

Paradise VGA Plus Card™



Exceptional Performance and Guaranteed VGA Compatibility.

The Paradise VGA Plus Card once again pushes IBM's* latest graphic standard to a higher level of performance, providing personal computer users with a video card that surpasses IBM in features and performance and retails at a price that makes it an exceptional value.

Unlike other VGA cards, the Paradise VGA Plus Card is the first video board that is 100% hardware compatible with IBM's new PS/2* VGA graphics, a fact that allows Paradise to offer a limited 3-year warranty that guarantees VGA compatibility.

The Paradise VGA Plus Card Features:

- ▲ 100% VGA compatible—Hardware (register) (software) BIOS
- ▲ Up to 100% faster than the IBM VGA Card
- ▲ Enhanced resolution
132 column text, 65% more text on-screen
800 x 600 in 16 colors out of a palette of 256K
- ▲ Three Year Warranty
- ▲ Three year compatibility guarantee

100% VGA & Pre-VGA Compatibility.

The Paradise VGA Plus Card delivers 100% VGA hardware compatibility in all modes as well

as complete downward compatibility with all pre-VGA graphics standards such as EGA, CGA, MDA, Hercules* and MCGA. It is designed for use with the IBM PC/XT/AT* (80286, 80386), PS/2 Models 25, 30 and compatibles.

A Compatibility Guarantee: Another Paradise First.

Paradise guarantees that if any VGA compatible software fails to run on an IBM PC/XT/AT with the Paradise VGA Plus Card, but will run on the same IBM PC/XT/AT with an IBM PS/2 Display Adapter (without any additional video controller cards), Paradise will replace the card with one that runs the software or give you your money back.



PARADISE™
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Paradise VGA Plus Card Specifications

State-Of-The-Art Resolution.

In addition to the high-resolution VGA performance you'd expect from Paradise, the Paradise VGA Plus Card makes the most of multifrequency and IBM's new analog monitors with an enhanced 132 column mode, allowing you to display 65% more text and spreadsheet information.

256 Colors On The Screen.

The Paradise VGA Plus Card is equipped with a high-performance chip that displays 256 on-screen colors out of a 256K color palette in 320 x 200 mode, rendering the tints and shades demanded by today's most advanced graphics software.

A 100% Performance Boost.

Paradise's VGA chip features a memory arbitration technique that allows the CPU to draw images into memory 100% faster than IBM's VGA. The result: much faster display times. It's also loaded with a full 256K of memory that provides high-resolution, high-performance video display.

The Personal Computer Video Company.

With the Paradise VGA Plus Card, Paradise once again demonstrates its commitment to push the quality of the IBM graphics standard to new levels of performance and convenience. This new half-size card delivers all the VGA benefits at a very attractive price.

Western Digital Imaging/Paradise
800 E. Middlefield Road
Mountain View, CA 94043
(415) 960-3353



Compatibility:

- ▲ Designed to work with the IBM PC/XT/AT (80286, 80386), PS/2 Models 25, 30 and compatibles.

Physical Characteristics:

- ▲ Fits IBM PC/XT/AT expansion slots
- ▲ Height: 4.2"
- ▲ Length: 5 1/4"
- ▲ Weight: 6 oz.

Connectors:

- ▲ 15 pin connector for all supported monitor types.
- ▲ Same edge connectors and feature connector as on IBM PS/2 Display Adapter.

Environmental Limitations:

- ▲ Ambient temperature:
Storage: -40° to +62°C
Operating: +4° to +55°C
- ▲ Ambient relative humidity:
Storage: 5% to 95% RH
Operating: 8% to 80% RH

Electrical:

- ▲ Voltage +5V (±5%)
- ▲ Current demand: nominal 0.75A (5V)
- ▲ Average power consumption: 4W
- ▲ EMI FCC class B

Warranty:

- ▲ The Paradise VGA Plus Card carries a 3 year warranty.
- ▲ Three year compatibility guarantee

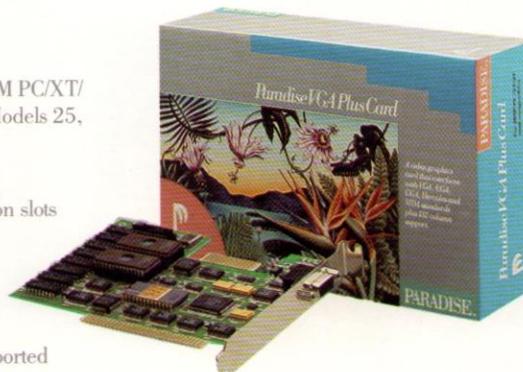
Paradise VGA Plus Supports the Following:

Mode	Resolution:	Colors:	Palette:	Monitors:†
Paradise	800 x 600	16	256K	4
VGA Plus	132 col x 43 row			1-4
	132 col x 25 row			1-4
Standard VGA	640 x 480	16	256K	1-4
	640 x 480	2	256K	1-4
	320 x 200	256	256K	1-4
	320 x 200	64 shades of gray	N/A	1-4
EGA	640 x 350	16	256K	1-4
	640 x 200	16	256K	1-4
	320 x 200	16	256K	1-4
CGA	640 x 200	2	N/A	1-4
	320 x 200	4	N/A	1-4
MDA	80 col x 25 row			1-4
Hercules	720 x 348			1-4

†Monitors: 1-IBM 8503, 2-IBM 8512, 3-IBM 8513, 4-Multifrequency.

*Trademarks: Paradise VGA Plus—Paradise Systems, Inc.; IBM PC/XT/AT, PS/2—International Business Machines Corp.; Hercules—Hercules Computer Technology; Microsoft—Microsoft Corp.; GEM—Digital Research, Inc.; AutoCAD—Autodesk, Inc.; CADvance—CalComp Group, Sanders Assoc., Inc.; Ventura Publisher—Ventura Software Inc. Framework—Ashton-Tate; WordPerfect—Word Perfect Corp.; WordStar—Micro Pro, Inc. Registered Trademarks: Paradise Systems—Paradise Systems, Inc.; IBM—International Business Machines Corp. These specifications are subject to change without prior notice.

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Software Support:

- ▲ Paradise VGA Plus Card currently supports the following software in 800 x 600 with 16 colors.
Microsoft® Windows 2.0
GEM*
AutoCAD*
CADvance*
Ventura Publisher*
Framework® II
- ▲ Paradise VGA Plus Card includes 132 column mode drivers for the following software:
Framework II
WordPerfect*
WordStar*



AutoSwitch™ EGA 350 Card



Exceptional Video, Exceptional Value.

The Paradise *AutoSwitch™* EGA 350 Card delivers exceptional video performance on monochrome, RGB and enhanced-RGB monitors designed for use with the IBM* PC, XT, AT and compatibles. It offers 100% compatibility with the IBM EGA standard and a value that no other card in its class can match. Check out this array of outstanding features:

AutoSwitch. Automatically reconfigures itself to the graphics mode required by the software in use (EGA, CGA, etc). No switches to set or commands to key in.

Automatic Monitor Detection. Automatically recognizes monitor type and configures itself accordingly. Saves you the trouble of setting switches.

640 x 480 Display. Provides excellent EGA resolution, delivering improved video detailing.

Outstanding Color Clarity. Offers a choice of 16 on-screen colors from a 64 color palette.

Complete Video Standard Compatibility. Provides 100% downward compatibility with pre-EGA standards such as MDA, Hercules,* CGA and Plantronics.

***A Full Complement of
256KB Video Memory.***

Flicker-Free Scrolling. Eliminates the visually fatiguing problem of flickering in all modes.

Limited One-Year Warranty. Covering repair or replacement of defects on cards properly installed and used.

PARADISE™
Western Digital Imaging

AutoSwitch EGA 350 Specifications



Physical Characteristics:

- ▲ Fits any IBM expansion slot, even short slots
- ▲ Height 5 inches, including bracket
- ▲ Length 5 7/8 inches, including bracket
- ▲ Weight 6 ounces

Connectors:

- ▲ Nine pin connector for all supported monitor types
- ▲ Berg strip for light pen
- ▲ IBM feature connector and associated RCA jacks

Controls:

- ▲ Six position DIP switch above connectors configures the card and controls these features:

AutoSwitch

Automatic Monitor Detection

- ▲ 2XX/3XX jumper (like IBM) controls addressing of the card

Environmental Limitations:

- ▲ Ambient temperature
 - Storage/shipping -40 to +62 C
 - Operating +4 to +55 C
- ▲ Ambient relative humidity
 - Storage/shipping 5% to 95% RH
 - Operating 8% to 80% RH

Electrical:

- ▲ Voltage +5V (±5% regulation)
- ▲ Current Demand: Nominal .75A (5V)
- ▲ Average power consumption: 4W
- ▲ EMI (Electro-Magnetic Interference): FCC Class B

Sync Frequencies by Monitor Type:

Mode	Vertical	Horizontal
EGA Monochrome	49.4 Hz	18.2 KHz
MDA Monochrome	50.0 Hz	18.43 KHz
Hercules Monochrome	50.9 Hz	18.8 KHz
Standard RGB	60.0 Hz	15.7 KHz
Enhanced RGB (200 line mode)	60.0 Hz	15.7 KHz
Enhanced RGB (350 line mode)	60.0 Hz	21.8 KHz

Video Port Connector

Pinout by Monitor:

PIN	Monochrome	RGB	Enhanced RGB
1	Ground	Ground	Ground
2	Ground	Ground	S. Red
3	Red	Red	Red
4	Green	Green	Green
5	Blue	Blue	Blue
6	Intensity	Intensity	S. Green
7	Video	No Con	S. Blue
8	H. Sync	H. Sync	H. Sync
9	V. Sync	V. Sync	V. Sync

Monitor/Software Compatibility

The following table lists the "families" of software compatibility and dot/color resolution modes automatically available according to the type of monitor you are using.

Monitor in use:	You can run software written for:	Resolution(s) available:
Monochrome	Monochrome Display Adapter (MDA)	80 character text
	Hercules Graphics Card	720h by 350v B&W
	EGA monochrome mode	640h by 350v B&W
Standard RGB	Color Graphics card (CGA)	40 or 80 column text
		320h by 200v by 4 colors
	Plantronics modes	640h by 200v B&W
		320h by 200v by 16 colors
Enhanced RGB	EGA in 200 line modes	640h by 200v by 4 colors
		640h by 200v up to 16 colors
	RGB plus: EGA in 350 line modes	640h by 350v up to 16 colors

*Trademarks: Paradise, AutoSwitch—Paradise Systems, Inc., Hercules—Hercules Computer Technology; Plantronics, Inc.; Registered trademark: IBM—International Business Machines Corporation. These specifications are subject to change without prior notice.

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 **PARADISE**TM
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AutoSwitch™ EGA 480 Card



High-Performance Video For The IBM Standard.

The Paradise AutoSwitch™ EGA 480 Card offers superior video performance in graphics and text for the IBM* PC, XT, AT and compatibles. It packs more features and popular software drivers into one card than any other enhanced graphics adapter:

AutoSwitch. Automatically reconfigures itself to the graphics mode required by the software in use (EGA, CGA, etc). No switches to set or commands to key in.

Automatic Monitor Detection. Automatically recognizes monitor type and configures itself accordingly. Saves you the trouble of setting switches.

640 x 480 Display. Provides extended EGA resolution, delivering up to 37% greater resolution than the IBM EGA standard on multi-frequency monitors. Significantly improves on-screen video detailing.

132 Column Text Mode. Allows 132 column screen display without scrolling on Enhanced-RGB and multi-frequency monitors. Ideal for spreadsheet and word processing applications.

Outstanding Color Clarity. Offers a choice of 16 on-screen colors from a 64 color palette.

Popular Software Drivers. Provides full compatibility with today's most popular applications software, enabling them to run in the EGA 640 x 480 mode. See list on back for details.

Complete Video Standard Compatibility. Provides complete EGA compatibility plus 100% downward compatibility with pre-EGA standards such as MDA, Hercules,* CGA and Plantronics.

A Full Complement of 256KB Video Memory.

Flicker-Free Scrolling. Eliminates the visually fatiguing problem of flickering in all modes.

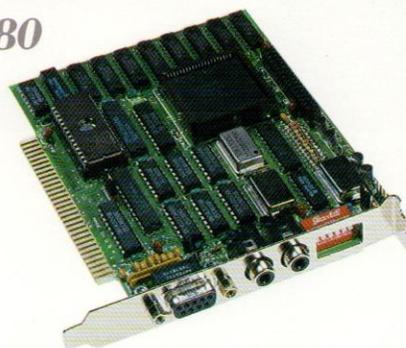
Limited One-Year Warranty. Covering repair or replacement of defects on cards properly installed and used.



TM

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Western Digital Imaging

AutoSwitch EGA 480 Specifications



Physical Characteristics:

- ▲ Fits any IBM expansion slot, even short slots
- ▲ Height 5 inches, including bracket
- ▲ Length 5 7/8 inches, including bracket
- ▲ Weight 6 ounces

Connectors:

- ▲ Nine pin connector for all supported monitor types
- ▲ Berg strip for light pen
- ▲ IBM feature connector and associated RCA jacks

Controls:

- ▲ Six position DIP switch above connectors configures the card and controls these features:

AutoSwitch

Automatic Monitor Detection

- ▲ 2XX/3XX jumper (like IBM) controls addressing of the card

Environmental Limitations:

- ▲ Ambient temperature
 - Storage/shipping -40 to +62 C
 - Operating +4 to +55 C
- ▲ Ambient relative humidity
 - Storage/shipping 5% to 95% RH
 - Operating 8% to 80% RH

Electrical:

- ▲ Voltage +5V (±5% regulation)
- ▲ Current Demand: Nominal .75A (5V)
- ▲ Average power consumption: 4W
- ▲ EMI (Electro-Magnetic Interference): FCC Class B

Sync Frequencies by Monitor Type:

Mode	Vertical	Horizontal
EGA Monochrome	49.4 Hz	18.2 KHz
MDA Monochrome	50.0 Hz	18.43 KHz
Hercules Monochrome	50.9 Hz	18.8 KHz
Standard RGB	60.0 Hz	15.7 KHz
Enhanced RGB (200 line mode)	60.0 Hz	15.7 KHz
Enhanced RGB (350 line mode)	60.0 Hz	21.8 KHz
Multi-frequency RGB (480 line mode)	60.0 Hz	30.5 KHz

Video Port Connector Pinout by Monitor:

PIN	Monochrome	RGB	Enhanced RGB
1	Ground	Ground	Ground
2	Ground	Ground	S. Red
3	Red	Red	Red
4	Green	Green	Green
5	Blue	Blue	Blue
6	Intensity	Intensity	S. Green
7	Video	No Con	S. Blue
8	H. Sync	H. Sync	H. Sync
9	V. Sync	V. Sync	V. Sync

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Monitor/Software Compatibility

The following table lists the "families" of software compatibility and dot/color resolution modes automatically available according to the type of monitor you are using.

Monitor in use:	You can run software written for:	Resolution(s) available:
Monochrome	Monochrome Display Adapter (MDA)	80 character text
	Hercules Graphics Card	720h by 348v B&W
	EGA monochrome mode	640h by 350v B&W
Standard RGB	Color/Graphics card (CGA)	40 or 80 column text 320h by 200v by 4 colors 640h by 200v B&W
	Plantronics modes	320h by 200v by 16 colors 640h by 200v by 4 colors
	EGA in 200 line modes	640h by 200v up to 16 colors
Enhanced RGB	All of the modes listed under Standard RGB plus:	
	EGA in 350 line modes	640h by 350v up to 16 colors
	Paradise 132 column text†	132 character text w/25 or 43 lines
Multi-frequency	All modes listed under Standard and Enhanced RGB plus:	
	Paradise 480 line graphics mode†	640h by 480v by 16 colors

†These modes require use of specific application software drivers supplied with your AutoSwitch EGA 480 Card.

AutoSwitch EGA 480 currently supports the following applications software:

Software	640 x 480 Display	132 Column
AutoCAD* v2.18 or later	▲	
CAD Vance*	▲	
GEM* v2.1	▲	
Ventura Publisher* 1.00 or later	▲	
Microsoft* Windows	▲	
PageMaker* (Windows)	▲	
EGA Paint* v2005	▲	
Symphony*	▲	
Lotus 1-2-3* release 2	▲	▲
Framework* II	▲	▲
WordStar* release 2		▲
WordStar Professional release 4		▲
WordPerfect*		▲

*Trademarks: Paradise, AutoSwitch—Paradise Systems, Inc.; Hercules—Hercules Computer Technology; COLORPLUS—Plantronics, Inc.; AutoCAD, ADI—Autodesk, Inc.; CAD Vance—CalComp Group; Sanders Associates, Inc.; GEM Digital Research, Inc.; Ventura Publisher—Ventura Software, Inc.; Microsoft Corporation; PageMaker—Aldus Corporation; EGA Paint—RIX Softworks, Inc.; Symphony, Lotus 1-2-3—Lotus Development Corporation; Framework II—Ashton-Tate; WordStar—MicroPro International Corp.; WordPerfect—Satellite Software International Registered trademark: IBM—International Business Machines Corporation; Paradise Systems reserves the right to change specifications without notice. © Copyright 1988 Paradise Systems, Inc.

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Paradise VGA Plus 16™ Card



Outstanding Performance At An Affordable Price.

The Paradise VGA Plus 16™ sets a new standard in VGA price/performance. With its 16 bit bus and BIOS interface, it is designed specifically to handle heavy corporate workloads, while offering faster performance and higher resolution than the IBM* VGA card.

The Paradise VGA Plus 16 Card is 100% hardware compatible with IBM's PS/2 VGA design. But it reaches beyond IBM's card performance, offering 256 on-screen colors out of a 256K color palette at 640 x 400 resolution, providing even crisper detail. It also features a proprietary Paradise video controller that operates up to 400% faster than IBM.

If you want high-performance video at an affordable price, the Paradise VGA Plus 16 Card is the one to order.

The Paradise VGA Plus 16 Card Features.

- ▲ 100% VGA compatible—Hardware (register) Software (BIOS)
- ▲ Up to 400% faster than IBM VGA Display Adaptor
- ▲ Enhanced resolution 800 x 600 in 16 colors out of a palette of 256K 132 column text, 65% more text on-screen on both PS/2 and multifrequency monitors
- ▲ Enhanced color 640 x 400 in 256 colors out of a palette of 256K
- ▲ Three year warranty
- ▲ Three year compatibility guarantee
- ▲ 16 bit data bus
- ▲ AutoSense™ to enable 16 bit BIOS

A 400% Performance Boost.

Paradise's VGA chip features a memory arbitration technique and a choice of 8 or 16 bit BIOS interface that allows the CPU to draw images up to 400% faster than

IBM's VGA in 16 bit mode. It's also loaded with a full 256K of memory providing high-resolution, high-performance video display.

100% VGA & Pre-VGA Compatibility.

The Paradise VGA Plus 16 Card delivers 100% VGA hardware compatibility in all modes as well as complete downward compatibility with all pre-VGA graphics standards such as EGA, CGA, MDA, Hercules* and MCGA. It is designed to be used with the IBM PC/XT/AT* (including 80286, 80386), PS/2 Models 25, 30 and compatibles.

A Compatibility Guarantee, Another Paradise First.

Paradise guarantees that if any VGA compatible application software fails to run on an IBM PC/XT/AT with the Paradise VGA Plus 16 Card, but will run on the same IBM PC/XT/AT with an IBM PS/2 Display Adapter (without any additional video controller cards), Paradise will replace the card with one that runs the software or give you your money back.

256 On-Screen Colors In Higher Resolution.

The Paradise VGA Plus 16 Card displays 256 colors out of a 256K color palette at 640 x 400, and displays 16 on-screen colors at 800 x 600.

132 Column Mode.

The Paradise VGA Plus 16 Card also features an enhanced 132 column display mode that allows you to increase the number of on-screen columns from 80 to 132, giving you the capability of displaying over 65% more data, which is particularly helpful in word processing, desktop publishing, database and spreadsheet applications. This feature works on both PS/2 and multifrequency type monitors.



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A Western Digital Company

Paradise VGA Plus 16 Card Specifications

AutoSense for a 16 Bit BIOS Interface.

In addition to a 16 bit wide video memory interface the Paradise VGA Plus 16 Card can present a 16 bit wide video BIOS data path to IBM's AT and many AT compatible systems. This means that the software instructions that actually draw the text and graphic images on screen in most applications can operate more than twice as fast as on an 8 bit VGA board. But a 16 bit BIOS interface does not come easily. To make it work, Paradise had to invent AutoSense, a sophisticated hardware and software system that tests and automatically enables the 16 bit BIOS for easy-to-use, trouble-free operation.

The Personal Computer Video Company.

With the Paradise VGA Plus 16 Card, Paradise once again demonstrates its commitment to push the quality of the IBM graphics standard to new levels of performance and convenience. As the world's largest supplier of add-in video controller boards and chips, Paradise is committed to supporting its customers with advanced engineering, technical support and a trend setting guarantee.

Western Digital/Paradise Systems®
800 E. Middlefield Road
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 **PARADISE**
A Western Digital Company

Compatibility:

- ▲ Designed to work with IBM PC/XT/AT (including 80286, 80386), PS/2 Models 25, 30 and compatibles.

Physical Characteristics:

- ▲ Fits IBM PC/XT/AT expansion slots
- ▲ Height: 3.9"
- ▲ Length: 8.9"
- ▲ Weight: 6.5 oz.

Connector:

- ▲ 15 pin connector for all supported monitor types
- ▲ Same edge connector and feature connector as the IBM PS/2 Display Adapter.

Environmental Limitations:

- ▲ Ambient temperature:
Storage: -40° to +62°C
Operating: +4° to +55°C
- ▲ Ambient relative humidity:
Storage: 5% to 95% RH
Operating: 8% to 80% RH

Electrical:

- ▲ Voltage +5V (±5%)
- ▲ Current demand: nominal 0.9A (5V)
- ▲ Average power consumption: 5W
- ▲ FCC class B certification

Warranty:

- ▲ The Paradise VGA Plus 16 Card carries a 3 year warranty.
- ▲ Three year compatibility guarantee.



Software Support:

- ▲ Paradise VGA Plus 16 Card includes support for the following software in 640 x 400 with 256 colors.
Microsoft® Windows 2.0
- ▲ Paradise VGA Plus 16 Card includes support for the following software in 800 x 600 with 16 colors.
Microsoft Windows 2.0
GEM*
AutoCAD*
CADvance*
Ventura Publisher*
Framework* II
- ▲ Paradise VGA Plus 16 Card supports the following software in 132 column mode:
Framework II
WordPerfect 4.2*
WordStar*

Paradise VGA Plus 16 Card Supports the Following:

Mode:	Resolution:	Colors:	Palette:	Monitors:†
Paradise	800 x 600	Monochrome	N/A	4
VGA Plus 16	800 x 600	16	256K	4
	640 x 400	256	256K	1-4
	132 col x 43 row			1-4
	132 col x 25 row			1-4
Standard VGA	640 x 480	16	256K	1-4
	640 x 480	2	256K	1-4
	320 x 200	256	256K	1-4
	320 x 200	64 shades of gray	N/A	1-4
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*T: Trademarks: Paradise VGA Plus 16, AutoSense (patent pending)—Paradise Systems, Inc.; PC/XT/AT, PS/2—International Business Machines Corp.; Hercules—Hercules Computer Technology; Microsoft—Microsoft Corporation; GEM—Digital Research, Inc.; AutoCAD—Autodesk, Inc.; CADvance—CalComp Group, Sanders Assoc., Inc.; Ventura Publisher—Ventura Software Inc.; Framework—Ashton-Tate; WordStar—MicroPro International Corporation; WordPerfect—WordPerfect Corporation; Registered Trademarks: Paradise Systems—Paradise Systems, Inc.; IBM—International Business Machines Corp.

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132 Column Mode.

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- 15 pin connector for all supported monitor types
- Same edge connector and feature connector as the IBM PS/2 Display Adapter.

Environmental Limitations:

- Ambient temperature:
 - Storage: -40° to +62°C
 - Operating: +4° to +55°C
- Ambient relative humidity:
 - Storage: 5% to 95% RH
 - Operating: 8% to 80% RH

Electrical:

- Voltage +5V (±5%)
- Current demand: nominal 0.9A (5V)
- Average power consumption: 5W
- FCC class B certification

Warranty:

- The Paradise VGA Plus 16 Card carries a 3 year warranty.
- Three year compatibility guarantee.

Paradise VGA Plus 16 Card Supports the Following:

Mode:	Resolution:	Colors:	Palette:	Monitors:†
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VGA Plus 16	800 x 600	16	256K	4
	640 x 400	256	256K	1-4
	132 col x 43 row			1-4
	132 col x 25 row			1-4
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	320 x 200	256	256K	1-4
	320 x 200	64 shades of gray	N/A	1-4
EGA	640 x 350	16	256K	1-4
	640 x 200	16	256K	1-4
	320 x 200	16	256K	1-4
CGA	640 x 200	2	256K	1-4
	320 x 200	4	256K	1-4
MDA	80 col x 25 row			1-4
Hercules	720 x 348			1-4

†Monitors: 1-IBM 8503, 2-IBM 8512, 3-IBM 8513, 4-Multifrequency.

*Trademarks: Paradise VGA Plus 16, AutoSense (patent pending)—Paradise Systems, Inc.; PC/XT/AT, PS/2—International Business Machines Corp.; Hercules—Hercules Computer Technology; Microsoft—Microsoft Corporation; GEM—Digital Research, Inc.; AutoCAD—Autodesk, Inc.; CADvance—CalComp Group, Sanders Assoc., Inc.; Ventura Publisher—Ventura Software Inc.; Framework—Ashton-Tate; WordStar—MicroPro International Corporation; WordPerfect—WordPerfect Corporation; Registered Trademarks: Paradise Systems—Paradise Systems, Inc.; IBM—International Business Machines Corp.

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Software Support:

- Paradise VGA Plus 16 Card includes support for the following software in 640 x 400 with 256 colors.
 - Microsoft* Windows 2.0
- Paradise VGA Plus 16 Card includes support for the following software in 800 x 600 with 16 colors.
 - Microsoft Windows 2.0
 - GEM*
 - AutoCAD*
 - CADvance*
 - Ventura Publisher*
 - Framework* II
- Paradise VGA Plus 16 Card supports the following software in 132 column mode:
 - Framework II
 - WordPerfect 4.2*
 - WordStar*



Basic Video Card™

***The first step
to better video.***

The Paradise Basic Video Card delivers high resolution graphics and greater video detailing for monochrome and RGB monitors commonly used with the IBM* PC and compatible computers. Like all Paradise products, the Basic Card is designed for long-lasting durability. Its competitive price makes it the entry level card of choice for improved video performance. In addition, it offers these outstanding features:

Compatibility with all popular pre-EGA video standards. 100% compatible with MDA, CGA, Hercules* and Plantronics graphic standards.

Up to 720 X 350 display. Provides dot addressable resolution of 720 X 350 in monochrome/Hercules graphics mode. 640 X 200 dot addressable resolution in color CGA and Plantronics mode.

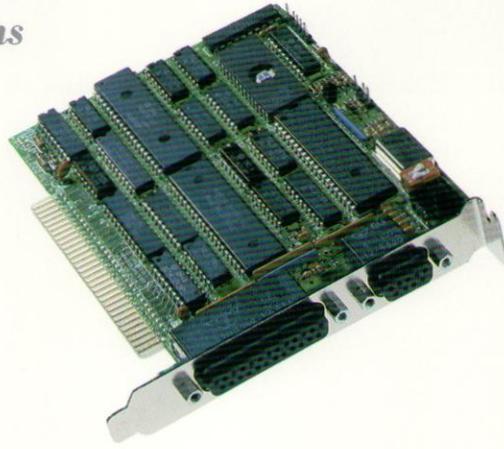
Supports a variety of monitors: Monochrome, RGB and Composite.

64K of video memory and flicker-free scrolling. Eliminates the eye-fatigue caused by flickering on the screen.

Includes a standard IBM parallel printer port.
Outstanding Color Clarity. Offers up to 16 on screen colors.

Limited One Year Warranty. Covering repair or replacement of defects on cards properly installed and used.

Basic Video Specifications



Physical Characteristics:

- ▲ Fits any IBM expansion slot, even short slots
- ▲ Height 5 inches, including bracket
- ▲ Length 5 7/8 inches, including bracket
- ▲ Weight 6 ounces

Connectors:

- ▲ Nine pin connector for RGB or monochrome displays.
- ▲ Berg strip for light pen.
- ▲ Berg strip for RF modulator and composite monitors.
- ▲ 25 Pin connector for parallel port.

Controls:

- ▲ Single switch to select operation as an IBM monochrome or IBM color graphics compatible display adapter.
- ▲ A two-lever dip switch configures parallel port for LPT1, LPT2, LPT3 or disable.

Environmental Limitations:

- ▲ Ambient temperature
 - Storage/shipping -40 to +62 C
 - Operating +4 to +55 C
- ▲ Ambient relative humidity
 - Storage/shipping 5% to 95% RH
 - Operating 8% to 80% RH

Electrical:

- ▲ Voltage +5V (±5% regulation)
- ▲ Current Demand: Nominal .75A (5V)
- ▲ Average power consumption: 4W
- ▲ EMI (Electro-Magnetic Interference): FCC Class B

Monitor/Software Compatibility

The following table lists the "families" of software compatibility and dot/color resolution modes automatically available according to the type of monitor you are using.

Monitor in use:	You can run software written for:	Resolution(s) available:
Monochrome	Monochrome Display Adapter (MDA)	80 character text
	Hercules Graphics Card	720h by 350v B&W
Standard RGB (and Composite)	Color/Graphics card (CGA)	40 or 80 column text 320h by 200v by 4 colors 640h by 200v B&W
	Plantronics modes	320h by 200v by 16 colors 640h by 200v by 4 colors
Enhanced RGB	Color Graphics card (CGA)	40 or 80 column text 320h by 200v by 4 colors 640h by 200v by B&W
	Plantronics modes	320h by 200v by 16 colors 640h by 200v by 4 colors

*Trademarks: Paradise, Basic Video—Paradise Systems, Inc.; Hercules—Hercules Computer Technology; Plantronics—Plantronics, Inc.; Registered trademarks: Paradise Systems—Paradise Systems, Inc.; IBM—International Business Machines Corporation. Paradise Systems reserves the right to change specifications without notice.

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 **PARADISE**™
 A Western Digital Company

AutoSwitch™ EGA 480 Card



High-Performance Video For The IBM Standard.

The Paradise AutoSwitch™ EGA 480 Card offers superior video performance in graphics and text for the IBM* PC, XT, AT and compatibles. It packs more features and popular software drivers into one card than any other enhanced graphics adapter:

AutoSwitch. Automatically reconfigures itself to the graphics mode required by the software in use (EGA, CGA, etc). No switches to set or commands to key in.

Automatic Monitor Detection. Automatically recognizes monitor type and configures itself accordingly. Saves you the trouble of setting switches.

640 x 480 Display. Provides extended EGA resolution, delivering up to 37% greater resolution than the IBM EGA standard on multi-frequency monitors. Significantly improves on-screen video detailing.

132 Column Text Mode.

Allows 132 column screen display without scrolling on Enhanced-RGB and multi-frequency monitors. Ideal for spreadsheet and word processing applications.

Outstanding Color Clarity.

Offers a choice of 16 on-screen colors from a 64 color palette.

Popular Software Drivers.

Provides full compatibility with today's most popular applications software, enabling them to run in the EGA 640 x 480 mode. See list on back for details.

Complete Video Standard Compatibility. Provides complete EGA compatibility plus 100% downward compatibility with pre-EGA standards such as MDA, Hercules,* CGA and Plantronics.

A Full Complement of 256KB Video Memory.

Flicker-Free Scrolling.

Eliminates the visually fatiguing problem of flickering in all modes.

Limited One-Year Warranty.

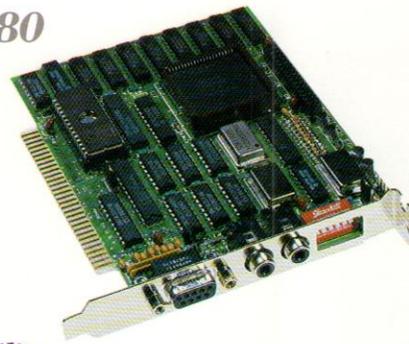
Covering repair or replacement of defects on cards properly installed and used.



TM

PARADISE™
Western Digital Imaging

AutoSwitch EGA 480 Specifications



Physical Characteristics:

- ▲ Fits any IBM expansion slot, even short slots
- ▲ Height 5 inches, including bracket
- ▲ Length 5 7/8 inches, including bracket
- ▲ Weight 6 ounces

Connectors:

- ▲ Nine pin connector for all supported monitor types
- ▲ Berg strip for light pen
- ▲ IBM feature connector and associated RCA jacks

Controls:

- ▲ Six position DIP switch above connectors configures the card and controls these features:

AutoSwitch
Automatic Monitor Detection

- ▲ 2XX/3XX jumper (like IBM) controls addressing of the card

Environmental Limitations:

- ▲ Ambient temperature
 - Storage/shipping -40 to +62 C
 - Operating +4 to +55 C
- ▲ Ambient relative humidity
 - Storage/shipping 5% to 95% RH
 - Operating 8% to 80% RH

Electrical:

- ▲ Voltage +5V (±5% regulation)
- ▲ Current Demand: Nominal .75A (5V)
- ▲ Average power consumption: 4W
- ▲ EMI (Electro-Magnetic Interference): FCC Class B

Sync Frequencies by Monitor Type:

Mode	Vertical	Horizontal
EGA Monochrome	49.4 Hz	18.2 KHz
MDA Monochrome	50.0 Hz	18.43 KHz
Hercules Monochrome	50.9 Hz	18.8 KHz
Standard RGB	60.0 Hz	15.7 KHz
Enhanced RGB (200 line mode)	60.0 Hz	15.7 KHz
Enhanced RGB (350 line mode)	60.0 Hz	21.8 KHz
Multi-frequency RGB (480 line mode)	60.0 Hz	30.5 KHz

Video Port Connector Pinout by Monitor:

PIN	Monochrome	RGB	Enhanced RGB
1	Ground	Ground	Ground
2	Ground	Ground	S. Red
3	Red	Red	Red
4	Green	Green	Green
5	Blue	Blue	Blue
6	Intensity	Intensity	S. Green
7	Video	No Con	S. Blue
8	H. Sync	H. Sync	H. Sync
9	V. Sync	V. Sync	V. Sync

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	EGA monochrome mode	640h by 350v B&W
Standard RGB	Color/Graphics card (CGA)	40 or 80 column text 320h by 200v by 4 colors 640h by 200v B&W
	Plantronics modes	320h by 200v by 16 colors 640h by 200v by 4 colors
	EGA in 200 line modes	640h by 200v up to 16 colors
	Enhanced RGB	All of the modes listed under Standard RGB plus: EGA in 350 line modes Paradise 132 column text†
Multi-frequency	All modes listed under Standard and Enhanced RGB plus: Paradise 480 line graphics mode†	640h by 480v by 16 colors

†These modes require use of specific application software drivers supplied with your AutoSwitch EGA 480 Card.

AutoSwitch EGA 480 currently supports the following applications software:

Software	640 x 480 Display	132 Column
AutoCAD* v2.18 or later	▲	
CAD Vance*	▲	
GEM* v2.1	▲	
Ventura Publisher* 1.00 or later	▲	
Microsoft* Windows	▲	
PageMaker* (Windows)	▲	
EGA Paint* v2005	▲	
Symphony*	▲	
Lotus 1-2-3* release 2	▲	▲
Framework* II	▲	▲
WordStar* release 2		▲
WordStar Professional release 4		▲
WordPerfect*		▲

*Trademarks: Paradise, AutoSwitch—Paradise Systems, Inc.; Hercules—Hercules Computer Technology; COLORPLUS—Plantronics, Inc.; AutoCAD, ADI—Autodesk, Inc.; CAD Vance—CalComp Group; Sanders Associates, Inc.; GEM Digital Research, Inc.; Ventura Publisher—Ventura Software, Inc.; Microsoft Corporation; PageMaker—Aldus Corporation; EGA Paint—RIX Softworks, Inc.; Symphony, Lotus 1-2-3—Lotus Development Corporation; Framework II—Ashton-Tate; WordStar—MicroPro International Corp.; WordPerfect—Satellite Software International Registered trademark: IBM—International Business Machines Corporation; Paradise Systems reserves the right to change specifications without notice. © Copyright 1988 Paradise Systems, Inc.

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Western Digital Imaging

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