



## t Pad 800 Touch Screen Installation Instructions

Please Read All Instructions Before Beginning Installation

Unpack all components. You should have the following:

- ✦ t Pad 800 Touch Screen Display
- ✦ t Pad 800 Touch Screen Calibration Acetate Overlay
- ✦ t Pad 800 Interface Box
- ✦ 3' VGA Cable
- ✦ 3' USB Cable
- ✦ 12-28v DC Power Cable
- ✦ Elastic Strap (2 part)
- ✦ PivotPro™ Software CD
- ✦ navAero Driver Software CD
- ✦ Warranty Booklet
- ✦ Warranty Registration Card

If any items are missing, call: 866-628-2376

### Step 1.

Prepare your laptop. Requirements: Laptop with CD-ROM drive, Processor with a minimum of 333Mhz, Windows OS—2000 or XP (preferred), 15-pin D-sub VGA connector, USB connector. To make the installation process easier, we suggest you purchase a 110v to 12vdc power converter. These items are commercially available at Radio Shack (Item #22-505, cost \$21.99) or a local electronic store.

**NOTE: UNTIL THE CALIBRATION PROCESS (STEP 6) HAS BEEN COMPLETED, YOU MUST EXECUTE ALL SET-UP OPERATIONS USING YOUR COMPUTER'S MOUSE OR TOUCH PAD CONTROL. PROPER USE OF THE TOUCH SCREEN WILL NOT BE POSSIBLE UNTIL CALIBRATION HAS BEEN COMPLETED.**

### Step 2.

Carefully remove the Touch Screen Calibration Acetate Overlay from the display. **DO NOT DISCARD THIS SHEET. THIS ITEM IS ESSENTIAL FOR CALIBRATING YOUR DISPLAY. YOUR SYSTEM WILL NOT FUNCTION PROPERLY IF YOU DO NOT HAVE THIS OVERLAY.**

Connect t Pad 800 Display to Interface box using the circular connector with screw lock. Connect one end of the VGA and USB cables to the Interface Box. Connect the other end of the VGA and USB cables to the laptop.

**NOTE: REMEMBER WHICH USB PORT YOU ARE USING. YOUR COMPUTER REMEMBERS WHICH PORT IS USED IN THE INITIAL SET-UP. TO MAINTAIN FUNCTIONALITY, YOU WILL ALWAYS NEED TO USE THIS SAME USB PORT WHEN CONNECTING YOUR tPad800 TO YOUR COMPUTER.** Next plug the Power Cable into the input beneath either the Amber or Green LED's on the Interface box. Then, connect the plug end of the DC power supply into either a cigarette lighter or into a 110v to 12vdc power converter (see note in Step 1).

Once power is established, you will see an illuminated LED on the Interface box above the input where you have plugged in the power cord. If the LED is not illuminated, you do not have power. Make sure your power supply is operating and double-check that all plugs are securely seated so that positive contact is being made. At this point, you may also have an on-screen indicator that "New Hardware Has Been Found".

### Step 3.

With power established to the t Pad unit and the VGA and USB cables attached to the Interface Box and your laptop.

- ✦ Your computer should now be prompting you that NEW HARDWARE has been found.
- ✦ Insert the navAero driver disk into your computer's CD ROM drive.
- ✦ Double-click in the "Install" icon. The Hardware Installation window should now pop-up stating that you are installing software for hardware "USB Touch Screen". **NOTE: You will see an alert that says that this software has not passed Windows logo testing to verify its compatibility with Windows. Please click on "Continue Anyway".**

Once the installation has been completed, close the folder and remove the CD from your computer's CD ROM drive.

To verify that the drivers have been installed, from the Control Panel, select Administrative Tools. Then select Computer Management. Then, from the left menu on the Computer Management screen, select Device Manager. On the right side of this screen, click-open the "Mice and other pointing devices" + symbol. This will allow you to see what drivers have been installed here. You should see "USB Touch Screen". If this appears, then the proper drivers have been installed.

#### Step 4.

Next, install the supplied Pivot™ Pro software according to the software manufacturer's installation instructions. Place the Pivot™ Pro disk into your computer's CD ROM drive. Follow the on-screen instructions for the installation. When the installation of this software has been completed, remove the Pivot™ Pro disk from your computer. You must now restart your computer before you can proceed with the rest of the installation process.

Next, with the tPad system powered-up, you need to **set your screen resolution to 800x600 for the external tPad Display**. To do this, go to your computer's Control Panel and select "Display". In the "Settings" tab, select 800x600 as the setting for the t Pad 800 as the external display device and set the external display into portrait rotation of 270°.

**Now that you have installed the required software, it's time to get it your t Pad 800 operational.**

#### Step 5.

First, if you have not already done so, press the "Standby" button that appears on the face of the tPad 800 display. You should see some faint illumination on the display. Everytime you first power-up the tPad display system, you need to "turn-on" the display by pressing this button once. You can also "turn-off" the illumination for the display by pressing this button at any time.

The first thing you need to do is to be sure the t Pad 800 screen is properly set. You need to "toggle" the video display on your laptop and redirect it from the computer screen to the t Pad 800 display. You do this by pressing the "Fn" key and one of the "F" keys that allows you to select an external CRT/LCD. On many computers, it is the "F8" key. This allows you to toggle the video output of your computer back-and-forth between your regular computer monitor and the t Pad 800 display screen. Please refer to your computer's instruction manual for how to connect to an external display device.

The first time you "toggle over" to the t Pad 800 display, it will appear in Landscape orientation.

When properly set, the t Pad 800 display should show your entire desktop. If it appears in a reduced size, simply press the "Fn" key and "F8" key again. Your desktop should now appear in its full size on the t Pad 800 display in the proper 800x600 resolution. If the t Pad 800 is displaying your desktop in Landscape orientation, click-on the PivotPro icon in your task bar and select screen rotation to 270°.

If your desktop appears to be slightly off-center, it will be necessary to realign and center the t Pad 800 display. This is done by adjusting the horizontal and/or vertical position setup of your t Pad 800 display using the controls on the Interface Box.

To accomplish this, on the face of the Interface Box, press the "Menu" button once. This will bring up an on-screen menu on the t Pad 800 display. Using the "+" or "-" button, select "Position" and then press the "Select" button on the interface box. Then, using the + or – buttons, choose "Auto Center" then press Select. Then, use the + or – buttons to choose "Yes", then press Select. This will automatically center the display. You can also use the other controls in a similar manner to customize the display characteristics.

#### Step 6 - Calibration

It is now necessary that you calibrate your t Pad 800. With your t Pad 800 display turned-on, depress the "Fn" and pressing the "F8" key (or the combination of keys on your computer that will allow you to switch to an external display), and "toggle" the video output of your computer from its regular screen over to the t Pad 800 display.

If the t Pad 800 screen does not completely fill and the image looks distorted or difficult to read (i.e., the wrong resolution is being displayed), try holding down the "Fn" key and pressing the "F8" key again. This should make your desktop completely fill the t Pad 800 display.

If you touch the screen and draw a line with your finger, you will see that the cursor move in a direction 90 degrees off from the direction your finger is going. To correct this, we need to "trick" the touch screen into the proper calibration.

- ♣ Use a mouse or the touchpad on your laptop to go to the Pivot™ Pro icon in the lower right corner of task bar. Open the Pivot™ Pro menu and select "Rotate to 0". This will put the display on the tPad in Landscape orientation. You will now see that the cursor move 180 degrees opposite your finger movement on the display.
- ♣ Using a mouse or your computer's touchpad, open the Start menu. Next, open "Control Panel" and then open the "Touch Screen Calibrator".

If you do not see the "Touch Screen Calibrator" icon in your control panel, please be sure that you are viewing your Control Panel in "Classic" view, not "Category" view.

- ♣ This will open a “Calibration Applet” window that will help you to properly set-up your t Pad.
- ♣ First: using your computer mouse or touchpad, click-on the “Settings” tab. For controlling the “Double-Click Area”, you will want to move the slider adjustment somewhere between small and large. If the double-click area is set too small, it becomes very difficult to launch programs because the accuracy of where you are touching becomes extremely small. You can always return to this setting to readjust the double-click area at a future time once you have become more comfortable with the operation of the touch screen. You may also want to adjust the “Time To Lock” so that it is slightly above the minimum setting.
- ♣ Second: Click-on the “Calibration” tab. We recommend setting the Calibration Points Offset From Edge to 10%. We also recommend setting the Maximum Tolerable Error In Pixels to 10. In the Button Swapping area, click-on the “Enable Tray Icon” and “Auto Return To Left Button”. This will place an icon in the task bar that will allow you to switch between left-click and right-click for on-screen touch functionality.
- ♣ Third: Place the supplied Acetate overlay onto the t Pad 800 screen. Using a mouse or your touchpad, click on the “Calibrate” button. This will open a white screen with a flashing circle in one corner.

Using a soft pointed instrument that will not damage the tPad 800 screen (like a plastic stylus or retractable ballpoint pen with the roller ball retracted), **lightly touch on the dot that is shown on the Acetate Overlay in the order in which the dots are numbered on the overlay. START WITH #1. DO NOT FOLLOW THE SEQUENCE THAT IS ACTUALLY SHOWN ON THE DISPLAY.**

Once the touch (calibration) has been made, the circle will move to another corner. **You MUST follow the numerical sequence on the acetate...NOT the sequence shown on the display.**

Keep repeating this process until the last circle appears in the center of the screen under the Dot labeled “5”. After this dot has been touched, a message will appear that informs you that the calibration has been accepted. If the calibration has been rejected, simply repeat the process and try to be more accurate with where you are touching the dot on the acetate overlay. **REMEMBER: TOUCH ON THE DOTS THAT ARE ON THE ACETATE OVERLAY...NOT THE FLASHING CIRCLES THAT ARE SHOWN ON THE SCREEN.**

- ♣ Fourth: Again, using your mouse or computer touchpad, click on the “Apply” button on the lower right corner of the Calibration Applet screen.

This completes the calibration process. Simply click OK and you will return to the Control Panel. Close this, and you will return to the desktop. Calibration is now complete. You should only need to go through this process again if you find you need to more precisely calibrate the display to your own personal preferences.

- ♣ Fifth: Using your computer mouse or touchpad, you need to go back to the task bar and select the Pivot™ Pro icon. When you “mouse-over” or double-touch the Pivot™ Pro icon in the task bar, it will bring-up a dialog window. You need to select “Rotate to 270 degrees”. This will switch your t Pad 800 display into portrait. Your t Pad 800 should now be properly calibrated in the Portrait orientation.

### Step 7.

You should now be up-and-running with a fully functioning t Pad 800. Using your finger or a soft-tip pointing device like a plastic stylus, you should be able to control all functions of your laptop computer right from the t Pad 800 display. Simply a double-touch can be used to perform the same functions you would with a double left-click. If you need to fine-tune the touch action/calibration settings (i.e., double click), simply return to the Touch Screen Calibrator from the Control Panel menu. You can adjust the sensitivity of the t Pad 800 touch screen from this applet. Just Remember: if you want to do a complete re-calibration, you must do the actual calibration in Landscape screen orientation. Just repeat Step 6

If you need to perform a right-click function, touch once on the little “mouse icon” that you will see in the task bar on the lower right corner of your screen. This is the “Touch Right” functionality that you set-up in the Calibration process. When you touch this icon, you will see the little red dot switch from the left side of the mouse to the right side which indicates right-click functionality. Once you touch right and perform a function, this functional automatically returns to Left Click functionality.

Remember, it’s going to take some practice to get comfortable and proficient with the stylus. Just take your time and you’ll get the hang of it.

Be sure to refer to your laptop instruction manual regarding your Power Setting in order to insure regular computer operation when the laptop lid is in the closed position as well as how to redirect video from your laptop screen to an external screen.

## NOTES:

1. The Interface Box has two inputs for supplying 12-28vDC power. One can be used for the supplied DC power cable that connects to +10 to +28 Volt DC power. The other is a connection for using an external battery (such as N-Charge™ Saphion lithium-ion battery module from Valence Technology, Inc.®). While you can use either of the two DC voltage inputs to power your t Pad 800, using both simultaneously with a battery back-up will provide for uninterrupted operation in case your primary power supply drops below listed operating range.

2. Unless conditions change substantially, no further adjustment of the interface control settings should be necessary. Adjustments for screen brightness are made directly from the “+ - Brightness” control buttons on the t Pad 800 front panel. Use the Standby button to turn the t Pad on and off for power conservation.

Updates to this Installation Manual can be found online at:

<http://www.navaero.com/support/downloads.asp>

A list of Frequently Asked Questions can be found online at:

[http://www.navaero.com/t\\_pad/faqs.asp](http://www.navaero.com/t_pad/faqs.asp)

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