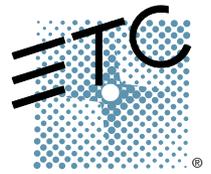# E T C ® S e t u p   G u i d e

Emphasis® Dual-Video Card Installation

Introduction

This setup guide provides instructions for installing a new video card in your Emphasis Server. Installing a video card requires you to open and work inside your server. While the installation process is uncomplicated, you may not feel comfortable working inside your server. If this is the case, please contact ETC Technical Services to arrange for a factory upgrade of your video card.

Upgrade Kit	ETC Part Number	Description
4200A1101	M862	Video Card 32MB ATI Radeon SFF
	M863	DVI-VGA Adapter Cable
4200A1102	M866	Video Card 128MB NVIDIA FX5200
	M867	DVI-VGA Adapter Cable GX270
4200A1107	M8070	Video Card 128MB X300 w/ cables

IF YOU ARE RUNNING EMPHASIS V1.0.0 ON A GX240/260 AND YOU ARE UPGRADING TO THE NVIDIA CARD, YOU WILL ALSO NEED TO ORDER AN EMPHASIS V1.0.1 SOFTWARE KIT TO GET THE APPROPRIATE VIDEO DRIVER. ALTERNATIVELY, YOU CAN TAKE THIS OPPORTUNITY TO UPGRADE TO THE CURRENT VERSION OF SOFTWARE. CONTACT ETC TECHNICAL SERVICES FOR MORE INFORMATION.

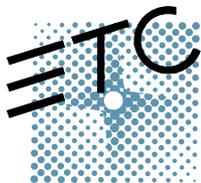**Note:** *Parts shipped from Dell will be marked "Refurbished".*

CAUTION: *You can damage your computer's components if you do not take certain precautions. Electrostatic Discharge (ESD), is caused by static electricity. It can cause immediate or subtle damage to sensitive electronic parts.*

You can reduce the chances of ESD damage by doing the following:
- *Leave the new video card in its protective packaging until you need to install it.*
- *Turn the power to the computer off and wait several minutes before starting to work.*
- *Ground yourself by touching the case of the computer.*
- *Touch only the items that must be replaced.*
- *Avoid walking around while replacing items inside the case, especially if you are on carpet or during conditions of low temperature and low humidity.*
- *When you remove the video card, don't touch the metal edge connectors at the bottom of the card that mate to the system board. Handle the card by its edges. Do not place it on plastic surfaces.*

By following these guidelines, you will greatly reduce the chances of ESD damage to your server and video card.

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Emphasis Dual-Video Card Installation

Determine your Server Type

Servers will change over time as Dell takes advantage of technology upgrades. ETC tests all servers to ensure their compatibility with the Emphasis Control System. Because of differences in the motherboard of the available servers, there are two sets of instructions in this setup guide. You may use either upgrade kit in any of the servers.

Look at the front of your server. There is text around the power button. This indicates your server type. Please follow the installation instructions for your server type.

Installation Instructions for GX240 Servers on page 3

Installation Instructions for GX260/270/280 Servers on page 6

In this server, you will need to replace the single-head video card with your new dual-head video card.

These servers use the integral video output on the motherboard for the single monitor. To upgrade to dual monitors, you will need to install the new dual-head video card.

CAUTION:	*If you are running Emphasis v1.0.0, or are upgrading to the current version of software, you will need to install <u>new</u> system software after installing your video card to ensure that the proper drivers are installed. This may result in the loss of show data. It is highly recommended that you backup show data, configurations and peripheral drivers (for printers, pointing devices, etc.) to CD prior to performing this upgrade.*

Setup Guide:

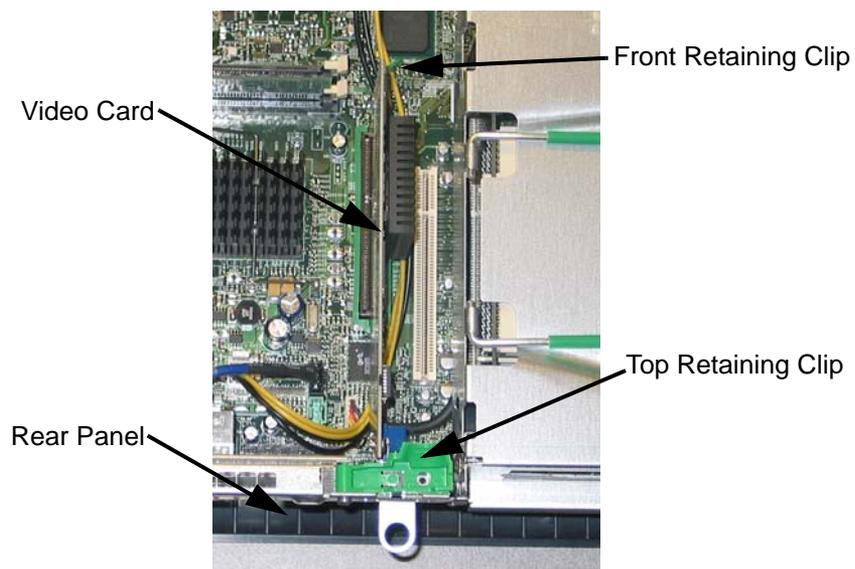## Emphasis Dual-Video Card Installation

Installation Instructions for GX240 Servers

Step 1: Shutdown your Emphasis Control System.

Step 2: Unplug the Emphasis Server from its AC power supply. Disconnect monitor and other connections on rear panel of server.

Step 3: Set the server flat on a stable surface with the rear panel facing you.

Step 4: Open the server case.
   a. Press in the button-latches on either side of the case.
   b. Lift the top of the case upward until it is vertical. The case will stay open on its own.

Step 5: Remove the old video card.
   a. Lift the top retaining clip by pressing gently toward the interior of the server and lifting the clip upwards.

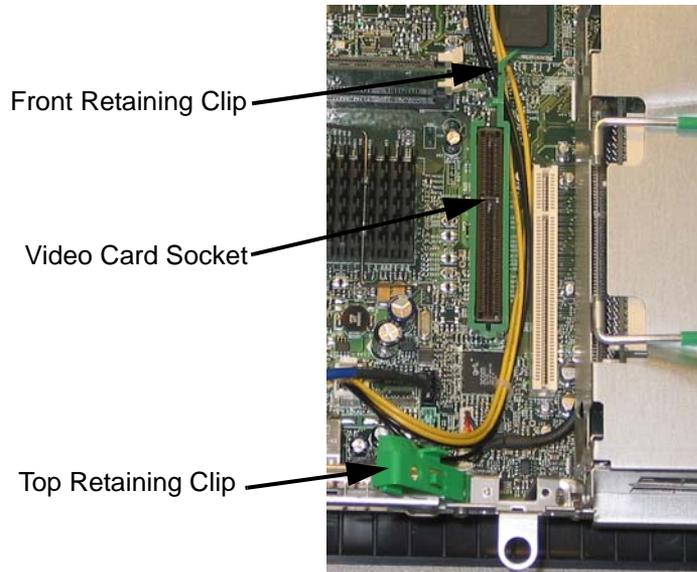   b. Loosen the front retaining clip by pressing it gently to your right.

c.   Grasp video card by its edge and lift it out of the case.

d.   Place the video card in a protective static bag, if available, or on a static-free surface, such as a sheet of paper or cardboard. You can re-use the protective static bag shipped with the new dual-video card for storage of the old video card.

Step 6: Insert the new video card.

a.   Remove dual-video card from protective static bag. Handle the video card by its edges only. Avoid touching the metal edge connector along the bottom of the card.

b.   Slide the new video card into the socket. Ensure that the front retaining clip engages.

Front Retaining Clip

Video Card Socket

Top Retaining Clip

c.   Check that wires near the video card have not been pinched, and press the top retaining clip down until it locks into place.

Step 7: Close the server case.

a.   Lower the top of the case gently into place. Ensure that no cables or wires are pinched.

b.   Press the top down until the button-latches engage.

c.   Connect the Y-cable to the connector on the video card and tighten the thumb-screws.

d.   Connect monitor #1 to the blue connector on the Y-cable and tighten the thumb-screws.

e.   Connect monitor #2 to the black connector on the Y-cable and tighten the thumb-screws.

f.   Connect your monitors to their AC power supply.

g.   Reconnect cables for pointing devices, keyboard, network, AC power supply, and other peripherals disconnected in Step 2.

h.   Turn on server and both monitors.

Step 8: If you are using Emphasis v1.0.0, or are upgrading to the current version of software, install from the CD-ROMs in your <u>new</u> software upgrade kit. If not, skip to step 10.

    a. Follow the software installation instructions included in the software Release Note included in the upgrade kit. If you are upgrading from an Emphasis 3D v1.0.0 kit, it will not upgrade your 2D system to a 3D system. These CDs contain the video driver you will need to use your new video card.

Note: *Prior to upgrading the software, your display may appear to be set to the wrong resolution. Upgrading the software will install the display driver for the new video card and will fix the resolution settings.*

Step 9: Restart your server.

Note: *When you restart the server, the second monitor will appear to have a blank screen. This is because the desktop is set to no wallpaper and no patterns. This setting is the default for an Emphasis Server and it is intended to increase the performance of your system. To verify that the second monitor is working, drag your cursor over to the second screen. You should be able to see the cursor arrow.*

Step 10: Reload show files, configurations, and peripheral drivers from backup disk, if required.

Step 11: Drag pop-up windows onto the second monitor, if desired.

Installation is now complete.

Setup Guide:

Installation Instructions for GX260/270/280 Servers

Step 1: Shutdown your Emphasis Control System.

Step 2: Unplug the Emphasis Server from its AC power supply. Disconnect monitor and other connections on rear panel of server.

Step 3: Set the server flat on a stable surface with the rear panel facing you.

Step 4: Open the server case. **(GX240 shown, GX260/270/280 is similar)**
   a. Press in the button-latches on either side of the case.
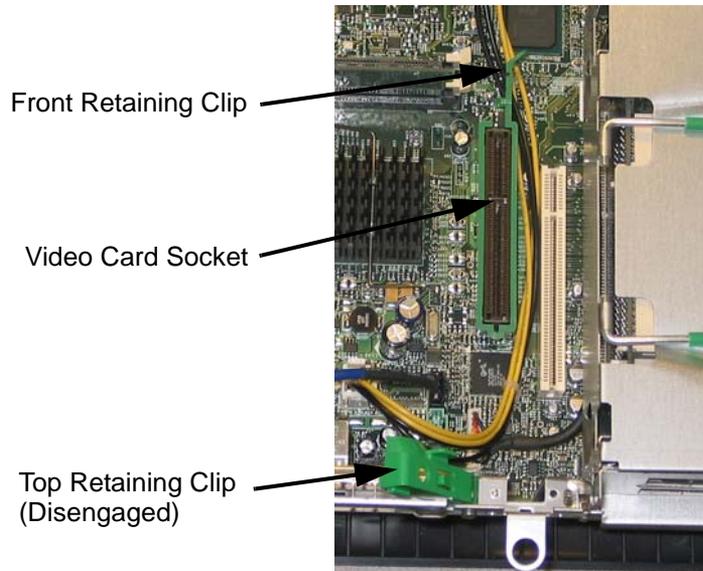   b. Lift the top of the case upward until it is vertical. The case will stay open on its own.

Step 5: Insert the new video card.
   a. Remove dual-video card from protective static bag. Handle the video card by its edges only. Avoid touching the metal edge connector along the bottom of the card.
   b. Slide the new video card into the socket. Ensure that the front retaining clip engages.

c. Check that wires near the video card have not been pinched, and press the top retaining clip down until it locks into place.

Front Retaining Clip

Video Card Socket

Top Retaining Clip (Disengaged)

Step 6: Close the server case.

a. Lower the top of the case gently into place. Ensure that no cables or wires are pinched.

b. Press the top down until the button-latches engage.

c. Connect the Y-cable to the connector on the video card and tighten the thumb-screws.

d. Connect monitor #1 to the blue connector on the Y-cable and tighten the thumb-screws.

e. Connect monitor #2 to the black connector on the Y-cable and tighten the thumb-screws.

f. Connect your monitors to their AC power supply.

g. Reconnect cables for pointing devices, keyboard, network, AC power supply, and other peripherals disconnected in Step 2.

Step 7: Turn on server and both monitors.

Note: *When you start the server, the second monitor will appear to have a blank screen. This is because the desktop is set to no wallpaper and no patterns. This setting is the default for an Emphasis Server and it is intended to increase the performance of your system. To verify that the second monitor is working, drag your cursor over to the second screen. You should be able to see the cursor arrow.*

Step 8: Reload show files, configurations, and peripheral drivers from backup disk, if required.

Step 9: Drag pop-up windows onto the second monitor, if desired.

Installation is now complete.