

User's Manual ShadowSense™ Touch

- MultiSync® E705 SST
- MultiSync® E805 SST
- MultiSync® E905 SST
- MultiSync® P403 SST
- MultiSync® P463 SST
- MultiSync® P553 SST
- MultiSync® P703 SST
- MultiSync® P801 SST
- MultiSync® X651UHD-2 SST
- MultiSync® X841UHD-2 SST
- MultiSync® X981UHD-2 SST

For using Touch Panel

- 1. Turn off the monitor.
- 2. Install the equipment.*1

- Using slot 2 type PC (OPS):

Connect the slot 2 type PC into the option board slot. Connect the B type connector to the USB upstream port on the left back side of the monitor and the A type connector to the downstream port on the slot 2 type PC.

NOTE: Please refer to the slot 2 type PC's manual for connection.

NOTE: When you set option board accessory other than slot 2 type

PC, touch function may not work.

- Using external computer:

Connect the B type connector to the USB upstream port on the left back side of the monitor and the A type connector to the downstream port on the external computer *(Figure 1).*

NOTE: On all ShadowSense touch displays from 40" up to 80", the USB connector type B is located on the left back side of the monitor, above the OPS slot. (*Figure 2*)

NOTE: On all ShadowSense touch displays from 84" up to 98", the USB connector is located on the bottom of the right back side of the monitor. *(Figure 3)*



Figure 2:



Figure 3:





- 3. Turn on the monitor.
- *1: Please contact your NEC customer support for more detailed information.

Monitor Setting

Select the input signal.
Using slot 2 type PC (OPS): Select [OPTION]
Using external computer: Select the input signal which is supplied by the PC connected to USB connector.

NOTE: Touch function does not work in PIP mode.

NOTE: Intelligent Wireless Data (NFC) communication is not supported with NEC ShadowSense touch screens.



Operating System Support Summary

| os | Single Touch | Native Multi-Touch Support | Custom Multi-Touch Support | Comments |
|----------------------------|--|-------------------------------|---|---|
| Win XP, Win XP Embedded | Yes, mouse emulation | NO | Yes, through Baanto SW Development Kit (SDK) | |
| Win 7 (all) | Yes | Yes | Yes, through Baanto SW Development Kit (SDK) | |
| Win8 (all) | Yes | Yes | Yes, through Baanto SW Development Kit (SDK) | |
| Mac OSX | Yes, with special EEPROM setting, R6.00 firmware | NO | Yes, through Baanto SW Development Kit (SDK) | Mouse data needs to be adjusted in MAC Os's to work propely. R6.00 Firmware allows user to configure MAC compatibility mode via Dashboard |
| Linux | Yes | Yes | Yes, through Baanto SW Development Kit (SDK) | All Linux variants (Fedora, Ubuntu, etc.) require a base Linux kemel of 3.4 for native support. Otherwise, support is not guaranteed but might still be possible with analysis |
| Android | Yes | Yes | Yes, through Baanto SW Development Kit (SDK) | Requires base kernel to be 3.4 or above for support |



NEC Dashboard Configuration Tool

ShadowSense algorithms offer a variety of parameters that can be used to customize the touch screen's performance.

The Dashboard software tool provides customers with the ability to easily modify the behavior of the touchscreen based on various use cases. It allows the user to adjust the performance and touch characteristics of the touchscreen such as to provide spurious touch and palm rejection, debris and static object recognition, rain and fluid cancellation and to enable/disable various features, like automatic pen & eraser detection.

NOTE: The latest NEC Dashboard configuration tool including user guide for the Dashboard tool is available for download on <u>www.nec-display-solutions.com</u>.





Re-Calibration

If the cursor fails to follow exact finger position, the screen can be re-calibrated using the calibration process in the NEC Dashboard tool.

NOTE: The following calibration process requires Dashboard version 2.0.6078.27074 or later.

Open Dashboard and browse to the *Configuration* menu and begin by clicking the *Calibration* button under the *Setup Hardware* setting. This is shown in Figure 4.

Figure 4: Calibration with NEC Dashboard

| Calibrate | | ? |
|-----------|-----------------|---|
| | | |
| | reset calibrate | |
| | | |

Once the calibration process has started, a user has 60 seconds to complete it. If calibration is not completed in this time then it can simply be restarted. The process can be aborted at any time by clicking the abort button at the bottom of the screen, and the user can also click the back button at any time to repeat the most recent change.

The calibration process will require the user to touch and hold four registration points shown on the screen. Each registration point will appear as a light grey circle with a crosshair in the middle. The accuracy of the calibration process is determined by how close a user touches the center of each registration point. The initial registration point will appear in the top left corner of the screen as shown in Figure 5.



Figure 5: First registration point at start of calibration process



The user is required to touch and hold their finger at the intersection of the crosshair until the touch is registered and stored in memory. A green crosshair will appear at the point where the user first touches the screen as shown in Figure 3. This is the current location of the registered touch and should not be confused with the target. **Do not try to drag this green crosshair onto the registration point.**

The user should then move their finger so that it is directly over the registration point and hold it in place for about 4 seconds. The duration in which the point is held is shown as a sweeping grey circle in Figure 4. When the entire circle goes from dark grey to light grey, the initial target will be replaced by a green crosshair showing that the new touch point has been registered. This is shown in Figure 5. If a user removes their finger before this occurs then they must restart the process for that particular registration point.

After the first touch point has been registered, the process repeats itself with a registration point appearing in the top right corner, then the bottom right corner, and finally the bottom left corner. When the entire process is complete, the screen should look similar to the screenshot shown in Figure 6.

If the calibration process has been performed correctly then the touchscreen should now be ready for use. Users should not see a significant difference between the location of their finger or stylus, and the pointer that is shown on the screen. If the gap is more than a few millimeters apart then repeat the calibration process.

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Figure 7: Sweeping grey circle showing duration of hold (Light Grey = Time Held, Dark Grey = Time Remaining)









Figure 9: Calibration screen once all points are registered



Disposal Instruction

NEC products are meeting all EU norms regarding safety, health and environmental requirements.





WEEE Mark (European Directive 2002/96/EC)

This includes monitors and electrical accessories, such as signal cables or power cords. When you need to dispose of your NEC display products, please follow the guidance of your local authority, or ask the shop where you purchased the product, or if applicable, follow any agreements made between yourself and NEC.

The mark on electrical and electronic products only applies to the current European Union Member States.

Outside the European Union

If you wish to dispose of used electrical and electronic products outside the European Union, please contact your local authority so as to comply with the correct disposal method.

NEC Display Solutions Europe GmbH

Landshuter Allee 12-14 D – 80637 München Phone: +49 (0)89 99 699-0 Fax: +49 (0) 89 99 699-500 <u>infomail@nec-displays.com</u> www.nec-display-solutions.com

