



## LCD MONITOR

# TOUCH DISPLAY DRIVER OPERATION MANUAL

**for Mac**

Version 1.1

|                                      |
|--------------------------------------|
| Applicable models (as of April 2015) |
|--------------------------------------|

|                             |
|-----------------------------|
| PN-K322B/PN-K322BH/LL-S201A |
|-----------------------------|

# Contents

|   |           |
|---|-----------|
| <b>Introduction .....</b>                     | <b>3</b>  |
| System Requirements .....                     | 3         |
| <b>Setting up the Computer .....</b>          | <b>4</b>  |
| Installing the touch display driver .....     | 4         |
| <b>Touch Panel Settings.....</b>              | <b>5</b>  |
| How to configure settings .....               | 5         |
| Calibration .....                             | 7         |
| Properties .....                              | 8         |
| <b>Uninstalling the Driver Software .....</b> | <b>10</b> |
| <b>Touch Action .....</b>                     | <b>11</b> |

## 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.

## Trademarks

- Apple, Mac and Mac OS are registered trademarks of Apple Inc.
- Intel is a trademark or registered trademark of Intel Corporation or its subsidiaries in the U.S.A. and other countries.
- All other brand and product names are trademarks or registered trademarks of their respective holders.

# Introduction

## System Requirements

To use the touch panel, the touch panel must be connected to a computer, and the touch display driver must be installed on the computer.

|                          |   |
|--------------------------|---|
| 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 MB   |

### TIPS

- Depending on the application software, touch operation may not be possible (for example, if the application processes mouse and other operations independently).

# Setting up the Computer

To use the touch panel, the touch display driver must be installed and the touch panel must be connected to your computer.

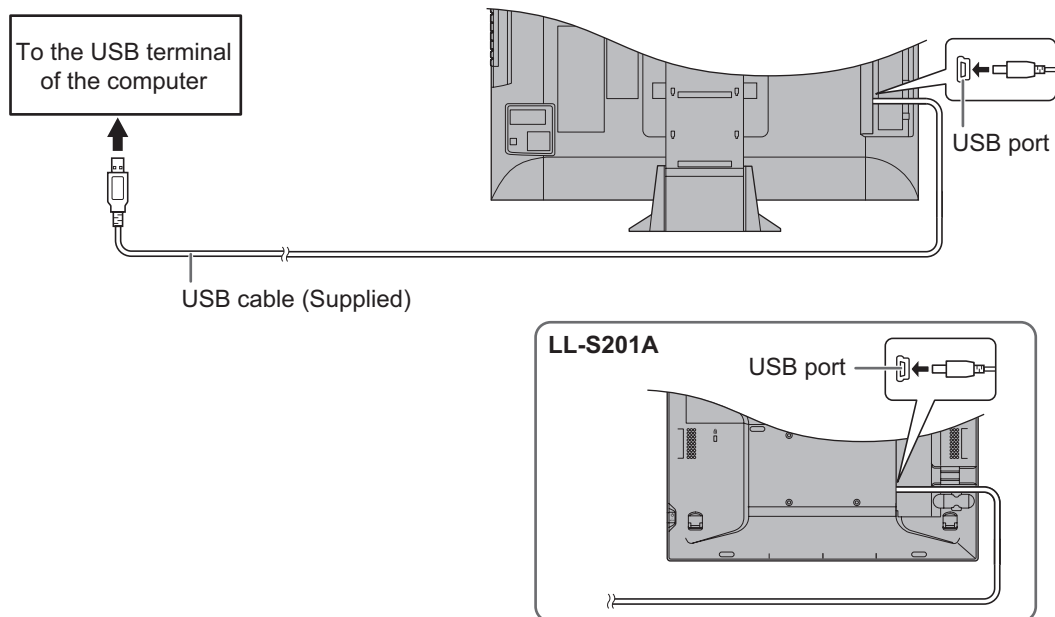
## Installing the touch display driver

The touch display driver is a program that enables you to use the touch panel to operate the computer that is connected to the touch panel.

### ! Caution

- To install, an administrator name (user name) and password are required.
- If an older version of the touch display driver is installed, remove (uninstall) the old version before installing the touch display driver. (See page 10.)
- 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.**



#### 4. Run the setup program.

- (1) Double-click the "TouchDisplay" folder, and then double-click the "Mac" folder.
- (2) Double-click "SharpTouchDisplay.mpkg".

#### 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 display driver.

Each time the computer is started, the touch display driver will start automatically to enable the touch panel to be used.

# Touch Panel Settings

The touch display driver starts automatically and the icon () appears on the menu bar.

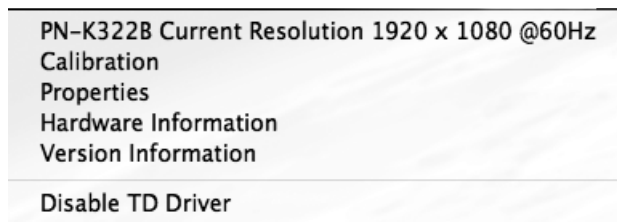
## TIPS

- If PN-K322B (or PN-K322BH) and LL-S201A are connected at the same time, a screen for selecting the model will appear each time you select a setting.
- Depending on the connected model, the screen image is different.

## How to configure settings


### ■Configuring settings from the menu bar

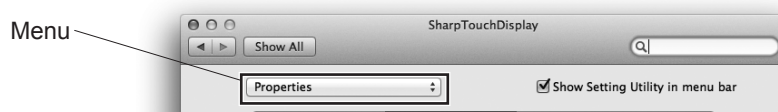
1. Click the touch display driver icon () on the menu bar.
2. Click a menu to change a setting.




- Current Resolution: The model currently being used and the current screen resolution appear.
- Calibration: See page 7.
- Properties: See page 8.
- Hardware Information: Select this to specify "Rotate Mode".
  - Rotate Mode:  
To correct the touch position when the screen is rotated, select the screen angle from the following:  
Standard (0°) / 90° / 180° / 270°
- Version Information: Shows the version of the touch display driver.
- Disable TD Driver:  
Select to disable the touch panel function.  
To disable a single touch panel function, see "Function Setting". (See page 9.)

### ■Configuring settings from System Preferences

1. Click "System Preferences" from the Apple menu (.
2. Click "SharpTouchDisplay".
3. Click the menu and select settings.



## TIPS

- If the "Show Setting Utility in menu bar" checkmark is removed, the touch display driver icon () does not appear on the menu bar.

## Touch Panel Settings

### ■ Settings when two devices are connected at the same time

If PN-K322B (or PN-K322BH) and LL-S201A are connected at the same time, select the model whose settings will be changed.

\* Two models cannot be set at the same time.

#### ! Caution

- If two displays of the same model are connected, touch operation will only be enabled on one model.

1. Click “System Preferences” from the Apple menu ().

2. Click “SharpTouchDisplay”.

The “Device Selection” screen appears.

3. Select the model whose settings you want to change.



## Calibration

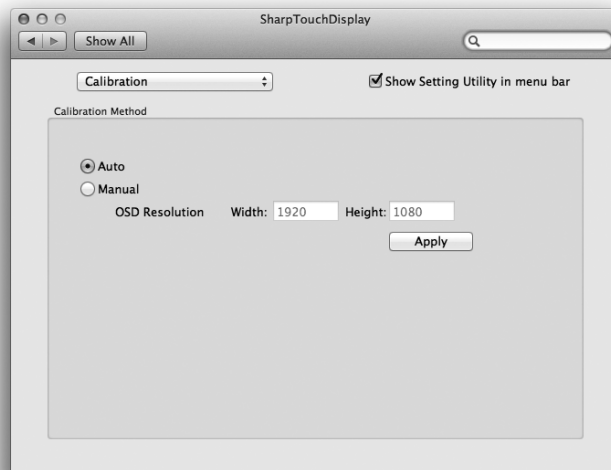
If black bands appear at the top and bottom or left and right of the screen, perform position adjustment so that the mouse cursor correctly moves to the point that is touched.

\* 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.

### ■Calibration Method

Follow the steps below to configure the setting.

1. Click the touch display driver icon (  ) on the menu bar.
2. Click “Calibration”.



### 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, enter the display resolution (width, height) and click “Apply”.

In the case of PN-K322B (or PN-K322BH), please check the menu screen. In addition, in the case of LL-S201A, please check by touching [Input Select] on the menu screen.

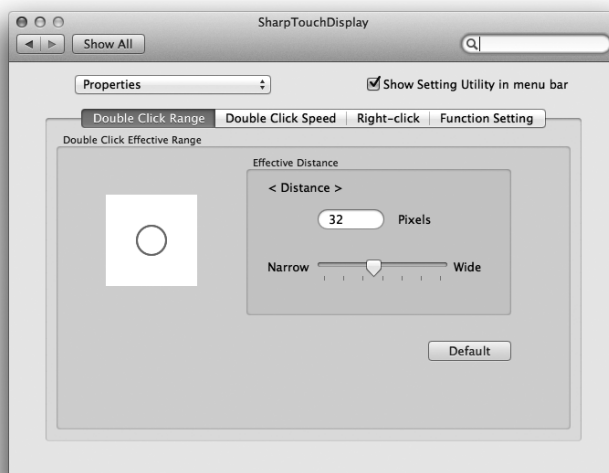
For details, see the LCD MONITOR manual.

### Properties

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

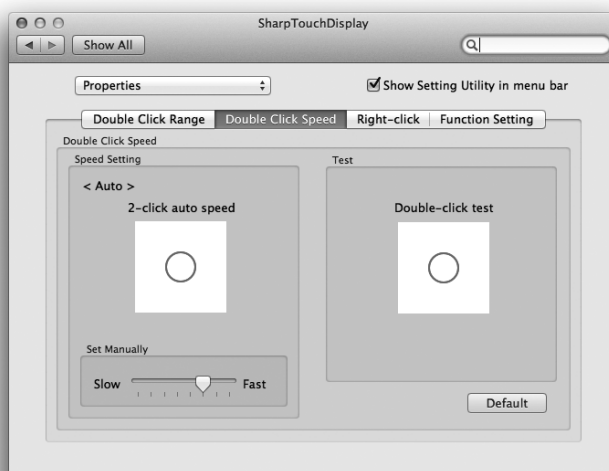
#### ■Double Click Range

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.

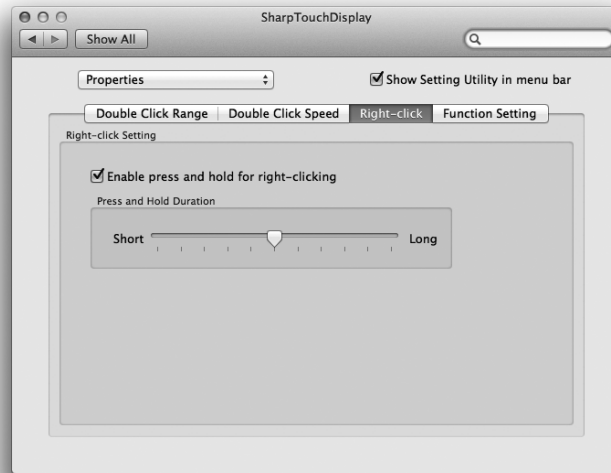
#### TIPS

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



## ■Right-click

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



### Enable press and hold for right-clicking

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

### Press and Hold Duration

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

\* 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")

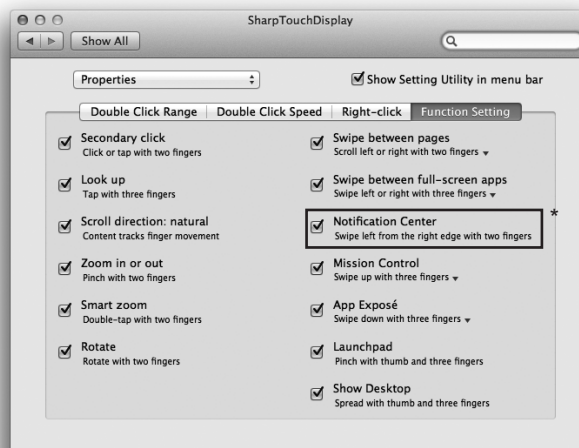
## ■Function Setting

Select the touch action to be used. (See page 11.)

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

# Uninstalling the Driver Software

## ! Caution

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

### 1. Disconnect the USB cable.

### 2. Execute uninstall.

- (1) Double-click the “TouchDisplay” folder, and then double-click the “Mac” folder.
- (2) Double-click “TouchDisplayDriver 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

Touch modes are finger/pen mode, pen-only mode, and finger-only mode. The default setting is finger/pen mode.

## TIPS

- To change the touch mode, see the manual for the LCD MONITOR (PN-K322B/PN-K322BH/LL-S201A).
- Select the action to be used in Function Setting. (See page 9.)
- You can not only move the cursor without tap operation.

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

| Touch Action \ OS                               | OS         | OS X v10.7 | OS X v10.8/<br>v10.9/<br>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                 |            |            |                                 |
| Swipe with three fingers                        |            |            |                                 |
| 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 | Yes *1, *2                      |
| Swipe left or right with four fingers           |            |            |                                 |
| Swipe up with three or four fingers             | Yes *1, *2 |            | Yes *1, *2                      |
| Swipe down with three fingers                   | Yes *1, *2 | Yes *1, *2 | Yes *1, *2                      |
| Swipe down with four fingers                    |            |            |                                 |
| 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.

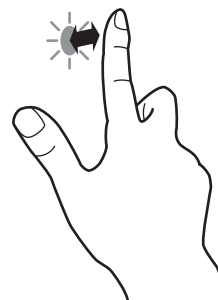
\*2 Actions can be selected. (See "Function Setting" on page 9.)

## Common finger and pen actions

### Tap

Same action as left-clicking a mouse.

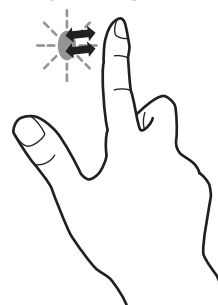
Touch with your finger/pen.



### Double-tap

Same action as double-clicking a mouse.

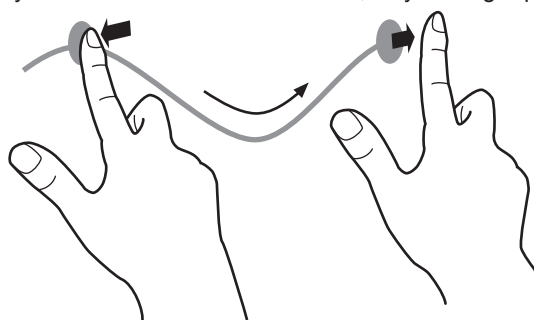
Quickly touch twice with your finger/pen.



### 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.



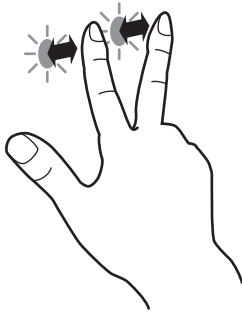
### ■Finger actions

#### TIPS

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

#### Click or tap with two fingers

Same action as a secondary click.

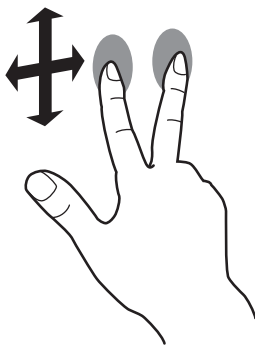


#### Scroll with two fingers

Use in screens that can be scrolled.

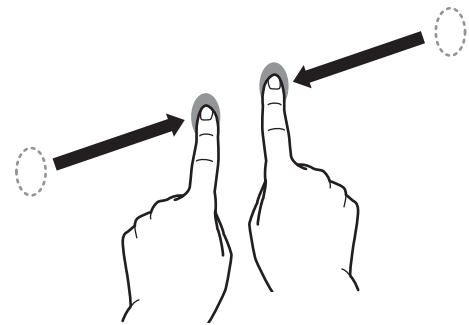
With your two fingers touching the screen, move in the direction you want to scroll. The screen scrolls in the direction of the movement.

The scroll direction can be changed.

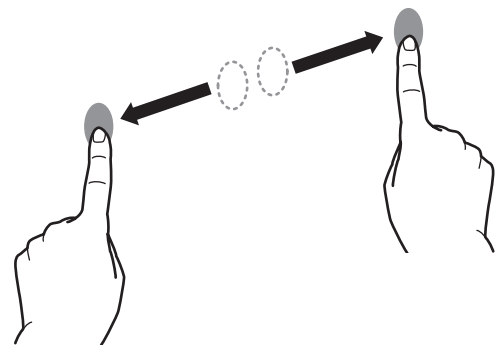


#### Pinch with two fingers

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

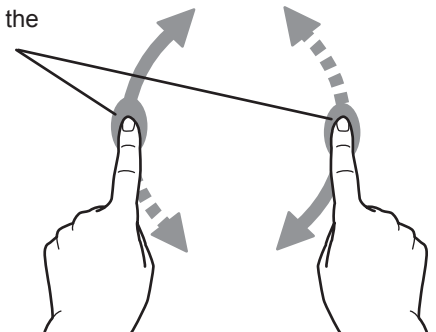


Enlargement

#### Rotate with two fingers

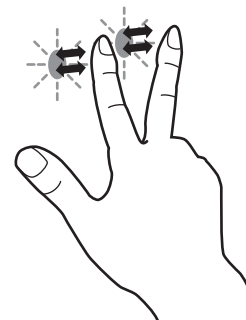
Use this action in a screen that is capable of image rotation. Touch the screen with two fingers and rotate to rotate the screen in that direction.

Rotate two fingers in the same direction.



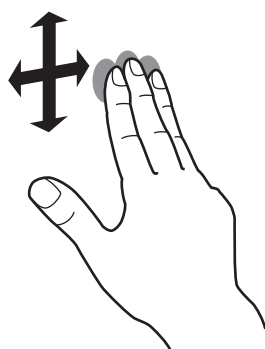
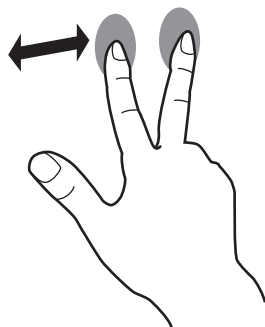
#### Double-tap with two fingers

Use smart zoom.



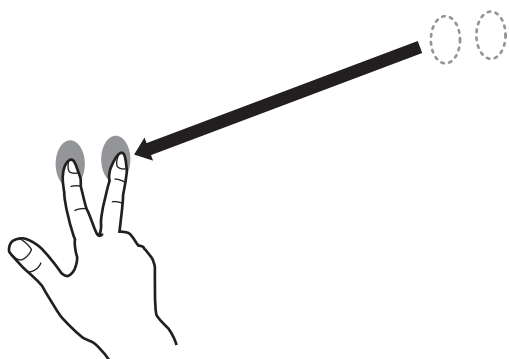
## Scroll left or right with two fingers / Swipe with two or three fingers

Use cross page swipe.



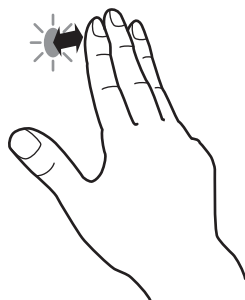
## Swipe left from the right edge with two fingers

Display the notice center.



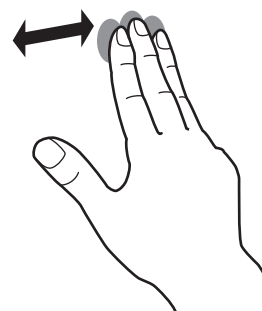
## Tap with three fingers

Check the tapped text in a dictionary or other resource.



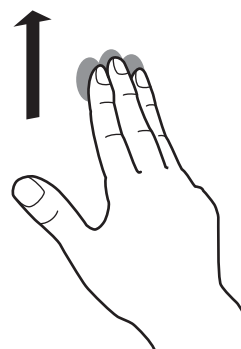
## Swipe left or right with three or four fingers

Move an application to the front.



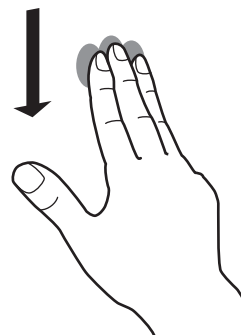
## Swipe up with three or four fingers

Display Mission Control.



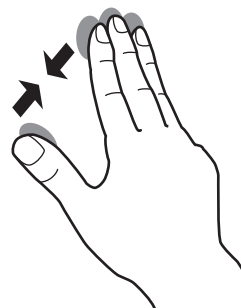
## Swipe down with three or four fingers

Display Application Exposé.



## Pinch with thumb and three fingers

Touch the screen with 4 fingers, and move your thumb and 3 fingers together to open Launchpad.



## Touch Action

### **Spread with thumb and three fingers / Swipe up with four fingers**

Touch the screen with 4 fingers, and move your thumb and 3 fingers apart to show the desktop.

