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## Install Driver Files

When clicking on the button "Install" in the main dialog window of the OakSetup program, you will begin a process of copying all Oak Windows drivers to a directory in your hard drive. The files being copied are: Oak Window drivers, redistributed Microsoft fonts needed by Windows driver setup, the OakSetup program and its supporting files.

All Oak Windows driver files and Microsoft font files are kept in compressed format. After you select the driver you want, the OakSetup will expand and copy that driver with other necessary files to your Windows system directory. The OakSetup program and its supporting files are not compressed.

At the end of copying files, you could choose to install (or update if you already have one) an icon for the OakSetup program in the Main group of your Windows program manager so that you could easily setup your display driver in the future.

NOTE: you could directly click on the "Setup" button to setup Windows drivers from the distribution diskette without copying all driver files to your hard disk.

## Setup Drivers

When clicking on the button "Setup" in the main window, you will get a new dialog with a number of buttons and selection groups.

The Resolutions and Colors are the selections that most users concern about. Click on the "Advanced" button, you will get several Advanced Selections -- Driver Types, Bit Numbers and Font sizes. Also, there is an additional button "Starting Address" for setting up Linear Driver Starting Address when you select linear drivers.

Click on the "SysInfo" button will give you the System Information which is helpful for setting up Oak Windows drivers.

When you finish Windows driver setup, click on the button "Ok" to Accept Selection. The program will copy the driver you selected and fonts required by the driver to the Windows system directory, and modify the Windows system file "system.ini" and "win.ini" in the Windows directory. Finally, the program will restart the Windows system so that your selection will take effect.

## Resolutions and Colors

These two groups of radio buttons provide users the most useful choices for setting up Oak Windows drivers.

You may notice that some choices are automatically grayed so you can not select them. Two major factors are contributed to the grayed choices:

- 1). Window drivers availability. For examples, if you choose 768 x 1024 for the resolution, all color choices will turn grayed except 16 color. That is because for the resolution 768 x 1024, only the 16 color driver is available.

- 2.) The memory size of Your Oak VGA controller. The program automatically detects your video memory size. It will eliminate the high resolution and high color combination if that combination requires more memory than you have.

Please note, extremely high resolution and high color combination may reduce display speed and readability of the display. So, for 14 inch super VGA color monitor, the best combination may be 800 x 600 resolution and 256 colors.

## Accept Selection

When you push the "Ok" button, the program will begin to actually install the Oak Windows driver into your Windows system directory, which includes copying driver files, all necessary fonts and other files, and modifying your Windows system file "system.ini" and "win.ini".

Before copying any files, the setup program will first check whether the driver file you selected already exists in the system. If so, the program will prompt you to choose either using "Current", that is, the existing one, or installing a "New" one. If you choose "current", the program only copies files that your system does not have but are required by the driver. When choosing "new", the program will copy every file required no matter whether you have it or not. Choose "New" only when you want to update your Windows driver. Otherwise, choose "Current" instead of "New".

Please note that the Oak Windows driver distribution diskette already provides all necessary font files and driver files for you. You do not need any other diskettes to complete the setup provided you run the OakSetup program in a directory that contains all Oak distributed files. If you run the OakSetup program from a directory that does not have files provided by Oak, the program will prompt you to insert suitable diskettes, including the original Microsoft Windows distribution diskettes.

NOTE: For Japanese Version of Windows, there may be one file needed to be extracted from the original Microsoft Windows distribution diskettes for each font size. The Setup program will prompt you to insert that diskette whenever it is necessary.

## Advanced Selections

When the "Advanced" button is pushed, the setup window will be extended and three additional selection groups will be provided: Windows driver type, Bit number and Font size.

There are two types of Windows drivers -- segmented and linear. The default setting is segmented, i.e. Video memory is placed at A000:0 -- BFFF:0. Linear drivers offer the fastest Windows performance. But, linear drivers do not work on systems with more than 12 Mb memory. The setup program will automatically eliminate the linear driver choices if it detected that you have more than 12 Mb system memory.

If linear drivers are selected, the "Starting Address" button below the Windows driver type group will be activated so that users could set the starting address for linear drivers. See [Linear Driver Starting Address](#) for details.

Please note that there are only a limited number (256 color, 16 bit) of linear drivers.

Bit number is another choice for advanced Windows driver setup. Most Windows drivers are sixteen bit drivers. Eight-bit drivers are used when you are using a co-resident monochrome display card with your VGA card (two monitors on one machine).

Please note only a limited number of 8 bit drivers (16 colors and segmented) are available.

For the 800x600 resolution or below, the default font size is "Normal". For the 1024x768 resolution or above, the default font size is "Large". The setup program provides an additional selection of font size for the 1024x768 resolution or above. If you have a big screen like 17 inch or 19 inch monitor, you could choose "Normal" font size so that you could have more text displayed on your screen.

### NOTE:

For Japanese Windows, there are different selections for font size -- 12, 16, 20, 24 points of the font.

## System Information

When you push SysInfo button, the information box on the bottom of the dialog window will display the system information related to the Windows driver setup.

The current driver is the driver currently being used by the system. The information comes from the system file "system.ini" in the Windows directory.

The video memory size decides how high the resolution can be and how many colors you could have. If you have limited video memory size, the program will automatically gray those high resolution and high color choices that your system can not run.

The system memory size plays a role when you are going to choose linear drivers. If you have more than 12 Mb of system memory, the setup program will eliminate all linear driver choices.

As we know, there are interlaced and non-interlaced monitors. Interlaced monitors could only be used in interlaced mode. Non-interlaced monitors could be used in both interlaced or non-interlaced mode. Whether a monitor is going to run in interlaced or non-interlaced mode depends on the display mode setting. For resolution 640x480 and 800x600, monitors are always in non-interlaced mode. For resolution 1024x768 and 768x1024, they may run in both interlaced and non-interlaced mode. Oak has another utility program "monitor.exe" to help users to set their display mode. That program can also set the vertical refresh rate for you.

If you have an interlaced monitor, you have to run the utility program "monitor.exe" to set non-interlaced mode for 1024x768 or 768x1024 resolution before running this setup program.

The Oak Windows driver setup program does not provide a selection for interlaced mode or non-interlaced mode. But, when you click on the "SysInfo" button, the program will tell you whether your monitor will be in interlaced or non-interlaced mode when you choose 1024x768 or 768x1024 resolutions according to the setting of the "monitor.exe" utility. Besides, the program will try to provide the most suitable Windows drivers for you. For example, if at one resolution, your monitor will be in interlaced mode, the program will automatically eliminate those drivers that work only for non-interlaced monitors. Also, if there are two drivers that have the same resolution, color number, bit number and same type (segmented or linear), but for different monitor modes (interlaced and non-interlaced), the program will try to match the driver with the monitor mode you are going to run.

The information about "Bus Mode" will help you when you select linear driver starting addresses. See [Linear Driver Starting Address](#) for details.

Note: When you click on any of the non-grayed choice buttons, the information box in the bottom of the dialog window will display the driver description string you just selected.

## Update Drivers

When the Windows driver you selected already exists in your system, the setup program will prompt you to choose between "Current" or "New". If you choose "Current", the setup program will copy Windows driver files and font files only when they do not exist in the system. Choosing "New", the setup program will copy all necessary driver files and fonts files even they are present in the system.

Normally, you should choose "Current", unless you want to update your Windows driver. This is especially true when the setup program tells you that the Windows driver you selected is IN USE by Windows. When files are in use, if you choose "New", the setup program has to copy the new driver files to a temporary place and use them to replace the in use driver files during the process of rebooting the Windows system.

Also, some Oak's Windows drivers are combined drivers, which means one driver will serve for several resolutions. In that case, if you are only switching from one resolution to another, you should choose "Current" to avoid unnecessary overwriting.

## Source Directory

The OakSetup program is supposed to run from the Oak Windows driver distribution diskette or a directory containing files copied from the Oak Windows driver distribution diskette. All necessary files required by the Windows driver setup should be ready on the diskette or in the directory created by the OakSetup program. When copying files, the setup program will search the current working directory first. If any files required by the OakSetup can not be found in that directory, the program will prompt users to insert diskettes or input a source directory so that the program could copy files from the source drive or directory.

If you are running the setup program from a separate directory, you could either insert the Oak distribution diskette and input the floppy drive name (even the program is asking for a Microsoft distribution diskette), or, if you have another directory containing those files, just input the full path of that directory.

## Linear Driver Starting Address

The "Starting Address" button is for setting the linear driver starting addresses. This button is activated only when users have selected linear drivers.

When clicking on the button "Starting Address", a small dialog window will appear on the screen and users will have three choices for the linear driver starting address: 12 Mb, 76Mb, and 92 Mb.

For a system with more than 12 Mb system memory, 12 Mb is not a suitable selection. In this case, the setup program will automatically eliminate the 12 Mb selection and set the default linear driver starting address to 76 Mb.

If your VGA card resides in the VESA BUS (32-bit slot), there are two types of cards -- 087 (VGA chip) without the 086 (IDE controller chip) and 087 with 086. If it is an 087 without 086, select 12 Mb or 76Mb. If it is an 087 with 086, choose 92 Mb only.

If you have an ISA bus (16-bit slot) add-on VGA board and your system has less than 12 Mb system memory, the recommended linear driver starting address is 12 Mb. In fact, the setup program will set the default linear driver starting address to 12 Mb for you. For ISA bus add-on VGA boards with more than 12 Mb system memory, some motherboards may still permit you to use linear drivers. In this case, if you really want to use linear drivers, you may set the linear starting address to 76 Mb and try it. The result is not guaranteed.

If a linear driver is selected, the OakSetup program will use another Oak utility program "set\_dr.exe" to set linear driver starting address. This will be done during the process of rebooting the Windows system.