

# ***Nikon***

## **ShuttlePix**

### **Digital Microscope**

P-MFSC Motorized Focusing Stand Controller

## **Update Operation Procedure Manual**

# Introduction



Thank you for purchasing a Nikon product.

This procedure manual is intended for users who want to update software for Nikon Digital Microscope P-MFSC Motorized Focusing Stand Controller. If P-400Rv/P-400R Digital Microscope (hereafter referred to as “camera head”) is attached to P-MFSC, software for the camera head also needs to be updated.

Fully read the manual before the operation to make sure that you can update the software correctly.

- 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.
- Although every effort has been made to ensure the accuracy of this manual, errors or inconsistencies may remain. If you note any points that are unclear or incorrect, please contact your nearest Nikon representative.
- If you intend to use any other equipment with this product, read the manual for that equipment too.
- If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

## ■ Prerequisite knowledge

This manual assumes a basic familiarity with Windows.

If you come across unfamiliar terms or operations while reading through this manual, consult the user's manual for your version of Windows.

## ■ About the example screens used in the manual

This manual describes various operations in Windows XP, Windows Vista and Windows 7 by showing Windows XP screens as examples. Procedures are virtually identical for Windows XP, Windows Vista and Windows 7.

Depending on the specific operating system (hereinafter referred to as 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.

## ■ Disclaimer

Nikon shall not be liable for any damages and problems on user side or on a third-party side, which may result from the use of this software.

## ■ Trademarks

- Microsoft, Windows, Windows XP, Windows Vista, and Windows 7 are registered trademarks of Microsoft Corporation in the U.S. and other countries.
- Products and brand names are trademarks or registered trademarks of their respective companies.
- The <sup>TM</sup> and <sup>®</sup> marks are not used to identify registered trademarks and trademarks in manual.

## Configuration of the Document

The following notational system is used throughout the manual:

Describes the operation procedure or resulting status. [ ] indicates a character string displayed on a screen including a menu name or button name.

Typical sample screen displayed during the operation.

Such information as notes, important matters, supplemental information and references.

3-2

### Marks

- ! : Notes that you should read so that applications or a microscope system can work correctly.
- ✓ : Information used for reference during the operation.
- REFERENCE** : Describes a reference.

## Table of Contents

Introduction .....	1
Configuration of the Document .....	2
Chapter 1 Preparation .....	1-1
1.1 Requirements .....	1-1
1.2 Checking Available RAM .....	1-2
Chapter 2 Setup.....	2-1
2.1 PC Setting .....	2-1
2.1.1 Power Option Settings .....	2-1
2.1.2 Screen Saver Settings .....	2-4
2.2 P-MFSC Setup .....	2-7
2.3 Hardware Setup.....	2-8
Chapter 3 Update .....	3-1
3.1 Running Update Application .....	3-1
3.2 Precautions .....	3-8

# 1

## Preparation

This chapter describes hardware and software required for update, and checking available RAM.

### 1.1

### Requirements

#### ! CAUTION

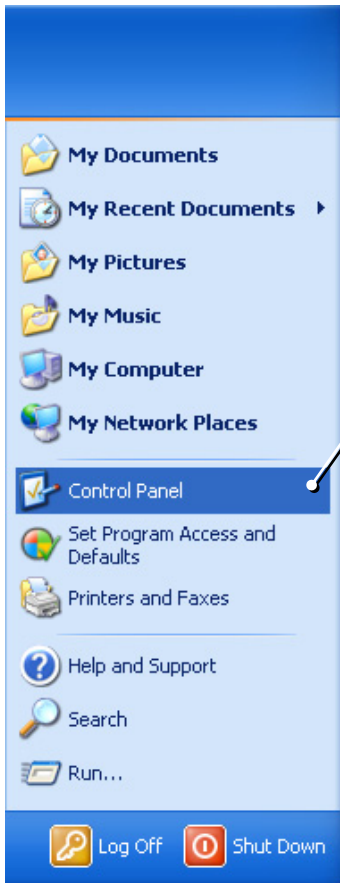
- Make sure that the memory capacity meets the requirements before running an update application.

Item		Specifications
PC main unit	Memory	<ul style="list-style-type: none"><li>• Windows XP : 1 GB or more</li><li>• Windows Vista/7: 2 GB or more</li></ul>
	OS	<ul style="list-style-type: none"><li>• Windows XP SP3 or later</li><li>• Windows Vista 32bit/64bit</li><li>• Windows 7 32bit/64bit</li></ul>
	Remarks	You need to download a set of ShuttlePix update application and data from our download site. Use your PC under a networked environment.
USB cable (type AB)		USB2.0 standard approved
P-MFSC		Should be working normally.
Camera head		Should be working normally.
SD card		Use an empty Nikon recommended SD card that has been formatted with P-MFSC or a camera head.
Operation Procedure (this manual)		Have it at hand and follow the procedure during update.

## 1.2 Checking Available RAM

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

### ▼ Startup Menu



(1) Click the [Start] button on the lower left of the PC to display the Startup Menu.

(2) Click [Control Panel] to display the [Control Panel] window.

## ▼ [Control Panel] window



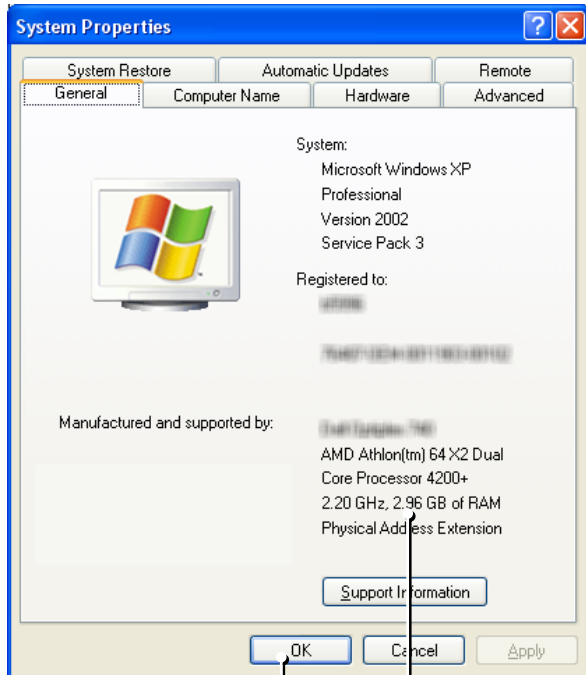
- (3) Double-click [System] in the [Control Panel] window. The [System Properties] dialog box appears.

✔ **Note**

The window on the left is shown as Classic. Click [Performance and Maintenance] to select [System] when the window is set to a category display.

## ■ Windows XP

### ▼ [System Properties] dialog box



(4) Check the memory capacity here.

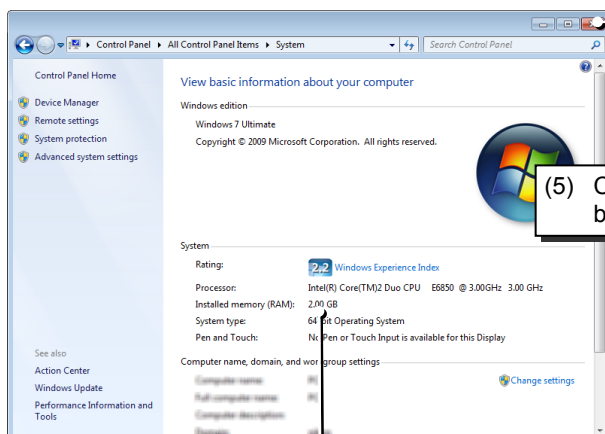
(5) Click the [OK] button.

(4) In the [System Properties] dialog box, check that at least 1 GB of memory is available.

(5) Click the [OK] button to close the [System Properties] dialog box.

## ■ Windows Vista/7

### ▼ [System Properties] dialog box



(5) Click the [x] button.

(4) Check the memory capacity here.

(4) In the [System Properties] dialog box, check that at least 2 GB of memory is available.

(5) Click the [x] button to close the [System Properties] dialog box.



This chapter describes a series of setups required prior to update.

#### REFERENCE

See ShuttlePix P-MFSC Instruction Manual for the details on P-MFSC screens.

## 2.1

### PC Setting

Before running the update application, set power options and close all system-resident programs such as the screensaver and anti-virus utility.

#### ! CAUTION

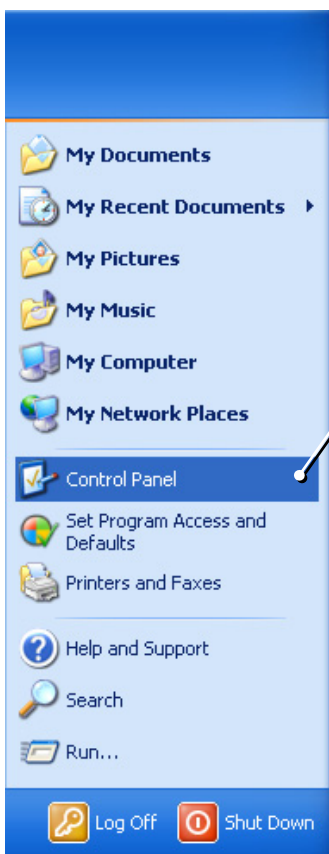
- You are required to log in as an administrator to work with the operation here.

### 2.1.1

#### Power Option Settings

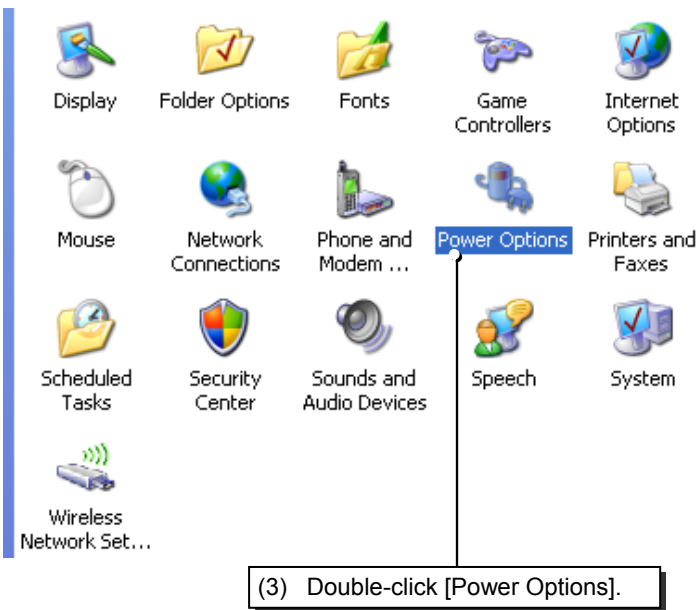
Update may not be successful if the PC stands by or hibernates when update is running. Follow the procedure below to change the power option settings to make sure that it does not stand by or hibernate.

#### ▼ Startup Menu



- (1) Click the [Start] button on the lower left of the PC to display the Startup Menu.
- (2) Click [Control Panel] to display the [Control Panel] window.

## ▼ [Control Panel] window



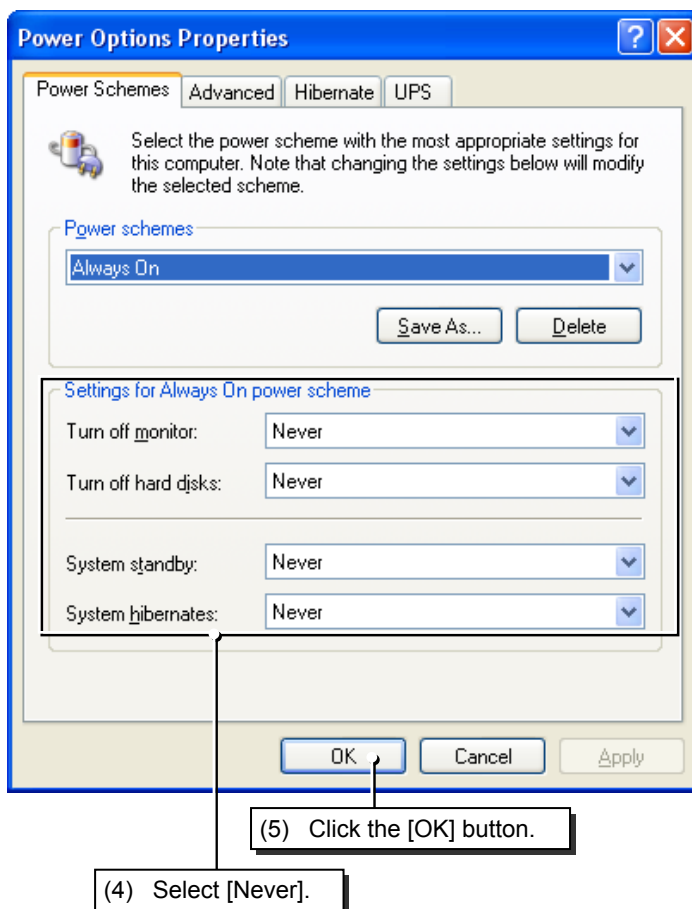
(3) Double-click [Power Options].

✓ **Note**

The window on the left is shown as Classic. Click [Printers and Other Hardware] to select [Power Options] when the window is set to a category display.

■ Windows XP

## ▼ [Power Options Properties] dialog box



(4) On the [Power Options Properties] dialog box select [Never] from all pull-down menus in [Settings for Always On power scheme] on the [Power Schemes] tab.

✓ **Note**

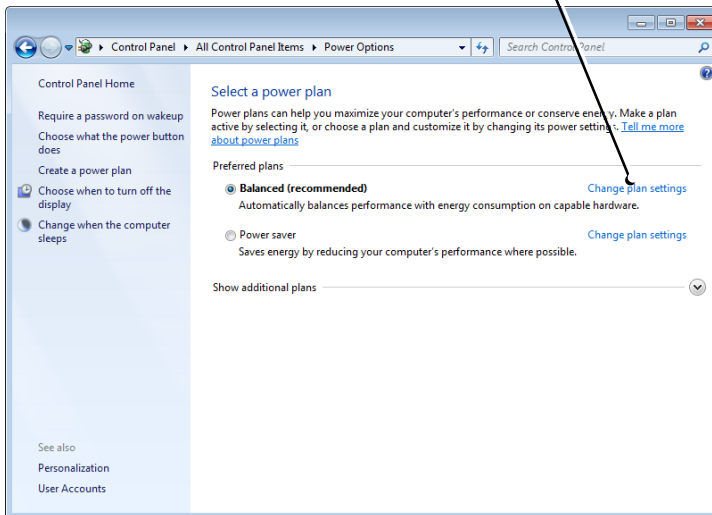
If [Enable hibernation] is unchecked on the [Hibernate] tab, [System hibernates] on the left is not shown. In that case, set to [Never] for items other than [System hibernates].

(5) Click [OK] button.

## ■ Windows Vista/7

### ▼ [Power Options] window

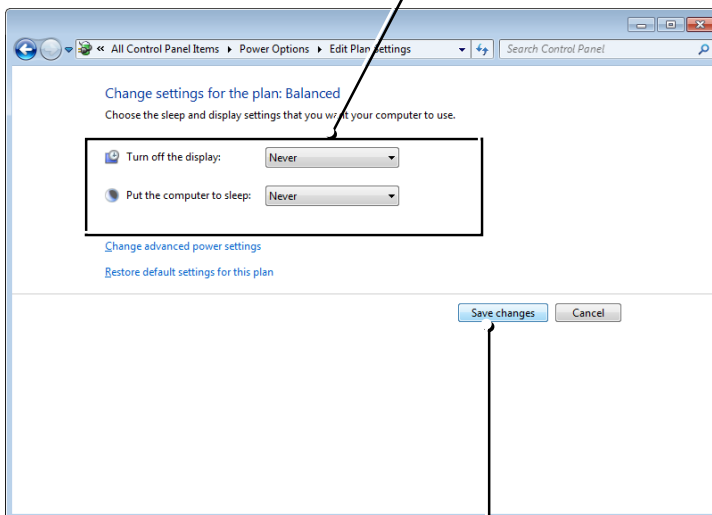
(4) Click [Change plan settings].



- (4) Click [Change plan settings] of a plan selected under [Preferred plans] in the [Power Options] window to display the [Edit Plan Settings] window.

### ▼ [Edit Plan Settings] window

(5) Select [Never].



- (5) Select [Never] from all pull-down menus.

- (6) Click the [Save changes] button.

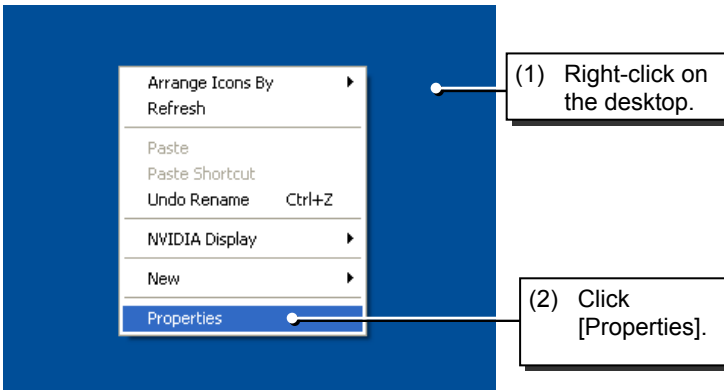
(6) Click the [Save changes] button.

### 2.1.2 Screen Saver Settings

Update may not be successful if the screensaver is running during update. Follow the procedure below to change the screensaver setting to make sure that it does not run during the update.

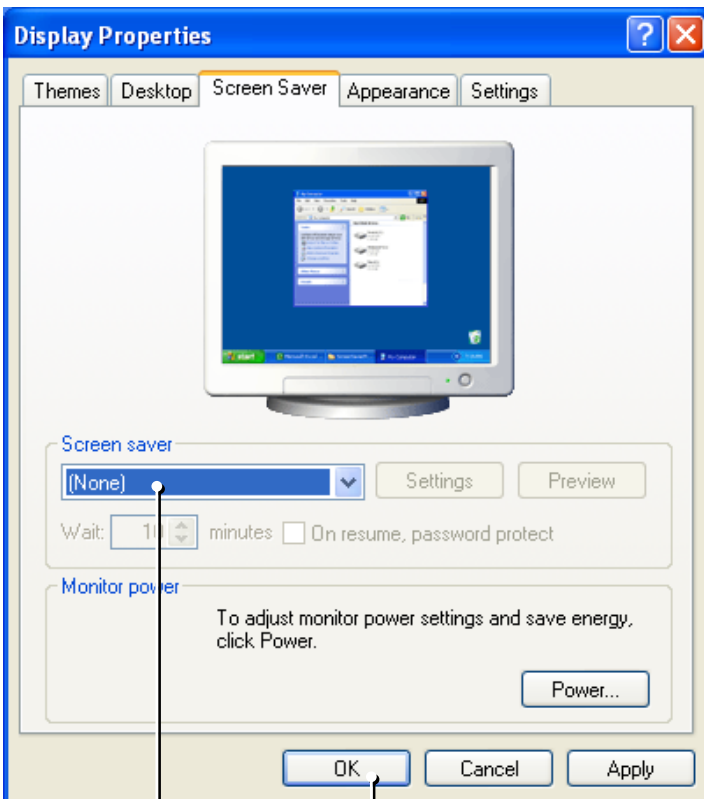
#### Windows XP

##### ▼ [Shortcut] menu on the desktop

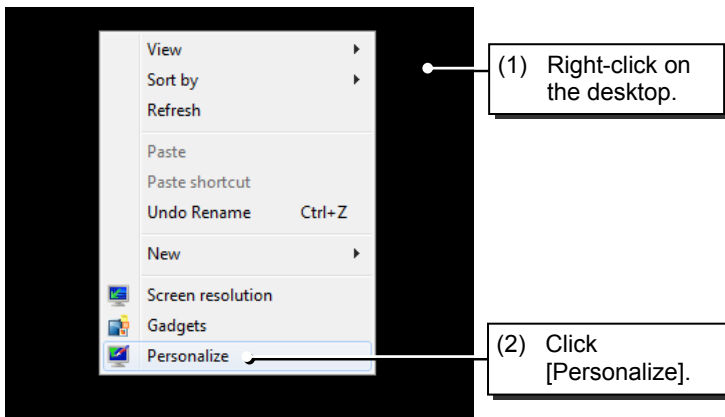


- (1) Right-click on the desktop to display a [Shortcut] menu.
- (2) Click [Properties] in the [Shortcut] menu. The [Display Properties] dialog box appears.

##### ▼ [Display Properties] dialog box

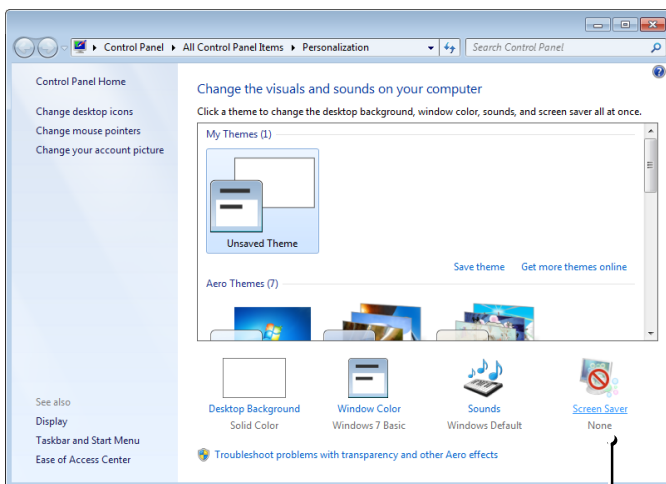


- (3) Under the [Screen Saver] tab, select [(None)] from the [Screen Saver] pull-down menu.
- (4) Click [OK] button.

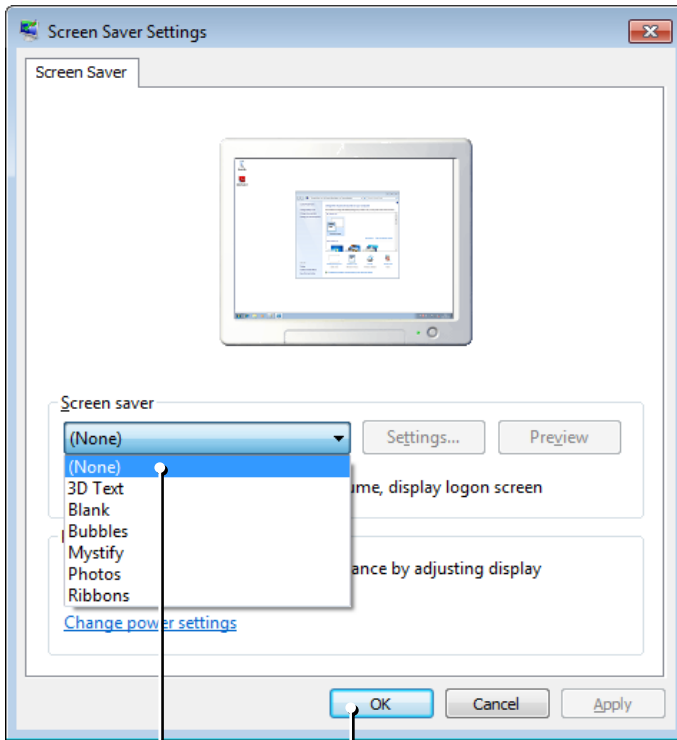
**Windows Vista/7****▼ [Shortcut] menu on the desktop**

(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]. The [Screen Saver Settings] dialog box appears.

**▼ [Screen Saver Settings] dialog box**

(4) Select [(None)].

(5) Click the [OK] button.

(4) Select [(None)] from the [Screen Saver] pull-down menu.

(5) Click the [OK] button.

## 2.2 P-MFSC Setup

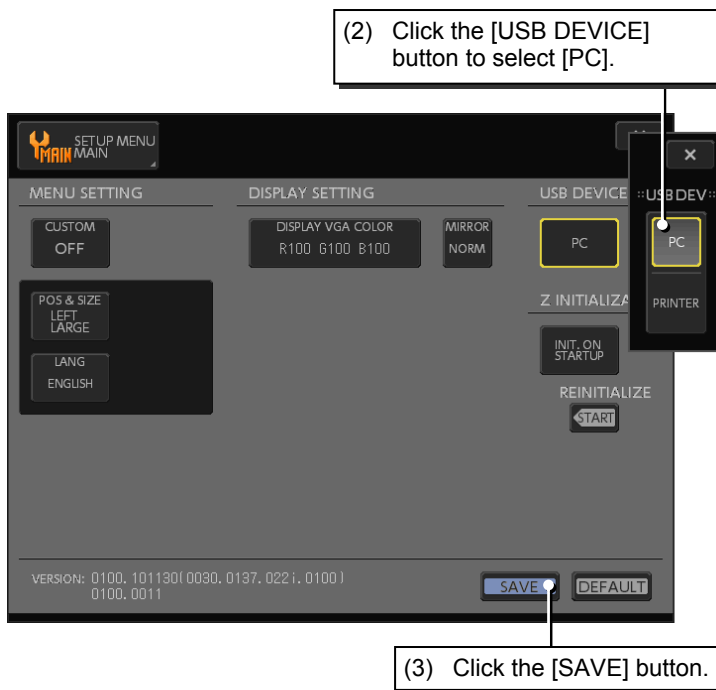
Set a P-MFSC USB device on the setup menu.

✔ **Note**

[USB Device Setting] is set to [PC] as default.

This setting is not necessary unless it has been set to [Printer].

### ▼ [SETUP] menu: Main window

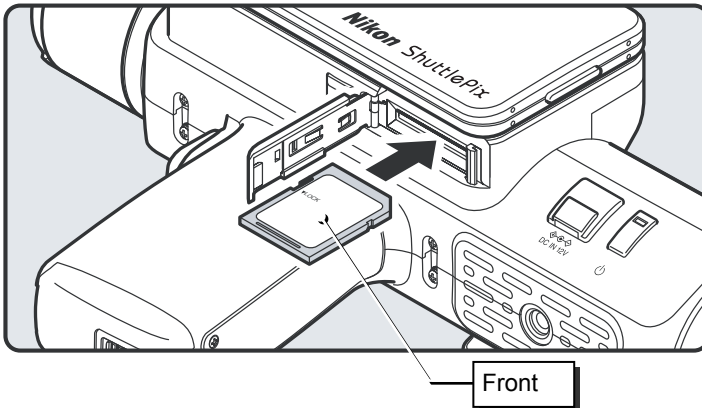


- (1) Display the main window of the P-MFSC [SETUP] menu.
- (2) Click the [USB DEVICE] button and select [PC].
- (3) Click the [SAVE] button.  
A message prompting you to restart P-MFSC appears.
- (4) Turn off P-MFSC.

## 2.3 Hardware Setup

Insert an SD card and connect a USB cable.

### ▼ Inserting an SD card

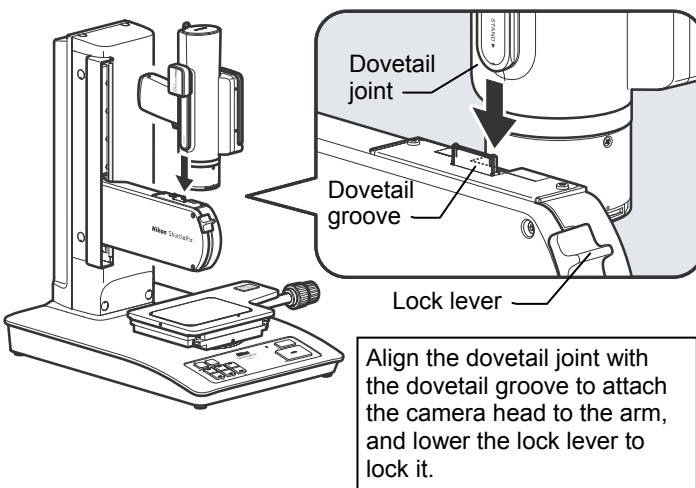


- (1) Insert a Nikon recommended SD card to the camera head and attach it to P-MFSC.

#### ! CAUTION

The camera head will not be updated if this procedure is not taken place. In this case, go to our Web site and download ShuttlePix P-400Rv/P-400R firmware from our download corner (<http://www.nikon-instruments.jp/eng/service/download/DLTop.aspx>) and follow the attached readme.pdf to update the camera head separately.

### ▼ Attaching the camera head



#### ✓ Note

Use an empty Nikon recommended SD card that has been formatted with P-MFSC or a camera head. If using an SD card with some data, the startup of the application and update may take longer.

- (2) Remove a USB memory connected to P-MFSC, if any.

#### ✓ Note

If there is a USB memory connected, the startup of the application and update may take longer.



▼ USB port

(3) Connect Connector A to the PC and connect Connector B to the USB(D) port of P-MFSC.

(3) Connect A Connector of the USB cable to the USB port of the PC and connect Connector B to the USB(D) port on the right side of P-MFSC.



This chapter describes how to run this application.

### 3.1

## Running Update Application

Run the application to update P-MFSC software.

#### ▼ [ShuttlePix P-MFSC] dialog box



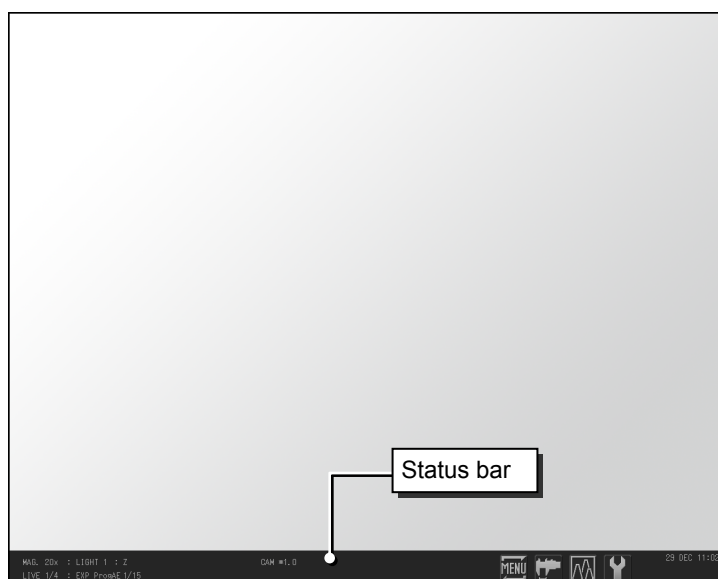
#### (1) Turn on P-MFSC.

##### ✓ Note

After P-MFSC is turned on and the PC finds P-MFSC, a program selection dialog box ([ShuttlePix P-MFSC] dialog box) as shown on the left may appear.

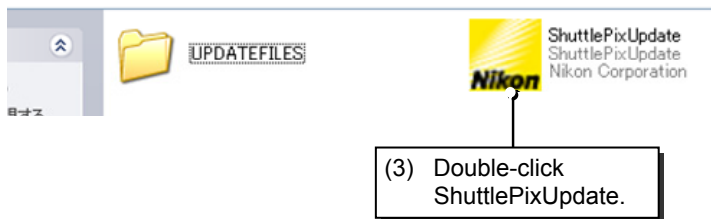
This is displayed to select another application when you want to use the application to control P-MFSC. When the dialog box appeared, click the [Cancel] button to close the window.

#### ▼ Touch panel monitor



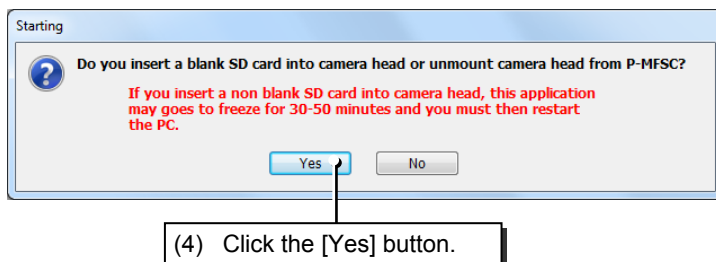
#### (2) Make sure that P-MFSC has started up and that a touch panel monitor (P-TPM) shows a status bar.

### ▼ Starting up the application



- (3) Double-click ShuttlePixUpdate icon to start up the application.  
A confirmation dialog box appears.

### ▼ Confirmation dialog box



- (4) Click the [Yes] button if an empty Nikon recommended SD card has been inserted into the camera head, or P-MFSC does not have a camera head attached.

#### ! CAUTION

- Select [No] when an SD card with data is inserted into the camera head. Selecting [No] shuts down the application. Turn off P-MFSC and insert an empty Nikon recommended SD card or remove the camera head from P-MFSC. Turn on P-MFSC and restart the application.
- If the camera head is removed, go to our Web site and download ShuttlePix P-400Rv/P-400R firmware from our download section (<http://www.nikon-instruments.jp/eng/service/download/DLTop.aspx>) and follow the attached readme.pdf to update the camera head separately.

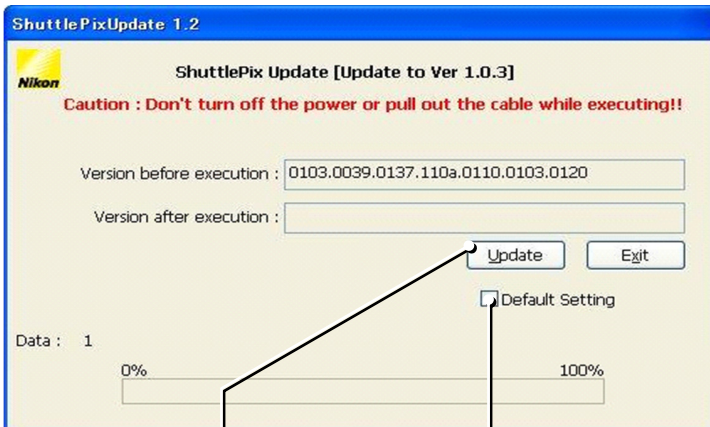
3.1 Running Update Application

- (5) Clicking the [Yes] button displays the [ShuttlePix Update] window.

**! CAUTION**

When a Nikon recommended SD card with data has been inserted into the camera head and if you click [Yes] in this state, the application may freeze for 30 to 50 minutes, resulting in an error dialog box "No ShuttlePix." (no update taken place). In this case, "No ShuttlePix." error dialog box persists every time the application is run unless the PC is restarted. Restart the PC and start over Section 2.3 "Hardware Setup" in this document again.

## ▼ [ShuttlePix Update] window



(7) Click the [Update] button.

(6) Check [Default Setting] to restore the default setting.

- (6) Check [Default Setting] if you want to restore the setting after the update back to the default setting.

### ! CAUTION

If [Version before execution] shows "Version Error", not the version information, the device setting may not be correct. Click the [Exit] button to exit the application and make sure that the [USB Device Setting] on the setup menu is set to [PC] (see 2.2 "P-MFSC Setup").

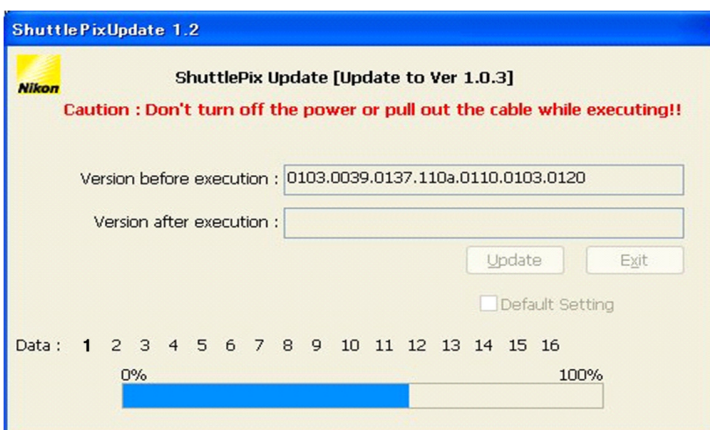
- If it is not set to [PC], set to [PC], turn on P-MFSC again and rerun the application.
- If it is set to [PC], make sure that the PC is connected to P-MFSC with a USB cable securely. If connected, turn on P-MFSC again and rerun the application. If the error still persists, restart the PC and rerun the application.

- (7) Click the [Update] button to start the update.

### ✓ Note

Updating takes approximately 15 minutes.

## ▼ Update in progress window



A window indicating the update is in progress appears.

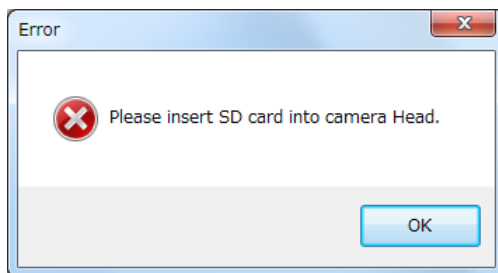
A data number being updated blinks in bold. At the same time, "downloading" or "writing" blinks. The progress is indicated with a bar below the data number.

**! CAUTION**

- **An error dialog box may appear during update.**

**Click the [OK] button to exit the application.**

- If a dialog box “No ShuttlePix.” appears,  
make sure that the PC is connected to P-MFSC with the USB cable securely.  
If connected, turn on P-MFSC again and rerun the application. If the error still persists, restart the PC and rerun the application.
- If a dialog box “Please insert SD card into camera head.” appears,  
insert an empty Nikon recommended SD card into the camera head and rerun the application.
- If a dialog box “Update Error (xx)” appears:
  - Make sure that a Nikon recommended SD card is inserted into the camera head securely. If inserted securely, turn on P-MFSC again. Then, rerun the application.
  - Make sure that all power option settings are set to [Never] (see 2.1.1 “Power Option Settings”). If not set to [Never], set all power option settings to [Never] and turn on P-MFSC again. Then, rerun the application.
  - Make sure that the screen saver setting is [(None)] (see 2.1.2 “Screen Saver Settings”). If not set to [(None)], set all screen saver settings to [(None)] and turn on P-MFSC again. Then, rerun the application.
- If a dialog box “SD card locked” or “SD card error” appears,  
writing to a Nikon recommended SD card may not be allowed. Remove the SD card and disable its write protection, then insert it into the camera head again. Then, rerun the application. If the error still persists, replace it with another empty Nikon recommended SD card.
- **Do not perform the following operations until the update is completed after starting up the application. Otherwise, the product may not start up normally.**
  - **Turning off P-MFSC**
  - **Removing the USB cable**
  - **Exiting the application forcibly**
  - **Working with the PC**
  - **Working with P-MFSC menus**

**▼ Error dialog box**

## ▼ Data1 Update complete window



- (8) When Data1 update is completed, a window on the left appears and P-MFSC restarts. When P-MFSC has restarted, the window closes and updating from Data2 will start.

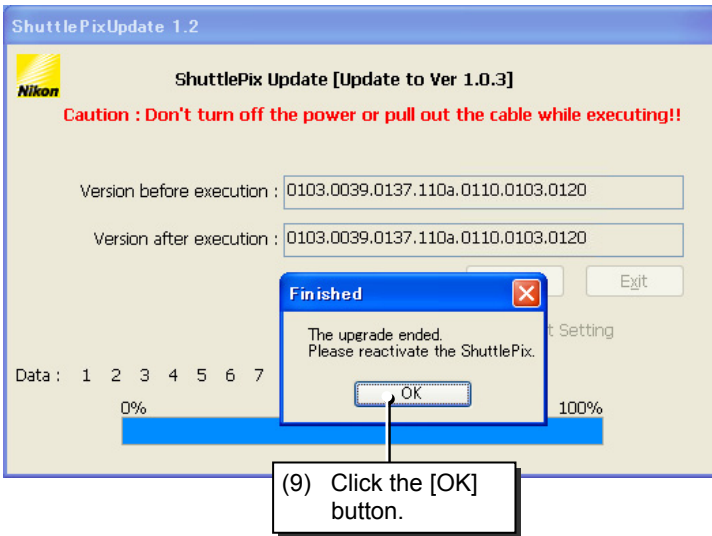
**! CAUTION**

When P-MFSC with a camera head attached is restarted during the update, the message as shown below may appear on the touch panel monitor (P-TPM). Ignore the message and continue updating the software.

## ▼ Message that may appear on the touch panel



## ▼ Update complete dialog box



(9) When the update is completed, a dialog box on the left appears. Click the [OK] button to exit the application.

(10) When the update is completed, turn off P-MFSC without working with ShuttlePix, and turn it on again.

! CAUTION

- The software may not work correctly if you start working with ShuttlePix without turning it off after the update. After the update is completed, turn off P-MFSC and then back on before working with ShuttlePix.
- Be sure to turn on P-MFSC again.

Now the software has been updated.



## **3.2**

## **Precautions**

Contact your nearest Nikon representative if P-MFSC does not work correctly after turning it on again after following the procedure in the document to update the software.