Introduction :

This is the HelpFile for the **WeitekPower Windows95 Display Drivers v2.0**.

You will find useful information about installing the drivers and configuring the Display Card.

Please select a Topic Section :

Driver Installation

Setting RefreshRates

Installation Procedure :

During or Before first Installation of Windows95

Changing from VGA or other Display Card

Upgrading from previous version WeitekPower Driver

Important Notes for users of VESA LocalBus Cards including :
Diamond ViperVLB, **Weitek Power9000 VLB** and
Weitek Power9100 VLB

If you are installing Windows95 for the first time

1. During Windows95 installation you may be asked to select the drivers for your card. (If not asked then choose VGA and refer to the <u>VGA Procedure</u>.)
2. Click on the **Manufacturer Supplied Drivers** button in the window and then the **Have Disk** button.

Insert the diskette containing the WeitekPower drivers (e.g. the diskette in **A:** drive) and enter the location of the driver diskette e.g. **A:** (if the diskette is in that drive)

3. Choose the appropriate option that matches the description of the card in your system and Click on **OK**.
After installation you can return to the **Display Settings** window where you can select your **Monitor** and then preferred resolution and color depth.

   Click here to start the **Add New Hardware** Wizard

If you have already installed Windows95 with VGA or other Driver

1. Open the Control Panel folder and choose the **Display** Icon,
      or Using the mouse, right-click on an empty space in the main Desktop Window and choose **Properties**.
2. Click on the Tabbed Windows titled **Settings** and then click on the button **Change Display Type**.
3. You should first select the **Monitor** Model to match your system if this is already done skip to the next step.
4. Click on the **Change** button in the Adapter type window and then the **Have Disk** button.

Insert the diskette containing the WeitekPower drivers (e.g. the diskette in **A:** drive) and enter the location of the driver diskette e.g. **A:** (if the diskette is in that drive)

5. Choose the appropriate Card Type that matches the description of the card in your system and Click on **OK**.
6. Double check to make sure that you have selected the correct Monitor for your system since this is used by Windows to interpret the maximum resolution your system is capable of, regardless of the capabilities of the card. Note that this information is also used by the Display Driver if **Auto Detect** Maximum Refresh Rate is enabled.
7. The drivers will be installed and you will be returned to the main **Settings** window where you can select your preferred resolution and color depth.
8. Click on the **Apply** or **Close** buttons *(but not Cancel)* to confirm you choice. Windows will advise that the System needs to be restarted to enable the new Settings.

    <u>Important Notes</u> for users of VESA LocalBus Cards including :
        Diamond ViperVLB,
        Weitek Power9000 VLB,
        Weitek Power9100 VLB

9. After the system restarts, and the next time you open the **Display Properties** window from Control Panel (or by right-clicking over an empty spot on the Desktop and selecting **Properties**) you can enter by choosing the window tab titled **WeitekPower** to select your Refresh Rate preferrence.

        🔺   Click here to open the **Device Manager** settings

If you have already installed a previous version Weitek Driver

1. Open the Control Panel folder and choose the **Display** Icon,
      or Using the mouse, right-click on an empty space in the main Desktop Window and choose **Properties**.
2. Click on the Tabbed Windows titled **Settings** and then click on the button **Change Display Type**.
3. You should first select the **Monitor** Model to match your system if this is already done skip to the next step.
4. Click on the **Change** button in the Adapter type window and then the **Have Disk** button.

Insert the diskette containing the WeitekPower drivers (e.g. the diskette in **A:** drive) and enter the location of the driver diskette e.g. **A:** (if the diskette is in that drive)

5. Choose the appropriate option that matches the description of the card in your system and Click on **OK**.
6. The drivers will be installed and you will be returned to the main **Settings** window where you can select your preferred resolution and color depth.
7. Make sure that you have selected the correct Monitor for your system since this is used by Windows to interpret the maximum resolution your system is capable of, regardless of the capabilities of the card. Note that this information is also used by the Display Driver if **Auto Detect** Maximum Refresh Rate is enabled.

   Important Notes for users of VESA LocalBus Cards including :
         Diamond ViperVLB,
         Weitek Power9000 VLB,
         Weitek Power9100 VLB

8. After the system restarts, and the next time you open the **Display Properties** window from Control Panel (or by right-clicking over an empty spot on the Desktop and selecting **Properties**) you can enter by choosing the window tab titled **WeitekPower** to select your Refresh Rate preferrence.

🔵 Setting RefreshRates :

Included in the drivers is a DisplayProperties **ControlPanel Extension** for supporting the **WeitekPower Windows95 Display Drivers**.

Using this utility you can select a prefered *Refresh Rate*, Monitor *SyncPolarity* and adjust *Monitor Alignment*, allowing dynamically adjustment of the *Size* and/or *Postion* of the visible screen. Additionally you can change the default settings of your card to improve performance in certain application types, or enable the special features of your card.

Context Sensitive help is supplied through-out this utility. You can get pop-up help on any control, or setting, by right-clicking with the mouse on that item. Additionally Windows95 also provides a Help Tool, the **?** button at the top right of the window. Click that button and then use the mouse to select the Control, FunctionWindow or StatusMessage that you wish to learn more about.

● Special Note For VL-Bus Cards :

If you have a **VESA LocalBus** card such as a **Diamond ViperVLB** or other **Weitek Power9000 VL-Bus** cards then you may get a warning message, after re-booting the system the first time with new Display settings, informing you that the **Display Adapter Is Not Configured Properly**. This occurs due to a bug in the way PnP treats legacy VL-Bus cards.

To avoid this problem you should not restart the system immediately after installing the driver and selecting a new resolution. Instead you should click on **No** when asked to **Restart** and then move immediately to the **Device Manager** window where you will be able to configure your card settings for the system. Click on the **Display Icon**, then **Propoerties**, and finally **Resources**. There will be a message complaigning *"... the resources used do not match known configurations.."*.
Select the **Set Configuration Manually** button and then **OK** to save the settings.

Note : For users of Weitek P9000 VLBus Cards (**not-including** Diamond ViperVLB) you will have to ensure the **Memory Address** shown in the Resources window matches the Jumper settings on your card. Please consult your hardware manual to confirm these match.

After confirming resources you can click on **OK** and you will then be asked to **Shutdown** the system, and this time you can click on **Yes**.

Click here to open the **Device Manager** now.

By using these control you can make small adjustments in the visible screen's Horizontal or Verical size and position.
Note : If, after effecting an adjustment, your monitor loses sync or starts jittering or becomes unstable you can press the **<ESC>** key to return to default settings.

By using these control you can make small adjustments in the visible screen's Horizontal or Verical size.
Note : If, after effecting an adjustment, your monitor loses sync or starts jittering or becomes unstable you can press the **<ESC>** key to return to default settings.

By using these control you can make small adjustments in the visible screen's Horizontal or Verical position.
Note : If, after effecting an adjustment, your monitor loses sync or starts jittering or becomes unstable you can press the **<ESC>** key to return to default settings.

Displays the Display Mode the card is currently in, showing the Resolution and Color Depth.
Note : If changed, the selected refresh rate and all screen settings will apply to this mode only, by default.

   Click here to open the **Display Properties** settings

This determines the polarity of the Vertical Sync signal sent to the monitor.
Note : Please consult your Monitor User's Manual before changing these settings.

This determines the polarity of the Horizontal Sync signal sent to the monitor.
Note : Please consult your Monitor User's Manual before changing these settings.

Enables support for Plug and Play Monitors. You must also install a **"Plug and Play Monitor (VESA DDC)"** in the **Settings** window, click on **Change Display Type**.
The Display Card will use the **VESA DisplayDataChannel** (DDC) to ask the Monitor for the best Refresh Rate it is capable. The driver will try detecting DDC2 and then fallback to DDC1, however DDC1-only Monitors will require the screen be blanked while communicating.
Note : This feature is not available on all cards.

The display driver will use only the lowest Refresh Rate available for that mode, this is usually about 60Hz.

Note : This does not mean the mode will work on any monitor.

   Click here to check the installed Monitor.

The display driver will make it's own determination on the best Refresh Rate suitable for your monitor.
Note : You should install the correct Monitor Type for this feature to work effectively.

Click here to check the installed Monitor.

Changes you make will be saved along with the current display Resolution and Color Depth and will only apply to that mode.

The Refresh Rate you select will be forced on all Modes regardless of Resolution or Color Depth. This preference should only be used if you have choosen a setting that later doesn't work in a particular mode and you wish to re-enter that mode to re-set that preference.
Note : Even when forced the display driver will not allow a refresh rate that the card is not capable of, **however** there is no way of knowing if the Monitor also can support it.

These are the details of the vendor hardware and card specific chips, as detected by the driver.

Click here to open the **Device Manager** now.

These are the **Refresh Rates** supported by the Display Card in the current Resolution and Color Depth.

Allows you specifically enable/disable chip, card and driver options, features and settings.

Enable or Disable card-specific features and settings.

Enable or Disable features and settings for cards with The Weitek **VideoPower** video-coprocessor installed.

Enable using the DAC's palette in 256 Color Modes.
Note : The only recommended setting is **Enabled**

Set the Dac to work in GreyScale in 8bit mode. All 256 colors will be represented in shades of Grey.

Use 5:5:5 (15 bit) pixels in Hi-Color color modes, giving a maximum of 32,768 colors.
Note : This mode has better compatiblity but less colors.

Use 5:6:5 (16 bit) pixels in Hi-Color color modes, giving a maximum of 65,535 colors.
Note : This mode has better more colors and will not use any more memory.

You can select a maximum hardware cursor size of 32x32 or 64x64.
Note : 64x64 hardware cursors are only available on certain cards.

Enable or Disable using hardware accelerated cursors.
Note : Changing this setting will **NOT** affect your ability to also use software color and animated cursors.

Enabling using Graphics Double Buffering may improve Video, Game and/or 3D performance. It will not improve normal Windows applications performance.
Note : Enabling Double Buffering will decrease the available memory by half and therefore limit the available Resolutions and Color Depths.

Enabling using hardware interrupts may improve Video, Game and/or 3D performance.
Note : Not all cards support using vertical refresh interrupts. Consult your card users manual.

Select the interrupt line used by the display card. Please consult your Display Card users manual.
Note-1 : Not all cards support using vertical refresh interrupts.
Note-2 : PCI card users do not need to change this setting.

Enable using the Weitek **VideoPower** video-coprocessor to accelerate Video Playback.

Enabling using double buffered video may improve Video or Game performance. It will not improve normal Windows applications performance.
Note : Enabling this feature will decrease the amount of available memory possibly limiting the maximum resolution or color depth.

Enable using the Bi-Linear Interpolative Scaler engine in the Weitek **VideoPower** video-coprocessor.
Note : Enabling this feature may improve video playback quality when the image is scaled above the original size.

These drivers, this program and the help file were all written by : **David Wyatt**
E-mail contact : **<davidw@tpts1.seed.net.tw>**

Determine the desired priority when using **VideoPower** to accelerate video playback.
Note : This setting only affects priorities when both Video and Graphics tasks perform simultaneously.

These drivers, by Weitek Corporation, are designed to work on the WeitekPower Family of graphics accelerators and video co-processors. This includes the Power9000, Power9100 and VideoPower chipsets.

This is the version number of the Display Driver and components.

Enabling the use of multiple buffers (e.g. Triple Buffering) if requested. Slower but more compatible.
Note : This will decrease the available memory as a temporary swap buffer needs to be allocated.

Sets the maximum number of surfaces to two. This works best with the double buffered design of the P9100 & P9000.
Note : Some DirectX software demands more than two buffers and will default to full software emulation.

Emulates multiple flipping surfaces by using the hardware Blt'er.
Note : This will decrease the available memory as a temporary swap buffer needs to be allocated.

Controls which GDI functions or groups of functions will be accelerated by hardware.Enabling an option will improve performance. Disabling an option is possible to fix an application compatibility problem.