



Working with Pressure Sensitive Tablets

A. Why Work with a Tablet?

I was introduced to Wacom Pressure Sensitive Tablets at the Kodak Center for Creative Imaging in Camden, Maine, in 1991 and have been using them ever since. I am such a staunch believer in the tablets that if I pack my Powerbook to go on location, to teach, or to lecture that a Wacom tablet is automatically packed up, too.

The primary reasons to work with a tablet are:

1. **Mice are Evil:** Our arms are not designed to grasp and maneuver a non-yielding object such as a mouse for long periods of time. The act of "mousing" has been proven to cause repetitive motion injury.¹ I've been working with digital imaging since 1989 and I plan on working for many years to come and the tablet is an important component of my personal computer health. It is just as important to me as proper lighting, correct seating height, non-glare glasses, and taking breaks to refresh my eyes and posture. Ergonomic issues are of critical importance to me and if you are responsible for employees or students they should be of even greater importance.
2. **Speed:** The ability to move around the screen by lifting the stylus approximately 1/4 inch off the tablet and just placing it where I need allows me to work very quickly and efficiently. The ability to change my brush stroke from light to dark or heavy to thin by just applying more or less pressure makes all the sense in the world. Rather than

¹ [pen & mouse study \[pdf\]](http://www.wacom.com/productinfo/needawacom.cfm) <http://www.wacom.com/productinfo/needawacom.cfm>

having to type in (I mean guesstimate) at the best opacity to use for a retouch, I have instant feedback with the tablet and can modify a brush stroke on the fly without having to use the keyboard or quick keys.

- 3. Artistic Intuition:** When I learned to write and paint, I learned with a pencil and a brush – not with “soap on a rope” i.e. a mouse. I can’t imagine doing a subtle portrait retouch, delicate restoration, or creating a fine edged mask with a brick. The last time I checked, mice weren’t pressure sensitive – no matter how hard I press!

B. Types of Tablets?

Wacom is the dominant manufacturer of pressure sensitive tablets, and with over 2 million tablets sold they are also very well established. I personally have only worked with Wacom tablets and they will be the focus of the article.

There are three Wacom models to choose from:

- 1. Graphire 3:** Available as 4 x 5 or 6 x 8 inch the Graphire is a solid beginners tablet with 512 levels of sensitivity, no menu strip, a limited 1 year warranty and the Graphire3 is a substantial improvement compared to previous versions.
- 2. Intous 2:** Available as 4x5, 6x8, 9x12, 12x12, and 12x18 inch² is a solid piece of professional equipment with 1024 levels of sensitivity, customizable function menu strip, and a warranty which remains effective as long as Wacom makes the Intous 2 and it remains with the original owner.
 - Deciding on the best size depends on your working style, working space, and budget. I personally prefer the 6 by 8 as I work closely on image details, I like the notepad size that disappears when not needed as I lean it against the side of the monitor where it takes up no space at all, and as mentioned it packs perfectly next to my Apple Powerbook. If you are painter or architect that works with a larger brush stroke gesture you should consider the larger sizes.
- 3. Cintiq:** The Rolls Royce of tablets – a pressure sensitive monitor which comes in two sizes:
 - a. 18SX** with a Screen Resolution of 1280x1024 (SXGA) and an Active Area of 14.1" x 11.3" and the **15x** with a Screen Resolution of 1280x1024 1024x768 (XGA) and an Active Area 12.0" x 9.0". The prices of the Cintiqs have just dropped to \$2500

² All sizes listed are based on ACTIVE area – the actual tablet is 25% larger.

- and \$1500 respectively.
- b. To be honest, unless you are doing a lot of masking and retouching you don't need the Cintiq...but speaking from experience (I have the 15x) working ON the image rather than looking at an image and moving my hand on a different surface is quite remarkable.
 - c. I also use the **CintiqPartner** on my primary workstation as it allows me to control my primary monitor with the same pen as I use on the Cintiq. Without the **CintiqPartner**, if you want to drive menus or palette placement on the primary monitor you need to let go of the stylus and pick up the mouse to get to the menus.

All current tablets come with a pressure stylus with a padded front end that is soft and makes it easy to hold for long periods of time, a duo switch that you can program, and an eraser. For additional information on tablet accessories please visit www.wacom.com

C. Wacom Settings

After installing the tablet driver software take a moment to configure the software to your liking:

- Application Support: You can set the tablet up to behave the same way for all applications or customize it for different applications.
- Adjusting Tip Feel: Use a soft tip setting for broad-brush strokes and to use a lighter touch.
- Set the double-click speed and the tool buttons. I set the lowest duo switch to be option/alt, which speeds up all cloning and healing enormously. I set the top button to be the control key, which allows me to access context sensitive menus easily. I never set the eraser and just ignore it.
- The functions strip on the Intous 2 can be set up to launch applications, be modifier keys, and command keystrokes. Being able to click a button on the strip for Open, Close, Save, and Save As is a real time saver.

D. Photoshop CS Settings:

1. Select the Brush tool or other painting tool in the toolbox.
2. Click the Brushes tab to bring the Brushes palette to the front or, if the palette isn't open, choose Window > Brushes.

3. To make the tool tip size change with pressure, select Shape Dynamics (be sure to click the word, not just the check box) in the Brushes palette. Then choose Pen Pressure from the Controls pop-up menu under the Size Jitter slider control.
4. To make the opacity change with pressure, select Other Dynamics. Then choose Pen Pressure from the Controls pop-up menu under the Opacity Jitter slider control.
5. **VERY IMPORTANT:** To apply these two essential settings to all brushes not just the one that was active when you opened the brush interface you have to click on the little lock to the right of Shape and Other Dynamics. If you don't, then as soon as you change brush size or hardness Photoshop will default back to the standard behavior, which does not recognize pen tool pressure.
6. If you prefer to set each brush individually then turn off the pressure sensitivity default.

E. Photoshop Tasks:

The three Photoshop tasks that benefit the most from a tablet are:

1. **Digital Darkroom:** Dodging and burning, painting in color correction, and softening and sharpening with a layer mask are perfect tasks for a pen based system.
2. **Portrait retouching:** I cannot imagine doing portrait retouching with a mouse.
3. **Paint based masking:** Creating high resolution, finely detailed masks are for me impossible to do with a mouse.

F. Tablet Tips:

1. I've noticed that it is difficult to achieve a very light opacity even with the lightest touch of the stylus and therefore prefer to control the density of the brush by setting the opacity to the desired density and greatly reducing the Flow. I often work with a 50-100% opacity and a 10% flow. With any brush active typing a number will set the opacity (2 = 20, 5 = 50, 25 = 25%, 75 = 75%) and shift typing the number will set the flow.
2. The Intous tablets are covered with a translucent sheet of acetate. You can lift this up and place images underneath it to trace over them. In fact the tablet will go through approximately 1/4 inch of paper, allowing you to trace off a sketchpad or magazine.
3. Many people do not like the slickness of the plastic covering. Simply cut a piece of watercolor paper to size and tape it onto the tablet to add the feel of the paper to your styles

response. Change the paper according to the final output of your work or desired effect.

4. When you install your tablet for the first time – hide the mouse! Give yourself a few hours to get used to the stylus – believe me you won't regret it.
5. If the tablet isn't responding – uninstall the driver and reinstall it.

G. Conclusion:

I know many people that do very fine work with a mouse...but if you're concerned about repetitive motion injury working very precisely then using a pressure sensitive tablet makes a lot of sense. Numerous workshops have tablets where you can try them out or visit the Wacom booth at the next imaging convention you're attending and give the table a spin.