Orchid Video Display Setup Help

Orchid's **NEW** Video Setup Utility for the <u>P9000 VLB</u> will assist   in the configuration of the Orchid P9000 VLB Drivers for <u>Windows 3.1</u>.

The Orchid P9000 VLB Driver is a unique three driver solution developed by Orchid Technology and Weitek, to offer high video resolutions, frequencies and colors.

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P9000 VLB Super VGA Accelerator Board is a product of Orchid Technology, Inc.

MS Windows is a registered trademark of Microsoft Corporation.

Configure Display Driver

Installation with a Mouse
Orchid's P9000 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 button, when the ENTER key is pressed, your changes will take effect.   Another option is to press "ALT+S" to have your changes take place.

Note
When the Orchid P9000 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.

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 Orchid P9000 VLB provides the following capabilities.

Resolution	Colors	Video Memory Required	Vertical Refresh
640 x 480	256	1024 KB	60, 72 & 90
640 x 480	65,536	1024 KB	60, 72 & 90
640 x 480	16.8 mil.	1024 KB	60, 72 & 90
800 x 600	256	1024 KB	60, 72 & 90
800 x 600	65,536	1024 KB	60, 72 & 90
800 x 600	16.8 mil.	2048 KB	60, 72 & 90
1024 x 768	256	1024 KB	60, 70 74 & 90
1024 x 768	65,536	2048 KB	60, 70 74 & 90
1280 x 1024	256	2048 KB	60, 72 & 74
1600 x 1200	256	2048 KB	60

Vertical frequencies are in Hz

Note:
The Orchid P9000 VLB has an eight position, switch block located near the mounting bracket.   These switches are pre-set to provide the best compatibility for most monitor and computer types, but you should check these switches to ensure that they are configured correctly for your computer.

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 P9000 VLB is shipped with 3MB of surface mounted memory: 1MB of DRAM memory for 16-bit standard VGA and 2MB of VRAM memory for VESA Local BUS video.

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 P9000 Setup and select another mode or frequency or both.

Resolution	Horizontal	Vertical
640x480	31.5KHz	60Hz
	37.9KHz	72Hz
	47.5KHz	90Hz
800x600	37.9KHz	60Hz
	48.1KHz	72Hz
	56.6KHz	90Hz
1024x768	48.4KHz	60Hz
	56.4KHz	70Hz
	59.9KHz	74Hz
	71.9KHz	90Hz
1280x1024	64.4KHz	60Hz
	77.0KHz	72Hz
	79.0KHz	74Hz
1600x1200	78.0KHz	60Hz

Font Sizes

Font Sizes control the size of the letters on the title bar, menu and icon text. The Orchid P9000 VLB Windows driver allows you to choose either small or large size fonts in the following resolutions:

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 800 x  600
1024 x  768
1280 x  960
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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.

Palette Types

The Power Palette uses a proprietary high-speed color blending algorithm, and is recommended for the highest graphics performance.   Select the Standard Palette if you require exact color compatibility.

Memory Addresses

Orchid P9000 VLB uses certain memory address segments.   Some memory manager programs may try to use those address segments.   If you encounter a conflict, add an exclusion statement in your CONFIG.SYS file, to exclude the Orchid P9000 VLB address segment being used.   (Refer to your memory manager user's manual for details on using an exclusion statement).

Memory Addresses Supported:

>   C000
>   D000
>   E000

Note: Switches 6&7 should be change to reflect the changes selected on the control panel.

Switch 6 & 7   P9000 VESA Local BUS Address

ON   ON   C000 Base Address (default)
ON   OFF   D000 Base Address
OFF ON   E000 Base Address

Monitor Types

Orchid Technology supplies a large list of monitor types, but if your monitor is not listed, the Generic option will function correctly for your needs.

Monitor Types:

Generic
Nanao 9080i
NEC 5FG/6FG
NEC 4FG/5FGe
Sony 1606
Hitachi
Toshiba P20C900

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 x 1024,vertical refresh rate up to 90Hz, and up to 16.8 million colors at 800x600.

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 640x480 and 65,536 colors at 800x600.

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).

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 1600x1200 - 256 colors with

a 60Hz flicker-free refresh rate.   24-bit color support is provided to 800x600 at 90Hz refresh rates and 65,536 colors are supported at 1024x768 at 90Hz refresh rate.

ProDesigner IIs

The ProDesigner IIs, an industry standard, delivers outstanding cost vs. performance at resolutions to 1024 x 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