



Multi-board Driver Installation Guide for Sharp LA Series

Sharp NEC Display Solutions Europe GmbH

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- Sharp's unique **Multi-board Driver** enables simultaneous multi-touch and pen writing on up to three LA series displays.
- Use cases: Agile workflows, Scrum, Kanban, Pull Planning and may more!



Application used on the image: Nialli
[Visual collaboration and pull planning| Nialli](#)

NOTE

- **Sharp's Multi-board Driver** is capable of simultaneous multi-touch input on multiple screens for up to three displays installed side-by-side.
- **Sharp's Multi-board Driver** is only supported by **Sharp LA Series**.

NOTE: Touch operation cannot be used during the configuration of the driver, please prepare a keyboard and mouse for setup.

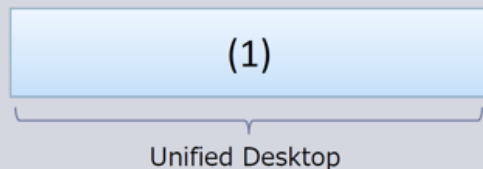
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- Windows OS can recognize multiple screens as a super single laterally long screen.
- Windows OS limitation: Configuration of three touch displays is possible, but interaction is only possible on one display at a time.
- Sharp's Multi-board Driver is capable of simultaneous multi-touch inputs on up to three displays installed side-by-side.

Setup using Multi-Board Driver

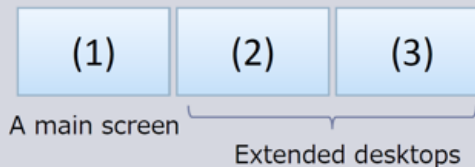
Windows recognizes the multiple displays as a super laterally long screen (unified desktop).



Simultaneous multi-touch input is available on multiple displays.

Setup without Multi-Board Driver

Windows recognizes the multiple displays as extended desktops.



Simultaneous multi-touch input is available on one display only.

1. Please refer to the **setup guide** of LA series for opening the packaging and installing the display.
2. Make sure to align the LA series displays using the **adjustment possibilities of the mounting system** used.
3. When installing two or three LA series displays side-by-side, please set the “**Multiple Display Mode**” to ON in the **ADVANCED menu** of the OSD Administrator menu to avoid ghost touches or miss behaviour of touch actions.

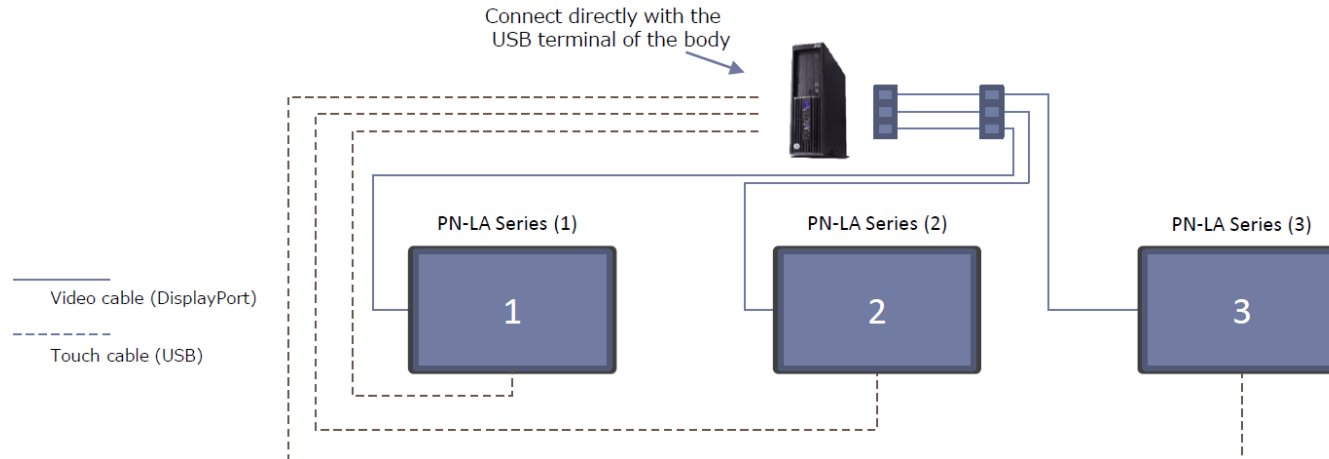
MULTIPLE DISPLAY MODE

OFF.....Normally set to “OFF” when using a single monitor. (Factory setting)

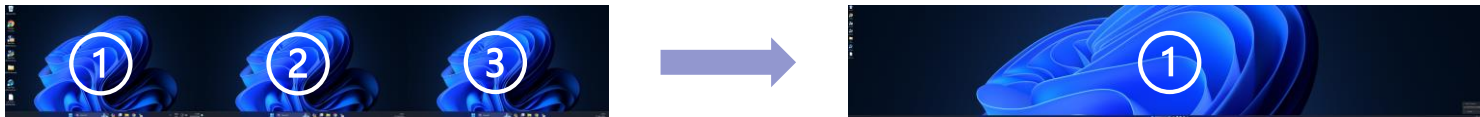
ON.....Set to “ON” when two or more monitors are used in close proximity.

4. Connect the **LA series displays to the PC** as shown in the below picture.

Note



- When using Sharp's Multi-board Driver, two or three screens of LA series need to be configured as one ultra-wide screen (unified desktop).



- The resolutions that can be supported are as follows:
 - 2 screens: 7680x2160, 3840x1080
 - 3 screens: 11520x2160, 5760x1080
- The PC used for the installation requires the desktop integration function. The following graphic functions:
 - NVIDIA "Mosaic function" / Supported graphics cards: Quadro and RTX series
 - NVIDIA RTX 6000 Ada Generation, NVIDIA RTX A6000, NVIDIA RTX A5500, NVIDIA RTX A5000
 - NVIDIA RTX A4500, NVIDIA RTX A4000, NVIDIA RTX A2000 | A2000 12GB, NVIDIA T1000 | T1000 8GB
 - NVIDIA T600, NVIDIA T400 | T400 4GB, Quadro RTX 8000, Quadro RTX 6000, Quadro RTX 5000, Quadro RTX 4000

For the latest information on supported graphics cards, please refer to the following web page.

<https://www.nvidia.com/en-us/drivers/mosaic-utility/>

- Intel "Combine Desktop function" or "Collage function"
 - Supported graphics card: 3rd generation or later Intel processor with integrated graphics

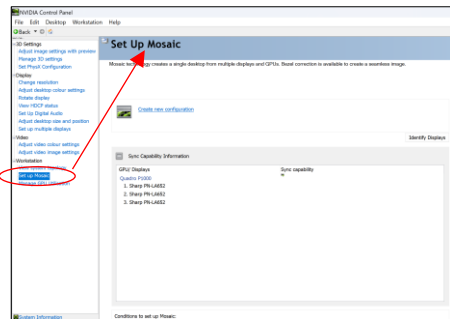
NOTE:

- Touch does not work just by integrating the desktop. You need to install "SHARP Touch Pen Management Tool" separately.
- GeForce series desktop integration (surround function) is not supported.

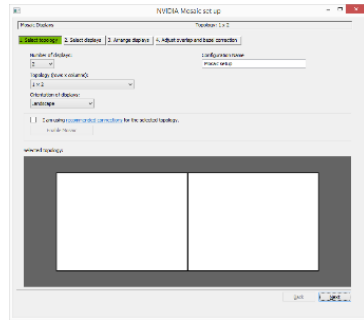
3.2 NVIDIA MOSAIC SETTINGS

1. Open the NVIDIA Control Panel and then select “Setup Mosaic”.

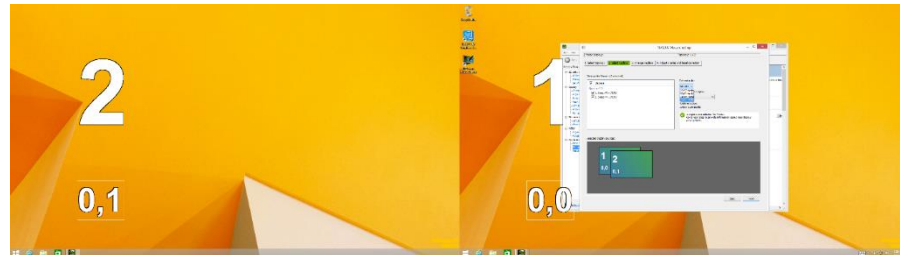
2. Select “Create New Configuration”.



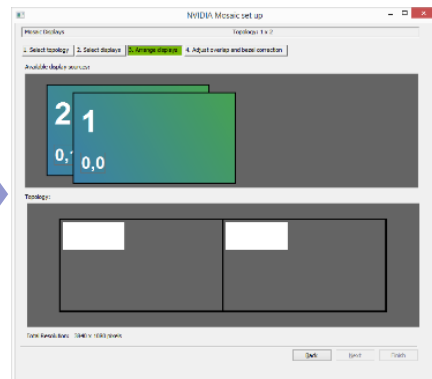
3. Configure “Number of Display,” “Topology” and “Orientation of displays” and then click “Next”.



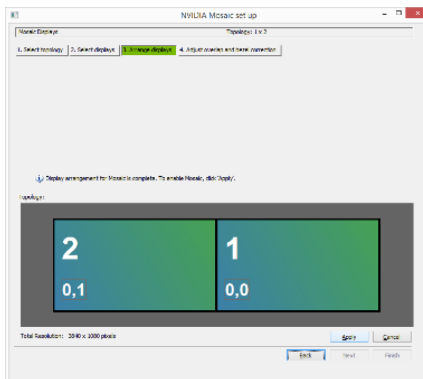
4. Select displays and then click “Next”. Set the configuration of the display and then click “Next”.



5. Arrange displays by mouse drag operation and then click “Next”.



6. Click “Apply” to save the configuration.

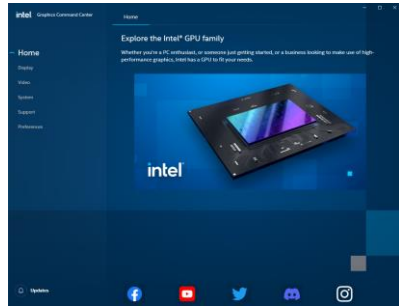


7. Click “Finish” to end the configuration.

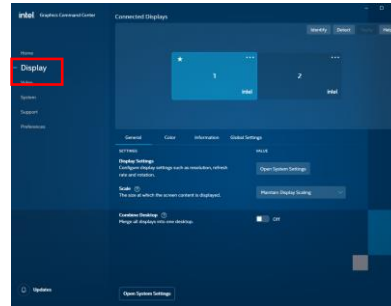
3.3 INTEL GRAPHICS COMMAND CENTER SETTINGS

Use the Intel Graphics Command Center on the PC. If it isn't installed yet on the PC, please download it from the Microsoft Store.

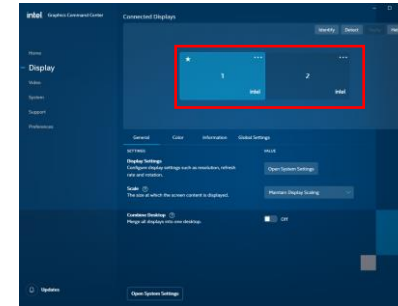
1. Open the Intel Graphics Command Center from the Windows start menu.



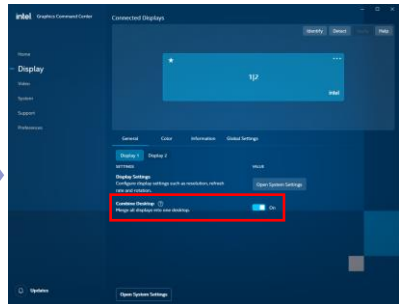
2. Select Display.



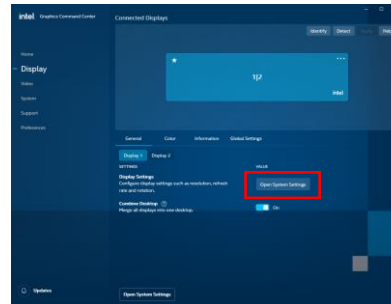
3. Setup the display configuration. Drag and drop to set the screen configuration.



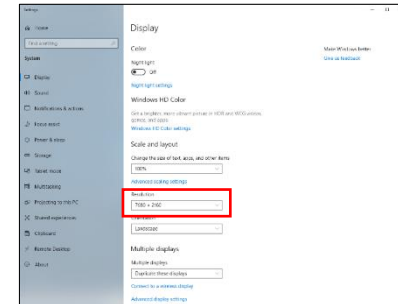
4. Set "Combine Desktop" to On.



5. To set the resolution, click "Open System Settings".

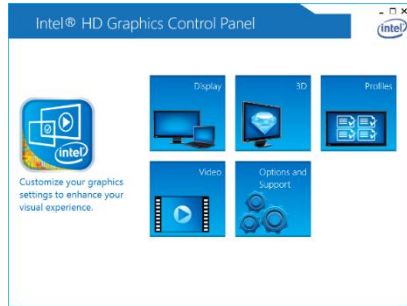


6. Select a resolution.
2 screens: 7680x2160, 3840x1080
3 screens: 11520x2160, 5760x1080

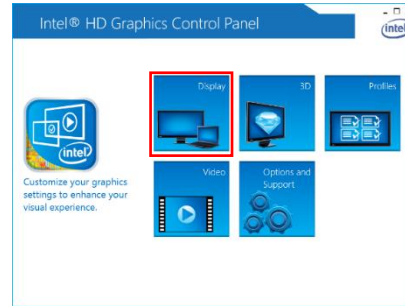


If the Intel Graphics Command Center is not available, you can configure it from the Intel HD Graphics Control Panel.

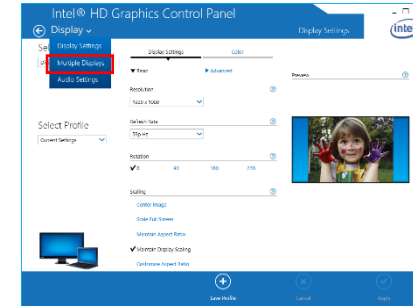
1. Right click on the desktop to open Intel Graphics Settings.



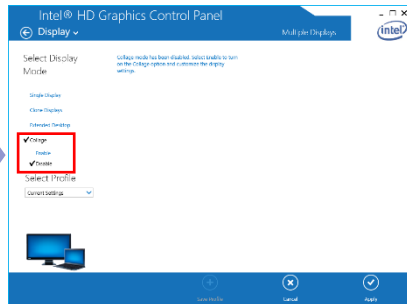
2. Select Display.



3. Select ▾ in the Display item to display the list, and then select "Multiple Displays".



4. Set Collage to Enable.



5. Set the display configuration and press “Apply” to finish the setting.

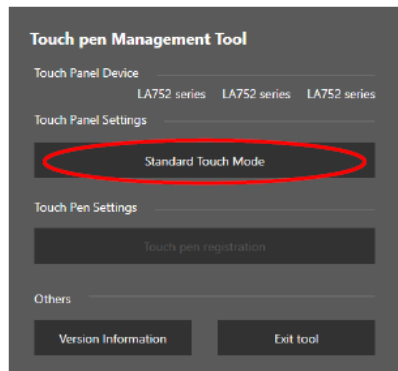


- **Touch Pen Management Tool** enables the **Multi-board Driver** (simultaneous multi-touch input) to be used.
- Install the latest version of the Touch Pen Management Tool compatible with LA series Wide Board mode. (Please contact your Sharp/NEC representative in case of any uncertainty.)
- The PC requires reboot after installing the Sharp Touch Pen Management Tool.

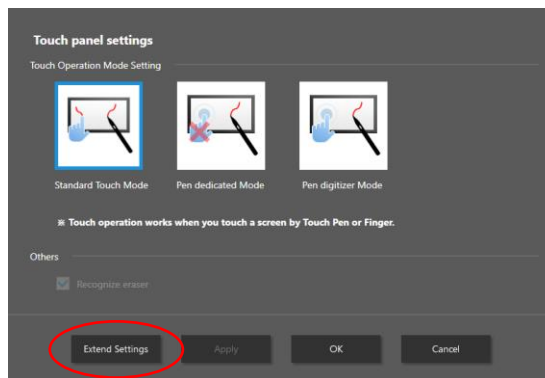
Setup of Touch Pen Management Tool

1. Open the menu of **Sharp Touch Pen Management Tool** icon in the Windows task tray.

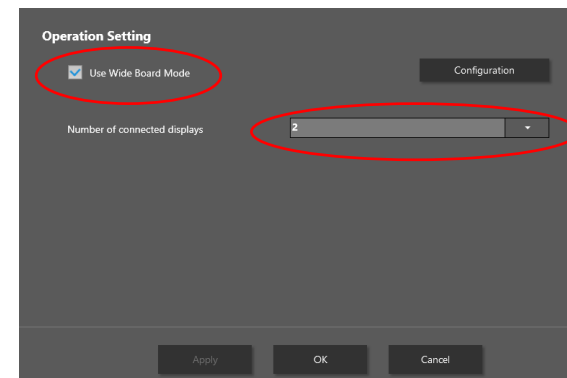
2. Select “**Standard Touch Mode**” at “**Touch Panel Settings**”.



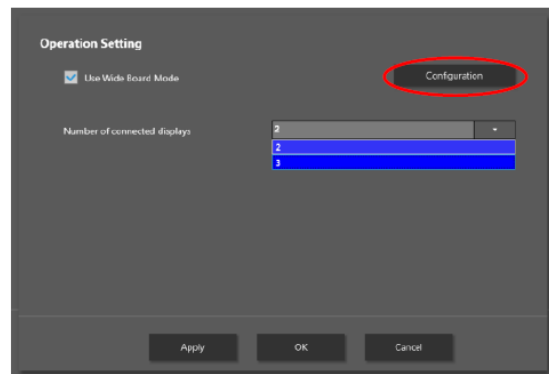
3. Select “**Standard Touch Mode**” at “**Touch Operation Mode Setting**” and click “**Extend Settings**”.



4. Enable “**Use Wide Board Mode**” and select the “**Number of connected displays**”.



5. After selecting the number of displays, click “**Configuration**”.



6. Follow the instruction displayed on the screens.

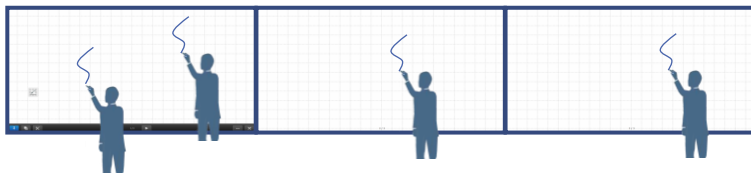
NOTE: Touch each screen only once. Double-tap might cause configuration issues.



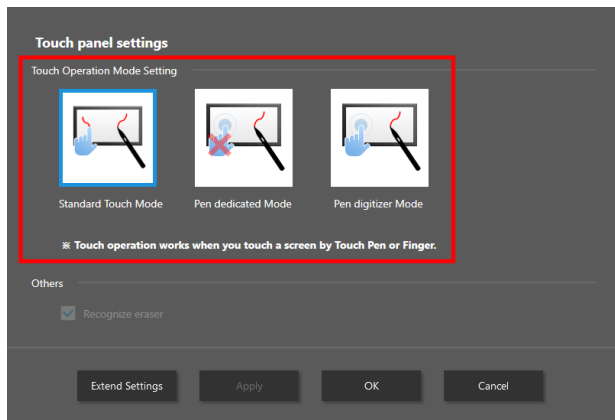
7. Click “**OK**” to save the configuration.

Using Sharp Pen Software together with Multi-board Driver

- Download the latest version of Sharp Pen Software from the [Sharp Information Display Downloader](#) application.
- Sharp's Multi-board Driver for Sharp LA Series is supported by Sharp Pen Software Ver. 3.8.2.1x



Differences in operation between the Touch Modes



- **Standard Touch Mode (recommended)**

Possible to draw with multiple stylus pens at the same time.
Possible to draw with multiple fingers at the same time.

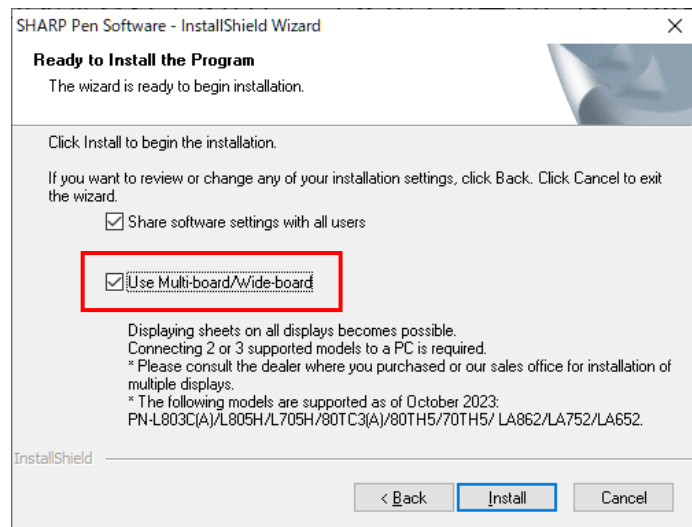
- **Pen dedicated Mode**

Operations and drawing are possible only with stylus pen.
Finger touches are ignored. Possible to draw with multiple stylus pens at the same time.

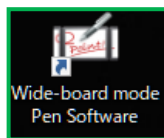
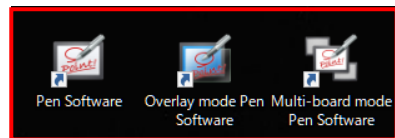
- **Pen digitizer Mode**

Finger touch and stylus pen touch are distinguished. Thick pen tip acts as an eraser.
Possible to draw with multiple fingers at the same time.
Not possible to draw with multiple stylus pens at the same time.

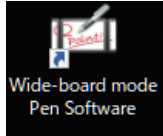
1. Run the Sharp Pen Software installer and follow the on-screen instructions to complete the installation. When the screen below will be displayed, please enable "Use Multi-board/Wide-board".



2. When using the Sharp Pen Software together with the Multi-board Driver for LA series, use need to use the version “**Wide-board mode Pen Software**”. Since standard “Pen Software”, “Overlay mode Pen Software” and “Multi-board mode Pen Software” are not supported, we recommend removing the below desktop shortcuts from the PC.



1. Run “Wide-board mode Pen Software”.



2. Click Settings.



3. Set the following in "Operation" tab to enable simultaneous drawing.
 - Set “Finger can draw” to “Enable”.
 - Set “Dual-Touch Gesture” to “Disable”.
 - Set “Simultaneous Drawing with Multiple Fingers” to “Enable”.

Basic	Operation	Default	Window	View	Sheet	Object
Other	Language	About				
Finger can draw		Enable Disable				
Select with Finger in Pen mode		Enable Disable				
Dual-Touch Gesture		Enable Disable				
Simultaneous Drawing with Multiple Fingers		Enable Disable				
Automatically Find Eraser		On Off				
* In order to use this function, it's necessary to connect touch panel which support eraser function.						
Sheet Expansion Gesture		Enable Disable				
Restore Default Settings		OK		Cancel		

Limitations of Multi-board Driver:

1. Only 2 or 3 units of LA series displays installed horizontally can be supported.
2. The supported resolutions are as follows: 2 screens: 7680x2160, 3840x1080; 3 screens: 11520x2160, 5760x1080
3. Set the connected PC not to go in sleep mode. Rarely, multi-touch operation might not be operated normally in returning the PC from sleep mode.

Limitations of Sharp Pen Software together with Multi-board Driver:

1. Only “Wide-board mode Pen Software” is supported.
2. Wide-board mode requires that screen size is 7680x2160, 11520x2160, 3840x1080 or 5760x1080. And it requires display scale 100%.
3. If two screens are used, windows which are displayed in the center normally are shifted to overlap the display bezel. Some windows, like as on-screen-keyboard and external applications, may be not shift and therefore overlap the display bezel.
4. Sheet/board zooming/scaling, search, WEB search, spotlight, screen shade, bookmark (paid function) cannot be used. The sheet/board size is fixed to the screen size. In addition, the board list cannot be used, and the board cannot be windowed.
5. Operations were checked in the following environment: Depending on the performance of the PC, the drawing performance will decrease. In that case, please reduce the resolution to 3840x1080 (2 screens) or 5760x1080 (3 screens). CPU: Core i7-7700; RAM: 8GB; Graphics: NVIDIA Quadro P4000



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