

EUT:VOODOO CARD

FCC ID:ILLFXG150C

BRITEK ELECTRONICS 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.

## 1. INTRODUCTION

The **VIEWTOP 3D Voodoo-1** Game Accelerator have been implemented with 3Dfx's Interactive Voodoo Rush game accelerator and 128-Bit 2D graphics accelerator. That provides the highest performance 2D and 3D solution with full PC compatibility for multimedia graphics acceleration.

### 1.1 General Feature Description

Feature	Product Model Number	
	B3D-3F1	B3D-3F1-TV
128-bit 2D Graphic Engine	YES	YES
Integrated 170MHz DAC	YES	YES
3D Setup/Rending Engine	3Dfx Voodoo Rush	3Dfx Voodoo Rush
VMI port	YES	YES
Software MPEG Driver	YES	YES
Refresh rates to 200Hz	Optional	Optional
Virtual desktop to 1600x1200	YES	YES
2D Display Buffer Size	2M Byte	2M Byte
3D Texture Buffer Size	2M Byte	2M Byte
PCI v2.1 Bus interface	YES	YES
3D Glasses support	Optional	Optional
NTSC/PAL TV Output	Optional	YES

### 1.2 3D Feature Description

- Perspective correct texture mapping
- Bi-linear and tri-linear texture filtering
- Level-of-detail (LOD) MIP mapping
- Sub-pixel and sub-textel correction
- Gouraud shading and texture modulation
- Full 24-bit rendering, dithered to 16-bit RGB
- 13 texture formats including 8-bit compressed and 8-bit paletted formats
- Full bi-linear blending of paletted and compressed textures
- Anti-aliasing
- Depth buffering (16-bit linear, 22-bit effective)
- Alpha blending
- Per-pixel special effects: fog, transparency, translucency
- Texture compositing, morphing, animation
- Linear frame buffer access

### 1.3 Software Drivers List

- ⇒ VIEWTOP Utilities
- ⇒ AutoDesk® ADI
- ⇒ Microsoft Windows™ 3.1x with DCI
- ⇒ Microsoft Windows NT™ 3.5x/4.0
- ⇒ MicroStation™ 4.0/5.0
- ⇒ Microsoft DirectDraw & DirectVideo
- ⇒ WordPerfect® 6.0
- ⇒ NeXTStep™

- ⇒ Microsoft Windows 95™
- ⇒ Eten Chinese system display driver
- ⇒ LINUX display driver 1.0
- ⇒ Major 3D APIs:
  - 3Dfx (rhide)
  - Criterion Renderware
  - Argonaut Brender
  - QuickDraw 3D Rave
- ⇒ SCO Open Desktop
- ⇒ Gamma Correction 2.0j
- ⇒ OS/2 3.0 (Optional)

### 1.4 System Requirements

- 120MHz (or faster) Intel Pentium™ CPU
- Vacant PCI slot
- Minimum 16MB RAM, 32MB Recommended
- For Glide: MS-DOS® revision 6.22 or higher, Windows® 95 or Windows® NT 4.0
- For Direct3D/DirectDraw™: Windows® 95 or Windows® 98

### 1.5 Advanced Information

For more information, please refers to 3Dfx web site at:  
<http://www.3dfx.com/>

### 2.3 Board Installation

To install the **VIEWTOP 3D Voodoo-1** Game Accelerator, follow the steps below:

1. Turn off your computer, but leave the power cable connected to the wall outlet to ensure that your computer is grounded.
2. Remove the screws from the back of the system unit cover and slowly pull the cover forward to remove it from the system unit.
3. Locate an available (unused) expansion slot. Your **VIEWTOP 3D Voodoo-1** Game Accelerator can be installed in any full or half length PCI expansion slot. Remove the slot cover and save the screw to anchor the accelerator board mounting bracket later.
4. Pick up the board (still in its sleeve) by grasping the edge bracket with one hand. Avoiding pressing on board components. With your other hand, touch an unpainted metal surface to discharge any built-up static electricity in your body.
5. Remove the plastic sleeve and with your free hand, touch an unpainted metal surface a second time to ensure there is no static buildup.
6. Insert the board into the expansion slot. Press it firmly to ensure that the board is fully seated. Anchor the board mounting bracket using the screw you set aside previously.
7. Replace the cover on the system unit and connect your analog VGA or compatible monitor to the accelerator board's 15-pin VGA connector, and fasten the retaining screws (if any).

### 3. SOFTWARE UTILITIES

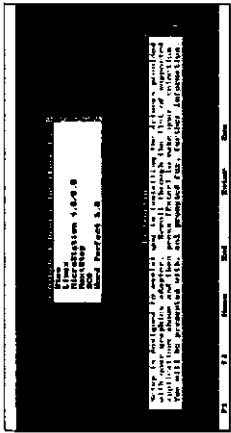
To facilitate the smooth installation of the optimized display drivers and utility software provided with your multimedia accelerator, you should read the instructions in this section carefully prior to attempting installation. The optimized display drivers for your multimedia accelerator may have been provided on diskette or compact disk (CD). If you received diskettes with your accelerator and have not already done so, first make a backup copy of the driver installation diskette(s) and store the original in a safe place. Refer to your operating system manual for details on how to duplicate a diskette. You should use the backup copy you have made for all subsequent steps. If you received driver CD with your accelerator, see **CONTENTS.TXT** for more detail.

#### 3.1 Windows 95 Installation

1. Install Windows 95 in the usual way. When installation has completed, Windows 95 should be booted on the VGA.
2. During the booting of Windows 95, a message of "**New Hardware Found PCI VGA Compatible Adapter**" must appear on the screen.
3. Insert the Windows 95 driver diskette into floppy disk A, or put **VIEWTOP** Driver CD into CD-ROM drive.
4. Select the "**Driver from Disk Provided by Hardware Manufacture**" and then select the "**OK**" button. A sub-window with a title named "**Install From Disk**" will be pop-on your screen.
5. Specify the path **A:\** (or correct driver and directory of driver CD) and select the "**OK**" button in the "**Install From Disk**" window.
6. After all new drivers are installed, a sub-window will be displayed asking you to restart Windows 95 now.
7. Remove the diskette from floppy drive A and then press "**Yes**" button to restart the Windows 95 now. Otherwise, use the normal procedure to restart Windows 95 (from the Start menu, click on the "**Shut Down**" icon and select the "**Restart the Computer**" option).

#### 3.1.1 Updating existing drivers for 1 W1 1 1 t1 1 w1

1. Insert the Windows 95 driver diskette into floppy disk A, or put put **VIEWTOP** Driver CD into CD-ROM drive.
2. Whilst running Windows95, open the control panel and choose "**Display**".
3. Navigate to the "**Settings**" tab at the top of the panel, and choose "**Change Display Type**" or "**Advanced Properties**". From here you can change the driver. Select "**Change**" and "**Have Disk**". Windows will now prompt for the installation floppy. Follow the usual procedure to install the drivers.
4. Windows will now reboot your machine using the new drivers.



3) Change the line that reads MATERIAL-DISPLAY=VGA320X200 to read MATERIAL-DISPLAY=RCPADI. Delete any leading semicolon that may be present.

• Example for 3D STUDIO 3.0 Batch file :

```
SET 3DS3DRV=C:\3DS3\DRIVERS
SET RCPADI=C:\3DS3\DRIVERS\RCTURBOC.EXP
3DS3\3DSHELL.COM
```

2. Scroll through the list of options by using a mouse or the cursor keys until you come to the option you wish to install. Click on the left mouse button or press [Enter] to select the option.

3. After reading the application notes (if any), click the left mouse button or press [Enter] to continue with the installation procedure. The SETUP program will search your environment path in an attempt to locate the installed application, and you will be prompted to confirm a directory where the files should be copied (normally the application's directory).

4. After the installation procedure has completed, you will be returned to the SETUP program. Select another option for installation as required. To exit SETUP, click on the right mouse button or press [Esc].

### 3.5.1 Autodesk ADI

After using Setup to install the Autodesk ADI driver, be sure to run the appropriate batch file to configure your environment so that your Autodesk product can locate the ADI driver.

Example for AutoCAD R13 batch files :

```
DEL C:\ACAD\*.CFG
SET ACAD=C:\SUPPORT\C:\ACAD\ADS\C:\ACAD\FONTS
SET ACADDRV=C:\ACAD\DRV
SET RCPADI=C:\ACAD\DRV\RCTURBOC.EXP
C:\ACAD\VACAD %1 %2
```

### 3D Studio 2.0/3.0

If you plan to use the ADI driver with Autodesk 3D Studio, you must delete the 3DS.CFG file and make the following changes to the 3DS.SET file in your 3D Studio directory:

- 1) Change the line that starts with RENDER-DISPLAY=VGA320X200 to read RENDER-DISPLAY=RCPADI.
- 2) Change the line that reads MAIN-DISPLAY= to read MAIN-DISPLAY = RCPADI. Delete any leading semicolon (;) that may be present.

10TH PLANET	BETHESDA SOFTWARE	AUTUMN '97	www.3dfx.com
X-CAR	BETHESDA SOFTWARE	AUTUMN '97	www.3dfx.com
GRAND THEFT AUTO	BMG INTERACTIVE	AUTUMN '97	www.3dfx.com
ASSAULT 1	BRODERBUND SOFTWARE	CHRISTMAS '97	www.3dfx.com
MYTH	BUNGIE INTERACTIVE	SUMMER '97	www.3dfx.com
PLAGUE	EIDOS INTERACTIVE	AUTUMN '97	www.3dfx.com
AIK&D/LONGBOW2	ELECTRONIC ARTS	AUTUMN '97	www.3dfx.com
BUG RIDERS	GT INTERACTIVE	AUTUMN '97	www.3dfx.com
JETFIGHTER 3	INTERPLAY	*	www.3dfx.com
CHASM	MEGA MEDIA	CHRISTMAS '97	www.3dfx.com
OUTLAW RACERS	MEGA MEDIA	CHRISTMAS '97	www.3dfx.com
FALCON 4.0	MICROPROSE	SUMMER '97	www.3dfx.com
CYBER DOME	MMI	NOW	www.3dfx.com
EF2000	OCEAN	MONSTER 3D	www.3dfx.com
TOSHINDEN	PIE	VERSION	www.3dfx.com
EARTH SIEGE 3	SIERRA ON-LINE	AUTUMN '97	www.3dfx.com
KINGS QUEST 8	SIERRA ON-LINE	AUTUMN '97	www.3dfx.com
MECHWARRIOR 3	SPECTRUM HOLOBYTE	CHRISTMAS '97	www.3dfx.com
MONATZUMA'S RETURN	UTOPIA TECHNOLOGIES	CHRISTMAS '97	www.3dfx.com
AGILE WARRIOR	VIRGIN INTERACTIVE	NOW	www.3dfx.com
LANDS OF LORE OF VARDIANS	ENTERTAINMENT		
OF DESTINY	VIRGIN INTERACTIVE	AUTUMN '97	www.3dfx.com
SCORCHED PLANET	ENTERTAINMENT	NOW	www.3dfx.com
	VIRGIN INTERACTIVE		
	ENTERTAINMENT		
	VIRGIN INTERACTIVE		
	ENTERTAINMENT		

# VOODOO by 3Dfx GAME CATALOG

Game Title	Publisher	Available	WWW.
OUT OF THE VOID	GAME FX	CHRISTMAS '97	www.gamefx.com
HEXEN II	RAVEN SOFTWARE	CHRISTMAS '97	www.activision.com
HEAVY GEAR	ACTIVISION	AUTUMN '97	www.activision.com
WIZBANG SOFTWARE	ACTIVISION	NOW	www.activision.com
INTERSTATE '76	ACTIVISION	*	www.activision.com
MECHWARRIOR 2	ACTIVISION	*	www.activision.com
MECHWARRIOR 2 RECKONERS	ACTIVISION	COMING SOON	www.activision.com
QUAKE MISSION PACK: SCORGE OF ARMAKON	ACTIVISION	NOW	www.activision.com
QUAKE MISSION PACK: DISMOUNTING OF ETERNITY	ACTIVISION	NOW	www.activision.com
OVERBOARD	PSYGNOSIS	COMING SOON	www.psygnosis.com
FIGHTER SQUADRON THE SCREAMING DRAGONS OVER EUROPE	PARSOFT	AUTUMN '97	www.activision.com
10 MK	POST-LINEAR ENTERTAINMENT	Q1 '98	www.segsoft.com
SKIES	PARADIGM ENTERTAINMENT	COMING SOON	www.segsoft.com
VIGILANCE	ANY CHANNEL	COMING SOON	www.segsoft.com
MDK	SHINY ENTERTAINMENT	NOW	www.plymaticsinteractive.com
FORMULA 1	BIZARRE CREATIONS	NOW	www.psygnosis.com
G.POLICE	PSYGNOSIS	COMING SOON	www.psygnosis.com
DARK VENGEANCE	REALITY BYTES	CHRISTMAS '97	www.realitybytes.com
PREY	3D REALMS	1998	www.gilderinteractive.com
QUAKE	3D SOFTWARE	*	www.gilderinteractive.com
TIGERSHARK	N-SPACE	NOW	www.gilderinteractive.com
UNREAL	ERIC MEGAGAMES	CHRISTMAS '97	www.gilderinteractive.com
CONFIRMED KILL	EIDOS INTERACTIVE	COMING SOON	www.eidosinteractive.com
DEATHTRAP DUNGEON	EIDOS INTERACTIVE	AUTUMN '97	www.eidosinteractive.com
FIGHTING FORCE	CORE DESIGN	CHRISTMAS '97	www.eidosinteractive.com
FLYING NIGHTMARE2	EIDOS INTERACTIVE	COMING SOON	www.eidosinteractive.com
STEEL LEGIONS	DIGITAL ANIMATIONS	AUTUMN '97	www.eidosinteractive.com
TEAM APACHE	SIMMS	SUMMER '97	www.eidosinteractive.com
TERRACIDE	SIMMS	COMING SOON	www.eidosinteractive.com
TOMB RAIDER	CORE DESIGN	*	www.lombalder.com
TOMB RAIDER 2	CORE DESIGN	*	www.eidosinteractive.com
THE DIVIDE: ENEMIES WITHIN	RAIDICAL ENTERTAINMENT	CHRISTMAS '97	www.eidosinteractive.com
CARMAGEDDON	SCI	SUMMER '97	www.tiamecmedia.com
DESCENT II	PARBALLAX SOFTWARE	NOW	www.interplay.com
DIE BY THE SWORD	TREYARCH INVENTION	COMING SOON	www.interplay.com
JEDI KNIGHT-DARK FORCES II	LUCAS ARTS ENTERTAINMENT	COMING SOON	www.lucasarts.com
LOUCS ARTS	LUCAS ARTS	*	www.lucasarts.com
OUTLAWS	ENTERTAINMENT	*	www.lucasarts.com

RELOADED	GREMLIN INTERACTIVE	COMING SOON	www.interplay.com
SAND WARRIORS	GREMLIN INTERACTIVE	SUMMER '97	www.interplay.com
STAR WARS: BLOODS OF THE EMPIRE	LUCAS ARTS ENTERTAINMENT	COMING SOON	www.lucasarts.com
STARLEET ACADEMY	INTERLAY PRODUCTIONS	SUMMER '97	www.interplay.com
SWIV 3D	SCI	SUMMER '97	www.interplay.com
VR BASEBALL	INTERLAY PRODUCTIONS	AUTUMN '97	www.interplay.com
WIPOUT XL	PSYGNOSIS	COMING SOON	www.psygnosis.com
POD	UBI SOFT ENTERTAINMENT	NOW	www.ubi-soft.com
F1 RACING SIMULATION	UBI SOFT ENTERTAINMENT	AUTUMN '97	www.ubi-soft.com
AQUA TAK	CRITERION STUDIOS	THIS SUMMER	www.criterion.com
SUBCULTURE	CRITERION STUDIOS	COMING SOON	www.criterion.com
HARDCORE AX4	GREMLIN INTERACTIVE	COMING SOON	www.gremlin.com
MOTOCRACER	DELFINE SOFTWARE INTERNATIONAL	NOW	www.mascot.com
SPEARHEAD	ZOMBIE	Q4 '97	www.zombie.com
SPECIAL OPS: US ARMY RANGERS	ZOMBIE	Q4 '97	www.zombie.com
FORSAKEN	PROBE ENTERTAINMENT	AUTUMN '97	www.aclammentertainment.com
TUROK: DINOSAUR HUNTER	ACCLAIM ENTERTAINMENT	SUMMER '97	www.aclammentertainment.com
LEGO ISLAND	MINDSCAPE	SEPTEMBER '97	www.mindscape.com
MAGIC CARPET 2	BULLFROG PRODUCTIONS	COMING SOON	www.bullfrog.com
REDLINE	BEYOND GAMES	Q4 '97	www.accolade.com
TEST DRIVE 4	PIT BULL SYNDICATE	Q4 '97	www.accolade.com
CROC: FRIEND OF THE COBBOS	ARCONAUT SOFTWARE LTD	AUTUMN '97	www.foxinteractive.com
DIE HARD TRILOGY	PROBE ENTERTAINMENT	NOW	www.foxinteractive.com
INDEPENDENCE DAY	REDICAL ENTERTAINMENT	NOW	www.foxinteractive.com
PANDEMONIUM	CRYSTAL DYNAMICS	NOW	www.citysaiid.com
MICROSOFT BASEBALL 3D	WIZBANG PRODUCTIONS	SUMMER '97	www.microsoft.com
HELL BENDER	TERMINAL REALITY	NOW	www.microsoft.com
MONSTER TRUCK	TERMINAL REALITY	NOW	www.microsoft.com
MADNESS	TERMINAL REALITY	NOW	www.microsoft.com
CYBERGLANDIAMS	DYNAMIX	NOW	www.betta.com
TIME WARRIORS	SILMABLLS	NOW	www.realitysoft.com
TANARUS	SONY INTERACTIVE STUDIOS AMERICA	AUTUMN '97	www.sonygames.com
GRAND SLAM	VIRGIN INTERACTIVE ENTERTAINMENT	SUMMER '97	www.vie.com
RESIDENT EVIL	CAPCOM	COMING SOON	www.vie.com
STARFIGHTER	3DO STUDIO	*	www.3dfx.com
TEAM 47 GOWAN	47-TEK	SUMMER '97	www.3dfx.com
CINDIE I4	ABOVE THE GARAGE	AUTUMN '97	www.3dfx.com
HARDBALL 6	ACCOLADE	AUTUMN '97	www.3dfx.com
QUAKE II	ACTIVISION	CHRISTMAS '97	www.3dfx.com
FLYING SAUCERS	ANY RIVER ENTERTAINMENT	AUTUMN '97	www.3dfx.com

### 3.1.2 DirectDraw

The driver contains support for hardware optimized DirectDraw acceleration, which is used by DirectDraw games as well as by the Direct3D HAL. The driver is compatible with DirectX. Please obtain a release of this software if you require DirectDraw/Direct3D acceleration.

### 3.1.3 Direct3D

The driver contains a Direct3D HAL driver. This enables hardware acceleration of Direct3D applications. Some features are currently still under development and there are limitations which should be understood before attempting to run Direct3D or Retained Mode Direct3D programs. Most of these features do not affect current Direct3D/DirectDraw applications.

### 3.2 Windows NT 3.5x/4.0

1. Login Windows NT using its included generic VGA driver (640x480 resolution).
2. Open the Display control panel. Click the button for "Change Display Type."
3. In the new window, under Adapter Type, click the button for "Change."
4. In the new window, under Select Device, click the button for "Other." A window appears asking for the path to the ProMotion installer. Enter an appropriate path and click the button for "OK."
5. Select one of the ProMotion options. Click the button for "Install." If Windows NT asks you to disable the currently installed driver, click the button for "Yes." A new window appears asking for the path to the ProMotion drivers. Click the button for "Continue." It will take a few moments to copy the files to your hard disk.

### 3.3 Glide 3D driver

Glide supports Windows@ 95, Windows@ NT 3.51, 4.0, MS-DOS@, and MAC O/S. There is no native support in the development release for OS/2™ or Linux.

Titles that use Glide Version 2.1.1 and earlier will not work with your VIEWTOP 3D Voodoo-1. A Glide 2.3 or newer version title must be obtained.

### 3.3.1 DOS Notes

If you are running within pure DOS (not a DOS Prompt or DOS Shell under Windows for Workgroups, Win95, or OS/2) and you have less than 24MB of RAM you must set the environment variable DOS4GVM to the value 1.

```
C:\>SET DOS4GVM=1
```

### 3.3.2 Windows 95 Notes

If you are running under Win95 and you have less than 24MB of RAM you must change your DOS properties settings. The value for DPMI memory must be changed from AUTO to 16384. The initial environment setting must also be changed from AUTO to a minimum of 4096 for some applications.

### 3.3.3 Windows NT Notes

Glide programs built for DOS4GW cannot be run under Windows NT.

### 3.4 Windows 3.1x Software Installation - SETUP.EXE

To install the enhanced display drivers for Windows, you must run the SETUP program, by selecting File|Run from the Windows Program or File Manager. SETUP.EXE will copy VIEWTOP 3D Voodoo-1 drivers and utilities to your hard drive and configure your Windows environment accordingly.

This setup utility must be launched from within Windows to install B3D-FX1 Windows 3.x display driver files.

1. Start Windows using its included generic VGA driver (640x480 resolution).
2. Once Windows is running, with the B3D-FX1 driver diskette in your floppy drive, select Run from the File menu of the Program Manager. Enter the following as the command line:  
**a:setup**
3. Choose your monitor type from the B3D-FX1 Display menu. If your exact model of monitor is not shown, choose the "generic display" or enter custom refresh rates for the "unlisted display" user define. Click the OK button to proceed.
4. Select the color depth, resolution, and font size from the VIEWTOP desktop menu. Click the OK button to proceed. It will take a few moments to copy the files to your hard disk.
5. VIEWTOP Windows display drivers are now installed on your computer. Click the button for "Restart Windows" in order to use the new drivers.

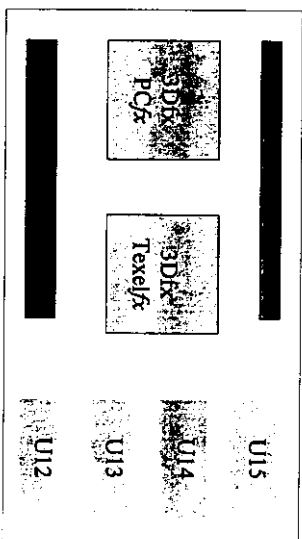
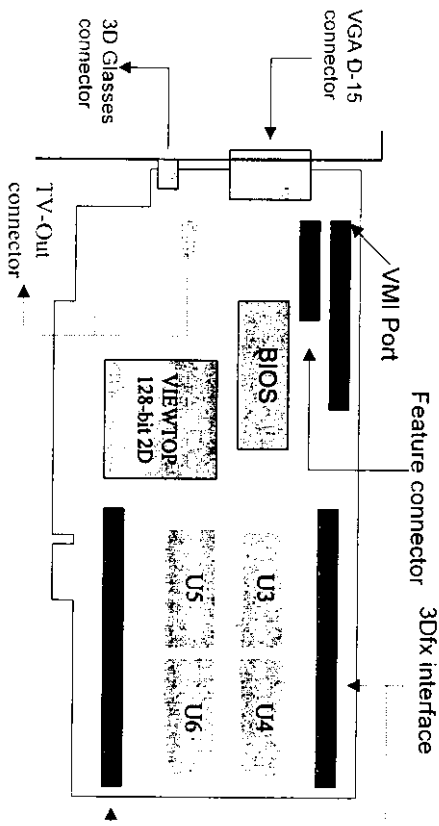
### 3.5 DOS Software Installation - SETUP.EXE

1. Insert the software installation diskette in drive A: or B: and from the DOS command line run the SETUP program by typing SETUP [Enter]. You will be presented with a list of options similar to the one illustrated below.



## 2. Hardware Information

### 2.1 Configuring the VIEWTOP 3D Voodoo-1 Game Accelerator



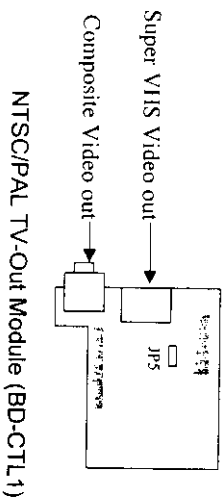
#### 2.1.1 Understand your VIEWTOP 3D Voodoo-1

- 1 **VGA D-15 Connector.** This connector accepts the video cable from the monitor, where the Voodoo Rush accelerator is attached.
- 2 **VMI port.** This connector is supported for TV-Tuner and DVD upgrade.
- 3 **3D Glasses Connector.** This is an optional connector, for 3D glasses package selected board.
- 4 **TV-OUT Upgrade Connector.** This connector accepts the TV-OUT daughter board plug-in, for additional NTSC/PAL TV display. (See section 2.2)
- 5 **128-bit 2D Engine.** This is a 128bit high performance 2D graphics engine. This chip acts as the central media hub.

- 6 **2D Frame Buffer.** From U3-U6. This has 2MB RAM and provides the video/texture memory for your VIEWTOP 3D Voodoo-1 board
- 7 **Voodoo Rush PCx (Triangle Engine).** This chip contains the interface logic for the DAC and the PCI bus, as well as the memory controller and the triangle rendering engine.
- 8 **Voodoo Rush Texel/x (Texture Engine).** This chip contains the texture rendering engine.
- 9 **3D Texture RAM.** From U12-U15. This RAM provides the video/texture memory for your VIEWTOP 3D Voodoo-1 board.

This release of the Voodoo Rush game accelerator contains 2 ASIC's, the PCx (triangle engine) and the Texel/x (texture engine). The daughter card has a Voodoo Rush interface that shares the video card's memory. This piggy-back method shares the 2D graphic card's resources. The VIEWTOP 128bit 2D chip provides high performance VGA and 2D accelerator functions - all 3D functions are performed by the 3Dfx chipsets via the 3Dfx interface.

#### 2.2 NTSC/PAL TV-OUT Module (BD-CTL1) Plug-In



JP5 Jumper Setting	
Pin 1-2 shorted	For NTSC TV output
Pin 2-3 shorted	For PAL TV output

This is an optional feature for the VIEWTOP 3D Voodoo-1 Game Accelerator. If you have purchased Model B3D-FX1-TV, that is already plug TV-OUT module on it. If your own Model is B3D-FX1 and you have purchased TV-OUT module BD-CTL1, you may need to upgrade TV-OUT feature by yourself. Follow the instruction as below:

- 1 Remove the VIEWTOP 3D Voodoo-1 Board and the TV-OUT Module (BD-CTL1) from the anti-static packaging.
- 2 Attach the TV-OUT Module Board to the VIEWTOP 3D Voodoo-1's TV-OUT connector, located at the lower-left corner (See the figure of VIEWTOP 3D Voodoo-1 at section 2.1)

## CONTENTS

<b>1. INTRODUCTION</b> .....	1
1.1 General Feature Description.....	1
1.2 3D Feature Description.....	1
1.3 Software Drivers List.....	1
1.4 System Requirements.....	2
1.5 Advanced Information.....	2
<b>2. HARDWARE INFORMATION</b> .....	3
2.1 Configuring the VIEWTOP 3D Voodoo-1 Game Accelerator.....	3
2.1.1 Understand your VIEWTOP 3D Voodoo-1.....	3
2.2 NTSC/PAL TV-OUT Module (BD-CTL) Plug-In.....	4
2.3 Board Installation.....	5
<b>3. SOFTWARE UTILITIES</b> .....	6
3.1 Windows 95 Installation.....	6
3.1.1 Updating existing drivers for Windows 95.....	6
3.1.2 DirectDraw.....	7
3.1.3 Direct3D.....	7
3.2 Windows NT 3.5x/4.0.....	7
3.3 Glide 3D driver.....	7
3.3.1 DOS Notes.....	7
3.3.2 Windows 95 Notes.....	8
3.3.3 Windows NT Notes.....	8
3.4 Windows 3.1x Software Installation - SETUP.EXE.....	8
3.5 DOS Software Installation - SETUP.EXE.....	8
3.5.1 Autodesk ADI.....	9