



BAMBOO™



User's manual

Bamboo (CTH-470, CTH-670)

Bamboo Pen (CTL-470)

Setting up

Navigating with touch

Customizing touch

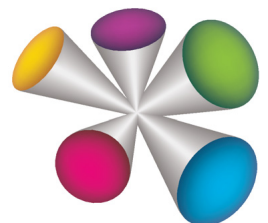
Using the ExpressKeys

Using a pen

Customizing a pen

Going Wireless

Troubleshooting





Bamboo™

User's Manual

Version 1.0, Rev G1511

Copyright © Wacom Co., Ltd., 2011

All rights reserved. No part of this manual may be reproduced except for your express personal use.

Wacom reserves the right to revise this publication without obligation to provide notification of such changes.

Wacom does its best to provide current and accurate information in this manual. However, Wacom reserves the right to change any specifications and product configurations at its discretion, without prior notice and without obligation to include such changes in this manual.

The above year indicates when this manual was prepared. However, the date of release to the users of the "manual" is simultaneous with the introduction into the market of the applicable Wacom product.

Bamboo is a trademark and Wacom is a registered trademark of Wacom Co., Ltd.

Adobe and Photoshop are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. Microsoft, Windows, and Vista are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Apple, the Apple logo, and Mac are trademarks of Apple, Inc., registered in the U.S. and other countries.

Any additional company and product names mentioned in this documentation may be trademarked and/or registered as trademarks. Mention of third-party products is for information purposes only and constitutes neither an endorsement nor a recommendation. Wacom assumes no responsibility with regard to the performance or use of these products.

ExpressKey is a registered trademark of Ginsan Industries, Inc., and is used with permission.





TABLE OF CONTENTS

About the manual	5	CUSTOMIZING YOUR BAMBOO	35
YOUR BAMBOO	6	Opening the control panel	35
Identify your tablet model	6	Control panel overview	36
Bamboo tablet	7	Customize your touch experience	37
Bamboo Pen tablet	8	Setting the touch options	37
Pen	9	Setting the touch functions	38
Pen holder	9	Disabling touch	39
SETTING UP YOUR BAMBOO	10	Customize your pen experience	40
Ergonomics	10	Setting the tip and eraser feel, and double-click distance	41
Configuring the tablet orientation	12	Setting the pen button functions	42
Understanding the tablet active area	13	Setting the tablet mapping	43
Working with multiple monitors	15	Portion of screen area	45
Control panel basics	15	Portion of tablet area	45
USING YOUR BAMBOO	16	Setting the pen speed in mouse mode	46
The touch experience with Bamboo	16	Customizing tablet and ExpressKey functions	47
Navigating with touch	17	Customizing the Pop-up Menu	48
Customizing touch	25	Working with Display Toggle	49
The pen experience with Bamboo	26	Button functions	50
Holding the pen	26	GOING WIRELESS WITH YOUR BAMBOO	55
Using the pen on the tablet	27	Wireless accessory components	55
Positioning	27	Wireless setup	56
Clicking	29	Establishing a wireless connection	57
Dragging	29	Optimizing the wireless connection	59
Using the pen buttons	30	Battery and power management	60
Writing and drawing with pressure sensitivity	31	Charging the battery	60
Erasing	32	Battery and wireless connection status	61
Eye-hand coordination exercise	33	Power saving features	62
Customizing pen input	33	Battery life information	63
Tablet controls	33	Replacing the battery	64
ExpressKey basics	34	Wireless module removal	65
Customizing the ExpressKeys	34	Wireless receiver storage	66





PROBLEMS WITH YOUR BAMBOO?	67	APPENDIX	82
Testing your tablet	68	Caring for Bamboo	82
Testing a pen	70	Replacing the pen nib	83
Troubleshooting tables	71	Bamboo Dock	84
General problems	71	Uninstalling Bamboo	84
Touch input problems	72	Managing preferences	85
Pen input problems	73	Pen and digital ink capabilities in Windows	86
Wireless connection problems	75	Product information	87
Windows-specific problems	77	Ordering parts and accessories	88
Mac-specific problems	78	Available parts and accessories	88
Technical support options	80	GLOSSARY	89
Obtaining driver downloads	81	INDEX	92










ABOUT THE MANUAL

This manual provides quick access to information about your [Bamboo](#). The information is common to Windows and Mac computers and Windows screen captures are shown, unless otherwise noted.

- Go directly to [table of contents](#) or [index](#) topics by clicking on them.
- Use the navigation controls to move through the manual.

			Go to front page.
Contents	Go to table of contents.	 	Page back, or page forward.
Index	Go to index.		Go back to previous view.
topic	Go to topic.		Topic continued.

- You can use your .pdf viewer zoom-in tool to increase the size of the manual on your display screen. Most .pdf viewers include additional tools for using and printing the manual. See the viewer application help for more information.
- SMALL CAPITAL LETTERS are used to identify the names of keyboard keys, dialog boxes, and control panel options.
- Be sure to see also the Important Product Information guide for Bamboo, located on the Bamboo Installation CD. The guide includes product safety precautions, specifications, and your license agreement.
- The following information is not included with this product: information about your specific computer hardware or operating system, or information about your application software. Your best source for this information is the set of manuals and discs that came with your hardware, operating system, or application.
- In addition to the built-in inking support found within Microsoft Windows 7 and Vista, many graphics applications also support pressure sensitivity and the pen eraser (when equipped). You can find a listing of applications that support these features on Wacom's web site (see [product information](#)).
- For information on how best to use Bamboo features within a specific application, see the instructions in that application's manuals.

Note: This manual does not describe how to install your Wacom tablet. Please refer to your product Quick Start Guide, and use the automated software installer (located on the Bamboo Installation CD).

Wacom's philosophy is to continually improve all of its products. As a result, engineering changes and improvements are made from time to time. Therefore, some changes, modifications, and improvements may not be covered in this manual.





YOUR BAMBOO

This section introduces you to your Bamboo. The quickest way to learn about your Bamboo tablet is to become familiar with its appearance and features.

- Not all product models are available in all regions.
- Your Bamboo tablet can only be used with compatible Wacom pens or input devices. Wacom cannot guarantee compatibility with older tablets or pens. You cannot use pens or input devices from a previous version Bamboo tablet. Nor can a pen from your new Bamboo tablet be used with other Wacom tablets or a previous version Bamboo tablet.

[Identify your tablet model](#)

[Bamboo tablet](#)

[Bamboo Pen tablet](#)

[Pen](#)

[Pen holder](#)

IDENTIFY YOUR TABLET MODEL

Each tablet model within the Bamboo family has a specific feature set. Not all models are available in all regions.

TABLET MODEL	TOUCH INPUT	PEN INPUT	EXPRESSKEYS
Bamboo (models CTH-470, CTH-670)	X	X	X
Bamboo Pen (model CTL-470)		X	

Icons are located near some of the topic headings in this manual. Use them to quickly identify sections that have information specific to touch or pen input.

- Touch input is identified by this icon: 

- Pen input is identified by this icon: 

Icons do not appear in common sections that may apply to all Bamboo tablet models.

Model-specific notes may be used as necessary.



BAMBOO TABLET

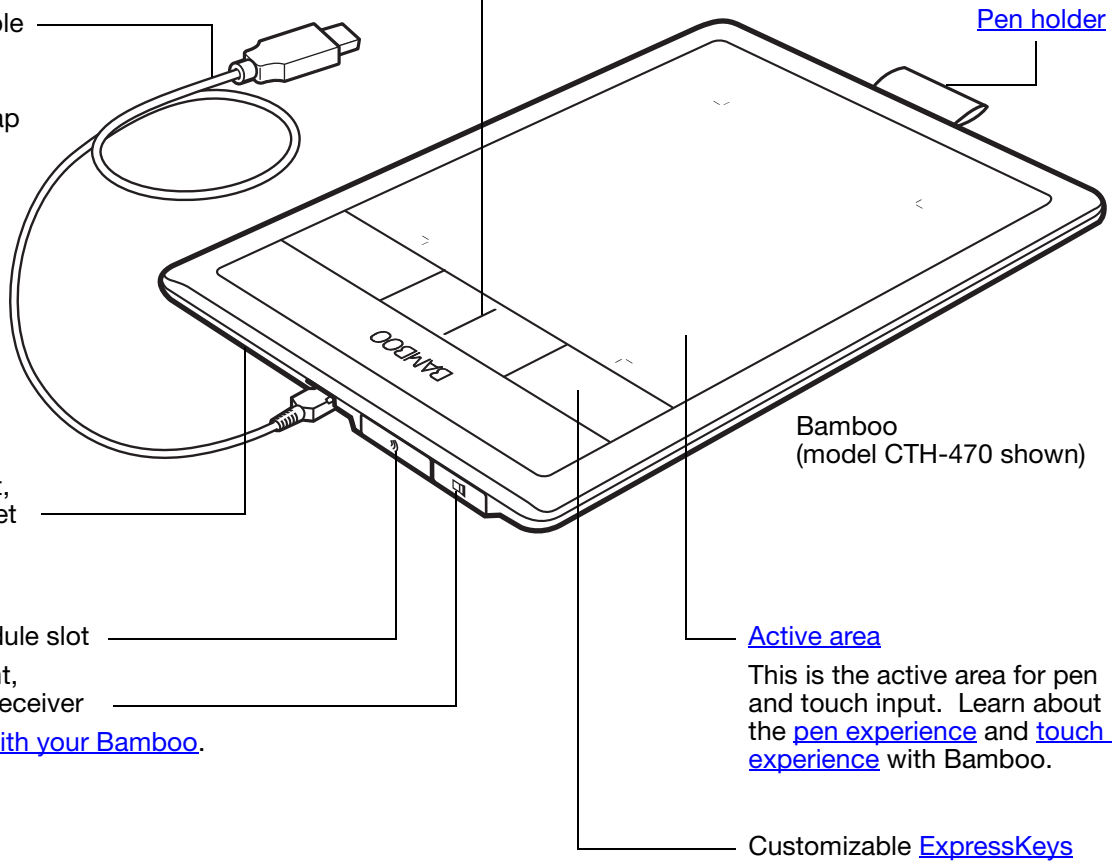


Status LED
 Glows blue when Bamboo is connected to an active USB port. Brightens when you touch the active area or press an ExpressKey.
 Glows white when using the pen.
 For wireless operation, see [battery and wireless connection status](#).

USB cable, detachable
 Disconnect the USB cable when storing Bamboo. Do not wrap the cable around the tablet.

Battery compartment, located beneath tablet
 See [wireless setup](#).

Wacom wireless module slot
Storage compartment, for Wacom wireless receiver
 See [going wireless with your Bamboo](#).



Bamboo (model CTH-470 shown)

Active area
 This is the active area for pen and touch input. Learn about the [pen experience](#) and [touch experience](#) with Bamboo.

Customizable [ExpressKeys](#)



BAMBOO PEN TABLET



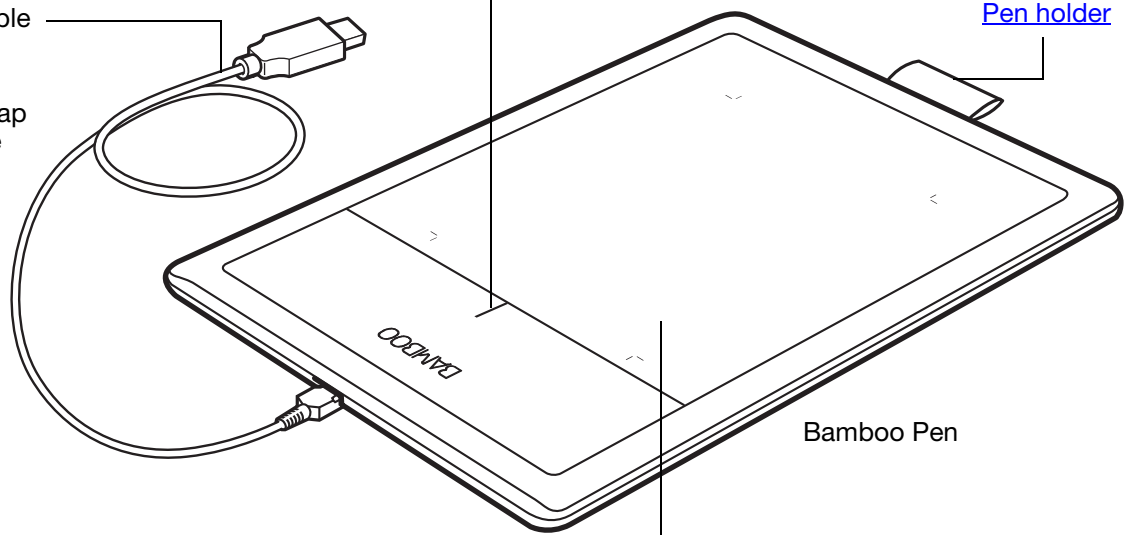
Status LED

Glowes blue when Bamboo is connected to an active USB port.

Brightens when using the pen.

USB cable, detachable

Disconnect the USB cable when storing Bamboo. Do not wrap the cable around the tablet.



[Pen holder](#)

Bamboo Pen

[Active area](#)

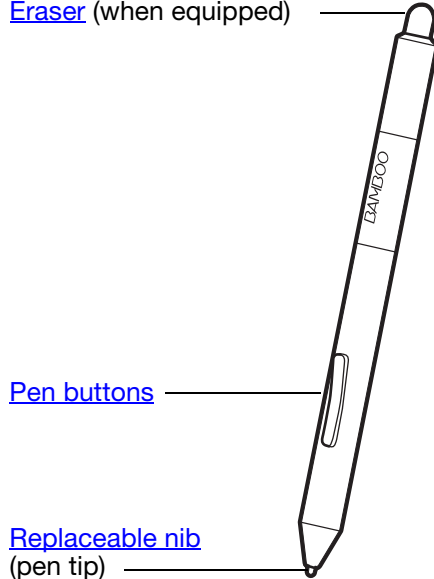
This is the active area for pen input. Learn about your [pen](#) and [the pen experience with Bamboo](#).



PEN



[Eraser](#) (when equipped)



Pen

Cordless, battery-free, and pressure sensitive. Use this freehand tool for image editing and creating natural-looking pen strokes. It is also an efficient tool for document annotation and taking notes in applications that support handwriting recognition.

You will find the pen ideally suited to enhance your workflow by enabling the pen and digital ink features found within Microsoft Windows 7, Vista, and Office 2007 or later. Take advantage of digital mark-up for collaborative editing and use digital ink to take notes in applications that support handwriting recognition.

Important: When not in use, place the pen in the pen holder or lay it flat on your desk. The eraser end of the pen should be inserted first into the loop. To maintain the sensitivity of your pen, do not store it in a container where it will rest on the tip or eraser.

Leaving the pen on the tablet may interfere with screen cursor positioning when using other pointing devices, or may prevent your computer from going to sleep.

PEN HOLDER

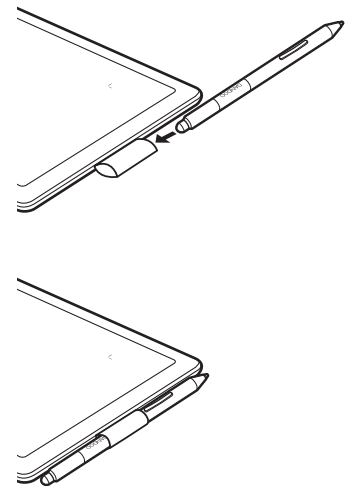


When not in use, store the pen in the pen holder.

- Insert the eraser end of the pen into the loop.
- Do not wedge the pen buttons inside the loop. Doing so may cause the buttons to be continually depressed and possibly fail.

Important: You can also lay the pen flat on your desk. Leaving the pen on the tablet may interfere with screen cursor positioning when using other pointing devices, or may prevent your computer from going to sleep.

Do not store the pen in a holder or stand other than the one provided with your Bamboo tablet or purchased from Wacom. The pen may be damaged if it falls out of an unsuitable stand. The sensitivity of your pen may be affected if stored in a container where it rests on the tip or eraser.



SETTING UP YOUR BAMBOO

To minimize fatigue, comfortably organize your work area. Position your tablet, pen, and keyboard for easy access without unnecessary reaching. Adjust your monitor so you can view it comfortably with minimum eyestrain. For best results, position the tablet so the screen cursor follows the same direction as your hand movements on the tablet.

[Ergonomics](#)

[Configuring the tablet orientation](#)

[Understanding the tablet active area](#)

[Working with multiple monitors](#)

[Control panel basics](#)

ERGONOMICS

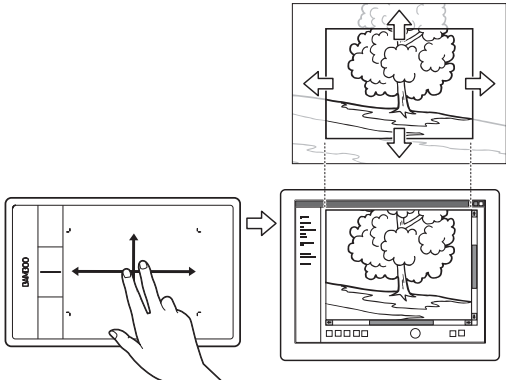


- Maintain a good posture at all times.
- Use a gentle grip when working with the pen.
- Periodically shift your gaze from your computer and focus on other objects within the room. This will help to relax your eyes.
- Take short breaks between tasks to stretch and relax your muscles.
- Alternate tasks and tools throughout the day. Minimize awkward postures and repetitive movements that cause discomfort.
- Change your position if you feel any discomfort due to your work position.
- For right-handed use, position the tablet so the input (active) area is located to the right of the ExpressKeys. If using the tablet as a primary pointing device and mouse replacement, consider placing it to the right of your keyboard.
- For left-handed use, position the tablet with the input area to the left of the ExpressKeys. See [configuring the tablet orientation](#). If using the tablet as a primary pointing device and mouse replacement, consider placing it to the left of your keyboard.
- If using the tablet primarily as a creative tool, consider placing the tablet below the keyboard, centered with respect to your monitor.

Note regarding RSI: Wacom makes no representation, promise or guarantee that Wacom products will cure or prevent, in whole or in part, mouse-induced repetitive stress symptoms, injuries or conditions. Individual results may vary. Always obtain competent medical advice to determine the most appropriate treatment for your specific situation.



As you work, you will discover many ways of interacting with your Bamboo tablet. For example:



Visual browsing

Use two fingers on the tablet surface to scroll through and navigate visual media within an application.

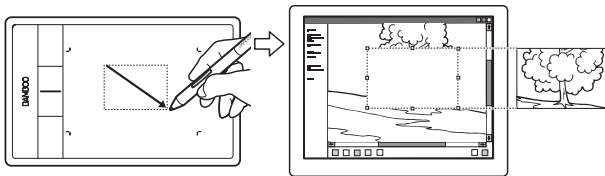
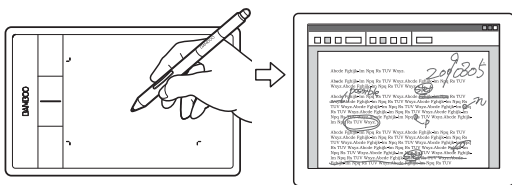


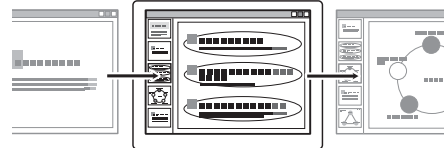
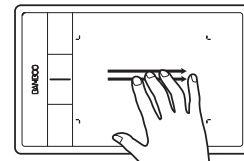
Photo editing

Use the pressure-sensitive pen to edit images within a photo or image editing application.



Annotation

Simplify document reviews by using the pen to digitally mark-up and annotate documents.



Presentation

Swipe three fingers across the tablet surface to quickly move between slides in a presentation.

For details on these and other ways to work with your tablet, see [the touch experience with Bamboo](#) or [the pen experience with Bamboo](#).

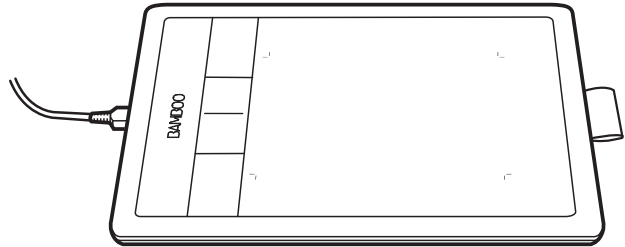
CONFIGURING THE TABLET ORIENTATION

When you first installed Bamboo, you were prompted to choose a default tablet orientation. The orientation you chose was used to determine the tablet default settings.

However, you can easily reconfigure Bamboo for left- or right-handed users at any time. The ExpressKey settings are automatically reconfigured when you change the handedness setting.

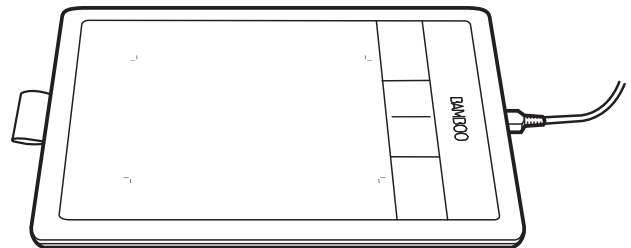
Right-handed operation:

- [Open the Bamboo control panel](#) and select the TABLET tab. Choose RIGHT HANDED. The tablet driver automatically configures all aspects of the tablet for correct right-handed use.
- Next, physically rotate your tablet so the tablet ExpressKeys are positioned to the left.



Left-handed operation:

- [Open the control panel](#) and select the TABLET tab. Choose LEFT HANDED. The tablet driver automatically configures all aspects of the tablet for correct left-handed use.
- Next, physically rotate your tablet so the tablet ExpressKeys are positioned to the right.



Note: This procedure does not affect the default orientation. At the system log on and user switching screens, the tablet uses the default orientation you chose during the install process. To change the default orientation, you must re-install the tablet driver.

UNDERSTANDING THE TABLET ACTIVE AREA

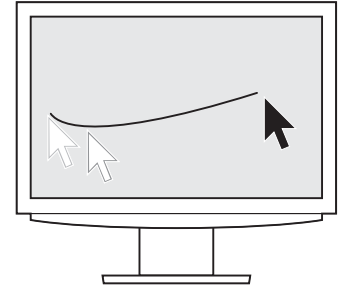
Depending on your tablet model, Bamboo can accept pen input or both pen and touch input. Note, however, that pen and touch input cannot be used at the same time.

Touch input

On touch-sensitive tablet models, slide your finger(s) across the active area to position the screen pointer.

- Click or right-click.
- Scroll or zoom.
- Move between pages in most web browsers and document or picture viewers.
- Switch between applications and perform other desktop functions.

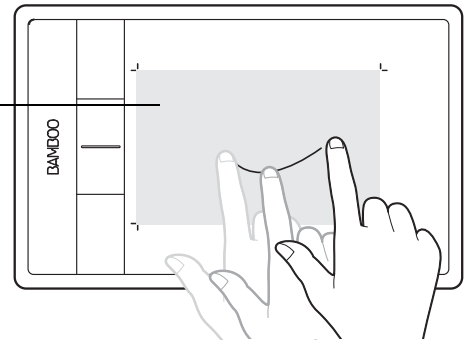
Learn about [the touch experience with Bamboo](#).



Tablet active area

The area of your Bamboo tablet that senses touch or pen input.

For tablet models that support both pen and touch input, touch is ignored whenever the pen tip or eraser is within the tablet [proximity range](#). Lift the pen and your hand away from the tablet active area to enable touch input.



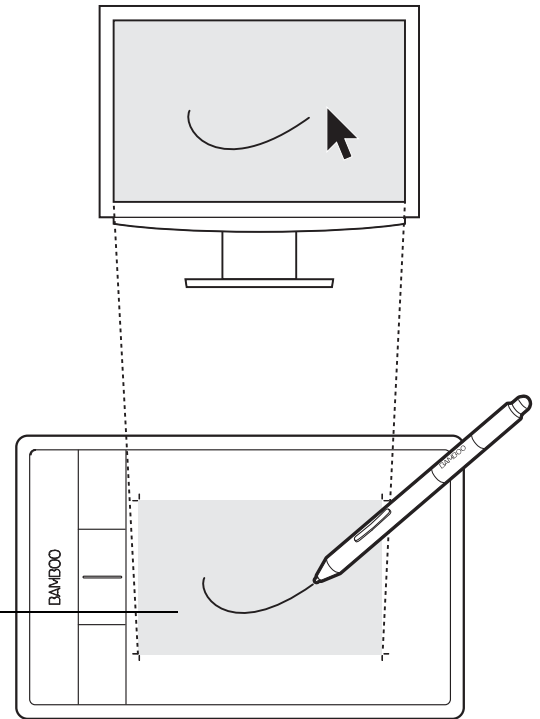
Pen input

The pen works only on the active area of the tablet.

Wherever you place the pen on the tablet, the screen pointer will jump to the corresponding point on the screen. The screen pointer indicates pen position, and follows the movement of the pen across the tablet surface.

Learn about [the pen experience with Bamboo](#).

Note: The active area is a mapped representation of your computer screen(s). By default it uses the entire screen or all screens if you have multiple displays. You can customize the mapping relationship for pen input by [setting the tablet mapping](#).



Tablet active area

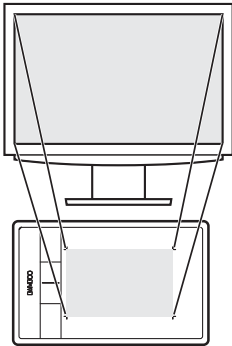
The area of your Bamboo tablet that senses touch or pen input.

For tablet models that support both pen and touch input, touch is ignored whenever the pen tip or eraser is within the tablet [proximity range](#). Lift the pen and your hand away from the tablet active area to enable touch input.

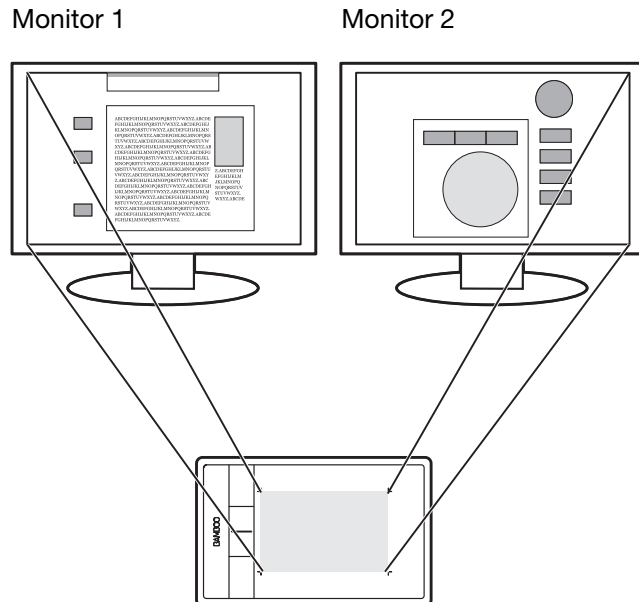
WORKING WITH MULTIPLE MONITORS

If your computer is equipped with more than one monitor, Bamboo will map to your monitors based upon how they are configured in the display properties control panel.

- If more than one monitor is in use and you are in extended monitor mode, the tablet maps to all monitors as if they were one large display.



Example of tablet mapping to a single monitor.



Example of tablet mapping to the entire system desktop, which is displayed on two monitors.

- If your monitors are in mirror mode (both monitors display the same content), the tablet maps to the entire space on each monitor and the screen cursor is displayed on each monitor simultaneously.

See your hardware and operating system documentation for details on configuring your computer and operating system for use with multiple monitors.

Tips:

You can customize the tablet to map to a single monitor, or to a portion of the monitor area. See [setting the tablet mapping](#).

When your system is configured with multiple monitors, you can assign the DISPLAY TOGGLE function to an ExpressKey. This enables you to toggle the current tablet mapping and screen cursor between the system desktop or primary display and your other monitors. See [working with Display Toggle](#).

CONTROL PANEL BASICS

After mastering the basics of using your Bamboo tablet, you may want to customize the way touch or pen input works. The Bamboo control panel is where you customize your Bamboo tablet settings.

[Opening the control panel](#)

[Control panel overview](#)

USING YOUR BAMBOO

If you are new to using Bamboo, read the following sections.

[The touch experience with Bamboo](#)

[The pen experience with Bamboo](#)

THE TOUCH EXPERIENCE WITH BAMBOO



Bamboo is designed to enhance the way you work. Touch input enables you to interact with a computer using only your fingertips on the Bamboo tablet.

First learn the basic actions to navigate and perform typical mouse operations. Then learn the gestural movements to control other functions such as scrolling, zooming, and rotating.

Touch input is activated whenever you touch the tablet [active area](#).

- When using multi-finger input methods, you can generally position your fingers as far apart as is comfortable. Your fingers must remain within the active area. However, placing your fingers too closely together may be interpreted by the tablet as input from a single finger, or the tablet may confuse which finger initiated or performed an action or gesture.
- As you learn the different input methods, experiment with what works best for you. Take care to prevent accidental touch input. For example, if your small finger or the palm of your hand touches the active area of the tablet while you are navigating or performing a touch action, then your input may be interrupted or you may trigger an unanticipated right-click.

Note: For tablet models that support both pen and touch input, the pen disengages touch input whenever the pen tip or eraser is within the tablet [proximity range](#). Lift the pen and your hand away from the tablet active area to enable touch input.

[Navigating with touch](#)

[Customizing touch](#)

[ExpressKey basics](#)

[Customizing the ExpressKeys](#)

[Customizing the Pop-up Menu](#)

[Working with Display Toggle](#)

NAVIGATING WITH TOUCH



The touch input feature of your Bamboo tablet enables you to control a computer using only your fingertips on the tablet surface. See [understanding the tablet active area](#).

Before learning how to control your computer with touch input, familiarize yourself with the following concepts:

CONCEPT	DESCRIPTION
Track	Touch and move a single finger across the tablet surface.
Tap	Touch and lift a single finger from the tablet. Tap with two fingers to perform different functions.
Pan	Touch the tablet surface with two fingers and move them in the same direction.
Swipe	Touch the tablet surface with three or four fingers and move them in a horizontal or vertical direction. Your fingers should be spaced slightly apart from one another.
Pinch	Touch the tablet with two fingers spaced slightly apart. While still touching the tablet surface, move or 'pinch' your fingers together.
Expand	Touch the tablet with two fingers spaced closely together. While still touching the tablet surface, move your fingers apart.
Twist	Touch the tablet with two fingers spaced slightly apart and move (rotate) them in a circular fashion, or move them in opposing directions. You can also hold one finger stationary and track your other finger around the stationary finger.

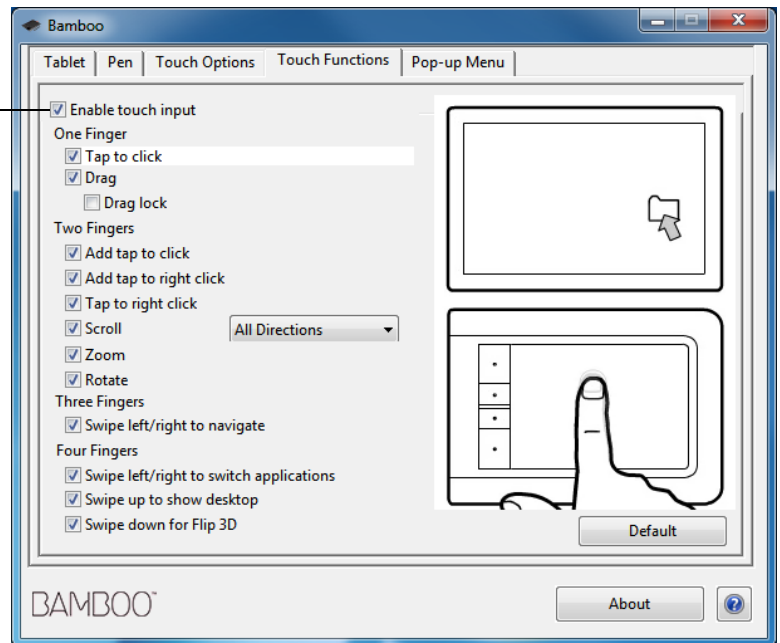
You can [customize your touch experience](#) and also [use the ExpressKeys](#) to perform some touch functions.



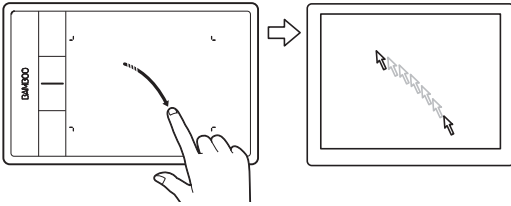
Touch input options can be enabled or disabled within the Bamboo control panel. Touch actions and gestures are available when selected in the TOUCH FUNCTIONS tab.

- Basic actions enable you to navigate and perform typical mouse operations.
- Gestures enable you to scroll, zoom, rotate, and perform other functions. Some gestures may provide a visual cue on your display screen to indicate when the gesture has been recognized by your Bamboo.

Uncheck to disable touch input.



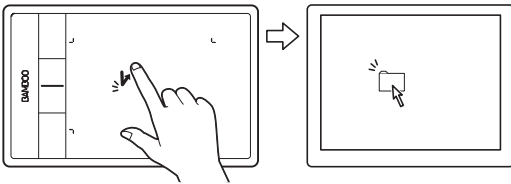
ONE-FINGER ACTIONS



Track

Use a single finger to move the screen cursor. Touch and slide your finger across the tablet surface.

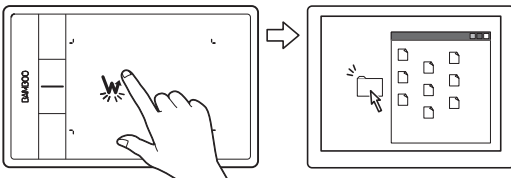
TAP TO CLICK



Click (single-finger tap)

Using a single finger, track to an item. Lift your finger and tap to select.

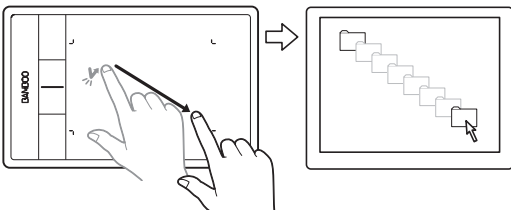
Alternatively, track to an item and then press an ExpressKey set to CLICK.



Double-click

Using a single finger, track to an item. Lift your finger and tap twice.

DRAG



Select and drag (DRAG LOCK disabled)

Using a single finger, tap on an item to select. Then again quickly tap down and track (slide) your finger across the tablet to drag. Lift your finger to release the item.

Alternatively, drag by tracking to an item, pressing an ExpressKey set to CLICK, and then continuing to move your finger across the tablet surface. Release the ExpressKey to release the item.

Tips:

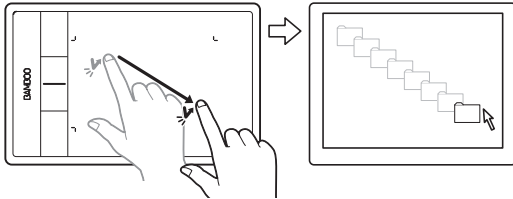
You can select and drag multiple items on the system desktop:

Windows: Press the CTRL or SHIFT key as you tap to select multiple items.

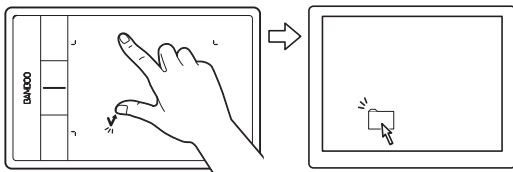
Mac: Press the SHIFT or COMMAND key as you tap to select multiple items.

You can also [select and drag](#) with two fingers.



DRAG LOCKDrag lock (DRAG LOCK enabled)

Using a single finger, tap on an item to select. Then track (slide) your finger across the tablet to drag. Tap again to release the item.

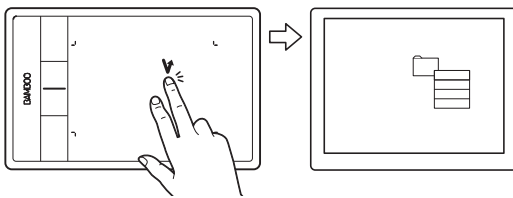
TWO-FINGER ACTIONS AND GESTURES**ADD TAP TO CLICK**Select and drag

Using a single finger, track to an item. Select by touching your thumb or a second finger to the left of that finger. If you will be dragging an item or selecting blocks of text, we recommend using two fingers instead of your finger and thumb.

- To move the selected item, continue moving both fingers across the tablet.
- To highlight a text block, continue moving both fingers across the tablet as you select text.
- You can also extend a drag without releasing the selection. To do this, lift the first finger and move your second finger to a new position. Then again touch the first finger to the tablet and continue to drag with both fingers.

Lift your thumb or second finger to release.

Note: If the tablet is set for left-handed orientation, touch to the right of the primary finger.

ADD TAP TO RIGHT CLICKRight-click

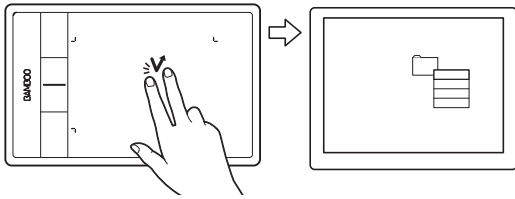
Using a single finger, track to an item. Then with a second finger touch and release to the right of that finger. Releasing your finger issues a right-click and brings up a context menu at the screen cursor position.

You can then track to an option in the menu and select it by tapping your finger.

Note: If the tablet is set for left-handed orientation, touch to the left of the primary finger.



TAP TO RIGHT CLICK

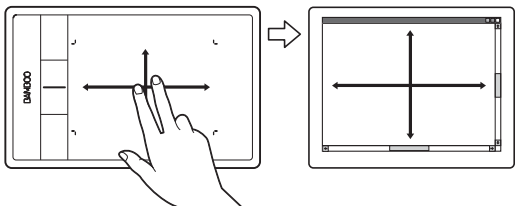
Right-click (two-finger tap)

To right-click and bring up a context menu at the screen cursor position, tap the tablet surface with two fingers spaced slightly apart. Use a quick tapping motion with both fingers at the same time.

You can then track to an option in the menu and select it by tapping your finger.

Alternatively, open a context menu by tracking to an item and then pressing an ExpressKey set to RIGHT CLICK.

SCROLL

Scroll

Place two fingers on the tablet surface. Using a smooth motion, move your fingers together in parallel.

- Scroll up by moving your fingers in an upward motion.
- Scroll down by moving your fingers in a downward motion.
- Scroll left by moving your fingers in a leftward motion.
- Scroll right by moving your fingers in a rightward motion.

Tips:

Flick your fingers at the end of the gesture to continue scrolling for a short time after your fingers leave the tablet.

For windows that scroll vertically and horizontally, move your fingers in any direction and the document view will follow.

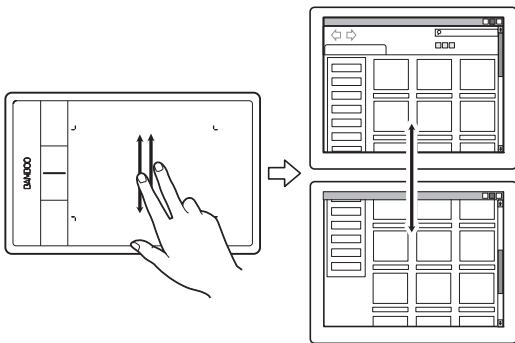
If you prefer vertical only scrolling, from the Bamboo control panel TOUCH FUNCTIONS tab select VERTICAL from the SCROLL drop-down menu.

Fast scroll

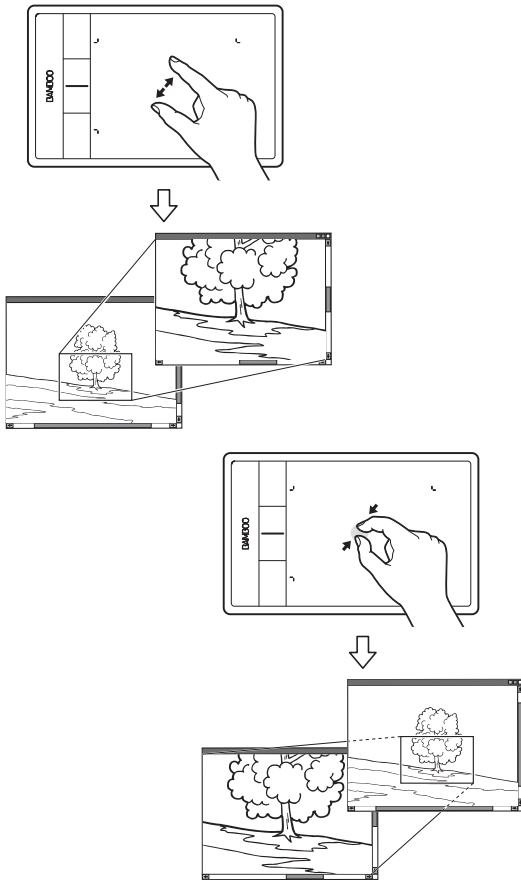
Quickly move (or flick) two fingers together, lifting your fingers at the end of the motion.

- Fast scroll up by flicking your fingers in an upward motion.
- Fast scroll down by flicking your fingers in a downward motion.

Note: Fast scrolling works only for vertical scrolling.



ZOOM



Zoom

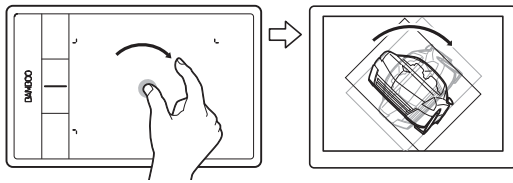
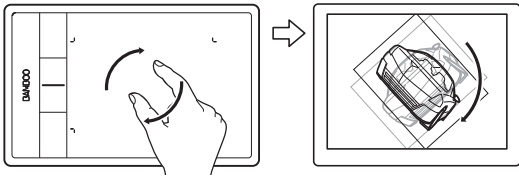
First place two fingers on the tablet surface.

- Zoom-in by moving (expanding) your fingers away from one another.
- Zoom-out by moving (pinching) your fingers toward one another.

Note: If zoom functions do not operate correctly within Adobe® Photoshop®, verify that the ZOOM WITH SCROLL WHEEL function is not selected within the Photoshop PREFERENCES options.



ROTATE



Rotate (two finger rotate)

Place two fingers diagonally on the tablet surface and then rotate them clockwise or counter-clockwise.

For best recognition of this gesture, start with your fingers positioned diagonally on the tablet surface and keep them at least 25 mm (1 inch) apart.

Note: The rotation gesture may work differently depending on the application you are working with. For example, rotation may work smoothly, in 90-degree increments, or not at all.

Rotate (rotate around finger)

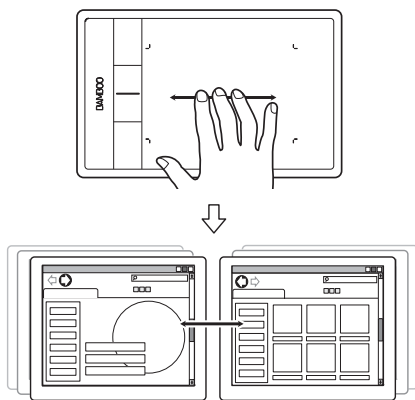
Place two fingers diagonally on the tablet surface. Keep one finger stationary and move the other finger around it.

For best recognition of this gesture, start with your fingers positioned diagonally on the tablet surface and keep them at least 25 mm (1 inch) apart.

Note: The rotation gesture may work differently depending on the application you are working with. For example, rotation may work smoothly, in 90-degree increments, or not at all.

THREE-FINGER GESTURES

SWIPE LEFT/RIGHT TO NAVIGATE



Forward or Back (swipe right or left)

Swipe using three fingers spaced slightly apart, lifting your fingers at the end of the motion.

- Send a 'Forward' command in most browsers and picture viewers by swiping to the right.
- Send a 'Back' command in most browsers and picture viewers by swiping to the left.

Tips:

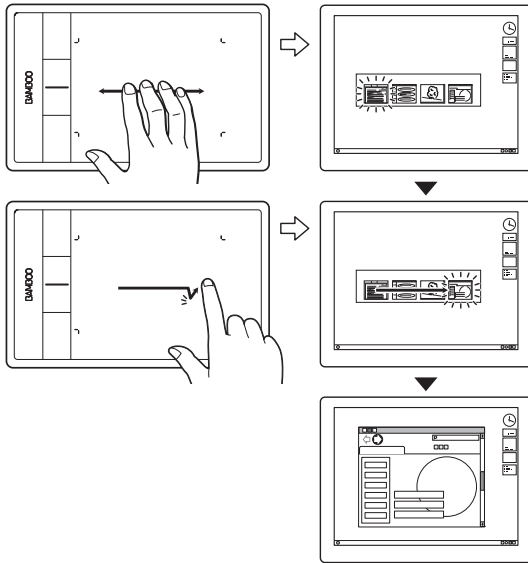
Swiping is similar to using the right and left arrow keys in document viewers.

Use the swipe gestures to page forward or back in most web browsers.



FOUR-FINGER GESTURES

SWIPE LEFT/RIGHT TO SWITCH APPLICATIONS

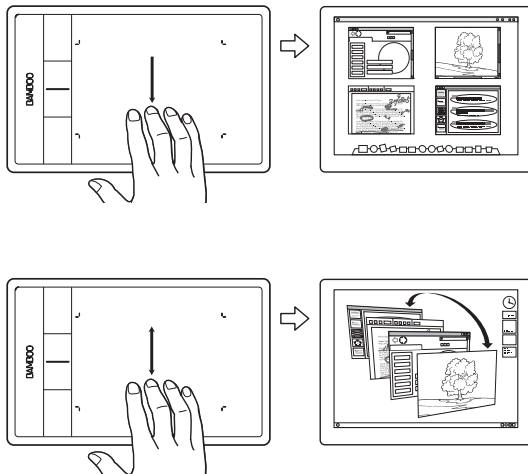


Switch applications

Using four fingers spaced slightly apart, move your fingers left or right to open the application switcher. Then using a single finger, move left or right to highlight an application. Tap to select an application.

Windows XP: Using four fingers, move them left or right to open the application switcher. Swipe your fingers again to open the next application in the list.

SWIPE DOWN FOR FLIP 3D/EXPOSÉ



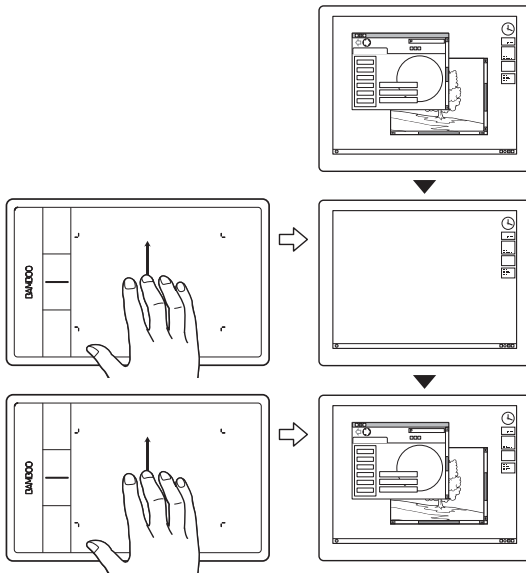
Open Flip 3D (Windows) or Exposé (Mac)

Using four fingers spaced slightly apart, swipe down.

- Windows: Your first swipe opens Flip 3D. Swipe down again to close Flip 3D. Not available for Windows XP. Alternatively, move your fingers down 1 cm (0.4 inch) to open Flip 3D. Without lifting your fingers, continue moving downward to select applications to the left, or move upward to select applications to the right. Lift any finger to dismiss Flip 3D.
- Mac: Your first swipe opens Exposé. Swipe down again to close Exposé.



SWIPE UP TO SHOW DESKTOP



Show Desktop

Using four fingers spaced slightly apart, swipe up to show the desktop. Swipe up again to move your open windows back to the desktop.

CUSTOMIZING TOUCH



Use the Bamboo control panel to customize the touch input options for the way you like to interact with your tablet and computer.

[Opening the control panel](#)

[Control panel overview](#)

[Customize your touch experience](#)

THE PEN EXPERIENCE WITH BAMBOO



Bamboo is designed to enhance the way you work. Bamboo tablet models equipped for pen input enable you to interact with a computer using the pen on the [active area](#) of the tablet.

Note: For Bamboo tablets that support both pen and touch input, the pen disengages touch input whenever the pen tip or eraser (when equipped) is within the tablet [proximity range](#). Lift the pen and your hand away from the tablet active area to enable touch input. If you experience unintended touch input from your hand, manually disable touch by pressing an Expresskey set to TOUCH TOGGLE. When done working with the pen, press the ExpressKey again to enable touch. See [customizing tablet and ExpressKey functions](#). You can also use the Bamboo control panel to disable touch input.

[Holding the pen](#)

[Using the pen on the tablet](#)

[Customizing pen input](#)

[ExpressKey basics](#)

[Customizing the ExpressKeys](#)

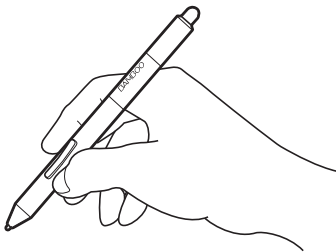
[Customizing the Pop-up Menu](#)

[Working with Display Toggle](#)

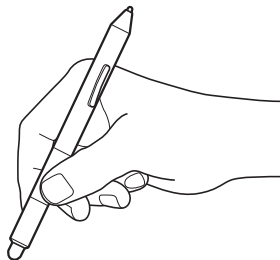
HOLDING THE PEN



Hold the pen like you would hold a normal pen or pencil. Make sure the pen buttons are in a convenient location where you can toggle them with your thumb or forefinger, but not accidentally press them while drawing or positioning with the pen. Tilt the pen in any way that feels most comfortable.

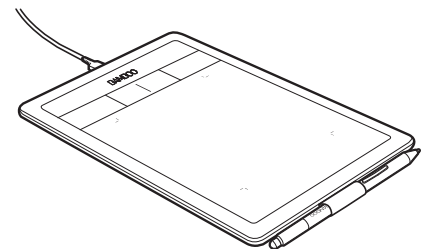


Position for drawing and navigation



Position for erasing

When you are not using the pen, store it in the [pen holder](#). The eraser end of the pen should be inserted first into the loop.



Important: When not in use, place the pen in the pen holder or lay it flat on your desk. To maintain the sensitivity of your pen, do not store it in a container where it will rest on the tip or eraser (when equipped). Leaving the pen on the tablet may interfere with screen cursor positioning when using other pointing devices, or may prevent your computer from going to sleep.

USING THE PEN ON THE TABLET



There are four basic techniques for using the pen: positioning, clicking, double-clicking, and dragging. If you are unfamiliar with using the pen, try the exercises on the following pages.

[Positioning](#)

[Clicking](#)

[Dragging](#)

[Using the pen buttons](#)

[Writing and drawing with pressure sensitivity](#)

[Erasing](#)

[Eye-hand coordination exercise](#)

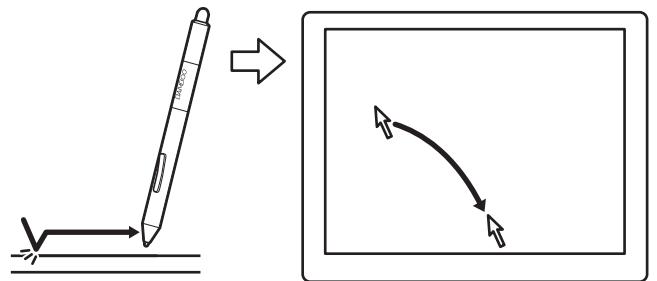
POSITIONING



Use the pen to position the pointer (or cursor) on your screen.

Lift the pen and place the pen tip on the tablet [active area](#). The cursor jumps to the new location.

Move the screen cursor by hovering the pen over the tablet surface. Do this without touching the tablet surface, but while still keeping the pen tip within [proximity](#) of the tablet.

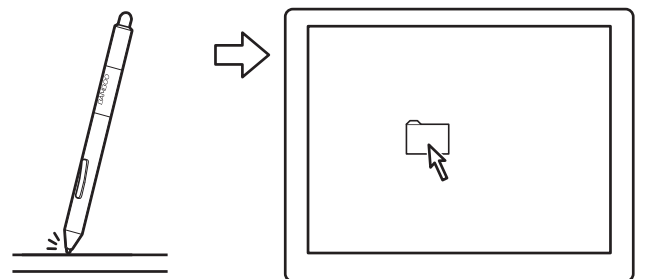


To select an icon or folder, use your pen to position the screen cursor over the object. Press down to select.

Tips:

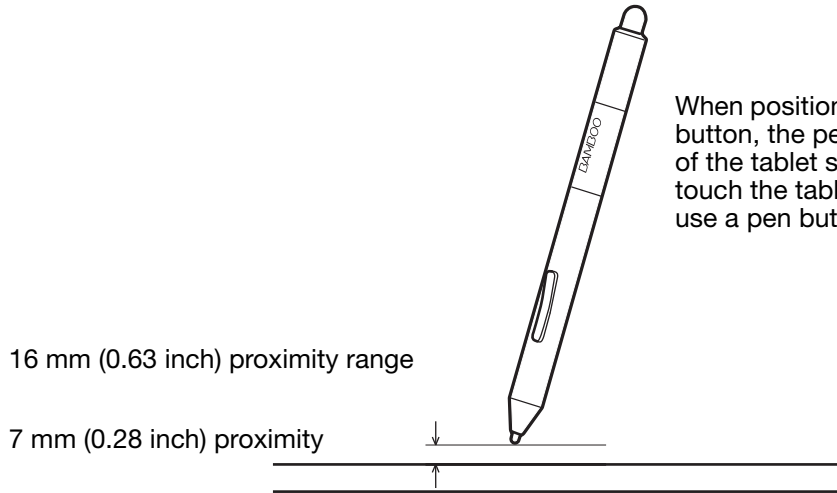
If you find using a pen to be somewhat difficult, try the [eye-hand coordination exercise](#).

Pointing is easier when you orient the tablet square to the computer monitor so the screen cursor follows the same direction as your hand movements on the tablet.



You can set the pen to position the screen cursor two different ways (see [setting the tablet mapping](#)).

- In [pen mode](#), wherever you place the pen on the tablet, the screen cursor will jump to a corresponding point on the display screen. The screen pointer indicates pen position, and follows the movement of the pen across the tablet surface. This is the default setting for the pen.



When positioning the screen cursor and operating a pen button, the pen tip needs to be within 7 mm (0.28 inch) of the tablet surface. The pen tip does not need to touch the tablet in order to move the screen cursor or use a pen button.

- In [mouse mode](#) you move the cursor with a “pick up and slide” motion similar to using a mouse.

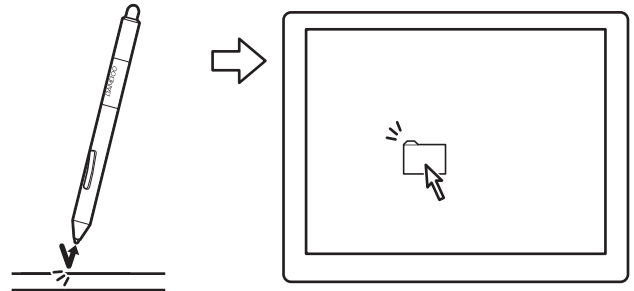
CLICKING



Click to highlight or select an item on the screen. Double-click to open it.

Clicking. Tap the pen tip once on the tablet, or press the pen tip on the tablet with enough force to register a click. Try clicking on a folder icon by moving the screen cursor over the icon and pressing down on the pen tip. The folder should highlight when you press.

If CLICK SOUND is selected in the Bamboo control panel and your computer speakers are on, then you will hear a “click” sound when the pen tip is pressed hard enough to generate a button click. Adjust your speaker volume as necessary.



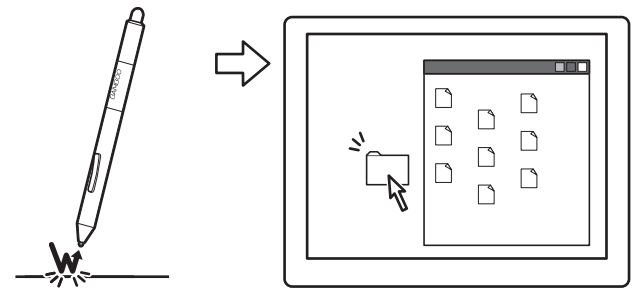
Tip: Configure Windows to select when hovering the pen over an icon and to launch the icon with a single click. To turn on this feature, first open a folder.

Windows 7 and Vista: From the ORGANIZE pull-down menu choose FOLDER AND SEARCH OPTIONS.... From the GENERAL tab select SINGLE-CLICK TO OPEN AN ITEM (POINT TO SELECT).

Windows XP: From the TOOLS pull-down menu choose FOLDER OPTIONS.... From the GENERAL tab select SINGLE-CLICK TO OPEN AN ITEM (POINT TO SELECT).

Double-clicking. Quickly tap the tablet twice in the same place with the pen tip. This is like clicking twice with a mouse button. Try double-clicking on a folder icon to open it.

Tip: Set a pen button to DOUBLE CLICK. This is easier than tapping twice with the pen tip, and is the preferred method of double-clicking with a pen.



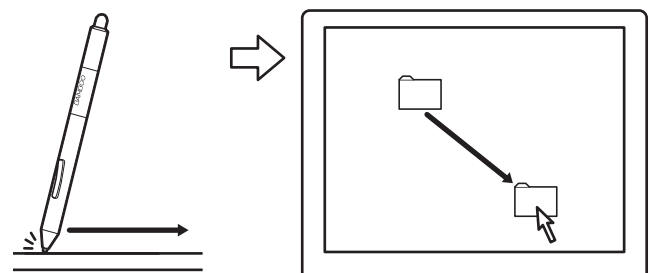
DRAGGING



Dragging is used to select and move objects on the monitor screen.

First point to an object. Then press the pen tip to the tablet and slide it across the tablet surface. The selected object will move across the display screen.

To select text within a document, move the screen cursor to the beginning of a text line. Then drag the pen across the tablet to highlight the text.



USING THE PEN BUTTONS



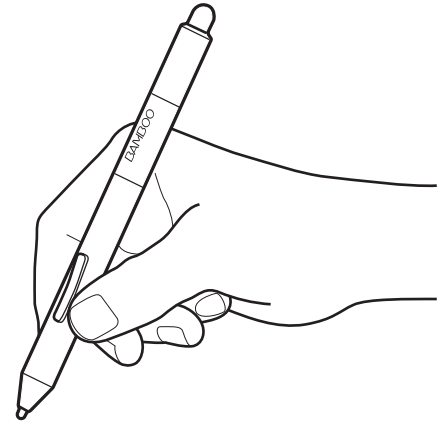
The pen comes equipped with two buttons. Each button has a programmable [function](#) that is selected when you press the button. You can use a pen button whenever the pen tip is within 7 mm (0.28 inch) of the tablet active area. You do not have to touch the pen tip to the tablet in order to use a button.

The default button positions are:

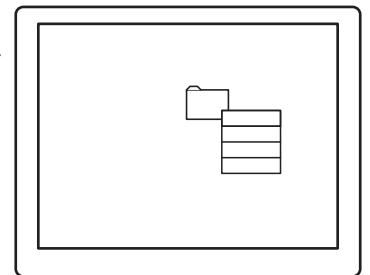
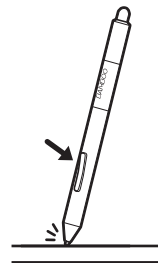
Upper: RIGHT CLICK

Lower: PAN/SCROLL

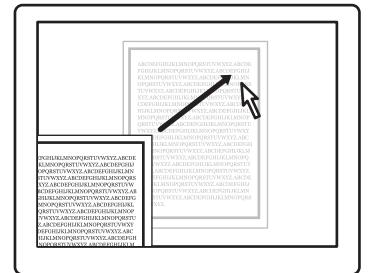
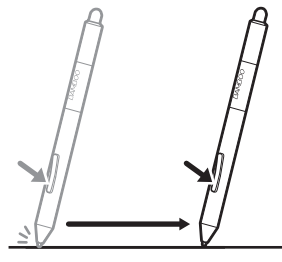
Tip: Set a pen button to DOUBLE CLICK. This is easier than tapping twice with the pen tip.



Use RIGHT CLICK to bring up application-specific or icon-specific menus.



PAN/SCROLL lets you position a document or image in any direction within the active window simply by pressing the pen button and moving the pen tip across the tablet. As you move the pen tip, the document or image is repositioned to follow the direction of pen movement on the tablet. Release the pen button or lift the pen tip from the tablet surface when done.



In some application windows the document will precisely follow the screen cursor as you move the pen tip. In others it will simply move in the same general direction as the screen cursor.

To assign new button functions, see [setting the pen button functions](#).

WRITING AND DRAWING WITH PRESSURE SENSITIVITY



The pen responds to your hand movements, enabling you to create natural-looking pen and brush strokes within applications that support this feature. The [digital ink](#) tools in Microsoft Windows 7, Vista, and Office 2007 or later, as well as the drawing tools in many graphics applications, respond to the pressure you place on the pen. For example, sliders are used in some applications to vary line characteristics such as width, color, and opacity. These characteristics can be controlled much better by the pen's pressure sensitivity. You can vary line width, blend colors, and change opacity with the pressure you exert upon the pen.

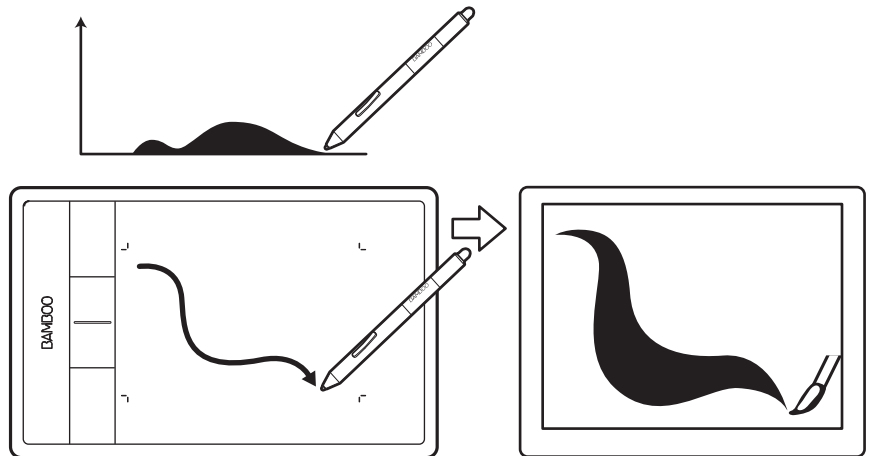
To write, ink, or draw with pressure sensitivity, move the pen along the surface of the tablet while applying various amounts of pressure downward on the tip of the pen.

- Press hard for thick lines or dense color.
- Press gently for thin lines or softer color.

Note that some applications require you first select a pressure-sensitive tool from the application tool palette.

To adjust the tip feel, see [setting the tip and eraser feel, and double-click distance](#).

Visit our web site for a list of applications that support pressure. See [product information](#).



ERASING

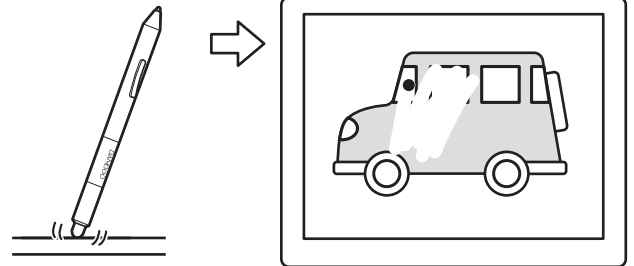


The pen eraser (when equipped) works like the eraser on a pencil.

You can erase intuitively and naturally in graphics applications that support the pen eraser. When you use the pen eraser, the application will automatically switch to the eraser tool.

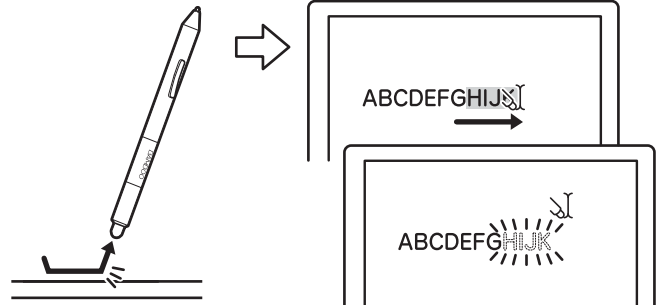
In applications that support pressure sensitivity, you can select pressure-sensitive tools in the application tool palette to vary the width and depth of your erasures as you change the amount of pressure exerted upon the pen.

See [setting the tip and eraser feel, and double-click distance](#).



Use the pen eraser in Microsoft Windows 7, Vista, and Office 2007 or later to erase notes or sketches made with [digital ink](#), and to select and delete text or spreadsheet cells within an application.

In supporting text applications use the eraser to select text, then lift the eraser from the tablet to delete the text.



Visit our web site for a list of applications that support the eraser (see [product information](#)). If the eraser is not supported in an application, you can still use the eraser for positioning, drawing, or annotation.

EYE-HAND COORDINATION EXERCISE



This exercise is designed to retrain your eye-hand coordination for using the pen:

1. Open any graphics application. Use the line tool to draw a rectangular grid with line spacings of about 20-25 mm (3/4 to 1 inch). You can use your standard mouse to do this.
2. Choose a free-hand tool in your application and use the pen to draw a dot at each grid intersection.
3. Draw an X at each grid intersection.
4. Clear your screen and make a simple drawing of your own. The more you use your pen, the easier writing, drawing, and navigation will become.

CUSTOMIZING PEN INPUT



You can easily customize the pen. Use the pen to open the Bamboo control panel. Then select the PEN tab to choose from the available options.

[Opening the control panel](#)

[Control panel overview](#)

[Customize your pen experience](#)

TABLET CONTROLS

Customizable ExpressKeys are featured on most Bamboo tablet models. ExpressKeys are not available for Bamboo Pen (model CTL-470).

[ExpressKey basics](#)

[Customizing the ExpressKeys](#)

EXPRESSKEY BASICS

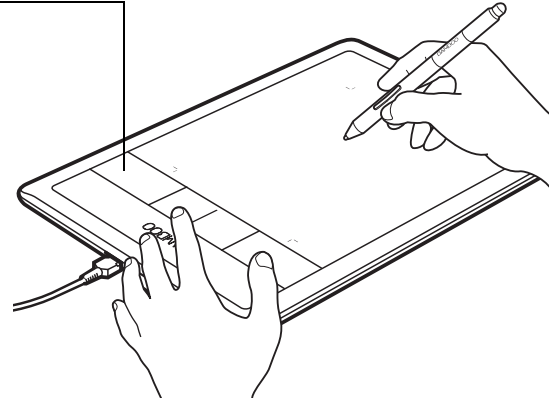
Press individual keys to perform frequently used functions or keystrokes. ExpressKeys can also be used to modify touch or pen input properties as you work.

ExpressKeys

Consider some of these ways to use the ExpressKeys:

- Set a key to a commonly used keyboard shortcut.
- Set a key to launch a commonly used file or application, such as your email program.
- Choose from any of the other available [functions](#).

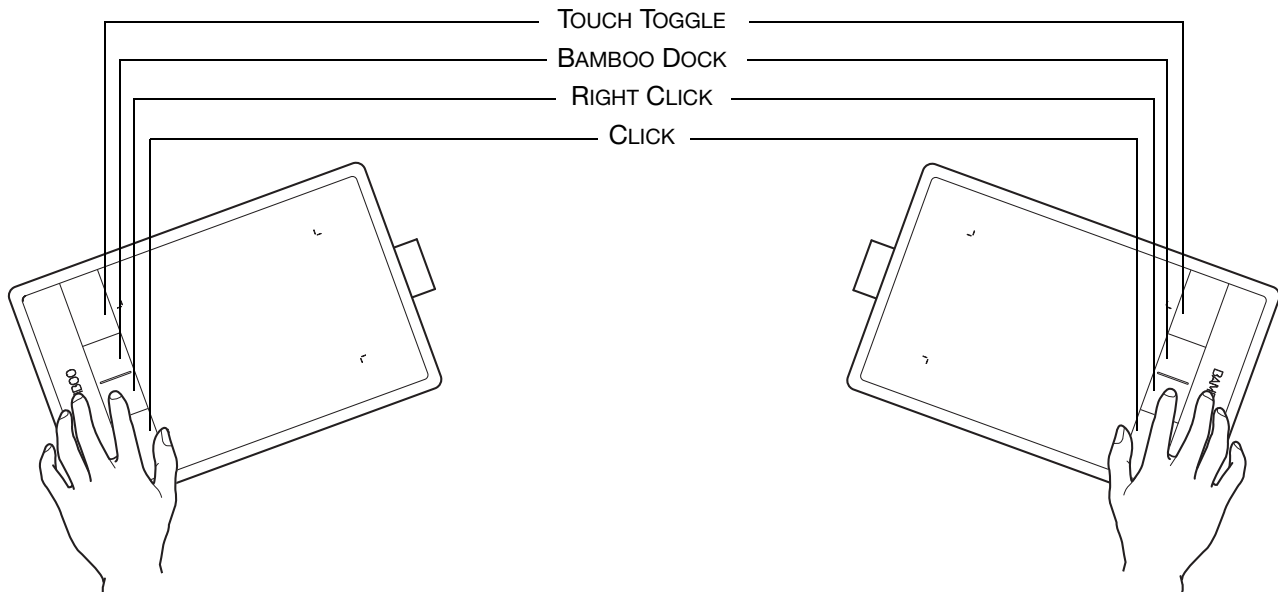
Note: The ExpressKeys can be operated in combination with one another. For example, program one key for the CTRL function and another for ALT. When you press both keys at the same time a CTRL+ALT function is initiated.



ExpressKeys configuration when positioned on left side of tablet (RIGHT HANDED orientation)

Default settings:

ExpressKeys configuration when positioned on right side of tablet (LEFT HANDED orientation)



CUSTOMIZING THE EXPRESSKEYS

Use the Bamboo control panel to customize the ExpressKey options.

[Opening the control panel](#)

[Control panel overview](#)

[Customizing tablet and ExpressKey functions](#)



CUSTOMIZING YOUR BAMBOO

Use the Bamboo control panel to customize Bamboo for the way you like work.

[Opening the control panel](#)

[Control panel overview](#)

[Customize your touch experience](#)

[Customize your pen experience](#)

[Customizing tablet and ExpressKey functions](#)

[Customizing the Pop-up Menu](#)

[Working with Display Toggle](#)

[Button functions](#)

OPENING THE CONTROL PANEL

To open the control panel:

- **Windows.** Click on the Windows START button and choose ALL PROGRAMS. Then select BAMBOO and choose the BAMBOO PREFERENCES option.
- **Mac.** Open SYSTEM PREFERENCES from either the Dock, the Apple menu, or from the APPLICATIONS folder. Then click on the BAMBOO icon.

You can begin customizing Bamboo after opening the control panel. The control panel displays only those tabs and options that apply to your tablet model and configuration. See [control panel overview](#).

Note: User-specific preferences are supported. After logging on, each user can customize their personal settings in the Bamboo control panel. Switching to another user will automatically load the settings for that user.

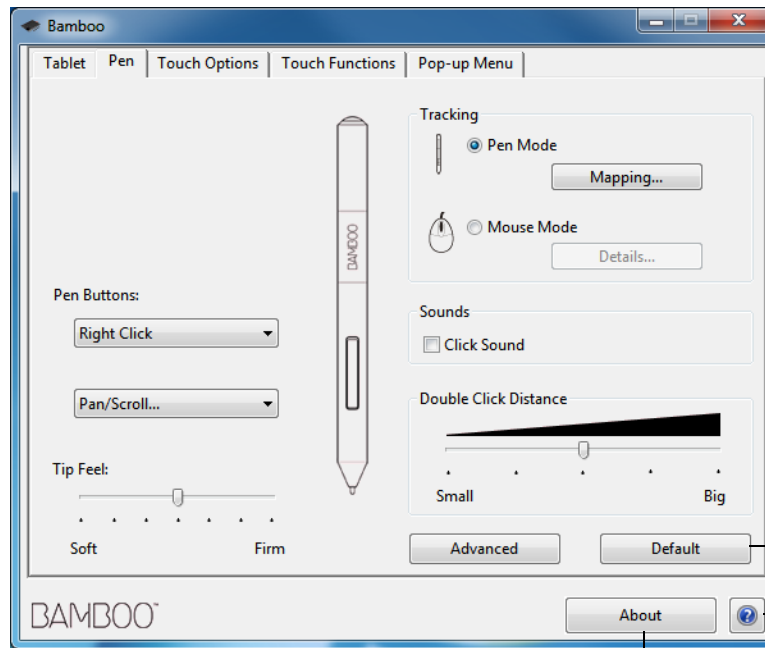


CONTROL PANEL OVERVIEW

After opening the control panel, you can begin customizing Bamboo.

Customizable settings are found on each tab.

The tabs that apply to your tablet model and configuration are displayed when you open the control panel.



Closes the control panel.

Resets the selected tab to its default settings.

Downloads or displays the manual.

Displays information about the control panel and driver.

Experiment with different settings to find what works best for you. Any changes you make will take effect immediately. Click DEFAULT to return a tab to the factory settings.

Tool Tips are available for most control panel items. Position the screen cursor over an item and let it rest there. The appropriate Tool Tip will pop up in a few moments.

Your keyboard tab and arrow keys can also be used to navigate the control panel.

The following sections provide detailed information about each control panel tab and some of the more advanced concepts. Many of the sections also contain useful customizing tips.

[Customize your touch experience](#)

[Customize your pen experience](#)

[Button functions](#)

CUSTOMIZE YOUR TOUCH EXPERIENCE



The control panel options enable you to customize Bamboo for the way you like to interact with your tablet and computer when using touch input. See also [navigating with touch](#).

[Setting the touch options](#)

[Setting the touch functions](#)

[Customizing tablet and ExpressKey functions](#)

[Disabling touch](#)

SETTING THE TOUCH OPTIONS



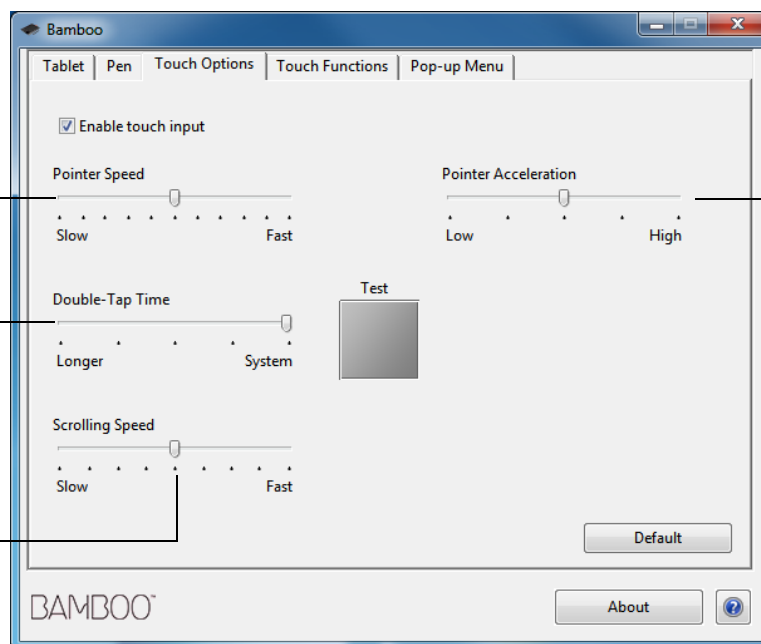
Select the TOUCH OPTIONS tab. The touch options determine how fast you must move or tap your fingers in order for an action or gesture to be recognized.

Adjusts the screen pointer for speed of tracking and navigating. Choose a SLOW speed to move the screen cursor at a slower rate with more finger motion. Choose a FAST speed to move the screen cursor quickly with less motion.

Sets the acceleration level of the screen pointer. Choose a LOW setting for a slower response to your finger motion on the tablet. Choose a HIGH setting for a quicker response.

Adjusts how fast you must tap to register a double-click. To test your setting, position the screen cursor over the TEST area and tap twice.

Sets the scrolling speed of the SCROLL touch gesture.



Note: Touch speed and acceleration settings are independent of system settings. Changes you make to these settings in the Bamboo control panel do not affect similar system settings. However, changes made to similar system settings may affect your Bamboo tablet settings.

SETTING THE TOUCH FUNCTIONS



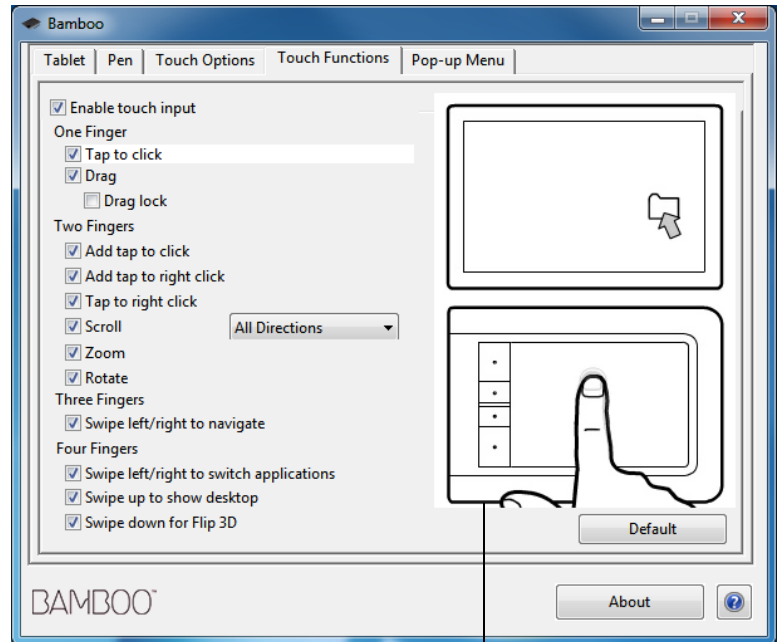
To customize Bamboo for your touch preferences, select the TOUCH FUNCTIONS tab.

Touch [input options](#) can be enabled or disabled individually, and are dependent upon application support.

Touch actions and gestures are available when selected.

So that you may work in different ways, some functions (such as a right-click) can be performed using different actions or gestures.

See also [navigating with touch](#).



Position the screen cursor over an option to see an animated demonstration of that function.

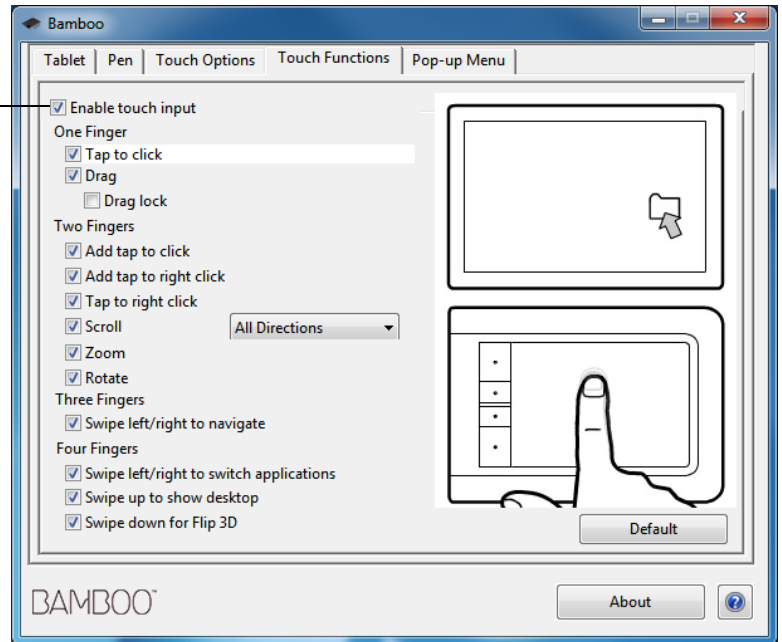
If you do not choose a specific option to view, then the control panel animation will demonstrate each option sequentially, from top to bottom.

DISABLING TOUCH



Choose the TOUCH FUNCTIONS or TOUCH OPTIONS tab to disable and enable touch input.

- Deselect to disable touch input. You can still work with the ExpressKeys (and pen).
- Select to ENABLE TOUCH INPUT.
- This option can also be changed by pressing an ExpressKey to which the TOUCH TOGGLE function has been assigned.



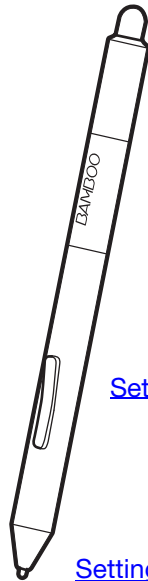
TOUCH FUNCTIONS tab shown.

CUSTOMIZE YOUR PEN EXPERIENCE



You can easily customize the pen. Use the pen to open the Bamboo control panel. You can then customize Bamboo for the way you like to interact with your tablet and computer when using pen input.

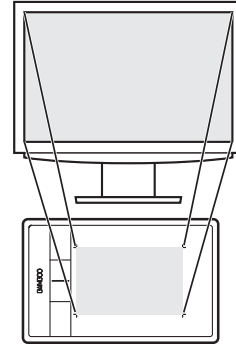
Note: If you have more than one Bamboo pen (for example, a standard pen and a premium pen), any changes you make to the pen settings will apply to both pens.



[Setting eraser feel](#)

[Setting the pen button functions](#)

[Setting tip feel and double-click](#)



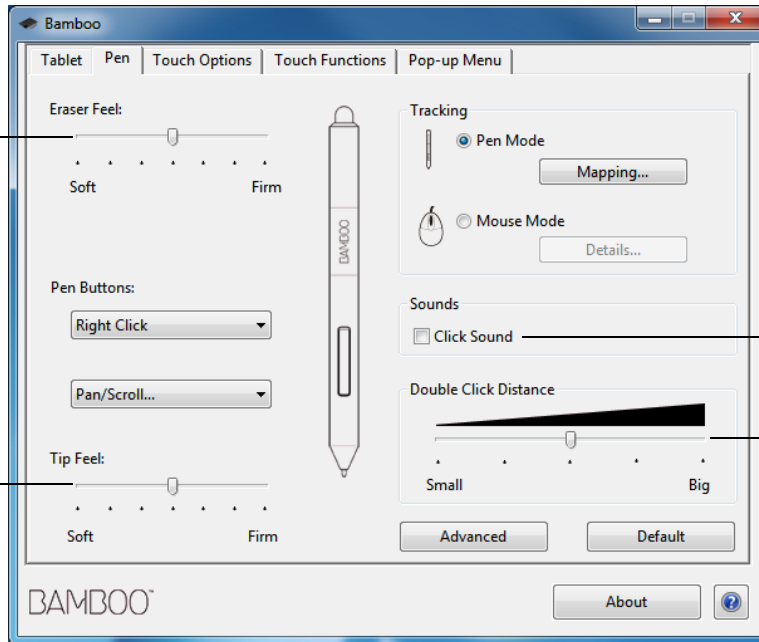
[Setting the tablet mapping](#)

SETTING THE TIP AND ERASER FEEL, AND DOUBLE-CLICK DISTANCE



Select the PEN tab. To create broad brush strokes or to click with a light touch, use a soft tip setting. For maximum control while drawing thin lines, use a firm tip setting. To erase with a broad stroke or to click with a light touch, use a soft eraser setting. For maximum control while erasing, use a firm eraser setting.

Customizes the amount of pressure needed to erase. Available for eraser-equipped pens.



Customizes the amount of pressure needed to click, draw, or ink.

When checked, an audible “click” sound will be heard whenever a pen click occurs and your computer speakers are turned on.

Adjusts the size of the double-click area and the double-click speed. A larger setting makes double-clicking easier.

Tips:

Use a soft TIP FEEL to reach the full pressure range with a lighter touch.

In some applications a soft pressure setting can make the pen overreact, causing any small press on the pen to be magnified on the screen. If you experience this, try a firmer TIP FEEL setting.

To make double-clicking easier, expand the tap area that accepts a double-click (the double-click distance).

A large double-click distance may cause a delay at the beginning of brush strokes in some drawing applications. This may also cause a delay at the beginning of a drag action or inking stroke. If you notice such effects, try setting a smaller double-click distance and using a pen button set to double-click (see [using the pen buttons](#)). You can also set an ExpressKey to double-click.

SETTING THE PEN BUTTON FUNCTIONS

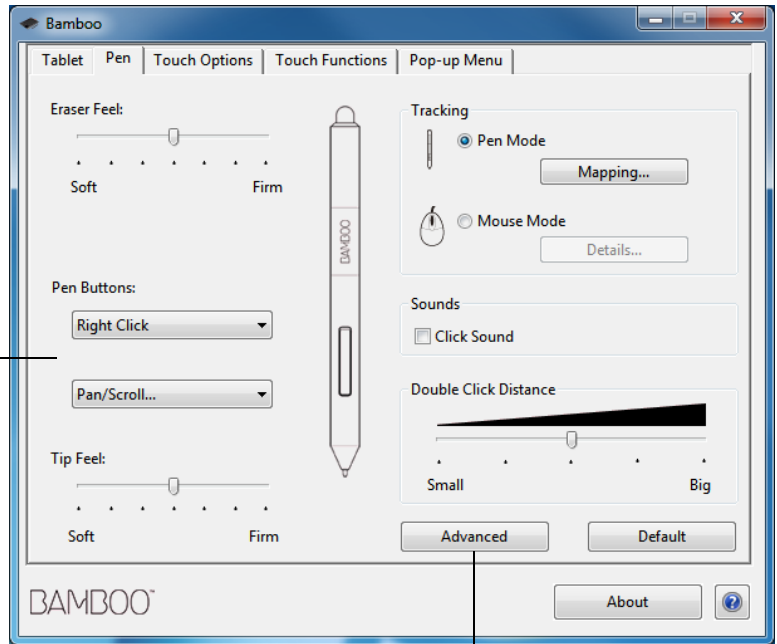


Select the PEN tab. Each pen button can be set to simulate a variety of mouse functions.

Select the **function** to perform when pressing the upper or lower pen button.

The selected function occurs when you bring the pen tip within 7 mm (0.28 inch) of the tablet surface without touching the tablet and then press the upper or lower pen button.

Tip: To make double-clicking easier, set a pen button to double-click automatically by selecting **DOUBLE CLICK**.



You can change the **SIDE SWITCH MODE** to best fit the way you like to use the pen when making right-clicks or other click functions. Click the **ADVANCED** button.

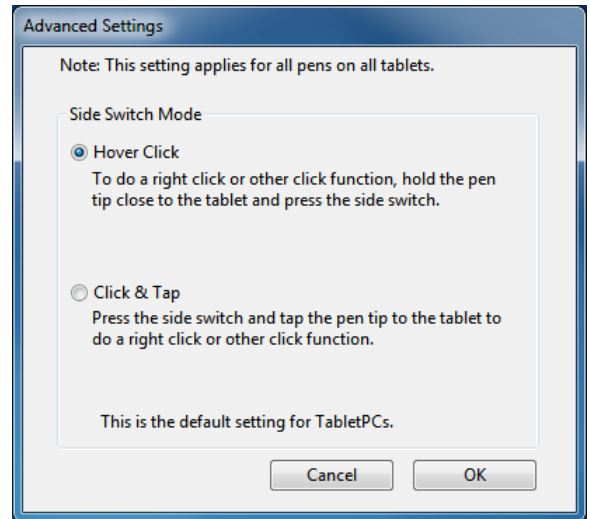
- Choose **HOVER CLICK** to perform click functions without touching the pen tip to the tablet surface.
- Choose **CLICK & TAP** to enable the precise placement of click functions. When selected, you must first press the pen button and then touch the pen tip to the tablet surface in order to perform the click function.



Hover click



Click tap

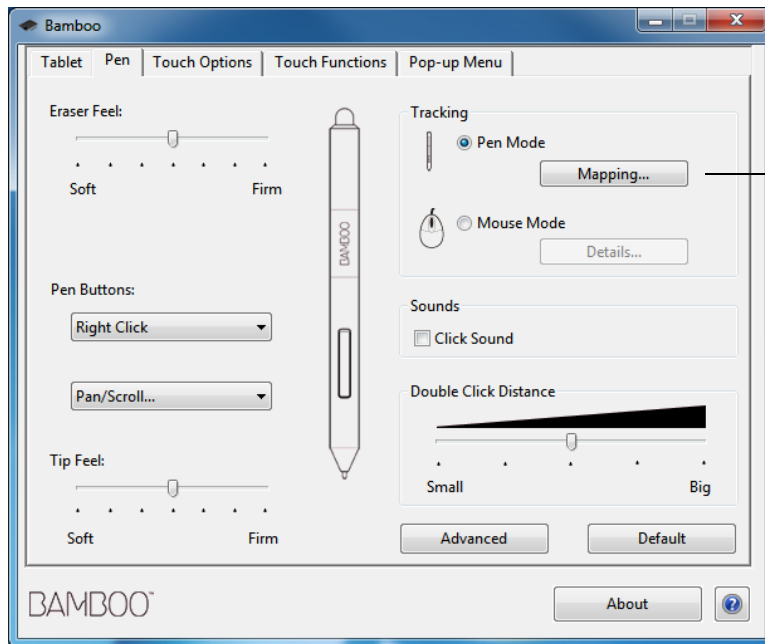


SETTING THE TABLET MAPPING



Select the PEN tab. The tablet TRACKING options enable you to define the relationship between pen movement on the tablet surface and cursor movement on the monitor screen.

By default the entire active area of the tablet maps to the entire monitor. If more than one monitor is in use the tablet will map to all monitors. See [working with multiple monitors](#).



TRACKING options control how the screen cursor moves:

- PEN MODE sets the cursor movement to correspond with the position of your pen on the tablet. Wherever you place your pen on the tablet, the cursor will jump to a corresponding point on the screen. This is known as absolute positioning, and is the default setting for the pen.

Click MAPPING... to customize the [tablet mapping](#).

- MOUSE MODE enables you to move the screen cursor with a “pick up and slide” motion similar to using a standard mouse.

Click DETAILS... to [set the pen speed in mouse mode](#).

Note: If you frequently switch between pen mode and mouse mode, you can assign the [MODE TOGGLE...](#) function to one of your pen buttons or ExpressKeys.



In the Bamboo control panel PEN tab, click on the PEN MODE MAPPING... button to display the PEN MODE DETAILS dialog box.

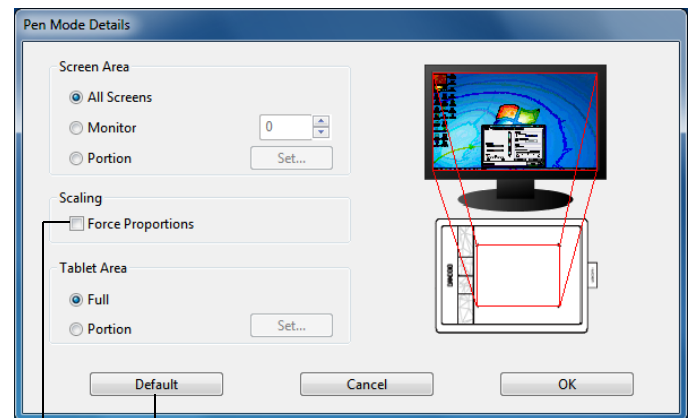
Use the SCREEN AREA options to select a screen area for tablet to screen mapping.

- ALL SCREENS. The entire monitor(s) area is mapped. This is the default setting. See [working with multiple monitors](#).
- MONITOR. The entire area of a single monitor that you choose is mapped.
- PORTION. A portion of the desktop area is mapped. Click SET... to define the [portion of screen area](#).

Use the TABLET AREA options to select a tablet area for tablet to screen mapping.

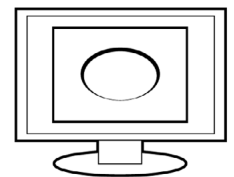
- FULL. The entire active area of the tablet is mapped. This is the default setting.
- PORTION. A portion of the tablet area is mapped. Click SET... to define the [portion of tablet area](#).

Note: Although Bamboo is optimized for use with 16 : 10 aspect ratio displays, the default settings automatically adjust for use with other aspect ratio displays.

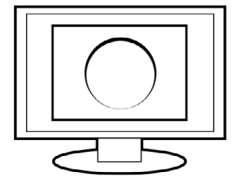


Returns settings to their factory defaults.

When FORCE PROPORTIONS is unchecked, the correct scale or proportions are not maintained. The selected tablet area is mapped to the selected display area. Drawing a circle on the tablet may create an ellipse on the display screen. This is the default setting.



When FORCE PROPORTIONS is checked, the correct vertical and horizontal proportions are maintained. Drawing a circle on the tablet results in a circle on the display screen. Depending on your settings, some portions of the tablet active area may no longer be usable when this option is selected.



PORTION OF SCREEN AREA

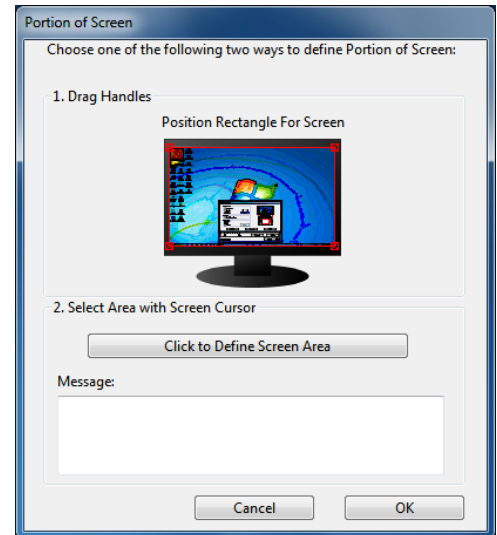


To define which portion of the display screen your tablet will map to, click on the PEN tab PEN MODE MAPPING... button to display the PEN MODE DETAILS box. Choose SCREEN AREA PORTION and click SET....

In the dialog that appears, choose a method for defining a portion of the display.

- Drag corners of the foreground graphic to select the screen area.
- Select the CLICK TO DEFINE SCREEN AREA button and move the screen cursor to select the screen area. Be sure to follow any MESSAGE prompts.

After defining a portion of the screen, you may need to use a different input device to access other portions of the screen area.



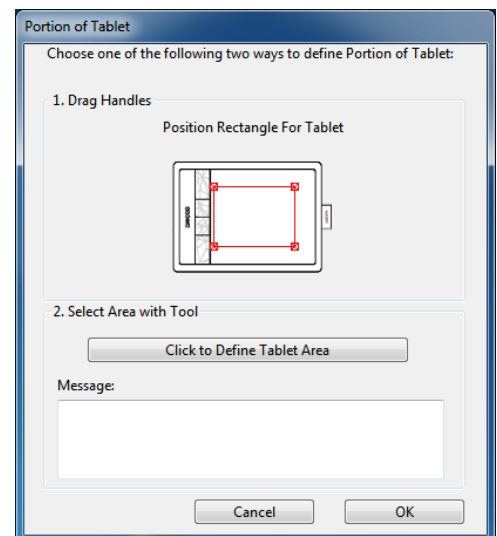
PORTION OF TABLET AREA



To define the tablet area that will be mapped to the screen area, click on the PEN tab PEN MODE MAPPING... button to display the PEN MODE DETAILS box. Choose TABLET AREA PORTION and click SET....

In the dialog that appears, choose a method for defining a portion of the tablet:

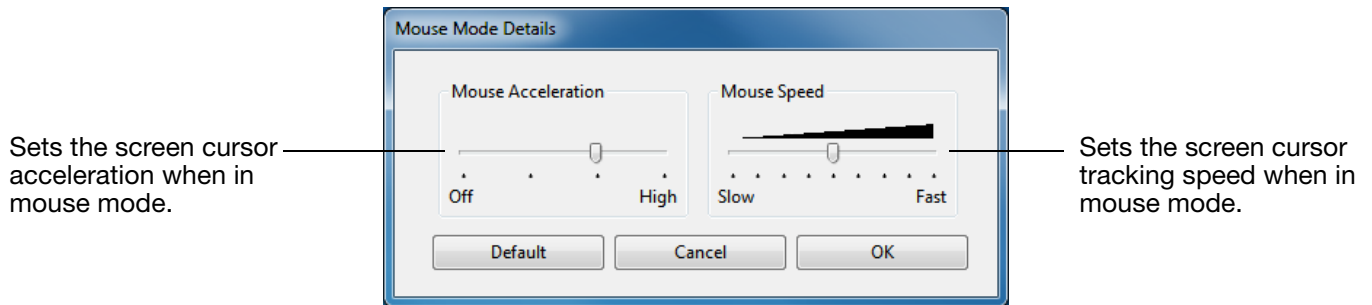
- Drag corners of the foreground graphic to select the tablet area that will be mapped to your selected screen area.
- Select the CLICK TO DEFINE TABLET AREA button and use your pen on the tablet to select the tablet area. Be sure to follow any MESSAGE prompts.



SETTING THE PEN SPEED IN MOUSE MODE



To change the screen cursor acceleration and speed when using the pen in mouse mode, click on the PEN tab **MOUSE MODE DETAILS...** button. A dialog box will be displayed where you can make your adjustments.



Notes:

The dialog box will also appear when you set a button to [MODE TOGGLE...](#). Only one acceleration and speed setting can be made.

The mouse mode acceleration and speed settings are independent of system settings. Changes you make to these settings in the Bamboo control panel do not affect similar system settings. However, changes made to similar system settings may affect your Bamboo tablet settings.

CUSTOMIZING TABLET AND EXPRESSKEY FUNCTIONS

Choose the TABLET tab to set the tablet orientation and to customize the ExpressKeys.

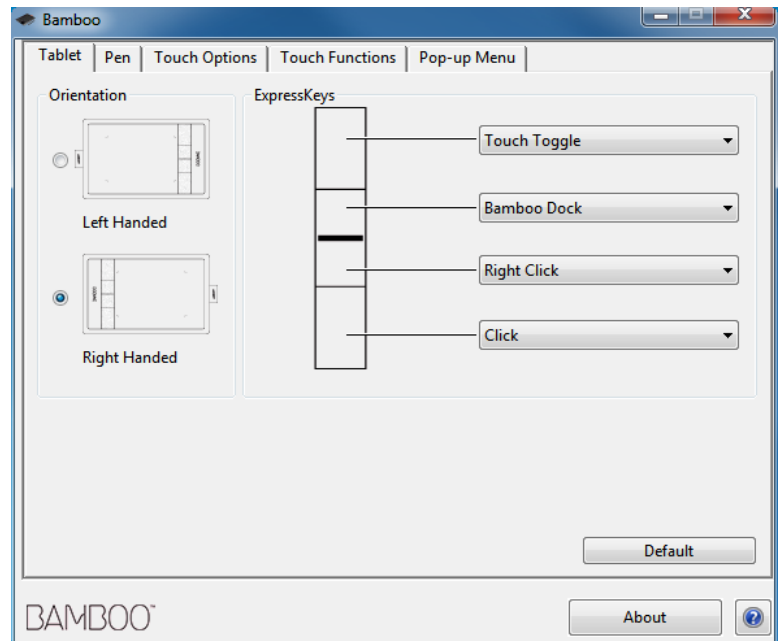
ORIENTATION: Change how your tablet is oriented by selecting RIGHT HANDED or LEFT HANDED input. The tablet driver automatically configures all aspects of the tablet for the selected option. Next, physically rotate the tablet to match your selection.

Note: At the system log on and user switching screens, the tablet will use the default orientation that was selected when the driver was installed. If you want to change the default orientation, you must reinstall the driver. See [configuring the tablet orientation](#).

EXPRESSKEYS: Use the pull-down menus to choose a [function](#) that will be performed when the key is pressed. Your choice will be displayed either within the pull-down menu or beneath the menu. By default:

- The upper key is set to TOUCH TOGGLE, allowing you to temporarily disable touch input when you press the ExpressKey. Press the ExpressKey again to re-enable touch input.
- You can use the 2nd from top key to launch [Bamboo Dock](#) or bring it to the foreground. Press the key again to minimize Bamboo Dock.
- The lower button default conditions are CLICK (bottom key) and RIGHT CLICK (2nd key up).

Note: Pen-only tablet models do not include ExpressKeys.



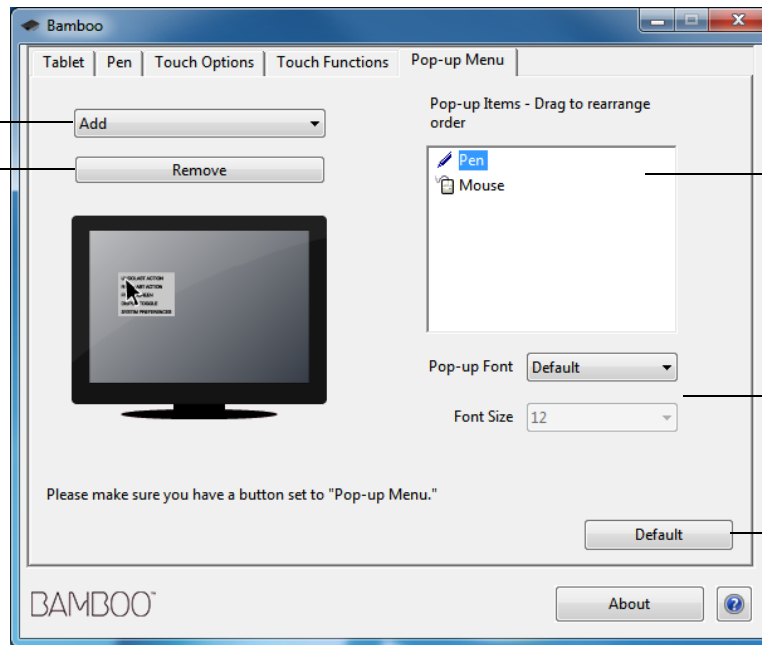
CUSTOMIZING THE POP-UP MENU

Select the POP-UP MENU tab to create a custom menu and define functions that will appear in the menu.

Select a [button function](#) to add to the Pop-up Menu.

Displays functions that have been added to the Pop-up Menu. To change the order of an item, drag it to a new location. Double-click on an item to make edits.

Removes the selected Pop-up Menu item.



Sets the FONT and FONT SIZE of the Pop-up Menu.

Returns the tab settings to the default values.

Important: This action will delete all Pop-up Menu items that have been defined.

To display the Pop-up Menu, set an ExpressKey or pen button to the POP-UP MENU function. When you press that button, the Pop-up Menu is displayed at the screen cursor position.

Click to choose options in the menu.

To close the Pop-up Menu without making a selection, click outside of the menu.

WORKING WITH DISPLAY TOGGLE

Display Toggle is available when working on multiple monitor systems. This feature allows you to work with your tablet on all displays or on one display at a time. See [working with multiple monitors](#).

After setting an ExpressKey to DISPLAY TOGGLE, you can then press that button to sequentially toggle the current tablet mapping between a base mapping (the current setting from the [PEN MODE DETAILS](#) dialog) and other monitors. For example:

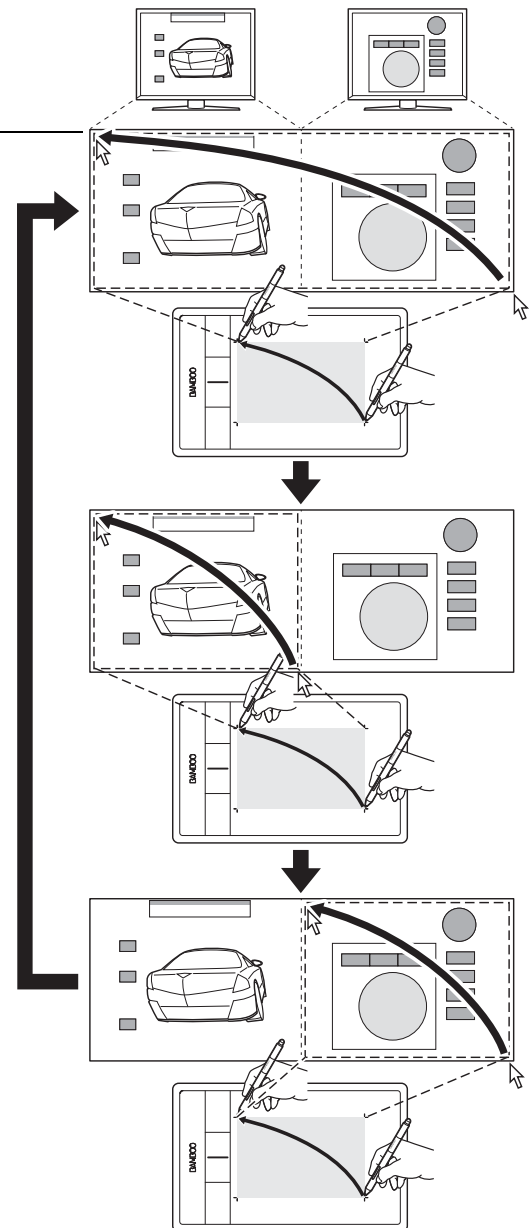
1. The entire display area of a multi-monitor system is set up for extended mode and assigned to the active area of the Bamboo tablet.
2. Pressing an ExpressKey to which the DISPLAY TOGGLE function has been assigned toggles the tablet mapping to the next display in sequence.

All monitors are selected in the toggle sequence.

- The base mapping is the tablet and display mapping defined in the [PEN MODE DETAILS](#) dialog. By default, this includes all monitors unless you have defined a specific monitor as your primary monitor.
- As you toggle to the next monitor, the active tablet area is mapped to that monitor (in pen mode).
- Toggling one more time after the last selected monitor returns the system to the base mapping.

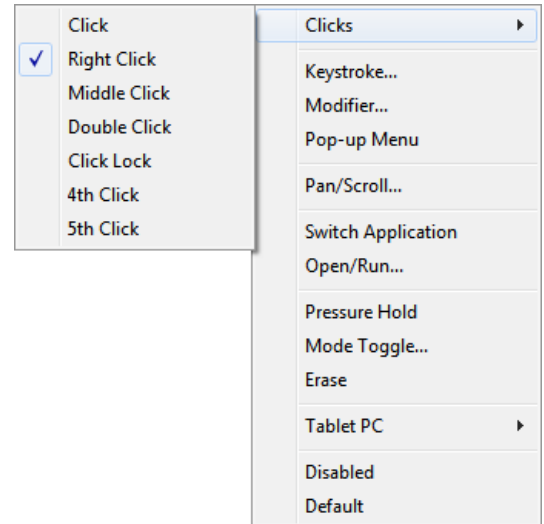
Any of the following actions will return the toggle sequence to the base mapping:

- Launching a graphics application that supports pressure sensitivity.
- Logging out of or rebooting the system.
- Switching users (Fast User Switching).
- Placing the system in sleep mode.
- Changing the [PEN MODE DETAILS](#) settings.
- Changing the resolution or number of displays on your system.
- Using the [MODE TOGGLE...](#) function.
- Selecting PEN MODE or MOUSE MODE from the Pop-up Menu.



BUTTON FUNCTIONS

Customize Bamboo for the way you like to work. Simply use the Bamboo control panel to change the button function that is assigned to a pen button, ExpressKey, or Pop-Up Menu setting. Button function options may vary, depending on your tablet model. Not all options are available for all controls or tablet models.



FUNCTION	DESCRIPTION
CLICKS	
• CLICK	Simulates a primary mouse button click. Default setting for the pen tip.
• RIGHT CLICK	Simulates a right mouse button click, which displays a context menu.
• MIDDLE CLICK	Simulates a middle mouse button click.
• DOUBLE CLICK	Simulates a double-click. For easier double-clicking, use this function instead of tapping twice with the pen tip.
• CLICK LOCK	Simulates holding down the primary mouse button. Press the tool button once to initiate click lock. Press the button again to release click lock. Click lock is useful for dragging objects or selecting blocks of text.
• 4TH CLICK	Simulates a 4th mouse button click.
• 5TH CLICK	Simulates a 5th mouse button click.
BACK	Simulates the BACK command in browser applications.
FORWARD	Simulates the FORWARD command in browser applications.
ERASE	Pen only. Sets a button so that when the button is pressed, the pen tip will act like the eraser in applications that support the ERASE function. See erasing .



FUNCTION

DESCRIPTION

KEYSTROKE...

Enables you to simulate keystrokes. Select this option to display the DEFINE KEYSTROKE dialog box.

Enter a keystroke or keystroke combination in the KEYS entry box. Keystroke combinations can include letters, numbers, function keys (such as F3) and modifier keys (such as SHIFT, ALT, or CTRL for Windows, or SHIFT, OPTION, COMMAND, and CONTROL for Mac). You can also choose special keystrokes or keystroke combinations from the ADD SPECIAL pull-down menu.

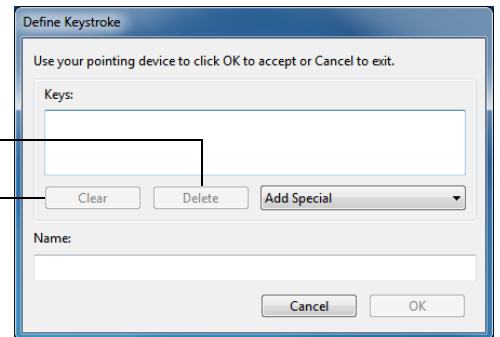
After defining a keystroke or keystroke sequence, click OK.

Important: Because the ENTER (Windows) and RETURN (Mac) keys can be selected as a defined keystroke, they cannot be used to select OK. You must use your pen to click on the OK button.

Enter a name for the keystroke definition. The name will be displayed with the respective control or in the Pop-up Menu list, as applicable.

Deletes only the last entry in the keystroke entry box.

Clears the keystroke entry box.



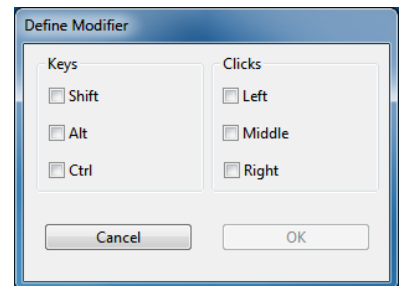
To learn which keystroke shortcuts are supported by a particular application, see the documentation that came with the application.

MODIFIER...

Enables you to simulate modifier key(s) (such as SHIFT, ALT, or CTRL for Windows, or SHIFT, OPTION, COMMAND, and CONTROL for Mac). Many applications use modifier keys to constrain the size or placement of objects.

Choose one or more modifier key options.

Choose a CLICKS option to simulate pressing a button of the selected type on a mouse.



FUNCTION

DESCRIPTION

POP-UP MENU

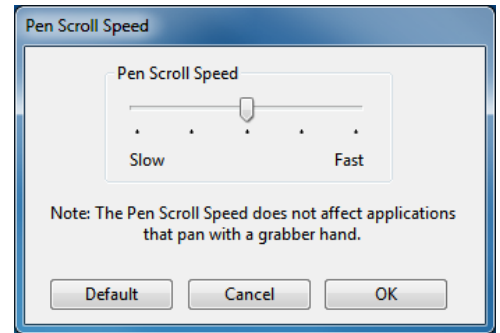
Displays a Pop-up Menu on your screen. See [customizing the Pop-up Menu](#) for more information.

PAN/SCROLL

Pen only. Enables you to position a document or image in any direction within the active pane. Do this by pressing a pen button set for PAN/SCROLL and then dragging with the pen tip across the tablet active area.

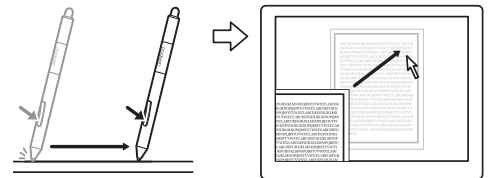
When you select PAN/SCROLL, you are prompted to set a scrolling speed for use in applications that do not support grabber hand (pixel-level) panning.

A slower setting reduces the scroll rate and is useful for close-up and detail work where you need precise control of the image.



As you move the pen tip, the document or image is repositioned to follow the direction of pen movement on the tablet.

Release the button or lift the pen tip from the tablet surface when you are done.



BAMBOO DOCK

Opens the [Bamboo Dock](#).

BAMBOO PREFERENCES

Opens the Bamboo control panel.

SHOW DESKTOP

Minimizes all open windows to display a clean desktop.

DISPLAY TOGGLE

For multiple monitor systems. Enables you to toggle the current tablet mapping and screen cursor between different displays when you press an ExpressKey that has been assigned this function. See [working with Display Toggle](#).

SWITCH APPLICATIONS

Brings up the application switching dialog with focus on the next open application. On Windows 7 or Vista systems running Aero, Flip 3D will be activated with focus on the next open application.





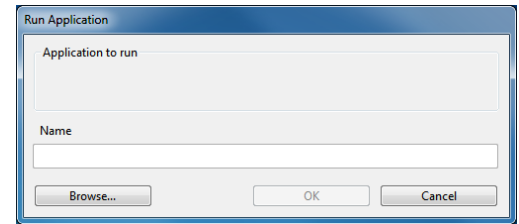
FUNCTION

DESCRIPTION

OPEN/RUN...

Opens the RUN APPLICATION dialog box.

Click BROWSE... to locate an application, file, or script to launch. Your selection appears in the APPLICATION TO RUN box. Click OK to accept the selection.



The dialog box will close and the OPEN/RUN... option you have selected will be assigned as your tool button option. Press the tool button to launch the assigned option.

If your selection is for the Pop-up Menu, it will be displayed in the Pop-up Menu list.

TOUCH TOGGLE

(Not available for Bamboo Pen tablets.) TOUCH TOGGLE is useful when you are working with the pen and want to prevent accidental touch input (e.g., to prevent an accidental right-click). Temporarily disable touch by pressing an ExpressKey to which you have assigned the TOUCH TOGGLE function. Press the ExpressKey again to re-enable touch input. See also [customizing tablet and ExpressKey functions](#).

INK TOGGLE

(Mac.) Toggles the “ink in any application” function of Ink on and off. Ink automatically recognizes and converts your handwriting into text and inserts it into a document. Handwriting recognition must be turned on for this function to work. See your Mac help for information on working with Ink.

TABLET PC

- TABLET PC INPUT PANEL

(Tablet PCs and Windows systems that support the Tablet PC Input Panel.) Opens the Tablet PC Input Panel when you press a tool button set to this function.

- JOURNAL

(Windows 7 and Vista, and Tablet PC systems that include Microsoft Journal.) Opens Microsoft Journal.

- TABLET PC DEFINED

(Tablet PCs and Windows systems that support the Tablet PC Input Panel.) Sets the button function according to settings found in the:

- Windows 7 and Vista TABLET PC SETTINGS and PEN AND INPUT DEVICES control panels.
- Windows XP Tablet Edition TABLET AND PEN SETTINGS control panel.





FUNCTION	DESCRIPTION
EXPOSÉ	(Mac.) Tiles all open windows. To access this option, first choose KEYSTROKE... and then click on the ADD SPECIAL menu within the dialog box.
PRESSURE HOLD	Locks the pressure at the current pressure level until the button is released. For example, you can paint with pressure sensitivity until you reach the brush size that you like. You can then press the button and continue painting with the same size brush until the button is released.
MODE TOGGLE...	Toggles pen input between pen mode and mouse mode. See setting the pen speed in mouse mode .
DISABLED	Disables the button function.
DEFAULT	Returns a button to its default setting.



GOING WIRELESS WITH YOUR BAMBOO

Bamboo tablets support both USB and wireless operation. Expand your creative freedom. Enable your Bamboo tablet for wireless operation by purchasing and installing a Wacom wireless accessory kit. See [ordering parts and accessories](#).

Note: Bamboo models CTH-470 and CTH-670 support wireless operation.

[Wireless accessory components](#)

[Wireless setup](#)

[Battery and power management](#)

[Battery life information](#)

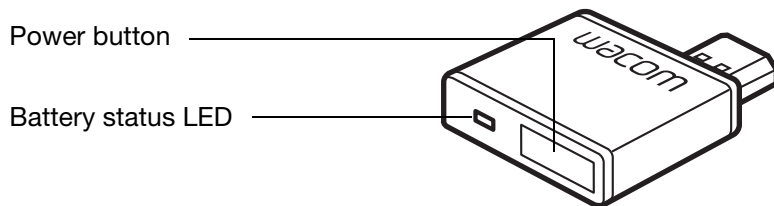
[Replacing the battery](#)

[Wireless module removal](#)

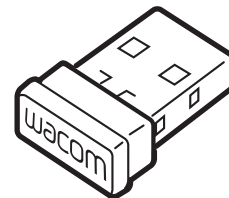
[Wireless receiver storage](#)

WIRELESS ACCESSORY COMPONENTS

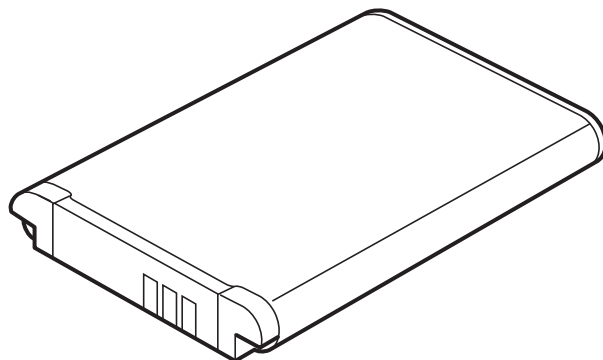
The Wacom wireless accessory kit includes the following components:



Wacom wireless module
Plugs into Bamboo tablet.



Wacom wireless receiver
Plugs into computer.
When not in use, can be stored in Bamboo tablet. See [wireless receiver storage](#).



Rechargeable battery, Lithium-Ion (Li-Ion)
Installs within Bamboo tablet.

Warning: See the Important Product Information guide for safety precautions. Located on the Bamboo Installation CD.

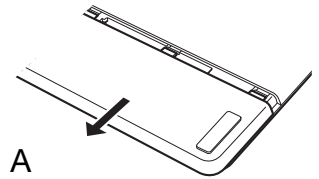
Note: The wireless module and receiver are factory paired. If lost or broken, you will need to purchase a new wireless accessory kit. The battery can be purchased separately.

To install the kit, see [wireless setup](#).

WIRELESS SETUP

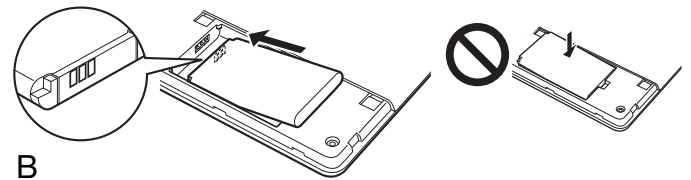
Configure Bamboo for wireless operation.

1. If you have been using Bamboo as a wired tablet, disconnect the USB cable.
2. Turn the tablet over. Remove the wireless compartment cover(s). See (A). Slide cover(s) away from tablet body to remove. Tablet model CTH-670 is equipped with two covers: one for the Wacom wireless module, and one for the rechargeable battery.



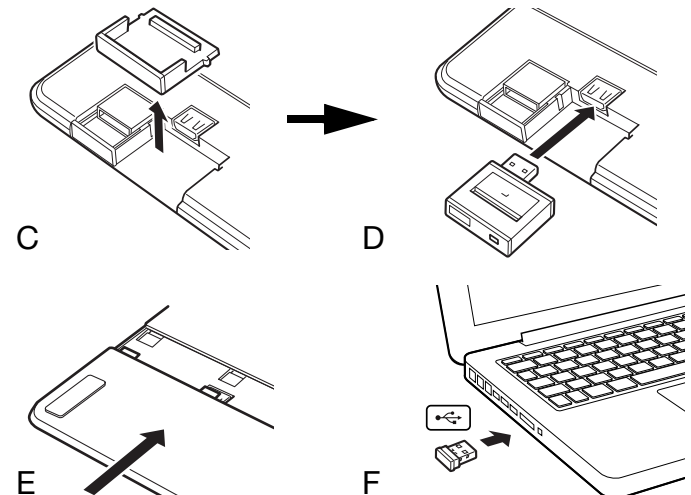
3. Install the wireless components.

- Install the battery. Align contacts (B) as shown and press into place. See also [replacing the battery](#).
- Install the wireless module. Lift away and remove the wireless module spacer (C). Slide the wireless module into the tablet, ensuring the connector is fully seated (D).



Important: Save the module spacer. You may need it as a tool for removal of the wireless module, and to protect the tablet interior from dust when the module is not installed. See [wireless module removal](#).

- Replace the wireless compartment cover(s). Align and slide into place (E).
- Connect the Wacom wireless receiver to an active USB port on your computer or USB hub (F).



When not in use, store the receiver in the wireless receiver storage compartment. See [wireless receiver storage](#).

4. If you have not already done so, turn on your computer and wait until the system has fully loaded.

Next, connect wirelessly.

[Establishing a wireless connection](#)

[Optimizing the wireless connection](#)

ESTABLISHING A WIRELESS CONNECTION

Connect wirelessly with Bamboo.

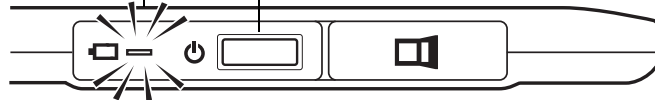
1. Press the power button on the Wacom wireless module. A wireless connection should be established within 4 seconds. If not, the wireless module will turn off. If this should occur, see [wireless connection problems](#).

[Pairing](#) is not required. The wireless module and Wacom wireless receiver are factory paired and work together as a discrete set.

2. Check the connection by using the pen on the tablet to move the screen cursor. See also [battery and wireless connection status](#).
3. Fully charge the tablet battery. See [charging the battery](#).

Battery status LED

- Amber when USB cable is connected and battery is charging.
- Green when USB cable is connected and battery is fully charged.
- Off when using tablet wirelessly.



Power button

- Push to connect, or wake from sleep mode.
- Push to enter sleep mode.

Bamboo can operate wirelessly or in USB mode, but not both at the same time.

- Wireless mode is activated when Bamboo is properly configured for wireless operation and the USB cable is disconnected. When the USB cable is disconnected, the tablet searches and connects to the wireless receiver within 4 seconds. If the receiver is not found then the tablet enters sleep mode.
- USB connection deactivates wireless mode, and activates USB mode.

Notes:

Bamboo can operate wirelessly for up to 10 meters (33 feet) away from your computer. The wireless module uses radio-frequency technology, which can pass through non-metallic objects like desks. It is not necessary for Bamboo to be “in sight” of the wireless receiver.


Interference from other devices (especially audio devices) or networks operating in the 2.4 GHz range, or metallic objects located in or along the line of sight can negatively impact the tablet performance and operating distance. If you experience connection problems, see [optimizing the wireless connection](#).


When starting up your computer, wait until your operating system has completely loaded and then turn on the wireless module (if not already on) to begin working wirelessly.






Important: The use of wireless devices is regulated in most countries. If your Bamboo is configured for wireless operation and you will be traveling, check with the appropriate regulatory authority for any restrictions that may apply to your product in the countries that you visit.

 Products using wireless signals may interfere with the equipment on commercial aircraft, and regulations require that all wireless devices be turned off when traveling in an airplane. Turn off the Bamboo tablet wireless signal by turning off or removing the wireless module (the tablet status LED will be off) and DO NOT power on the wireless module during takeoff, transit, or landing.

 Do not use Bamboo wirelessly in a facility control system or any other environment that requires extremely high reliability, or where the use of a wireless device may cause interference. Wireless operation may interfere with or cause other electronic devices to malfunction, or other wireless devices may interfere with or cause the tablet to malfunction. Where use of wireless products is prohibited, power off or remove the wireless module (ensuring the wireless signal has been turned off) to prevent the possibility of it interfering with or causing other electronic devices to malfunction. Wacom does not accept any liability for direct or consequential damages. For details, please refer to your Warranty, located within the Important Product Information guide.

 Power off your tablet in locations where/when electronic devices are not allowed. Because the tablet may cause other electronic devices to malfunction in some locations where/when the use of electronic devices is not allowed, such as within an airplane, be sure to turn off the tablet by unplugging the USB connector of this product from your computer.





OPTIMIZING THE WIRELESS CONNECTION

If your screen cursor lags behind the pen movement on the tablet or frequently “jumps” about, or if you see excessive straight line segments when drawing in graphics applications, then your wireless connection may not be able to transmit all of the data from the tablet with the necessary speed. This may be caused by interference from other radio sources, obstructions in the radio wave path, excessive distance from the computer, or a combination of the above.

To improve the wireless connection and optimize tablet performance:

- Remove any metallic objects that may be in the line of sight between Bamboo and the Wacom wireless receiver attached to your computer.
- Try connecting the wireless receiver to a USB extension cable, and place it on your desktop or somewhere in sight of Bamboo.
- Move the tablet closer to your computer.
- Switch off any other devices operating in the 2.4 GHz radio spectrum, such as WiFi networks, mobile telephones, etc., or move their antennas further away from your computer.



BATTERY AND POWER MANAGEMENT

This section contains important information about the rechargeable battery and power management features of your Bamboo tablet when configured for wireless operation. Be sure to review the following sections.

[Charging the battery](#)

[Battery and wireless connection status](#)

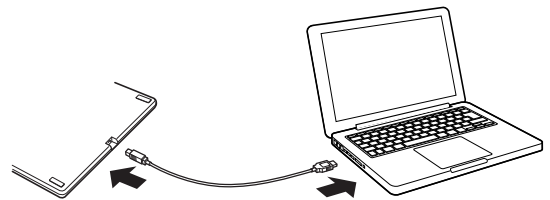
[Power saving features](#)

CHARGING THE BATTERY

Fully charge the tablet battery before using Bamboo for the first time in wireless mode.

Connect the USB cable between Bamboo and a primary USB port located directly on your computer, or to a powered USB hub.

- The battery charges whenever the cable is connected and the battery is not fully charged.
- For everyday use, charge your battery in approximately 4 hours. To fully charge an empty battery it takes approximately 6 hours. Actual charge time depends upon battery level and tablet use while charging.
- USB connection deactivates wireless mode.



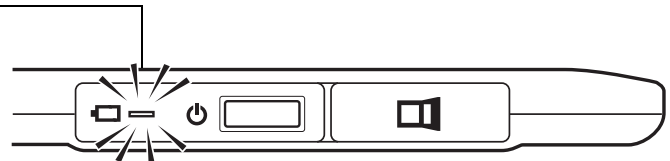
Important: When charging the battery, always connect the USB cable directly to your computer or to a powered USB hub. A non-powered hub may not provide enough current to charge the battery, which may affect overall tablet operation.

When your tablet is not connected to your computer via USB cable, you can charge the battery using a standard wall adapter with 5V output voltage. Quick charging will not work during this process.

For more information, check the product information on the Wacom web site for your region.

Battery status LED

- Amber when USB cable is connected and battery is charging.
- Green when USB cable is connected and battery is fully charged.



Warning: See the Important Product Information guide for safety precautions.

Tips:

When charging, be sure that both the battery and the Wacom wireless module are installed in the tablet.

To check the battery charge status, open the Bamboo control panel and select the TABLET tab. See [battery and wireless connection status](#).

Make the most of your wireless time. See [power saving features](#) and [battery life information](#).

BATTERY AND WIRELESS CONNECTION STATUS

When in wireless mode, Bamboo provides you with additional feedback about your tablet.

- The tablet status LED shows the following:

Blue, flashing	Wireless mode connecting.
Blue	Wireless mode on.
Off	Sleep mode, or wireless mode off.

- On the Wacom wireless module, the battery status LED shows the following:

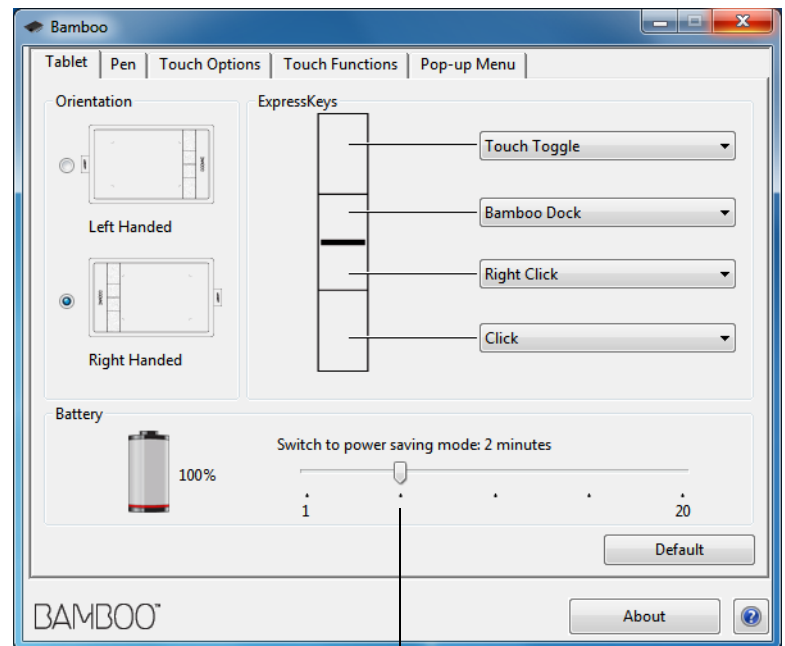
Amber	USB cable connected and tablet battery charging.
Green	USB cable connected and tablet battery fully charged.
Off	USB cable connected, tablet is in USB suspend mode or USB connecting state.
	USB cable disconnected, no charging activity.

- A battery status icon appears in the system task bar (Windows) or menu bar (Mac). Hover the screen cursor over the icon to learn specific details.
- The Bamboo control panel TABLET tab updates to display the tablet battery status and control options.

The battery status icon indicates the tablet is in use, and shows an approximation of the battery charge remaining.

- A power plug symbol indicates tablet is running on external power through the USB cable, and the tablet battery is charging.
- A check mark symbol indicates battery is fully charged.
- An alert symbol indicates battery charge is below 20%.

The above points describe only the basic feedback elements of the battery status icon. You may see variations of these descriptions, depending on the actual status of your tablet and operating system. See also [power saving features](#).



Adjust slider to determine when your tablet will switch to power saving mode.



POWER SAVING FEATURES

When configured for wireless operation, Bamboo uses a number of power saving features to conserve the tablet battery charge and improve performance.

Power saving mode Tablet enters power saving mode after 2 minutes of no user input. The time parameter can be adjusted in the Bamboo control panel. See [battery and wireless connection status](#).
Depending on your tablet model, wake from power saving mode by touching the tablet, pressing an ExpressKey, or placing the pen in proximity.

Sleep mode Tablet enters sleep mode:

- When there is no wireless connection for more than 4 seconds. For example, you switch off the computer, move the tablet out of range, or unplug the wireless receiver. To resume operations, correct any problem and ensure the tablet is within range of your computer. Then press the power button on the Wacom wireless module. See [testing your tablet](#).
- After 30 minutes of no user input.
- When the battery level is extremely low. Recharge the battery immediately.

To wake from sleep mode, first press the power button on the wireless module. Depending on your tablet model, touch the tablet surface with your finger or the pen. Then move your finger or pen along the tablet to fully activate Bamboo.

To manually enter sleep mode, press the power button on the wireless module.

Conserve battery power by turning off the wireless module when you are done working.

Important: The tablet draws current from the battery whenever the wireless module is on. Even in sleep mode a very small trickle of current will continue to flow, leading to eventual battery discharge and possible failure. It is a good idea to charge the battery and turn off the wireless module before leaving the tablet unused for a number of days. See [battery life information](#).



BATTERY LIFE INFORMATION

The rechargeable battery should provide approximately 8 hours of wireless operation on a full charge. However, all batteries age over time and gradually lose their ability to hold a charge.

- The typical life span of a Li-Ion battery is two to three years, whether it is used or not. The life and performance of a Li-Ion battery is not improved by cycling (discharging and recharging).
- Always charge the battery whenever the low battery warning appears on your display screen. See also [power saving features](#).
- The tablet draws current from the battery whenever the Wacom wireless module is on. To reduce power drain, the tablet will enter sleep mode whenever the battery level is very low. The battery must be recharged.

A small amount of current is drawn even in sleep mode, and will slowly discharge the battery. It is a good idea to charge the battery and turn the wireless module off before leaving the tablet unused for a number of days.

- Once the battery voltage has fallen below a minimum safety level, an internal protection circuit within the battery prevents any charging.

If a battery with a low charge remains in the tablet for an extended period of time, the small trickle of current used by the tablet may discharge the battery so far that the internal protection circuit is activated. If this occurs, you can no longer charge the battery. When leaving the tablet unused for an extended period of time, preserve the battery by removing it from the tablet.

You cannot recharge a Li-Ion battery that has been over-discharged.

- For extended battery storage (a month or longer), keeping the battery in a partially (not fully) charged state, along with cool storage, can slow the aging process. The recommended charge level is approximately 40% for optimum battery recharge when placed back into service. If storing both tablet and battery, you do not need to remove the battery. However, it is always good practice to remove the battery when storing the tablet.

Note that you may not be able to recharge the battery after 6 continuous months of non-use.

You will need to purchase a new battery when it is no longer capable of holding an adequate charge or can no longer be charged. See [ordering parts and accessories](#).

 **Warning:** See the Important Product Information guide for battery safety precautions.

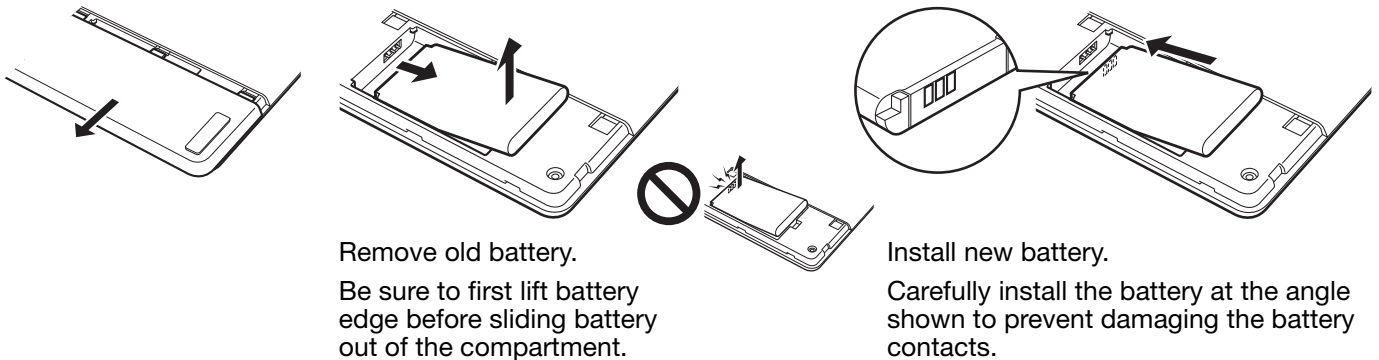
REPLACING THE BATTERY

If your tablet battery has exceeded its life span and can no longer be charged or no longer holds a charge, it will need to be replaced. Be sure to use only the rechargeable battery designed for your tablet. For information, see [ordering parts and accessories](#).

Important: Only use a Wacom battery specified for your tablet.

To replace the rechargeable battery:

1. Turn the tablet over. Remove the wireless compartment cover. Tablet model CTH-670 is equipped with two covers: one for the Wacom wireless module, and one for the rechargeable battery. Slide cover away from tablet body to remove.
2. Carefully remove the old battery as shown below.
3. Install the new battery. Align the terminals of the new battery with the tablet contacts as shown below. Press the battery into the compartment.
4. Replace the wireless compartment cover. Align and slide into place.
5. Connect the USB cable and charge the battery for optimum performance. See [charging the battery](#).



Important: When replacing the battery, be careful not to drop it on hard surfaces. The battery can be damaged internally when dropped, and should be replaced even if there is no obvious damage. This will help prevent any future damage that could occur to the tablet if the battery has been dropped, is installed in the tablet, and then later develops a short or leak while in the tablet.

Warning: See the Important Product Information guide for battery safety precautions.

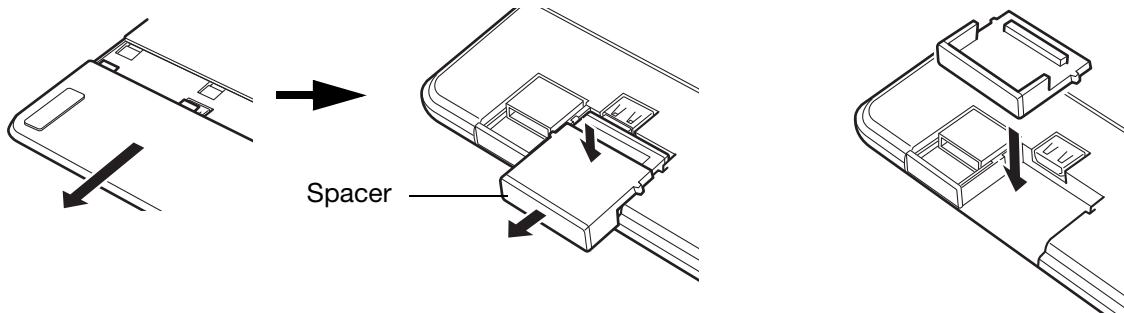
Many communities offer voluntary or mandatory recycling programs for batteries. Properly recycle the old battery by following all applicable laws, and in accordance with the safety precautions for Lithium-Ion batteries as described in the Important Product Information guide. Keep batteries out of the reach of children, and promptly recycle old batteries.

WIRELESS MODULE REMOVAL

Once installed, the Wacom wireless module can be left in your Bamboo tablet. To remove the wireless module:

1. Turn the tablet over. Remove the wireless compartment cover. Tablet model CTH-670 is equipped with two covers: one for the wireless module, and one for the rechargeable battery. Slide cover away from tablet body to remove.
2. Place the wireless module spacer over the wireless module. Use the spacer as a hook to unseat and slide the wireless module out of the tablet. If the spacer is not available, use your thumbnail or other suitable, non-metallic tool to unseat the module.
3. Separate the spacer from the wireless module. Press the spacer back into the wireless module slot.
4. Replace the wireless compartment cover. Align and slide into place.

Store the wireless module in a safe place after removal.



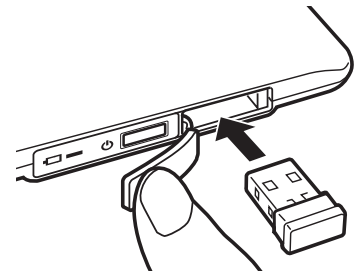
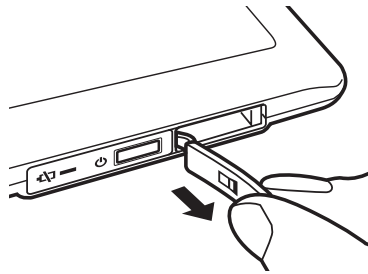
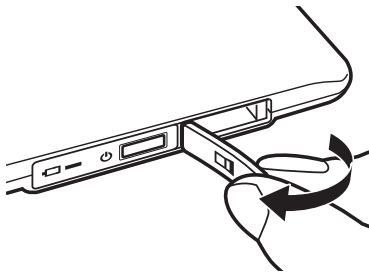


WIRELESS RECEIVER STORAGE

The Wacom wireless receiver is designed for portability. Plug it into a USB port on your computer. Then leave it there so the receiver will always be available for use with your tablet, even when you are traveling or otherwise on the go with Bamboo.

The wireless receiver can also be stored within your Bamboo tablet. To store the receiver in the tablet:

1. Use your fingernail or other suitable, non-metallic tool to open the wireless receiver storage compartment.
2. As you open the receiver storage door, slide the wireless receiver spacer partially out of the tablet body.
3. Insert the receiver into the spacer.
4. Slide the spacer fully back into the tablet body and close the receiver storage door.



To remove the receiver from the tablet, open the compartment. Slide the spacer partially out of the tablet body. Remove the receiver from the spacer. Slide in the spacer and close the storage door.





PROBLEMS WITH YOUR BAMBOO?

Most of the time your tablet will work flawlessly. But if you are having trouble, Wacom recommends you do the following:

1. If the tablet driver failed to load properly, first perform the recommended action in any error message that may appear on your screen. If that does not solve the problem, review the troubleshooting procedures in this chapter.
2. Look in the [troubleshooting tables](#). Your problem may be described there and you can try the solution offered.
3. Open the Wacom tablet Read Me file and look for any information updates.
4. Check the product FAQs (Frequently Asked Questions) on the Wacom web site for your region.
5. If you are having a compatibility conflict between Bamboo and a new hardware or software product, see [obtaining driver downloads](#) for information on downloading an updated software driver. Wacom periodically updates the software driver to maintain compatibility with new products.
6. Test your tablet and pen. See [testing your tablet](#) and [testing a pen](#).
7. If you have tried the suggestions in this manual and still cannot resolve the problem, then contact Wacom for Technical Support. See [technical support options](#) and the Read Me file for information on where to obtain support for your region.

[Testing your tablet](#)

[Testing a pen](#)

[Troubleshooting tables](#)

[Technical support options](#)

[Obtaining driver downloads](#)





TESTING YOUR TABLET

1. Turn on your computer and wait until the system has fully loaded.
2. Check the USB connection. The tablet status LED should glow whenever the tablet is properly connected and your computer has registered it as a USB device. If not:
 - Make sure the tablet USB cable is securely connected to an active USB port on your computer.
 - Check the tablet USB cable for damage.
 - If you are connecting the tablet to a USB hub (or hub device such as a keyboard with USB ports), be sure the USB hub is properly connected to your computer and is active.
 - If the status LED does not illuminate after your computer is on and has finished booting up, your USB port may be disabled. Verify that you have connected the tablet to an active USB port.
 - Connect the tablet to a different USB port or try connecting to the USB port on another computer.
3. For [wireless operation](#), check the tablet connection. The tablet status LED should glow whenever the tablet is properly connected and your computer has registered it as a USB device. If not:
 - Verify that the wireless module is on. See [battery and wireless connection status](#).
 - Verify that the wireless module and receiver are properly installed. See [wireless setup](#).
 - Check the battery power. See [battery and wireless connection status](#). If the battery charge is low, connect the USB cable and charge the battery. See [charging the battery](#).
 - Switch the wireless module off, and then back on.
 - Move the tablet closer to the computer. Make sure there are no metal or other high density obstructions in the line of sight between the tablet and computer.
4. Check touch and pen input:
 - [Check touch input](#). Attempt to move the screen cursor by tracking your finger across the tablet surface. Then tap to select an item. The status LED should brighten when you touch the active area of the tablet.

If the tablet driver does not load properly, basic touch movement will be recognized but other actions and gestures will not. If the driver does not properly load, the lower two ExpressKeys only will function at their default settings of CLICK (bottom key) and RIGHT CLICK (2nd key up). If gestures are not recognized and ExpressKeys do not function, install the tablet driver software.
 - [Check pen input](#). If the tablet driver does not load properly, pen input will not be available. (If you have a pen-only tablet model, you will be able to use the pen tip to move the screen cursor and click. You will also be able to use the pen buttons to CLICK and RIGHT CLICK, but there will be no other pen functionality.) Install the tablet driver software. See also [testing a pen](#).





5. Check the ExpressKeys (if equipped). Do a quick check by pressing each key in turn. The status LED should brighten each time you press a key when there is no touch or pen input. Then open the Bamboo control panel and select the TABLET tab. Click on the DEFAULT button to return to the tablet default settings.
 - Press the upper ExpressKey to toggle touch input off and on.
 - Press the second from top key to open [Bamboo Dock](#) (if installed).
 - Position the screen cursor over an item, such as an empty folder on your desktop, and press the third ExpressKey to perform a right-click.
 - Position the screen cursor over an item, such as an empty folder on your desktop, and press the bottom ExpressKey to perform a click.
6. If any of these tests fail you may have defective hardware. See [technical support options](#).

After testing, use the Bamboo control panel to reconfigure your tablet for any custom settings you may originally have been using.



TESTING A PEN



1. First perform the procedures for [testing your tablet](#).
2. Check the pen by opening the Bamboo control panel and selecting the PEN tab. Click on the DEFAULT button to return the pen to its default settings. Next:
 - Touch the pen tip and then the eraser (when equipped) to the tablet active area. Each time the tip or eraser makes contact with the tablet surface, the status LED should provide a visual indication.
Models CTH-470 and CTH-670: the LED should glow white.
Model CTL-470: the LED should brighten.
 - Without applying pressure to the pen tip, hold the pen tip within approximately 7 mm (0.28 inch) of the tablet surface and press each pen button in turn. For each button press, the status LED should provide a visual indication.
Models CTH-470 and CTH-670: The LED should glow white.
Model CTL-470: The LED should brighten.
 - While still within proximity, but without touching the tablet surface, move your pen across the active area of the tablet. The screen cursor should move in the corresponding direction on your monitor or display screen.
3. If any of these tests fail you may have defective hardware. See [technical support options](#).
4. After testing, use the Bamboo control panel to reconfigure your tablet and pen for any custom settings you may originally have been using.

TROUBLESHOOTING TABLES

If you encounter problems with your Bamboo tablet or pen, see the following tables. Your problem may be described here, and you can try the solution offered. Check the tablet Read Me file for the latest information updates.

For additional information, visit the Wacom web site at <http://www.wacom.com> .

[General problems](#)

[Touch input problems](#)

[Pen input problems](#)

[Wireless connection problems](#)

[Windows-specific problems](#)

[Mac-specific problems](#)

GENERAL PROBLEMS

The computer does not have an available USB port.	Check if there is an available USB port on a USB hub. If not available you will need to add a USB hub or USB card.
The tablet status LED does not illuminate.	Verify that your tablet USB cable is properly connected to an active USB port. If you are connecting to a USB hub, make sure the hub is connected to an active USB port and that the hub is active. If using Bamboo in wireless mode, see also wireless connection problems .
The computer does not go to sleep.	When you are not using the pen, remove it from the tablet surface or the tablet will continue to send data, keeping the computer awake. Note: Because some metallic or other conducting objects can also cause the tablet to send data, it is best to keep the tablet surface clear of all objects when not in use.
The screen cursor is very erratic or jumps around when using the tablet.	On rare occasions the tablet may receive interfering radio frequencies from a computer monitor or nearby AM radio station. If you notice interference from a monitor, try moving the tablet at least six (6) inches away from the monitor, or change the monitor refresh rate or monitor resolution.
The tablet is set for RIGHT HANDED (or LEFT HANDED), but at the log on screen the tablet seems to work upside down.	Reinstall the tablet driver software and change the default orientation of the tablet. See configuring the tablet orientation .

TOUCH INPUT PROBLEMS



Touch input does not work.	Re-enable touch input by pressing an ExpressKey that is set to TOUCH TOGGLE. Otherwise, open the Bamboo control panel and go to the TOUCH FUNCTIONS or TOUCH OPTIONS tab. Be sure the ENABLE TOUCH INPUT option is selected.
Touch input does not seem to fully work. The screen cursor can be moved, but more complex actions or gestures do not work.	If the tablet driver does not load properly, basic touch movement will be recognized but other actions and gestures will not. If the driver does not properly load, the lower two ExpressKeys only will function at their default settings of CLICK (bottom key) and RIGHT CLICK (2nd key up). Install the driver software for the tablet.
The tablet does not reliably recognize multi-finger input.	If you hold your fingers too close together, the tablet may not recognize them as being separate. Try moving your fingers a little further apart.
Cannot zoom-in or zoom-out when working with Adobe Photoshop.	If zoom functions do not operate correctly within Photoshop, verify that the ZOOM WITH SCROLL WHEEL function is not selected within the Photoshop PREFERENCES options.
Scrolling and panning gestures do not function correctly when working with Adobe Photoshop.	If touch input gestures do not operate correctly within Photoshop, verify that the ZOOM WITH SCROLL WHEEL function is not selected within the Photoshop PREFERENCES options.
Rotation gestures do not seem to work consistently, or not at all.	<p>Rotation may work differently depending on the application you are working with. For example, rotation may work smoothly, in 90-degree increments, or not at all.</p> <p>For best recognition of this gesture, start with your fingers positioned diagonally on the tablet surface and keep them at least 25 mm (1 inch) apart.</p>

PEN INPUT PROBLEMS



The pen does not position the screen cursor, or otherwise work.

If the tablet driver does not load properly, pen input will not be available.

- For tablet models that combine pen and touch input, basic touch movement will continue to be recognized but other actions and gestures will not. If the driver does not properly load, the lower two ExpressKeys only will function at their default settings of CLICK (bottom key) and RIGHT CLICK (2nd key up).
- If you have a pen-only tablet model, you will be able to use the pen tip to move the screen cursor and click. You will also be able to use the pen buttons to CLICK (lower button) and RIGHT CLICK (upper button), but there will be no other pen functionality.

Install the driver software for the tablet.

The pen does not draw or ink with pressure sensitivity.

Some applications require that you turn on the pressure capabilities within the application or selected tool before the pen will respond as a pressure-sensitive tool.

Verify also that your application supports pressure sensitivity.

Clicking is difficult.

Open the Bamboo control panel and go to the PEN tab. Try using a lighter TIP FEEL.

Select the CLICK SOUND option (the check box should be checked). This will enable you to hear when the pen registers a mouse click. Your computer speakers must be turned on and the volume audible before you can hear a click sound.

Double-clicking is difficult.

Be sure you are quickly tapping the tablet twice in the same place on the tablet active area.

Using a pen button set to double-click is recommended (review the techniques in [clicking](#)).

Open the Bamboo control panel and go to the PEN tab.

- Try increasing the DOUBLE CLICK DISTANCE.
- Try using a lighter TIP FEEL.

Windows: Try setting your system to launch programs with a single click. See [clicking](#).

The pen selects everything, will not stop selecting.

Open the Bamboo control panel and go to the PEN tab. Move the TIP FEEL slider toward FIRM. If this does not help, see [testing a pen](#).





The eraser (when equipped) selects everything or will not stop erasing.

Open the Bamboo control panel and go to the PEN tab. Move the ERASER FEEL slider toward FIRM. If this does not help, see [testing a pen](#).

You notice a screen delay at the beginning of pen or inking strokes.

Open the Bamboo control panel and go to the PEN tab. Try decreasing the DOUBLE CLICK DISTANCE.

You have to press hard with the pen when clicking, drawing, or writing.

Open the Bamboo control panel and go to the PEN tab. Move the TIP FEEL slider toward SOFT.

The pen tip does not function.

Depending on your tablet model, the status LED should brighten or change color when the pen tip is pressed to the tablet. Be sure you are using the pen that originally came with your product. Other pens may not function properly on the Bamboo tablet.

See [testing a pen](#) to verify pen operation. If any of the tests fail you may have defective hardware.

The screen cursor jumps back.

Do not place the pen on the tablet when it is not in use or when you are using another pointing device. Leaving your pen on the tablet may interfere with screen cursor positioning when using other input devices.

The upper or lower pen button does not work.

Be sure you press the pen button when the pen tip is within 7 mm (0.28 inch) of the tablet active area. Do this without pressing down on the pen tip.

From the Bamboo control panel, verify that the pen button is set to the function you are expecting to occur.

In the Bamboo control panel, click on the PEN tab ADVANCED button. If CLICK & TAP is selected, you will need to first press the pen button and then touch the pen tip to the tablet surface in order to perform a click function. See [setting the pen button functions](#).

See [testing a pen](#) to verify pen operation. If any of the tests fail you may have defective hardware.

Cannot move the cursor where you want to on the screen, or the line you are drawing does not line up with the location of the pointer in paint applications.

Open the Bamboo control panel. Verify that PEN MODE is selected. If this does not help, click on the DEFAULT button to reestablish the default tablet to screen mapping. If you are still having difficulty, remove the tablet preferences (see [Windows-specific problems](#) or [Mac-specific problems](#) for details).





WIRELESS CONNECTION PROBLEMS

The computer does not have an available USB port.

Check if there is an available USB port on a USB hub. If not available, add a USB hub or USB card.

After pressing the power button on the wireless module, the tablet status LED glows steadily for 4 seconds and then turns off.

If a wireless connection is not established, the wireless module will turn off after 4 seconds.

- Make sure the wireless receiver is properly connected to an active USB port on your computer or USB hub.
- Move the tablet closer to the antenna and make sure there are no metal or other high-density obstructions in the line of sight between the tablet and your computer.

Again press the power button to activate the connection.

After turning on the wireless module, the status LED indicates good functionality but the screen cursor cannot be moved with the pen.

Be sure you are using the pen correctly. Review [using the pen on the tablet](#).

Switch the wireless module off, then back on.

If the battery charge is low, try [charging the battery](#).

A wireless connection has been made, but the tablet does not seem to work correctly.

Be sure you have correctly installed the tablet driver software.

See also [optimizing the wireless connection](#).

The tablet works when connected with the USB cable, but turns off as soon as the cable is disconnected.

Confirm the wireless module and receiver are correctly installed, and that the wireless module is turned on.

Check the battery. See [battery and wireless connection status](#).

- Open the tablet wireless compartment cover and verify that the battery is properly installed. Tablet model CTH-670 is equipped with two covers: one for the Wacom wireless module, and one for the rechargeable battery.
- Check the battery appearance to ensure there is no leakage or other indication of damage.
- Charge the battery overnight and try again. If the problem persists, the battery may be completely discharged or damaged and can no longer hold a charge. You will have to purchase a replacement battery. See [ordering parts and accessories](#).





The tablet status LED does not illuminate after pressing the power button on the wireless module.

Try again. Then:

1. Verify the Wacom wireless receiver is properly connected to an active USB port. If connecting to a USB hub, make sure the hub is connected to an active USB port and that the hub is active.
2. Verify the Wacom wireless module is properly installed in the tablet. Press the power button to connect wirelessly.
3. If the tablet status LED still does not light, connect the USB cable between your tablet and computer.

On the wireless module, check the battery status LED.

Amber indicates the battery is charging. Green indicates the battery is fully charged. If the LED remains off, the battery may be defective. Replace the battery.

4. If both the tablet status and wireless module LEDs remain off, then contact the Wacom support staff for the area where your product was purchased. See [technical support options](#).

When using the tablet, the screen cursor or pen strokes seem to lag or skip in some applications.

See [optimizing the wireless connection](#) for tips on improving the connection.

The battery charging process seems to stop whenever the computer enters sleep mode.

As required, adjust your system power or energy saver settings so that the computer does not enter sleep mode while the tablet battery is charging.





WINDOWS-SPECIFIC PROBLEMS

You suspect the tablet preferences may be corrupted, or want to make certain that all settings are at their factory defaults.

Use the Bamboo Preference File Utility to work with preferences. Close any open applications. Click the START icon and select ALL PROGRAMS. Then select BAMBOO and BAMBOO PREFERENCE FILE UTILITY.

- It is a good idea to first back up your tablet preferences. In the BAMBOO PREFERENCE FILE UTILITY dialog box, click BACKUP... and follow the prompts.
- Then, use the Bamboo Preference File Utility to delete the tablet preferences as follows:
 - Single user. Under MY PREFERENCES, click REMOVE to delete the preferences for the current user.
 - Multiple users. Under ALL USER PREFERENCES, click REMOVE to delete preferences for multiple users. Administrator rights are required to delete preferences for all users. Relaunch any currently open tablet-aware applications that you may be running.

You can quickly restore tablet preferences that have been backed up by clicking RESTORE... under MY PREFERENCES.





MAC-SPECIFIC PROBLEMS

At startup, a dialog box appears telling you that either the driver failed to load or the tablet preferences have not yet been created.

The tablet was not detected at startup.

If using a wireless connection:

- Make sure the wireless connection is active. See [battery and wireless connection status](#).
- From the GO menu, select UTILITIES and launch the SYSTEM PROFILER. Select USB from the HARDWARE section of the CONTENTS list. A Wacom USB tablet model should be listed. If a tablet model is not listed, check the wireless connection.

If connected with the provided USB cable:

- Make sure the USB cable is securely connected to an active USB port on your computer or USB hub. Make sure that the tablet status LED is illuminated.
- From the GO menu, select UTILITIES and launch the SYSTEM PROFILER. Select USB from the HARDWARE section of the CONTENTS list. A Wacom USB tablet model should be listed. If a tablet model is not listed, check the USB tablet cable connection or try plugging the tablet into a different USB port.

If you are still having difficulties, uninstall then reinstall the tablet driver software.

If this does not help, contact Wacom for Technical Support. See [technical support options](#).





You suspect the tablet preferences may be corrupted, or want to make certain that all settings are at their factory defaults.

Use the Bamboo Utility to work with preferences. Close any open applications. Open the main APPLICATIONS folder. Then open the BAMBOO folder and run the BAMBOO UTILITY.

- It is a good idea to first back up your tablet preferences. In the Bamboo Utility, select CURRENT USER or ALL USERS. Then click BACKUP... and follow the prompts.
- Then, delete the tablet preferences as follows:
 - Single user. When the utility starts, select CURRENT USER and click REMOVE. Log out, then log back in. When the tablet driver loads it will create a new preferences file with the factory defaults.
 - Multiple users. When the utility starts, select ALL USERS and click REMOVE. Log out, then log back in. When the tablet driver loads it will create new preferences files with the factory defaults.

You can quickly restore tablet preferences that have been backed up for the CURRENT USER or ALL USERS by clicking on RESTORE... within the utility.

Note: Do not manually remove the BAMBOO.PREFPANE file from the main LIBRARY PREFERENCEPANES folder. This file is only to be removed when uninstalling the tablet software driver, and then only when using the BAMBOO UTILITY.

Ink does not work correctly with the tablet.

There may be a problem with the Ink preferences. Remove the damaged preference files as follows. They will be re-created when you enable handwriting recognition.

1. Open SYSTEM PREFERENCES, choose SHOW ALL and select INK. Then turn off handwriting recognition.
2. From the GO menu, choose your HOME. Open the LIBRARY and PREFERENCES folders. Remove the following preferences:
 - COM.APPLE.INK.FRAMEWORK.PLIST
 - COM.APPLE.INK.INKPAD.PLIST
 - COM.APPLE.INK.INKPAD.SKETCH
3. Go back to SYSTEM PREFERENCES and INK, and then enable handwriting recognition.
4. Test the Ink function using your tablet and pen.

If this procedure does not resolve your problem with Ink, contact Apple Support for further assistance. Wacom is not the software manufacturer for Ink and we are limited in our abilities to support a third party software application.





TECHNICAL SUPPORT OPTIONS

If you have a problem with your tablet, first check the tablet Quick Start Guide to be sure the unit is installed correctly. Then review the [troubleshooting](#) procedures.

If you cannot find the answer in this manual, you may find updated information about your problem in the Read Me file for your platform (located on the Bamboo Installation CD). You can also check the product FAQs (Frequently Asked Questions) on the Wacom web site for your region.

If you have an Internet connection you can download the latest software drivers from the Wacom web site for your region. See [obtaining driver downloads](#).

If you cannot solve the problem and you think your tablet is not working properly, contact the Wacom support staff for the area where your product was purchased. See the tablet Read Me file, located on the Bamboo Installation CD, for contact information.

When you call, you should be at your computer with the following information available:

- This manual.
- Tablet serial and model number. (Look on the bottom of the tablet.)
- Driver version number. (See the Bamboo Installation CD or click on the Bamboo control panel ABOUT button.)
- The make and model of your computer, and operating system version number.
- A list of peripheral devices attached to your computer.
- The software application and version you were using when the problem occurred.
- The exact wording of any error message that appeared on your screen.
- What happened and what you were doing when the problem occurred.
- How you tried to solve the problem.

You can also contact the Wacom Customer Care Center by visiting the Wacom web site for your region and completing an Email Inquiry form.



OBTAINING DRIVER DOWNLOADS

Wacom periodically updates the tablet software driver to maintain compatibility with new products. If you are having a compatibility problem between Bamboo and a new hardware or software product, it may be helpful to download a new software driver (when available) from the Internet.

USA, Canada, Central and South America

Worldwide Web: <http://www.wacom.com> Software updates

Europe, Middle East and Africa

Worldwide Web: <http://www.wacom.eu/downloads> Software updates

Japan

Worldwide Web: <http://tablet.wacom.co.jp/download/down1.html> Software updates (Japanese)

Asia Pacific (English)

Worldwide Web: <http://www.wacom-asia.com> Software updates (English)

China

Worldwide Web: <http://www.wacom.com.cn> Software updates
(Simplified Chinese)

Hong Kong

Worldwide Web: <http://www.wacom.com.hk> Software updates
(Traditional Chinese)

Korea

Worldwide Web: <http://www.wacomkorea.com> Software updates (Korean)

Taiwan

Worldwide Web: <http://www.wacom.com.tw> Software updates
(Traditional Chinese)



APPENDIX

This section contains tips on caring for Bamboo, instructions on how to uninstall the tablet software, information about digital inking, and more.

[Caring for Bamboo](#)

[Replacing the pen nib](#)

[Bamboo Dock](#)

[Uninstalling Bamboo](#)

[Managing preferences](#)

[Pen and digital ink capabilities in Windows](#)

[Product information](#)

[Ordering parts and accessories](#)

[Available parts and accessories](#)

CARING FOR BAMBOO

Keep your Bamboo tablet surface and pen clean. Dust and dirt particles can stick to the pen and cause excessive wear to the tablet surface. Regular cleaning with a soft, damp cloth will help to prolong the life of your tablet surface and pen. You can also dampen the cloth using a very mild soap diluted with water. Do not use volatile liquids, such as paint thinner or benzene, as they may damage the plastic case.

Keep Bamboo in a clean, dry place and avoid extremes in temperature. Room temperature is best. Also, your Bamboo tablet and pen are not made to come apart. Twisting the pen case can break the pen. Taking apart the product will void your warranty.

Important: Take care to never spill liquids onto the tablet or pen. Be especially careful of getting the tablet ExpressKeys or pen buttons, tip, and eraser (when equipped) wet. They contain sensitive electronic parts that will fail if liquid enters them.



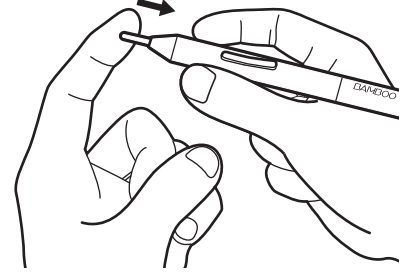
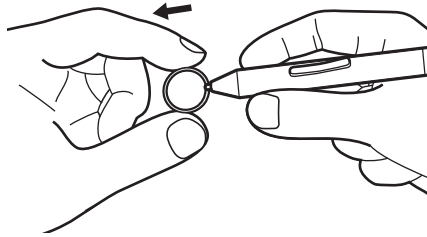
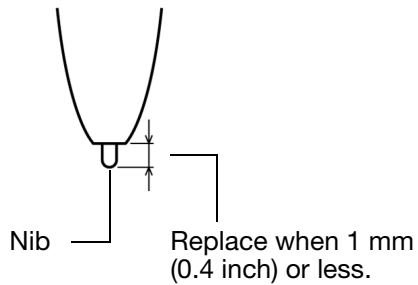


REPLACING THE PEN NIB



The pen nib (tip) will wear with normal use. Excessive pressure will cause it to wear sooner. Replace the nib when it gets too short or develops a flat point.

1. Clasp the old nib and pull it straight out of the pen. Use the nib removal tool, pair of tweezers, needle-nosed pliers, or similar instrument.



2. Slide the end of the new nib straight into the barrel of the pen. Firmly push the nib until it stops.



Warning: Choking hazard. Prevent children from swallowing the pen nib or button part. The pen nib or button part may accidentally be pulled out if children are biting on them.

For replacement parts, see [ordering parts and accessories](#).

Important: When not in use, place the pen in the pen holder or lay it flat on your desk. The eraser end of the pen should be inserted first into the loop. To maintain the sensitivity of your pen, do not store the pen in a container where it will rest on the tip or eraser (when equipped).





BAMBOO DOCK

Use the Bamboo Dock to work with your Bamboo tablet settings, and to view and add applications (apps) made for Bamboo. To learn more, visit <http://bamboodock.wacom.com/> and choose your language.

To open Bamboo Dock, press a tablet ExpressKey to which the Bamboo Dock function has been assigned. Otherwise:

- Windows: Click START and choose (ALL) PROGRAMS. Then select BAMBOO DOCK from the BAMBOO DOCK folder.
- Mac: From the Finder GO menu or PLACES sidebar, choose APPLICATIONS, open the BAMBOO DOCK folder, and double-click on the BAMBOO DOCK icon.

Draw to open or hide Bamboo Dock options.

Work with your Bamboo settings. Click the Bamboo settings (gear) icon. Here you can adjust your Bamboo tablet settings and more.

Learn about and install Bamboo apps. Click the Bamboo collection (+) icon. From games and sketching to composing music or sharing and connecting with friends, there is an ever-growing collection of Bamboo apps to choose from.

To uninstall Bamboo Dock:

- Windows: Click START and choose (ALL) PROGRAMS. Then select BAMBOO DOCK and UNINSTALL. Follow the prompts.
- Mac: In the APPLICATIONS folder, locate and trash the BAMBOO DOCK folder.

UNINSTALLING BAMBOO

Follow the appropriate procedure below to remove the tablet driver software from your system.

Important: When you remove the tablet software, your tablet will no longer operate with full tablet functionality but will continue to function as a mouse device.

Windows 7 and Vista: Click on the Windows START button and open the CONTROL PANEL. In the CONTROL PANEL window click on UNINSTALL A PROGRAM. In the dialog box that appears, choose BAMBOO and click UNINSTALL. Follow the prompts to remove the tablet driver. If prompted, enter your administrator log on name and password. Restart your computer after uninstalling the software.

Windows XP: Click on the Windows START button and open the CONTROL PANEL. In the CONTROL PANEL window select ADD OR REMOVE PROGRAMS. In the ADD OR REMOVE PROGRAMS window, choose BAMBOO and click REMOVE. Follow the prompts to remove the tablet driver. Restart your computer after uninstalling the software.

Mac: From the GO menu, choose APPLICATIONS and open the BAMBOO folder. Double-click on the BAMBOO UTILITY icon and select the TABLET SOFTWARE: REMOVE button. Enter your administrator login name and password. After the removal is completed, click OK. Restart your computer after uninstalling the software.





MANAGING PREFERENCES

Use the preference file utility to manage your tablet preferences for single or multiple users.

Windows: First close any open applications. Then open the utility by clicking the START icon and selecting ALL PROGRAMS. Select BAMBOO and BAMBOO PREFERENCE FILE UTILITY.

- To remove preferences for the current user, click REMOVE under MY PREFERENCES.
- To delete preferences for multiple users, click REMOVE under ALL USER PREFERENCES. Administrator rights are required to delete preferences for all users. Relaunch any currently open tablet-aware applications that you may be running.
- To back up your preferences, click BACKUP... under MY PREFERENCES.
- To restore preferences that you had previously backed up, click RESTORE... under MY PREFERENCES.
- Carefully follow any prompts that may appear.

Mac: Open the main APPLICATIONS folder. Then open the BAMBOO folder and run the BAMBOO UTILITY.

- To remove preferences, select CURRENT USER or ALL USERS. Then click REMOVE. Log out, then log back in. When the tablet driver loads it will create a new preferences file with the factory defaults.
- To back up your preferences, select CURRENT USER or ALL USERS. Then click BACKUP....
- To restore preferences that you had previously backed up, select CURRENT USER or ALL USERS. Then click RESTORE....
- Carefully follow any prompts that may appear.





PEN AND DIGITAL INK CAPABILITIES IN WINDOWS



Microsoft Windows 7 and Vista provide extensive support for pen input. Pen features are supported in all versions of Windows 7 and Vista except Windows 7 Starter and Home Basic, and Windows Vista Home Basic. Use Bamboo and your Wacom pen for quick, intuitive results.

- **Note taking.** Jot notes and capture quick sketches in Windows Journal. Use the Journal search engine to locate your handwritten content.
- **Handwriting recognition.** Quickly enter handwritten information anywhere the computer accepts typed input. Convert your handwritten content to typed text at any time.
- **Gestures.** Make simple gestural movements on the tablet to trigger customizable actions. To customize gestures, select the FLICKS tab in the Windows 7 PEN AND TOUCH or Windows Vista PEN AND INPUT DEVICES control panel.
- **Digital Ink in Microsoft Office 2007.** Utilize the enhanced digital mark-up and inking tools found on the REVIEW tab within applicable applications.

The Windows 7 or Vista Input Panel enables you to use handwriting or an on-screen keyboard to directly enter text with your Wacom pen.

There are different ways to launch the Input Panel:

- Click on the Input Panel icon which appears when you move the screen cursor into a text entry area.
- Click on the Input Panel tab, located by default on the left edge of the display screen.
- Click on the Tablet PC Input Panel icon located on the Windows Taskbar. If the icon is not visible, right-click on the Taskbar, select TOOLBARS, and TABLET PC INPUT PANEL.

To disable the Input Panel:

1. Open the Tablet PC Input Panel.
2. Select TOOLS and OPTIONS.
3. Choose the OPENING tab and uncheck the following boxes:
 - FOR TABLET PEN INPUT, SHOW THE ICON NEXT TO THE TEXT BOX
 - SHOW THE INPUT PANEL TAB.
4. Click OK.

For details, study the documentation that came with your system, including the Windows training tools and Tablet PC tutorial. To access the Tablet PC Pen Training, from the START menu choose ALL PROGRAMS, TABLET PC, and TABLET PC PEN TRAINING. Search the Windows help system for training tools if they are not available from the START menu.



Search the Microsoft web site for enhanced information about digital inking in Windows. You can also visit the Wacom web site at www.wacom.com/vista

Note: The following workarounds in the Wacom software driver improve performance in Windows 7 and Vista:

- The Pen Flicks and 'press-and-hold-to-right-click' features are disabled in graphics applications using the Wintab API.
- There is no pressure sensitivity in Journal and other Ink features when both the Flicks and 'press-and-hold-to-right-click' features are disabled in the Windows 7 PEN AND TOUCH or Windows Vista PEN AND INPUT DEVICES control panel.

PRODUCT INFORMATION

To learn more about Bamboo, visit the Wacom web site for your region. You can also discover which software applications are currently tablet enhanced to support the pressure sensitivity and other special functionality of your tablet.

USA, Canada, Central and South America	http://www.wacom.com/productinfo
Europe, Middle East and Africa	http://www.wacom.eu
Japan	http://tablet.wacom.co.jp
Asia Pacific (English)	http://www.wacom-asia.com
China (Simplified Chinese)	http://www.wacom.com.cn
Hong Kong (Traditional Chinese)	http://www.wacom.com.hk
Korea	http://www.wacomkorea.com
Taiwan	http://www.wacom.com.tw
Thailand	http://www.wacom-thai.com



ORDERING PARTS AND ACCESSORIES

To purchase [available parts and accessories](#), refer to the Wacom tablet Read Me file and see who to call for your region.

You can also do the following:

- In the USA or Canada, call 1.888.884.1870 (toll-free) or visit Wacom's web site at <http://www.WacomDirect.com> (USA only).
- In Europe, call +49 (0)180.500.03.75 or send an email to spareparts@wacom.eu. Or, visit <http://shop.wacom.eu>. You can also contact your local dealer, distributor, or technical support using the appropriate number for your region.
- In Australia, Singapore, Taiwan and Korea, please visit: www.BuyWacom.com.au, www.BuyWacom.com.sg, www.BuyWacom.com.tw and www.BuyWacom.co.kr, respectively.
- In other countries, please contact your local dealer or distributor.

Some parts and accessories may not be available in all regions.

AVAILABLE PARTS AND ACCESSORIES

DESCRIPTION	PART NUMBER
Wacom wireless accessory kit (includes Wacom wireless module, Wacom wireless receiver, and rechargeable battery)	ACK-40401
Rechargeable battery	ACK-40403
Pen, standard, without eraser	LP-170
Pen, premium, with eraser	LP-170E
Pen nibs, black, qty 5	ACK-204-01K
Pen nibs, white, qty 5	ACK-204-01W
Carrying case, small	ACK-403021

Additional parts and accessories may be available on the Wacom web site for your region. See [ordering parts and accessories](#).



GLOSSARY

Active area. The navigation and drawing area of your Bamboo tablet where touch or pen input is detected. See [touch sensor](#).

Aspect. The ratio between the vertical and horizontal dimension of the tablet or display.

Click force. The amount of force you must apply to the pen tip for a click to occur.

Digital Ink. A broad category that typically describes handwritten content which has been created using pen-based input on a computer. This handwritten content takes the form of sketches, ink mark-up, or handwriting. The handwriting can optionally be converted to typewritten text or simply left alone for use in its original format. Depending on your system and application settings, the handwritten text you make with digital ink can be converted on-the-fly or at another time.

Display Toggle. A Bamboo feature that allows you to work with your tablet on all displays or on one display at a time. Available only on multiple monitor systems. See [working with Display Toggle](#).

Double-click distance. The maximum distance (in screen pixels) that the screen cursor can move between clicks and still be accepted as a double-click. Increasing the double-click distance makes double-clicking easier, but may cause a delay in brush strokes in some applications.

Eraser-aware application. A software application that has built-in support for the pen eraser. These applications take advantage of the eraser in different ways, depending on what makes sense for the application.

Expand. A motion used when [navigating with touch](#). Touch the tablet with two fingers spaced closely together. Then while still touching the tablet surface, move your fingers apart.

ExpressKeys. The customizable control keys located on your Bamboo tablet.

ExpressKeys, LEFT HANDED. A tablet setting where the ExpressKeys are oriented to the right of the tablet.

ExpressKeys, RIGHT HANDED. A tablet setting where the ExpressKeys are oriented to the left of the tablet.

Journal. A Microsoft Windows application that electronically simulates a physical journal pad, but with the advantages of digital note taking. For example, you can create quick sketches and jot handwritten notes that can be converted to text and sent on to colleagues for digital mark-up. Journal includes a variety of pen, marker, and highlighter tools, plus an eraser that is easily activated by the eraser (when equipped) of the Wacom pen. Additionally, your handwritten content is searchable within Journal.

Mapping. The relationship between the pen position on your Bamboo tablet and the cursor position on the monitor screen.

Modifier. Modifier keys include SHIFT, ALT, and CTRL for Windows, or SHIFT, CONTROL, COMMAND, and OPTION for Mac. You can customize your Bamboo pen buttons or ExpressKeys to simulate a modifier key.





Mouse acceleration. A setting that allows you to adjust the screen cursor acceleration when using mouse mode.

Mouse mode. A method for positioning the screen cursor. When you place the pen on your Bamboo tablet, you can move the screen cursor with a “pick up and slide” motion similar to using a standard mouse. This is known as relative positioning. See also [pen mode](#).

Mouse speed. A setting that allows you to adjust the speed at which your screen cursor moves when using mouse mode.

Nib. The replaceable pen tip.

Pan. A motion used when [navigating with touch](#). Touch the tablet surface with your fingers and move them in the same direction.

Pairing. A method of creating a virtual cable link between two devices.

Pen input. A method of controlling a computer using the pen on your Bamboo tablet.

Pen mode. A pen input method of positioning the screen cursor. Wherever you place the pen on your Bamboo tablet, the screen cursor will jump to the corresponding point on the screen. This is known as absolute positioning, and is the default setting for the pen. Pen mode allows you to quickly position the screen cursor without having to first find it and then move it across the desktop. See also [mouse mode](#).

Pinch. A motion used when [navigating with touch](#). Touch the tablet with two fingers spaced slightly apart. Then while still touching the tablet surface, move or ‘pinch’ your fingers together.

Pixel. The smallest unit of measure on your monitor screen.

Pop-up Menu. A user-defined menu that displays a list of keystroke functions and other actions you can perform. You can customize the buttons of your pen to display this menu. Available for tablet models that are configured for both pen and touch input.

Pressure sensitive. A quality of the Wacom pen tip and eraser (when equipped) that senses the amount of pressure being applied. This is used to create natural-looking pen, brush, and eraser strokes in applications that are pressure sensitive.

Pressure-sensitive application. Any application that supports pressure-sensitive input.

Proximity. The height above the tablet [active area](#) where pen detection occurs. See also [positioning](#).

Screen cursor. The pointer on the display screen. Screen cursors come in different shapes (such as an I-beam, arrow, or box), depending on which application you are running.

Swipe. A motion used when [navigating with touch](#). Touch the tablet surface with three or four fingers and move them in the same direction.



Tablet PC Input Panel (TIP). The Microsoft Windows Tablet PC Input Panel enables you to use your Wacom pen to create handwritten notes or work with an on-screen keyboard. The Input Panel dynamically converts your handwriting to text. The information you create can then be inserted into other documents, spreadsheets, or illustrations.

Tap. A motion used when [navigating with touch](#). Touch and lift a single finger from the tablet.

Touch input. A method of interacting with a computer using only your fingertips on the Bamboo tablet.

Touch sensor. The navigation area of your Bamboo tablet where touch input is detected. The touch sensor resides within the active area, and does not accept pen input.

Track. A motion used when [navigating with touch](#). Touch and move a single finger across the tablet surface.

Twist. A motion used when [navigating with touch](#). Touch the tablet with two fingers spaced slightly apart and move (rotate) them in a circular fashion, or move them in opposing directions. Alternatively, hold one finger stationary and track your other finger around the stationary finger.

USB. Universal Serial Bus. A hardware interface standard for connecting computer peripheral devices. USB ports support hot-plugging, which allows you to connect or disconnect a USB device without turning off your computer.

Wintab. An interface standard used by Windows applications for receiving tablet information. Bamboo supports all Wintab-compatible applications under Windows.



INDEX

About the manual	5	input	33
Accessories and parts, ordering	88	speed in mouse mode	46
Accessories, available	88	Pop-up Menu	48
Active area, understanding	13	tablet orientation	47
Bamboo		tip feel	41
caring for	82	touch	
customizing	35	functions	38
Expresskey basics	34	input	37
pen input	26	Digital inking capabilities	86
problems with	67	Disabling touch input	39
product features	6	Display Toggle, working with	49
setting up	10	Double-click distance, customizing	41
tablets matrix	6	Double-clicking, how to	29
the pen experience	26	Dragging, with pen	29
the touch experience	16	Drawing with pressure	31
touch input	16	Driver downloads, obtaining	81
troubleshooting	67	Environmental conditions	82
using	16	Eraser feel, customizing	41
Bamboo Dock	84	Erasing, with pen	32
Button functions	50	Ergonomics	10
Care, for Bamboo	82	ExpressKeys	
Click sound	29	basics	34
Clicking, with pen	29	customizing	34
Control panel		setting functions	47
basics	15	using	34
opening	35	Eye-hand coordination exercise	33
overview	36	Features	
Controls, tablet	33	pen	9
Customizing		pen & touch models	7
Bamboo	35	pen holder	9
button functions	50	pen models	8
double-click distance	41	Functions, button	50
eraser feel	41	General problems, troubleshooting	71
ExpressKeys	34	Holding the pen	26
functions	47	Information, product	87
pen	40	Mac-specific problems, troubleshooting	78
acceleration in mouse mode	46	Manual, about	5
buttons	42		





Mapping			
tablet	43	Pressure	
to multiple monitors	15	drawing with	31
Monitors, working with multiple	15	writing with	31
Navigation, customizing for touch input	37	Problems, with Bamboo	67
Nib, replacing	83	Product	
Ordering parts and accessories	88	features	6
Orientation		information	87
configuring for tablet	12	Proportions and scale	44
setting for tablet	47	Scale and proportions	44
Overview, control panel	36	Set up	10
Parts and accessories, ordering	88	Settings, control panel	36
Parts, available	88	Software	
Pen		driver downloads	81
buttons		uninstalling	84
customizing	42	Tablet	
using	30	configuring orientation	12
clicking with	29	controls	33
customizing	40	ExpressKeys	34
double-clicking with	29	features matrix	6
dragging with	29	mapping	43
drawing with pressure	31	area	44
erasing with	32	for portion of screen area	45
features	9	for portion of tablet area	45
holding	26	to multiple monitors	15
input problems, troubleshooting	73	orientation, setting	47
input, customizing	33	pen & touch model features	7
nib, replacing	83	pen model features	8
pointing with	27	scale and proportions	44
positioning with	27	storing	82
speed, setting	46	testing	68
testing	70	tracking	43
the experience	26	Technical support options	80
tip, replacing	83	Testing	
using	26	pen	70
on tablet	27	tablet	68
pen buttons	30	Tip	
writing with pressure	31	customizing feel	41
Pen holder	9	replacing	83
Pointing, with pen	27	Touch	
Pop-up Menu, customizing	48	adjusting touch speed	37
Positioning, with pen	27	basic actions	18
Preferences, managing	85	customizing	25
		disabling	39





four-finger gestures	24	Uninstalling tablet software	84
gestures	18	Using Bamboo	16
input problems, troubleshooting	72	Windows-specific problems, troubleshooting	77
input, customizing	37	Wireless operation	55
navigating with	17	battery life	63
one-finger actions	19	battery management	60
options	17	battery replacement	64
setting navigation features	37	battery, charging	60
setting touch functions	38	components	55
speed, adjusting	37	connection problems	75
the experience	16	establishing a connection	57
three-finger gestures	23	optimizing the connection	59
two-finger actions	20	power management	60
two-finger gestures	20	power saving	62
Tracking, tablet	43	setup	56
Troubleshooting	67	status	
general problems	71	battery	61
Mac-specific problems	78	connection	61
pen input problems	73	troubleshooting	75
tables	71	wireless module, removal from tablet	65
touch input problems	72	wireless receiver, storage in tablet	66
Windows-specific problems	77	Work area, setting up	10
wireless connection problems	75	Writing with pressure	31





WACOM INTERNATIONAL OFFICES

WACOM TECHNOLOGY CORPORATION

1311 SE Cardinal Court
Vancouver, WA 98683
U.S.A.

Telephone: +1.360.896.9833

Fax: +1.360.896.9724

WACOM CO., LTD.

JAPAN TABLET SALES DIVISION

Harmony Tower 18F, 1-32-2 Hon-Cho,
Nakano-Ku, Tokyo 164-0012
Japan

Internet: <http://tablet.wacom.co.jp>

WACOM CHINA CORPORATION

1103, Beijing IFC West Tower
No. 8 Jianguomenwai Street
Chaoyang District, Beijing 100022
China

Internet: <http://www.wacom.com.cn>

WACOM AUSTRALIA PTY. LTD.

Unit 8, Stage 1 Cumberland Green
2-8 South Street Rydalmere
NSW 2116 Australia

Telephone: +61.2.9422.6700

Fax: +61.2.9420.2272

WACOM TAIWAN INFORMATION CO., LTD.

Suite 605, 6th floor, No. 205 Tun-Hwa North Road
Taipei, 105 Taiwan

Telephone: +886.2.2712.2675

Fax: +886.2.2712.9789

WACOM EUROPE GMBH

Europark Fichtenhain A9
47807 Krefeld
Germany

Internet: <http://www.wacom.eu>

WACOM CO., LTD.

ASIA PACIFIC DIVISION

Harmony Tower 18F, 1-32-2 Hon-Cho,
Nakano-Ku, Tokyo 164-0012
Japan

Telephone: +81.3.5309.1513

Fax: +81.3.5309.1514

WACOM KOREA CO., LTD.

#1211, 12F KGIT Sangam Center,
1601 Sangam-dong, Mapo-gu, Seoul 121-913, Korea
Telephone: +82.2.557.3894

Fax: +82.2.557.3895

WACOM SINGAPORE PTE. LTD.

5 Temasek Boulevard
#12-09 Suntec Tower Five
Singapore 038985

Telephone: +65.6258.8640

Fax: +65.6258.8697

WACOM HONG KONG LIMITED

Room 1201, Tai Tung Building
8 Fleming Road
Wanchai, Hong Kong

Telephone: +852.25739322

Fax: +852.25739500

