

FCC ID:FQII740AGPSD

EUT: AGP VGA CARD

APPLICANT: JOYTECH COMPUTER CO., LTD

User's Manual

EXHIBIT

## FEDERAL COMMUNICATIONS COMMISSION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used in order to comply with emission limits.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## **Section 2**

### **Features**

Section 2 Features 3

1. Sustained 3D Performance
2. 3D Visual Enhancements
3. 3D Graphics Texturing Enhancements
4. 2D Graphics Performance and Video Architecture
  - 1). High speed 64-bit 100 MHz GUI accelerator.
  - 2). Up to 800MB / second memory bandwidth.
  - 3). Up to 1600 × 1200 in 8 bit color at 75 Hz and 1024 × 768 in 8/16/24 bit colors at 85 Hz refresh rate.
  - 4). Integrated 24-bit 170 MHz RAMPAC.
  - 5). Confirms to VESA monitor DDC2B interface which compatible with Windows 95 plug and play.
  - 6). Support VESA DPMMS compliant monitors, reducing energy consumption and extending monitor life.
  - 7). Fully IBM VGA-compatible BIOS.

9). Full – Screen, Full – Frame Rate Video Acceleration.

10). Low – Cost Software DVD : 24fp + Hollywood Content.

#### **5. OS and Driver Support**

- 1). DirectX \* 5.0.
- 2). OpenGL.
- 3). GDI.

#### **6. Full AGP Support**

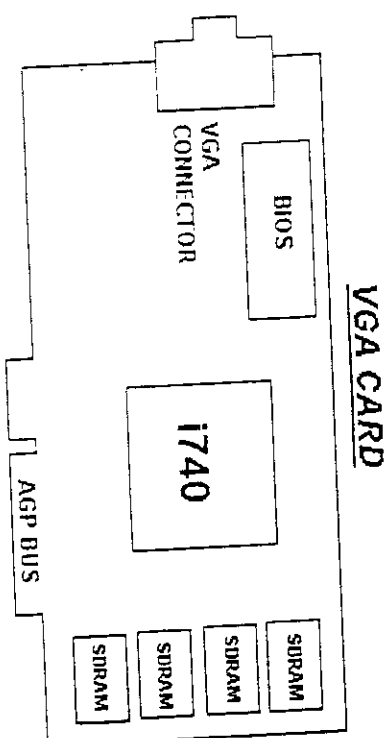
- 1). Windows \* 95.
- 2). Windows NT\* 4.0.
- 3). Windows \* 98.
- 4). Windows NT\* 5.0.

## Section 4

### Hardware Installation

The device will have been configured for the options installed at the factory. Before installing the device please check that the memory options fitted and the switch settings correspond and that you have taken note of the static electricity precautions.

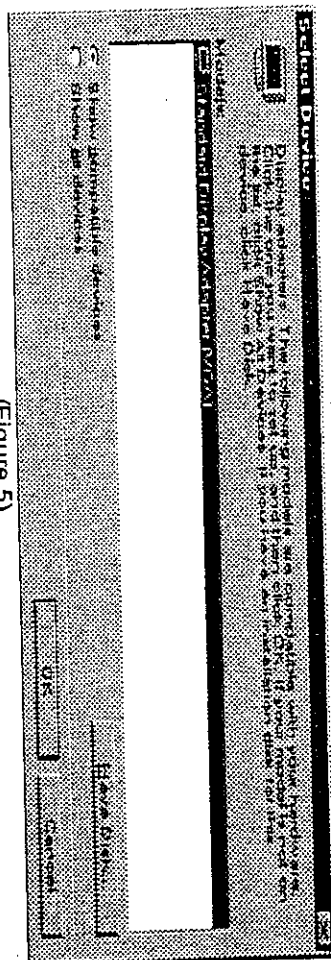
#### 4-1. Knowing Your i740 Card



5. Find a free AGP expansion slot in your system.
6. Remove the metal cover plate from the slot you have chosen and put the screw to one side.
7. Align the AGP slot connector with the expansion slot in our PC and gently lower and push the board into the free slot.
8. Secure the board to the expansion slot with the screw you removed from the metal plate.
9. Replace the cover on your system and plug in the power cord.
10. Reattach the video cable to the devices video output connector.
11. Turn on the monitor and power up the system.

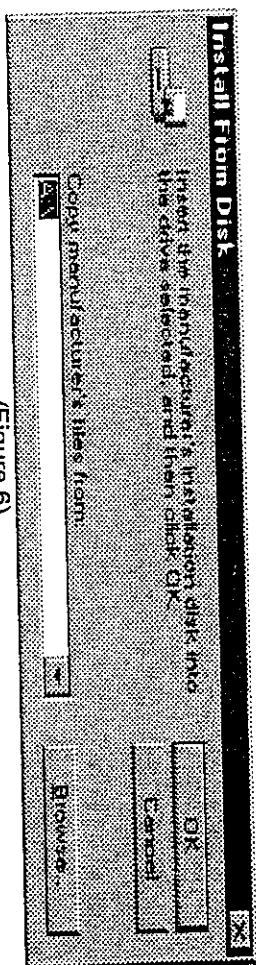


10. Click on **Have Disk**. (Figure 5)



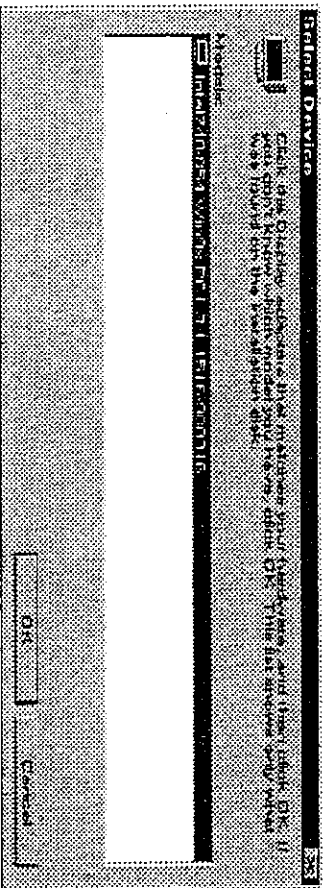
(Figure 5)

11. Insert the i740 AGP Windows 95 driver disk (CD or Floppy disk) , if you install from floppy disk **[A:]** , and click on **Browse**. (Figure 6)

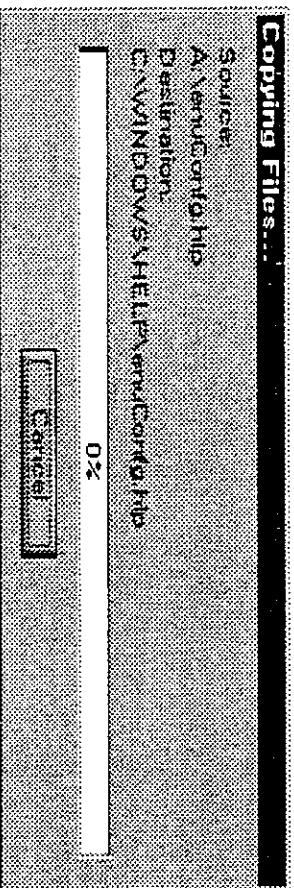


(Figure 6)

13. Under **Select Device** Menu, click on **OK**. (Figure 9 - Figure 10)



(Figure 9)



(Figure 10)

## B.DirectX

We recommend you to install DirectX 5.0 to get a better performance under some Direct 3D games.

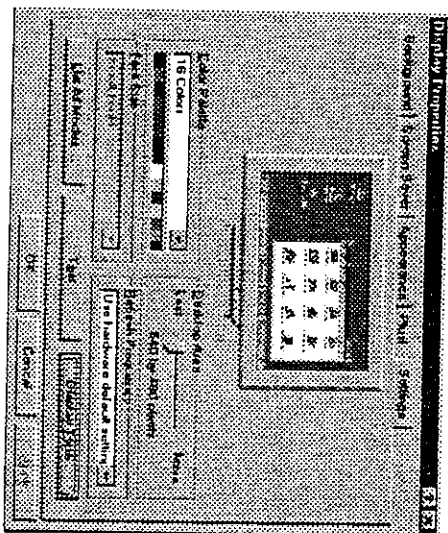
### 5-2. Windows NT 4.0

#### A. Driver Installation

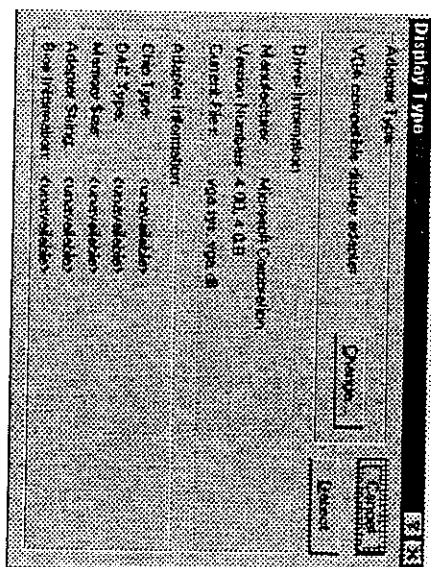
If you are first time to start windows NT 4.0, please select **VGA Mode** from boot menu.

1. After you login the Windows NT 4.0, the default display are standard VGA mode, now you need to install the i740 AGP to active the driver.
2. Click on **Start** Menu. (Figure 1)
3. Move your mouse pointer to **Setting** > **Control Panel**, and click on it. (Figure 1)
4. Now you bring up the **Control Panel**, double click on **Display** icon. (Figure 2)

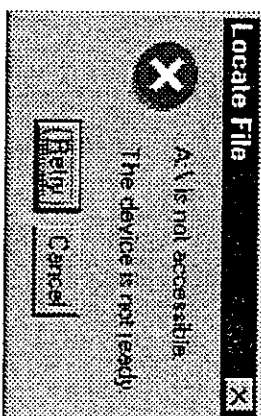
5. Move the mouse pointer to **Display Type**, and click on it. (Figure 3)
6. You will find now the NT 4.0 set default display types as **VGA Compatible Display Adapter**.
7. Click on **Change** button. (Figure 4)



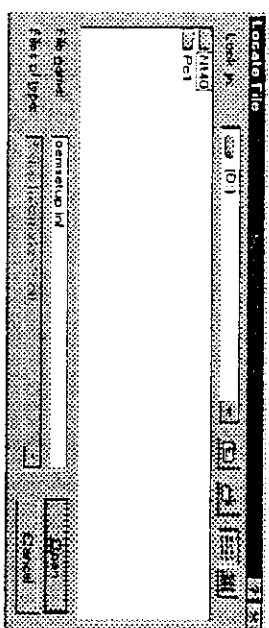
(Figure 3)



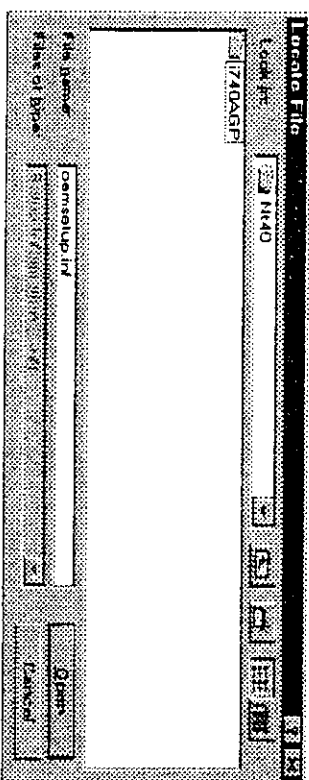
(Figure 4)



(Figure 6-2) Click on **Cancel** button.

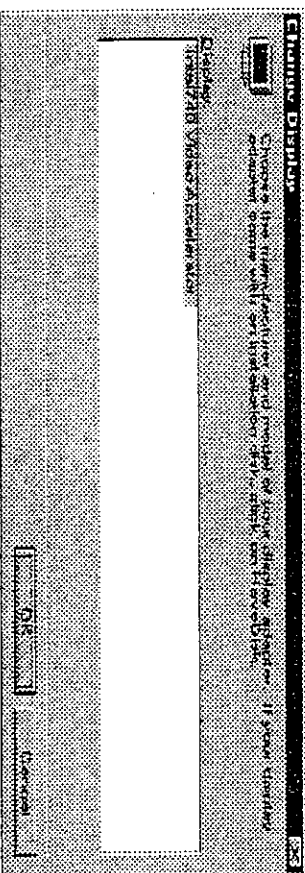


(Figure 6-3)



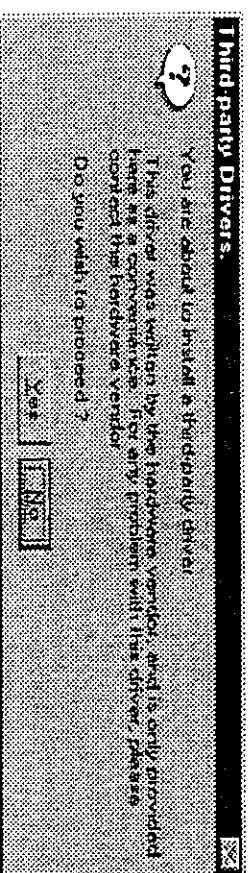
(Figure 6-4)

11. Under **Change Display** Menu, click on **O.K.** button. (Figure 7)



(Figure 7)

12. The system will prompt you about a **Third Party Driver** and click on **Yes** button. (Figure 8)

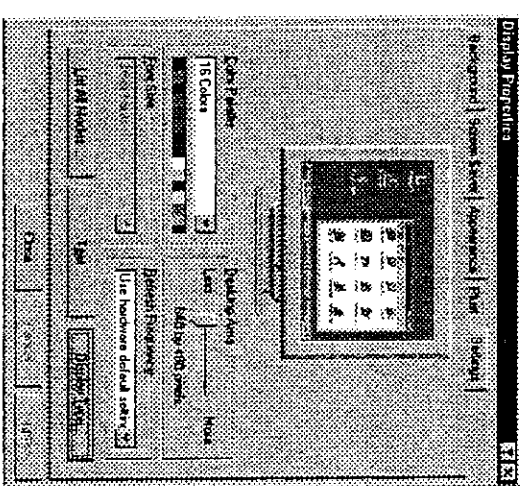


(Figure 8)

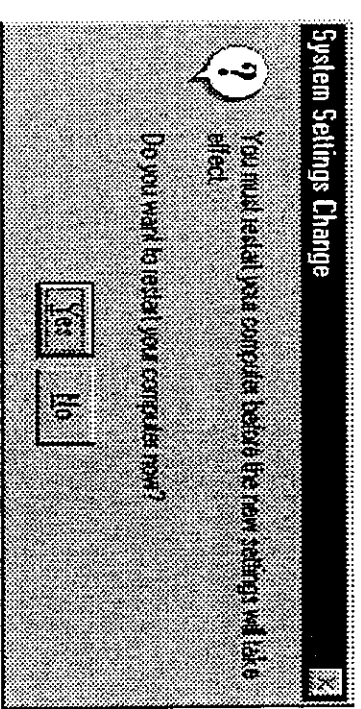
15. Under **Display Properties** Menu, just click on **Apply** button, the system will prompt you to restart Windows.  
(Figure 11)

16. Click on the **Yes** button. (Figure 12)

(Figure 11)



(Figure 12)

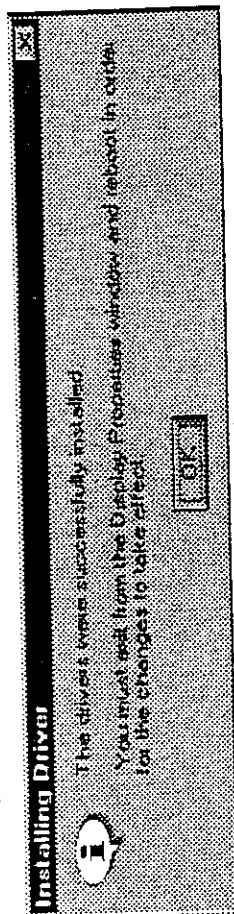


## Section 6

### Display Modes Supported

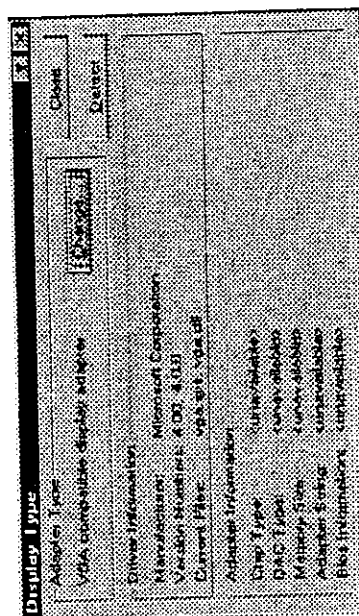
| Resolution  | Bits Per Pixel ( Frequency inHz) |             |             |
|-------------|----------------------------------|-------------|-------------|
|             | 8-bit Indexed                    | 16-bit      | 24-bit      |
|             |                                  |             |             |
|             |                                  |             |             |
|             |                                  |             |             |
|             |                                  |             |             |
| 640 × 480   | 60,72,75,85                      | 60,72,75,85 | 60,72,75,85 |
|             |                                  |             |             |
| 10240 × 768 | 60,70,75,85                      | 60,70,75,85 | 60,70,75,85 |
| 1280 × 1024 | 60,72,75,85                      | 60,72,75    | —           |
| 1600 × 1200 | 60,75                            | —           | —           |

13. Then the system will prompt you the driver are installed successfully, click on **O.K.** (Figure 9)

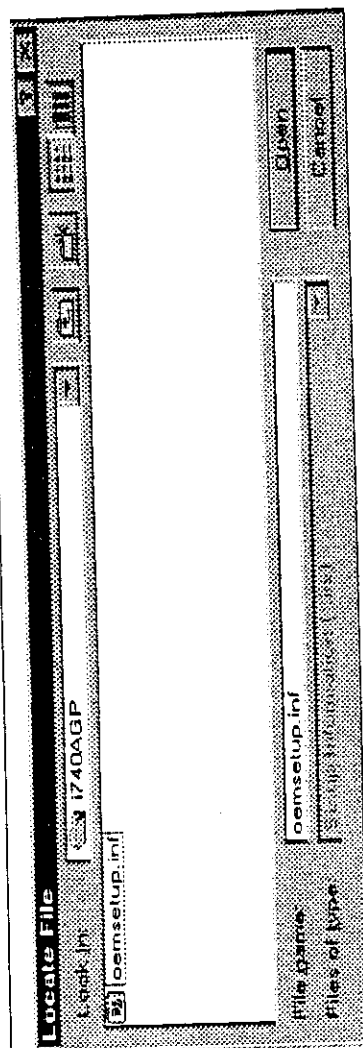


(Figure 9)

14. Now you go back to **Display Type Menu**, Click on **Close** button. (Figure 10)

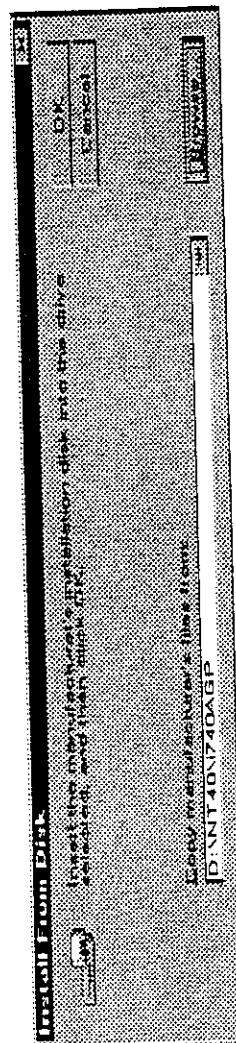


(Figure 10)



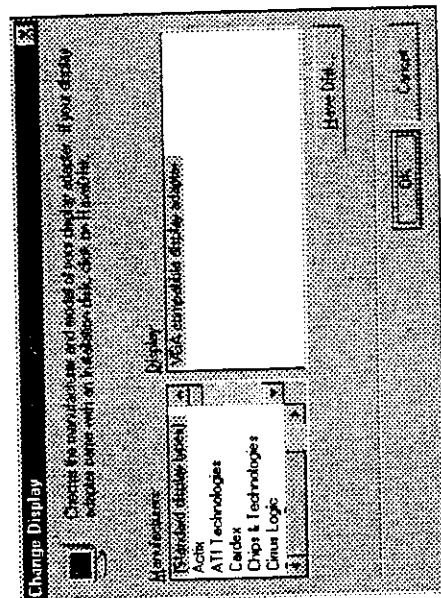
(Figure 6-5)

10. Under **Install From Disk** Menu, and click on **O.K.** button.

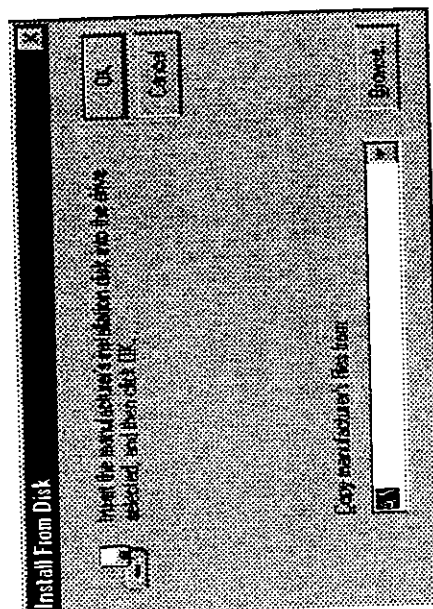


(Figure 6-6)

8. Please click on **Have Disk** button. (Figure 5)
9. Please insert the Installation CD or Driver Disk with the i740 VGA into CD-ROM or Floppy Disk, and type the display driver path as follow **D:\NT40\I740AGPIOEMSETUP.INF** and click **O.K.** button. (Note: the CD-ROM location are depend on what your system assign) (Figure 6-1 ~ Figure 6-6)

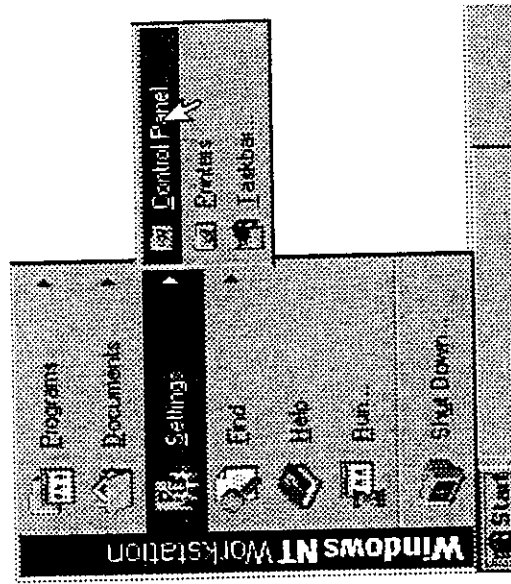


(Figure 5)

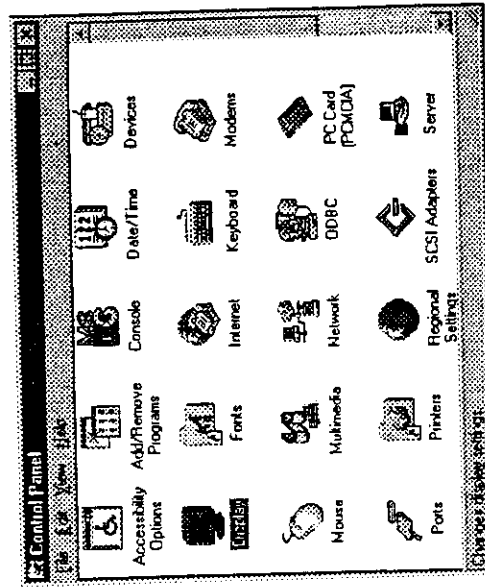


(Figure 6-1)

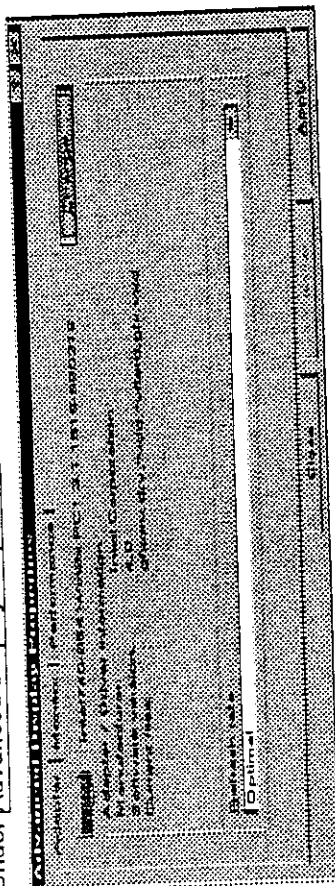
(Figure 1)



(Figure 2)

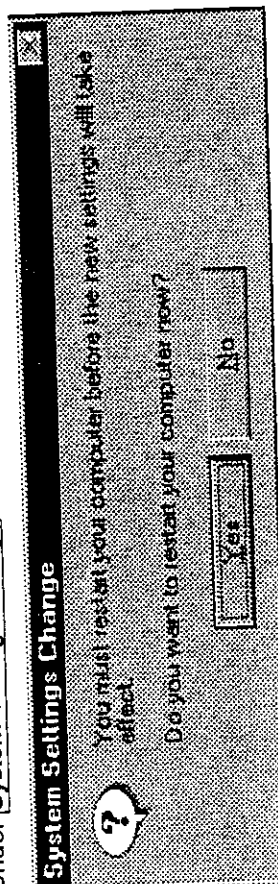


14. Under **Advanced Display Properties Menu**, click on **Close** button. (Figure 11)



(Figure 11)

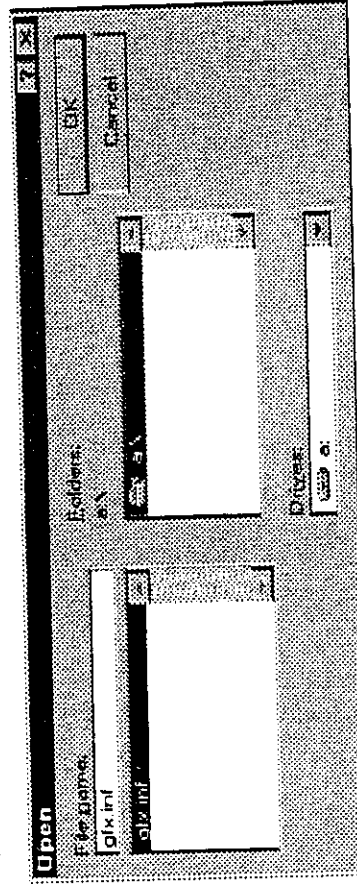
15. Under **System Settings Change Menu**, click on **O.K.** and it's completed. (Figure 12)



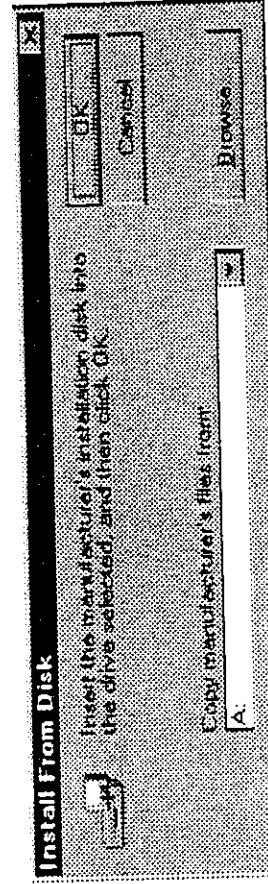
(Figure 12)

12. Select floppy disk `A:\gfx.inf` file . (Figure 7 · Figure 8)

(Figure 7)

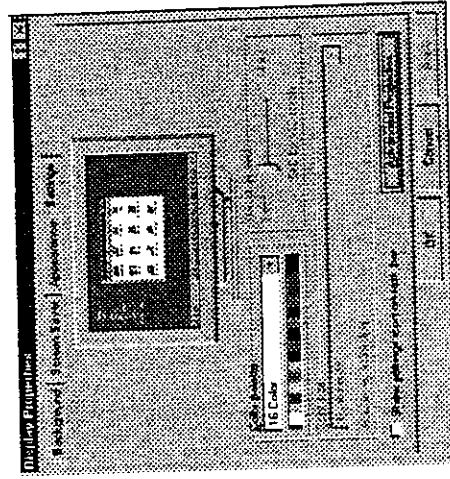


(Figure 8)

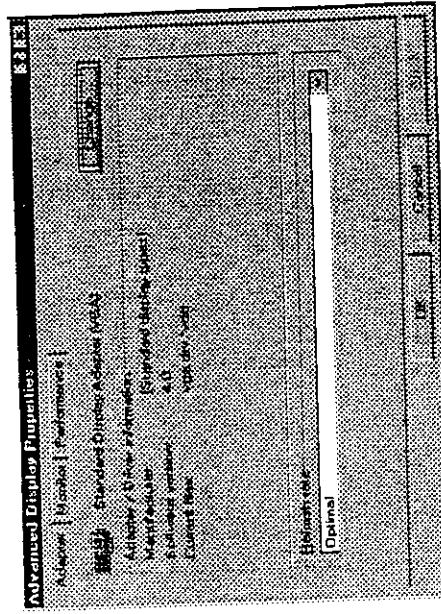


8. Click on **Settings** and click on **Advanced Properties**. (Figure 3)

9. Click on **Change** under **Adapter** sub-menu. (Figure 4)



(Figure 3)



(Figure 4)

## **Section 5**

### **Software Installation**

#### **5-1. Windows 95**

##### **A. Driver Installation**

1. Windows 95 should already be installed.
2. Power down the computer and install the i740 AGP card.
3. Reboot the computer and start windows 95. The Windows 95 will auto detect and install standard VGA display driver into your system.
4. Now to active the i740 AGP, please following the next step to install the i740 AGP display driver.

#### 4-2. Static Electricity Precautions

1. Before handling any components or touching anything inside the system unit, discharge your body static electric charge by touching a grounding surface. If the system unit is connected to a grounded outlet, you can touch any part of the system metal chassis.
2. Do not remove boards from their antistatic bags until you are ready to install them.
3. When handling boards, hold them by their edges and their metal mounting brackets. Avoid touching components on the board and the edge connectors that plug into the expansion slots.
4. Avoid plastic, vinyl, styrofoam and furs in your work area. Wear a grounding wrist strap if one is available.

#### 4-3. Installing The i740 AGP Card

Installing the i740 AGP Card in your system is simple, so please follow the instructions carefully. To install the device:

1. Switch off your system and all peripheral devices, and unplug the power cord from the wall outlet.
2. Touch a metal plate on your system to ground yourself and discharge and static electricity.
3. Remove the cover from your system.
4. Remove any old video board installed in the system. Detach the monitor cable from the old video board, remove the screw that holds the old board in place and then pull it out from its expansion slot. Store the old video board in an anti-static bag.

## Section 3

### Product Highlights

#### 1. Optimized for the Pentium II processor and AGPset platform.

#### 2. Intel740's HyperPipelined 3D architecture is an innovative design that delivers a new level of balanced, scalable and sustained 3D performance along with smooth video and great 2D graphics experience.

This technology is comprised of:

- 1). Precise Pixel Interpolation (PPI) delivers the best-of-class image quality.
- 2). Parallel Data Processing (PDP) allows consistent high-performance.
- 3). Direct Memory Execution (DME) delivers 528MB/sec. Bandwidth and provides seamless access to system memory for unlimited texture sizes and rich rendering. Delivers highquality graphics acceleration in 3D, 2D and video / DVD applications at 2MB, 4MB or 8MB.

#### 3. Fully Optimized Intel740 Driver Suite:

- 1). Intel tuned and validated drivers support Windows 95, Windows 98, Windows NT 4.0, DirectX and OpenGL.

## **Section 1**

### **Product Description**

This highly integrated graphics solution provides high-performance 3D, 2D, video and software DVD.

The Intel740 graphics accelerator uses a breakthrough 3D architecture that enables maximum memory bandwidth for sustained 3D performance and exceptional image quality in PCs equipped with the Pentium II processor and AGPset. The result is real-time 3D performance for a wide variety of new business and consumer applications running on mainstream platforms. The Intel740 graphics accelerator is well suited for home user "edutainment" systems, small business graphics-enabled authoring platforms and corporate data-intensive tools. This platform provides a leap in graphics performance, enabling creativity and consumer/business applications.

Intel, as an author of the Accelerated Graphics Port (AGP) specification, introduces the Intel740 graphics accelerator as the first of Intel's graphics accelerators specifically engineered with Intel's HyperPipelined 3D architecture. This technology maintains a sustained high level of performance on the Pentium II processor platform. The Intel740 graphics accelerator introduces a new design constituting of Precise Pixel Interpolation, Parallel Data Processing and Direct Memory Execution.

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