

QDI I7400/IV7400
AGP

3D Graphics Card

I7400/IV7400 AGP

User' s Guide
Version 2.0

Copyright© 1998 LEGEND.QDI®
All rights reserved

No part of this manual may be reproduced or transferred to other media without permission from QDI® .

Notice

QDI® believes the information contained in this document is accurate and reliable. However, QDI® reserves the right to make corrections, improvements, or changes to this document at any time given without prior notice.

Please refer to README file in the driver diskette for operating instructions and other information updates.

Trademarks Acknowledgments

- MS-DOS, Windows, and DirectX are trademarks of Microsoft Corporation
- Pentium is a trademark of Intel Corporation
- OS/2, VGA are trademarks of IBM Corporation

All other brands and product names are trademarks of their respective companies.

CONTENTS

Introduction	1
Features	1
System Requirements	3
Package Contents	3
Software Upgrade	3
Hardware Installation	4
Drivers Auto-Installation	7
Before You Begin	7
Operating System Requirements	7
Installation of I7400/IV7400 display drivers for Windows 95/98/NT	7
Configuring Windows 95 Driver	11
Configuring Windows NT 4.0 Driver	16
BIOS Upgrade	

This manual can be used for both QDI I7400 or IV7400 AGP Graphics Card.

Introduction

Thank you for purchasing the I7400/IV7400 AGP 3D Graphics Card.

Your I7400/IV7400 3D AGP Graphics Card is based on Intel740 AGP Graphics Accelerator. Intel 740 is optimized for Pentium II processor platform to heighten the visual experience for users, its unique HyperPipelined 3D architecture and powerful 2D video acceleration enables a new generation of graphics stunning consumer and business applications. Intel has been working closely with a wide range of software developers to produce the innovative 3D applications which includes Data Visualization, consumer CAD, 3D Web browser, high quality DVD titles and exciting 3D games, etc. You can enjoy the latest 3D applications by using your I7400/IV7400 AGP 3D Graphics Card which provides you with sustained 3D performance and exceptional image quality.

Features:

1. AGP V1.0 compliant, full feature AGP support includes AGP 2X mode, side-band addressing and DME(Direct Memory Execution).

2. 2MB/4MB/8MB 100MHz SGRAM or 8MB 100MHz SDRAM onboard, memory peak bandwidth is more than 1.3GB/S.
 3. Excellent 2D graphics acceleration for business applications.
 4. HyperPipelined 3D acceleration includes Parallel Data Processing(PDP), to deliver superior 3D acceleration, Precise Pixel Interpolation(PPI) for highly realistic image quality, and Direct Memory Execution(DME), enabling more video memory size and bandwidth for high quality new generation 3D applications.
 5. MPEG-II acceleration in hardware and high quality software DVD video playback.
 6. High resolution, high color depth, high refresh rate, display up to 1600x1200 at 75Hz and 1024x768 true color at 100Hz.
 7. Supports DPMS, DDC2B and ACPI.
 8. Drivers for major operation system and APIs including Windows 95 (OSR2.1), Windows 98, Windows NT4.0, DirectX5.0/6.0, OpenGL, etc.
 9. Drivers can be auto-installed into Windows 95/98/NT.
 10. Supports popular and new generation 3D titles and applications.
- (IV7400) High quality video output for TV display.
VMI Bus Connector for upgrades such as TV-Tuner
Video Capture and hardware DVD.

System Requirements:

Computer :Uses Pentium II based mainboard with an AGP Bus slot

Monitor :Standard VGA monitor. For receiving all benefits from the graphics card, a high resolution multi-frequency monitor is needed.

Operating System :Windows 95(OSR2.1); Windows 98, Windows NT4.0, etc.

Package Contents:

Before installing your I7400/IV7400 graphics card, please check to make sure your I7400/IV7400 package is complete.

- I7400/IV7400 AGP graphics card
- Driver CD-ROM Disk
- User's manual

Contact your dealer if you find anything missing or damaged.

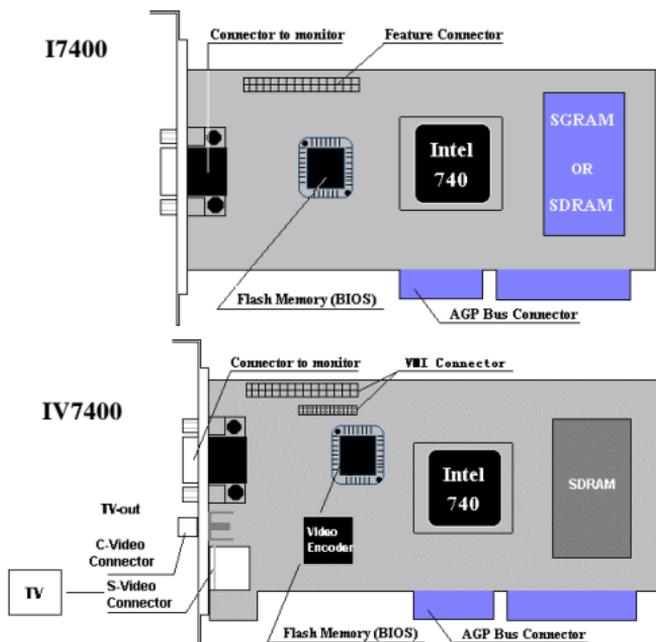
Note! *Graphics cards are sensitive to static charge. To avoid damages that may occur by static charge, leave the graphics card in its antistatic packaging until installation. Keep the packaging for possible future transportation.*

Software Upgrade

You can visit our web-site: **http://www.qdigrp.com** /for BIOS, driver updates and other release information.

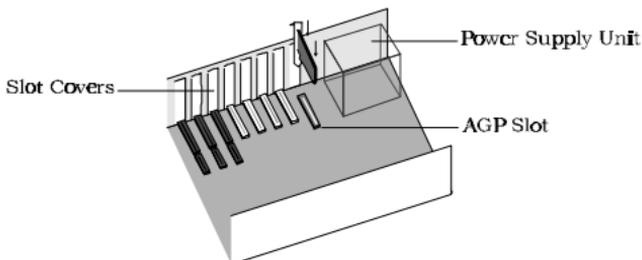
Hardware Installation

Follow the detailed procedures described in this section for easy installation of the I7400/IV7400 Graphics card onto your computer system. The only tool needed for installation is a screwdriver.



Note! *Before installing the I7400/IV7400 AGP card, touch the metal surface of your computer to discharge yourself of static charge, hold the graphic card by the edges, be sure not to touch the IC chips, leads or circuits.*

1. Before opening the computer cover , be sure that the power to the computer system unit and all devices connected to it are turned off. Disconnect the computer from the power supply.
2. In a typical PC computer all cover mounting screws are located on the back of the computer. Remove these screws and save them. Carefully remove the cover.
3. Remove an existing VGA card or disable the motherboard' s VGA.
4. Remove the AGP slot shield at the back of the computer by removing its retaining screw and lifting it out. Save the screw.
5. Carefully insert the graphics card into the AGP slot by holding the card at the top and gently pushing both ends into the slot at the same time. Do not force the card into the slot! If the card does not fit easily, pull it back, and try again.



1. Secure the card with the screw removed in the above step.
2. Replace and secure the system cover.
3. Connect a VGA compatible or multi-frequency monitor with the 15 pin video connector at the back of the I7400/IV7400 card.
4. Connect the computer to the power supply.

To make room for the heatsink of I7400/IV7400, please plug your PCI card into a PCI slot which is a bit far from the AGP slot.

Drivers Auto-Installation

Before you begin

All installation instructions assume that the CD-ROM disk is located in drive D: and Windows 95 is in C:\Windows. Replace either with the actual location if necessary.

Operating System Requirements

For all AGP feature benefits, you must use Windows 95 OSR2.1 or the later version. To install Windows 95 OSR2.1, first install OSR2.0 then upgrade to OSR2.1 by installing USBSUPP which is provided by Microsoft. You can contact the distributor of Windows 95 OSR2 for USBSUPP supplement.

Installation of I7400/IV7400 display drivers for Windows 95/98/NT

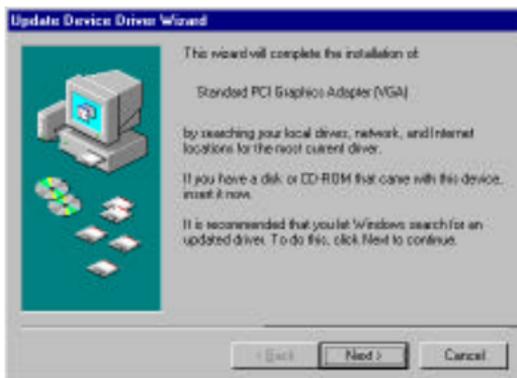
The display drivers can be automatically installed into Windows 95 OSR2.1, Windows 98 or Windows NT4.0.

1. Installing Standard VGA Driver

It is recommended that you first install Windows 95/98/NT with the I7400/IV7400 AGP card already installed. After

the installation of Windows 95/98/NT, the default VGA driver should have been installed first.

If Windows 95(OSR2) has been installed before the installation of the I7400/IV7400 AGP card, the first time Windows 95 runs with the I7400/IV7400, the **Update Device Driver Wizard** window appears, click **next** (*Do not click **Cancel**, or your system will hang!*). Then click **finish** to install the standard VGA driver, direct the installation path to your `\windows\system` directory if Windows 95 CD is requested. Follow the prompt, do not restart Windows 95 and then proceed to step 2. If using Windows 98/NT, this incident will not occur.

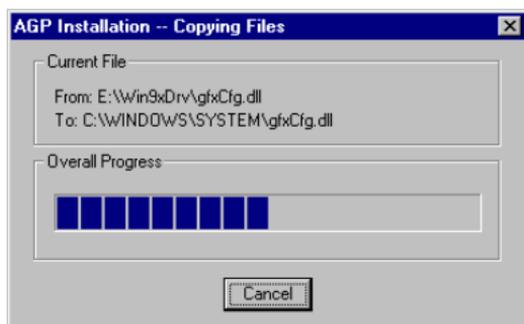


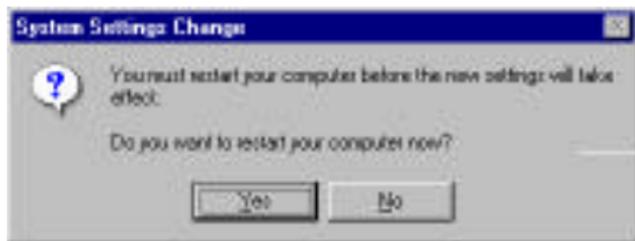
2. Installing the I7400/IV7400 driver

After inserting the auto-run I7400/IV7400 driver CD into the CD ROM drive, a dialog box pops up as shown below. You can also run Auto.exe in the CD directly if auto-run is not supported by your system.



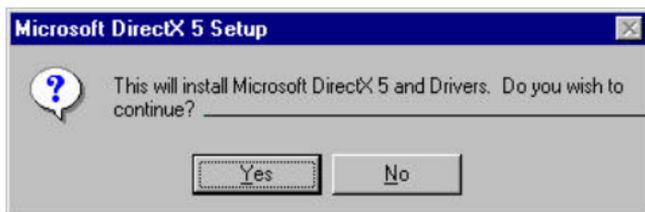
Selecting '**Install Display Driver**' from the dialog box with your mouse, will automatically install the I7400/IV7400 driver. When completed, a message box pops up, prompting you to restart the computer. Press OK to restart the computer.





3. Installing DirectX

In windows 95, run auto.exe in the CD-ROM and select '**Install DirectX**' from the dialog box, then follow the prompts to install DirectX



Note: *If you try to install DirectX in Windows 98 and NT, a message box will popup, informing you that it is unnecessary to install them in these two operation systems. Please take note that the DirectX can only be auto-installed in Windows English, Simplified and Tradition Chinese versions. For other language versions, please direct the path to **D:\DirectX5\Multi Language** and install the correspondent language version manually.*

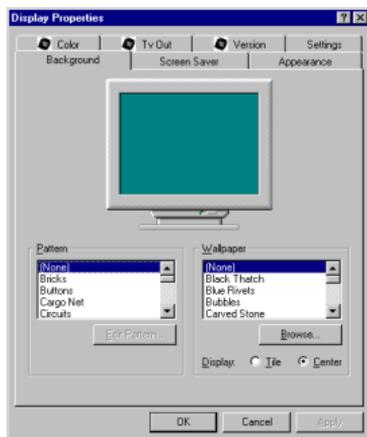
You can read the Readme file in this path to receive the name of corresponding installation program.

Configuring Windows 95 Driver

To receive optimum visual display and performance, configure your Windows 95 driver once it is installed

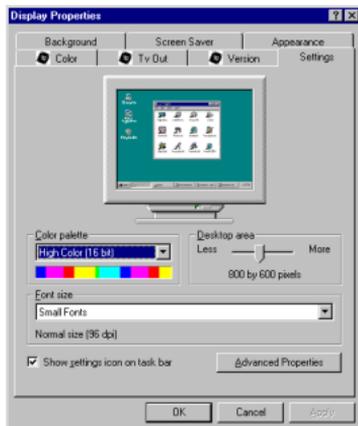
Click the right mouse button while the mouse is pointing at an empty area of Windows 95 desktop and select **Properties**, from **Display Properties** Window, you can adjust screen resolution, color depth, monitor setting, refresh rate, etc.

Refer to the sections below for a complete description of what options are available for each configuration tab. After making your changes, follow the on-screen prompts to complete the configuration.

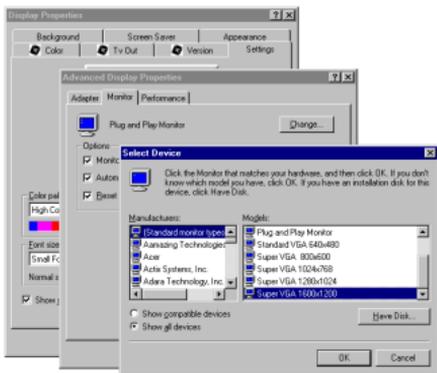




If you want to change the screen resolution or color depth, click on the **Settings** tab at the top of the screen. This panel will now be displayed, change the screen resolution using the “Desktop area” slider on the right side of the window. To change the color depth of the screen use the “Color palette” selector on the left side of the window.

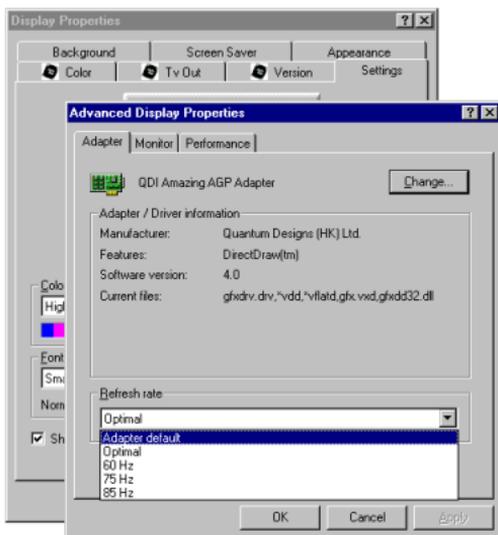


If you are not able to choose a resolution that your monitor supports, you may need to change your monitor settings by clicking the **Advanced Properties** button and clicking the **Monitor** tab. Click **Change** button for Monitor Type. Click the Manufacturer and Model that matches your monitor. If your monitor brand is not available, choose Standard monitor and VGA

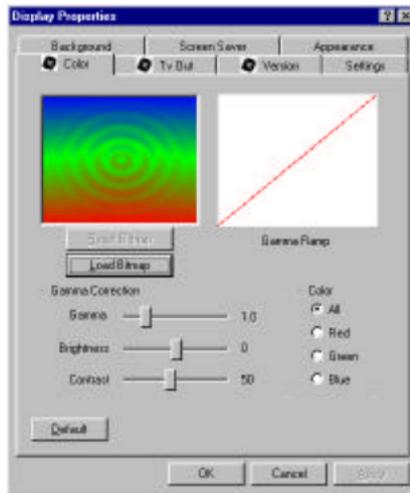


model.

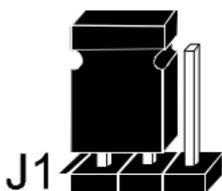
If you want to change the refresh rate, click the **Advanced Properties** button in the **Setting** panel, click the down arrow button and click the number of the refresh rate you hope to select, then click **OK** button. In general, the higher the refresh rate, the better the display quality. Be sure your monitor can support the refresh rate chosen!



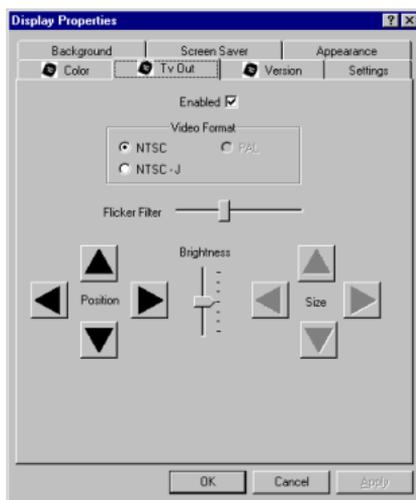
You can also change other settings. Click on the **740 Color** tab at the top of the window. This setting is called “Gamma Correction”, it modifies color values to compensate for the different characteristics of different monitors. If the default setting is not satisfactory, you can change the values of Gamma, Brightness, Contrast by dragging the sliders. You can adjust Red, Green and Blue simultaneously or respectively by select all color or a single color.



IV7400 has video-out function which supports simultaneous display on TV, if you want to view the image or video on TV, connect your TV to the video out connector first, it is recommended to use the S-Video connection (if this is supported by your TV) since S-Video has higher image quality than C-Video. In the following TV-out window, change the video format to conform your TV standard, or adjust Flicker Filter, Brightness and Position resulting in a satisfied image effect. On IV7400 Card, the jumper J1 default setting is for NTSC, if PAL Video-out needed, please change the jumper J1 setting as the following.



PAL Video-out



Configuring Windows NT 4.0 Driver

To configure your Windows NT 4.0 driver once it is installed, follow the procedures listed below.

1. Right click on an empty area of the Windows NT desktop and select **Properties**.
2. From the **Display Properties** dialog box, you can change your driver and monitor configurations. Click on the **Settings** tab located at the top of the dialog box, and adjust the settings using the drop-down boxes and slider bars.
3. Follow the on-screen prompts for completing the Windows NT 4.0 driver or monitor configuration.

BIOS Upgrade

It may be necessary to upgrade the video BIOS on your I7400/IV7400 card when the display driver is upgraded. You can browse our Website www.qdigrp.com to verify if an upgraded driver is available for the I7400/IV7400 card, if it prompts to upgrade the BIOS, then download both driver and BIOS, and follow the next steps to complete the BIOS upgrade.

Step 1. Start in DOS mode. The BIOS upgrade procedure cannot be executed from within Windows 95. If you are already running Windows, shut down the machine and restart in DOS mode.

Step 2. At DOS prompt, create a directory in your hard disk, then copy the new BIOS file into this directory, and copy the file 'Prom740.exe' from the directory \BIOSUpdate from CD-ROM for the I7400/IV7400 card.

eg. C:>md temp740

Step 3. At the DOS prompt, change the directory to the above created directory, type the following command to install the new BIOS into the I7400/IV7400 card's Flash Memory.

eg: C:>cd temp740

C:temp740>**PROM740 xxxx.DAT**

xxxx.DAT is the BIOS BIN File you received.

This will load the BIOS image file into the card's BIOS space.

Important: Do NOT reboot or power down the machine during this process, as it will cause the BIOS to be incompletely programmed, resulting in a non-functioning graphics card.

After the new BIOS has been installed, you can Hard Boot your system by either pressing the Reset button or the Power button, then you can install the new driver.

FCC Information

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 against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy, 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 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.

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

Notice to user: Changes or modifications to this product not approved by the party responsible for FCC compliance could void your authority to operate this equipment.

In order for an installation of this product to maintain compliance with the limits for a Class B device, shielded cables must be used for the connection of any devices external to this product.

P/N: 430-02006-302
Manual I7400/IV7400 AGP CardVer 2.0