A new, improved way to give your competition headaches.

(System 2000 terminals, $8,250*.)

The Lexidata System 2000. In terms of price, it’s the most affordable step forward in raster technology since the development of raster technology.

In terms of performance, System 2000 will outdo any terminal near it in price and many that cost considerably more.

The combination of which will give you an edge if you’re an OEM. In fact, quite a considerable edge.

And what will it give your competition? Something to keep them awake nights.

**More OEM flexibility**

There are five processor option slots in a System 2000 terminal. They’ll allow you to add more serial ports, and more program memory (up to 1.28 megabytes).

A detachable keyboard with integral joystick is standard with pre-programmed peripheral interfaces.

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**A new ergonomic policy**

On the screen, there are four hardware assisted workspaces. Each with a set of functions that you can call up with simple English commands.

These individual workspaces reduce the overall system cost by eliminating the need for a separate alphanumeric display and a menu space on the digitizer work surface.

This feature, plus the fact that the System 2000 has a multitasking operating system, contribute to two very important aspects of customer concern: Ease of learning and ease of use.

**Improves Tektronix “PLOT-10” four ways**

You can put the System 2000 in a PLOT-10 environment very simply. And very quickly, you can improve that environment.

The System 2000 will give you a 62.5% higher resolution on a 1280 by 1024 line screen.

In black and white, the System 2000 will give you steady, flicker-free graphics. At a refresh rate of 60 Hz.

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There’s more, too. Standard features like zoom, pan, text scroll and independently controlled cursors. And options like an 11” x 11” data tablet and a hard copy interface.

If you’re interested in a demonstration of all this call (617) 663-8550 or write to us at 755 Middlesex Turnpike, Billerica, MA 01865. TWX 710-347-1574.

LEXIDATA

The clear choice in raster graphics.

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What the 4 workspaces do:

**W1** Supports pan and zoom. Ideal for interactive graphics.

**W2** Accommodates system-select menus.

**W3** Is perfect for processing text.

**W4** Is used for logging messages or annotating keyboard function keys.

Note: Each workspace has graphics and text cursors and is adjustable in size.

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*PLOT-10 is a registered trademark of TEKTRONIX

* System 2000, black and white model, $8250 in quantities of 50.

System 2000, color model, $11,621 in quantities of 50.

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This book is at once a delight and a disappointment. In the chapters that focus on robots, Chapters 8-12, the book is crisp and clear, informative, educational, and imaginative. These chapters appear to be the author's native ground.

Even in those chapters that address a model for robot intelligence (Chapters 5-7), Albus's treatment is informative and useful, although I believe the approach is technically flawed.

There are several disappointments. Some are about the book as a book; others are more profound technically.

As literature, when Albus delivers material that comes from others (e.g., Chapter 2-4), the telling lacks the sparkle that occurs when he talks about his own areas of interest and expertise. The book has neither preface nor introduction; not until the last three paragraphs of Chapter 1 does the author inform the reader of his goal or method. There is much, too, that is not made adequately relevant to the book's intent. The material on neuro-anatomy, for example, is largely not connected for the reader to its significance for robotic behavior. Photographs are used to create inexpensive illustrations, and the book's production treats them poorly.

Brains, Behavior, and Robotics is about building and programming "robots with significant motor skills and intellectual behavior." As such it is about complex systems that use as a model what we can learn from "creatures of nature," Albus has chosen a path that focuses on the central nervous system and its role in the mechanics of behavior. Not bad! Indeed, this path has been laid down by many before him. It has great merit as part of a complete understanding of robotic behavior.

My major criticism is that cybernetic systems (a skillful, intelligent robot is one!) are much more profound than "motor skills and intelligent behavior." They are autonomous systems in contact with their environment that have the ability, to some extent, for adaptive behavior and learning. A general systems theory based on living systems, therefore, would seem to serve as a sounder foundation for understanding and achieving robotic behavior. Yet, nowhere in the book does the author consider this type of material—not even at the level of setting it aside as irrelevant, from his point of view. J. G. Miller's magnum opus Living Systems, a reference often encountered in other books on cybernetic systems, is apparently unknown to the author. More important, the understanding of intelligent, adaptive, educable living systems that Miller's book conveys is sorely missing in this book by James Albus.

In conclusion, I encourage interested readers to delve into this book. The sparkle about robotics is worth it. The rest won't hurt.

R. M. Dunn  
Woodbridge, Conn.

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