COMPAQ

Multi-Monitor Support for the ELSA GLoria Synergy and GLoria Synergy+ Graphics Controllers

TechNote

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Configuring Your System for Multi-Monitor Operation

Configuring Your System for Multi-Monitor Operation

This document provides the instructions to configure a Compaq Professional Workstation as a multi-monitor desktop. A multi-monitor desktop includes the display areas of more than one monitor. You can use a multi-monitor desktop only if you have more than one GLoria Synergy graphics controller installed in your system. GLoria Synergy and GLoria Synergy+ graphics controllers offer multi-monitor support for Windows NT 3.51, 4.0, and Windows 98 only. This technote addresses multi-monitor operation for Windows NT 3.51 and 4.0 only. For Windows 98, refer to your Windows 98 documentation.

⚠ ⚡	Any surface or area of the equipment marked with these symbols indicates the presence of electrical shock hazards. Enclosed area contains no operator serviceable parts. **WARNING:** To reduce the risk of injury from electrical shock hazards, do not open this enclosure.

⚠ 🔥	Any surface or area of the equipment marked with these symbols indicates the presence of a hot surface or hot component. If this surface is contacted, the potential for injury exists. **WARNING:** To reduce the risk of injury from a hot component, allow the surface to cool before touching.

⚠	Power Supplies or Systems marked with these symbols indicate the equipment is supplied by multiple sources of power.
	WARNING: To reduce the risk of injury from electrical shock, remove all power cords to completely disconnect power from the system.

> **IMPORTANT:** In a multiple-monitor configuration, information will be displayed on only one monitor during Power On Self Test (POST). In a configuration with one or more PCI-based GLoria Synergy graphics controllers and an AGP-based GLoria Synergy+ graphics controller, POST will appear on a monitor attached to the first PCI-based GLoria Synergy graphics controller.

Depending on your computer model, your workstation may have one AGP slot on the system board. All GLoria Synergy and GLoria Synergy+ multi-monitor configurations require additional PCI-based GLoria Synergy graphics controllers.

When installing additional controllers, you do not need to reinstall the driver software. However, if you have different driver versions, Compaq recommends that you install the latest drivers in order to take advantage of any system enhancements.

In a multi-monitor configuration, all controllers must run with the same resolution, pixel depth (number of colors), and video memory.

> **IMPORTANT:** Before you begin the following procedure, a single GLoria Synergy graphics controller should be installed in a dedicated PCI slot or the GLoria Synergy+ graphics controller should be installed in the AGP slot, with the appropriate driver installed for Windows NT.

1. Turn off the computer, remove the cover, and locate the unused PCI slots or the unused AGP slot.

2. Install the additional GLoria Synergy graphics controllers securely into the PCI slots, or install the GLoria Synergy+ graphics controller into the AGP slot. Replace the cover and connect the additional monitors to the 15-pin connectors of the newly installed controllers.

3. Turn on the additional monitors.

4. Turn on the computer. Information will be displayed on only one monitor during POST. If your primary graphics controller was the AGP-based GLoria Synergy+ graphics controller, the primary graphics controller will now be a PCI-based GLoria Synergy graphics controller.

5. When the Windows NT operating system is running on the primary graphics controller and monitor, you can configure the additional monitors by using the Windows NT Display Properties utility.

Configuring Additional Monitors Using Windows NT Display Properties

1. From the Control Panel, double-click the *Display* icon. This displays the Windows NT Display Properties dialog box. In Windows NT 4.0, click the *Settings* property sheet.

2. Move the Desktop Area slider with the left mouse button or click *List All Modes,* and observe the resolutions that are offered.

Table 1
Monitor Resolutions

Typical Single-Display Resolutions	Possible Double-Display Resolutions	Possible Triple-Display Resolutions	Possible Quadruple-Display Resolutions
640 x 480	1280 x 480	1920 x 480	2560 x 480
	640 x 960	640 x 1440	640 x 1920
			1280 x 960
800 x 600	1600 x 600	2400 x 600	3200 x 600
	800 x 1200	800 x 1800	800 x 2400
			1600 x 1200
1024 x 768	2048 x 768	3072 x 768	4096 x 768
	1024 x 1536	1024 x 2304	1024 x 3072
			2048 x 1536

3. Select a multi-monitor resolution and click *Test.* Some monitors may not warm up fast enough to display the test pattern in the 5 seconds allowed by the test. If you do not see all monitors active during the test, but you know you are testing a valid configuration, click *OK* when prompted, "Did you see the test bitmap properly?"

    NOTE: A valid multi-monitor configuration will be a multiple of a supported single-screen resolution. For example, the GLoria Synergy and GLoria Synergy+ graphics controllers support 1024 x 768, so the dual-monitor configurations would be 2048 x 768 (side by side) and 1024 x 1536 (stacked vertically).

4. Click *OK* or *Apply* to change to the new multi-monitor resolution. You may have to restart the computer for the new settings to take effect.

Configuring Additional Monitors Using the ELSA Property Sheets

In addition to the standard Windows NT 4.0 Display Properties Settings property sheets, the latest ELSA GLoria Synergy graphics controller drivers for Windows NT 4.0 contain other tools to assist you in configuring multiple monitors and controlling the multi-monitor desktop. To access the ELSA tools, from the Control Panel, double-click the *Display* icon. This displays the Windows NT Display Properties dialog box. Click the *ELSA* property sheets to view and edit settings. Click the *Help* button where available for additional information.

NOTE: The ELSA Desktop property sheet is only available in the Windows NT Display Properties dialog box after the workstation has been configured for multi-monitor operation.

ELSA tabs include:

■ ELSA GLoria Settings

■ ELSA Hotkeys

■ ELSA Settings

■ ELSA Desktop

Getting Help

If you have a problem and have exhausted the information in this document, you can get further information and other help in the following locations.

For the name of your nearest Compaq Authorized Reseller:

In the United States, call 1-800-345-1518
In Canada, call 1-800-263-5868

For Compaq technical support:
In the United States and Canada, call 1-800-386-2172
For Compaq technical support phone numbers outside the United States and Canada, visit the Compaq website.