# IBM Geometry Accelerator Adapter Option User's Guide Supplement

# Installing the IBM Geometry Accelerator Card

This supplement provides information about the following installation procedures.

- Preparing the Intellistation and taking antistatic precautions
- Installing the IBM Geometry Accelerator Card
- Troubleshooting the installation

## **Preparing for the Installation**

Refer to the *About Installing Options* book included in your computer's documentation for detailed information on turning off the power, opening and closing the computer, avoiding electrostatic discharge, and installing and replacing option cards.

## Installing the IBM Geometry Accelerator Card

Installing an IBM Geometry Accelerator Card requires one free PCI slot adjacent to the IBM 3D Graphics Adapter.

### To Install the IBM Geometry Accelerator Card:

- 1. Follow the instructions in your computer's documentation on how to shut down the computer, turn off the power, and remove the cover.
- 2. Remove the IBM 3D Graphics Adapter from the Intellistation.
- 3. Connect the IBM 3D Graphics Adapter to the IBM Geometry Accelerator Card using the vertex data bus cable. The figure on the next page shows the cable and cards.
- 4. Reinstall both cards into the Intellistation in adjacent PCI slots.
- 5. Refer to your computer's documentation for instructions on reinstalling the cover.
- 6. Start your computer as usual.



## **Troubleshooting the Installation**

### **Video Display**

The following table lists some common video configuration problems.

Problem	Action
Display is black, not synchronized, or distorted.	Restart Windows NT in VGA mode.
Monitor does not support a selected resolution or refresh rate.	Select a supported resolution and refresh rate from the NT Control Panel.

#### **Obtaining a Usable Video Resolution**

When the IBM 3D Graphics Adapter video display driver cannot accommodate all monitor types, the computer operates in VGA mode. VGA mode is used during initial installation of the video display driver and when experiencing video problems. If you select a resolution that causes the monitor to display incorrectly, **do not** press CTRL+ALT+DEL to log on to the Windows NT operating system. Instead, use the **Last Known Good** option to return to the last known good configuration recorded by Windows NT.

#### To use the Last Known Good option:

- 1. Restart the Intellistation.
- 2. Press the space bar at the following prompt:

Press space bar NOW to invoke the Last Known Good Menu

If using the Last Known Good option fails to correct the video display problems, you can obtain a functional video resolution by restarting the computer in VGA mode.

#### To restart the system in VGA mode:

- 1. Restart the Intellistation.
- 2. At the boot screen, select the VGA version of the operating system.

#### **Determining a Defective Intellistation Unit**

If the monitor display is distorted, make sure the software setup is correct for the monitor type. If the software setup is correct, use a similar type monitor (if available and functioning properly) to determine if the Intellistation is defective.

#### To determine a defective unit:

- 1. Save and exit from all files, if possible, then shut down Windows NT.
- 2. Turn off power to the monitor and to the Intellistation unit.

**ATTENTION:** Refer to your computer's documentation for detailed information on turning off the power, opening and closing the cover, avoiding electrostatic discharge, and installing and replacing option cards.

- 3. Check and reseat all card and cable connections as needed.
- 4. Turn on the monitor power. If the monitor's **Power On** LED does not come on, return the monitor.
- 5. Turn on the Intellistation power. If the Power On LED on the Intellistation does not come on, or if the BIOS beep codes indicate a failure, return the Intellistation. You can find warranty information following this section. Refer to the *Adapter Option User's Guide* for help and service information.

## **Product Warranty**

The following warranty information applies to products purchased in the United States, Canada, and Puerto Rico. For warranty terms and conditions for products purchased in other countries, see the enclosed Warranty insert, or contact your IBM reseller or IBM marketing representative.

International Business Machines Corporation Armonk, New York, 10504

#### **Statement of Limited Warranty**

The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you originally purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. Unless IBM specifies otherwise, the following warranties apply only in the

country where you acquire the Machine. If you have any questions, contact IBM or your reseller.

#### Machine: IBM Geometry Accelerator Card

Warranty Period\*: One (1) year

\*Contact your place of purchase for warranty service information..

#### **Production Status**

Each Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's warranty terms apply.

#### The IBM Warranty for Machines

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications.

The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if authorized by IBM, will provide warranty service under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

For IBM or your reseller to provide warranty service for a feature, conversion, or upgrade, IBM or your reseller may require that the Machine on which it is installed be 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade.

Many of these transactions involve the removal of parts and their return to IBM.

You represent that all removed parts are genuine and unaltered. A part that replaces a removed part will assume the warranty service status of the replaced part.

If a Machine does not function as warranted during the warranty period, IBM or your reseller will repair it or replace it with one that is at least functionally equivalent, without charge. The replacement may not be new, but will be in good working order. If IBM or your reseller is unable to repair or replace the Machine, you may return it to your place of purchase and your money will be refunded.

If you transfer a Machine to another user, warranty service is available to that user for the remainder of the warranty period. You should give your proof of purchase and this Statement to that user. However, for Machines which have a life-time warranty, this warranty is not transferable.

#### Warranty Service

To obtain warranty service for the Machine, you should contact your reseller or call IBM.

In the United States, call IBM at 1-800-772-2227.

In Canada, call IBM at 1-800-565-3344.

You may be required to present proof of purchase.

IBM or your reseller will provide certain types of repair and exchange service, either at your location or at IBM's or your reseller's service center, to restore a Machine to good working order.

When a type of service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours.

You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item. Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service. You also agree to ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange.

You agree to:

- 1. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
- 2. where applicable, before service is provided -
  - a) follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provide,
  - b) secure all programs, data, and funds contained in a Machine, and
  - c) inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.