
DUS-DD v1.3.6.13

User's Guide

DMC Co., Ltd.

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1. Structure and Outline

■ Structure

DUS-DD consists of

- Setting Tool (Touch Screen Properties)
- Configuration Files
- Driver

■ Outline

System Outline

DUS-DD provides the functions necessary to operate a touch screen.

The functions are

- Install and Uninstall of the touch screen driver
- Configuration of the touch screen driver
- Monitoring of the touch screen driver

All the settings can be configured with this tool.

2. System Requirements

Japanese version of Windows7/Windows8 32bit Home or greater editions

.Net Framework3.5

Approximately 10MB of free space and data file capacity is needed in system drive.

(Note) Windows8 System Builder (OEM) version is not supported..

The install destination will be inside of

System drive¥Program Files¥DUS-DD¥

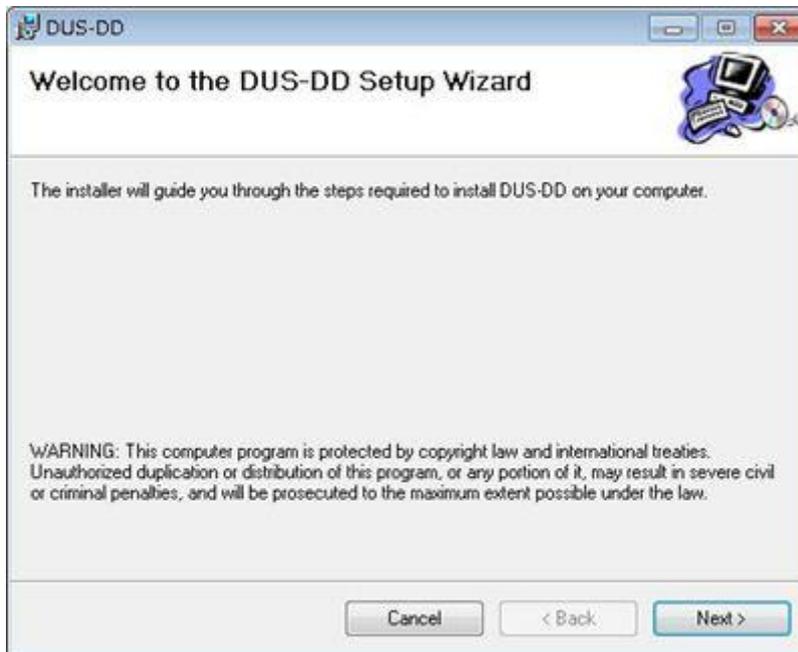
Under Windows7 and a multiple-monitors environment, the graphic driver needs to be WDDM1.0 or greater and support DirectX9.

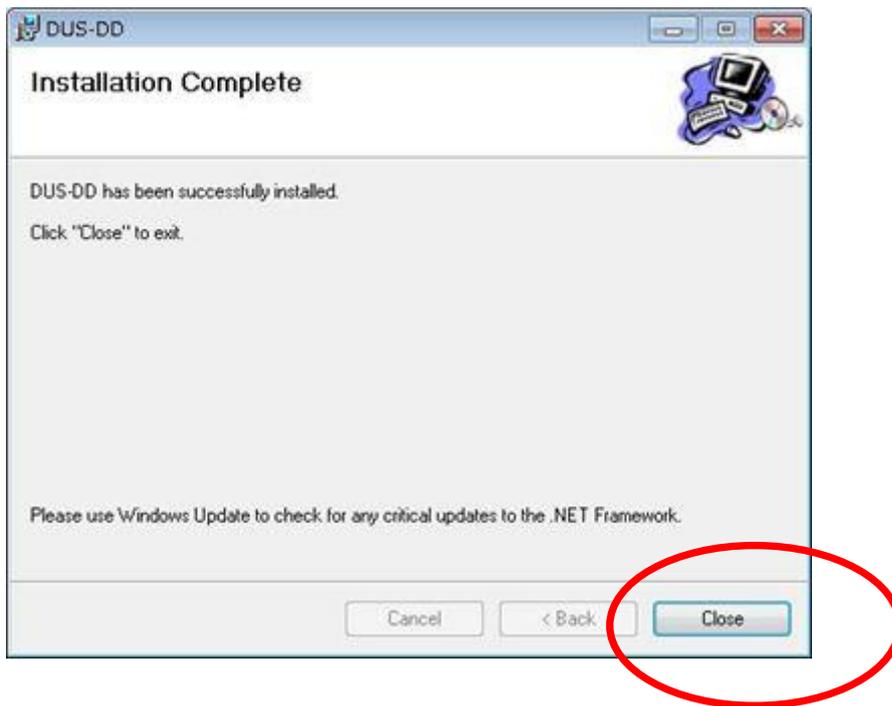
Operation will be single-touch mouse input under Windows XP.

3. Install and Startup

Double-click [DUS-DD.msi].

Setup wizard will start. Click [Next] for install.





Once install is completed, click [Close].

If install was successful, shortcut for [DUS-DD] would be created on the desktop.



Either double-click the shortcut, or select [System Drive ¥ Program Files ¥ DUS-DD ¥ DUS-DD.exe] from the program file. The setting tool (Touch Screen Properties) will start up.

- **Windows7 or windows8**

Under Windows7 environment, administrative privilege will be required because [DUS-DD.exe] will install a driver. In some settings of UAC (User Account Control), the dialog like below will appear. If such dialog appeared, click [Yes].



Install is completed at this point.

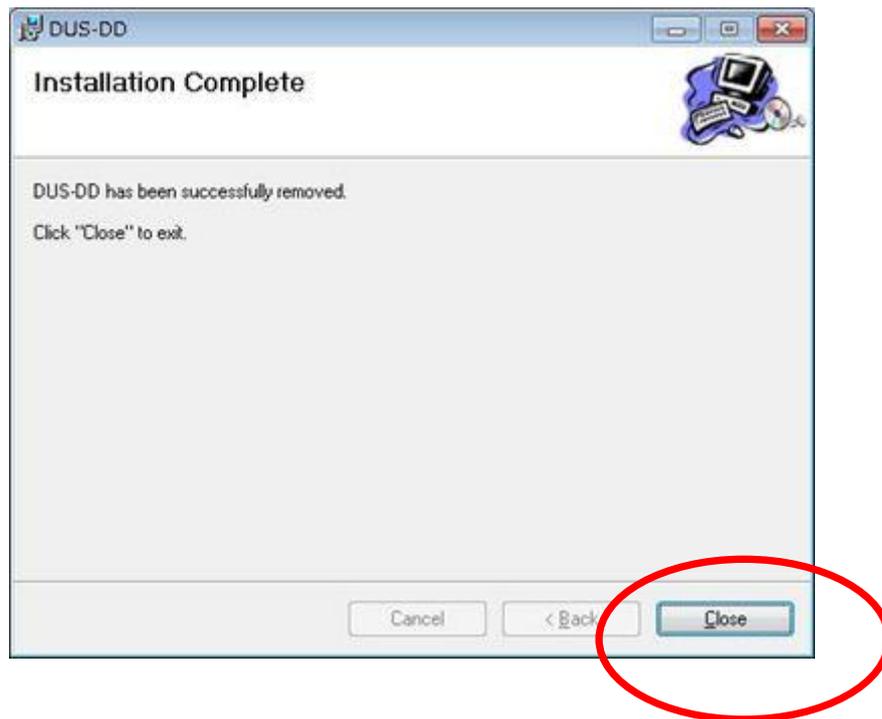
4. Uninstall

Double-click **[DUS-DD.msi]**.

Menu for repairing/removing DUS-DD.msi. will appear.

Select **[Remove DUS-DD]**, and click the **[Finish]** button.





Once uninstall is completed, click [Close].

Uninstall is completed at this point.

5. Setup Procedures of Touch Screen Driver

■ Procedures to operate the touch screen driver

To use the touch screen driver, the below procedures are required in each screen.

1. Device Addition

Install of the touch screen driver

2. Configuration File Selection

After selecting the installed driver from Basic Setting, select a configuration file.

***The default input mode after driver install is touch input.**

3. Touch Screen Composition

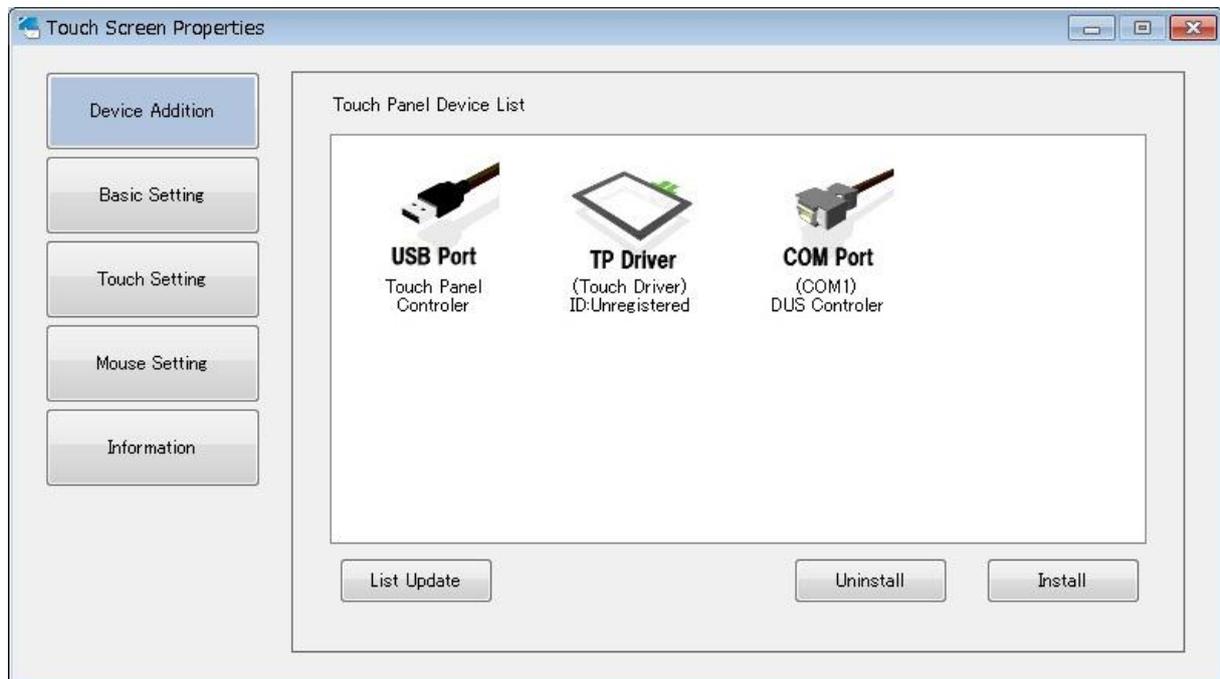
Touch input: Setup of TabletPC setting in Touch Setting

Mouse input: Setup of Mouse Configuration in Mouse Setting

6. Device Addition

6-1 Touch Panel Device List

The connected USB touch screen controller and/or connectable COM port will be indicated.



The list will be automatically updated as a touch screen is connected.

*The automatic updating will not be performed during install and uninstall.

The list can be updated manually as well, by clicking the [List Update] button.

The icons to appear on the Touch Panel Device List are as below.

Icon	Connection Type	Note
 <p>USB Port Touch Panel Controler</p>	<p>USB</p>	<p>This icon will not appear if a driver is already installed.</p>
 <p>COM Port (COM1) Unconnected</p>	<p>COM Port VCP Port</p>	<p>This icon will not appear if a driver is already installed.</p>
 <p>TP Driver (Touch Driver) ID:1</p>	<p>Installed Driver</p>	<p>This icon indicates that a driver is already installed on the touch screen connected via USB, COM, or VCP.</p>

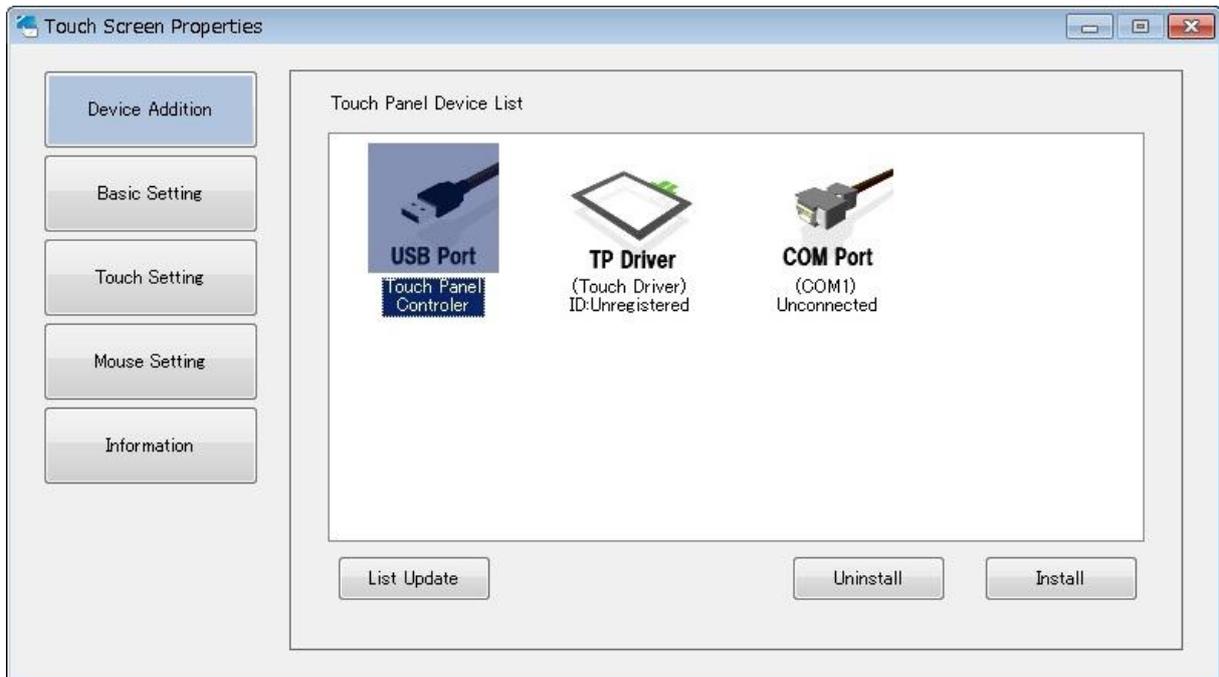
6-2. Install

This section is about installing the touch screen driver.

Follow the below procedures for install.

Connect the touch screen before install.

1. Select the device intended to be installed.



Select the device from the Touch Panel Device List for install, and click [install].

Or touch the touch screen you intend to install. The controller connected to the touched touch screen will be selected.

The installable devices are as below.

USB connection/ DUS controller (made by DMC)

Serial (TTL) connection / DUS controller (made by DMC)

In case of RS-232C connection, install cannot be started if connection with the controller is not recognized when the [Install] button is clicked.



2. The confirmation dialog will appear. Select [Yes].



3. The below dialog will appear at the initial install.

Windows7

Select [Install this driver software anyway].



WindowsXP

Select [Continue Anyway].



The above screen may appear several times. Click [Continue Anyway] each time.

In WindowsXP environment, the below screen may appear during install. The install will be performed automatically. Do not click anything.



4. Install will begin, and the below indication will appear. Please wait for a while.

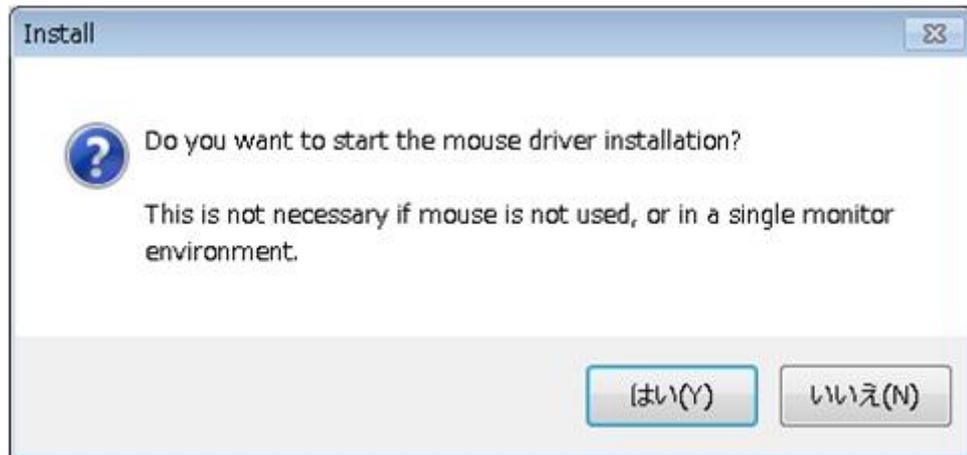


5. Device will be checked once install is completed. Please wait for a while.



6. If you want to use a mouse in multiple-monitors environment, select [Yes] on the below screen and install the mouse driver.

*Install is not necessary if only touch input is used or for single monitor environment.



7. The below dialog will appear at the initial install.

Windows7

Select [Install this driver software anyway].

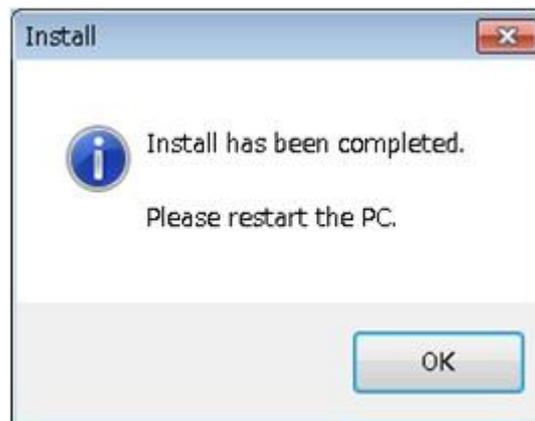


WindowsXP

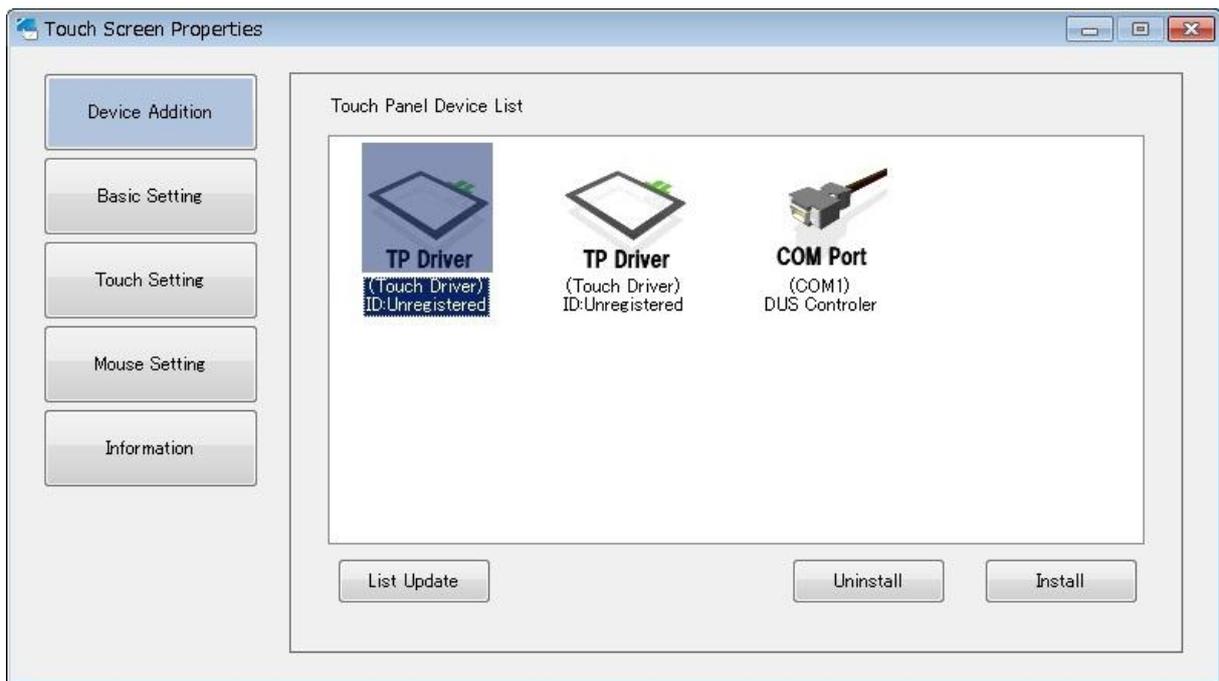
Select [Continue Anyway].



8. Once install is completed, the below dialog will appear. Click [OK].



9. Install completion



Once install is completed, [TP Driver] will appear in the [Touch Panel Device List].
Restart the PC after the install completion.

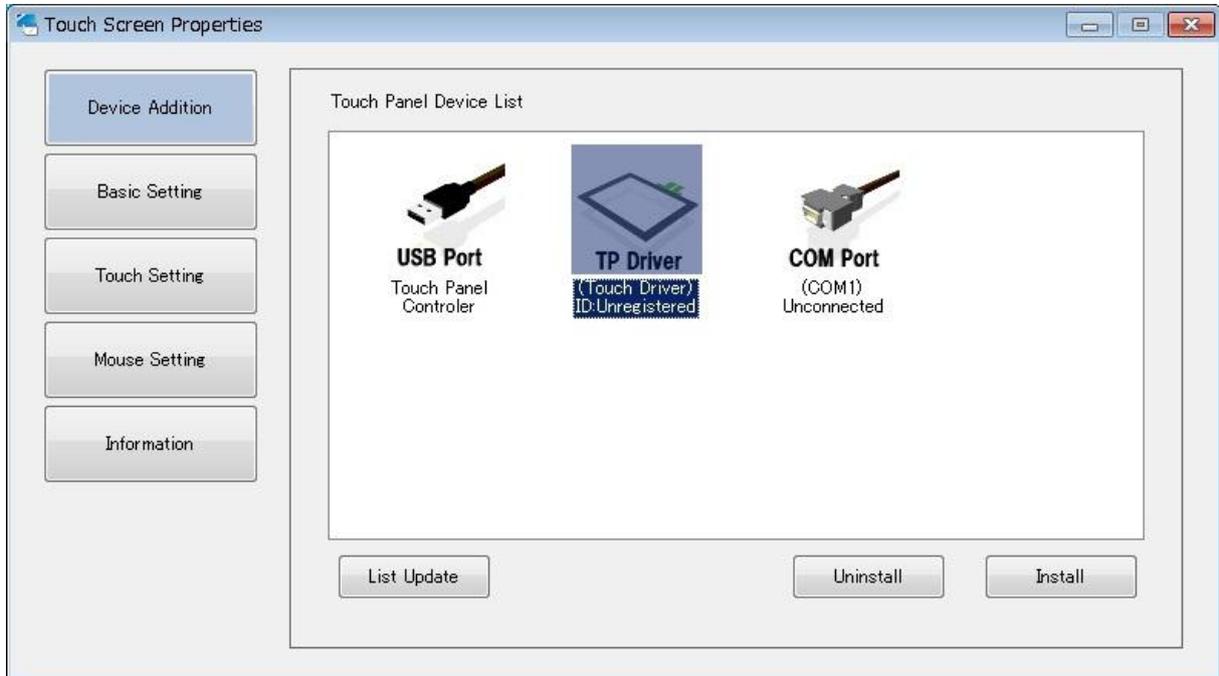
The install is completed at this point.

6-3. Uninstall

This section is about uninstalling the touch screen driver.

Follow the below steps for uninstall.

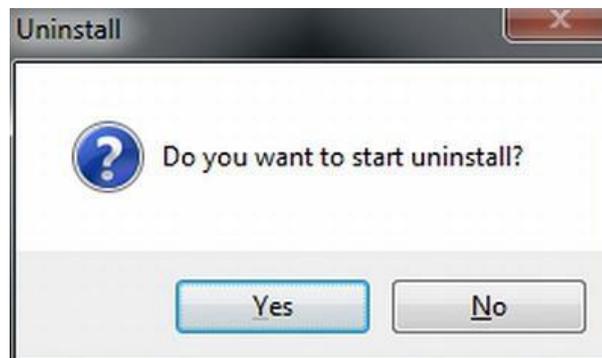
1. Select the device intended to be uninstalled.



Select the driver icon on the [Touch Panel Device List], and click [Uninstall].

Or touch the touch screen you intend to uninstall. The driver software related with the touched touch screen will be selected.

2. The confirmation dialog will appear. Select [Yes].



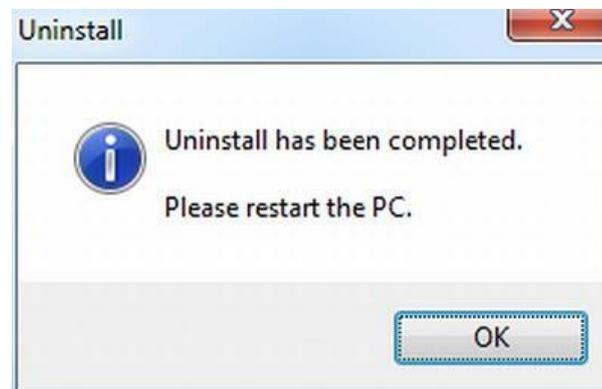
3. The device is being uninstalled. Wait for a while.



4. Uninstall has been completed. The device is being checked. Wait for a while.

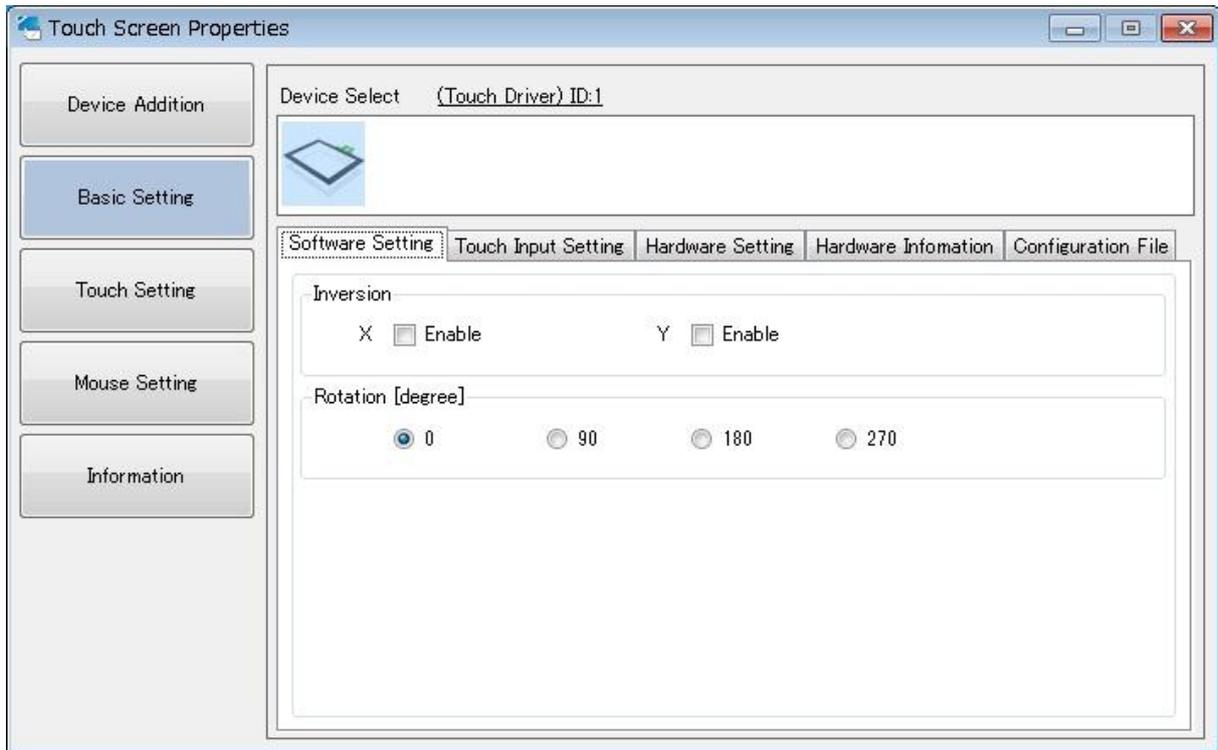


5. Uninstall has been completed. Click [OK] and restart the PC.



Uninstall is completed at this point.

7. Basic Setting



You may make settings and maintenance for the driver and controller individually.

Select the driver or touch screen controller from “Device Select”. Or touch the touch screen you intend to configure settings on. The driver or touch screen controller related with the touched touch screen will be selected.

7-1. Software Setting



You can configure settings on the driver or touch screen controller being selected.

- **X-axis Inversion**

If enabled, X-axis coordinates will be inversely outputted on touches.

This function is not enabled in default configuration.

- **Y-axis Inversion**

If enabled, Y-axis coordinates will be inversely outputted on touches.

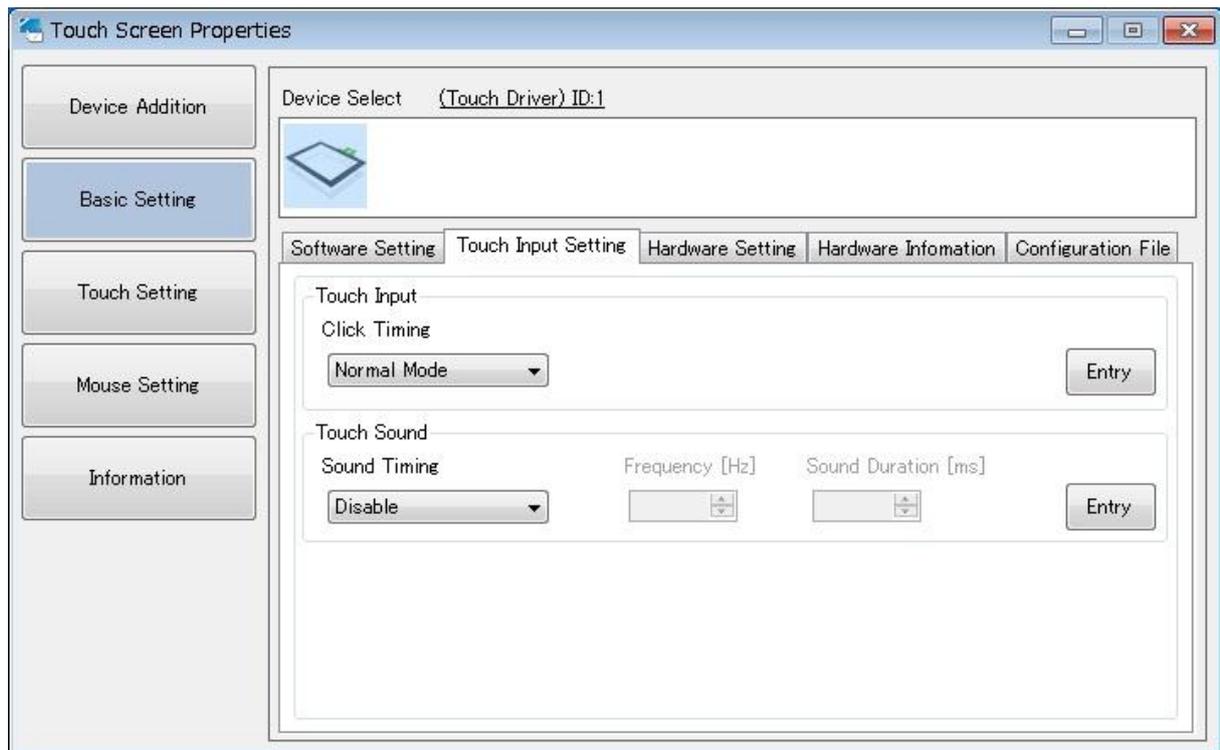
This function is not enabled in default configuration.

- **Rotation**

X-axis and Y-axis coordinates will be outputted in rotation of 0, 90, 180, and 270 degrees.

The default setting is [0 degree].

7-2. Touch Input Setting



· Touch Input

Touch input setting of the driver selected on the combo box can be configured. After the configuration is made, click [Entry].

◇ Click Timing

- Normal Mode

Touch down will cause touch down, touch up will cause touch up.

- Click at touch up

Click (touch down → touch up) will be caused at the timing of touch up.

- Click at touch down

Click (touch down → touch up) will be caused at the timing of touch down.

Default: Normal Mode

· Touch Sound

The touch sound setting of the driver selected on the combo box can be configured. After the configuration is made, click [Entry].

◇ Sound Timing

- Disabled

No touch sound will be caused.

- At touch up

Touch sound will be caused at the timing of touch up.

- At touch down

Touch sound will be caused at the timing of touch down.

- During touch down

Touch sound will be caused all through touch down.

Default: Disabled

◇ Frequency (Hz)

Touch sound frequency can be configured.

The available frequency range is 37 Hz – 32767 Hz.

If the [Sound Timing] is configured as [Disabled], this frequency setting will be disregarded.

Default: 1000 Hz

◇ Sound Duration [ms]

Touch sound duration can be configured.

The available duration range is 1 ms – 5000 ms.

If the [Sound Timing] is configured either as [Disabled] or [During touch down], this sound duration setting will be disregarded.

Default: 55 ms

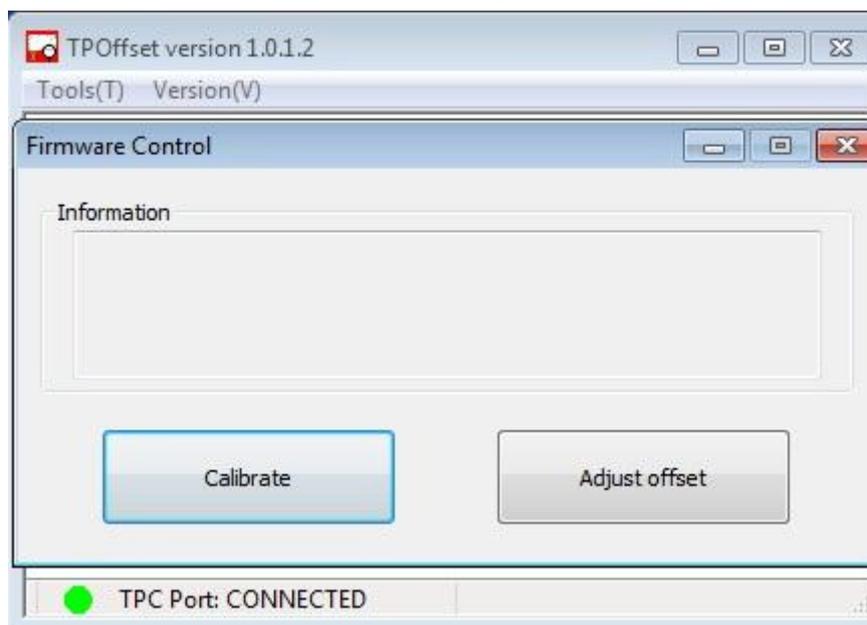
7-3. Hardware Setting



- **Touch Screen Maintenance (TPOffset)**

You may make the maintenance on the driver or touch screen controller being selected. Click the [Open] button.

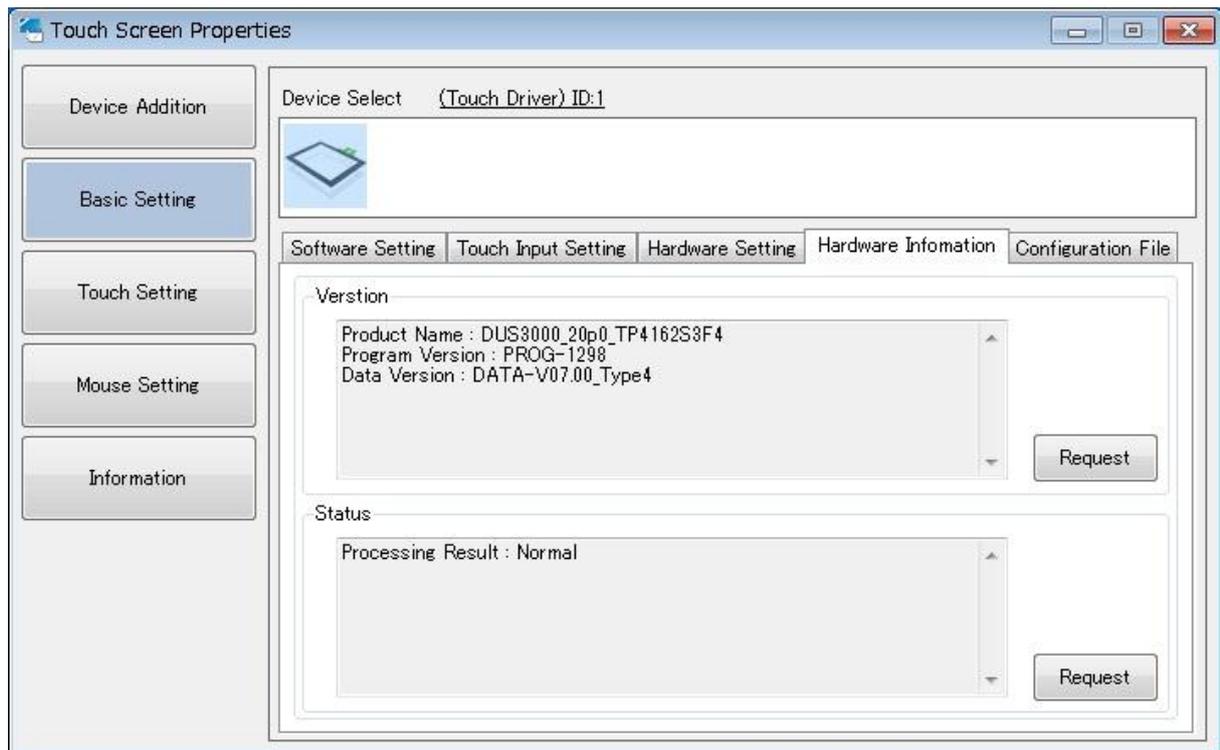
Maintenance Tool Screen



* The setting tool cannot be operated when the maintenance tool is open.

* For how to operate the maintenance tool, refer to the User's Guide of TPOffset.

7-4. Hardware Information



- **Version**

You may check the version of the controller or touch screen driver being selected. Click the [Request] button, then the controller version of the connected controller will be indicated.

- **Status**

You may check the status of the driver or touch screen controller being selected. Click the [Request] button, then the current status will be indicated.

7-5. Configuration File



- **Configuration File**

You may change the configuration file of the driver or touch screen controller being selected. Click the [Register] button after selecting the configuration file.

[Touch.mfd] : for using touch output

[mouse.mfd] : for using mouse output

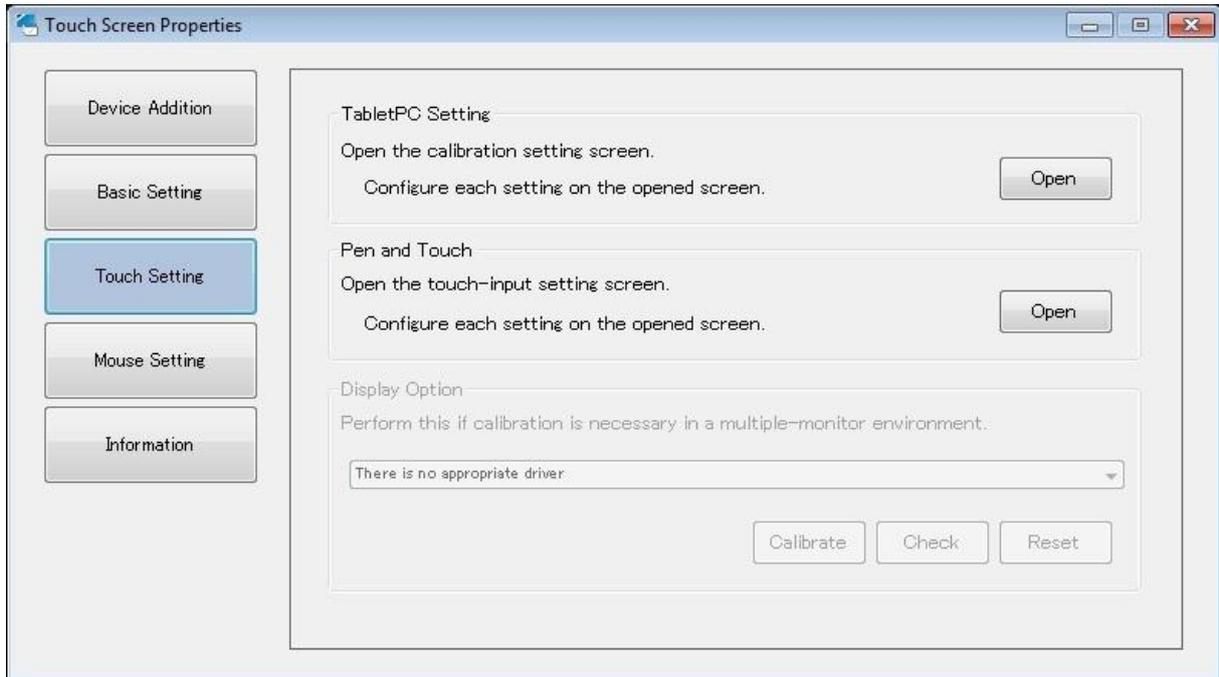
The default configuration file is [Touch.mfd].

- **Addition and Removal of the Configuration Files**

The configuration files can be added and removed on Explorer of Windows. Click the [Open] button.

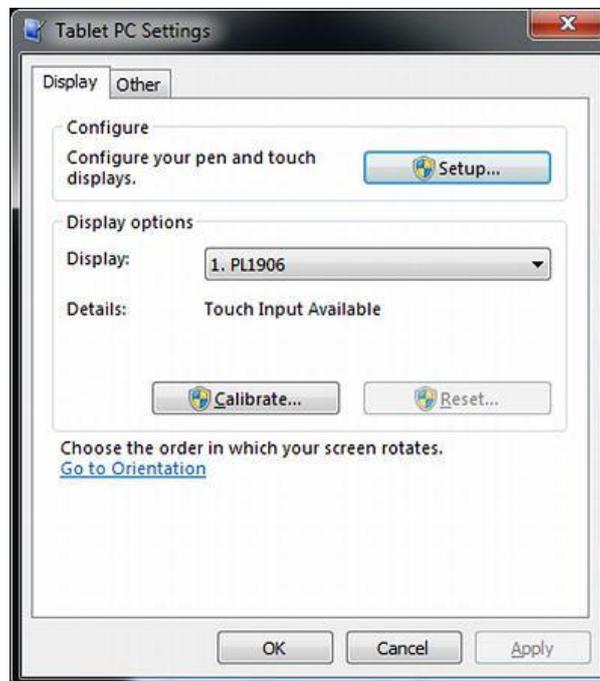
8. Touch Setting

The screen below is available only under an Windows7 or Windows8 environment.



- TabletPC Setting

Click [Open], then the Windows standard setting screen will appear.



Display configuration and calibration can be performed.

- Pen and Touch

Click [Open], then the Windows standard setting screen will appear.



Touch input adjustment and flick/gesturing touch operation setting can be performed.

- Display Option

- Calibrate

Software calibration can be performed for each driver.

Select a driver and click [Calibrate].

For multiple-monitors environment, perform this function only if it is necessary.

Refer to the [8-2. Touch Screen Calibration] section for details.

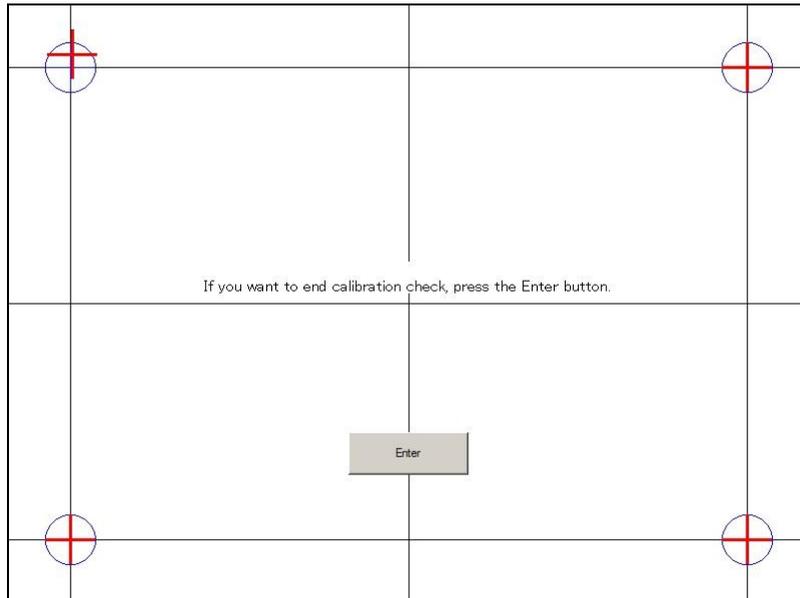
- Reset

Adjustment results can be reset.

- Confirm

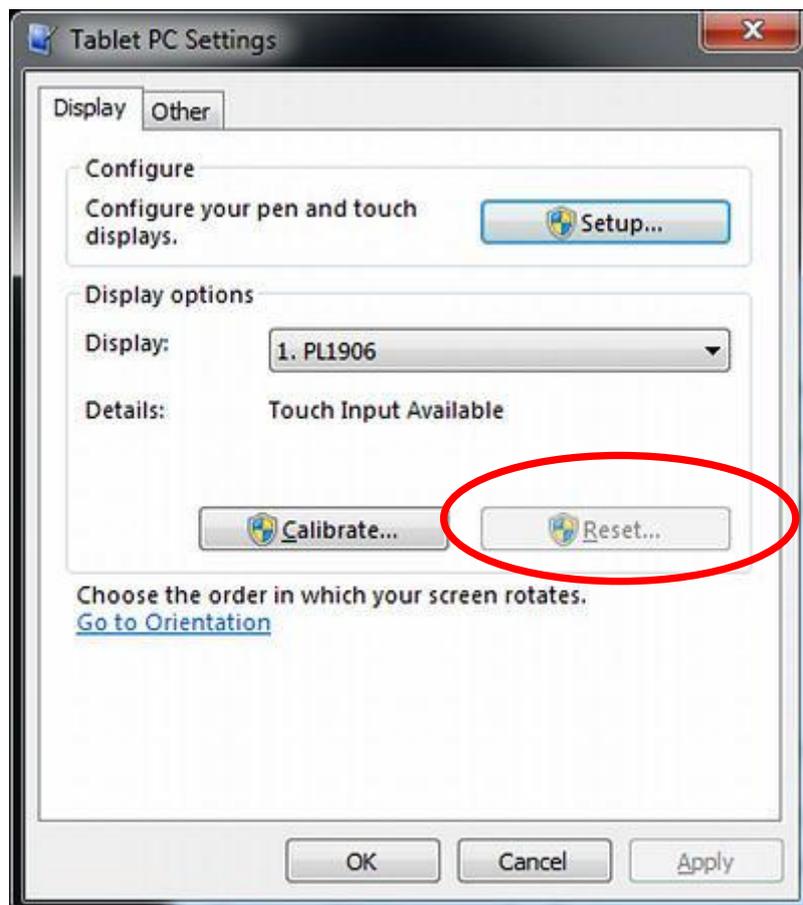
Check and confirm the calibration data.

The below screen will appear. The ideal points at calibration are indicated with blue while the touched (corrected) points are indicated with red.



Press [Enter] to end the confirmation.

Note) If you make calibration with this function, do not use Windows standard calibration function. If settings have been already made with the Windows function, the settings need to be reset beforehand.



8-1. Touch Screen Configuration

If touch screen is to be used on Windows 7 or Windows 8, the following configuration will be required.

1. Click [Open] in the [TabletPC Setting] to open the [TabletPC Settings] screen.



2. Select [Setup] in [Configure].



3. Touch the touch screen on which the below message is appearing.

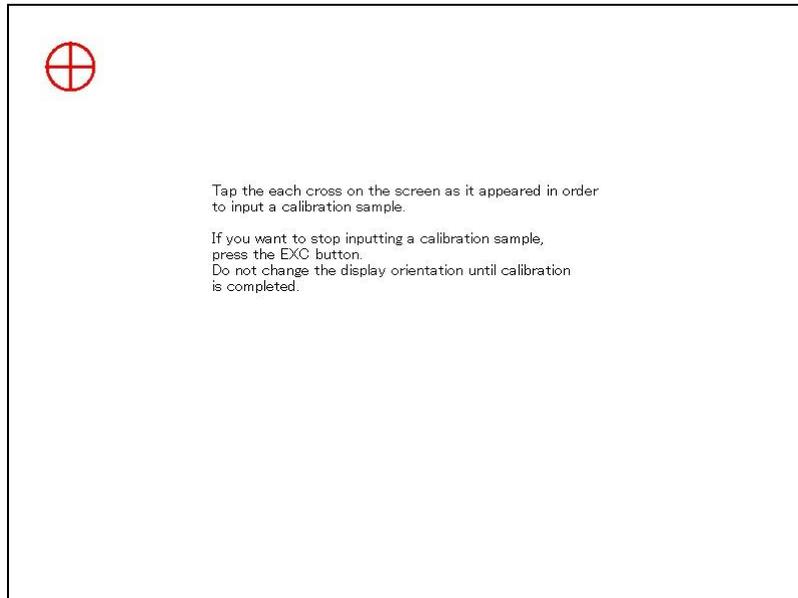


4. Repeat the above procedure 3 as many as number of the displays.

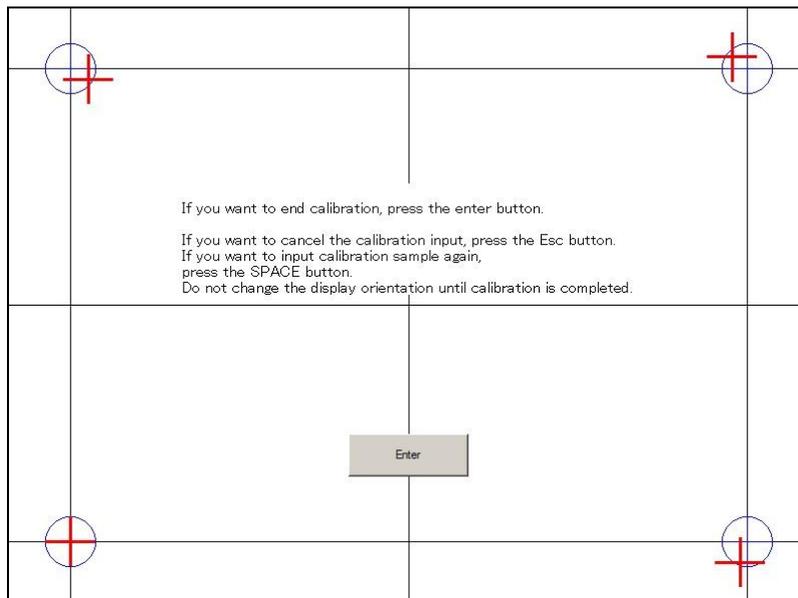
Once the above setting is completed, the cursor will become to appear on the monitors at touch.

8-2. Touch Screen Calibration

1. After selecting a driver in the touch setting screen, click [Calibrate] in display option.
2. The below calibration screen will appear on the monitor related with the touch screen of the selected driver.



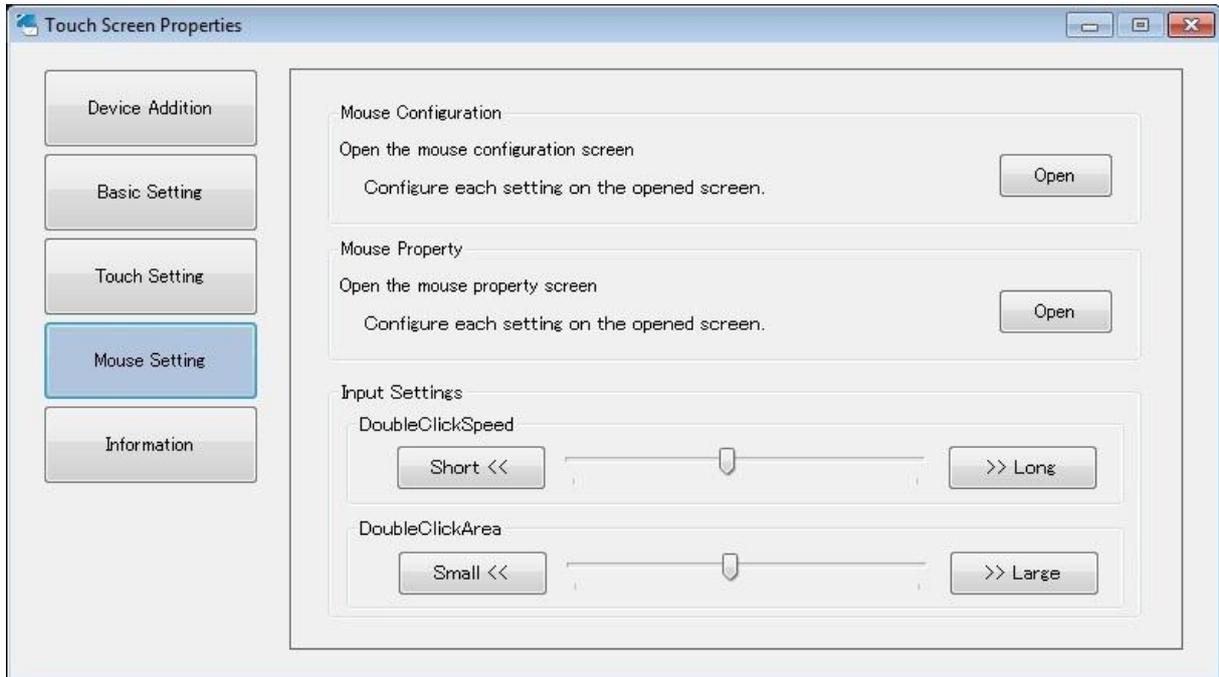
3. Touch the center of the markers on the screen. The markers will appear in order of left top, right top, left bottom and right bottom.
4. After touching all the markers, the below screen will appear.
The ideal points at calibration will be indicated with blue crosses while the touched (corrected) points will be indicated with red crosses.



5. Touch the screen to check if the calibration is successful.
If the calibration is successful, press [Enter].
If you want to make calibration again, press [Space].

If you want to cancel calibration, press [ESC].

9. Mouse Setting



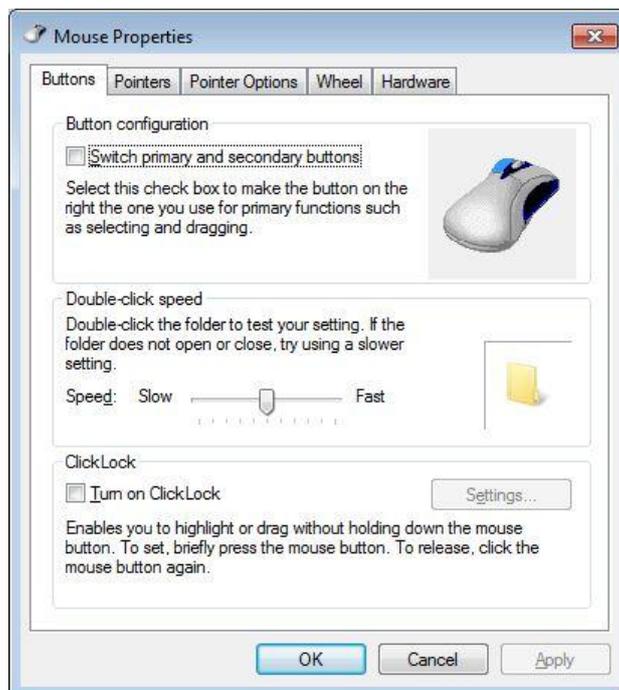
■ Mouse Configuration

Click [Open] to open the mouse configuration screen.

Refer to [9-1. Mouse Configuration Screen] in the next page for details.

■ Mouse Property

Click [Open] to open the Windows standard mouse property screen.



- Input Settings

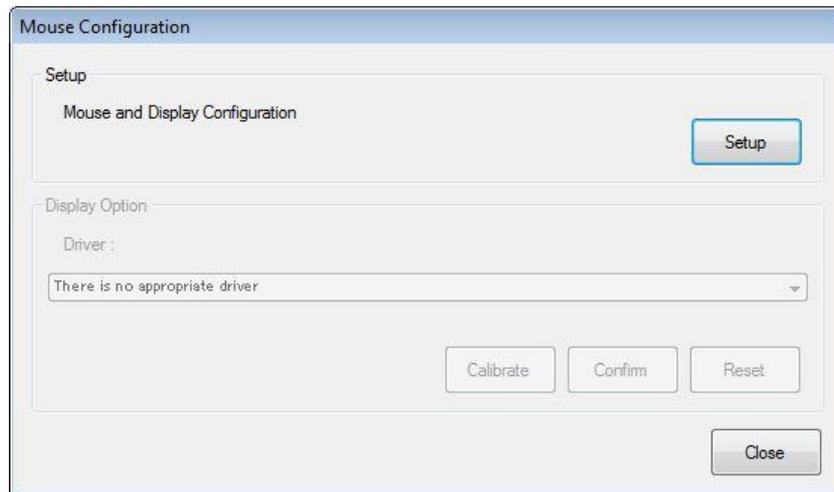
- DoubleClickSpeed

Setting for interval of time between 2 successive clicks to recognize double-click

- DoubleClickArea

Setting for area to recognize double-click (The area within which 2 successive clicks are recognized as double-click)

9-1. Mouse Configuration Screen



- Setup

You can relate mouse with monitor.

Click [Setup] to make relations.

Refer to the [9-2. Mouse Configuration] section for details.

- Display Option

- Calibrate

Software calibration can be performed on each driver.

Refer to the [9-3. Mouse Calibration] section for details.

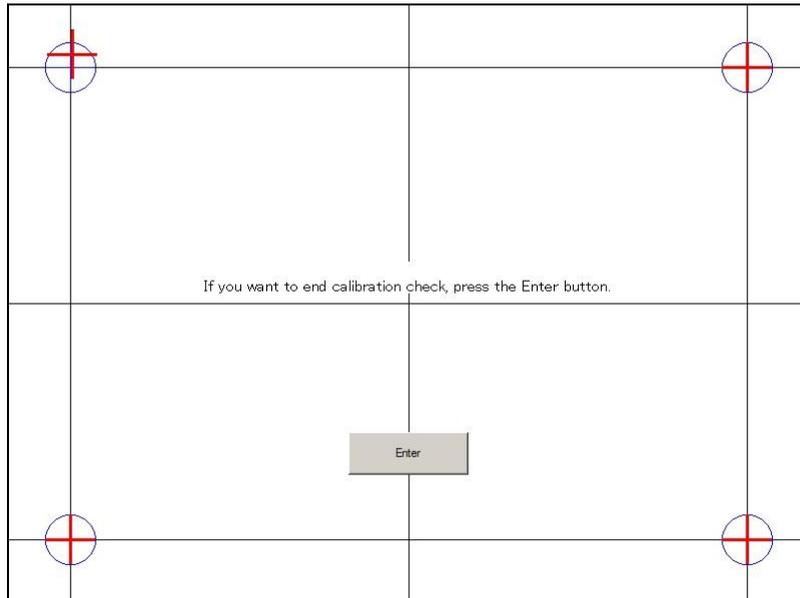
- Reset

Reset calibration result to default.

- Confirm

Check and confirm the calibration data.

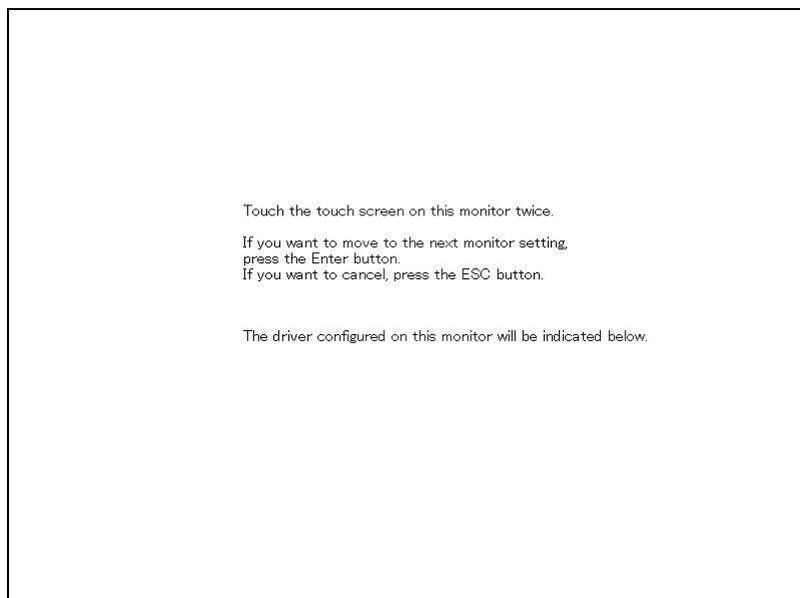
The ideal points at calibration will be indicated with blue while the touched (corrected) points will be indicated with red.



Press [Enter] to end the confirmation.

9-2. Mouse Configuration

1. Click [Setup] in the Muse Configuration screen.
2. The below screen will appear on the monitors one by one from the leftmost.



3. Tap the touch screen twice.
4. The tapped touch screen will appear on the screen.



5. Once setting of the current monitor is completed, press [Enter].

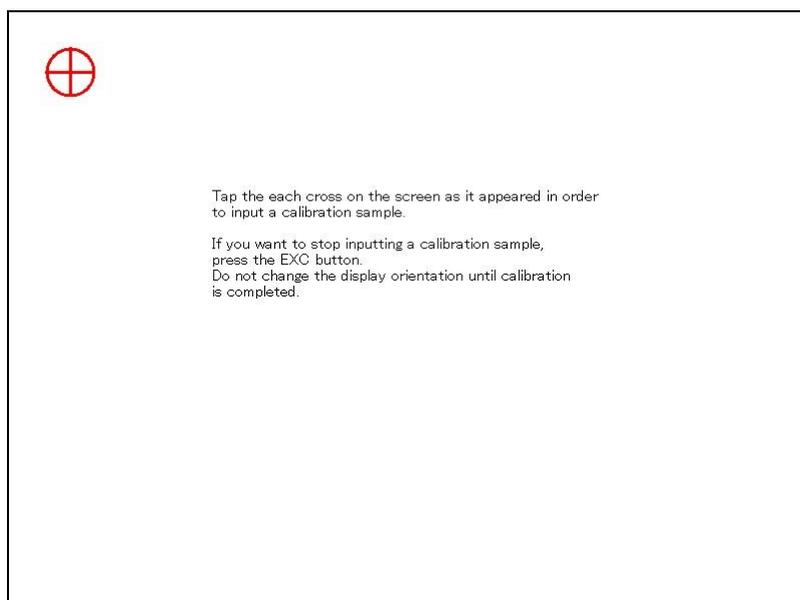
If there are multiple monitors, the screen of the above procedure 2 will appear on the next monitor.

6. Once [Enter] is pressed at the last monitor, the setting will be completed.

If you want to cancel halfway, press [ESC].

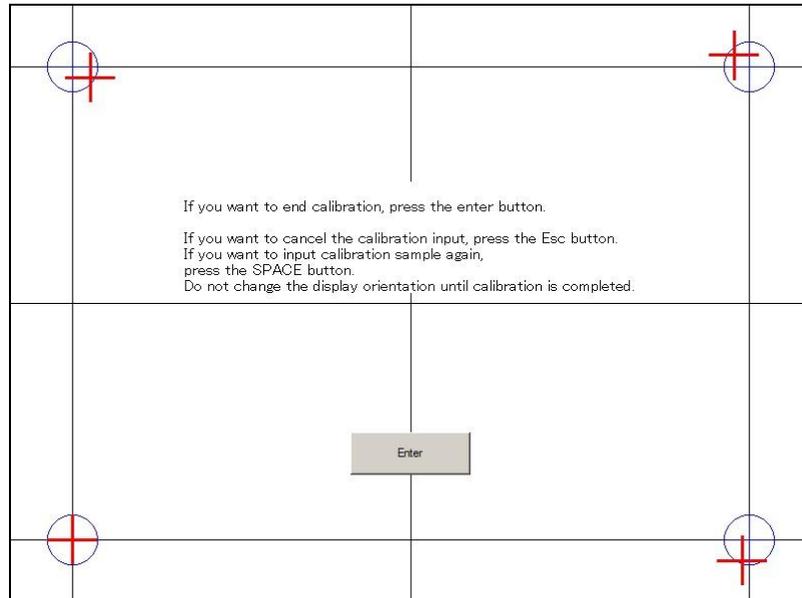
9-3. Mouse Calibration

1. After selecting a driver in mouse configuration screen, click [Calibrate].
2. The below Calibration screen will appear on the monitor related with the touch screen of the selected driver.



3. Touch center of the markers on the screen. The markers will appear in order of left top, right top, left bottom and right bottom.
4. After touching all the markers, the below screen will appear.

The ideal points at calibration will be indicated with blue crosses while the touched (corrected) points will be indicated with red crosses.



5. Touch the screen to check if the calibration is successful.
If the calibration is successful, press [Enter].
If you want to make calibration again, press [Space].
If you want to cancel calibration, press [ESC].

10. Information

Various information will be indicated.



Version information of driver and the setting tool (Touch Screen Properties) can be checked.

DUS-DD v1.3.6.13 User's Guide

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