/SUS® AGP-V3800 Series

3D Multimedia Accelerator

USER'S MANUAL

Hardware & Video Drivers

AGP-V3800 Deluxe/32MB

AGP-V3800TVR/32MB

AGP-V3800TVR/16MB

AGP-V3800/32MB

AGP-V3800/16MB

AGP-V3800 Combat/16MB

AGP-V3800 Combat/8MB

USER'S NOTICE

No part of this manual, including the products and software described in it, may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form or by any means, except documentation kept by the purchaser for backup purposes, without the express written permission of ASUSTEK COMPUTER INC. ("ASUS").

ASUS PROVIDES THIS MANUAL "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL ASUS, ITS DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF PROFITS, LOSS OF BUSINESS, LOSS OF USE OR DATA, INTERRUPTION OF BUSINESS AND THE LIKE), EVEN IF ASUS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES ARISING FROM ANY DEFECT OR ERROR IN THIS MANUAL OR PRODUCT.

Product warranty or service will not be extended if: (1) the product is repaired, modified or altered, unless such repair, modification of alteration is authorized in writing by ASUS; or (2) the serial number of the product is defaced or missing.

Products and corporate names appearing in this manual may or may not be registered trademarks or copyrights of their respective companies, and are used only for identification or explanation and to the owners' benefit, without intent to infringe.

- IBM and OS/2 are registered trademarks of International Business Machines.
- NVIDIA, RIVA, ULTRA, TNT2, and NVIDIA Vanta are trademarks of NVIDIA Corporation.
- Windows and MS-DOS are registered trademarks of Microsoft Corporation.
- Adobe and Acrobat are registered trademarks of Adobe Systems Incorporated.

The product name and revision number are both printed on the product itself. Manual revisions are released for each product design represented by the digit before and after the period of the manual revision number. Manual updates are represented by the third digit in the manual revision number.

For previous or updated manuals, BIOS, drivers, or product release information, contact ASUS at http://www.asus.com.tw or through any of the means indicated on the following page.

SPECIFICATIONS AND INFORMATION CONTAINED IN THIS MANUAL ARE FURNISHED FOR INFORMATIONAL USE ONLY, AND ARE SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTICE, AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY ASUS. ASUS ASSUMES NO RESPONSIBILITY OR LIABILITY FOR ANY ERRORS OR INACCURACIES THAT MAY APPEAR IN THIS MANUAL, INCLUDING THE PRODUCTS AND SOFTWARE DESCRIBED IN IT.

Copyright © 1999 ASUSTeK COMPUTER INC. All Rights Reserved.

Product Name: ASUS AGP-V3800 Series

Manual Revision: 1.02 E371
Release Date: May 1999

ASUS CONTACT INFORMATION

ASUSTeK COMPUTER INC. (Asia-Pacific)

Marketing

Address: 150 Li-Te Road, Peitou, Taipei, Taiwan 112

Telephone: +886-2-2894-3447 Fax: +886-2-2894-3449 Email: info@asus.com.tw

Technical Support

Tel (English): +886-2-2894-3447 ext. 706 Tel (Chinese): +886-2-2894-3447 ext. 111

Fax: +886-2-2895-9254 Email: tsd@asus.com.tw Newsgroup: news2.asus.com.tw WWW: www.asus.com.tw

FTP: ftp.asus.com.tw/pub/ASUS

ASUS COMPUTER INTERNATIONAL (America)

Marketing

Address: 6737 Mowry Avenue, Mowry Business Center, Building 2

Newark, CA 94560, USA

Fax: +1-510-608-4555 Email: info-usa@asus.com.tw

Technical Support

+1-510-608-4555 Fax: BBS: +1-510-739-3774 Email: tsd-usa@asus.com.tw

WWW: www.asus.com

FTP: ftp.asus.com.tw/pub/ASUS

ASUS COMPUTER GmbH (Europe)

Marketing

Address: Harkort Str. 25, 40880 Ratingen, BRD, Germany

Telephone: 49-2102-445011 49-2102-442066 Fax: Email: sales@asuscom.de

Technical Support

Hotline: 49-2102-499712 BBS: 49-2102-448690 Email: tsd@asuscom.de WWW: www.asuscom.de

FTP: ftp.asuscom.de/pub/ASUSCOM

CONTENTS

I. Introduction	7
Highlights	7
Available Models	7
ASUS TNT2 Ultra TM Model	7
ASUS TNT2 TM Model	7
ASUS Vanta TM Model	7
Specific Features	
AGP-V3800 Deluxe	8
AGP-V3800/TVR (32MB/16MB frame buffer) AGP-V3800 (32MB/16MB frame buffer)	8
AGP-V3800 Combat	8
Common Features	8
II. Hardware Installation	9
ASUS AGP-V3800 Deluxe Layout	9
ASUS AGP-V3800/TVR AGP-V3800 Layout	10
ASUS AGP-V3800 Combat Layout	
Installation Procedures	
New Systems	
Systems with Existing VGA Card	12
III. Windows 95/98	13
Operating System Requirements	13
Windows 95 OSR2.0 with USB Support	13
Windows 98	13
Driver Setup	14
Method 1: ASUS Quick Setup Program	14
Method 2: Display Property Page	15
Method 3: Plug and Play	16
ASUS Windows 95/98 Install Shell	17
Install Display Driver	17
Install DirectX	18
Install GART Driver	19
Install Live3800 Utility	21
Using ASUS Live3800	22
Always On Top	22

CONTENTS

Uninstall Display Driver	24
Using the Autorun Screen	24
Using Windows 95/98 Control Panel	24
Install Acrobat Reader	25
Install ASUS Tweak Utility	27
Using the ASUS Tweak Utility	28
ASUS Control Panel	30
Refresh Rate	30
More Resolution	31
Information	31
Color	32
Desktop	32
D3D/Game	32
General Functions	33
Important Notes	34
Display	35
VGA	35
TV	37
Advanced	38
StereoGlasses	38
Direct3D	39
OpenGL	39
IV. Windows NT 4.0	40
Install Display Driver	40
Installation Procedures	
V. Resolution Table	41
VI. Troubleshooting	44
Description	
Recommended Action	

FCC & DOC COMPLIANCE

Federal Communications Commission Statement

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

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 and, if not installed and used in accordance with manufacturer's 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 to 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.

WARNING! The use of shielded cables for connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Canadian Department of Communications Statement

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

I. Introduction

Thank you for purchasing an ASUS AGP-V3800 Series Graphics and Video Accelerator. With the NVIDIA RIVA TNT2TM UltraTM/TNT2TM/VantaTM built in, the ASUS AGP-V3800 Series graphics cards provide you with extremely fast acceleration in 2D/3D graphics and high quality scalable video playback, which can fully support 3D Business, Gaming, and Multimedia Applications.

Highlights

- Supports professional graphics design, gaming, learning, and business applications
- Flicker free, high refresh rates reduce eye strain
- Powerful 3D rendering
- Crisp, realistic images
- Striking cinema-quality video

Available Models

ASUS TNT2 Ultra™ Model

AGP-V3800 Deluxe (32MB SGRAM Frame Buffer)
 VGA + Video-In + TV-Out + 3D Glasses (ASUS VR-100G Bundled Free!)

ASUS TNT2™ Model

- AGP-V3800/TVR (32MB or 16MB SGRAM Frame Buffer) VGA+Video-In+TV-Out+3D Glasses Support (ASUS VR-100G Upgradeable)
- AGP-V3800 (32MB or 16MB SGRAM Frame Buffer) Pure VGA (ASUS VR-100 Upgradeable)

ASUS Vanta™ Model

• AGP-V3800 Combat (16MB or 8MB SDRAM Frame Buffer) Pure VGA (ASUS VR-100 Upgradeable)

I. Introduction

Specific Features

AGP-V3800 Deluxe

- Built-in NVIDIA RIVA TNT2 Ultra™ 128-bit 3D Graphics and Video Accelerator
- 300MHz Palette-DAC

AGP-V3800/TVR (32MB/16MB frame buffer) AGP-V3800 (32MB/16MB frame buffer)

- Built-in NVIDIA RIVA TNT2TM 128-bit 3D Graphics and Video Accelerator
- 300MHz Palette-DAC

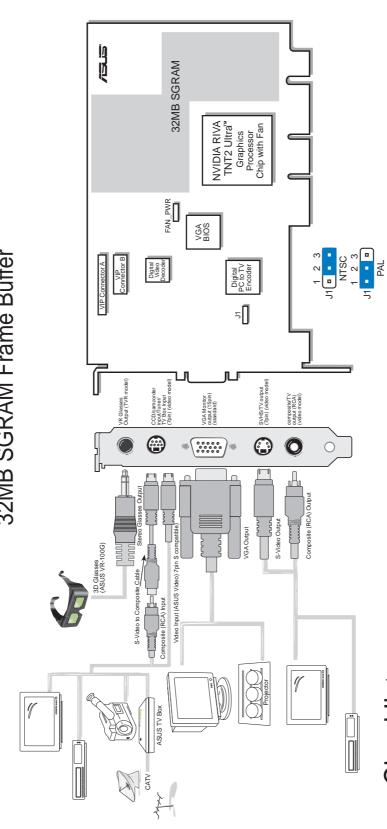
AGP-V3800 Combat

- Built-in NVIDIA Vanta[™] 128-bit 3D Graphics and Video Accelerator
- 250MHz Palette-DAC

Common Features

- Bus mastering AGP V2.0 slot interface with full sideband and "Execute" model support
- Optimized for Direct3D acceleration with complete support for DirectX 5.0 and 6.x features, such as multi-texturing, bump mapping, texture modulation, light maps, full-scene anti-aliasing, and Trilinear and 8-tap Anisotropic filtering (better than Trilinear Mip mapping)
- OpenGL ICD support in Windows 95/98, Windows NT, and Windows 2000
- TwiN-Texel (TNT) 32-bit graphics pipeline providing 2 texture mapped, lit pixels per clock and single pass multi-texture rendering
- 32-bit ARGB rendering with destination alpha, 16- or 24-bit Z buffer, 8-bit stencil buffer
- 100% hardware triangle setup engine
- High performance 128-bit 2D/GUI/DirectDraw acceleration
- Planar YUV12 (4:2:0) to/from packed (4:2:2) Color Space Conversion for software MPEG acceleration and H.261 video conferencing applications
- DVD sub-picture alpha blend compositing
- Video Acceleration for DirectShow MPEG 1/2 and Indeo
- VESA DDC2B+, DPMS, VBE 2.0/3.0 support

ASUS AGP-V3800 Deluxe Layout 32MB SGRAM Frame Buffer



- Use the same TV standard for all devices.
- and T antenna cannot be connected at the same

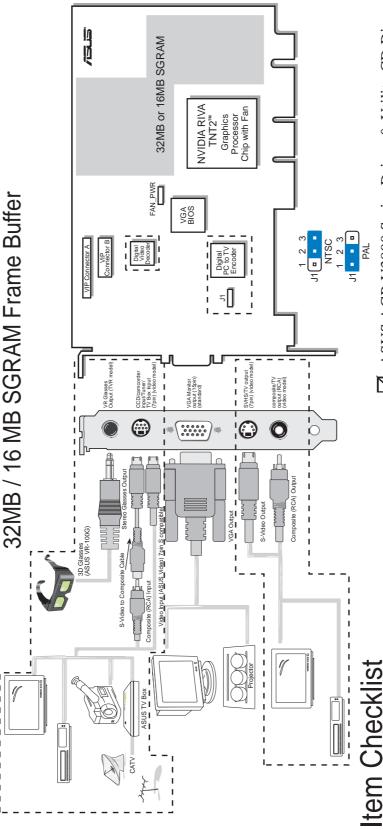
ASUS AGP-V3800 Deluxe (PAL or NTSC)

Item Checklist

Video-in and TV-out cables

3D glasses This User's Manual (with Adobe® Acrobat® PDF copy) ASUS AGP-V3800 Series Driver & Utility CD Disc

ASUS AGP-V3800/TVR | AGP-V3800 Layout



☑ ASUS AGP-V3800 Series Driver & Utility CD Disc

NOTES

Video-in and TV-out cables (AGP-V3800/TVR only)

ASUS AGP-V3800/TVR (PAL or NTSC) or

ASUS AGP-V3800

ZZ

3D glasses support (ASUS VR-100G upgradeable)

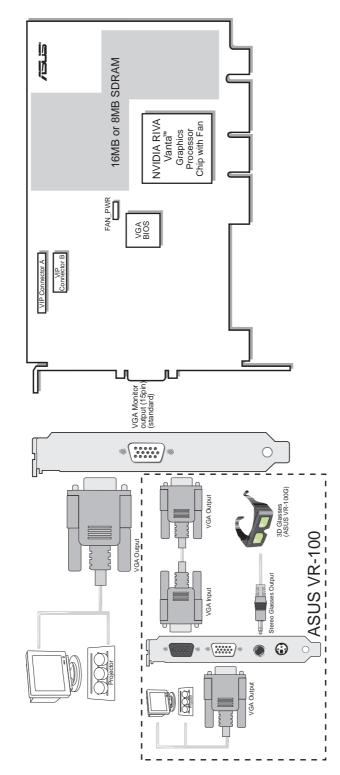
N

- Components enclosed in dotted boxes can only be used or are available only in the AGP-V3800/TVR model.
 - Use the same TV standard for all devices.
- and it antenna cannot be connected at the same This User's Manual (with Adobe® Acrobat® PDF copy) ASUS VR-100 upgrade—see next page for layout) (AGP-V3800/TVR only; AGP-V3800 requires

II. Installation Vanta

II. Hardware Installation

ASUS AGP-V3800 Combat Layout 16MB / 8 MB SDRAM Frame Buffer



Item Checklist

ASUS AGP-V3800 Combat

3D glasses support (requires ASUS VR-100 upgrade)
This User's Manual (with Adobe® Acrobat® PDF copy)
ASUS AGP-V3800 Series Driver & Utility CD Disc

NOTE

• Components enclosed in dotted boxes can only be used or are available only with the ASUS VR-100 upgrade.

II. Hardware Installation

NOTE: The ASUS AGP-V3800 series graphics card can only be installed in motherboards with an AGP slot.

WARNING! Computer boards and components contain very delicate Integrated Circuit (IC) chips. To protect the computer board and other components against damage from static electricity, you must follow some precautions.

- 1. Make sure that you unplug your power supply when adding or removing expansion cards or other system components. Failure to do so may cause severe damage to both your motherboard and expansion cards.
- 2. Keep all components such as the host adapter in its antistatic bag until you are ready to install it.
- 3. Use a grounded wrist strap before handling computer components. If you do not have one, touch both of your hands to a safely grounded object or to a metal object, such as the power supply case. Hold components by the edges and try not to touch the IC chips, leads, or circuitry.
- 4. Place components on a grounded antistatic pad or on the bag that came with the component whenever the components are separated from the system.

Installation Procedures

New Systems

- 1. Unplug all electrical cords on your computer.
- 2. Remove the system unit cover.
- 3. Locate the AGP bus expansion slot. Make sure this slot is unobstructed.
- 4. Remove the corresponding expansion slot cover from the computer chassis.
- 5. Ground yourself to an antistatic mat or other grounded source.
- 6. Pick up the board (still in its sleeve) by grasping the edge bracket with one hand and then remove the plastic sleeve.
- 7. Position the card directly over the AGP slot and insert one end of the board in the slot first. Firmly but gently press the bus connector on the bottom of the card down into the slot. Be sure the metal contacts on the bottom of the host adapter are securely seated in the slot.
- 8. Anchor the board's mounting bracket to the computer chassis using the screw from the slot cover that you set aside previously.
- 9. Replace the cover on the system unit.
- 10. Connect your analog monitor's 15-pin VGA connector to the card and fasten the retaining screws (if any).
- 11. Connect other cables and devices if available -You are now ready to install the software drivers and utilities.

Systems with Existing VGA Card

- 1. Change your display driver to Standard VGA.
- 2. Shut down your computer and unplug all electrical cords.
- 3. Replace the existing VGA card with the ASUS AGP-V3800 series graphics card.
- 4. Restart your computer.
- 5. Install the ASUS AGP-V3800 series display driver.

Operating System Requirements

NOTE: The AGP-V3800 series graphics cards require a motherboard with an AGP slot.

Windows 95 OSR2.0 with USB Support

Windows 95 OSR2.0 supports AGP cards, but to take advantage of all the AGP features, you must use Windows 95 OSR2.0 and install the USB upgrade and then install the VGARTD driver for the corresponding chipset on your motherboard. (see III. Windows 95/98 Install VGARTD Driver).

To install Win95 OSR2.0 with USB support, you must have OSR2.0 installed already. Otherwise, first install OSR2.0 and then use the USB support update (you must use the same update language of your Windows language). On the April 1997 MSDN Disc-1 "Windows 95, SDKs, and Tools", OSR2.0 is found in "\OSR2" while the USB support update is found in "\OSR2\USBSUPP". To determine the installed version of the operating system, look in the registry at:

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Version\Version\Undersion\Version

OSR2.0 with USB has:

Version "Windows 95" and VersionNumber "4.03.1212" or "4.03.1214".

Windows 98

Windows 98 supports full Direct3D and AGP features. If you are still using the beta version of Windows 98 and you want to fully take advantage the Direct3D and AGP features, you must upgrade your current Windows to the release version before installing the AGP display driver.

Windows 98 includes VGARTD for the major chipsets but it is recommended that you install VGARTD from the AGP-V3800 Series CD to make sure that you have the latest version of VGARTD.

NOTES

- For other notes or release information, see the README files in the installation CD.
- This Manual assumes that your CD-ROM disc drive is drive D: and that Windows is in C:\WINDOWS. Replace either with the actual location, if necessary.

Driver Setup

You can use one of three methods to install the Windows 95/98 drivers for your ASUS AGP-V3800 series graphics card.

NOTE: Method 2 and Method 3 will not install the appropriate AGP GART driver if your motherboard does not use the Intel AGPset. Installing the AGP GART driver will ensure that the AGPset's AGP functions are available. Method 2 and Method 3 will not install also the DirectX runtime libraries. DirectX must be installed so that your video player can take advantage of hardware acceleration. *See* **III. Windows 95/98 Install VGART Driver** and **III. Windows 95/98 Install DirectX** later in this manual for the setup steps.

Method 1: ASUS Quick Setup Program

NOTE: See III. Windows 95/98 | ASUS Windows 95/98 Install Shell | Install All Drivers and Utilities for detailed steps.

- 1. Start Windows.
- 2. Switch display to Windows' Standard Display Adapter (VGA) mode and then restart Windows.
- 3. Insert the CD installation disc into your CD-ROM drive.
- 4. The ASUS Windows 95/98 Install Shell appears. Click **Drivers and Utilities** and then click **Install All Drivers and Utilities** on the **Drivers** dialog box.

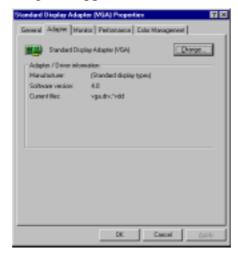




- 5. Follow the onscreen instructions to complete the setup.
- 6. When Setup has finished installing all the necessary files on your computer, it will prompt you to restart your computer. Click **Yes...** and then **Finish** to restart your computer and to complete Setup.

Method 2: Display Property Page

- 1. Start Windows.
- 2. Switch display to Windows' Standard Display Adapter (VGA) mode and then restart Windows.
- 3. Right-click the Windows desktop and click **Properties**.
- 4. Click the **Settings** tab and then click **Advanced**. The **Standard Display Adapter** (**VGA**) **Properties** dialog box appears.

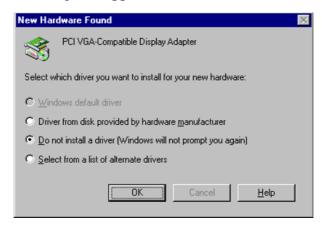


- 5. Click **Change** on the **Adapter** tab. The **Update Device Driver Wizard** dialog box appears. Click **Next**, click **Display a list of all the drivers**... and then click **Next**.
- 6. Click **Show all hardware** and then click **Have Disk...**.When the **Install From Disk** dialog box appears, type the location of the ASUS3800.INF file and then proceed to step 9. Otherwise, proceed to the next step.
- 7. Click **Browse** to search the CD-ROM drive. In the **Drives** box of the **Open** dialog box, select your CD-ROM drive and then click **OK**.
- 8. In the **Folders** box, double-click the WIN95 folder and then select ASUS3800.INF in the **File name** box.
- 9. Click **OK**. A list of video cards appears. Select your VGA card type for your operating system and then click **OK**.
- 10. The **Update Driver Warning** box appears. Click **Yes** to confirm the setting up of the ASUS enhanced display drivers and then follow the onscreen instructions to start the setup.
- 11. Setup will prompt you when it has finished installing all the necessary files on your computer. Click **Finish** to close Setup.
- 12. When you are returned to the **Standard Display Adapter (VGA) Properties** box, click **Close**. The **Display Properties** box appears. Click **Close**.
- 13. The system will prompt you to restart your computer. Click **Yes** to restart your computer and to complete Setup.

Method 3: Plug and Play

NOTE: Before proceeding with these steps, replace first your old VGA card with an ASUS AGP-V3800 series graphics card.

- 1. Start Windows.
- 2. When Windows detects your ASUS AGP-V3800 series graphics card, the **New Hardware Found** dialog box appears.

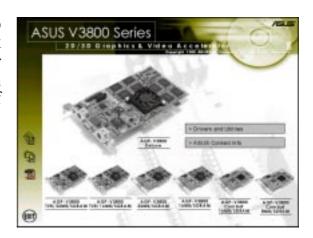


- 3. Click **Driver from disk provided by hardware manufacturer**.
- 4. When Setup prompts you for the location of the driver, type D:\WIN95 to direct Setup to the INF file and then click **Finish** to install the driver.
- 5. When Setup has finished installing all the necessary files on your computer, it will prompt you to restart your computer. Click **Yes** to restart your computer and to complete Setup.

ASUS Windows 95/98 Install Shell

Install Display Driver

1. Insert the CD installation disc into your CD-ROM drive or double click the CD drive icon in My Computer to bring up the autorun screen or run **Setup.exe** in the root directory of your CD-ROM drive.



Click Drivers and Utilities.

2. The **Drivers** box appears. Click **Install Display Driver** to install all the drivers and utilities into your computer. Setup will install the drivers and utilities in the following order: Display Driver, DirectX runtime libraries, Direct3D and OpenGL Drivers for games. Just follow the onscreen instructions to complete the installation.



If you prefer to install the drivers and utilities individually, follow the steps on the following pages.

Install DirectX

Microsoft DirectX allows 3D hardware acceleration support in Windows 95/98. For Software MPEG support in Windows 95/98, you must first install the **Microsoft DirectX** libraries, and then an MPEG-compliant video player.

1. Insert the CD installation disc into your CD-ROM drive or double click the CD drive icon in My Computer to bring up the autorun screen or run **Setup.exe** in the root directory of your CD-ROM drive.

Click **Drivers and Utilities**.



2. The **Drivers** box appears. Click **Install DirectX** to install the DirectX libraries.



3. The installation program will automatically install the DirectX 6 runtime libraries into your system.



4. Setup will prompt when it has finished copying all the files to your computer. Click **OK** to finish the installation.



Install GART Driver

The AGP GART Driver is used to support AGP functionality for the chipset on your PC's motherboard. It is recommended to install the GART driver if it is newer than the one you have installed in your system.

NOTE: Installation dialogs are slightly different for each chipset. Follow the onscreen instructions to finish the VGARTD installation. The succeeding steps assume that you are installing for an Intel AGPset.

1. Insert the CD installation disc into your CD-ROM drive or double click the CD drive icon in My Computer to bring up the autorun screen or run **Setup.exe** in the root directory of your CD-ROM drive.

Click Drivers and Utilities.



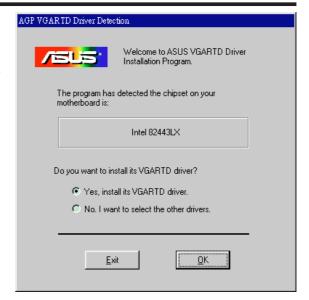
2. The **Drivers** box appears. Click **Install GART Driver** to install AGP support for motherboards with Intel, VIA, SiS, or ALi AGPsets.



3. A message appears that the VGARTD driver is only required for AGP boards. Click **Yes** to continue to install the driver.



4. The **AGP VGARTD Driver Detection** box appears with the chipset detected on your motherboard. Click **OK** to install the appropriate driver for your AGPset.



5. If you selected **No...**, on the previous screen before clicking **OK**, you will be presented with a selection of other drivers. Make your driver selection and click **Install**.



6. When the **Welcome** screen appears, click **Next** to continue.



7. Once the driver installation is finished, click **Finish.**



Install Live3800 Utility

Live3800 lets you view and capture video images from the card's video input port.

NOTE: Make sure that you have an ASUS graphics card with VIDEO-IN connector before attempting to install the utility.

1. Insert the CD installation disc into your CD-ROM drive or double click the CD drive icon in My Computer to bring up the autorun screen or run **Setup.exe** in the root directory of your CD-ROM drive.

Click **Drivers and Utilities**.

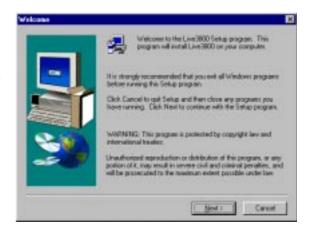


2. The **Drivers** box appears. Click **Install Live3800 Utility**.



3. When the **Welcome** box appears, click **Next** to start copying the files. Setup automatically starts copying the necessary files to the default folder.

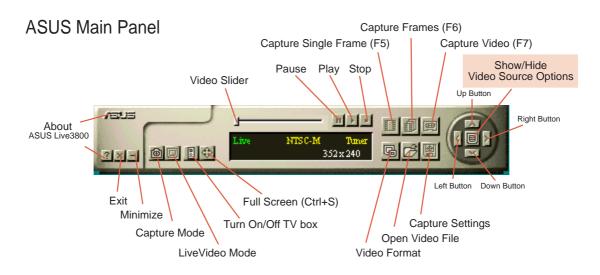
To complete the installation, simply follow the onscreen instructions.



Using ASUS Live3800

The ASUS Live utility software can be used to:

- 1. View images using your monitor as screen from traditional consumer devices, such as videocassette players, camcorders, digital cameras, and laser disc players through the onboard RCA or SVHS VIDEO-IN connectors (V3800 Deluxe and V3800/TVR only).
- 2. Capture live motion video up to 30 frames/second (minimum Pentium II/266 system).
- 3. Play any *.AVI file.

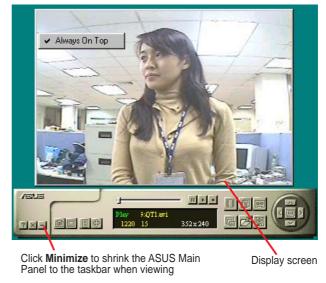


To run the software, click **Start** and point to **Programs** and then **ASUS LIVE3800** and then click **LIVE3800**.

To uninstall the software, click **Start** and point to **Programs** and then **ASUS LIVE3800** and then click **Uninstall**. You may also uninstall the software using the **Add/Remove Programs Properties** dialog box at the **Windows Setup** tab. *See* Windows online help for more information on removing a Windows component.

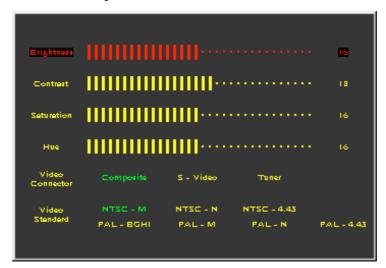
Always On Top

The **Always On Top** option is provided for users who may wish to continue watching VCD/DVD/TV programs while doing other tasks, such as when downloading files from the Internet or word processing. To keep your display screen always on top of other programs, right-click the display screen and then click the **Always On Top** button. Position the screen where it will not interfere with your other tasks.



Show/Hide Video Source Option

When first using ASUS Live, you must set up the video source. By clicking the **Show/Hide Video Source Options** button on the ASUS Main Panel, you can show or hide the video source setup screen.



Use the Up or Down arrow buttons on the ASUS Main Panel to select Video Connector and then the Left and Right arrow buttons to select *Tuner* to start using your TV Box to view programs.

NOTE: Users with the PAL D/K models should select PAL-BGHI for the Video Standard.

If desired, you may adjust Brightness, Contrast, Saturation, and Hue of your display using the video source setup screen. Click again the **Show/Hide Video Source Options** button on the ASUS Main Panel to exit from this screen.

For the other options on the ASUS Live utility software, click the appropriate button on the ASUS Main Panel to open its dialog box.

Video Capture Driver

IMPORTANT! It is the intent of ASUS that this product be used in full compliance with the copyright laws of your respective and other countries and that prior permission be obtained from copyright owners whenever necessary.

When you install the Windows 95/98 Driver of your ASUS graphics card with the VIDEO-IN connector, the video capture driver will automatically be installed on your system. This video capture driver follows Microsoft Video for Windows standard and can open **up to a capture window size of 704 x 480**. It can be used with some applications that use video capture as an option, such as video conferencing, net meeting, or digital video authoring applications.

To start capturing images on your screen, click the **Capture Mode** button on the ASUS Main Panel.

Uninstall Display Driver

If you want to update your display drivers or if you no longer need the AGP-V3800 display drivers, you can use one of the following procedures to completely uninstall the drivers from Windows 95/98 to save disk space.

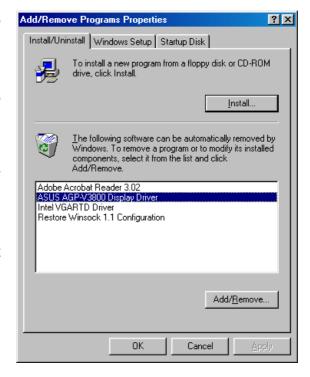
Using the Autorun Screen

- 1. Insert the CD installation disc into your CD-ROM drive or double click the CD drive icon in My Computer to bring up the autorun screen or run **Setup.exe** in the root directory of your CD-ROM drive.
- 2. Click **Uninstall Display Driver** and follow the onscreen directions.



Using Windows 95/98 Control Panel

- 1. Click **Start**, and then point to **Settings**.
- 2. Click Control Panel.
- 3. Double-click the **Add/Remove Programs** icon.
- 4. Click the **Install/Uninstall** tab.
- 5. Click **ASUS AGP-V3800 Display Driver** from the list.
- 6. Click Add/Remove.
- 7. The system will prompt you to restart your computer. Click **Yes** to restart.



Install Acrobat Reader

Acrobat Reader is necessary for reading the PDF copy of this manual.

1. Insert the CD installation disc into your CD-ROM drive or double click the CD drive icon in My Computer to bring up the autorun screen or run **Setup.exe** in the root directory of your CD-ROM drive.

Click **Drivers and Utilities**.



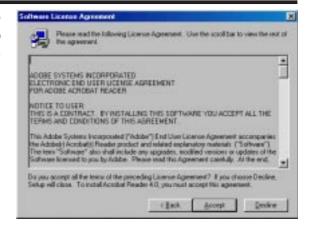
2. The **Drivers** box appears. Click **Install Acrobat Reader**.



3. When the **Acrobat Reader x.x Setup** box appears, click **Next**.



4. When the **Software Licese Agreement** box appears, click **Accept** to signify your acceptance of the License Agreement.



5. When the **Choose Destination Location** box prompts you for a destination folder, click **Next** to select the default location. Setup starts to copy the necessary files to your computer.



6. When Setup has finished copying files to your computer, click Yes, I want to restart my computer now and then click Finish to restart your computer to begin using Acrobat Reader. You may select No, I will restart my computer later if you still want to install other software or want to use your computer and then click Finish.



Install ASUS Tweak Utility

The ASUS Tweak Utility lets you control the core clock speed and the memory interface speed of your graphics card.

WARNING! Use this option with caution. Using this inappropriately may damage your card and cause your system to be unstable.

1. Insert the CD installation disc into your CD-ROM drive or double click the CD drive icon in My Computer to bring up the autorun screen or run **Setup.exe** in the root directory of your CD-ROM drive.

Click **Drivers and Utilities**.



2. The **Drivers** box appears. Click **Install ASUS Tweak Utility**



3. When the **Welcome** box appears, click **Next**.



4. When the **Information** box apears, click **Next** to signify your acceptance of the warning and other related information.

Setup starts to copy the necessary files to your computer. Follow the onscreen intructions to complete the installation.



Using the ASUS Tweak Utility

WARNING! Use the ASUS Tweak Utility with extreme caution and only if you are well acquainted with your display card. Using this inappropriately may damage your card, its components, and your system.

To run the ASUS Tweak Utility, click **Start** and point to **Programs**, **Asus**, **Tweaking Utilities**, and then click **Tweak**.

Timing Adjustment

Timing Adjustment lets you adjust the working frequency of the graphic engine and video memory.

Graphics Speed

Engine

Lets you adjust the working frequency of the graphic engine

Memory

Lets you adjust the working frequency of the video memory.

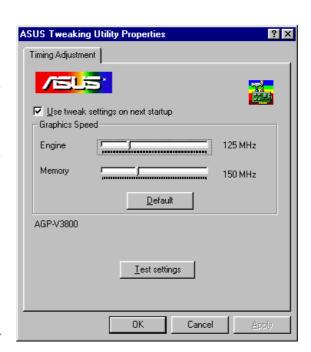
Default

Restores the settings to their defaults.

Test settings

Lets you test your settings.

Use tweak settings on next startup Selecting this allows you to use your settings when Windows starts.



Tweak Safe Mode Recovery

Timing Adjustment (Safe Mode) lets you restore the working frequency of the graphic engine and video memory to their factory default settings. This mode is used when you encounter problems when starting or restarting Windows using your customized tweak settings.

Using Tweak Safe Mode Recovery

- 1. Restart Windows in safe mode. To start Windows in safe mode, hold the F8 key until the Windows Startup Menu appears. For some machines and Windows 98, you can use CTRL to bring up the Startup Menu. Enter the number for **Safe mode** and then press ENTER.
- 2. In Windows, click **Start** and point to **Programs**, **Asus**, **Tweaking Utilities**, and then click **Tweak Safe Mode Recovery**.
- 3. The **ASUS Tweak Safe Mode Properties** box appears. Click the appropriate settings.

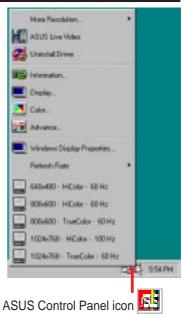
Timing Adjustment (Safe Mode)
Select the Clear tweak settings and use factory default box to change back the timing adjustment settings to their factory defaults and then click **OK** to restart Windows properly.



ASUS Control Panel

After installation of the display drivers, you will find an ASUS icon on the taskbar's status area. Clicking or right-clicking this icon opens the ASUS Control Panel, showing a menu composed of shortcuts of the graphics board's enhanced and other functions.

NOTE: Instead of clicking the ASUS Control Panel icon, you may right-click the Windows95/98 desktop, click **Properties**, and then click **Settings**. Under Windows98, click Advanced after clicking Settings. Click the appropriate tab to change your display settings.



Refresh Rate

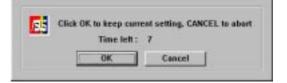
Refresh Rate lets you change the refresh rate of your current screen resolution.

WARNING! Be sure that the refresh rate that you select is supported by your monitor. Selecting a refresh rate that is beyond your monitor's specification may damage it. Press ESC to restore your original settings in case of problems.

1. Click/right-click the ASUS Control Panel icon, point to **Refresh Rate**, and then click the desired refresh rate.



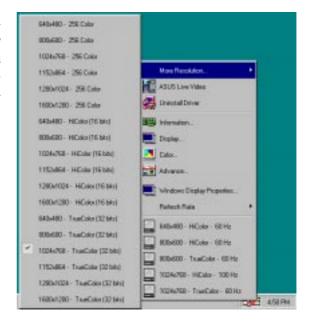
2. The system will prompt you whether you want to keep the setting you just selected. Click **OK** to keep the setting, otherwise, click Cancel or press ESC.



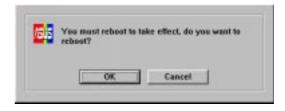
More Resolution

More Resolution lets you change the screen resolution of your monitor.

1. Click/right-click the ASUS Control Panel icon, point to **More Resolution**, and then click the desired screen resolution. The system will automatically set the resolution selected without restarting your computer.



WINDOWS95 USERS: You will be prompted to restart your computer if you select a screen resolution with a different color depth, for example, from 800x600 HiColor to 800x600 TrueColor. Click **OK** to restart your computer to make the change.



Information

Information lists the relevant information about your card. Aside from this, it has links to the ASUSTEK COMPUTER, INC. web site for updated information about the graphics board, latest drivers, and other information.





Color

Color allows you to make color adjustments, such as brightness, contrast, and gamma values for each or all of the RGB colors. These adjustments can be made for Desktop and D3D/Game. This function is not available in 8-bit color depth.

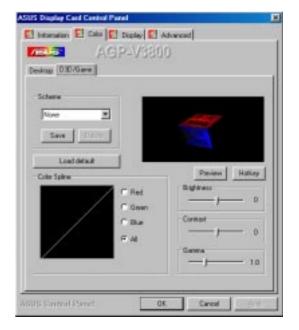
Desktop

Desktop lets you adjust the color of your Windows 95/98 desktop.



D3D/Game

D3D/Game lets you make your favorite color settings for D3D games.



General Functions

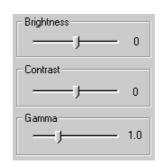
Brightness / Contrast / Gamma Brightness / Contrast / Gamma sliders let you calibrate the contrast, brightness, and gamma output of your display card.

Desktop

Changes to your color settings are shown immediately on your monitor. You may change the preview picture by clicking **Load** from the **Desktop** box.

D3D/Game

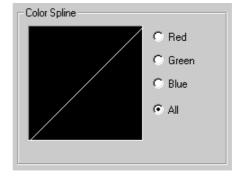
Changes to your color settings can be viewed by clicking **Preview**. When playing a <u>full-screen</u> DirectDraw/ Direct3D game, changes can be interactively made if **Hotkey** is enabled.



Dragging a slider to the left decreases the level and to the right increases it. The number at the right of each slider displays the brightness (value range: -128 to +128, default: 0), contrast (-30 to 30, default: 0), or gamma value (0.2 to 3.0, default: 1.0).

Color Spline

Color Spline shows how each (R, G, or B) or all channels are distributed when you move the Brightness, Contrast, or Gamma slider to make your adjustments. You can adjust all channels at once (All) or individual channels (R, G, or B).



Scheme

Scheme lists schemes that you can use to change the appearance of many screen elements simultaneously. You can use existing schemes, or create and save your own scheme by saving your current settings, or delete unwanted schemes. You may want to save a scheme that you created for some special situations, such as when you want to use the same settings when playing a certain game or a movie.

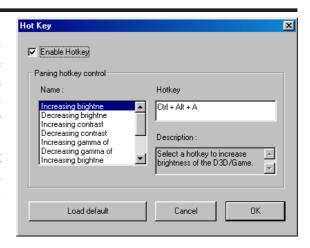


Hotkey

Hotkey lets you assign hot keys to adjust color settings interactively while playing a DirectDraw/Direct3D game or watching a movie. To use this function, click Hotkey to open the Hot Key box and then select Enable Hotkey. You may want to change the default hot keys when they conflict with hot keys of certain games, video players, or Windows programs.

To change the default hot keys

- 1. In the **Name** list under **Paning hotkey control**, click the hot key control that you want to change and then click the **Hotkey** box.
- 2. Hot keys automatically include CTRL+ALT. Press any valid key (you cannot use ESC, ENTER, TAB, SPACEBAR, PRINT SCREEN, or BACKSPACE) you want to add to this combination. For example, to define the hot key combination CTRL+ALT+B, press B.



NOTE: The hot keys will be available only if you selected the **Enable Hotkey** check box and if you are in the appropriate environment. That is, with the **Enable Hotkey** check box selected, hot keys take effect only if you are playing a **full-screen** DirectDraw/Direct3D game or video hot keys are valid only when you are playing a movie with hardware acceleration (**YUV** overlay) turned on.

Important Notes

D3D/Game

The color settings of **D3D/Game** take effect only when you are playing a **full-screen** DirectDraw/Direct3D game.



Display
Display lets you make monitor adjustments, such as position, size, and refresh rate.

WARNING! Adjusting position or size, especially refresh rate is a highly dangerous operation. Selecting a value that is beyond your monitor's specification may damage it. Press ESC to restore your original settings in case of problems.

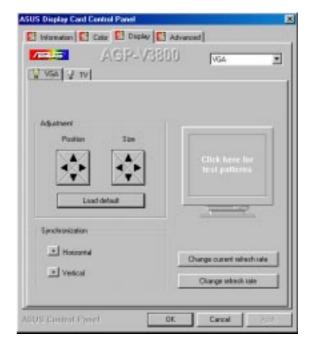
VGA

Adjustment

Position sets the screen position Size sets the screen size

Synchronization

Adjusts the synchronization polarity settings

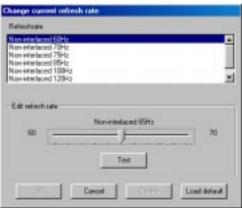


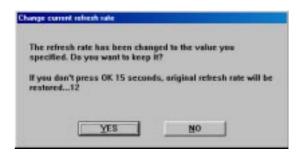
Change current refresh rate

Displays the Change current refresh rate box to let you customize a new refresh rate.

To change the current refresh rate

- 1. Click Change current refresh rate.
- 2. In the **Refresh rate** list under Change current refresh rate, click the nearest default refresh rate and then adjust the Edit refresh rate slider to the rate you want, click Test and then click YES when prompted to add the new refresh rate into the list. Otherwise, the original refresh rate will be restored.





Load default

Restores the settings to their defaults.

Change refresh rate

Displays the **Change refresh rate** box to let you change the refresh rate of any screen resolution.

GDI

GDI lets you change the refresh rate of the Windows desktop.

To change the refresh rate

- 1. Click Change refresh rate.
- 2. In the **Refresh Rate** list under the **GDI** tab, select the refresh rate you want to use. A **Test** button appears to let you test the selected refresh rate and resolution combination. Click **YES** when prompted whether to keep the new refresh rate. Otherwise, the original refresh rate will be restored.

DirectDraw

DirectDraw lets you change the refresh rate of DirectDraw. It is most useful when you are playing a **full-screen** game.

To change the refresh rate

- 1. Click Change refresh rate.
- 2. In the **Refresh Rate** list under the **DirectDraw** tab, select the refresh rate you want to use. A **Test** button appears to let you test the selected refresh rate and resolution combination. Click **Test** to preview the new refresh rate.
- 3. To keep the new refresh rate, press **F1**. Otherwise, press **F2** to select another refresh rate.





TV

Position

Sets the screen position.

Size

Sets the screen size.

Standard

Sets the TV signal format, for example, PAL or NTSC.

Output type

Displays the connection status of composite and S-Video.

Scan type

Sets the scan type of the TV display.

Black Level

Sets the brightness of the TV display.

Contrast

Sets the contrast of the TV display.

Flicker

Sets the anti-flicker effect.





Advanced provides some advanced settings for StereoGlasses (setting is available only with the ASUS AGP-V3800 Deluxe model or AGP-V3800TV model with the VR Stereoscope upgrade), Direct3D and OpenGL, software interfaces for your ASUS AGP-V3800 3D graphics board.

StereoGlasses

Enable Stereoscopic Mode

When selected, this enables you to use the stereoscopic mode when playing games or watching 3D videos. This mode is available only

Strereoscopic Glasses

Eves

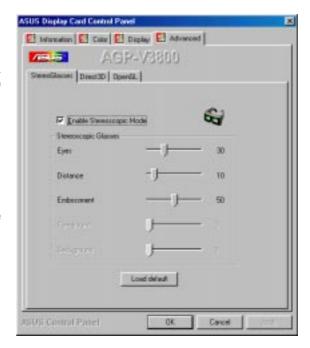
Distance between your eyes.

Distance

Distance between foreground and eyes.

Embossment

The effect to make objects virtually pop out of the screen.



Load Default

Restores the settings to their defaults.

IMPORTANT! Before enabling stereoscopic mode and using your stereoscopic or VR glasses (ASUS VR-100G), make sure that your monitor can support 120Hz interlaced mode under the following display modes:

640 x 480 x 16 bits 800 x 600 x 16 bits 960 x 720 x 16 bits 1024 x 768 x 16 bits 1152 x 864 x 16 bits

WARNING! To prevent discomfort and eye fatigue when using your stereoscopic or VR glasses, DO NOT try to use your VR glasses for an extended period of time. Take frequent short breaks to give your muscles and eyes a chance to rest by taking off your VR glasses and then looking up and focusing on distant objects.

Direct3D

Direct3D Feature Settings

Turn off V-SYNC waiting

When selected, games will achieve higher frame rate but tear frame may occur.

Anti-alias supersampling size

Lets you select the size of anti-aliasing, supersampling block.

8-bit indexed palette texture convert

Format for 8-bit indexed texture to convert.

Direct3D Mipmap Settings

Permit dithering mipmap

When selected, rendering performance may be higher; visual quality may, however, be lower.

Auto-generate mipmap

When selected, rendering performance may be higher; visual quality may, however, be lower.

Auto-generate mipmap filtering

Select Tri-linear for higher rendering quality.

Load default

Restores the settings to their defaults.



OpenGL

Enable buffer region extension

Enables region extension for 3D Studio Max.

Permit dithering mipmap

When selected, texture mipmap dithering will be enabled. Visual quality may improve when selected; a decrease in rendering performance, however, may occur.

Anisotropic mipmap

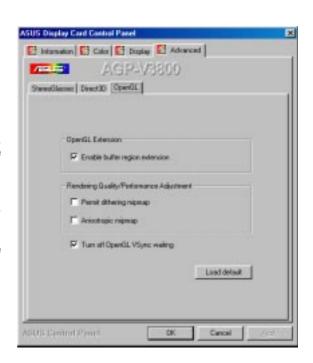
When selected, quality/performance may be better.

Turn off OpenGL VSync waiting

When selected, games will achieve higher frame rate but tear frame may occur.

Load default

Restores the settings to their defaults.



IV. Windows NT 4.0

Install Display Driver

WARNING! Before installing the display driver in Windows NT 4.0, make sure that you have installed **Windows NT 4.0 Service Pack3 or later, to take full advantage of the ASUS AGP-V3800 AGP features.** (You must use the same update language of your Windows language available on the Internet at http://www.microsoft.com/isapi/support/bldqpage.idc? ProductPage=q_servpk.)

NOTE: The following steps assume your CD-ROM drive letter is D.

Installation Procedures

- 1. Start Windows NT, switch display properties to VGA mode (16 colors, 640 x 480 pixels), then restart your computer to make the change.
- 2. After your computer restarts, right-click the desktop and click **Properties**.
- 3. Click the **Settings** tab.
- 4. Select Change Display Type.
- 5. Select **Adapter Type** and click **Change**.
- 6. Click Have Disk.
- 7. Insert the ASUS AGP-V3800 installation CD disc.
- 8. Type **D:\NT40** or click **Browse** to select the path of the display driver for Windows NT. Click **OK.**
- 9. Select ASUS AGP-V3800 and then click OK.
- 10. Windows NT will once again prompt for confirmation. All appropriate files are then copied to the hard disk. When all files are copied, go back to the **Display Properties** box by clicking **Close**. Click **Apply**.
- 11. The **System Settings Change** dialog box is displayed. Click **Yes** to restart Windows.
- 12. Windows NT will restart with the default settings. The Display applet will appear to allow for mode selection.

V. Kesolution 8MB Memory

V. Resolution Table

8MB Video Memory

Resolution	Vertical Frequency	Horizontal Frequency	Color Depth		
			8bpp = 256 colors Standard	16bpp = 65K colors High Color	32bpp = 16.7M colors True Color
640 x 480	60Hz	31.4KHz	√.	√.	√.
	70Hz 72Hz	34.9KHz	1	V	√ √
	72Hz 75Hz	36.1KHz 37.6KHz	\ \lambda	V √	√.
	85Hz 100Hz	43.0KHz 51.0KHz	1	√ √	1
	120Hz	61.8KHz	, v		$\sqrt{}$
	140Hz 144Hz	72.9KHz 75.2KHz	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
	150Hz	78.7KHz	, i	√,	√,
	170Hz 200Hz	92.6KHz 108.6KHz	\bigvee_{i}	$\sqrt[N]{}$	$\sqrt{}$
	240Hz	132.8KHz	, i	V	Ž,
800 x 600	250Hz 60Hz	138.6KHz 37.9KHz	V	V	V V
000 X 000	70Hz	43.8KHz	, i	√,	Ň,
	72Hz 75Hz	45.1KHz 47.0KHz	\int_{0}^{1}	$\sqrt[N]{}$	$\sqrt{}$
	85Hz	53.6KHz	, i	V	Ž,
	100Hz 120Hz	63.7KHz 77.2KHz	$\frac{1}{\sqrt{2}}$	V √	V.
	140Hz	91.1KHz	1	√ 2/	V
	144Hz 150Hz	94.0KHz 98.2KHz	, v	V,	√,
	170Hz 200Hz	112.8KHz 135.0KHz	1	√ √	$\sqrt{}$
	240Hz	166.3KHz	, v	√,	V,
1024 x 768	250Hz 60Hz	172.5KHz 48.4KHz	1	1	V
1024 X 706	70Hz	56.0KHz	V,		√,
	72Hz 75Hz	57.5KHz 60.2KHz	$\bigvee_{}$	$\sqrt{}$	$\sqrt{}$
	85Hz	68.6KHz	, i	√,	Ž,
	100Hz 120Hz	81.7KHz 98.8KHz	$\sqrt{}$	$\sqrt{}$	V
	140Hz	116.6KHz	1	√ 1	V
	144Hz 150Hz	120.0KHz 125.8KHz	, v	V,	V,
1152 x 864	170Hz	144.0KHz	1	√ 2/	\ \ \
1152 X 804	60Hz 70Hz	53.7KHz 62.9KHz	\ \lambda	V,	V,
	72Hz	64.8KHz	1	√ √	$\sqrt{}$
	/5Hz 85Hz	67.6KHz 77.1KHz	, V	√,	V,
	100Hz 120Hz	91.3KHz 111.2KHz	$\sqrt{}$	$\sqrt{}$	√ √
	140Hz	131.4KHz	, i	√,	Ň,
	144Hz 150Hz	135.2KHz 141.3KHz	$\sqrt{}$	$\sqrt[N]{}$	$\sqrt{}$
1280 x 1024	60Hz	64.0KHz	\ \		
	70Hz 72Hz	74.6KHz 76.8KHz	$\sqrt{}$	√ √	√ √
l	75Hz	80.1KHz	, V	, V	Ų,
l	85Hz 100Hz	91.3KHz 108.5KHz	V √	$\sqrt{}$	√.
1600 - 1200	120Hz	131.6KHz	1	1	\ 2
1600 x 1200	60Hz 70Hz	74.6KHz 87.4KHz	V √	$\sqrt{}$	√ √
l	72Hz 75Hz	90.1KHz 84.0KHz	$\sqrt{}$	$\sqrt{}$	√ 2
	85Hz	107.1KHz	V	V	V
1920 x 1080	60Hz 70Hz	67.1KHz 78.7KHz	V	V	_
l	72Hz	81.1KHz	√	$\sqrt[4]{}$	
l	75Hz 85Hz	84.6KHz 96.4KHz	√ √	$\sqrt[4]{}$	_
1920 x 1200	60Hz	74.6KHz	√,	√,	
	70Hz 72Hz	87.4KHz 90.0KHz	√ √	$\sqrt{}$	
	72Hz 75Hz	90.0KHz 94.0KHz	l ∛	I √	_

V. Resolution Table

16MB Video Memory

		Color Depth			
Resolution	Vertical Frequency	Horizontal Frequency	8bpp = 256 colors Standard	16bpp = 65K colors High Color	32bpp = 16.7M colors True Color
640 x 480	60Hz 70Hz	31.4KHz 34.9KHz	√ √	V	V
	72Hz	36.1KHz	V,	V,	V √
	75Hz 85Hz	37.6KHz 43.0KHz	V	V	$\sqrt{}$
	100Hz 120Hz	51.0KHz 61.8KHz)	Ž)
	140Hz	72.9KHz	V,	V,	, v
	144Hz 150Hz	75.2KHz 78.7KHz	V	V	$\sqrt{}$
	170Hz 200Hz	92.6KHz 108.6KHz)	Ž)
	240Hz 240Hz 250Hz	132.8KHz 138.6KHz	, ,	Ž	, v
800 x 600	60Hz 70Hz	37.9KHz 43.8KHz	V	V	V
	72Hz	45.1KHz	V,	V,	, v
	75Hz 85Hz	47.0KHz 53.6KHz	V	V.	V
	100Hz 120Hz	63.7KHz 77.2KHz	N N	√ √	√ √
	140Hz	91.1KHz	V,	V,	, v
	144Hz 150Hz	94.0KHz 98.2KHz	V	V	$\sqrt{}$
	170Hz 200Hz	112.8KHz 135.0KHz	Į į	V V	Į ,
	240Hz	166.3KHz	√,	V,	N,
1024 x 768	250Hz 60Hz	172.5KHz 48.4KHz	V	N V	V V
1021 K 700	70Hz	56.0KHz)	Ž	N N
	72Hz 75Hz	57.5KHz 60.2KHz	V,	V,	, v
	85Hz 100Hz	68.6KHz 81.7KHz	$\sqrt{}$	√ √	$\sqrt{}$
	120Hz 140Hz	98.8KHz 116.6KHz)	Ž)
	144Hz	120.0KHz	V,	V,	, v
	150Hz 170Hz	125.8KHz 144.0KHz	$\sqrt{}$	V	$\sqrt{}$
1152 x 864	60Hz	53.7KHz	V	V	V
	70Hz 72Hz	62.9KHz 64.8KHz	V,	V,	V √
	75Hz 85Hz	67.6KHz 77.1KHz	$\sqrt{}$	V	$\sqrt{}$
	100Hz	91.3KHz)	Ý	N N
	120Hz 140Hz	111.2KHz 131.4KHz	V,	V,	V,
	144Hz 150Hz	135.2KHz 141.3KHz	V	V	V
1280 x 1024	60Hz	64.0KHz	V	V	V
	70Hz 72Hz	74.6KHz 76.8KHz	√,	√,	V,
	75Hz 85Hz	80.1KHz 91.3KHz	√ √	√ √	√ √
	100Hz 120Hz	108.5KHz 131.6KHz	, V	ý	, j
1600 x 1200	60Hz	74.6KHz	√, √,	√,	V V
	70Hz 72Hz	87.4KHz 90.1KHz	$\sqrt[4]{}$	$\sqrt[4]{}$	$\sqrt{}$
	75Hz 85Hz	84.0KHz 107.1KHz	, V	ý	, J
1920 x 1080	60Hz	67.1KHz	N.	N.	N.
	70Hz 72Hz	78.7KHz 81.1KHz	√,	V,	V,
	75Hz 85Hz	84.6KHz 96.4KHz	$\sqrt{}$	$\sqrt{}$	√ √
1920 x 1200	60Hz	74.6KHz	,	Ņ	Ņ
	70Hz 72Hz	87.4KHz 90.0KHz	√,	√, √,	√ √
	75Hz	94.0KHz	$\sqrt{}$	$\sqrt{}$	V

V. Resolution 32MB Memory

V. Resolution Table

32MB Video Memory

TD 1		Color Depth			
Resolution	Vertical Frequency	Horizontal Frequency	8bpp = 256 colors Standard	16bpp = 65K colors High Color	32bpp = 16.7M colors True Color
640 x 480	60Hz	31.4KHz 34.9KHz	V	V	V
	70Hz 72Hz	34.9KHZ 36.1KHZ	V,	√ √,	√ √
	75Hz 85Hz	37.6KHz 43.0KHz	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
	100Hz	51.0KHz	√ ,	$\sqrt{}$	$\sqrt{}$
	120Hz 140Hz	61.8KHz 72.9KHz	V	$\sqrt{}$	√ √
	144Hz	75.2KHz	, V	√ √	, V
	150Hz 170Hz	78.7KHz 92.6KHz	√ ,	√,	V,
	200Hz 240Hz	108.6KHz 132.8KHz	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
000 600	250Hz	138.6KHz	V	Ÿ	V
800 x 600	60Hz 70Hz	37.9KHz 43.8KHz	V,	√,	$\sqrt{}$
	72Hz 75Hz	45.1KHz 47.0KHz	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
	85Hz	53.6KHz	, V	, j	, j
	100Hz 120Hz	63.7KHz 77.2KHz	V,	√,	√ √
	140Hz 144Hz	91.1KHz 94.0KHz	$\sqrt{}$	$\sqrt{\frac{1}{2}}$	$\sqrt{}$
	150Hz	98.2KHz	V,	V,	$\sqrt{}$
	170Hz 200Hz	112.8KHz 135.0KHz	√ √	√ √.	$\sqrt{}$
	240Hz 250Hz	166.3KHz 172.5KHz	$\sqrt{}$	$\sqrt{\frac{1}{2}}$	$\sqrt{}$
1024 x 768	60Hz	48.4KHz	V,	V,	V,
	70Hz 72Hz	56.0KHz 57.5KHz	$\sqrt{}$	$\sqrt[4]{}$	$\sqrt{}$
	75Hz	60.2KHz))	N N
	85Hz 100Hz	68.6KHz 81.7KHz	√ ,	√,	$\sqrt{}$
	120Hz 140Hz	98.8KHz 116.6KHz	$\sqrt{}$	$\sqrt[4]{}$	$\sqrt{}$
	144Hz 150Hz	120.0KHz 125.8KHz)	J J	N N
	170Hz	144.0KHz	V	V	V
1152 x 864	60Hz 70Hz	53.7KHz 62.9KHz	√ √	$\sqrt{}$	$\sqrt{}$
	72Hz 75Hz	64.8KHz 67.6KHz	N N	\int_{1}^{1}	√ √
	85Hz	77.1KHz	V,	$\sqrt{}$	√,
	100Hz 120Hz	91.3KHz 111.2KHz	$\sqrt{}$	$\sqrt{}$	$\sqrt[4]{}$
	140Hz 144Hz	131.4KHz 135.2KHz	N N	\int_{1}^{1}	√ √
	150Hz	141.3KHz	V	V	V
1280 x 1024	60Hz 70Hz	64.0KHz 74.6KHz	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
	72Hz 75Hz	76.8KHz 80.1KHz)	J J	N N
	85Hz	91.3KHz	√,	$\sqrt{}$	$\sqrt{}$
	100Hz 120Hz	108.5KHz 131.6KHz	V V	$\sqrt[N]{}$	$\sqrt[\gamma]{}$
1600 x 1200	60Hz 70Hz	74.6KHz 87.4KHz	V	V	1
	72Hz	90.1KHz	V,	$\sqrt[4]{}$	$\sqrt[3]{}$
	75Hz 85Hz	84.0KHz 107.1KHz	V	√ √	$\sqrt{}$
1920 x 1080	60Hz 70Hz	67.1KHz 78.7KHz	1	1	1
	72Hz	81.1KHz	√,	√,	$\sqrt{}$
	75Hz 85Hz	84.6KHz 96.4KHz	√ √	$\sqrt{}$	$\sqrt{}$
1920 x 1200	60Hz	74.6KHz	V	, ,	V,
	70Hz 72Hz	87.4KHz 90.0KHz	, v	√, √,	$\sqrt[\gamma]{}$
2048 x 1536	75Hz	94.0KHz	supports this ::	√ √	√
2048 X 1330		AGP-V3800 Deluxe	supports this r	esolution	

VI. Troubleshooting

Description

After installation and restarting, Windows 95/98 informs me that the display setting is still incorrect.

My monitor is not capable of high resolution or refresh rate.

DirectX or the other applications report no AGP memory available.

LIVE3800 reports that my board is not a TV model.

Games or applications report "No 3D acceleration hardware found."

memory or run I-Base test.

I cannot enable AGP

My MPEG player displays bad quality video clips.

Recommended Action

- Make sure the "Assign IRQ to VGA" option is enabled in the BIOS.
- Check if there is enough IRQ for VGA.
- Uninstall the driver, restart, and reinstall the driver.
- It depends on the display characteristics of your monitor. Consult your monitor documentation for the proper configuration.
- Windows 95 is not OSR2.1 or later.
- DirectX version is not 6.0 or later.
- You have not installed appropriate drivers for the AGP chipset. (e.g. VGARTD.VXD for Intel 440LX).
- Incorrect BIOS setting. BIOS must support at least 64MB for AGP aperture size.
- Your adapter has no video-in options.
- 3D works only in 16- or 32-bit color depth. Switch your color depth display mode to 16-bit (high color) or 32-bit (true color).
- Check necessary libraries, such as DirectX or OpenGL.
- Try to switch to a lower resolution.
- You may be using a motherboard with an Aladdin IV AGPset. To get the best compatibility, the display card uses AGP Bus Master mode instead of AGP execute mode for motherboards using this AGPset.
- You must install DirectX 6 or later so that your player can take advantage of the hardware acceleration mode (DirectDraw).
- Try to switch to a lower resolution, color depth, or refresh rate. Switching to a lower mode allows your player to use hardware acceleration mode.
- Switch dual view mode to VGA or TV mode.