SHARP®

LCD MONITOR

TOUCH DISPLAY DRIVER 2 for Mac Version 1.0
OPERATION MANUAL

Applicable models
LL-P202V/LL-S242A

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.
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- This manual does not contain basic operating instructions for Mac OS.

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Introduction

System Requirements

The touch display 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 display driver 2 must be installed on the computer.

OS	Mac OS X v10.7, Mac OS X v10.8, Mac OS X v10.9
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 or differ from mouse operation (for example, if the application processes mouse and other operations independently).

Setting up the Computer

Install

- To install, an administrator name (user name) and password are required.
- If an older version of the touch display driver 2 is installed, remove (uninstall) the old version before installing the touch display driver 2. (See page 12.)
- 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.**

USB cable (Supplied)

To the USB terminal of the PC

Touch Panel port
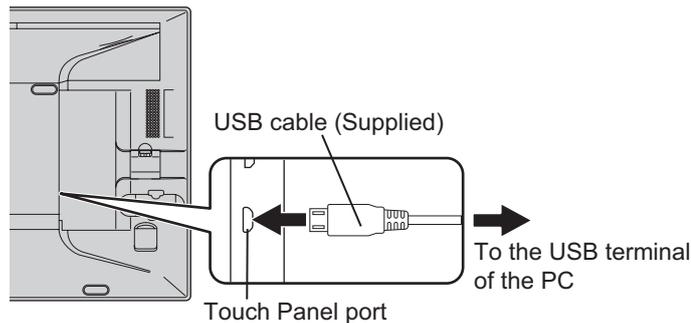
4. **Run the setup program.**
   (1) Double-click the "TouchDisplay" folder, and then double-click the "Mac" folder.
   (2) Double-click "SharpTouchDisplay2.pkg".
5. **Click "Continue".**
   Follow the on-screen instructions to install the driver.
   - If a screen prompting you to enter the name and 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 display driver 2.

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

Touch Panel Settings

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

> LL–P202V Current Resolution 1920 x 1080 @60Hz
> Calibration
> Properties
> Hardware Information
> Digitizer Pen
> Version Information
>
> Disable TD Driver
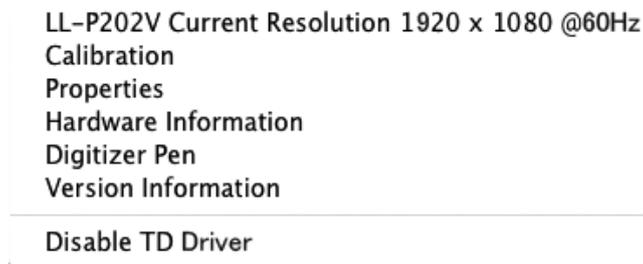
- Current Resolution: The model currently being used and the current screen resolution appear.
- Calibration: See page 7.
- Properties: See page 8.
- Hardware Information: Select this to specify "Rotate Mode".
  - Rotate Mode:
    To correct the touch position when the screen is rotated, select the screen angle from the following:
    Standard (0°) / 90° / 180° / 270°
- Digitizer pen (LL-P202V only): See page 10.
- Version Information: Shows the version of the touch display driver 2.
- 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 "SharpTouchDisplay2".**
3. **Click the menu and select settings.**
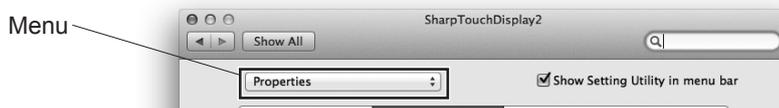
Menu ——
> SharpTouchDisplay2
> ◀ ▶ Show All   🔍
> Properties ▾   ☑ Show Setting Utility in menu bar

Touch Panel Settings

■Settings when two devices are connected at the same time

- If two displays of the same model are connected, touch operation will only be enabled on one model.
- If LL-P202V and LL-S242A are connected at the same time, select the model to apply the touch panel settings to.
  * Two models cannot be set at the same time.

1. **Click "System Preferences" from the Apple menu (◉).**
2. **Click "SharpTouchDisplay2".**

    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 2 icon ( ) on the menu bar.**
2. **Click "Calibration".**
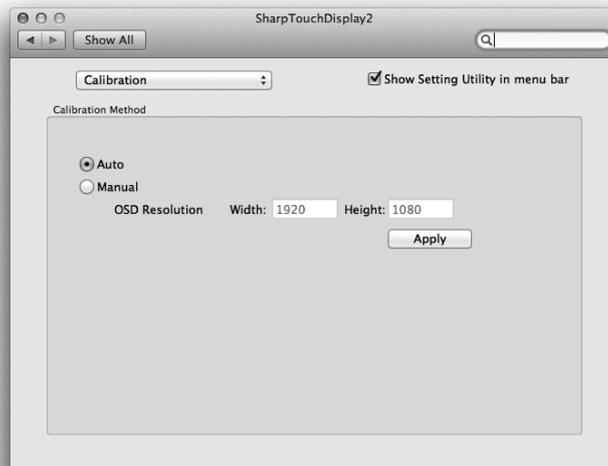
Auto

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".
To check the monitor resolution, touch "Input Select" in the menu screen of the touch display. The resolution will be shown in the screen that appears.
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).
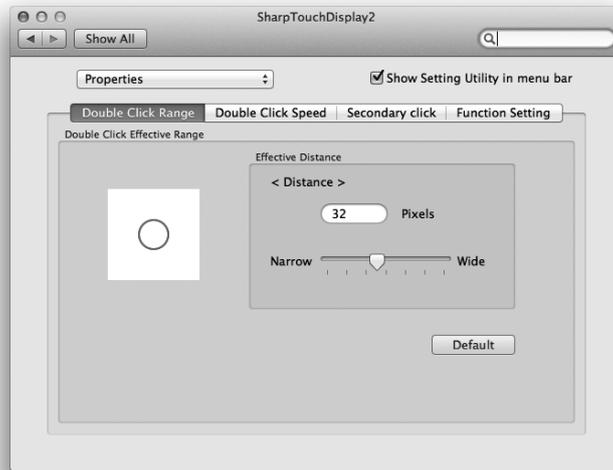
■Double Click Speed

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.
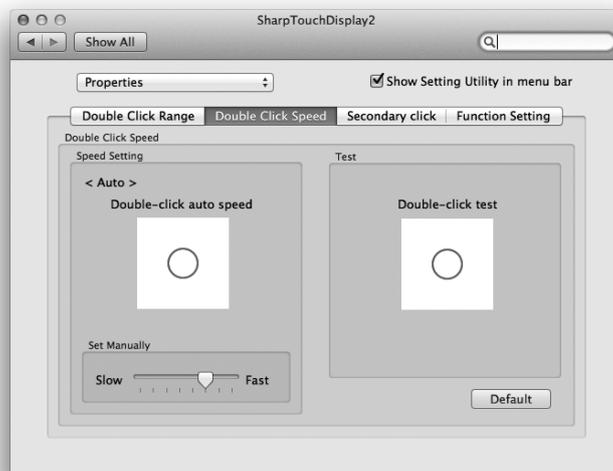
Speed Setting (Auto)
The inside of the frame can be touched twice (double-clicked) to set the speed automatically based on the interval between the touches.

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).

■Secondary click

You can set press and hold to be recognized as a secondary click.*
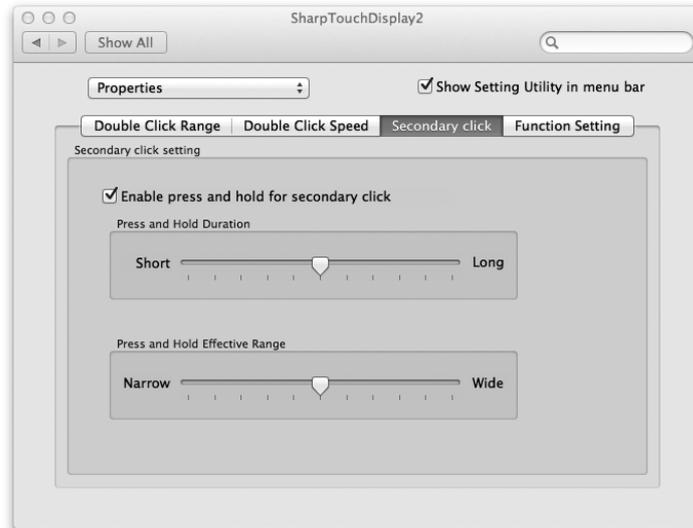
Enable press and hold for secondary click
When the checkbox is selected, press and hold is recognized as a secondary click.

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 13.)

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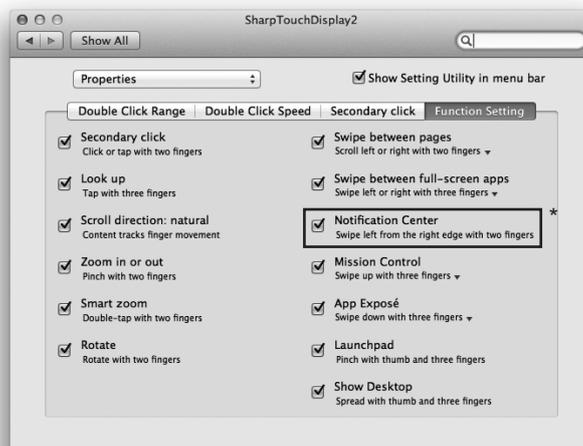
* OS X v10.8/v10.9 only

Pen Settings (LL-P202V Only)

Digitizer pen

Settings for the digitizer pen can be configured.

■Button Settings

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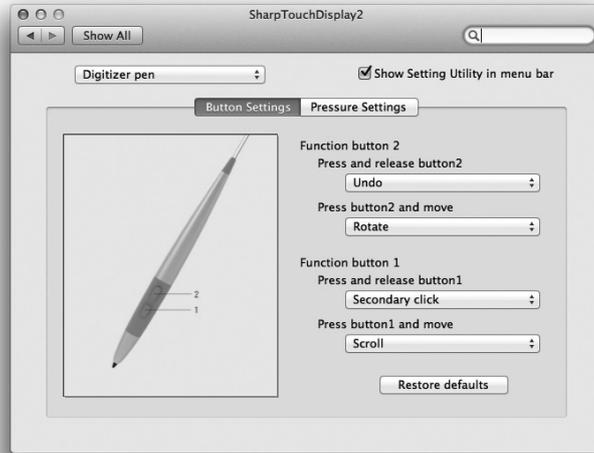
The factory default settings are shown below.

	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

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

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

*1 Press and release the button without moving the pen (screen touch or hover action)
*2 Move the pen while holding down the button (screen touch or hover action)

Restore defaults
Click to return to the default setting (factory default setting).

■Pressure Settings

Configure the pressure settings of the digitizer pen.
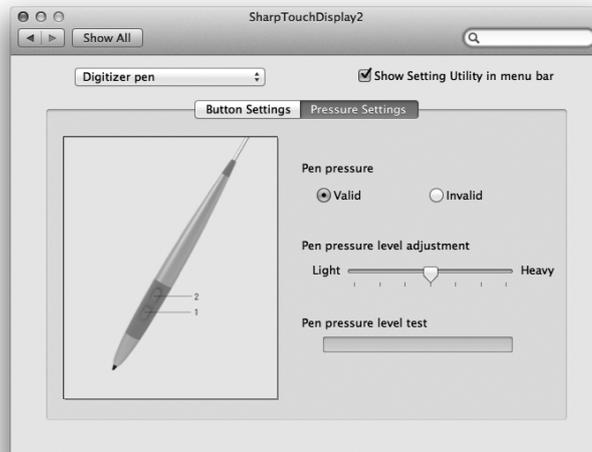
Pen pressure

Set pen pressure mode of the digitizer pen to Valid/Invalid.

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.

Uninstall

! 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 "SharpDisplayDriver2 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 (LL-P202V/LL-S242A).
> - Select the action to be used in Function Setting. (See page 9.)
> - When using your finger or a touch pen, you cannot move the cursor without tapping the screen.

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

Touch Action \ OS	OS X v10.7	OS X v10.8/v10.9
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 or 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 9.)

■Common finger and pen actions

Tap
Same action as left-clicking a mouse.
Touch with your finger/pen.
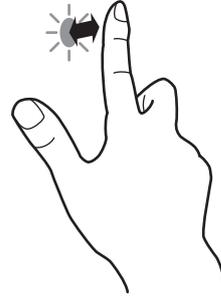

Double-tap
Same action as double-clicking a mouse.
Quickly touch twice with your finger/pen.
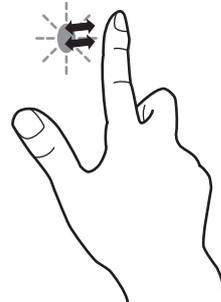
Drag-and-drop
Same action as drag-and-drop with a mouse.
Touch the screen with your finger/pen and move without lifting.
When you have finished the movement, lift your finger/pen.
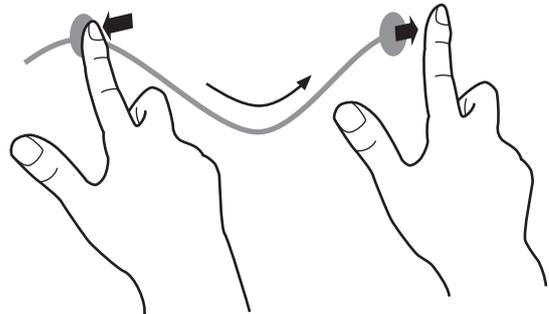
■Finger actions

- 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.
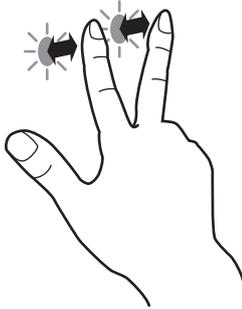
**Scroll with two fingers**
Use in screens that can be scrolled.
With your two fingers touching the screen, move in the direction you want to scroll. The screen scrolls in the direction of the movement.
The scroll direction can be changed.
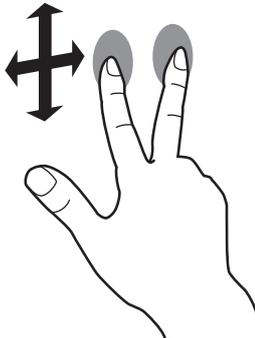
Pinch with two fingers
Use in a screen that is capable of reduction/enlargement. Touch the screen with two fingers and move your fingers closer together to reduce the view, or apart to enlarge the view.

Reduction

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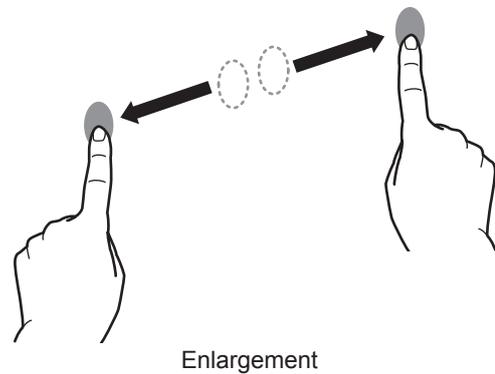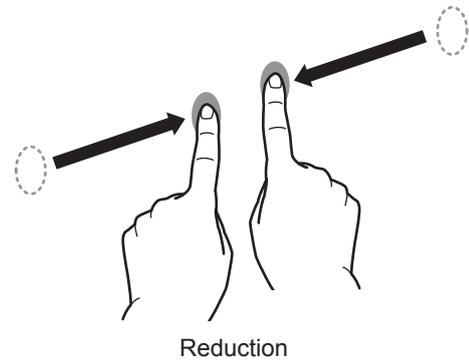
Rotate with two fingers
Use this action in a screen that is capable of image rotation. Touch the screen with two fingers and rotate to rotate the screen in that direction.

Rotate two fingers in the
same direction.
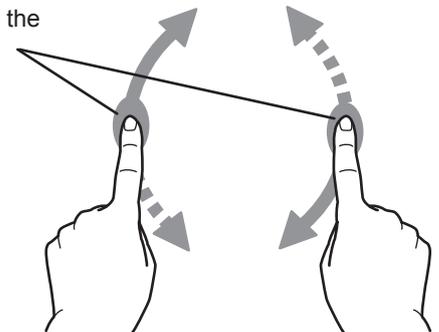
Double-tap with two fingers
Use smart zoom.
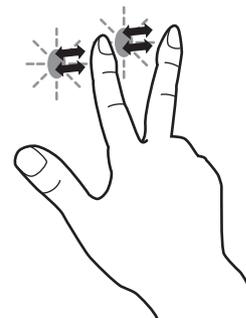
Scroll left or right with two fingers / Swipe with two or three fingers
Use cross page swipe.

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

**Swipe up with three or four fingers**
Display Mission Control.
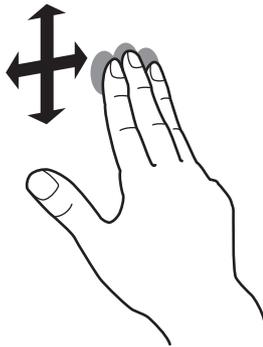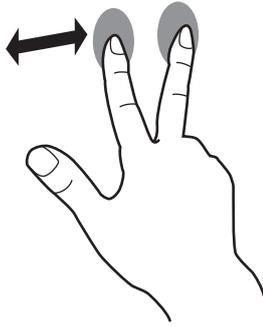
Swipe left from the right edge with two fingers
Display the notice center.
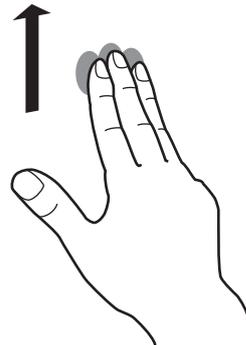
Swipe down with three or four fingers
Display Application Exposé.
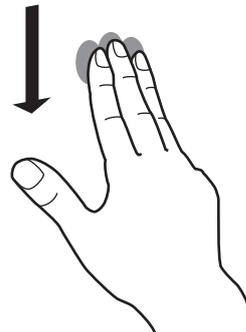
Tap with three fingers
Check the tapped text in a dictionary or other resource.

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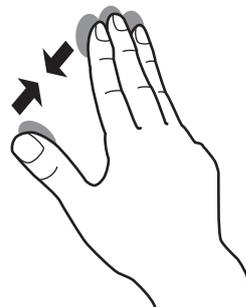
Touch Action

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

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