

USB driver

Installation Procedure

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1. Overview

A driver (inf file) for recognizing the USB port as a COM port for communication and performing serial communication with the stage controller. Contains configuration files required for installation. An internet connection environment may be required for the target PC during installation.

2. Target controller

| Name | Model |
|-------------------------------------|--------|
| Submicron feedback stage controller | FC-111 |
| Submicron feedback stage controller | FC-114 |
| Submicron feedback stage controller | FC-411 |
| Submicron feedback stage controller | FC-414 |
| 10nm feedback stage controller | FC-511 |
| 10nm feedback stage controller | FC-514 |
| 5nm feedback stage controller | FC-611 |
| 1nm feedback stage controller | FC-911 |
| Open stage controller | SC-111 |
| Open stage controller | SC-114 |

3. Target firmware

| Target FV |
|------------|
| FV01.030 ~ |

4. PC specifications

The operating systems supported by this USB driver are listed below.

[On Windows 10, the installation will start automatically with the standard OS driver. Use the OS standard driver.](#)

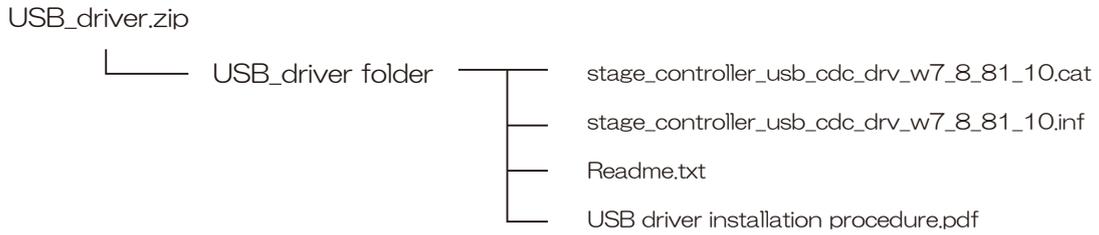
| Target OS |
|------------------|
| Windows7 32bit |
| Windows8 32bit |
| Windows8.1 32bit |
| Windows10 32bit |
| Windows7 64bit |
| Windows8 64bit |
| Windows8.1 64bit |

5. USB Protocol

When this USB driver is properly installed, it will be recognized as "COM port (CDC protocol)" on the PC. A COM port number will be assigned and serial communication will be possible.

6. About files

The file structure is as follows.



| File name | Description |
|---|-------------------------|
| USB driver installation procedure.pdf | PDF file |
| stage_controller_usb_cdc_drv_w7_8_81_10.cat | Security catalog file |
| stage_controller_usb_cdc_drv_w7_8_81_10.inf | USB driver setting file |
| Readme.txt | Readme file |
| Serial communication test.exe | Application |

7. Things to prepare

Prepare the following items when installing the USB driver. In some cases, an internet connection environment may be required.

| What to prepare |
|--|
| Stage controller (Including power cable) |
| PC |
| USB2.0 cable(TypeA-TypeB type) |

8. USB interface precautions

The USB driver is required when connecting to the PC for the first time. Once installed, connecting our stage controller with a USB interface to the USB port will automatically recognize it as a COM port. The next time you connect to the USB port, you do not need to install it. When connecting multiple stage controllers, be sure to acquire the serial number and other information through communication and specify the model individually.

[On Windows 10, the installation will start automatically with the standard OS driver. Use the OS standard driver.](#)

9. Contact

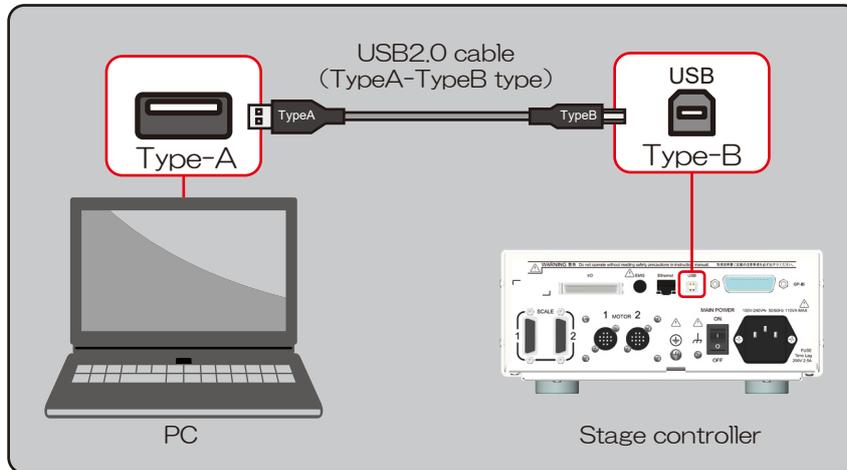
| | | |
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10. USB driver installation procedure

This section describes the USB driver installation procedure. Please turn on the power of the PC in advance. The PC used in the procedure is assumed to be a Windows 7 equipped machine.

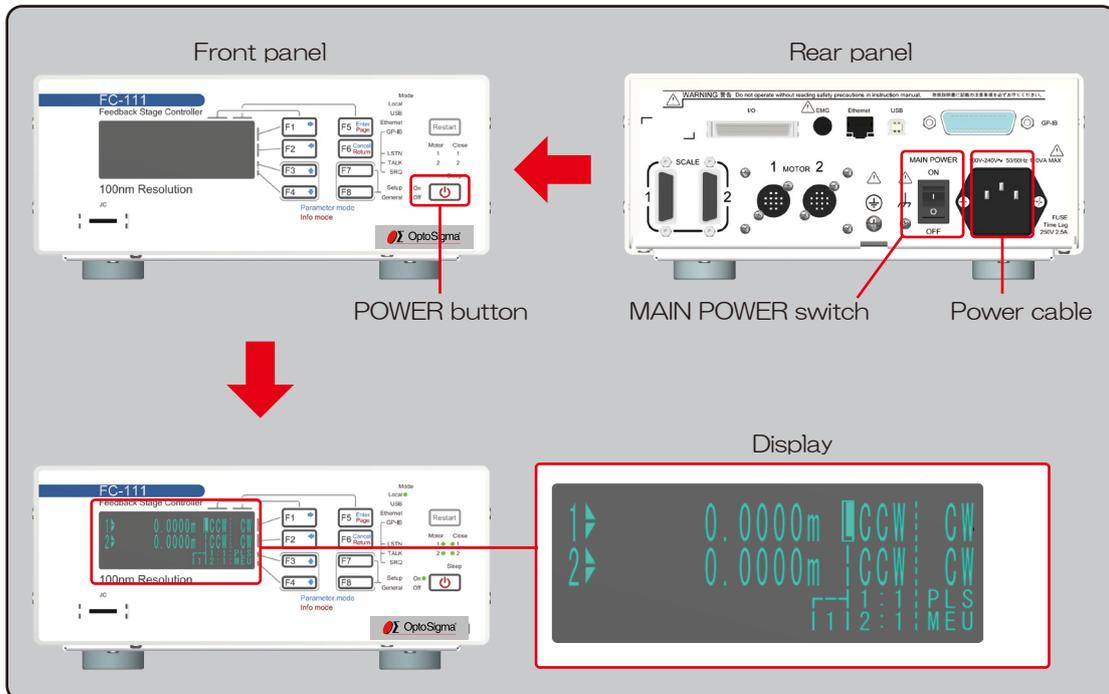
- Step1 USB cable connection

Connect the stage controller "Rear panel-USB Type-B connector" and "PC-USB Type-A connector" with a USB cable.



- Step2 Power on the stage controller

Power on the stage controller. Please connect "Power cable", turn on "Rear panel-MAIN POWER switch", and push "Front panel-POWER button". When it starts up normally, the coordinate values are displayed on the "Display screen".



- Step3 Start installing USB driver

When step 2 is finished, the device driver installation will start automatically on your PC. The following dialog is displayed at the bottom right of the screen of the PC. Click the dialog to display the "Driver software installation" screen. Please skip obtaining driver software from Windows Update that appears later.

- Step4 USB driver update

Open the property of "Stage Controller Usb Cdc" displayed on the Device Manager and click "Tab-Driver". Then click the "Update Driver Button".

Please update the driver by referring to the USB driver setting file "stage_controller_usb_cdc_drv_w7_8_81_10.inf" provided by us.

- Step5 Serial communication test

Perform a serial communication test. Start "Serial communication test.exe". Select "Stage Controller Usb Cdc Port (COM *)" in "Destination" and press "Start button". Check if the communication test ends normally.

11. Trouble shooting

If any problems occur, please check the following contents. If the solution does not improve, unplug the power cable from the outlet and contact us or our agent.

| Contents | Possible causes | Workaround | Page |
|--|--|--|----------|
| COM port is not displayed in Device Manager. | Cable is not connected. | Make sure the USB cable is connected. | 3 |
| | The controller power is off. | Please press the power button. Turn on the MAIN POWER switch. | *1 *1 |
| | "usbser.sys" is not in the specified folder | Search "usbser.sys" on your PC and copy it to the following folder. C:\Windows\System32\drivers | - |
| Cannot communicate. | COM port conflict | Change the COM port number. Open the properties with "Port (COM and LPT)-Stage Controller Usb Cdc Port (COM *)" and select "Tab-Port Settings". Click the "Detailed Settings button" in "Tab-Port Settings" and set the COM port number in "Detailed settings for COM *" to a different number (select a port that is not in use please). Then restart your PC. | - |
| | The COM expansion board added to the PC has an effect. | Update all COM port drivers to the latest version. | - |

*1 See the instruction manual for the stage controller.

Memo

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|---------------------|--|
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