



## AED767 raster graphics terminal with built-in anti-aliasing.

The AED767 is an intelligent desktop terminal ideal for use in CAD/CAM, animation, business graphics, cartography, graphic arts, television production, and other computer imaging applications. It solves the problem of jagged lines in raster-generated images with built-in anti-aliasing capability. This enables you to create a wide variety of anti-aliased drawings with no prior processing by the host computer.

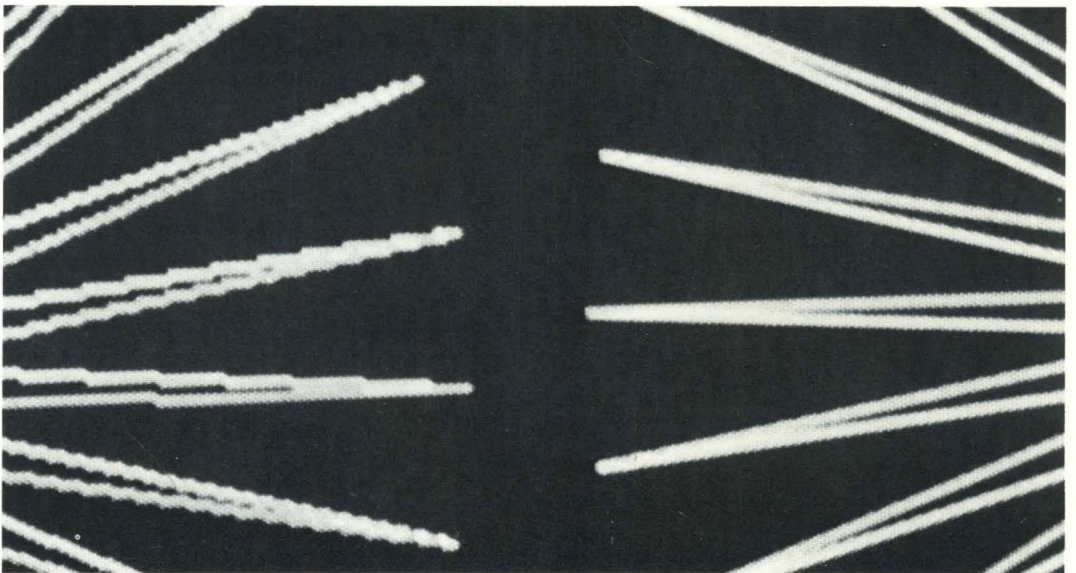
The AED767 offers you a 1K x 1K x 8 virtual address space with a 768 x 575 viewing window. This provides crisper images than existing technologies, and allows you to display the maximum amount of information on the screen at any given moment.

Also standard on the AED767 is a blue-line reference cross-hatch for layout applications, plus ellipse and arc generators, and stipple-filled rectangle and polygon-fill functions.

No matter what your computer graphics application, the AED767 will add powerful imaging capabilities to your local or remote computer.



*The AED767 graphics terminal is sufficiently compact to fit easily on a desktop. It comes complete with keyboard, joystick, I/O ports, and all electronics. Optional display monitors are available from AED.*



*The effects of aliasing, jagged or 'stepped' lines, are apparent in the image shown on the left. By contrast, notice the smooth appearance of the anti-aliased image on the right. Anti-aliasing is accomplished within the AED767's firmware at draw time.*

*(All video images are unretouched, taken directly from the AED767 screen.)*



# AED767 graphics terminal features.

<b>Colors</b>	256 simultaneously displayable colors from a full palette of 16.8 million colors.
<b>Blue-line reference crosshatch grid</b>	Can be turned on or off and brightened or dimmed, as desired. Especially useful for CAD/CAM applications, including drafting, PC board design, etc.
<b>Graphic support commands</b>	Anti-aliased vector; circle; arc; ellipse; color-filled rectangle; stipple-filled rectangle, and polygon (closed curve) fill.
<b>Intelligence</b>	An on-board 500 nanosecond 6502A microprocessor controls the terminal and I/O functions, and performs character, vector, circle, and filled-area generation. Emulation of the Tektronix 4010 family permits running of 10-bit PLOT 10 <sup>®</sup> . Terminal has up to 42K bytes of RAM/ROM. Upward compatible instruction set from AED512.
<b>Keyboard</b>	Full ASCII standard communications format, with upper and lower case characters, 10-key numeric pad, 10 terminal control keys, and 8 user-definable function keys. Solid state key switch design, and typewriter "feel."
<b>Imaging</b>	Full-screen transfer rate of 2.0 sec./picture via direct memory access port.
<b>Scroll</b>	Horizontal and vertical scrolling by simultaneously updating video memory while modifying origin registers.
<b>Zoom</b>	2:1, 3:1, ..., 15:1, 16:1 independently set, horizontally and vertically.
<b>Pan</b>	Display origin register may be set via joystick or under program control to allow continuous pan at any level of zoom.
<b>Joystick</b>	For selecting data features and objects, colors, panning, and image editing. Absolute position (coarse or fine) or rate mode are key selectable.
<b>Communications</b>	Either RS232-C or 20 ma. current loop; rates to 19.2 kilobaud. Terminal includes an auxiliary RS232-C serial interface for driving printer, plotter, or graphics digitizer. The terminal may also be used with all hard copy devices having a standard RS170 interface. Direct Memory Access (DMA) port permits I/O at 500K bytes/second.
<b>Display monitors</b>	Optional 14", 19" long-persistence phosphor, and standard phosphor monitors are available from AED.
<b>Refresh</b>	Interlaced refresh rates are user selectable: 25 Hz for CCIR, 30 Hz for NTSC, 45 Hz for reduced flicker.

## External sync

The AED767 can gen-lock to external video equipment, offering state-of-the-art computer graphics capability to television-based systems. By including video mixers, NTSC encoders/decoders, and/or special effects generators, the user can overlay or switch video from tape, disk or camera with graphics images from the AED767.

## Modular configuration

The base unit, including electronics, I/O ports, keyboards and joystick, may be purchased without the display monitor. The monitor can be placed on top of the base unit or separated from the controller. An alternate configuration includes a remote keyboard, rack-mountable controller, and a separate display monitor.

## Graphics user group

Membership in the AED graphics user group is free to all purchasers of an AED graphics system. Members receive a free subscription to the group's newsletter, access to a library of user-submitted computer programs and software for support of the graphics system, and information about applications for the system from other group members.

## Specifications.

### Power requirements

47-63 Hz; Terminal 100 ± 10% VAC@2A, or 115 ± 10% VAC@2A, or 230 ± 10% VAC@1A, excluding the monitor.

### External connections

Serial Interface—25 pin "D"; Parallel Direct Video Memory Access—50 pin Scotchflex; Aux. Serial—25 pin "D"; Red, Green, Blue composite video—BNC connectors; Monochrome/2-level Hard Copy—UHF connector; External Sync/Mix—UHF connector.

## Dimensions

	Weight	Height	Width	Depth
<b>AED767</b> with 13" color monitor:	60 lbs.	16"	22.8"	30"
<b>AED767</b> without monitor:	25 lbs.	3.5"	22.8"	30"
<b>AED767R</b> (Rack Mount) Terminal:	25 lbs.	3.5"	19"	26.5"
<b>AED767KB</b> Remote Keyboard: Distance 15 feet max.	10 lbs.	3.0"	20.1"	9.8"

## Warranty

The AED767 and its options are guaranteed to be free from defects in workmanship, materials, or design for 90 days from the date of invoice.

## AED graphics command summary

Mnemonic	Instructions	Mnemonic	Instructions	Mnemonic	Instructions	Mnemonic	Instructions
AAV*	Anti-Aliased Vector	ESC	Escape to Interpreter	RJP	Read Joystick Position	STD	Set Turnaround Delay
BFL	Boundary Fill	ESF	Erase Special Font	RPX	Read Pixel	SUB	Enter TEK Compat. Input Mode
BLG*	Blue-Line Grid On/Off	ETC	Enable Tablet Cursor	RRD	Read Raster Direct	SUC	Set Up Counters for DVMA
BSO	Set Both Origins (V&H)	FFD	Form Feed	RST	Reset Terminal	SUP	Enable Superoam
COP	Make Hard Copy	FFR	Draw Filled Rectangle	RVO	Read Vertical Origin	SVO	Set Vertical Origin
DAI	Define Area of Interest	GFL	Relative Generalized Overlay Fill	SAC	Set Alpha Cursor Color	SWM	Set Write Mask
DCA	Draw Cursor Absolute	GS	Enter TEK Emulation Mode	SAP	Select Alpha Parameters	SZR	Set Zoom Register
DCL	Draw Circle	HOM	Home Cursor	SAT*	Setup Anti-Aliased Vector Color Table	VSR	Vertical Scroll Relative
DFC	Draw Fat Circle	HSR	Horizontal Scroll	SBC	Set Background Color	WDA	Write Direct Into AOI
DFF*	Draw Filled Polygon	IFL	Relative Interior Fill	SBL	Set Blink	WHC	Write Horizontal Scan
DFR	Draw Filled Rectangle	JUS	Jump to User Subroutine	SBR	Set Baud Rate	WHR	Write Horizontal Runs if AOI
DJC	Disable Joystick Cursor	LMR	Load Microprocessor RAM	SCC	Set Cursor Colors	WHS	Write Horizontal Scan
DMV	Draw Multiple Vectors	MOV	Move Absolute	SCD	Start Command DMA	WHU	Write Horizontal Runs if no AOI
DPA	Disable Panning	MVR	Move Relative	SCP	Set Cursor Parameters	WIP	Write Incremental Plot
DPK	Define Programmable Key	OFL	Overlay Fill	SCR	Send Carriage Return	WMP	Write Multiple Pixels
DRL	Define LED Display	OPT	Set Programmable Option Number	SCS	Set Console Status	WPX	Write Pixel
DSF	Define Special Font	RCP	Read CAP*	SCT	Set Color Table	WRD	Write Raster Direct
DSK	Define Soft Key	RCT*	Read Color Table	SDA	Stop Direct Access, Read or Write	WSF	Write Special Font
DTM	Define Tablet Mapping	RDA	Read Direct from AOI	SEC	Set Color	XCD	Exit Command DMA
DVA	Draw Vector Absolute	RHO	Read Horizontal Origin	SEN	Set Encoding Scheme	XTD*	Enter Extended Command Set
DVR	Draw Vector Relative	RHR	Read Horizontal Runs	SHO	Set Horizontal Origin		
ECU	Erase Cursor	RHS	Read Horizontal Scan	SIF	Select Interface		
EJC	Unconditionally Enable Joystick Cursor			SKS	Send Keystroke		
ELP*	Draw Ellipse			SLS	Set Line Style		
EPA	Enable Panning			SRM	Set Read Mask		
ERS	Erase Entire Memory			SSE	Set Stack End Address		

\*Reg. Trademark of Tektronix, Inc.

Instruction compatible with AED512.  
\*Available only on AED767.  
\*\*CAP-Current Access Position.



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