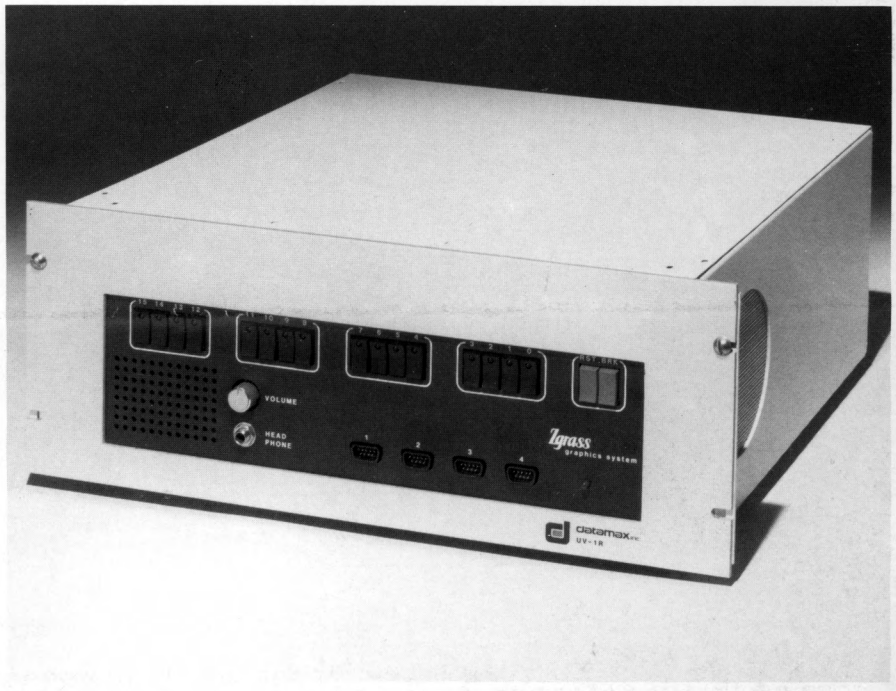
The DATAMAX UV-1R
Zgrass Graphics Computer

The UV-1R *Zgrass* Graphics Computer puts computer graphics capabilities into the hands of the graphic artist. The UV-1R uses advanced video game technology and the powerful *Zgrass* language to produce exciting video images and high-speed animation.



UV-1R Specifications:

User Memory	32K RAM, expandable to 64K for CP/M* compatibility
Screen Memory	256K RAM, with 192K usable as solid-state disk cache ← 16 IMAGE SCREENS
Resolution	320 x 201 x 2 bits
CPU	Z80 hardware-assisted arithmetic processing unit
Palette	256 colors, with four colors displayable per area
Firmware	*Zgrass*-resident 32K EPROM
Output	NTSC composite video (RS170) RGB (optional)
Ports	two RS232C
Interfaces to:	graphics tablet 5.5 Mbyte 5.25″ Winchester drive up to eight 5.25″ floppy drives printer plotter
Front panel connections	headphones four joysticks
Sound	three-voice synthesizer

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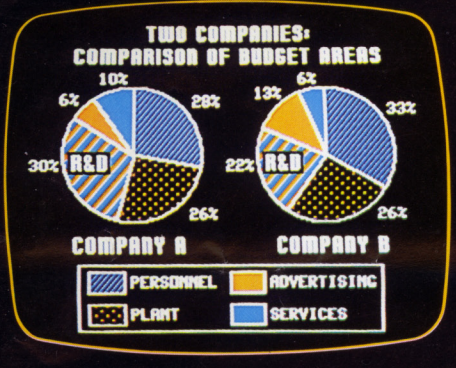
The *Zgrass* Graphics Language

Zgrass is a high-level, interactive computer language that was designed to meet the demands of the artist. *Zgrass* simplifies the creation and manipulation of graphics in real-time. In *Zgrass*, complex computer graphics and real-time animation sequences can be produced in minutes without advanced programming knowledge.

Zgrass features:

- extensive graphics primitives: Point, Line, Box, Circle, Ellipse, Snap, Fill with Color, Fill with Pattern
- 160 modes of drawing with color filters and logical operations
- Easy manipulation of sixteen image screens
- sophisticated error handling and reporting
- parallel and priority program execution
- full string manipulation capabilities
- full hardware-assisted math capabilities, including sine, cosine, tangent, arctan, arccos, arcsin, exponents, natural and base ten logs, and square roots
- full array capabilities, including multi-dimensional and string arrays
- interpretive and compiled execution modes
- user-programmable at two levels: high level *Zgrass* and low-level Z80 code
- controls for time-lapse film recording
- ten system timers for animation



Credits: "Zgrass", "Hometown Hearth", "Two Companies", "Columbia" by Jane Veeder. "American Dance", "Weathermap" by Copper Giloth.