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Introduction

GrafixStar 600, VideoLogic's new video-graphics card provides you with high performance graphics, with display sizes up to 800 x 600 pixels with 16.7 million colors, 1152 x 864 pixels with 65,536 colors, or 1600 x 1200 pixels with 256 colors, along with SmartTools for Windows 95 which let you control the graphics and video display of your PC.

To run GrafixStar 600 you need an IBM or fully compatible 486 PC or above which complies with the PCI local bus specification and which has a spare PCI bus slot.

Before you begin installing your GrafixStar 600 card, read the Readme file in the GS600 directory on the VideoLogic Software Library CD.

Conventions used in this guide

The following conventions are used throughout this document: **bold** text is used for anything you type; *italic* is used for cross-references to other documents; small capital letters are used for keyboard keys, for example, ENTER, SHIFT, CTRL.

Handling GrafixStar 600

Like other adapter cards, GrafixStar 600 can be damaged by electrostatic charges during handling. To minimize the risk, follow these simple guidelines:

☐ Keep the card in its protective packaging until you are ready to install it.

☐ Just before handling the card, touch the metal frame of your computer with the back of your hand to discharge any static electricity which may have built up on you or your clothes.

☐ Hold the card by the adapter bracket or by its edges; do not touch the printed circuit board.

☐ Do not place the card on top of your computer or on any other metal surface.

☐ Make sure that the card is not accidentally touched by anyone else.

☐ Handle the card with care to avoid damage to the fragile electronic components mounted on the circuit board.

Installing GrafixStar 600

Installing the GrafixStar 600 hardware

Note that if you are running Windows 3.1 or 3.11, Windows should be set for a standard VGA display **before** you install the hardware.

Warning: Always switch off your computer before removing the cover and observe the warnings specified in the manufacturer's documentation.

The following diagram shows the connectors on the card.

feature connector

monitor
connector

PCI bus connector

GrafixStar 600
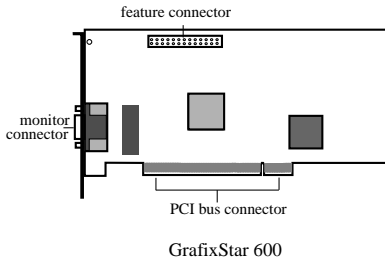
1. Switch off your computer, monitor, and any hardware devices such as printers connected to your computer. Leave the power cable connected to the power outlet so that your computer is grounded.

2. Disconnect your monitor cable from your computer.

3. Remove the computer's cover. You may need to refer to the documentation supplied with your computer for instructions on how to do this.

4. Remove your existing display card or disable your built-in graphics controller. Refer to the documentation supplied with your computer for instructions on how to disable a built-in graphics controller.

5. Locate an empty PCI bus expansion slot and remove the slot cover. Keep the screw, you will need it later to secure the card.

6. Touch the bare metal chassis of your computer with the back of your hand to discharge any static that may have built up on you or your clothes.

7. Align GrafixStar 600 with the slot you have chosen. Firmly press the card into the slot. You will need to use some pressure to push the card into position, but do not use excessive force.
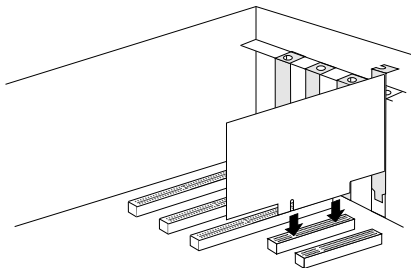
8. Secure GrafixStar 600 using the screw that you removed previously.

9. Replace the cover of your computer.

10. Connect your monitor cable to GrafixStar 600. All cables connected to GrafixStar 600 should be properly shielded and comply with radio frequency interference standards.

11. Switch on your computer and your computer monitor.

Installing the GrafixStar 600 Windows 95 software

The easiest way to install the GrafixStar Windows 95 software is using the Display Properties window:

1. Insert the CD or disk into your computer.

2. Open the Control Panel window. To do this, click Start, point to Settings and click Control Panel.

3. Double click on the Display icon to open the Display Properties Window.

   Note: You can go directly to the Display Properties window by clicking on the Windows 95 desktop with the right mouse button and choosing Properties from the menu.

4. Choose the Settings page by clicking on the Settings tab.

5. Choose the Change Display Type button.

6. Make sure that the Monitor Type line contains the name of your monitor. If not, click the Change button and select the name of your monitor from the list.

7. Click on the Change button for the Adapter Type.

8. Insert the GrafixStar CD into your computer and choose Have Disk from the Select Device menu. Browse to the folder [disk]:\gs600\win95\disk1.

9. Select GrafixStar 600 from the list and choose OK.

10. When the GrafixStar files have been copied to your PC, the Change Display Type window is displayed again. Choose Close.

11. A message appears telling you that you will have to restart Windows 95 for the new display type to take effect. Choose OK.

12. Windows 95 restarts with the new GrafixStar Windows 95 drivers. You are now ready to install the Smart Tools for Windows 95.

13. Choose Run from the Start menu.

14. Type **[disk]:\gs600\win95\disk1\setup** and choose OK.

15. Follow the instructions that appear on the screen.

Installing GrafixStar 600 for Windows 3.1

Note: before installing the GrafixStar 600, make sure that you have configured Windows to run with a standard VGA display. You can do this by using the Windows Setup from the Main program group, choosing Change Systems settings from the Options menu and selecting VGA from the display list box. You can also run the Windows Setup program from DOS. See the *Windows User's Guide* for details on running Windows Setup from DOS.

To install the GrafixStar 600 software for Windows 3.1:

1. Insert the CD into your system.

2. Type **[disk]:\gs600\win31\disk1\setup** and choose OK.

3. Follow the instructions that appear on the screen.

At the end of the setup procedure a dialog box will appear asking you to choose the display mode that you want for your monitor, and will prompt you to restart Windows once you have chosen a display mode. You can access this dialog to change your display mode by running the Video Select program. This program is installed in the ET6000 program group by default.

The SmartTools for Windows 95

The SmartTools are a new set of applications which let you get the most out of the powerful capabilities of your graphics card, giving you more control over the appearance and behavior of your Windows desktop.

The instructions in this chapter are intended to give you an overview of how the SmartTools work. For more detailed instructions, refer to the online help supplied with the SmartTools.

There are three Smart applications, SmartTools, SmartDisplay and SmartDesktop.

SmartTools

SmartTools lets you create toolbars for quicker access to your applications and documents.

With SmartTools you can:

- Use toolbars for the other Smart applications, and customize these toolbars to suit your needs.

- Create toolbars for other applications, adding buttons for the programs, documents and files you use most.

- Assign hotkeys for commands that you use most often.

SmartDisplay

SmartDisplay makes it easier and quicker for you to set up the properties for your monitor.

SmartDisplay gives you:

- A SmartDisplay Wizard, which guides you through a step-by-step procedure that helps you find the ideal display settings for the kind of work you are doing.

- A SmartDisplay set up procedure for advanced users, which lets you select the display size, color palette, refresh rate, desktop size, connectivity and monitor alignment for your display.

SmartDesktop

SmartDesktop controls the size and behavior of your desktop.

With SmartDesktop you can:

☐ Set a virtual desktop that is larger than the display size.

• Control the way you move around the desktop and reach the off-screen portion of your desktop.

☐ Change the display size at the touch of a button, allowing you to zoom in and zoom out while you are working.

Using SmartTools

With SmartTools, you can customize the toolbars for the other Smart applications and create toolbars of your own.

Starting SmartTools

To start SmartTools, press the Start button, choose Programs, then VideoLogic SmartTools, then SmartTools, or use the SmartTools shortcut icon on the Windows 95 desktop.

The SmartTools window contains three pages, Toolbar Properties, Customize Toolbars and Customize Hotkeys.

Toolbar properties

With Toolbar Properties selected, you can

• Open and close existing toolbars by checking and unchecking them.

• Set the properties (Name, On Top, Tool Tips, Status Bar and Lock) for each toolbar.

Customize Toolbars

With Customize Toolbars selected, you can:

• Create new toolbars and add them to the list of toolbars on the Toolbar Properties page by dragging applications from the Applications list onto the desktop, or by dragging one of the buttons in the commands list onto the desktop.

• Add buttons to toolbars by dragging them from the Commands list onto the toolbar, move buttons by holding down the SHIFT key and dragging them along the toolbar, or remove buttons by holding down the SHIFT key and dragging them off the toolbar.

• Add buttons for other applications to the Other Apps list and set properties for these buttons.

Assigning hotkeys

With Customize Hotkeys selected, you can assign hotkey combinations to the commands you use most often, using combinations of SHIFT, CTRL and ALT, plus the other keys on the keyboard.

Using SmartDisplay

SmartDisplay is an application that lets you select, customize and create display modes for your monitor. If you have never set a display mode before, or if you need help in choosing your settings, you should use the **SmartDisplay Settings Wizard**. If you are familiar with setting display modes, you should use the **Advanced Settings** button.

Starting SmartDisplay

1. Select the Display Properties Control Panel either by right-clicking on the Windows background and choosing Properties from the menu or by pressing the Start button, choosing Settings, then Control Panels, then Display.

2. Click the SmartDisplay tab. The following window appears:

Setting display modes using the Wizard

The Wizard takes you through a step by step procedure for setting up a display mode.

To use the Wizard:

1. Choose the SmartDisplay page on the Display Properties window.
2. Select the display mode you want to modify from the Display Modes list.
3. Click on the SmartDisplay Settings Wizard button.
4. Follow the instructions given by the Wizard.

Setting display modes using the Advanced Settings button

This procedure lets you choose the settings for your display mode. You should only use it if you are familiar with setting display modes.

To set a display mode:

1. Choose the SmartDisplay page on the Display Properties window.

2. Select the display mode you want to modify from the Display Modes list.

3. Click on the Advanced Settings button.

This takes you to the SmartDisplay Advanced Settings window. This window has five pages: **Display** for setting the display size, **Desktop** for setting the desktop size, **Connectivity** for the type of connection to multimedia option cards, **Screen** for centering and resizing the display on your monitor and **Properties** for creating and naming display modes.

Using SmartDesktop

SmartDesktop is an application which controls the appearance and behavior of your desktop. You can use SmartDesktop to set a virtual desktop, where the desktop size is larger than the display size, and you can change the display size at the touch of a button, allowing you to zoom in and zoom out while you are working.

To use the SmartDesktop functions, you use the toolbar for SmartDesktop, created using SmartTools.

You can use the SmartDesktop Properties page to set properties which control the way SmartDesktop works.
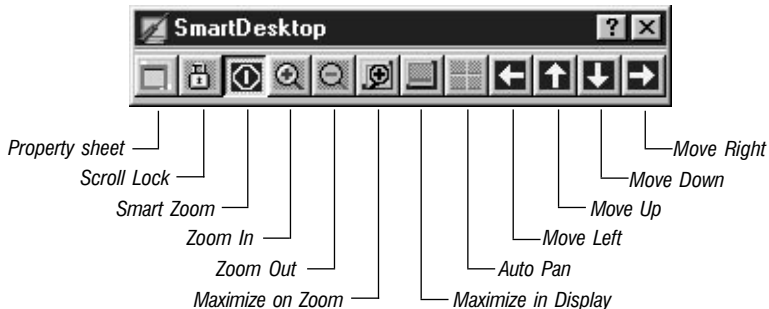
The SmartDesktop toolbar

Using SmartTools, you can create a toolbar for running SmartDesktop.

To create a SmartDesktop Toolbar:

  1. Start SmartTools.

  2. Click on the Customize Toolbars tab.

  3. Click on SmartDesktop in the applications list and drag it off the desktop.

The SmartDesktop toolbar appears as follows:

Property sheet
Scroll Lock
Smart Zoom
Zoom In
Zoom Out
Maximize on Zoom
Maximize in Display
Auto Pan
Move Left
Move Up
Move Down
Move Right

Property Sheet accesses the SmartDesktop Display Properties page. This is described on the next page.

Scroll Lock disables scrolling functions. This is useful if you are using a virtual desktop and you want to work on a particular area of the desktop without accidentally moving to other areas.

When you have **SmartZoom** selected, you can use all the virtual desktop functions: when you zoom in or zoom out with Smart Zoom selected, only the display size changes; the desktop size stays the same. You can also use the functions such as Scroll Lock, Auto Pan, Maximize on Zoom and Maximize on Display to control the way your desktop behaves. If SmartZoom is not selected, you can only use Zoom In and Zoom Out.

Zoom In and **Zoom Out** are use to change the size of your display. You can keep pressing the Zoom In button until the display size reaches the smallest size available (640 x 480). You can keep pressing the Zoom Out button until the display size reaches the largest size available (this is set using SmartDisplay).

You can also use the Zoom Display Fully In and Zoom Display Fully Out functions to zoom directly to the smallest and largest display sizes for your monitor. These functions are available as hot keys and SmartTools menu items.

When **Maximize on Zoom** is selected, all maximized windows fit the new display size when you zoom in or zoom out.

When **Maximize in Display** is selected, maximized windows fit the display size. When this is not selected, maximized windows fit the desktop size.

If you have **Auto Pan** enabled, and you switch to a window which is currently off-screen (using ALT+TAB, or using the taskbar), the screen scrolls automatically to the window you selected.

The **Move Up**, **Move Down**, **Move Left** and **Move Right** buttons on the toolbar move to the parts of the desktop which are currently off-screen (when the desktop size is larger than the display size). You can also move to these areas using the mouse.

The SmartDesktop Display Properties page

The SmartDesktop Properties page provides you with an alternative way of setting SmartDesktop's characteristics.

To open the SmartDesktop Display Properties page, select the Display Properties Control Panel and click the SmartDesktop tab. The following page appears:

You can also set **Schemes** which are a useful way of saving combinations of SmartDesktop functions. Each scheme that you create saves a different combination of SmartDesktop settings that you can access again at any time.

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Technical details

Display modes

The display modes supported by GrafixStar 600 are shown in the table below. If you have the feature connector enabled, the number of display modes available may be reduced.

Resolution	Colours	Refresh Rates (Hz)	Suggested Monitor
1600 x 1200	256	48i, 60	19"- 21"
1280 x 1024	256	43i, 60, 70, 72, 75	19"- 21"
1152 x 864	65 thousand 256	60, 70, 72, 75 60, 70, 72, 75, 80, 85, 90, 100	17" - 19"
1024 x 768	65 thousand 256	43i, 60, 70, 72, 75, 80, 85 90 43i, 60, 70, 72, 75, 80, 85, 90, 100, 120	17" - 19"
800 x 600	16.7 million 65 thousand 256	56, 60, 72, 75, 85 90 56, 60, 72, 75, 85, 90, 100, 120 56, 60, 72, 75, 85, 90, 100, 120, 150	15" - 17"
640 x 480	16.7 million 65 thousand 256	60, 72, 75, 85, 90, 100, 120 60, 72, 75, 85, 90, 100, 120, 150, 200 60, 72, 75, 85, 90, 100, 120, 150, 200	13" - 15"

i = interlaced

Monitor connector

GrafixStar 600 uses a standard 15-way high density 'D' socket. If your monitor uses a different connector your monitor dealer will be able to supply an adapter. The pin-outs are as follows:
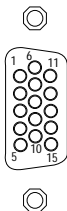
PIN	SIGNAL NAME	PIN	SIGNAL NAME	PIN	SIGNAL NAME
1	Red video	6	Red return	11	Unused
2	Green video	7	Green return	12	DDC2B-Data
3	Blue video	8	Blue return	13	Horizontal
4	Reserved	9	+5 V	14	Vertical
5	Ground	10	Sync return	15	DDC2B-Clock

Power and temperature specifications

GrafixStar 600 operates at a nominal power rating of +5.5 Watts (6.8 Watts max), at temperatures between 10°C (50°F) and 50°C (122°F).

Troubleshooting

This chapter provides solutions to the problems that can happen when installing and using GrafixStar 600 which lead to the PC or Windows being unable to start. For more detailed troubleshooting information refer to the file readme.txt in the GS600 directory on the VideoLogic Software Library CD.

Problem: After installing GrafixStar 600, my PC does not start.

Solution: Your old graphics controller or graphics card is still active. Remove the old card or disable your graphics controller, referring to your PC's documentation for instructions on how to do this.

Your GrafixStar 600 card is not seated properly in your PC. Check that the connectors at the bottom of the card are fitted properly into the PCI slot. In some cases, you may need to move the card into another slot.

Problem: My screen is blank (black) when Windows 95 has loaded.

Solution: The Hardware Acceleration bar in the Graphics section of the System Properties Performance page has been set to None. Change this to Full.

Problem: My screen is blank, flickering, or corrupted.

Solution: You have the wrong monitor type selected in Display Properties, and it cannot support the selected refresh rate. To select the correct monitor type, shut down Windows 95, choosing Restart the computer. (If you can't see the screen, use ALT+F4, DOWN ARROW, ENTER.) When the 'Starting Windows 95' message appears, press the F8 key and choose Safe Mode. When Windows 95 has started, choose a different monitor in Display Properties, or choose a lower refresh rate.

Technical support

If you have a problem with your GrafixStar 600 card, go though the steps below to get your system running again as quickly as possible. There are two sequences, depending on whether you are in USA, Canada and South America or elsewhere in the world.

USA, Canada and South America

1. Check the Troubleshooting information on page 17 and in the readme in the GS600 directory on the CD. They contain lists of likely problems and solutions.

2. Dial 800 203 8587 for our FaxBack service where you will find a constantly updated list of common questions and answers, as well as a list of the latest software versions available.

3. Contact us online using one of the following services.

   - Internet web site: http://www.videologic.com
   - Internet FTP site: ftp://ftp.videologic.com
   - Microsoft Network: Go to VideoLogic
   - CompuServe: GO VIDEOLOGIC
   - Bulletin board: 415 875 7748 (to 28800 baud, 8-N-1)

4. Contact your original supplier for technical help.

5. Call our customer support group at 415 875 0606. To help us help you quickly and efficiently, please have as many details of your system as possible to hand before you call.

For further information on VideoLogic products and services, or to order your extra memory, contact us at the following address:

VideoLogic Inc., 1001 Bayhill Drive, Suite 310, San Bruno, CA 94066, USA.
Telephone: 800 578 5644.
Fax: 415 875 4167.
e-mail: sales_usa@videologic.com

Outside USA, Canada and South America

1. Check the Troubleshooting information on page 17 and in the readme in the GS600 directory on the CD. They contain lists of likely problems and solutions.

2. Dial +1 800 203 8587 for our FaxBack service where you will find a constantly updated list of common questions and answers, as well as a list of the latest software versions available.

3. Contact us online using one of the following services.

   - Internet web site: http://www.videologic.com
   - Internet FTP site: ftp://ftp.videologic.com
   - Microsoft Network: Go to VideoLogic
   - CompuServe: GO VIDEOLOGIC
   - Bulletin board (UK): +44 1923 271301 (to 28800 baud, 8-N-1)
   - Bulletin board (Germany): +49 61 03 1923 371257 (to 28800 baud, 8-N-1)

4. Contact your original supplier for technical help.

5. Call our customer support group at +44 1923 271300. To help us help you quickly and efficiently, please have as many details of your system as possible to hand before you call.

For further information on VideoLogic products and services, or to order your extra memory, contact us at one of the following addresses:

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