

# NEXTSTEP for Intel Processors

**Title:** Diamond Viper Video Adapter

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**Product Vendor:**

Diamond Computer Systems  
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## Usage Commentary

For NEXTSTEP Release 3.3, please see NeXTanswer document 1815\_Weitek\_Power\_9000\_Driver\_Overview.rtf

The Diamond Viper displays up to 800x600 32-bit color graphics, 1152 x 900 16 bit color graphics, or 1280 x 1024 8 bit greyscale graphics using the Weitek Power 9000 driver under NEXTSTEP 3.2. This card is available in both VESA localbus and PCI versions. The PCI version will in addition support up to 1600x1200 in 8-bit greyscale. The PCI version of the Diamond Viper should provide faster graphics due to the faster bus interface. Both PCI and VESA Localbus versions support up to two megabytes of video RAM.

The Weitek Power 9000 device driver is available from NeXTanswers via anonymous FTP (<ftp.next.com>) or email ([nextanswers@next.com](mailto:nextanswers@next.com)). Request documents1558\_WeitekP9000Driver.pkg.compressed and

1557\_WeitekP9000Driver.ReadMe.rtf Please note that you must be running NEXTSTEP 3.2 in order to use this driver.

**Diamond Viper VLB Display Adapter Display Modes  
(BT485 110MHz RAMDAC)**

| <b>8-bit Greyscale</b>                        | <b>16-bit Color</b>                           | <b>32-bit Color</b>                   |
|---|---|---------------------------------------|
| 800x600 1MB VRAM<br>56, 60, 72, or 75 Hz      | 800x600 1MB VRAM<br>56, 60, 72, or 75 Hz      | 640x480 2MB VRAM<br>60, 72, or 75 Hz  |
| 1024x768 1MB VRAM<br>60, 70, 72, 75, or 80 Hz | 1024x768 2MB VRAM<br>60, 70, 72, 75, or 80 Hz | 800x600 2MB VRAM<br>56, 60, 72, 75 Hz |
| 1280x1024 2MB VRAM<br>60 Hz                   | 1152x900 2MB VRAM<br>60 or 70 Hz              |                                       |
| 1152x900 1MB VRAM<br>60, 70, 72, or 74 Hz     |   |                                       |

**Diamond Viper PCI Display Adapter Display Modes  
(BT485 135MHz RAMDAC)**

| <b>8-bit Greyscale</b>                        | <b>16-bit Color</b>                           | <b>32-bit Color</b>                   |
|---|---|---------------------------------------|
| 800x600 1MB VRAM<br>56, 60, 72, or 75 Hz      | 800x600 1MB VRAM<br>56, 60, 72, or 75 Hz      | 640x480 2MB VRAM<br>60, 72, or 75 Hz  |
| 1024x768 1MB VRAM<br>60, 70, 72, 75, or 80 Hz | 1024x768 2MB VRAM<br>60, 70, 72, 75, or 80 Hz | 800x600 2MB VRAM<br>56, 60, 72, 75 Hz |
| 1280x1024 2MB VRAM<br>60, 72, 74, 75 Hz       | 1152x900 2MB VRAM<br>60 or 70 Hz              |                                       |
| 1600x1200 2MB VRAM<br>60 Hz                   |   |                                       |
| 1152x900 1MB VRAM<br>60, 70, 72, or 74 Hz     |   |                                       |

**Setup and Installation**

The NEXTSTEP driver automatically sets all of the necessary parameters as specified in Configure.

In Configure, the 'width' and 'height' parameters are the width and height of the display in pixels. The 'refresh' parameter is the refresh rate of the monitor in Hz. The 'colorspace' parameter is of the form 'BW:x' where 'x' is the number of bits/pixel, or 'RGB:xyz/w' where 'x', 'y', and 'z' are the number of bits/component and 'w' is the number of bits/pixel.

## Supported Displays

NeXT designs and tests its display adapter device drivers using displays that can support display modes with very high resolutions and non-interlaced refresh rates, such as the NEC 5FG, NEC 6FG, and Nokia Multigraph 445X. Read the owner's guide that comes with your display to ensure it can support the display mode you set in Configure.

**Warning:** Some vendors claim that you can use their display adapters at display modes with resolutions and refresh rates that exceed what their RAMDACs can support. You can permanently damage your display adapter and computer by doing this. Read the owner's guide that comes with your display adapter or contact its manufacturer to ensure that your adapter's RAMDAC can support the display mode you set in Configure.

## Known Problems

7 The Diamond Viper is not supported in SoftPC full-screen mode.