

**TRIDENT BLADE 3D**  
**SP9880**  
**3D GRAPHIC ACCELERATOR**

**MANUAL**

# BLADE 3D 9880

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## Important

Operating System requirement:

### **For Windows 95 user**

Need OSR2.1 or newer version.

OSR2.1 means OSR2.0 + USB supplement upgrade.

Please find this upgrade file "usb supp.exe" from your OS supplier.

DirectX 5.0 r newer

### **For Windows 98 user**

DirectX 5.0 r newer

### **For Windows NT4.0 user**

Need at least SP3 or newer version

Please find this **Service Pack 3** upgrade from your OS supplier.

## **1. SP9880 Features**

### **High Performance rCADE3DAccelerator**

- AGP 2X with side band addressing for up to 533 Mbytes per second
- Single Cycle Pipelined Engine
- Per Pixel Mip-Mapping
- Multiple Levels of Detail (LOD)
- 32-bit Color Rendering
- 1/16<sup>th</sup> Sub-Pixel Precision
- Perspective Correct Textures
- DirectX 6 Texture Compression & Anisotropic Filtering
- 4Kbyte Texture Cache
- DirectDraw™ acceleration
- Multiple Buffering

### **Setup Engine**

- 32-bit IEEE Floating Point Input Data
- Slope and vertex calculations
- Back Facing Triangle Culling
- Deep Command List
- Flexible Vertex Buffers
- Triangle Strips and Fans

### **Rendering Engine**

- Gourard and Flat Shading
- Scene Anti-Aliasing
- OpenGL compliant blending for fog and depthcueing
- 16-bit Z-buffer

### **Texturing Engine**

- Anisotropic, Tri-Linear, Bi-Linear, Point-Sampled Filtering
- Mip-Mapping with 11 Levels-Of-Detail
- Color Key and Alpha Blending
- 1/2/4/8-bits per pixel Palletized Textures

### **2D GUI Engine**

- 8/15/16/24/32-bits per pixel color formats
- 256 Raster Operations (ROPs)
- BitBLTs, lines, polygons, fills, patterns, clipping, bit masking
- Panning, scrolling, clipping, color expansion, sprites

### **DVD with THAMA™**

- Trident Hardware-Assisted MPEG-2 & AC-3
- Simultaneous Motion Compensation and Front End Processing
- Dynamic Frame and Field De-Interlacing
- Pan and Scan Support
- Tamper-Proof Software Copy Protection
- Supports DVD 1.0, VCD 2.0 and CD-Karaoke
- Microsoft DirectShow native support, MCI backwards compatibility
- No additional frame buffer requirements

### **Memory Interface**

- 8Mbyte Frame Buffer
- 64-bit 125MHz SGRAM/SDRAM

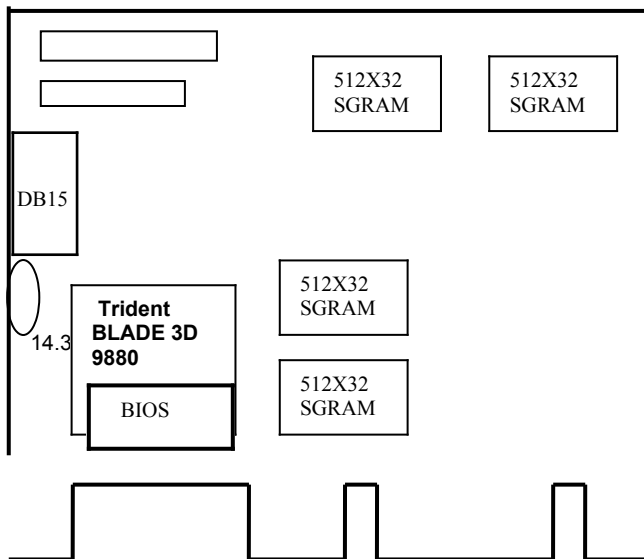
### **CRT Interface**

- Integrated 24-bit 230MHz RAMDAC
- DDC2B & VESA™ DPMS

## 2. Board outline

SP9880 using SGRAM

8MB on board, board size: 144 x 97 mm.



### **3. Hardware Installation**

#### **3.1 Package Contents**

1. Trident 9880 card.
2. CD title or Software diskettes
3. This manual.(D:\Manual\9880manu.doc)

#### **3.2 Installing the Card**

1. Turn off your computer.
2. Remove the cover of the computer per the owner's manual.
3. Install the card in the AGP bus slots.
4. Replace the cover.

### 3.3 Resolutions, refresh rate and colors supported:

9880 AGP bus VGA cards are fully compatible VGA with the addition of Hi-Color and True Color modes depending on the amount of video memory staled. The amount of memory needed to display various resolutions is shown below

8 MB on board support:

Resolution & Colors	BPP	Refresh Rate(Hz)
640X480-256	8	60 / 70 / 72 / 75 / 85 / 100 / 120 / 160
640X480-64K	16	60 / 70 / 72 / 75 / 85 / 100 / 120 / 160
640X480-16M	32	60 / 70 / 72 / 75 / 85 / 100 / 120 / 160
800X600-256	8	60 / 70 / 72 / 75 / 85 / 100 / 120 / 160
800X600-64K	16	60 / 70 / 72 / 75 / 85 / 100 / 120 / 160
800X600-16M	32	60 / 70 / 72 / 75 / 85 / 100 / 120 / 160
1024X768-256	8	60 / 70 / 72 / 75 / 85 / 100 / 120
1024X768-64K	16	60 / 70 / 72 / 75 / 85 / 100 / 120
1024X768-16M	32	60 / 70 / 72 / 75 / 85 / 100 / 120
1280X1024-256	8	60 / 70 / 72 / 75 / 85 / 100
1280X1024-64K	16	60 / 70 / 72 / 75 / 85 / 100
1600X1200-256	8	60 / 70 / 72 / 75 / 85
1600X1200-64K	16	60 / 70 / 72 / 75 / 85

## 4. Smart Installation

### 4.1 Put the Smart Installation CD in your CD-ROM



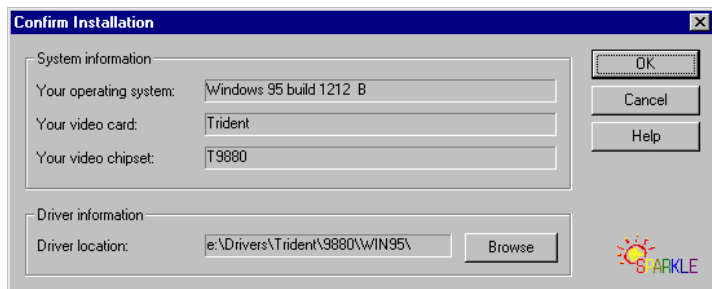
- 4.2 Select the language for you.** Default is same as system language.  
(Click small UP/DOWN arrow for more languages)  
Then click the **Driver installation** button





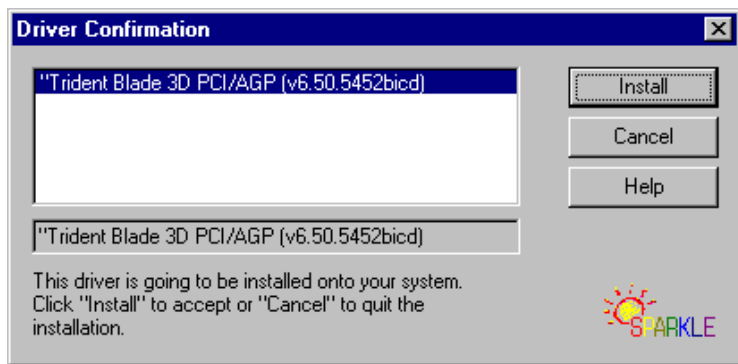
### 4.3 Comes up the Confirm Installation window

Click **OK**, if the information and driver location is fine.



### 4.4 The Driver Confirmation window

Then click **Install** button



### 4.5 Install complete, please restart your computer.

## 5. Manually install Windows 95 & Windows 98 drivers

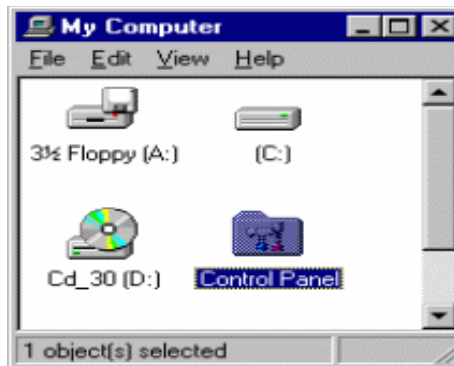
### 5.1 Installation and Setup

#### 5.1.1 Windows95 VER: OSR2.0

The Windows setup program installs and modifies all of the necessary files. Follow these steps to install the Windows 95 driver.

Insert the "Window 95 Driver" Installation Diskette or DISC (CD Title Driver).

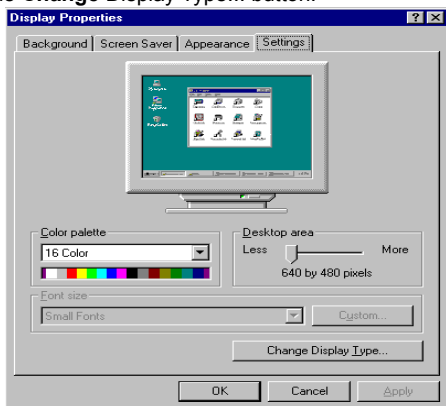
- Select **Control Panel** from **My Computer** group.



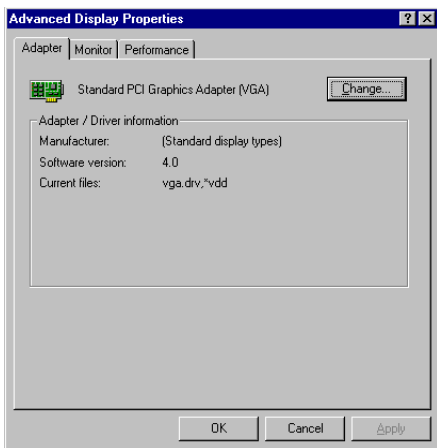
- Select the **Display** icon



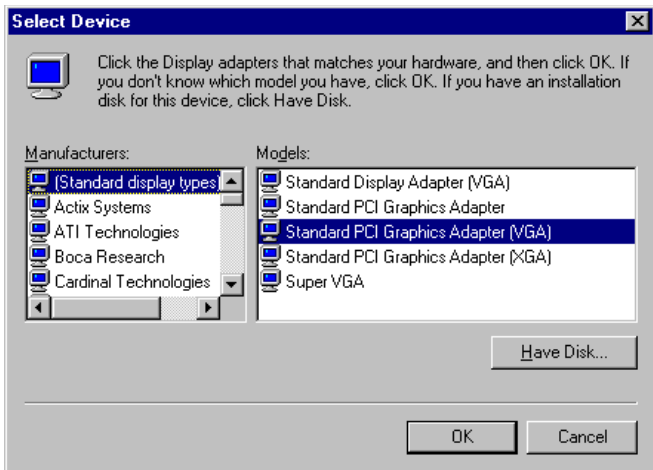
- Double-click on the **Display** icon in the Setting -> **Control Panel** folder. You can also click the right mouse button anywhere on the desktop and select the Properties option from the pop-out menu.
- Click the **Settings** tab.
- Click the **Change Display Type...** button.



- Click the **Change** button



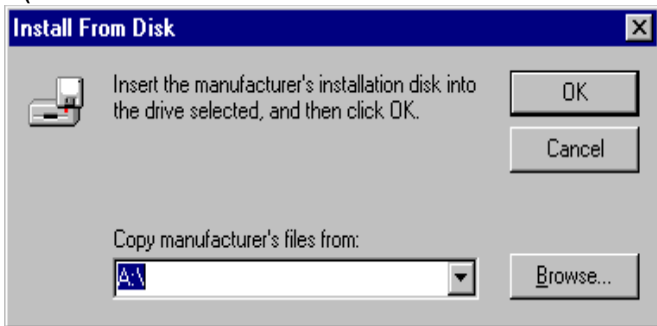
- Click the Have Disk button.

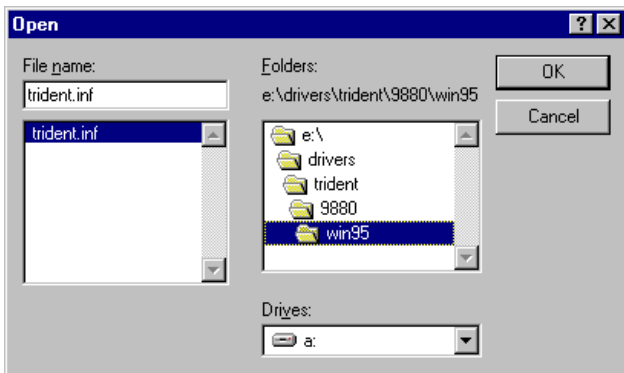


- Change directories and Select Trident 9880

Diskette is **A:** or **B:WIN95** , Disc (CD Title) is **E:\drivers\Trident\9880\WIN95**

- ("**A:**" or "**B:**" → Diskette Drive "**E:**" → CD Drive

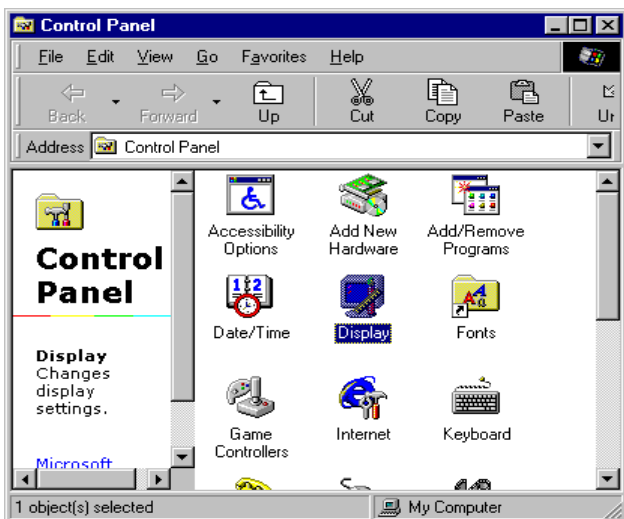




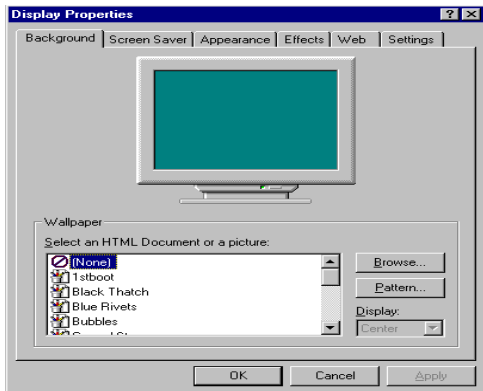
- Select Trident 9880 PCI/AGP driver from the list and click **OK** button. If a message stating that one or more driver files is older than the files on the system respond **YES** to overwrite the files.
- Click the Close button and Apply button, and restart your computer.

### 5.1.2 Windows98

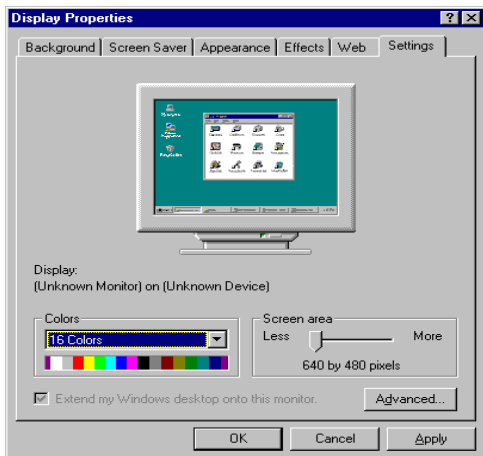
- Select **Control Panel** from **My Computer** group.



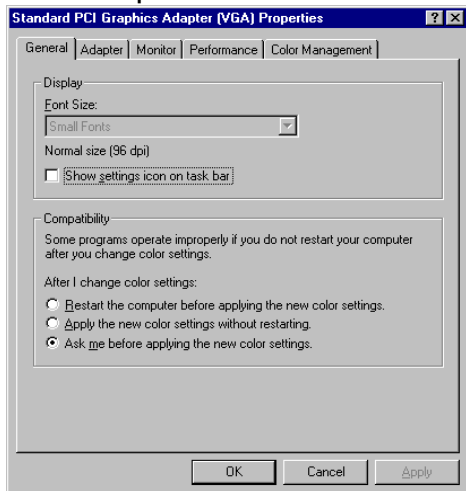
- Select the **Display** icon



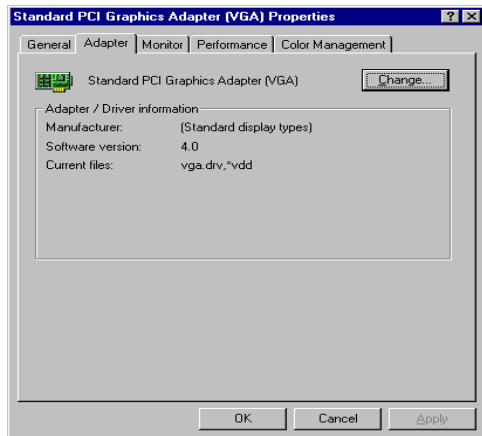
- Double-click on the **Display** icon in the Setting -> **Control Panel** folder. You can also click the right mouse button anywhere on the desktop and select the Properties option from the pop-out menu.
- Click the **Settings** tab.



- Then show **[Unknown Device.] Properties** tab  
Select **Adapter**



- Then show **Standard PCI Graphics....** tab  
Select **Change**



- Then show **Update Device ...** tab  
Select **Next**

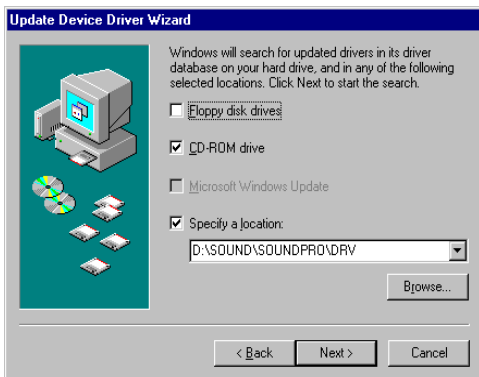


- Then show **Update Device...** tab  
Select **Search for a better...**  
Then select **Next**

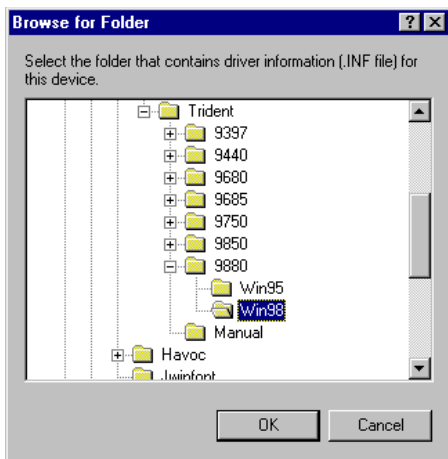




- Then show **Update Device ...** tab  
If the **Specify a location** is wrong  
Please select **Browse**



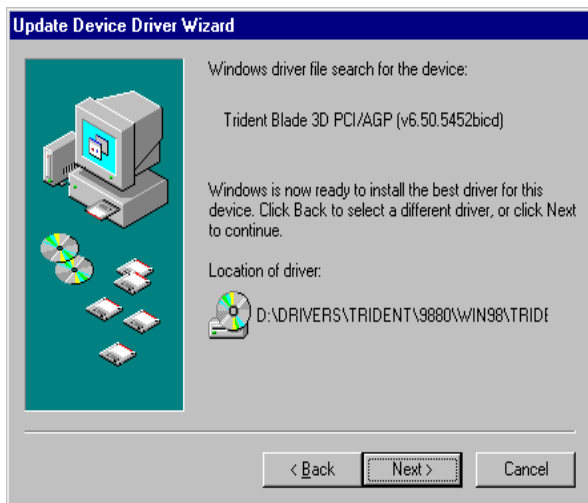
- Then show **Browse for Folder** tab ,Select you need driver  
Then select **OK**



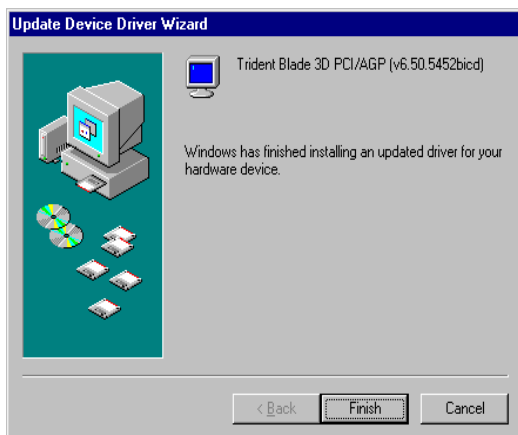
- Then show **Update Device Driver Wizard** tab  
Select **CD-ROM driver**  
Click the **Specify a locator**, if right  
Then select **Next**



- Then show **Update Device Driver Wizard** tab  
Select **Next**



- Then show **Update Device Driver Wizard** tab  
Select **Finish**



- Then show **System Settings Change** tab  
Select **OK**



## 5.2 How to Change Color Depth and Resolution

1. Make sure that you have installed the **WINDOWS95** Driver.
2. Click on the **Start** box in the lower left corner and proceed to **Control Panel**.
3. Inside the **Control panel** group , click on **Display** icon to open the **Display Properties** folder and select the **Setting table**
4. Click on the pull-down arrow from the **Color** palette area to select color depth or adjust the sliding bar to either **Less** or **More** from the **Desktop area**
5. Select **OK** to restart **WINDOWS95** and new color depth or the new resolution takes effect.

## 6. Windows NT4.0 Setup

The following steps describe how to install WindowsNT4.0 display drivers

1. Select **Control Panel** from the **Main** group.
2. Select the **Display** icon.
3. Select **Change Display Type**.
4. Select Change from the **Adapter Type** area.
5. Select **Other**.
6. Place the **Windows NT** Installation Disk or Disc (CD Title) into Driver. Click **OK**.
7. Select **Install** and click "**YES**" when the Installing Driver dialog box appears.
8. When the **WINDOWS NT Setup** dialog box appears select driver A or CD ROM, and click "**Continue**".

A message appears stating that drivers were successfully installed. Click **OK**. Another message appears stating that the driver could not be restarted dynamically. Restart **Windows NT** to run the new driver. Click **OK**.

## **FCC Statement**

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. (2) this device must accept any interference received, including interference that may cause undesired operation.

### **Warning:**

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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 the instructions, may cause harmful interference to radio or television reception. 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.

### **Notice:**

(1) An Unshielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used.

(2) Use only shielded cables to connect I/O devices to this equipment.

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

## **Trademark Acknowledgments**

All brand names and trademarks are the property of their owners.