SHARP®

LCD MONITOR

TOUCH PANEL DRIVER 2 OPERATION MANUAL

for Mac

Version 1.4

Applicable models (as of September 2015)   Available models differ according to region.

PN-L series (PN-L803C/PN-80TC3/PN-L703A/PN-70TA3/PN-L703B/PN-70TB3/PN-L603A/PN-60TA3/PN-L603B/PN-60TB3)
PN-C series (PN-C703B/PN-70SC3)
PN-ZL01/PN-ZL02/PN-ZL03

Contents

Important Information

- This software has been shipped after strict quality control and product inspection. If, however, you find any failure or malfunction, contact your product dealer.
- Please understand that SHARP CORPORATION bears no responsibility for errors made during use by the customer or a third party, nor for any other malfunctions or damage to this software arising during use, except where indemnity liability is recognized under law.
- Transcribing or duplicating part or all of this manual and/or this software without permission from our company is not permitted.
- As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice.
- The contents or details may vary depending on the screen configuration and OS version, etc.
- This manual does not contain basic operating instructions for Mac OS.

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Introduction

System Requirements

The touch panel driver 2 is a program that enables you to use the touch panel to operate the computer that is connected to the touch panel.
To use the touch panel, the touch panel must be connected to a computer, and the touch panel driver 2 must be installed on the computer. This manual refers to the touch pen that is included with the PN-L803C/PN-80TC3/PN-L703A/PN-70TA3/PN-L603A/PN-60TA3 and PN-ZL01/PN-ZL02/PN-ZL03 as "active pen" (3 button pen).

OS	Mac OS X v10.7, Mac OS X v10.8, Mac OS X v10.9, Mac OS X v10.10
CPU	Intel processor
Memory	At least 2 GB
Free space on hard drive	At least 5.5 MB

TIPS

- Depending on the application software, touch operation may not be possible (for example, if the application processes mouse and other operations independently).
- To use an active pen, the touch pen adapter* must be connected to the monitor. For details, refer to the manual for the monitor.
  * PN-L803C/PN-80TC3/PN-L703A/PN-70TA3/PN-L603A/PN-60TA3 : Supplied
    PN-L703B/PN-70TB3/PN-L603B/PN-60TB3   : Sold separately (PN-ZL01)

!Caution

- Two or more active pens cannot be used at once.
- The PN-C series does not support active pens.

Setting up the Computer

Install

- To install, an administrator name (user name) and password are required.
- If an older version of the touch panel driver 2 is installed, remove (uninstall) the old version before installing the touch panel driver 2. (See page 16.)
- Do not touch the touch panel when connecting the USB cable.
  If you touch the touch panel, it will lead to a malfunction. In this case, disconnect and then reconnect the USB cable.

1. **Start your computer.**
2. **Exit all applications that are running.**
3. **Connect the USB cable for the touch panel to the computer.**

   PN-L703A/PN-70TA3/PN-L703B/PN-70TB3/PN-L603A/PN-60TA3/PN-L603B/PN-60TB3

   USB 1 port*
   To the USB terminal of the computer
   USB 2 port*
   USB cable
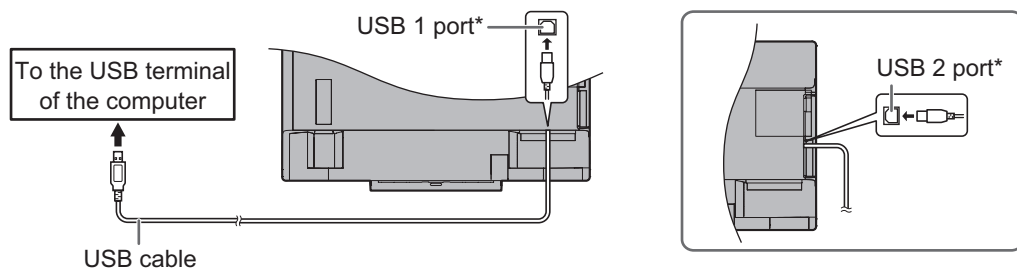
   * To use a touch panel with a computer connected to the bottom, connect to the USB 1 port.
   To use a touch panel with a computer connected to the side, connect to the USB 2 port.
   (Factory setting. Can be changed in TOUCH INPUT SELECT in the SETUP menu.)

   PN-L803C/PN-80TC3

   USB 1 port*
   To the USB terminal of the computer
   USB 2 port*
   USB cable
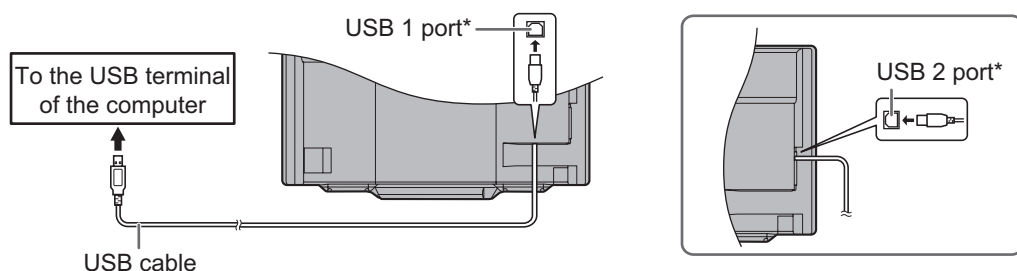
   * The USB port varies depending on the terminal connected to the computer.

D-sub 1 input terminal/DisplayPort input terminal/HDMI 1 input terminal	USB 1 port
D-sub 2 input terminal/HDMI 2 input terminal/HDMI 3 input terminal	USB 2 port

   (Factory setting. Can be changed in TOUCH INPUT SELECT in the SETUP menu.)

   PN-C703B/PN-70SC3

   USB cable
   To the USB terminal of the computer
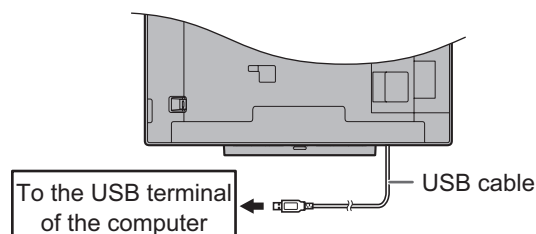
4. **Double-click the setup program.**
   \TouchPanel\Mac\SharpTouchPanel2.pkg

5. **Click "Continue".**
   Follow the on-screen instructions to install the driver.
   - If a screen prompting you to enter the name and password appears, enter the name and password of the administrator and click "Install Software" (or "OK").
   - If the "When this software finishes installing, you must restart your computer. Are you sure you want to install the software now?" screen appears, click "Continue Installation".
6. **When the installation finished screen appears, click "Restart".**
   This completes the installation of the touch panel driver 2.

Each time the computer is started, the touch panel driver 2 will start automatically to enable the touch panel to be used.
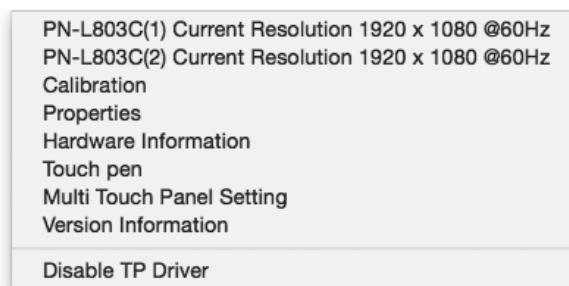
Touch Panel Settings

The touch panel driver 2 starts automatically and the icon (✎) appears on the menu bar.

How to configure settings
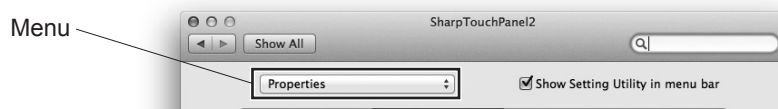
■Configuring settings from the menu bar

1. **Click the touch panel driver 2 icon (✎) on the menu bar.**
2. **Click a menu to change a setting.**

PN-L803C(1) Current Resolution 1920 x 1080 @60Hz
PN-L803C(2) Current Resolution 1920 x 1080 @60Hz
Calibration
Properties
Hardware Information
Touch pen
Multi Touch Panel Setting
Version Information

Disable TP Driver

- Current Resolution: The model currently being used and the current screen resolution appear.
- Calibration: See page 8.
- Properties: See page 9.
- Hardware Information: Hardware information appears.
- Touch Pen (only when a touch pen adapter is connected): See page 11.
- Multi Touch Panel Setting (only when 2 touch panels are connected): See page 7.
- Version Information: Shows the version of the touch panel driver 2.
- Disable TP Driver:
  Select to disable the touch panel function.
  To disable a single touch panel function, see "Function Setting". (See page 10.)

■Configuring settings from System Preferences

1. **Click "System Preferences" from the Apple menu (🍎).**
2. **Click "SharpTouchPanel2".**
3. **Click the menu and select settings.**

Menu ———

SharpTouchPanel2

Show All

Properties ↕   ☑ Show Setting Utility in menu bar

Double Click Range   Double Click Speed   Secondary click   Function Setting

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TIPS

- If the "Show Setting Utility in menu bar" checkmark is removed, the touch panel driver 2 icon (✎) does not appear on the menu bar.
- The color of the touch panel driver 2 icon varies depending on whether or not a touch pen adapter is connected.
  Touch pen adapter connected: Blue
  Touch pen adapter not connected: Green

Multi Touch Panel Setting

If 2 touch panels are connected at the same time, specify which USB connection is connected to which display.

■Settings when two devices are connected at the same time
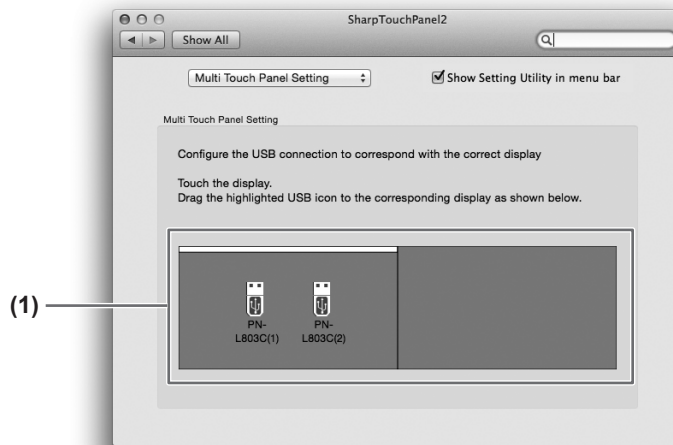
1. **Touch the touch panel and check the USB that is connected to the touch panel.**
   A red frame appears around the USB icon in (1) above.
2. **Drag the USB icon with the red frame on screen (1) to the corresponding monitor.**

TIPS

• Only the PN-L803C/PN-80TC3 supports multiple touch panels.

Calibration

If black bands appear at the top and bottom or left and right of the screen, perform position adjustment so that the mouse cursor correctly moves to the point that is touched.
* If black bands appear both at the top and bottom and at the left and right, the touch position is not correct. In this case, change the display.
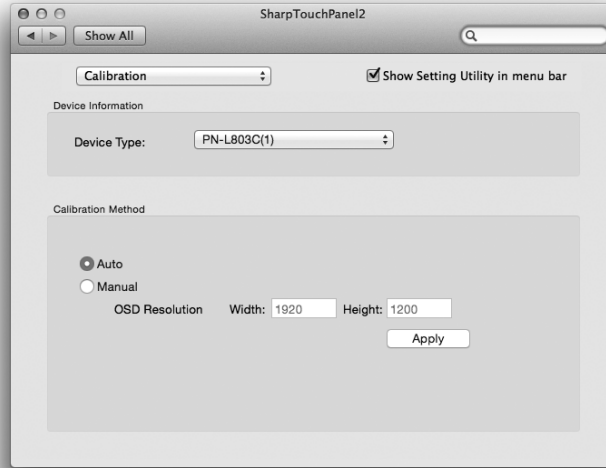
■Device Information
Select the model to be calibrated.

■Calibration Method
Execute calibration of the selected model.

Auto
If black bands appear on the screen, position adjustment is automatically performed.
Select "Auto" and click on "Apply".

Manual
If the automatically adjusted touch position is not correct, perform manual calibration. The PN-L series and PN-C series have different calibration methods.

• PN-L series
  Enter the display resolution (Width, Height) and click "Apply".
  To check the monitor resolution, see the manual for the LCD Monitor.

• PN-C series
  When you click "Apply", a setting screen appears. (4-point touch screen)
  Follow the instructions on the screen.
 To cancel, press the [ESC] key on your keyboard.

Properties

Settings for the touch action can be configured in the properties.

■Double Click Range

Set the range over which the position can shift between the first touch and the second touch and still be recognized as a double-click ("Narrow" (8 pixels) to "Wide" (64 pixels)). To return the setting to the default setting, click "Default" (32 pixels).
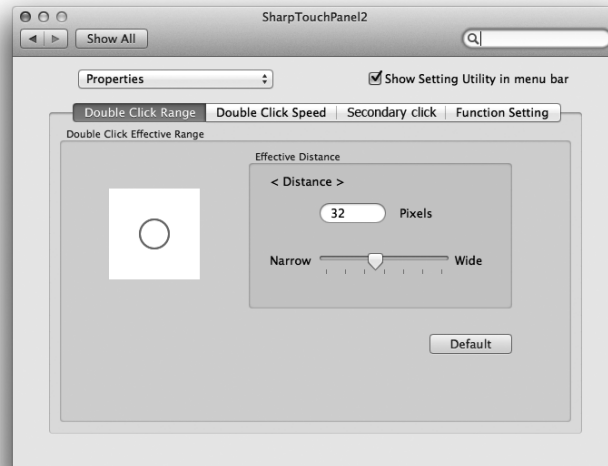
■Double Click Speed

Set the time that is recognized as a double-click. When a second touch occurs within the set time after the first touch, it is recognized as a double-click.
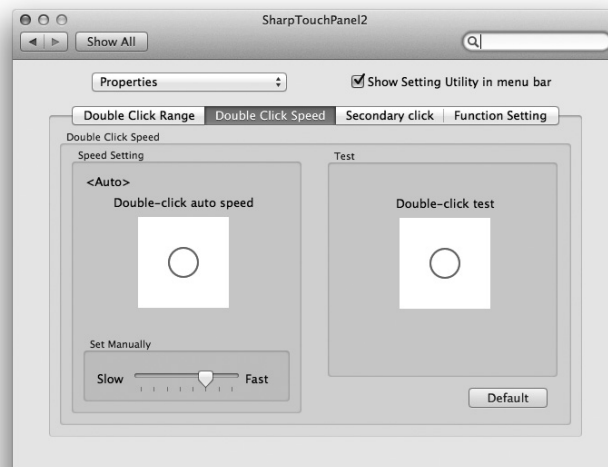
Speed Setting (Auto)
The inside of the frame can be touched twice (double-clicked) to set the speed automatically based on the interval between the touches.

Set Manually
The speed can be set manually from "Slow" (about 1 second) to "Fast" (about 0.3 seconds).

Test
When the inside of the frame is double-clicked by touching it twice, the screen changes. If the screen does not change, repeat the setting.
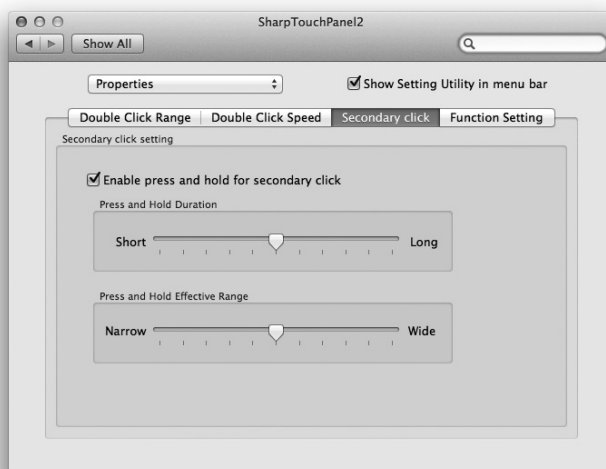
Default
Click to restore the default setting.

> TIPS

• Depending on the application software, changing the setting may not have any effect (for example, if the setting is set separately in the application).

■Secondary click

You can set press and hold to be recognized as a secondary click.*

Enable press and hold for secondary click

When the checkbox is selected, press and hold is recognized as a secondary click.

Press and Hold Duration

Set the time until press and hold is recognized as a secondary click ("Short" (0.5 sec) to "Long" (1.5 sec)).

Press and Hold Effective Range

Set the effective range for determination that the screen is being touched continuously ("Narrow" (0 pixels) to "Wide" (20 pixels)).

* If the Mac OS left-click long press action interferes with the press and hold action, do the following:
 • Use "Click or tap with two fingers"
 • Adjust "Press and Hold Duration" to a longer setting (toward "Long")

■Function Setting

Select the touch action to be used. (See page 17.)

Touch actions that are followed with a ▼ mark have multiple actions that can be used. Click a touch action and selected the desired action.

! Caution

• Touch actions that can be used vary depending on the OS.
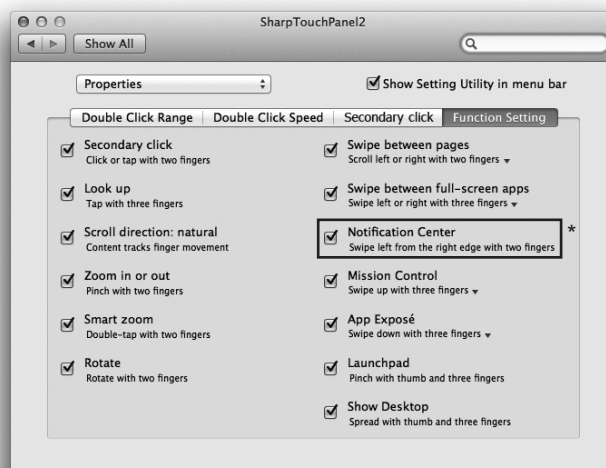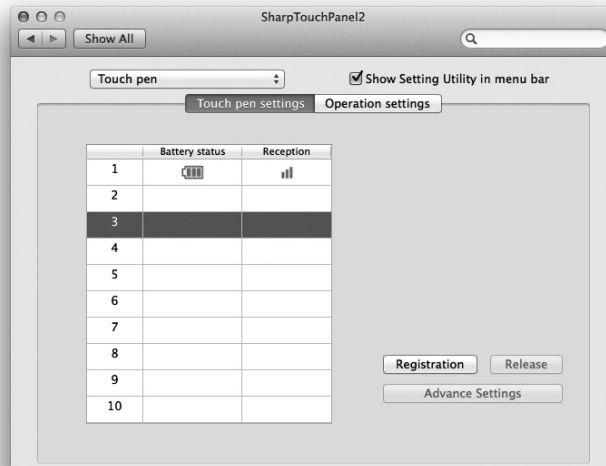

* OS X v10.8/v10.9/v10.10 only

Touch pen settings

Touch pen

Settings for an active pen can be configured. (The PN-C series does not support active pens.)
To configure the settings, the touch pen adapter that has the active pen registered must be connected.

■Touch pen settings

Register or delete an active pen, and configure button and pen pressure settings.

Registration

Register active pens (pairing). (Maximum of 10 pens.)
When active pen pairing is successful, the pen settings screen appears. You can register/delete pens, and configure various pen settings.

1. **Prepare the active pen.**

   For details on installing batteries and other preparations, refer to the manual for the monitor.
2. **Select a line in the touch pen settings screen that does not have a pen registered, and click [Registration].**
   The screen below appears.
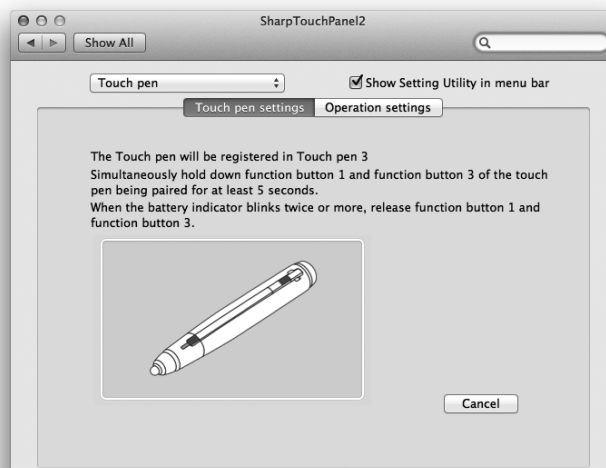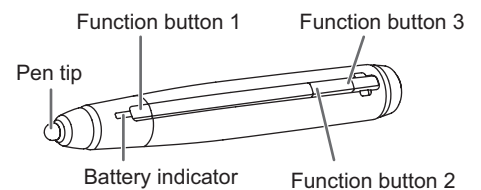

3. **Simultaneously hold down function button 1 and function button 3 of the active pen being paired for at least 5 seconds.**
4. **When the battery indicator blinks twice or more, release function button 1 and function button 3.**
   A message appears after completion of pairing.
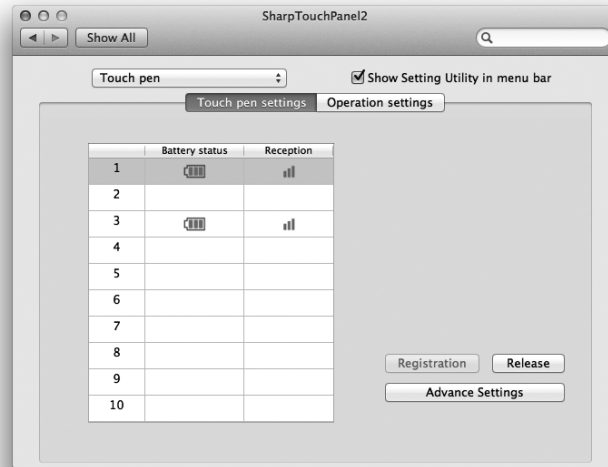5. **Click [OK].**
   The pen settings screen appears. (See page 12.)

TIPS

• One touch pen cannot be registered in multiple touch pen adapters.

Touch pen settings

Shows the registration number, the battery level and the signal strength of the active pen being used.
You can delete a registered active pen and configure various settings.

Release
Delete the registration of an active pen.
1. **Click the active pen you want to cancel in the touch pen settings screen.**

2. **Click [Release].**

Advance Settings
Configure button settings (see page 13) and pen pressure settings (see page 14).
Separate settings are configured for each pen.
1. **Click the active pen whose settings you want to change in the touch pen settings screen.**

2. **Click [Advance Settings].**

TIPS

• Alert settings for low battery (OS X v10.8/v10.9/v10.10 only)
  When the battery is low, an alert appears in the top right corner of the monitor screen.
  To change the alert display method, select "Sharp Touch Panel2" from "System Preferences" - "Notifications" in the Apple menu (). Select from the three methods below.

  None ....Not displayed
  Banners..........Displayed for about 10 seconds (factory default setting)
  Alerts..............Displayed until "Close" is pressed

■Button Settings

Assign functions to the function buttons of the active pen.
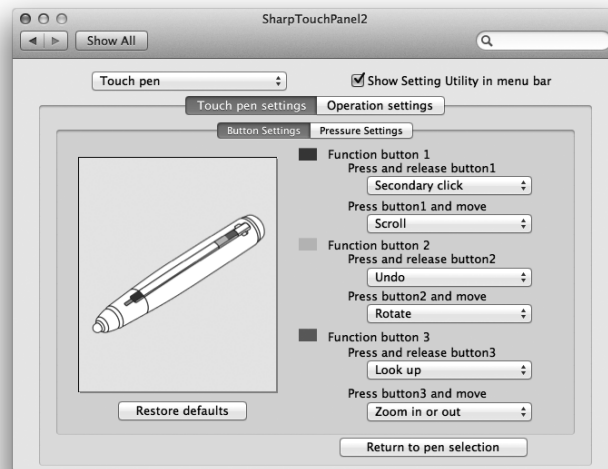
The factory default settings are shown below.

	Button action	Function
Function button 1	Press and release button1 *1	Secondary click
	Press button1 and move *2	Scroll
Function button 2	Press and release button2 *1	Undo
	Press button2 and move *2	Rotate
Function button 3	Press and release button3 *1	Look up
	Press button3 and move *2	Zoom in or out

The functions below can be assigned to Function button 1, Function button 2 and Function button 3.

Button action	Function
Press and release button1/Press and release button2/ Press and release button3	Secondary click, Look up, Undo, Redo, Back, Forward, PageUp, PageDown, Disable
Press button1 and move/Press button2 and move/ Press button3 and move	Scroll, Rotate, Zoom in or out, Shift, Option, Command, Show Desktop, Disable

*1 Press and release the button without moving the pen
*2 Move the pen while holding down the button

Restore defaults
Click to return to the default setting (factory default setting).
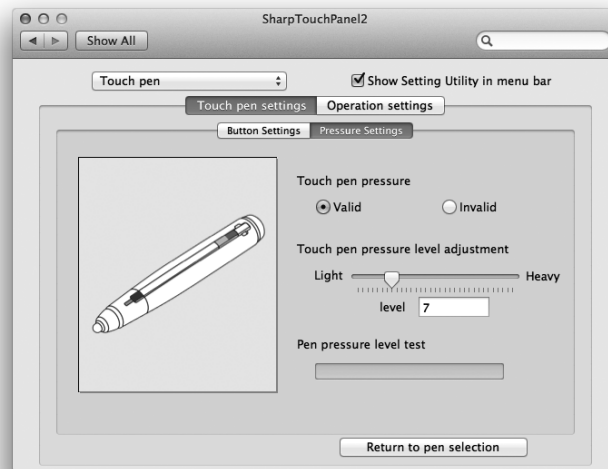
Return to pen selection
Click to return to the Release / Advance Settings screen (see page 12).
Settings for another active pen can be configured.

■Pressure Settings
Configure the pressure settings of the active pen.

Touch pen pressure
Set pen pressure mode of the active pen to Valid/Invalid.

Touch pen pressure level adjustment
Set the pen pressure at which the touch panel recognizes the pen.

Pen pressure level test
Shows the pen pressure level.

Return to pen selection
Click to return to the Release / Advance Settings screen (see page 12).
Settings for another active pen can be configured.

Operation settings

Input mode

Set the input mode for the touch panel. It is normally recommended that you use "Standard".
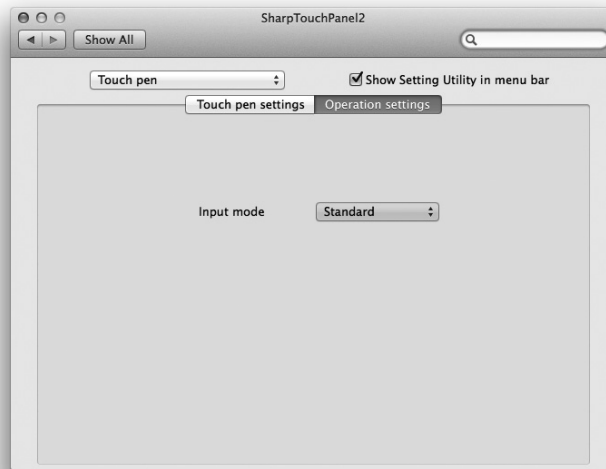
- Standard : Automatically switches between pen mode and handwriting mode.
- Pen : The touch pen functions can be used. Your finger or a pen other than a touch pen cannot be used to draw. Finger actions are possible.

Uninstall

• To uninstall, an administrator name (user name) and password are required.

1. Disconnect the USB cable.
2. Execute uninstall.
   (1) Double-click the "TouchPanel" folder, and then double-click the "Mac" folder.
   (2) Double-click "SharpTouchPanel2 Uninstaller.app".
   (3) Click "Uninstall".
     • If a screen prompting you to enter the name and password appears, enter the name and password of the administrator
      and click "OK".
3. When the uninstall finished screen appears, click "Quit".

This completes the uninstallation.

Touch Action

To touch with the touch pen, use pen mode. The factory default setting is automatic switching of the input mode. (Standard)

- In addition, read the manual for the monitor.
- Select the action to be used in Function Setting. (See page 10.)
- You can not only move the cursor without tap operation.

Touch actions that can be used on this device vary depending on the OS.

OS / Touch Action	OS X v10.7	OS X v10.8/v10.9/ v10.10
Tap	Yes	Yes
Double-tap	Yes	Yes
Drag-and-drop	Yes	Yes
Click or tap with two fingers	Yes *1	Yes *1
Scroll with two fingers	Yes	Yes
Pinch with two fingers	Yes *1	Yes *1
Rotate with two fingers	Yes *1	Yes *1
Double-tap with two fingers	Yes *1	Yes *1
Scroll left or right with two fingers	Yes *1, *2	Yes *1, *2
Swipe with two or three fingers	Yes *1, *2	Yes *1, *2
Swipe with three fingers	Yes *1, *2	Yes *1, *2
Swipe left from the right edge with two fingers	No	Yes *1
Tap with three fingers	Yes *1	Yes *1
Swipe left or right with three fingers	Yes *1, *2	Yes *1, *2
Swipe left or right with four fingers	Yes *1, *2	Yes *1, *2
Swipe up with three fingers	Yes *1, *2	Yes *1, *2
Swipe up with four fingers	Yes *1, *2	Yes *1, *2
Swipe down with three fingers	Yes *1, *2	Yes *1, *2
Swipe down with four fingers	Yes *1, *2	Yes *1, *2
Pinch with thumb and three fingers	Yes *1	Yes *1
Spread with thumb and three fingers	Yes *1	Yes *1

*1 The device can be switched ON/OFF.
*2 Actions can be selected. (See "Function Setting" on page 10.)

■Common finger and pen actions

Tap
Same action as left-clicking a mouse.
Touch with your finger/pen.
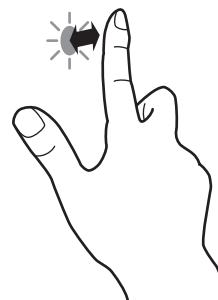
Double-tap
Same action as double-clicking a mouse.
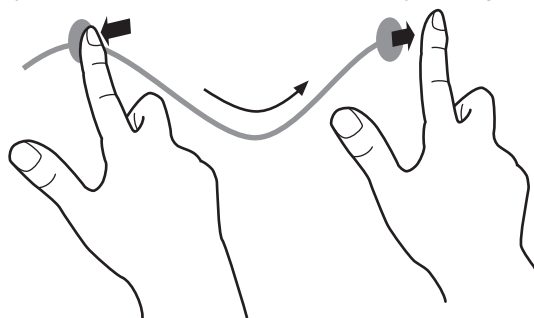Quickly touch twice with your finger/pen.

Drag-and-drop
Same action as drag-and-drop with a mouse.
Touch the screen with your finger/pen and move without lifting. When you have finished the movement, lift your finger/pen.
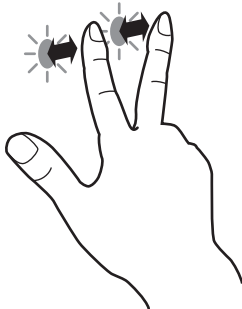
■Finger actions

- The screen may not respond correctly in the following cases:
    Touching is too quick
    The distance between the two points is too short
    When the two points cross
- Operation with the touch pen is not possible.

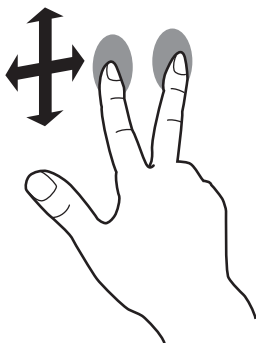**Click or tap with two fingers**
Same action as a secondary click.

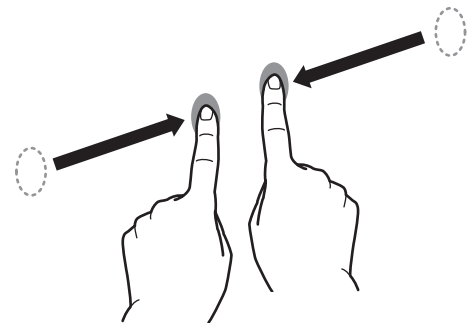**Scroll with two fingers**
Use in screens that can be scrolled.
With your two fingers touching the screen, move in the direction you want to scroll. The screen scrolls in the direction of the movement.
The scroll direction can be changed.

Pinch with two fingers
Use in a screen that is capable of reduction/enlargement. Touch the screen with two fingers and move your fingers closer together to reduce the view, or apart to enlarge the view.

Reduction
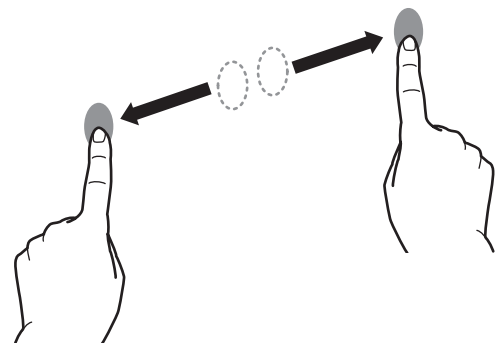
Enlargement

Rotate with two fingers
Use this action in a screen that is capable of image rotation. Touch the screen with two fingers and rotate to rotate the screen in that direction.
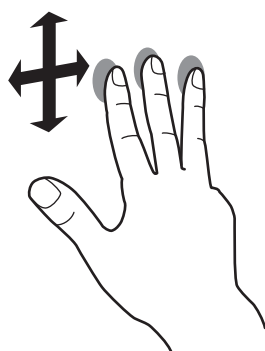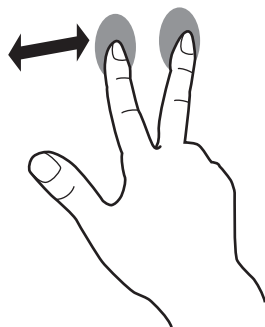
Rotate two fingers in the same direction.
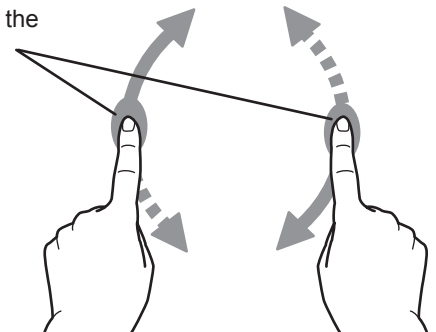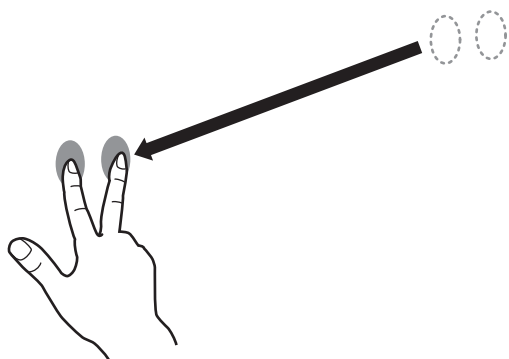
Double-tap with two fingers
Use smart zoom.
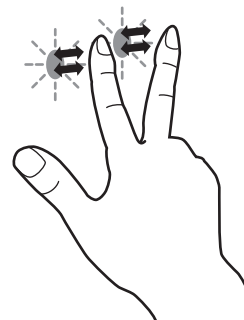
Scroll left or right with two fingers / Swipe with two or three fingers
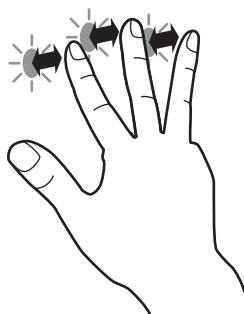Use cross page swipe.

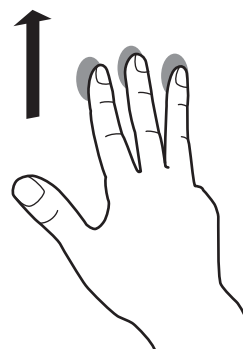**Swipe left or right with three or four fingers**
Move an application to the front.

Swipe up with three or four fingers
Display Mission Control.

Swipe left from the right edge with two fingers
Display the Notification center.

Swipe down with three or four fingers
Display Application Exposé.
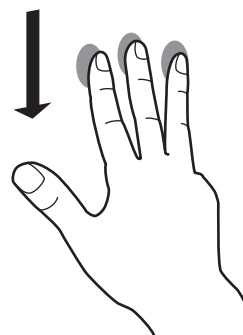
Tap with three fingers
Check the tapped text in a dictionary or other resource.

Pinch with thumb and three fingers
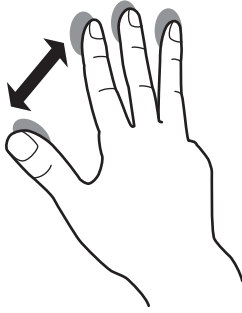Touch the screen with 4 fingers, and move your thumb and 3 fingers together to open Launchpad.
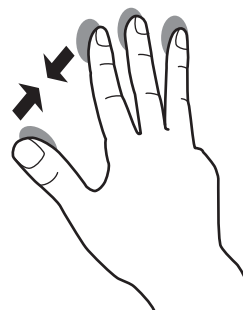
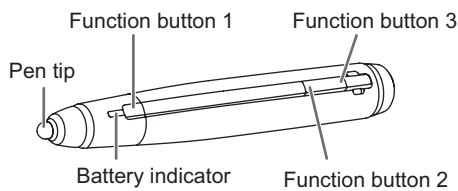**Spread with thumb and three fingers**
Touch the screen with 4 fingers, and move your thumb and 3 fingers apart to show the desktop.

∎Active pen actions

Function button 1   Function button 3

Pen tip

Battery indicator   Function button 2

Functions can be assigned to the function buttons. For details, see "Button Settings" (see page 13).

TIPS

- Use function buttons near the front of the screen. If too far away, operation will not be possible.
- Press function buttons slowly and firmly. If pressed too quickly, the action may not be recognized.
- The line may break if the active pen battery is low or there is other wireless equipment in operation nearby.
- Do not press the pen tip on other than the screen.
  This may cause malfunctioning.
- For information on replacing the pen tip, see the operation manual of the LCD Monitor.

SHARP

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