

EUT : VGA CARD

FCC ID : FQI-VANTASD

JOYTECH COMPUTER CO., LTD.

USER'S MANUAL

## **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.

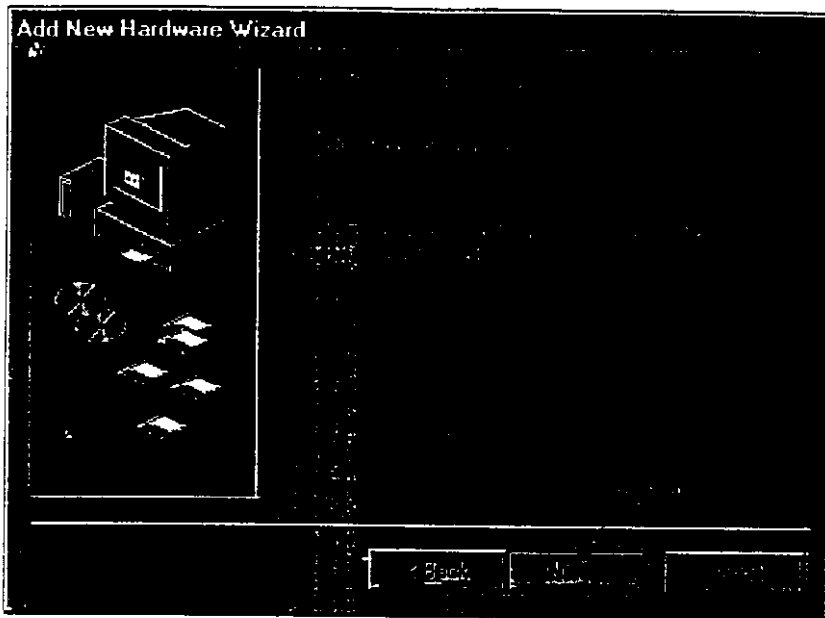
### **NOTE**

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:

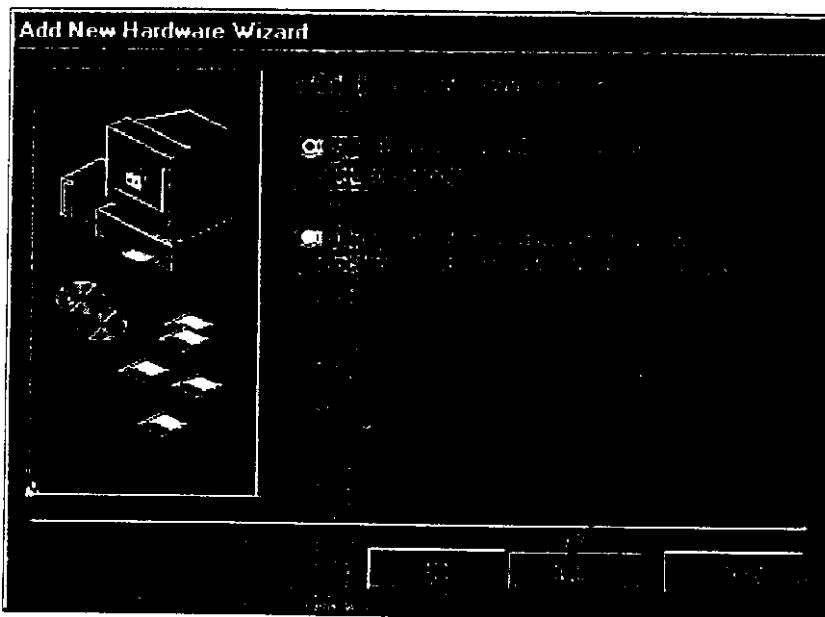
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.



The default is " Next", press " Next ", after that, you will see a dialog as follows.



The default is " Search for the best driver.... ", select it then press "Next ", after that, you will see a dialog as follows.

*Congratulations and welcome your purchase of this advanced graphic accelerator or sound card. This enclosed setup CD contains all the information about the board. May you enjoy it doing it by yourself. Following is the important installation procedure in Chapter 1 and 2.*

**Chapter 1 Hardware Installation - Safely placing the card in your computer**  
**Chapter 2 Software Installation - Easily installing the enhanced driver**  
**Chapter 3 Video Mode Tables**

#### **Chapter 1 Hardware Installation - Safely placing the card in your computer**

1. Please power off your computer and monitor, then disconnect the monitor from the back of your computer.
2. Be aware to discharge your body's static electricity by touching the metal surface of computer chassis. Then remove the computer cover.
3. If there is an existing card in your system, replace it gently but save the screw. Or, you may need to remove the cover from the rear of expansion slot that you select.
4. Align your card with an empty corresponding expansion slot (PCI or AGP), then carefully grasp the card by top edge and put it firmly into the slot. Secure the screw to fasten the card in place and replace the computer cover.
5. Plug the monitor cable into your card, then turn on the computer and monitor.
6. Now you have finished the hardware installation and are ready to install the driver.

#### **Chapter 2 Software installation - Easily installing the enhanced driver**

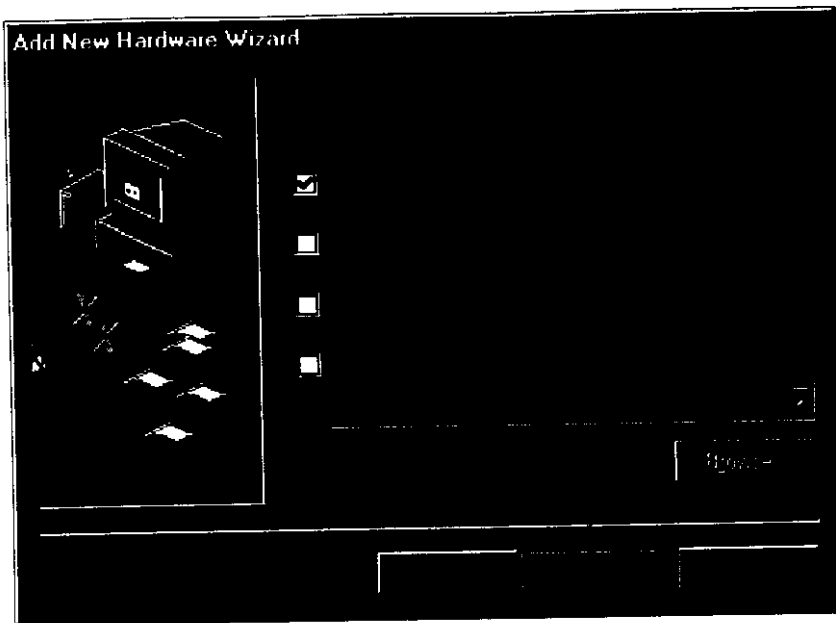
The Setup CD title bring you to take advantage of your card's performance. But, there are some issues you should note in advance.

1. If it is the first time you install the card by the Plug and Play feature of Windows 95/98. Windows will find a new hardware and ask for the driver. There are four (4) different kind conditions from Windows 98, Windows 96 OSR 2, Windows 95 and Windows NT. The basic rule is to click " Next ", " Next"...until " Finish ".

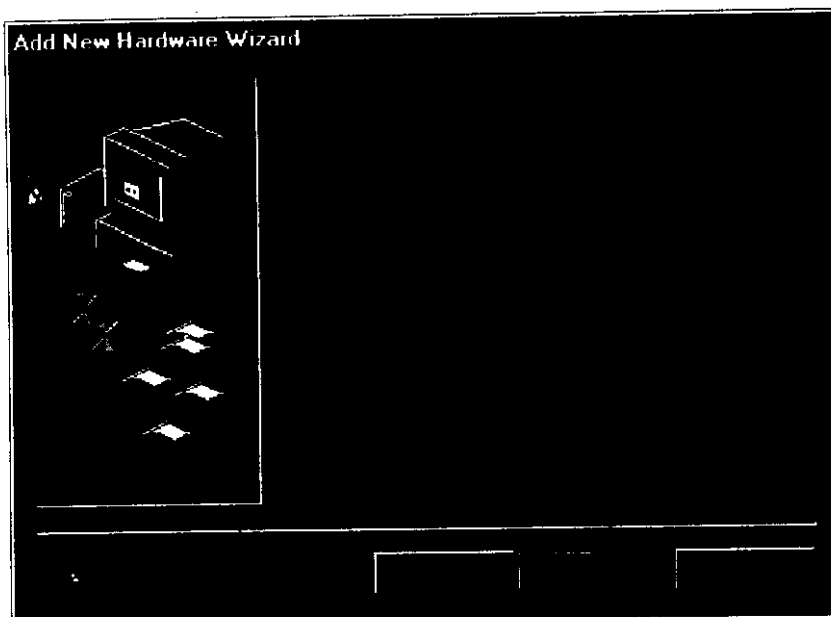
##### **For Windows 98:**

(The general rule is to click Next", Next" ... until Finish")

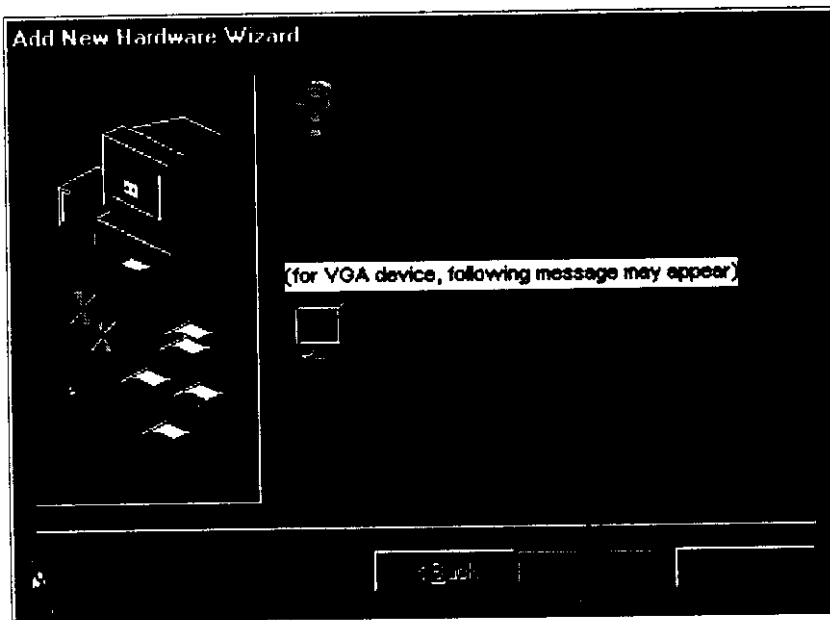
**After launch Windows 98, you will see a dialog similar to the one (Add new hardware Wizard) in the window.**



The default is " Next ", press " Next ", after that, you will see a dialog as follows.



The default is " Next ", press " Next ", after that, you will see a dialog as follows.



While Windows prompt you to restart Windows, please click " Yes " to restart your system. After Windows restarting, go to step 2.

#### **For Windows 95 OSR2:**

(The general rules is to click Next", Next".... until Finish ")

After launch Windows 95 OSR2, You will see a dialog similar to the one (Update Device Driver Wizard) in the Windows.

The default is " Next ", press " Next ", after that. You will see a dialog as follows.

Simply press " Finish ", and after that you will see following window:

Please insert your Windows 95 CD-title into CD-ROM driver, then follow on-screen instructions to go on.

While Windows prompt you to restart Windows, Click " Yes " to restart Windows. After Windows restarting, go to step 2.

#### **For Windows 95 (Original Version)**

After launch Windows 95, you will see a dialog similar to the one (New Hardware Found) in the windows.

Click " Do not install a driver (Windows will not prompt you again) " then press " OK ".

After that, if the card you are installing is a VGA card, you will see the below dialog; for the other cards, you can skip the following procedure and go directly to step 2.

Press " Cancel ", and then you will see:

Click " Cancel ", then go to step 2.

While Windows prompt you restart Windows; please click " Yes " to restart your system. After Windows restarting go to step 2.

#### For Windows NT:

Please select VGA mode from boot menu, if it is your first time to start Windows NT.

2. Insert the Setup CD into your CD-ROM driver.

IF Windows 95/98 runs the CD-ROM automatically, proceed to step 3.

3. It will auto-launch the setup program on Windows 95/98 or Windows NT then click a proper driver.

4. If you are on the other platform on the setup program does not auto-run, please double click the **MSETUP.EXE** on the root of the setup CD. After a setup display in the specific setup window, you can conveniently install the driver and related software by the on-screen instructions to complete the installation.

The following windows is an example Setup Window for 3Dfx Banshee, other chipset has similar picture. Click the button to install a corresponding drivers or software. While Windows prompt you to restart Windows, please click YES to restart your system.

### Chapter 3 Video Mode tables

#### Video Mode Tables

##### nVidia TNT AGP/16MB

Color Depth	8-bit	16-bit	24-bit	32-bit
Resolution	Refresh Rate	Refresh Rate	Refresh Rate	Refresh
Rate				
640X480	60-170	60-170	-	60-170
800X600	60-144	60-144	-	60-144
1024X768	60-100	60-100	-	60-100
1152X864	60-100	60-100	-	60-100
1280X1024	60-85	60-85	-	60-85
1600X1200	60-75	60-75	-	60-75

**3Dfx Voodoo Banshee AGP/16MB**

Color Depth	8-bit	16-bit	24-bit	32-bit
Resolution	Refresh Rate	Refresh Rate	Refresh Rate	Refresh Rate
640X480	60-120	60-120	60-120	60-120
800X600	60-120	60-120	60-120	60-120
1024X768	60-100	60-100	60-100	60-100
1280X1024	75-85	75-85	75-85	75-85
1600X1200	65-75	65-75	65-75	65-75

**Trio 3D AGP/8MB**

Color Depth	8-bit	16-bit	24-bit	32-bit
Resolution	Refresh Rate	Refresh Rate	Refresh Rate	Refresh Rate
640X480	60-85	60-75	60-75	-
800X600	56-85	56-85	56-85	-
1024X768	43-85	43-85	43-85	-
1280X1024	43-60	43-60	43-60	-
1600X1200	-	-	-	-

**nVIDIA TNT2 AGP/16/32MB**

Color Depth	8-bit	16-bit	24-bit	32-bit
Resolution	Refresh Rate	Refresh Rate	Refresh Rate	Refresh Rate
640X480	60-170	60-170	-	60-170
800X600	60-144	60-144	-	60-144
1024X768	60-100	60-100	-	60-100
1152X864	60-100	60-100	-	60-100
1280X1024	60-85	60-85	-	60-85
1600X1200	60-75	60-75	-	60-75

**nVIDIA M64 AGP/16/32MB**

Color Depth	8-bit	16-bit	24-bit	32-bit
Resolution	Refresh Rate	Refresh Rate	Refresh Rate	Refresh Rate
640X480	60-170	60-170	-	60-170
800X600	60-144	60-144	-	60-144
1024X768	60-100	60-100	-	60-100
1152X864	60-100	60-100	-	60-100
1280X1024	60-85	60-85	-	60-85
1600X1200	60-75	60-75	-	60-75



**RIVA128ZX AGP/8MB**

Resolution	Color Depth	8-bit Refresh Rate	16-bit Refresh Rate	24-bit Refresh Rate	32-bit Refresh
<b>Rate</b>					
640X480		60-75	60-75	-	60-75
800X600		60-75	60-75	-	60-75
1024X768		60-75	60-75	-	60-75
1152X864		60-75	60-75	-	60-75
1280X1024		60-75	60-75	-	60-75
1600X1200		60	60	-	60

**VANTA AGP/16/32MB**

Resolution	Color Depth	8-bit Refresh Rate	16-bit Refresh Rate	24-bit Refresh Rate	32-bit Refresh
<b>Rate</b>					
640X480		60-170	60-170	-	60-170
800X600		60-100	60-100	-	60-100
1024X768		60-85	60-85	-	60-85
1152X864		60-100	60-100	-	60-100
1280X1024		60-85	60-85	-	60-85
1600X1200		60	60	-	60

**SAVAGE 4 AGP/16/32MB**

Resolution	Color Depth	8-bit Refresh Rate	16-bit Refresh Rate	24-bit Refresh Rate	32-bit Refresh
<b>Rate</b>					
640X480		60-160	60-160	-	60-160
800X600		56-85	56-85	-	56-85
1024X768		60-85	60-85	-	60-85
1152X864		60-100	60-100	-	60-100
1280X1024		60-85	60-85	-	60-85
1600X1200		60	60	-	60

**Intel i740 AGP/8MB**

Resolution	Color Depth	8-bit Refresh Rate	16-bit Refresh Rate	24-bit Refresh Rate	32-bit Refresh
<b>Rate</b>					
640X480		60-85	60-85	60-85	-
800X600		56-85	56-85	56-85	-
1024X768		60-85	60-85	60-85	-
1280X1024		60-85	60-85	60-85	-
1600X1200		60-75	-	-	-

**3DLabs Permedia2/8MB**

Color Depth	8-bit	16-bit	24-bit	32-bit
Resolution	Refresh Rate	Refresh Rate	Refresh Rate	Refresh
Rate				
640X480	60-100	60-100	60-100	-
800X600	60-100	60-100	60-100	-
1024X768	60-75	60-75	60-75	-
1152X870	60-75	60-75	60-75	-
1280X1024	60-75	60-75	60-75	-
1600X1200	60-75	60-75	60-75	-

**Cirrus Logic 5465 AGP/ 4MB**

Color Depth	8-bit	16-bit	24-bit	32-bit
Resolution	Refresh Rate	Refresh Rate	Refresh Rate	Refresh
Rate				
640X480	60-85	60-85	60-85	-
800X600	56-85	56-85	56-85	-
1024X768	60-85	60-85	60-85	-
1152X864	70-85	70-85	70-85	-
1280X1024	60-85	60-85	60-75	-
1600X1200	60-96i	60-96i	-	-

**3Dfx VoodooII PCI/12MB**

Mode	Double Buffer (No Z)	Double Buffer (With Z)	Triple Buffer (No Z)	Triple Buffer (With Z)
Resolution	Refresh Rate	Refresh Rate	Refresh Rate	Refresh Rate
640X400	72-120	72-120	72-120	72-120
640X480	72-120	72-120	72-120	72-120
800X600	72-120	72-120	72-120	72-120

Remark: Refresh rate might be varied slightly according to user's monitor size.