



**MANUAL**

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## SECTION 1

### Introduction

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#### 1.1 Features

Thank you for purchasing our VGA graphics board. The adapter works with you IBM PC/XT/AT (or compatible) to bring you super-high resolution, 256-color capability, fast screen redraw, compatibility with most soft ware and hardware.

#### Compatibility

- 486, 386, 286 and PC compatibles
- Register compatible with Hercules, MDA, CGA, EGA and VGA
- Non-interlaced or interlaced monitor support
- Compatible with Multi-Sync and PS/2 monitors
- 72Hz VESA standard (800 x 600 resolution)
- 1024 x 768 70 Hz refresh

#### Resolution And Color Selection

Memory	256K DRAM	512K DRAM
640 x 400	—	256-NI*
640 x 480	16-NI	16-NI, 256-NI
768 x 1024	—	16-I**
800 x 600	16-NI	16-NI, 256-I/Ni
1024 x 768	4-I	4-I, 16-I/Ni

\*NI = Non-interlaced    \*\*I = Interlaced

### Extended Text Display

- 80-column text modes in 30, 43, and 60 rows
- 132-column text modes in 25, 30, 43 and 60 rows

### Software Drivers Supported

- AutoCAD    ■ Autoshade    ■ CADKEY
- Framework    ■ GEM Desktop    ■ Lotus
- MS Windows    ■ MS Word    ■ P-CAD
- Symphony    ■ Ventura    ■ VersaCAD
- WordPerfect    ■ WordStar    ■ OS/2 Presentation
- Quattro Pro    ■ VESA BIOS Extension Manager

#### 1.2 Check List

In addition to this manual, you should have the following:

- VGA Graphics Adapter
- Two Driver & Utility Diskettes

If any of these items are missing or damaged, contact your dealer.

Take this time to record the following information:

**Dealer:**

**Date of Purchase:**

**Invoice Number:**

**Dealer's Phone:**

Please have the serial number from your adapter ready when you call.

**IMPORTANT:** Keep all packaging materials that accompany your adapter in the event you need to return the product.

## SECTION 2

### Configuring Your VGA Adapter

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This section explains how to configure the adapter for use with your computer system.

**WARNING:** Incorrect setting or use of the adapter may result in damage to the computer system, monitor, or the graphics adapter itself. Carefully read through this manual before installing the adapter in your system. Step-by-step instructions in the "Installation" section will guide you through the installation process.

### 2.1 Hardware Configuration

Figure 1 is a diagram of the VGA graphics adapter. Board features are listed.

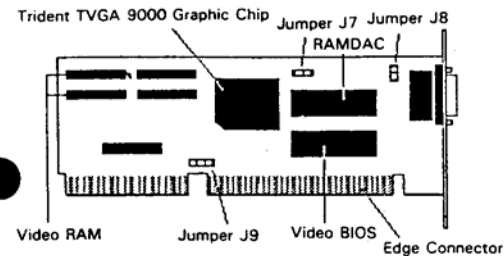


FIGURE 1. Jumper & Component Locations

### 2.2 Jumper Settings

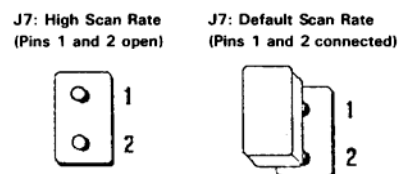
You can adapt the VGA adapter for special hardware configurations using the given jumpers on the card.

#### 2.2.1 Select Scan Rate: Jumper J7

J7 allows you to configure the scan rates of extended VGA modes to be compatible with your multi-scanning monitor. **J7 is operational for the 4 DRAM (512K) configuration only.** If your monitor can scan at 48.7 kHz or higher, remove the Jumper pin across J7. J7 in the open position will allow non-interlaced display for 1024 x 768-16, and higher horizontal and vertical scan rates for 800 x 600-16. If your monitor cannot scan at 48.7KHz, leave Jumper J7 in the default

position. This will give interlaced display for 1024 x 768-16 and reduced horizontal and vertical scan rates for the 800 x 600-16 color. Reference Table 2 (page 3-4) and Table 5 (Appendix A-4) for more detail on scan rates. Figure 2 illustrates the two settings for Jumper J7.

**Figure 2. J7 Settings for Selecting Scan Rate**



**NOTE:** Be sure to check your multi-scanning monitor's specifications before selecting the scan rate. Selecting a scan rate higher than the monitor can handle may damage the monitor.

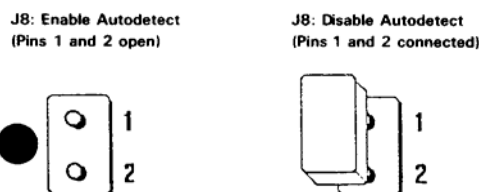
**IMPORTANT:** 60Hz and 70Hz refresh rates are available for 1024 x 768, 16 colors, non-interlaced. The default value is 60Hz. To achieve 70Hz refresh rate (requires monitor with a scan rate of 56.4 KHz or higher), use the TVGACRTC program located on driver/utility diskette #1.

### 2.2.2 Enable/Disable Autodetect: J8

J8 allows you to enable/disable the BIOS Autodetect feature. The Autodetect feature controls the BIOS interface (8 or 16-bit). When enabled (default) the BIOS will sense whether the VGA Adapter is in an 8-bit or 16-bit slot, and will configure the BIOS interface accordingly. When disabled, the board will boot up in its default 8-bit BIOS interface setting.

**NOTE:** If you have problems booting your system, set Jumper J8 to disable autodetect, or place the card in an 8-bit slot.

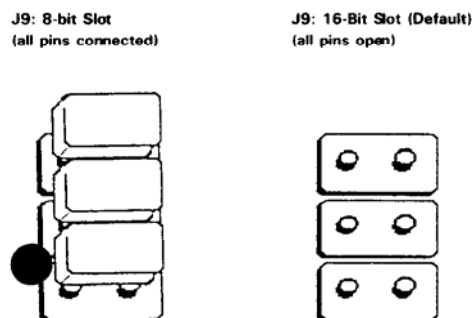
**Figure 3. J8 Setting to Enable/Disable Autodetect**



### 2.2.3 8-bit or 16-Bit Slot: Jumper J9

Jumper J9 is used to configure the VGA adapter for an 8-bit or 16-bit slot. Figure 4 illustrates the two settings for Jumper J9.

**FIGURE 4. J9 Settings for Monitor Detection Control**



## Install the VGA Drivers & Utilities

Using UNPACK.EXE, EXTRACT.EXE, INSTALL.EXE utility. The distribution diskettes contain the executable files necessary to install drivers and utilities using VGA ULTRA display board. The installation step can be taken by automatic installation utility or manual installation procedure.

### INSTALLATION

Before beginning, make back up copies of the original distribution diskettes and store the originals in a safe place. Use the backup diskette to perform the installation procedure.

To install the VGA Ultra drivers and utilities:

1. Insert distribution disk #1 into drive A or B.
2. Check which install program on your diskette (will be one of UNPACK.EXE, EXTRACT.EXE, INSTALL.EXE). Then at the DOS prompt enter the install program's file name.

A: UNPACK [CR] or A: EXTRACT [CR] or A: INSTALL [CR]

3. The menu type installation menu will pop up. Follow the interactive prompt to select your target and PACKED files (in self-extract format). Before you start the installation please use the HELP function for further procedure.
4. After UNPACK the drivers please refer the relative document files for more detail about the setup instruction of your application.

### Manual Installation

If problems occur which prohibit the automatic installation, a step by step procedure can be used to manually install the disks.

1. Create (if required) the User's Application Directory.  
(example: MD C:\ACAD [CR])
2. Move to the directory.
3. Insert the backup VGA Ultra distribution diskette at driver A then at DOS prompt type the relative executable file name.  
(example for ACAD will be entry as following under DOS Prompt)

A:\acad [cr] or A:\PTD\ACAD [CR]

(depending on the executable file location)

After this process completes, you have successfully load driver on target directory. Then follow the instruction under document file to set up your application.

**NOTE:** The latest update information can be found at DOC or README files relative to your application under distribution diskette.

