#### What Is Touch 95?

#### Welcome!

Touch 95<sup>™</sup> is Hercules' latest generation of graphics tools and utilities for Windows users. Brand new for Windows 95, Touch 95 works exactly like the *Display Properties* "applet" that you use to change your desktop area, screen saver, and other desktop attributes. In fact, even though Touch 95 duplicates many of the functions of the Display Properties dialog box (in addition to adding many features not provided by Windows 95), you may still continue to use either tool interchangeably.

Like the Display Properties applet, Touch 95 uses a collection of "tabs" (Microsoft calls them *property sheets*) to organize functions and features. Not only is this an efficient way of presenting information, it also allows us to extend Touch 95 by adding more tabs without changing the way that existing tabs work.

You can use the menu below to learn more about each of the tabs offered with this version of Touch 95. You can also select the **Contents** button, above. If you have any questions, comments or suggestions, please let us know. You can view complete contact information by selecting the **Reach Us** button.

<u>Installing And Removing Touch 95</u> covers getting Touch 95 on or off of your system. Want to move your Hercules card to another PC but don't have the installation guide? This will tell you what to do.

The <u>Display Configuration</u> tab lets you configure the <u>desktop area</u>, <u>viewport area</u>, <u>color palette</u>, and <u>font size</u>.

The Screen Adjustment tab lets you adjust your screen size and position with a few clicks of your mouse.

The <u>Refresh Rate Meter</u> tab lets you verify that you're getting the best <u>refresh rate</u> possible for a crisp, stable display.

The Speedy tab lets you launch Speedy, one of the toughest graphics benchmarks around.

The <u>Zoom In</u> tab contains our screen magnification utility. You can use it to magnify any portion of your screen by up to a factor of eight.

The <u>Reach Us</u> tab is a quick reference to all of our support services. If you've got a World Wide Web browser, you can even use it to take a tour of our site without using any connect time.

### **Installing And Removing Touch 95**

Your Hercules product came with one or more Windows 95 diskettes. The first diskette contains the SETUP.EXE program which installs Touch 95 and Hercules Entertainment Center. Depending on which of our products you're using, SETUP.EXE may also install the display drivers for your Hercules card.

SETUP.EXE uses the familiar "wizard" interface to let you customize your installation. If you like, you can install just one, all, or any combination of our Windows 95 tools and drivers.

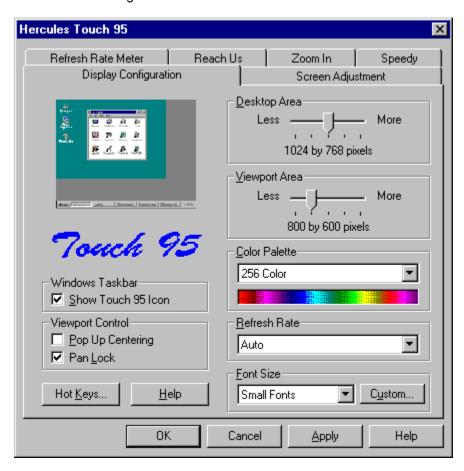
All of the Hercules tools may be removed via Control Panel's *Add/Remove Programs* icon. Just select "Hercules Utilities" from the list of installed software and Windows 95 will take care of the rest.

#### **Display Configuration**

This tab allows you to change your display's <u>desktop area</u>, <u>viewport area</u>, <u>color palette</u>, <u>refresh rate</u>, and <u>font size</u>. It also lets you to configure how the viewport feature works and specify a hot key for launching Touch 95.

This tab duplicates many of the features of the Windows' own <u>Display Properties dialog box</u>. However, you can continue to use Touch 95 and the Display applet interchangeably. There's no risk of harming your system or causing a conflict by using one or the other.

To learn more about the options offered by the Display Configuration tab, click on any of the areas or controls on the image below.



#### **Change The Desktop Area**

Use this control to tell Windows how many pixels across and down the desktop area should be.

The choices available to you are based on the Hercules product you have and the monitor type you've chosen with the <u>Display Properties dialog box</u>. For example, if you've told Windows that you have a monitor which does not support a resolution of 1280x1024, this option won't be available through Touch 95. If you're not getting all the resolutions you think you should be, you may want to make sure that you've chosen the monitor model that best matches yours.

The viewport area, or portion of the desktop area that your screen displays at once, may be the same as the desktop area, or smaller. For an explanation of how viewports work, see <u>Setting The Desktop Area</u> And Viewport Area.

## **Change The Viewport Area**

Use this control to tell Windows how many pixels across and down the <u>viewport area</u> should be. You can further configure viewport operation with the Display Configuration tab's <u>Viewport Control</u> feature.

The choices available to you are based on the Hercules product you have.

The viewport area, or portion of the desktop area that your screen displays at once, may be the same as the desktop area, or smaller. For an explanation of how viewports work, see <u>Setting The Desktop Area And Viewport Area</u>.

#### **Viewport Control**

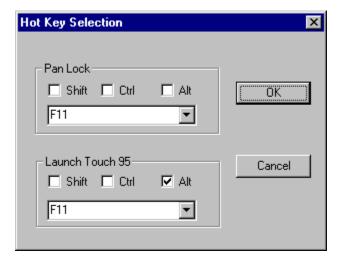
These controls let you configure the way viewports work on your display. They are only active when you've selected a <u>viewport area</u> that's smaller than your <u>desktop area</u>.

When you enable **Pop Up Centering**, pop-up dialog boxes (for instance, the type that might warn you when you exit an application without first saving your work) will appear in the center of your viewport. When this feature is disabled, pop-up dialog boxes will appear at the center of your desktop area, which means that they may appear off-center or (if the viewport is small enough), off the screen entirely.

When you enable **Pan Lock**, you can instantly "lock" the viewport and prevent the viewport from "drifting" as the mouse approaches the edge of the screen. Pan locking is toggled on and off with a hot key which you can define with the Hot Key Selection dialog box by clicking on the <u>Hot Keys... button</u>.

## Hot Keys... Button

Use this button to launch the Hot Key Configuration dialog box. For more information on the options offered by this dialog box, click on the image below.



## Pan Lock Hot Key

Use this control to tell Windows what hot key you'd like to toggle pan locking. By checking the *Shift*, *Ctrl* and *Alt* boxes, you can set up a multi-key combination.

Pan locking allows you to instantly "lock" the viewport and prevent the viewport from "drifting" as the mouse approaches the edge of the screen.

## **Launch Touch 95 Hot Key**

Use this control to tell Windows 95 what hot key you'd like to use to run the Touch 95 utility suite. Launching Touch 95 with a hot key is a convenient alternative to conventional methods of starting a program.

This feature only operates if Touch 95 has been installed with our SETUP.EXE program. If the hot key feature doesn't work, you may want to try reinstalling Touch 95 before contacting us for assistance.

# **OK Button**

Use this button to accept your changes and exit the dialog box.

## **Cancel Button**

Use this button to discard your changes and exit the dialog box.

## **Help Button**

This button launches this help file and takes you to the section that covers the Display Properties tab. Clicking on the help button at the lower right corner of the Touch 95 application displays the help file's table of contents.

#### **Change The Refresh Rate**

Use this control to pick the <u>vertical refresh rate</u> at which you'd like to run your Hercules product. The refresh rates offered will depend on the product you're using and the viewport size you've selected (or, if you're not using a viewport, the desktop area). The refresh rate at which you'd like to run is stored along with your color palette, desktop area, and viewport area settings. Once you've chosen a new refresh rate, your display will use this refresh rate at this viewport/desktop/color palette settings until you choose a new refresh rate. In other words, rebooting or shutting down your PC will not require you to choose your refresh rate again the next time. If you use the default choice of *Auto*, Windows will use the refresh rate for the monitor you've selected from the Display Properties dialog box.

**Important Note:** For most purposes, the default *Auto* setting will be your best choice. However, in some cases, Windows will not contain an entry for your monitor in its database, and in a few instances, the information that Windows 95 has for your monitor is incorrect, and your monitor is actually capable of being run at higher refresh rates. In either of these cases, you can use this control to override the default setting. *However, it's possible to use this control to select a refresh rate which is beyond your monitor's capabilities.* After you choose your display options and click on the Apply or OK button, Touch 95 lets you "preview" your settings and restores your previous mode after a few seconds if there's a problem, but there still exists the remote possibility of damaging your monitor by using this or any other facility that affects the refresh rate. *If you are unsure of what refresh rates are supported by your monitor, please refer to your monitor's documentation or contact the manufacturer.* 

### **Change The Color Palette**

Use this control to tell Windows the number of colors you'd like to be able to display at once. The <u>color palette</u> is sometimes referred to as the color depth or pixel depth.

With all graphics accelerators, a larger color palette takes more memory, and the maximum possible desktop area will be smaller when a larger color palette is used. If you use this control to increase the size of the color palette, the Display Area and Viewport Area controls above it may also change.

Using a larger color palette may also reduce the performance of your graphics accelerator, as your PC must manipulate more memory for each pixel. Choose the color palette that gives you the best combination of appropriateness for your current application, the maximum desktop area you need, and your performance requirements.

## **Desktop / Viewport Indicator**

This area of the Display Properties tab gives you a visual representation of the desktop and viewport sizes you've selected. The area in green represents your viewport, and the area in dark gray represents your desktop.

#### **Setting The Desktop Area And Viewport Area**

With Touch 95, your Hercules product gains a powerful feature: the ability to define a *viewport* into a larger *desktop area*. This technology is also often referred to as a *virtual desktop*. When a viewport is enabled, you only see part of the Windows display environment at once. Moving the cursor near the edge of the display will cause it to instantly "pan" in the direction of the mouse.

You enable a viewport with Touch 95's <u>Display Configuration</u> tab. It's as simple as using the slider control to select a viewport area that's smaller than the desktop area.

We also offer two features which make working with viewports easier: *pop-up centering* lets you tell Windows to make sure that important pop-up dialog boxes appear in the middle of your viewport. *Pan lock* gives you the ability to use a definable hot key to instantly "lock" your viewport at a particular section of your desktop area and override the automatic panning that normally happens when you move your cursor near the edge of the display. Both features may be enabled from the <u>Display Configuration</u> tab.

#### Why Viewports?

There are many ways in which this feature can make using your PC easier. One popular usage is in desktop publishing programs where it's beneficial to view an entire page at once. If you have a smaller monitor and it's not feasible to run at a high resolution in order to see everything at the same time, a viewport lets you see your work in detail while giving you the flexibility of instantly panning to any part of the page, rather than using the software's scrolling function, which is often slower.

Using a viewport also lets you run at a higher refresh rate. You can take advantage of the benefits of a high resolution display while having the ability to choose a refresh rate that's only available at lower resolutions.

Note that the color palette size at which you may run is limited by the desktop area, and not the viewport area. This is because Windows needs to reserve enough memory to represent any given pixel in your desktop area at any time. For example, if you have a graphics accelerator with 2MB of DRAM that can display 16.7 million colors at a resolution of 800x600 pixels and 256 colors at 1280x1024, choosing a desktop size of 1280x1024 and a viewport size of 800x600 will allow you to use a color palette of up to 256 colors. However, if your graphics accelerator is limited to interlaced refresh rates only at 1280x1024 but can display the 800x600 resolution at up to 90Hz, you may use a desktop area of 1280x1024 at 90Hz by choosing a viewport size of 800x600.

If you have any questions about working with viewports, please contact us.

#### Reach Us

This tab contains complete instructions for contacting Hercules. You can also view this information by clicking <u>here</u> or on the **Reach Us** button above.

If you have a World Wide Web browser, selecting the "Click here" button near the bottom of the tab launches it and displays an index of many of the services on our world wide web site. Doing this doesn't connect you to our site, so you can take a brief tour of our site without incurring connect charges. However, selecting some of the links on our index *will* take you to our site, so be sure to set up your Internet connection before proceeding, if necessary.

The "click here" button works by launching whatever application you have set up to use files with the extension .HTM. If you haven't added your browser to the registry, you can view the index by launching your browser manually and opening the DEFAULT.HTM file in the Hercules folder.

#### **How To Reach Hercules**

Here's how to contact Hercules:

Via telephone:

Technical support: 800-323-0601 (toll-free in North America)

or 510-623-6050

Toll-free fax-back service: (800) 711-HERC

Sales hotline: 800-532-0600 Main number: 510-623-6030

In Germany: +49-89-8989-0228

Via fax:

In the United States: (510) 623-1112

In Germany: +49-89-8989-0585

Via the Internet:

World Wide Web: www.hercules.com FTP: ftp.hercules.com

e-mail: support@hercules.com or

sales@hercules.com

We also offer the <u>Hercules Information Server</u>. Subscribers *automatically* receive notification of new drivers and software for their Hercules product.

CompuServe:

**GO HERCULES** 

BBS:

In the United States: (510) 623-7449

In Germany: +49-89-8989-0576

Our mailing address:

US Office:

Hercules Computer Technology, Inc. 3839 Spinnaker Court Fremont, CA 94538

German Office:

Hercules Computer Technology, Europe Bussardstr. 5 D-82116 Graefelfing Munich Germany

#### The Hercules Information Server

If you have an Internet e-mail address, we invite you to subscribe to the Hercules Information Server. Once you've joined, you'll automatically receive e-mail whenever new software for your Hercules product is available, or if there's other important news. This is a free service, except for any charges from your service provider or online service for the time you spend reading your mail.

There are six mailing lists:

The **dynamite** list is for owners of the Hercules Dynamite, Dynamite Pro, and Dynamite Power.

The dyn128 list is for owners of the Hercules Dynamite 128/Video.

The **graphite** list is for owners of products in the original Hercules Graphite family (products based on IIT AGX chipsets).

The **stingray** list is for owners of products in the Hercules Stingray family.

The **term3d** list is for owners of the Hercules Terminator 64/3D.

The **terminator** list is for owners of all other products in the Hercules Terminator family.

How To Subscribe

To subscribe, send Internet e-mail to the following address:

update@hercules.com

with the following in the body of the message:

subscribe [list name] your name

For example, if your name is Mary Smith and you own a Terminator 64/Video, you might send us a note like this:

To: update@hercules.com

Subject: [you can leave this blank]

subscribe terminator Mary Smith

How To Unsubscribe

Unsubscribing is even easier. Send a note to the same update@hercules.com address with the word "unsubscribe" followed by the name of the list in the body of your message. For example:

To: update@hercules.com

Subject: [again, you can leave this blank]

unsubscribe terminator

#### **Refresh Rate Meter**

The Hercules Refresh Rate Meter allows you to test the <u>vertical refresh rate</u> you are currently using. It is especially helpful when used in concert with <u>Screen Adjustment</u> to tune your display for optimal refresh rate performance.

Higher refresh rates deliver more vibrant and stable images that are easier to work with for extended periods. In general, higher refresh rates deliver better displays.

Click on the COARSE button to get an approximate reading of your system's refresh rate. Click on the FINE button to get a more accurate reading.

The COARSE measurement will take approximately 3 to 5 seconds to complete while the FINE measurement takes between 30 and 40 seconds.

Note: when you are running in an interlaced mode, Refresh Rate Meter will give a reading of approximately 87Hz in FINE mode. While this is technically correct, it may be misleading. A non-interlaced display, even one that is running at 60Hz, will always look better than an interlaced display. In interlaced mode, the electron gun completes a top-to-bottom pass of the screen approximately 87 times per second, but since it takes two passes to draw the screen, the entire display is only updated 43.5 times per second, giving you an effective refresh rate of 43Hz.

#### **Screen Adjustment**

This tool provides digital controls for your analog monitor. You can use it to change the size and position of the image on your screen, save the settings to disk and set up your display driver to use them every time it boots. It's useful for minimizing the amount of "black space" around the edges of your display and getting the largest display area possible.

The buttons on the Screen Adjustment tab have the following effects:



Expand the image vertically



Move the image up



Compress the image vertically



Move the image down



Move the image left



Expand the image horizontally (widen the image)



Move the image right



Compress the image horizontally (narrow the image)

When adjusting the display, you can click on the "Undo" (or hit the U or Alt-U key) to undo the effect of the last adjustment you have made. Hitting U is useful if clicking on one of the buttons causes the display to go blank, lose synchronization, or otherwise become unreadable.

To restore your display to the state it was in when you launched Adjust, click on Reset or hit R or Alt-R.

Clicking "Okay" or "Apply" will automatically save your configuration. The next time you restart Windows in the same resolution and pixel depth, the adjustments you have made will still take effect. You won't need to adjust the display for this resolution and pixel depth unless you choose a new monitor type from the Display Properties dialog box.

Two other important notes on Screen Adjustment:

• This tool works by modifying internal registers in the graphics card. Its range is limited, and it has no way of seeing what your display looks like. If you find that it is ineffective at giving you the display

you want (for example, if the image is too large and the software controls can only expand it so far, or if using this tool causes noticeable screen flicker), try using your monitor's hardware controls, or using Windows' <u>Display Properties dialog box</u> to select a basic monitor type that is a closer match for your monitor's capabilities. In particular, many monitors display a shrunken image when they are driven at or near their published maximum scan rate or refresh rate. In most cases, you will be able to use some combination of Adjust and the monitor's hardware controls to expand the image to your liking, but if not, use the software that came with your graphics card to select a monitor configuration that uses a slightly lower scan rate and/or refresh rate. Because of the great variety of monitors, we cannot guarantee that you will be able to use Adjust by itself to obtain a perfect image at all resolutions. Adjust is not a universal replacement for your monitor's hardware controls.

• Lastly, Adjust individually tunes each combination of resolution and pixel depth. Adjust should be run once for each graphics mode under which you use Windows.

## Speedy

This tab lets you launch our Speedy benchmark program.

Quick start: click on the "Go!" button to start Speedy. After about a minute of calculation, the SPEEDMARK=... line in the center window will be replaced with a fixed number. You can exit Speedy by hitting F10.

Speedy has its own set of complete documentation. To view it, hit the F1 key while Speedy is running.

#### Zoom In

This tab controls Zoom In, our screen magnification tool. Zoom In is a powerful utility that takes the form of a window. As you move the pointer around your display, the area around the pointer is magnified and displayed in the Zoom In window.

Since Zoom In is a separate application, you can close Touch 95 after you've launched Zoom In.

Zoom In has several options. You can click on the *Configure* button within Touch 95 and select your settings; they'll automatically be saved when you exit Touch 95. You can also choose options on the fly from within Zoom In's system menu.

Zoom In's options include the following:

The *Hot Key* is the key sequence you can use to bring up the Zoom In window after you've minimized. This is convenient when you're using Zoom In for precision work but you don't need the Zoom In window to be visible all the time.

The *Zoom Level* is the magnification factor. You may set any value between 1x, where the *Zoom In* window simply contains a duplicate of the area around your pointer, to 8x, where the area around your pointer is magnified by a factor of eight.

The *Cross Hair* is an indicator of where your pointer is located in the Zoom In window. This feature can be useful when you're doing precision, pixel-level work (for example, in a paint program) and you need to know exactly where your pointer is. It can be disabled entirely by selecting "None."

Panning controls the way that Zoom In follows your pointer. When you select the Continuous Pan option, the center of the Zoom In window always corresponds to the exact location of your pointer. When you select the Edge Pan option, the Zoom In window does not scroll until you move your pointer to the edge of the area being magnified.

The Zoom In window may be scaled to control the area of the display that you want magnified.

### **Vertical Refresh Rate**

Often referred to simply as "refresh rate"

The number of times per second the electron gun in your monitor retraces the screen. A vertical refresh rate of 76Hz means that the electron gun completes approximately 76 trips from the top to the bottom of the picture tube every second. The higher refresh rate, the more stable the display.

Hz is short for "hertz" and means one cycle per second. The term is named for Heinrich Hertz, a German physicist born in 1857.

## **Display Properties Dialog Box**

This is Windows 95's own facility for changing display properties, such as the <u>color palette</u>, <u>desktop area</u>, and background. The easiest way to see this dialog box is by right-clicking on the desktop and selecting "Properties" from the pop-up menu. You can also launch it via the "Display" icon in Control Panel.

Note that Touch 95 duplicates many of the features offered by the Display Properties dialog box. You can still use Display Properties to control your desktop settings without causing a conflict. Display Properties and Touch 95 work in harmony with each other.

### **Color Palette**

Also referred to as "color depth" or "pixel depth"

The range of colors available for each pixel on your display. Possible color palette sizes are 16 colors, 256 colors (also referred to as 8-bit color), high color (defined as either 32,768 colors [15-bit color] or 65,536 colors [16-bit color]), or true color (16.7 million colors, referred to as 24-bit color or 32-bit color).

You may set the color palette for your display with Touch 95's <u>Display Configuration</u> tab, or the <u>Display Properties dialog box</u>.

#### **Desktop Area**

The amount of information that Windows 95 can display. The desktop area is defined in terms of pixels. For example, a desktop area of 1024x768 contains 1,024 pixels in the horizontal direction and 768 pixels in the vertical direction.

Normally, the desktop area is the same as the viewport, or display area – the amount of information that can be displayed on your screen at one time. However, with many Hercules products you can use Touch 95's <u>Display Configuration</u> tab to tell Windows 95 to use a viewport area that's smaller than the desktop area. This is sometimes referred to as a *virtual desktop* and is explained in more detail in the <u>Setting</u> <u>The Desktop Area And Display Area</u> section.

#### **Font Size**

This control is used to set the size of the text used for displaying the names of icons, the titles of windows and dialog boxes, and other system elements. The font size also affects the height of window title bars and other elements. Using larger fonts makes the display more readable, but will limit the amount of desktop area that can be used for programs to display text and graphics. Using smaller fonts gives you more screen "real estate" to work with, but may cause the display to be harder to read, particularly with higher resolutions on smaller monitors.

Users who have migrated to Windows 95 from Windows 3.1 will appreciate the new custom font size settings. Under Windows 3.1, you had the choice of either small fonts or large. With Windows 95, you can select virtually any system font size. You can further customize the way the desktop looks by using the "Appearance" tab in the Display Properties dialog box.

### **Viewport Area**

The portion of your desktop area that's visible at once. This is most often the same, but you can use Touch 95 to tell Windows to display a viewport that's smaller than your desktop area. You can then use your mouse to scroll the viewport around the desktop and use Touch 95's pan lock feature to "freeze" the viewport's location.

This feature is sometimes referred to as a *virtual desktop*.

### **Windows Taskbar Icon Selection**

If you like, Touch 95 can place an icon in the Windows taskbar, near the clock display. You can launch Touch 95 by clicking on this icon. This control allows you to enable or disable display of the icon.

## **OK Button**

Pressing this button accepts the changes you've made within the Touch 95 environment and exits Touch 95. The Apply button does the same thing but does not cause Touch 95 to exit.

## **Cancel Button**

This button discards an	y changes y	ou've made and	exits Touch 95.
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# **Apply Button**

Pressing this button accepts the changes you've made within the Touch 95 environment. It does not cause Touch 95 to exit. The OK button does the same thing, then exits Touch 95.

## **Help Button**

This button launches the help file for Touch 95. It displays the table of contents, which you may also view by clicking the **Contents** button, above.

For context-sensitive help, click the Help button found within most of Touch 95's tabs.