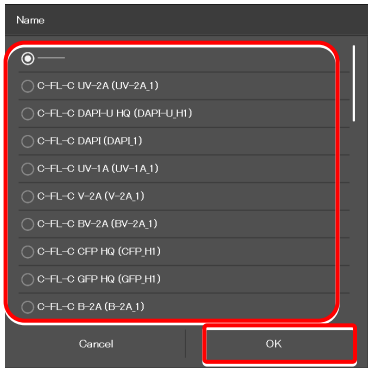
5. Click [Send].

The set filter cube information is sent to the microscope.

▼ Setting the filter cube



▼ Filter cube list



3.3.3 Setting the BA Filter

Specify which BA filter is attached to each address of the BA filter wheel.

1. **In the [Barrier Filter] area, click the [Name] field for each BA filter wheel address at which you need to set BA filter information.**

   The list of the BA filters is displayed.

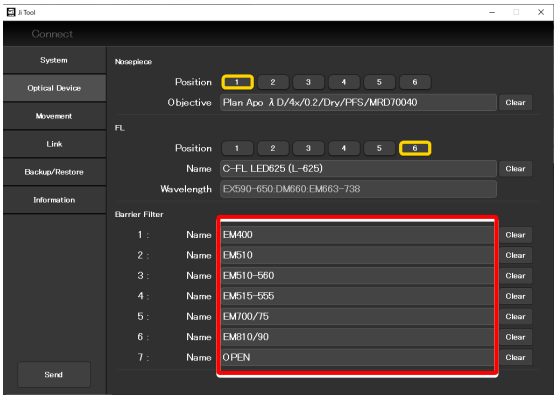
2. **Select a BA filter from the list, and then click [OK].**

3. **Repeat steps 1 and 2 for each BA filter wheel address for which BA filter information is to be set.**

4. **Click [Send].**

   The set BA filter information is sent to the microscope.

▼ Setting the BA filter



▼ BA filter list

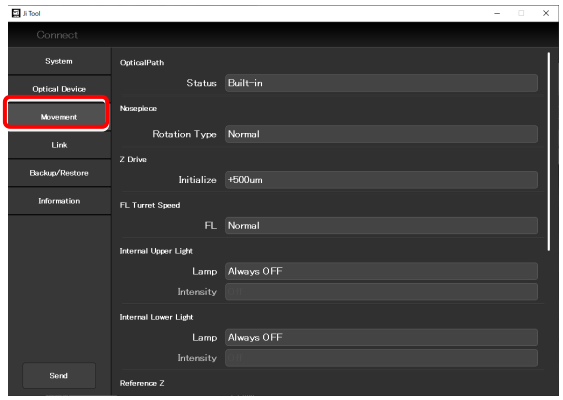
3.4 [Movement] Setting the Movement

This section describes how to set the movement of each motorized device.

1. Select [Movement] from the setting item selection area.

The movement setting screen appears.

▼ Setting the movement



3.4.1 Operating the XYZ Panel (Common to [Movement] and [Link])

When [Movement] or [Link] is selected from the setting item selection area, the following panel appears. Operate the panel to set each item.

- XYZ panel: Use this panel to operate the motorized stage and the focusing device.

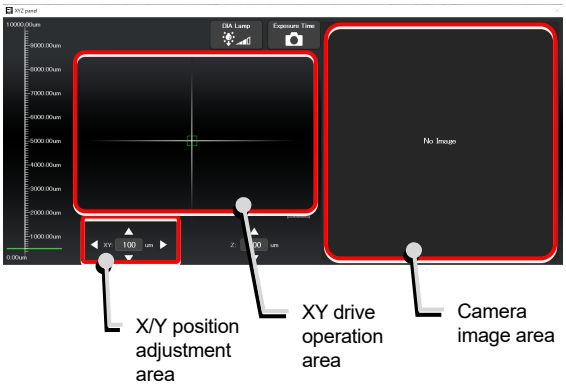
■ XYZ panel – Operating the motorized stage

1. Display the area framed by the green square at the center of the XY drive operation area in the camera image area.

2. Double-click (with the left button of the mouse) the desired point of the XY drive operation area. The motorized stage moves to bring the point to the center.

3. Click an arrow button in the X/Y position adjustment area to move the motorized stage for the amount indicated by the value in the area between the arrow buttons.

▼ XYZ panel



SUPPLEMENTAL REMARKS

- To zoom in/out on the XY drive operation area, roll the mouse wheel in the operation area.
- To change the zoom speed, hold down the Ctrl key or the Ctrl + Shift keys while rolling the mouse wheel.

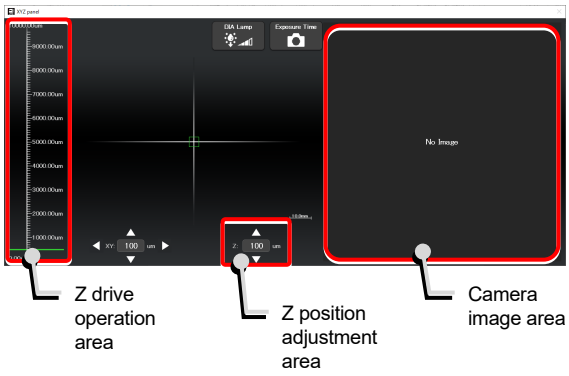
■ **XYZ panel – Operating the focusing device**

1. **Double-click (with the left button of the mouse) the desired point of the Z drive operation area. The focusing device moves to the specified Z position.**
2. **Click an arrow button in the Z position adjustment area to move the focusing device for the amount indicated by the value in the area between the arrow buttons.**
3. **To increase or decrease the travel amount, select the appropriate value from the list (1/10/100/500/1000 µm).**

SUPPLEMENTAL REMARKS

- To zoom in/out on the Z drive operation area, roll the mouse wheel in the operation area.
- To change the zoom speed, hold down the Ctrl key or the Ctrl + Shift keys while rolling the mouse wheel.

▼ **XYZ panel**



3.4.2 Operating the DIA Lamp/Exposure Time Panel (Common to [Movement] and [Link])

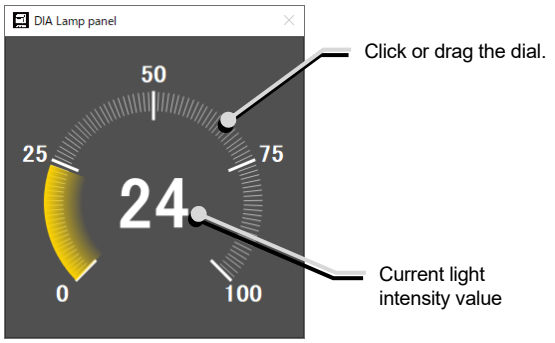
If you click the [DIA Lamp] or the [Exposure Time] button of the XYZ panel, a panel appears for settings of the following items. Operate the panel to set each item.

- DIA Lamp panel: Use this panel to operate the diascopic illumination device.
- Exposure Time panel: Use this panel to operate the camera exposure time.

■ **DIA Lamp panel – Setting the light intensity of the diascopic illumination**

1. **Click or drag on the dial scale of the DIA Lamp panel to adjust the light intensity if the image in the camera image area is too bright or too dark.**

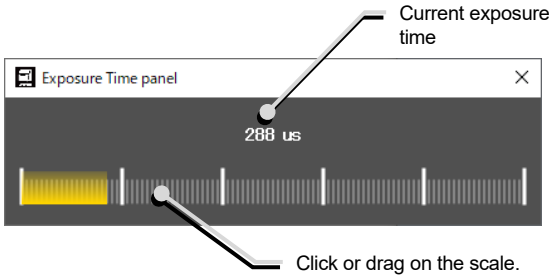
▼ **DIA Lamp panel**



■ **Exposure panel – Setting the camera exposure time**

1. **Click or drag on the scale to adjust the exposure time if the image in the camera image area is too bright or too dark.**

▼ **Exposure Time panel**



3.4.3 Setting the Optical Path

Set the optical path.

1. Select an optical path in the [OpticalPath] area.

Status:

Select one.

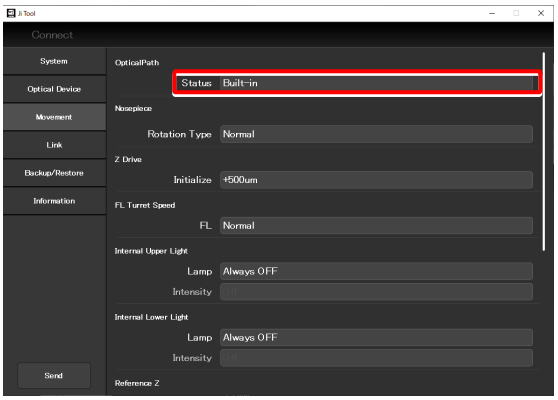
Built-in: Built-in camera

External: External camera

2. Click [Send].

Setting information is sent to the microscope.

▼ Setting the optical path



3.4.4 Setting the Nosepiece Rotation

Set the rotational movement of the nosepiece.

1. Set the rotational movement of the nosepiece in the [Nosepiece] area.

Rotation Type:

Select the operating pattern of the nosepiece.

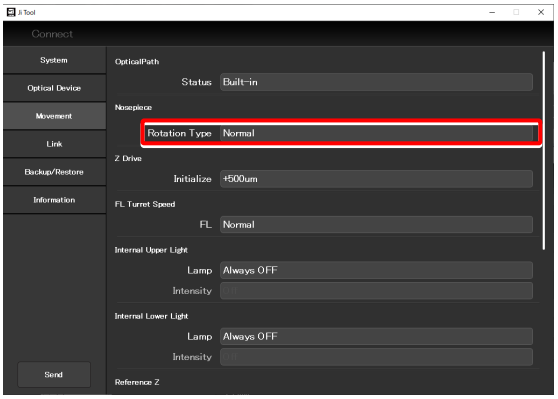
Normal: Normal operation pattern

Shuttle: The nosepiece moves from 1 to 6 (or 6 to 1) via all addresses.

2. Click [Send].

Setting information is sent to the microscope.

▼ Setting the rotational movement of the nosepiece



3.4.5 Setting the Focusing Device (Z Drive)

Set the movement of the focusing device (Z drive).

1. Set the following items in the [Z Drive] area.

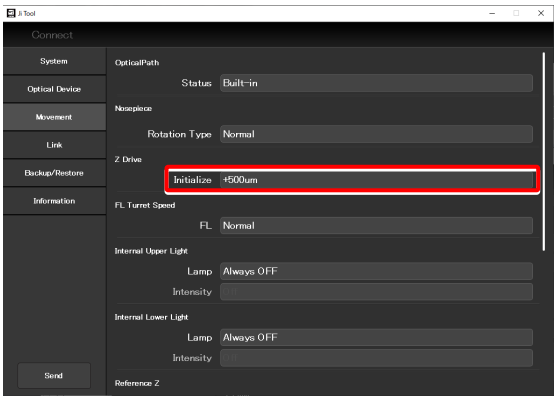
Initialize:

Specify where the objective is to be stopped when the microscope system is initialized.

2. Click [Send].

Setting information is sent to the microscope.

▼ Setting the focusing device



3.4.6 Setting the Rotation Speed of FL Turret

Set the rotation speed of the FL turret.

1. **Set the following item in the [FL Turret Speed] area.**

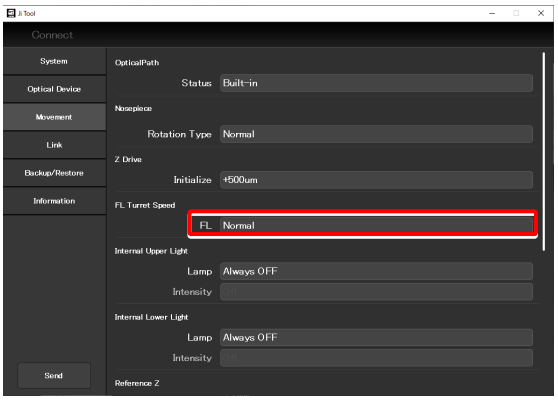
   FL:

   Select the rotation speed of FL turret 1 from [Normal] or [Slow].

2. **Click [Send].**

   Setting information is sent to the microscope.

▼ Setting the drive speed of FL turret



3.4.7 Setting the Observation Chamber Light

Set the observation chamber light (the internal upper light).

1. **Set the following items in the [Internal Upper Light] area.**

   Lamp:

   Set the status of the observation chamber light by choosing from [ON] (Lamp ON when the front door is open) and [Always OFF].

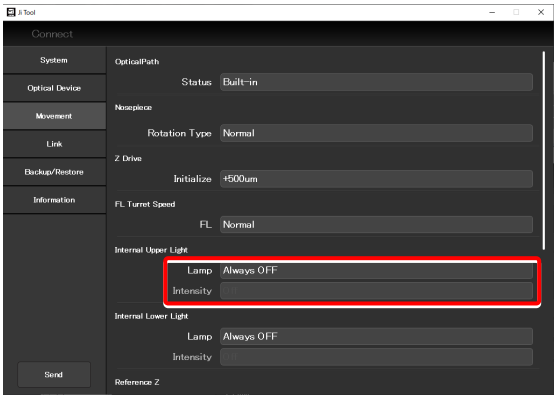
   Intensity:

   Set the light intensity level of the observation chamber light by choosing from [Off], [Low], [Standard] and [High].

2. **Click [Send].**

   Setting information is sent to the microscope.

▼ Setting the observation chamber light



3.4.8 Setting the Access Window Light

Set the access window light (the internal lower light).

1. **Set the following items in the [Internal Lower Light] area.**

   Lamp:

   Set the status of the access window light by choosing from [ON] (Lamp ON when the lower door is open) and [Always OFF].

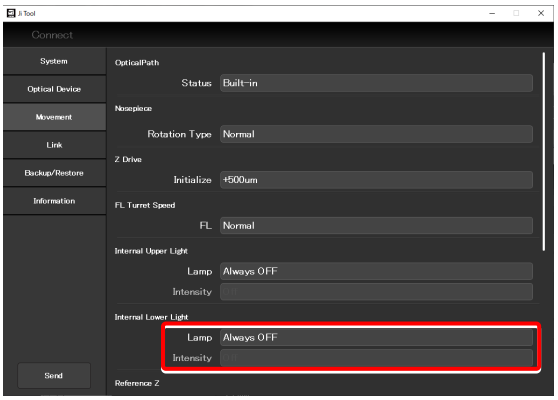
   Intensity:

   Set the light intensity level of the access window light by choosing from [Off], [Low], [Standard] and [High].

2. **Click [Send].**

   Setting information is sent to the microscope.

▼ Setting the access window light



3.4.9 Setting the Reference Position for the Focusing Device

Select the holder to be used and sample.

1. **Place the holder to be used and the sample on the stage.**

   If a well plate is to be used, check the manufacturer name and the model number beforehand.

2. **Set the following items in the [Reference Z] area.**

   Holder :

   Select the holder set on the stage.

   Sub Holder :

   Select the sub holder set on the stage. (This item is not required if a well plate is used.)

   Well Plate :

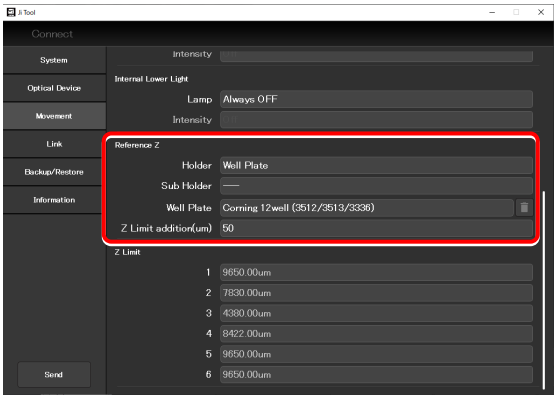
   Select the well plate set on the stage. (This item is not required if a well plate is not used.)

> **If your well plate is not in the [Well Plate] list**
>
> If the desired well plate is not in the [Well Plate] list, enter the well plate information to add it to the list.
>
> (1) In the [Well Plate] field, select "Other."
>
> (2) When the Custom Well Plate screen appears, set the following items.
>
> - Name:
>   Enter a well plate name.
> - Offset (um):
>   Enter the height of the well plate, from the loading plane to the bottom plane of a well.
>
> (3) Click [OK].

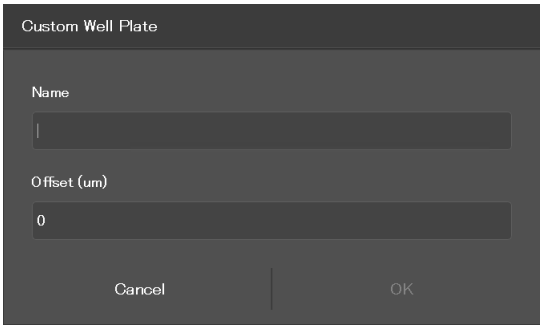
The drive upper limit (Z Limit) for the focusing device is automatically set according to the selected holder and the sample.

> **If drive cannot reach the focus plane because of the drive upper limit (Z Limit)**
>
> When a high magnification objective is in use, focusing device drive may reach the upper limit before reaching the focal plane due to placement errors, etc. In such a case, you can extend the drive upper limit by entering a value to [Z Limit addition] field. Click [Send] to apply the change to the setting.

▼ Setting the Z reference position



▼ Custom Well Plate screen (adding a well plate to the list)



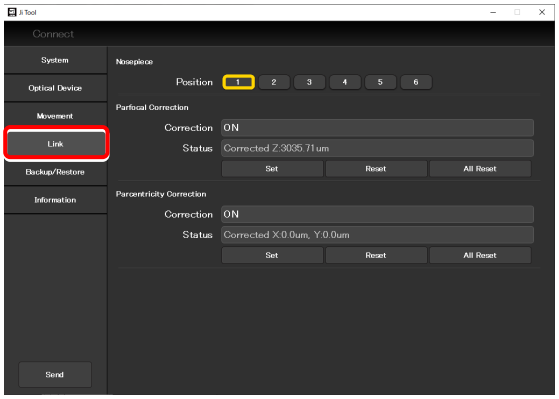
3.5 [Link] Setting the Linking Function

This section describes how to set the linking (interlocking) of other motorized devices when switching the objective. For the methods of operating the XYZ panel or DIA LAMP panel, refer to “3.4.1 Operating the XYZ Panel (Common to [Movement] and [Link])” or “3.4.2 Operating the DIA Lamp/Exposure Time Panel (Common to [Movement] and [Link]).”

1. **Set a sample on the stage.**
2. **Select [Link] from the setting item selection area.**

   The link control setting screen appears.

▼ Setting linked control



3.5.1 Setting the Parfocal Correction

This setting allows a correction of a shift in focal position that occurs when the objective is switched.

1. **Set and confirm the following items in the [Nosepiece] and [Parfocal Correction] areas.**

   [Nosepiece] area
   Position:

   Click one of [1] to [6] to select the address at which you need to correct the focal position.

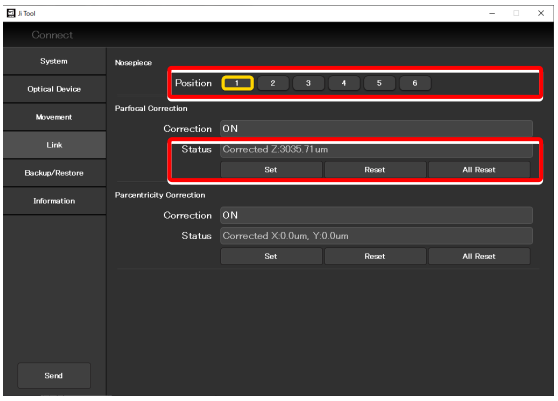
   [Parfocal Correction] area
   Status:

   Indicates whether the objective is corrected or not.
2. **Change the current objective to the maximum magnification objective on the microscope main body.**
3. **Operate the focusing device with the XYZ panel to focus the microscope.**

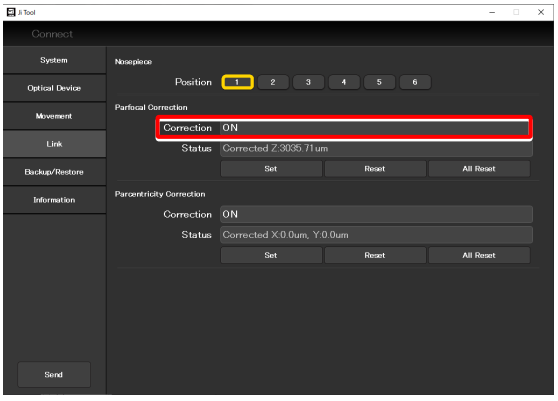
   For the operation method, refer to “■ XYZ panel - Operating the focusing device” in “3.4.1 Operating the XYZ Panel (Common to [Movement] and [Link]).”

   > **Camera image area operation**
   > To zoom in/out the camera image area, hold down the Ctrl key while rolling the mouse wheel on the camera image area.
4. **Click [Set] in the [Parfocal Correction] field in the setting area.**
5. **Repeat steps 1 to 4 to set the focal position for all addresses (from the highest magnification to the lower magnifications).**

▼ Setting the parfocal correction



▼ Setting the parfocal correction



3.5.2 Setting the Parcentricity Correction

This setting allows a correction of a shift in center position that occurs when the objective is switched.

1. **Set and confirm the following items in the [Nosepiece] and [Parcentricity Correction] areas.**

   [Nosepiece] area
   Position:

   Click one of [1] to [6] to select the address at which you need to correct the center position.

   [Parcentricity Correction] area
   Status:

   Indicates whether parcentricity correction for the objective is set or not.

2. **Change the current objective to the desired objective.**

3. **Move the motorized stage so that an easy-to-identify object is at the center of the field of view.**

   This object serves as a guide when correcting objectives at other addresses. Use the XYZ panel to move the motorized stage. For the operation method, refer to "■ XYZ panel - Operating the motorized stage" in "3.4.1 Operating the XYZ Panel (Common to [Movement] and [Link])."

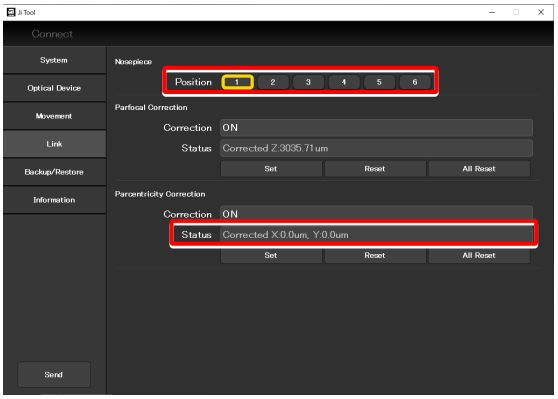
4. **Click [Set] in the [Parcentricity Correction] area.**

   > **Camera image area operation**
   > To zoom in/out the camera image area, hold down the Ctrl key while rolling the mouse wheel on the camera image area.

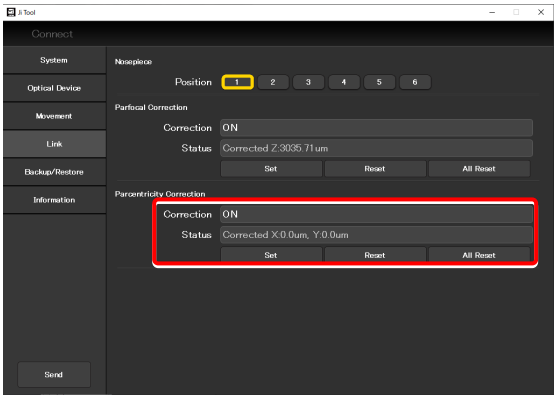
5. **Repeat steps 1 to 4 to set the center position for all addresses (from the lowest magnification to the higher magnifications).**

   > **SUPPLEMENTAL REMARKS**
   > If you click the [Set] button, a temporary sub-window appears for the current image.

▼ Setting the parcentricity correction



▼ Setting the parcentricity correction



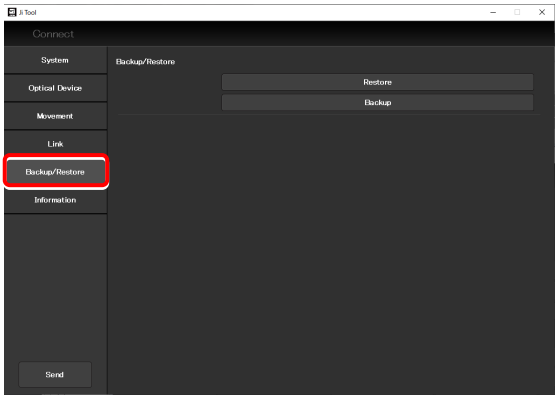
3.6 [Backup/Restore] Importing and Saving the Settings

This section describes how to import and save the settings.

The settings made by using the “Ji Tool” application can be saved (as a configuration file) in the PC and read later. More than one configuration file can be saved, with a file for each user. The settings of the microscope system can be changed by reading different configuration files.

1. **Select [Backup/Restore] from the setting item selection area.**

▼ Import and save settings



3.6.1 Importing the Settings

1. **Click [Restore] in the [Backup/Restore] area.**

   The explorer appears.

2. **Select the setting information file to be imported.**

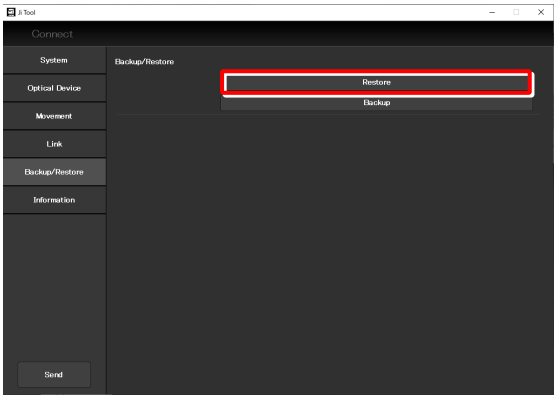
3. **Click [OK].**

   Setting information is imported.

4. **Click [Send].**

   Setting information is sent to the microscope.

▼ Importing the settings



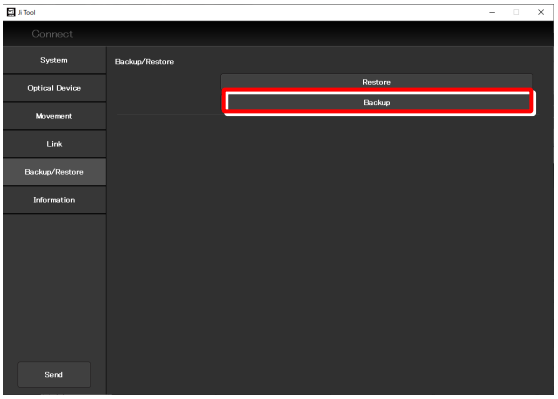
> **SUPPLEMENTAL REMARKS**
>
> A setting file cannot be imported if the settings are of another Ji microscope unit.

3.6.2 Saving the Settings

1. **Click [Backup] in the [Backup/Restore] area.**
2. **Enter a name on the explorer.**
3. **Click [OK].**

   Setting information is saved.

▼ Saving the settings



> **CAUTION**
>
> When the Restore function is executed, the stage and the objective may move. Ensure that no holder or sample is set on the stage before using the Restore function.

3.7 [Information] Version Information

This section describes how to confirm the version of the application and the controller for the microscope.

1. Select [Information] from the setting item selection area.

Versions of application, controller, and microscope main body are displayed.

Version:

Version of Ji Tool (this application)

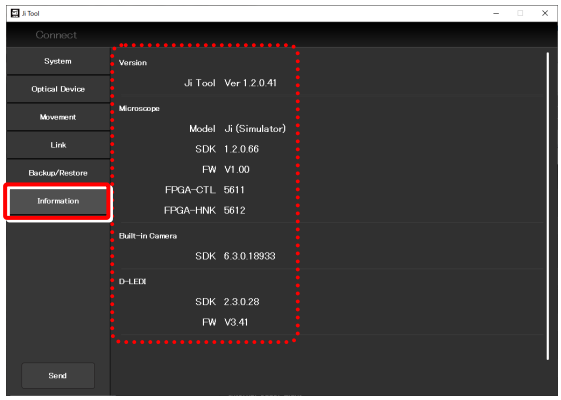
Microscope:

Model:	Name of the currently used microscope system
SDK:	SDK version of the microscope main body
FW:	Firmware version of the microscope main body
FPGA-CTL:	FPGA version of the Ji controller
FPGA-HNK:	FPGA version of the microscope main body

Built-in Camera:

SDK:	SDK version of the internal camera

D-LEDI:

SDK:	SDK version of the D-LEDI (if the D-LEDI is used)
FW:	Firmware version of the D-LEDI (if the D-LEDI is used)

▼ Version information