USPM-RU/RUIII Installation Instructions

(Ver 3.21)

OLYMPUS®

⚠ CAUTION

Before use

We thank you for purchasing the USPM-RU/RUIII. To derive the best performance from this product, and to use this product safely, be sure to read this instruction manual when you reinstall USPM-RU/RUIII. After reading this manual, keep it in a safe and convenient place for future use.

In particular, when you perform a version upgrade or reinstallation on a PC where the program is already installed, you should perform the following procedures first: "7. Backing Up the Settings Files", "8. Uninstalling the Communications Driver", "9. Uninstalling the GPIB USB Connecting Driver", and "10. Uninstalling the USPM-RU/RUIII Program".

If a necessary file is deleted by mistake during these uninstallation operations, the PC may not operate properly.

Installation-related operations must be performed by personnel who have adequate knowledge and experience in the operation of a personal computer and an interferometer, and have carefully read this manual.

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1. Introduction

(1) Preparation

    Prepare the following before installing the program.

  [For the USB-cable version(for USPM- RUIII)]

    1) The computer into which the program is to be installed

    2) The program installation CD-ROM

    3) The control box (UCB-01) and USB cable.

  [For the GPIB-USB connect version(for USPM-RU)]

    1) The computer into which the program is to be installed

    2) The program installation CD-ROM

    3) The GPIB USB Cable.

(2) Computer (PC) specifications

    The following system configuration is required to operate the program.

[Windows10]

    1) CPU: made by Intel Corporation

    2) Chipset: made by Intel Corporation (*1)

    3) Memory: 4GB or greater required

    4) OS: Windows 10 Professional 64bit

    5) CD-ROM drive (external drive can also be used)

    6) USB 2.0 x 1 port (2 ports or greater is recommended)

    7) Screen resolution: 1024 x 768 or greater

    8) Set the power management settings so as not to turn off the hard disk power.

[Windows7]

    1) CPU: made by Intel Corporation

    2) Chipset: made by Intel Corporation (*1)

    3) Memory: 1 GB or greater required (2 GB or greater is recommended)

    4) OS: Windows 7 Professional or Windows 7 Business 32bit

    5) CD-ROM drive (external drive can also be used)

    6) USB 2.0 x 1 port (2 ports or greater is recommended)

    7) Screen resolution: 1024 x 768 or greater

    8) Set the power management settings so as not to turn off the hard disk power.

 *1 Proper operation may not be guaranteed if a different chipset is used.

(3) Note on the OS login ID

When installing the program or the device driver, be sure to first log in to the OS with administrator user rights (as Administrator, etc.).
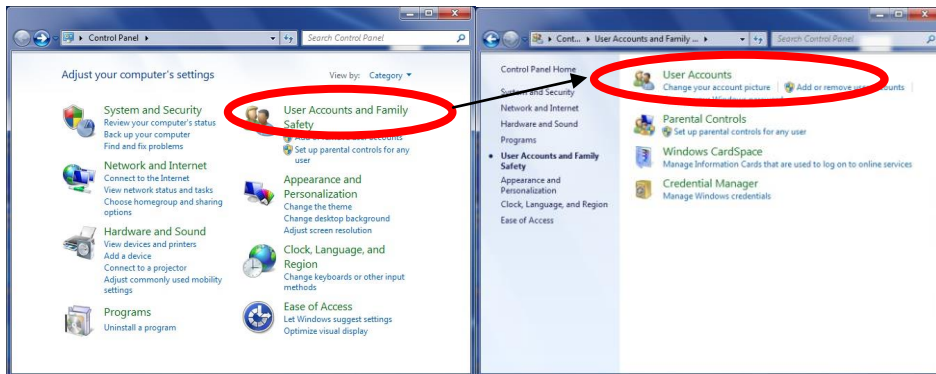
(4) Installation into a PC

It is necessary to disable the user account control setting before installation. The user account control setting can be disabled using the following procedure.
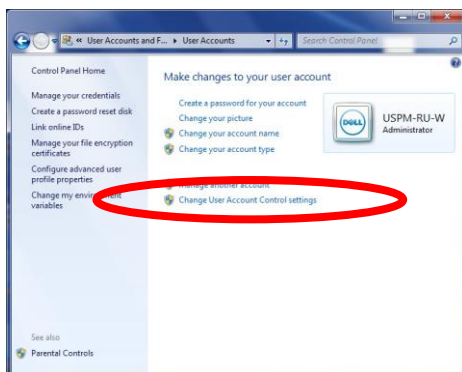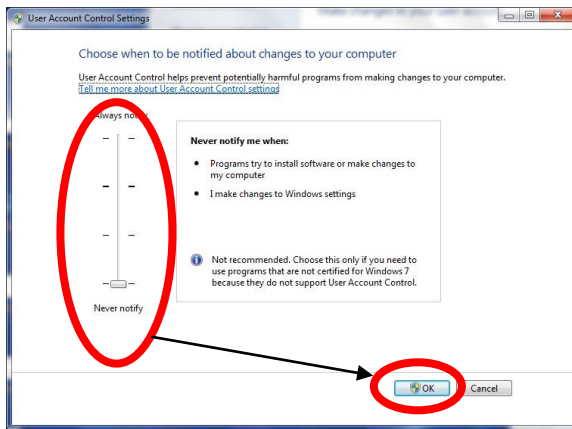
1) Select "Control Panel" from "Start Menu".
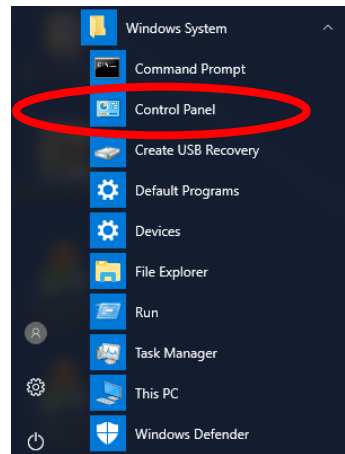

2) On the first screen, click "User Accounts".

3) On the next screen, click "Turn User Account Control on or off".

4) On the next screen, set "Choose when to be notified about changes to your computer" to "Never notify".

5) A dialog box asking you to restart the computer is displayed. Restart the computer. In case a dialog box asking you to restart the computer is not displayed, restart the computer.

6) Here is Power Supply Setting.   Select "Power Options" , and display Power Supply Setting Window by clicking items that indicated by arrows shown in a below chart. Then select "No" or "Never" for all of items.
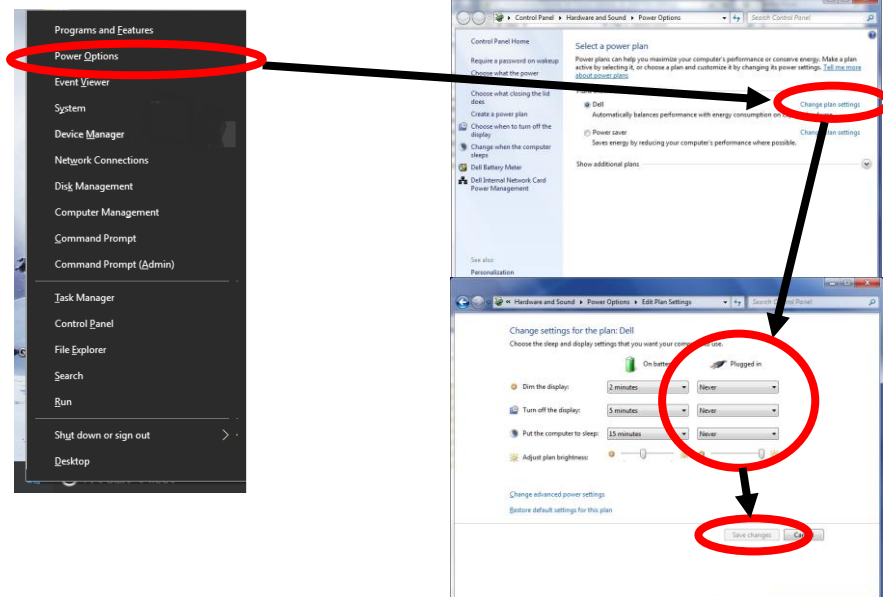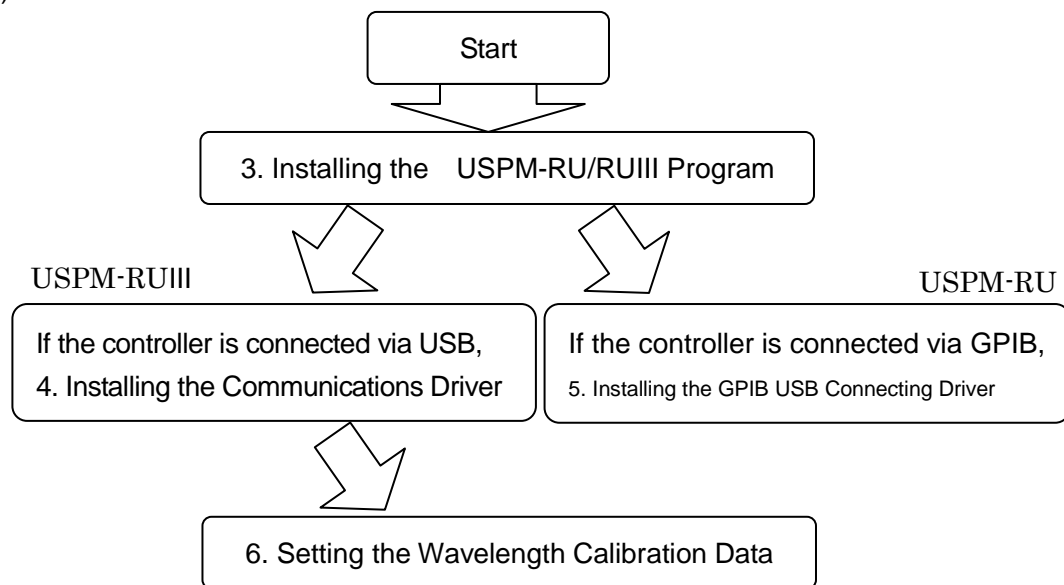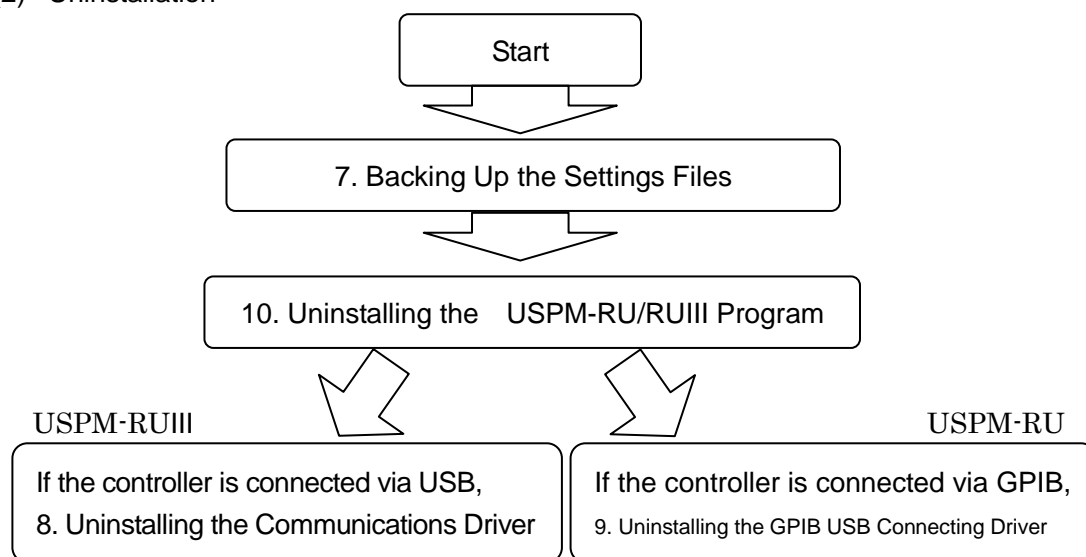
2. Installation Procedures

For installation or uninstallation, follow the procedures below.

* For reinstallation into a personal computer where the program is already installed, first uninstall the existing version, and then install the new version.

* When a new installation is performed or if you do not need to restore existing settings, item "3(5). Restoring the Backed-up Settings Files" is not necessary.

(1) Installation

```
                    ┌──────────────────┐
                    │      Start       │
                    └──────────────────┘
                            ↓
        ┌──────────────────────────────────────────┐
        │  3. Installing the   USPM-RU/RUIII Program │
        └──────────────────────────────────────────┘
          ↓                              ↓
USPM-RUIII                                        USPM-RU
┌──────────────────────────────┐  ┌──────────────────────────────────────┐
│ If the controller is connected │  │ If the controller is connected via GPIB, │
│ via USB,                       │  │                                          │
│ 4. Installing the              │  │ 5. Installing the GPIB USB Connecting    │
│    Communications Driver       │  │    Driver                                │
└──────────────────────────────┘  └──────────────────────────────────────┘
          ↓
┌──────────────────────────────────────────┐
│ 6. Setting the Wavelength Calibration Data │
└──────────────────────────────────────────┘
```

(2) Uninstallation

```
                    ┌──────────────────┐
                    │      Start       │
                    └──────────────────┘
                            ↓
        ┌──────────────────────────────────────────┐
        │       7. Backing Up the Settings Files     │
        └──────────────────────────────────────────┘
                            ↓
        ┌──────────────────────────────────────────┐
        │ 10. Uninstalling the   USPM-RU/RUIII Program │
        └──────────────────────────────────────────┘
          ↓                              ↓
USPM-RUIII                                        USPM-RU
┌──────────────────────────────┐  ┌──────────────────────────────────────┐
│ If the controller is connected │  │ If the controller is connected via GPIB, │
│ via USB,                       │  │                                          │
│ 8. Uninstalling the            │  │ 9. Uninstalling the GPIB USB Connecting  │
│    Communications Driver       │  │    Driver                                │
└──────────────────────────────┘  └──────────────────────────────────────┘
```

3. Installing the USPM-RU/RUIII Program

(1) Open Explorer, and open the "JPN" folder on the CD-ROM. Open the "install" (for 380 nm) folder or the "install440" (for 440 nm) folder at the lower level, and double-click "Setup.exe" to execute it.
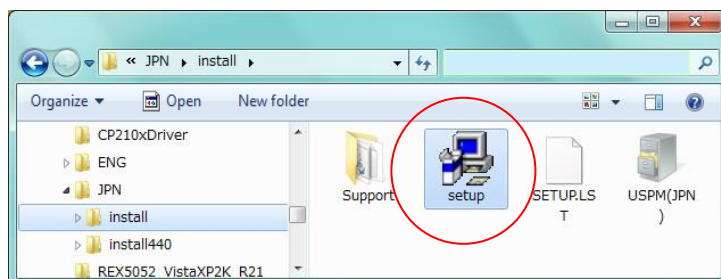

* The Japanese version of the program is stored in the "JPN" folder, and the English version of the program is stored in the "ENG" folder. The program supporting the 380 nm measuring head is stored in the "install" folder, and the program supporting the 440 nm measuring head is stored in the "install440" folder.
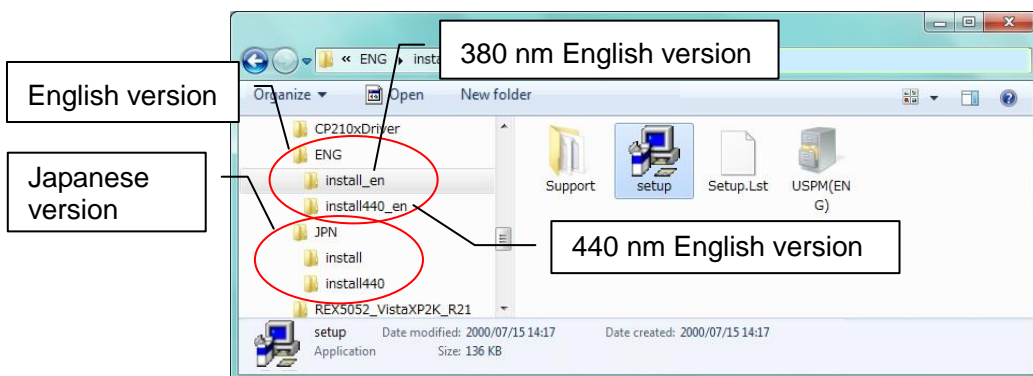
(2) When a message of Setup start is displayed, click OK button. The setup dialog box will be displayed. Click on the icon.
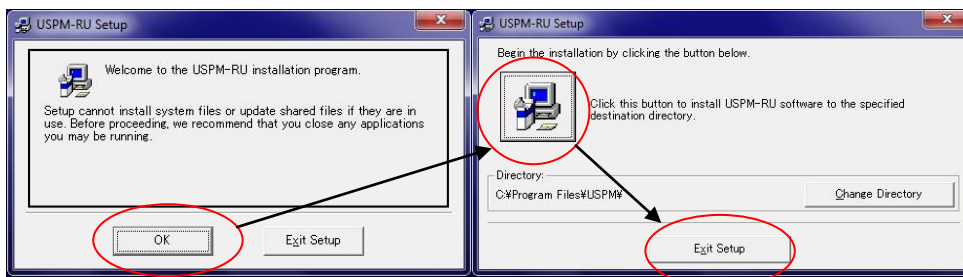
(3) The following dialog box will be displayed. Click "Continue".　 When a version up message is displayed during installation, click "No" button.
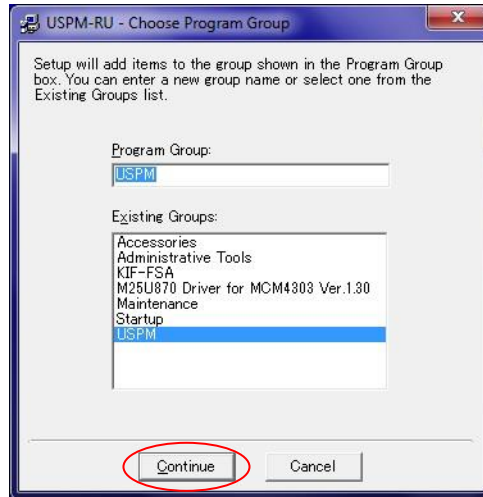
(4) A dialog box indicating completion of the setup will be displayed. Click "OK".
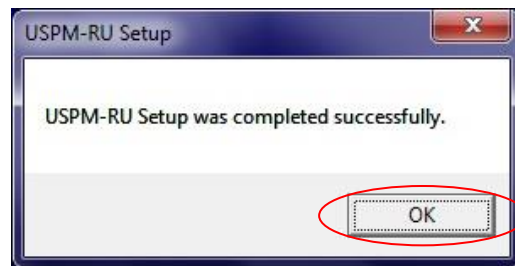
(5) The procedures are complete for a first installation. If this is a reinstallation and you would like to restore the previous settings, overwrite (replace) the files in the original location (installation destination) with the saved files in "7. Backing Up the Settings Files".

(6) Create a shortcut on the desktop. Select and right-click on the "USPM.exe" file located in the folder into which the USPM-RU/RUIII program has been installed (C:¥USPM or ¥USPM440 by default). Click "Send to" ─ "Desktop (create shortcut)". A shortcut will be created on the desktop.

4. Installing the Communications Driver

* The installation in this chapter is to be performed when the controller of the main unit is connected via USB. The installation procedures may differ depending on the settings of the personal computer on which the installation is performed, or may differ if it is a reinstallation.

(1) Double-click to run "CP210xVCPInstaller_x64 (.exe)" in the "CP201xDriver"
     ([Windows7] "_WIN7¥CP210xVCPInstaller_x86 (.exe)" in the "CP201xDriver") folder
     of the CD-ROM.
(2) In the following screen, click the "Next" button to proceed.
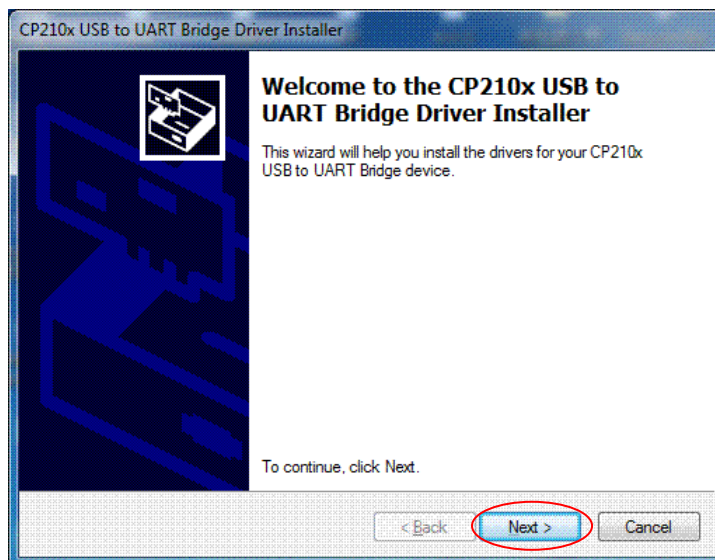
(3) In the following screen, select the "I accept this agreement "check box and click the "Next " button to proceed.
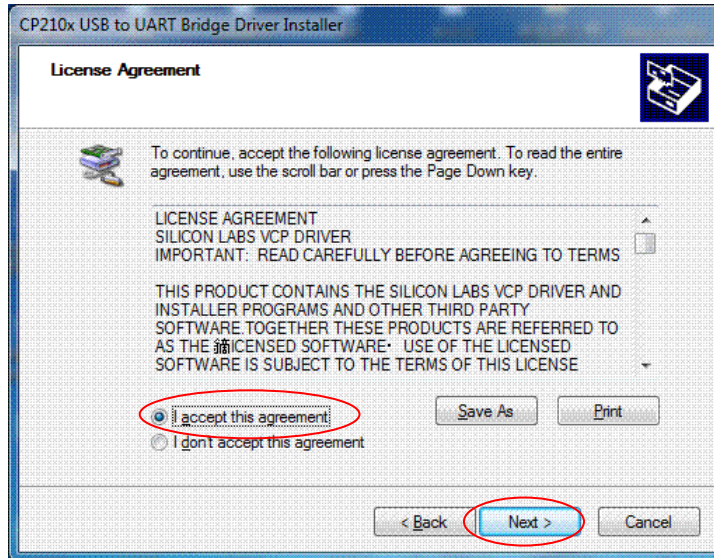
(4) Finally press the Finish button to complete the operation.
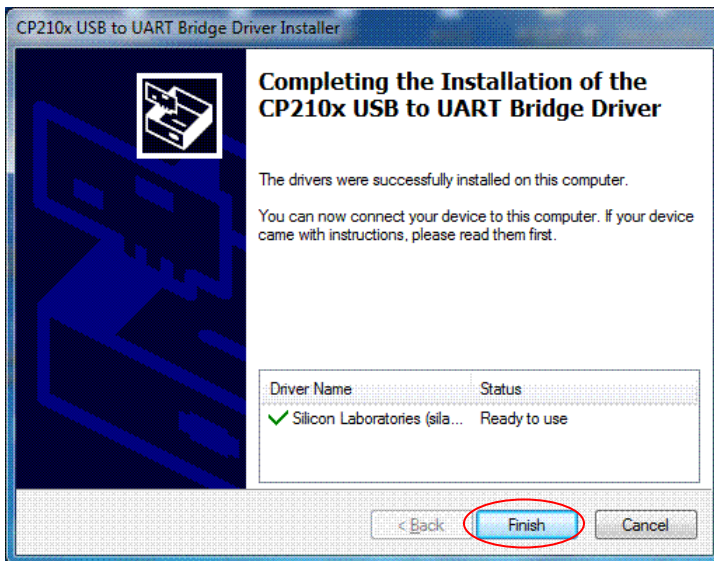
(5) Next, set the port number. Select "Start Menu" -> "Control Panel" -> "Hardware and Sound", and select "Device Manager".

(6) Click the + mark next to "Ports (COM & LPT)" to display the connected serial ports. If "Silicon Labs CP210x USB to UART Bridge (COM3)" is displayed, COM3 represents the port number.
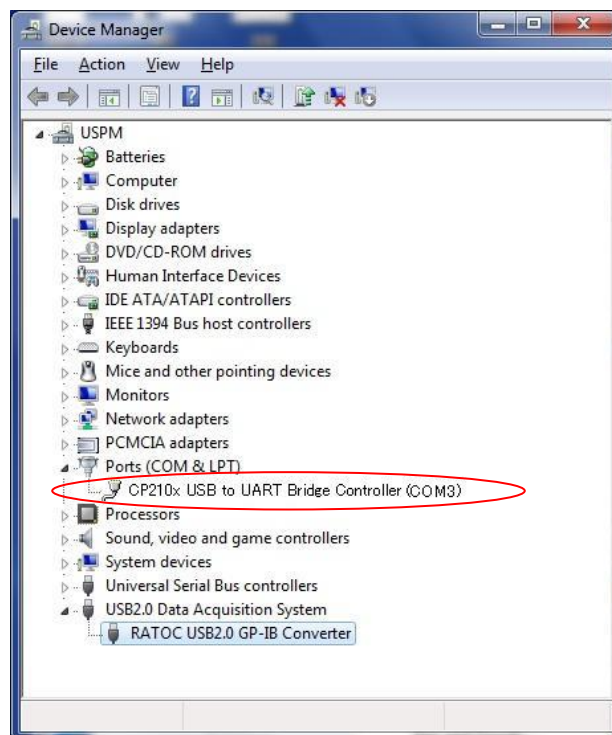
(7) Double-click to open the "USPM.int" file located in the folder into which the USPM-RU/RUIII program has been installed (C:¥USPM or ¥USPM440 by default). If it cannot be opened, right-click on the "USPM.int" file, select "Open with", and select Notepad to open it.

    * ".int" will not appear if the "Hide extensions for known file types" setting is applied.

(8) Check the numerical value that appears on the third line of the "USPM.int" file. This number represents the serial port number, for which the default value is 5. Specify the serial port number that you confirmed in "Device Manager". In the example above, "COM3" was displayed, so you would type 3. After the setting is complete, save and close the file. If the file is read-only and cannot be overwritten, clear the "Read-only" check box in the file properties and save the file again.

5. Installing the GPIB USB Connecting Driver

If you are using the USB-cable version, perform the following settings. Installment is started without connecting GRIP USB connecting cable to the Computer.

(1) Double-click to run "USB220_Setup_for_Win10(.exe)" in the "REXUSB220"
([Windows7] "USB220_Setup(.exe)" in the "_WIN7¥REXUSB220") folder
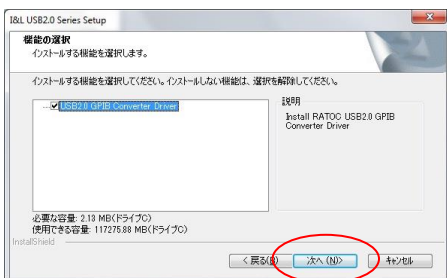of the CD-ROM.

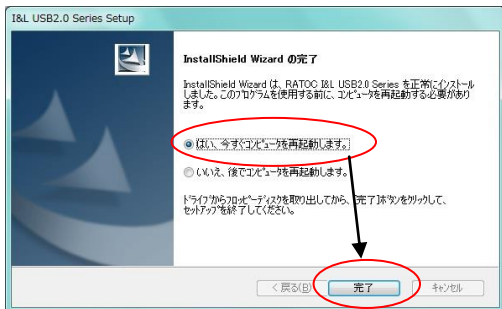* The extension (.EXE) might not appear, depending on the OS settings.
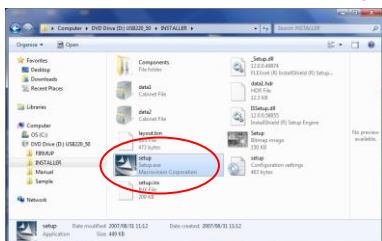
(2) Click the "Next" button to proceed.

(3) Click the "Install" button to start the installation.

(4) Click the "Finish" button. The installation is complete.

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(5) Confirm restarting the computer is completed, then connect GRIP USB Connecting Cable into USB Connector.

(6) Next, perform the initial settings by editing the settings file contents. Double-click to open the "USPM.int" file located in the folder into which the USPM-RU/RUIII software has been installed (C:¥USPM¥ or ¥USPM440 by default). If it cannot be opened, right-click on the "USPM.int" file, select "Open with", and select Notepad to open it.

(7) Check the numerical value that appears on the third line of the "USPM.int" file. This number represents the serial port number, for which the default value is 5. Type 0 for the setting. After the setting is complete, save and close the file.

6. Setting the Wavelength Calibration Data

If you are using the USB-cable version, perform the following settings.

(1) Double-click to open the "USPM.int" file located in the folder into which the USPM-RU/RUIII program has been installed (C:¥USPM¥ or ¥USPM440 by default). If it cannot be opened, right-click on the "USPM.int" file, select "Open with", and select Notepad to open it.

(2) Enter the numerical values found on the measuring head, as shown below, and save the file.

Example of the numerical values on the measuring head

```
1: 38      2: 77
3: 214     4: 401
5: 454     6: 485
```

Example of the description in the USPM.int file

1st line	:	(Data file identification tag)
2nd line	:	(Configuration file name)
3rd line	:	(Used port number)
4th line	:	38 ← Set the numerical value for item 1 in the box on the left.
5th line	:	77 ← Set the numerical value for item 2 in the box on the left.
6th line	:	214 ← Set the numerical value for item 3 in the box on the left.
7th line	:	401 ← Set the numerical value for item 4 in the box on the left.
8th line	:	454 ←Set the numerical value for item 5 in the box on the left.
9th line	:	485 ← Set the numerical value for item 6 in the box on the left. (*1)
Last line	:	(Shutter waiting time)

*1: There is no 9th line in the 440-840 nm specification.

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# 7. Backing Up the Settings Files

The setting files listed below will be deleted when an uninstallation is performed. If you want to continue to use the current settings after an uninstallation is performed, copy the files below to another location, and return them to the original location after a new installation is performed.

File name	Remarks
C:¥USPM¥uspm.cal	or ¥USPM440
C:¥USPM¥uspm.env	or ¥USPM440
C:¥USPM¥uspm.int	or ¥USPM440 The extension (.int) is not displayed.
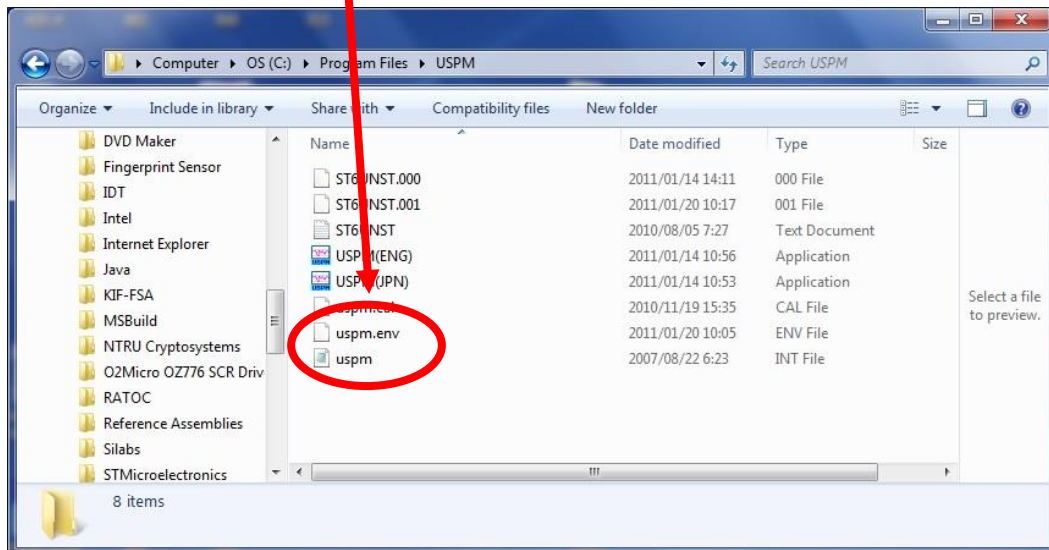
8. Uninstalling the Communications Driver

(1) Select "Control Panel" from "Start Menu".
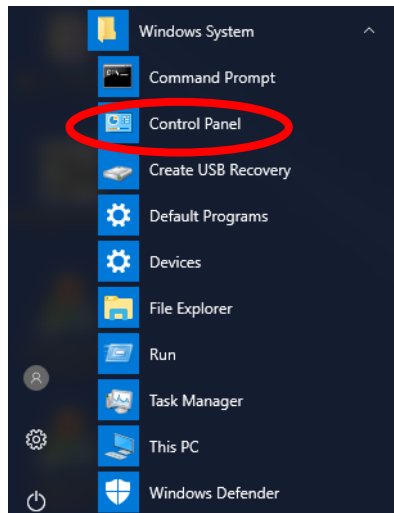
(2) Click "Add or Remove Programs" or "Programs and Features".
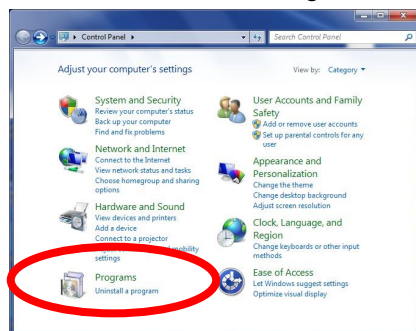
(3) First select "Windows Driver Package – Silicon Laboratories (silabenm) Ports" and then start the uninstallation using the "Uninstall/Change" button.
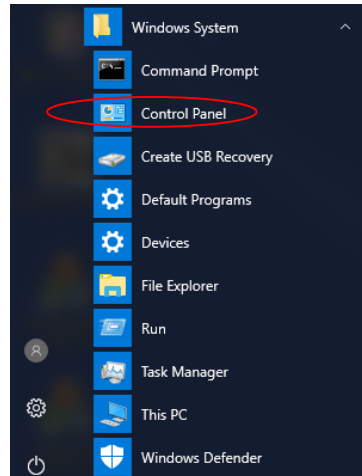

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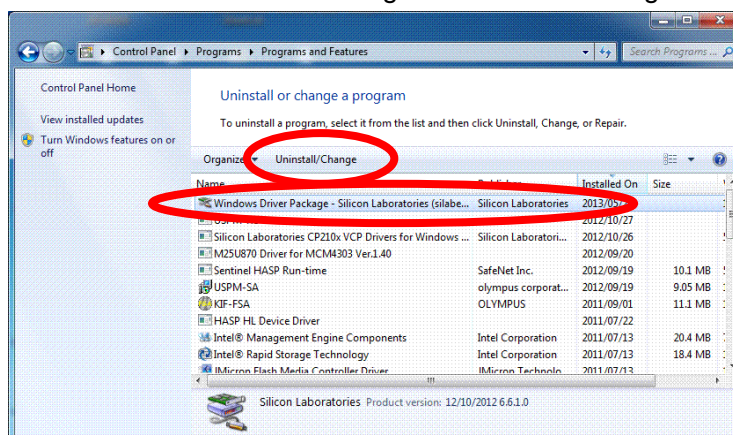
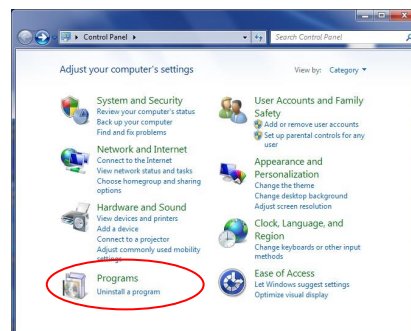(4) In the following screen, click the Yes button to complete the uninstallation.
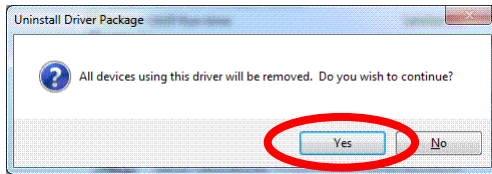
9. Uninstalling the GPIB USB Connecting Driver

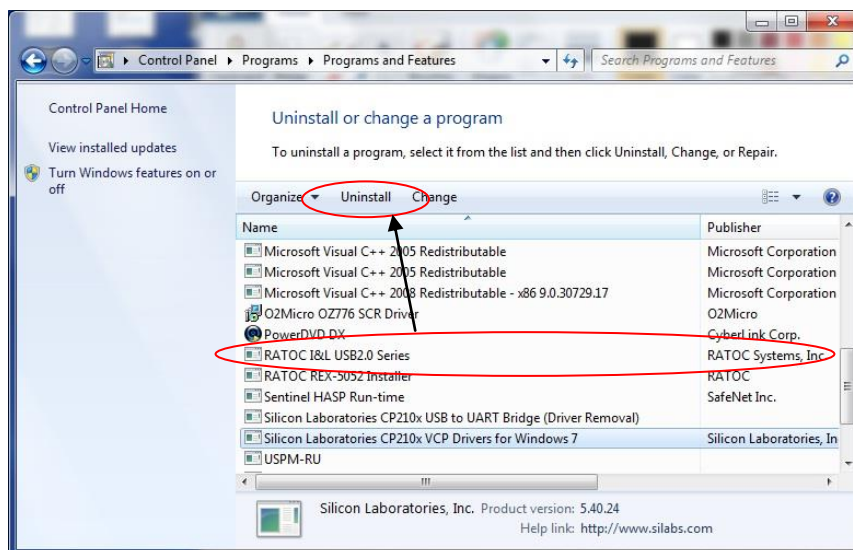(1) Open "Control Panel" from "Start Menu".

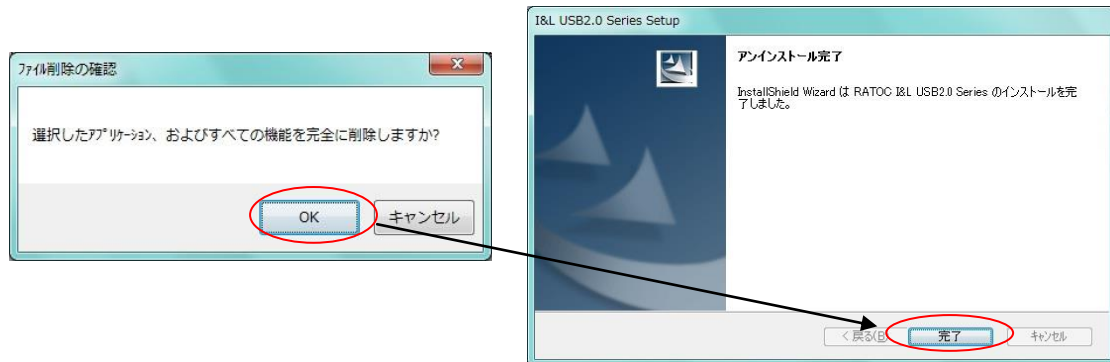(2) Click "Programs". (If you are using the classic view, proceed to Step (3).)

(3) Click "Programs and Features". (If you are using the classic view, proceed to Step (4).)

(4) Select "RATOC I&L USB2.0 Series", and click "Remove" or "Uninstall".

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(5) If the dialog box indicating that the uninstallation is complete is displayed, click "Finish" or "OK".

(6) Wait until the uninstallation is complete.
(7) When the dialog box disappears, the uninstallation process is complete.
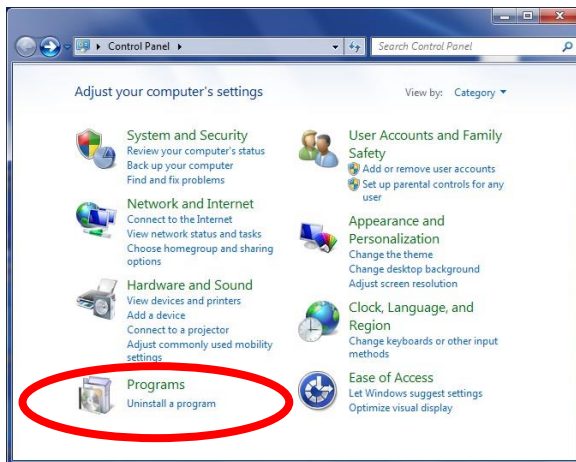
10. Uninstalling the USPM-RU/RUIII Program

When you perform a reinstallation on a PC where the USPM-RU/RUIII program is already installed, uninstall the program by following the procedures below.
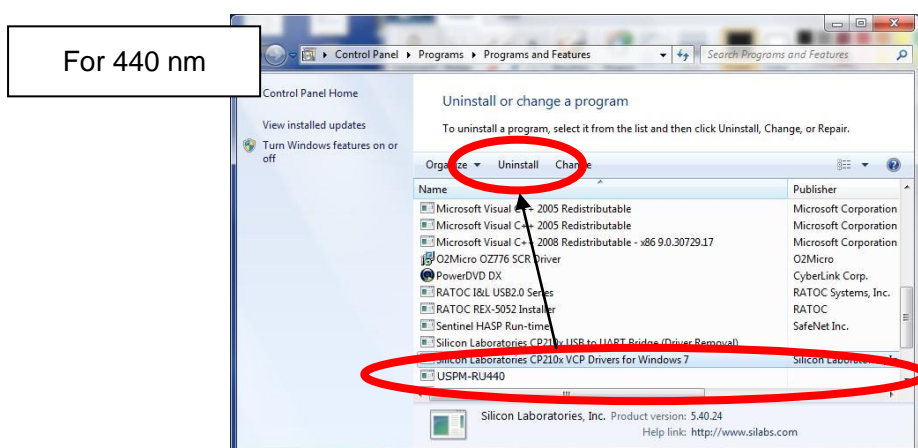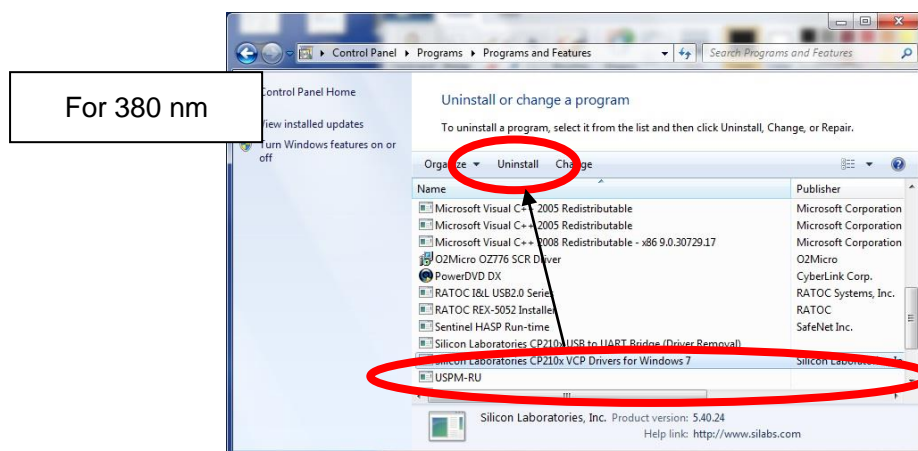
(1) Open "Control Panel" from "Start Menu".
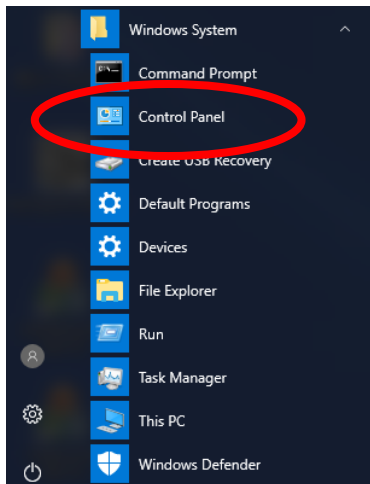
(2) Click "Add or Remove Programs" or "Programs and Features".

(3) Select "USPM-RU", and click "Remove" or "Uninstall".

For 380 nm

For 440 nm

(4) If the "Add or Remove Programs" confirmation dialog box is displayed, click "Yes".

(5) If the "Delete shared file" confirmation dialog box is display, click "Delete All".

(6) If files have been moved in "7. Backing Up the Settings Files", a message indicating that a file does not exist is displayed. Confirm the message contents and close the message dialog box. The uninstallation will continue.

(7) Wait until the uninstallation is complete. When the message(U2GPLIB.DLL is not found.) is displayed during uninstallation, "OK" is pushed.

(8) When the message indicating that the uninstallation is in process disappears, the uninstallation process is complete. If a dialog box confirming the completion is displayed, close the dialog box. Close "Programs and Features" and "Control Panel".

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