# **Orchid ProDesigner Video Display Setup Help**

Orchid's **NEW** Video Setup Utility for the <u>ProDesigner IIs</u> will assist in the configuration of the Orchid Standard & Turbo drivers for <u>Windows 3.1</u>.

## How To ..

**Configure Display Driver** 

## **Reference Information**

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ProDesigner II Series Super VGA Boards are products of Orchid Technology, Inc.

MS Windows is a registered trademark of Microsoft Corporation.

Standard & Turbo Drivers, Orchid provides two sets of driver for your convenience.

# **Configure Display Driver**

#### **Installation with a Mouse**

Orchid's Setup Utility will help you select different resolutions, colors and font sizes in Windows 3.x. To make your selection, use the mouse to click on an item. When the SAVE button is pressed, your changes will take effect.

## Installation with a Keyboard

Use the TAB key to toggle from one group to another. Within each group, use the UP and DOWN arrow keys to make a selection. Tab to the SAVE option and when the RETURN key is pressed, your changes will take effect.

## **Setup Notes**

When the Orchid Setup Utility is configuring the driver, it may ask you to insert the Orchid Disk or a Microsoft Windows Disk in drive A to complete the installation. If you cancel the program before completing this task, your previous settings will remain in effect.

## **Memory Managers**

Orchid Technical Support recommends that users exclude the A000-C7FF range when using third party Memory Managers.

If you are using a third party Memory Manager, you have to exclude the Video BIOS Address (C000-C7FF) or the Memory Address Segments (A000-BFFF) or Both (A000-C7FF) if conflicts occur. Check your Memory Manager's manual to reference how to do an exclude statement.

## **Resolutions and Colors**

Resolution is the number of horizontal and vertical <u>pixels</u> that can be displayed on your screen. In other words, a higher resolution will display more picture information than a lower resolution.

Color is the number of colors that can be displayed on the screen at one time. More colors will make the display more realistic.

Depending on the amount of the <u>Video Memory</u> installed in the video board, the ProDesigner II Series provides the following capability.

## **Standard Drivers:**

Resolution	Colors	Video Mem	ory Required	Vertical Refresh
640 x 480	256	512	KB	60, 72
640 x 480	32,768*	1024	KB	60, 72
800 x 600	16	512	KB	56, 60 & 72
800 x 600	256	512	KB	56, 60 & 72
800 x 600	32,768*	1024	KB	60
1024 x 768	16	512	KB	43.5(i), 60 & 70
1024 x 768	256	1024	KB	43.5(i), 60 & 70

## **Turbo Drivers:**

Resolution	Colors	Video Memory Required	Vertical Refresh
640 x 480	256	1024 KB	60, 72
800 x 600	256	1024 KB	56, 60 & 72
1024 x 768	256	1024 KB	43.5(i), 60 & 70

Vertical frequencies are in Hz (i) indicates interlaced mode (\*) requires a Sierra DAC on Board

#### **Modes & Frequencies**

Please be sure your monitor supports your selected mode and frequency. If you are not sure if your monitor can run the resolution you wish to select, we recommend the following actions:

- 1. Check the ProDesigner IIs switch settings to determine the default frequencies.
- 2. Check your monitor's manual to see if the frequencies selected on the ProDesigner IIs switches ONE & TWO will function with your monitor (SEE BELOW).
- 3. Run DYNASCAN.COM (SEE BELOW or Read the Utilities section of you ProDesigner IIs Manual) to test the modes and frequencies, if your not sure.
- 4. Contact your Dealer
- 5. Contact Orchid Technical Support (SEE TECHICAL SUPPORT).

#### Note:

The ProDesigner II Series has a small, four position, switch block located near the mounting bracket. These switches are pre-set to provide the best compatibility for most monitor types, but you should check these switches to ensure that they are configured correctly for your computer. Your monitor's reference booklet will provide you with the correct vertical refresh rate and maximum resolution supported by your monitor. (SEE MONITOR

## VERIFICATION TABLE).

## **DYNASCAN**

Orchid's DOS utility, DYNASCAN.COM, provided in the ProDesigner II Series Disk, can be used to check your monitor's capability. However, DO NOT run DYNASCAN.COM inside Windows using the DOS shell. To run DYNASCAN, exit Windows, then type:

"DYNASCAN -x c:" or "DYNASCAN -?" for more information and options.

# **Pixels**

A pixel is defined as a dot that you see on the screen.

**Video Memory**The video display buffer is used to hold images that will be displayed on the monitor. The ProDesigner IIs is shipped with either 512KB or 1MB of video memory on board.

## **Monitor Verification Table**

Please verify that your monitor can support the following frequencies (Horizontal & Vertical ranges) before selecting a mode. If you enter a mode and your monitor fails to sync up (no video or lines across the screen) use the ALT <F4> keys and then press <ENTER> to exit Windows. Run SETUP from the Windows directory and select the VGA option under video display. Enter Windows and select the Orchid ProDesigner IIs Setup under the Control Panel and select another mode or frequency or both.

Resolution	Horizontal	Vertical	_
640x480	31.5KHz	60Hz	
	37.9KHz	72Hz	
800x600	37.9KHz	60Hz	
	48.1KHz	72Hz	
1024x768	48.4KHz	60Hz	
	56.4KHz	70Hz	

<b>ProDes</b>	igner	IIs Sw	itch	Settings
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SW1	SW2	640x480	800x600	1024x768
OFF	OFF*	60Hz	60Hz	60Hz
ON	OFF	60Hz	56Hz	45Hz
OFF	ON	72Hz	72Hz	60Hz
ON	ON	72Hz	72Hz	70Hz

<sup>\*</sup> Default Setting

## **Font Sizes**

Font Sizes control the size of the letters on the title bar, menu and icon text. The ProDesigner IIs Windows driver allows you to choose either small or large size fonts in the following resolutions:

800 x 600\* 1024 x 768

In high resolutions such as 1024 x 768, larger fonts provide easier to read text.

Small size fonts -- The original VGA display fonts with 96 dots per inch in the X and Y direction.

Large size fonts -- The 8514/A display fonts with 120 dots per inch in the X and Y direction.

<sup>\*</sup> Large fonts for 800x600 are ONLY available in Turbo Mode

## **Orchid Products**

Orchid Technology is a leading manufacturer of hardware and peripherals for personal computers. Since its incorporation in 1982, Orchid has been at the forefront of the personal computer industry with the introduction of new and exciting products. The following is a list of the products we currently manufacture:

For more information on any of these products, contact Orchid Sales at:

#### 1-800-7-ORCHID

#### **Celsius VLB**

The Celsius VLB uses the IIT AGX015 graphics processor and high performance VRAM based video board. With it's enhanced graphics instructions this board will give the highest performance possible. The Celsius VLB offers video resolutions to  $1280 \times 1024$ , vertical refresh rate up to 90Hz, and up to 16.8 million colors at  $800 \times 600$ .

#### Fahrenheit 1280

The Fahrenheit 1280 is the next generation Super VGA graphics adapter. Its Graphics Accelerator technology provides for faster Windows and CAD video performance. The Fahrenheit 1280 offers video resolutions to 1280 x 1024, vertical refresh rate up to 72Hz, and up to 16.8 million colors at 640x480.

#### Fahrenheit 1280 Plus

The Fahrenheit 1280 Plus is the next generation Super VGA graphics adapter. Its Graphics Accelerator technology provides for faster Windows and CAD video performance. The Fahrenheit 1280 offers video resolutions to 1280 x 1024, vertical refresh rate up to 72Hz, up to 16.8 million colors at  $640 \times 480 \text{ and } 65,536 \text{ colors}$  at  $800 \times 600$ .

#### Fahrenheit VA

The Fahrenheit VA is more than just a Windows Accelerator--it features the fastest graphics possible, with a twist! With Orchid's own Voice Notes software, the Fahrenheit VA enables you to add custom voice annotation to all Windows applications supporting Object Linking & Embedding (OLE). A single keystroke opens the Voice Notes window, allowing you to easily record, play, pause, and automatically embed your recording within the document. The Fahrenheit VA offers video resolutions to 1280 x 1024, vertical refresh rate up to 72Hz, up to 16.8 million colors at 640x480 and 65.536 colors at 800x600.

#### Fahrenheit VA/VLB

Fahrenheit VA/VLB is a Fahrenheit VA (see above), except that it is designed for the VESA local bus slot (see Superboard 486 VLB). In addition, the Fahrenheit VA/VLB offers 65,536 colors at 1024x768 and 256 colors at 1280x1024.

## Fahrenheit 1280 Plus/VLB

Fahrenheit 1280 Plus/VLB is a Fahrenheit 1280 Plus (see above), except that it is designed for the VESA local bus slot (see Superboard 486 VLB). In addition, the Fahrenheit 1280 Plus/VLB offers 65,536 colors at 1024x768 and 256 colors at 1280x1024.

## Orchid P9000 VLB

P9000 VLB is, without question, the fastest Windows accelerator available on the market today. Whether you're running Windows or AutoCAD, you're guaranteed to actually FEEL the difference. Designed for a VESA local bus slot, the P9000 VLB Graphics Hardware Accelerator speeds bit blitting, line drawing, pattern filling, polygon filling, clipping and color expansion. The P9000 VLB provides a maximum resolution of  $1600 \times 1200 - 256$  colors with a 60Hz flicker-free refresh rate. 24-bit color support is provided to  $800 \times 600$  at 90Hz refresh rates and 65,536 colors are supported at  $1024 \times 768$  at 90Hz refresh rate.

## **ProDesigner IIs**

The ProDesigner IIs, an industry standard, delivers outstanding cost vs. performance at resolutions to  $1024 \times 768$  and colors to 32,768 with refresh rates at the ergonomically pleasing 72Hz.

## **ProDesigner IIs/EISA**

The ProDesigner IIs/EISA is a 1MB Super VGA graphics adapter for high performance EISA personal computers. The ProDesigner IIs/EISA provides ease of installation and all the SVGA high resolutions and colors you've come to expect from Orchid.

## **ProDesigner IIs/MC**

The ProDesigner IIs/MC is a high performance SVGA adapter based upon the same proven design as the Pro IIs. It offers owners of IBM PS/2 Micro Channel personal computers and 100% compatibles, the performance and high color support that owners of the Orchid ISA and EISA video adapters have come to appreciate.

## RamQuest 8/16

The RamQuest 8/16 is an ISA memory card that is expandable to 32MB. The RamQuest 8/16 installs in less than 3 minutes on your IBM PC, XT, AT and compatibles. Extended and expanded memory are supported for maximum compatibility.

#### RamQuest 16/32

The RamQuest 16/32 is a Micro Channel memory card that is expandable to 8MB. The IBM PS/2 Model 50, 55sx, 60, 70, 80 and 100% compatibles are supported. The RamQuest 16/32 installs in less than 10 minutes and provides up to a 50% increase in performance. It delivers true 32-bit memory with correct memory configuration.

## Superboard 486 VLB

The Superboard 486 VLB (VESA Local Bus) is an ISA motherboard equipped with two VLB slots for a high-performance video card and/or fast IDE controller. The local bus design provides direct 32-bit data transfer between the video card/IDE controller and the CPU at CPU speeds. Pair the Superboard 486 VLB with an Orchid Fahrenheit VA/VLB graphics card, and you will experience the fastest graphics and motherboard combination possible.

## **Super IDE/VLB Controller**

Orchid's Super IDE/VLB Controller nearly doubles the speed of your system when paired with a VESA-compliant motherboard. This disk controller delivers a maximum data transfer rate of 8MB per second (ANSII Standard) in AT-compatible IDE hard drivers. The Controller provides support for up to two hard drives and two floppy drives.

### **Gulliver Notebook**

Gulliver delivers power, style and fun into notebook computing. The distinctive styling of Gulliver is an ergonomic achievement. Gulliver houses a powerful 386 or 486 CPU and features the latest in chipset technology while affording you a number of upgrade options. And it does so with style -- from the rounded contours to the built-in trackball to its removable battery pack. Orchid takes the dull out of notebook computing. Choose from three exciting colors: Hunter Green, Charcoal, or Blackberry.

#### **Sound Producer Pro**

The Sound Producer Pro delivers an unparalleled features set while maintaining 100% SoundBlaster Pro compatibility. With 20-voice FM synthesizer and digital sounds, it delivers support for 4 sound standards, and the ability to add Voice Notes to any Windows document that supports Object Linking & Embedding (OLE). The Sound Producer Pro delivers the highest quality sound to your favorite games or business presentations, with sampling rates up to 44.1 KHz. It comes complete with joystick port, MIDI In/Out support, and stereo microphone input.

# **Technical Support**

Orchid Technology makes every effort to provide a trouble free product. If you find you need assistance, please call upon our technical support department and have one of our experienced technicians assist you. Free technical customer assistance is available Monday-Friday from 7am - 5pm Pacific Standard time.

Phone : (510) 683-0323 Fax : (510) 683-0355

You can also write to our technical support department at the following address:

Orchid Technology ATTN: Technical Support 45365 Northport Loop West Fremont, CA 94538

# **Bulletin Board Service (BBS)**

Orchid's 16 line BBS is available 7 days a week, 24 hours a day, for Orchid users who want the latest up-to-date drivers. Set the modem to 8 data bits, 1 stop bit, and no parity (N-8-1). YMODEM and ZMODEM are the recommended file transfer protocols. Connect to the Orchid BBS by dialing the following numbers:

2400 Baud : (510) 683-0327 9600 Baud : (510) 683-0555

## Standard & Turbo Drivers

Orchid provides two sets of drivers for your convenience. The Standard Drivers will function in 16, 256, & 32K color modes. The Turbo Drivers will only function in 256 color modes. There is a Turbo Mode check box in the lower right hand corner of the ProDesigner Control Panel. Check the Turbo Mode box to enable the Turbo mode drivers. Note: the 16 & 32K color options will gray out.

If a problem occurs in the Turbo Mode, switch back to the Standard Mode drivers by unchecking the Turbo Mode box. Again, both drivers are provided to ensure compatibility with all available programs on the market.