"We enter each market with this commitment: The best solution in the industry. The best long-term value. That's why Tektronix is far and away the world leader in computer graphics."

Lawrence L. Magee
Group Vice President
Rhode, Inc.
At Tektronix, we're famous for quality assurance. And we're also famous for value assurance; that means a commitment to adapting graphics to the needs of the customers we address. And to anticipate their future needs.

You see part of that commitment demonstrated here. In low cost graphics.


From business and scientific graphing to complete graphic computer systems, our product development is a mutual process: As our customers demonstrate new needs, we continue to develop solutions. On the following pages you'll see where the graphics market, and thus the graphics leader, are heading.
"We found customers asking for even more information capacity. Now we're offering them 25-inch graphics."

Ten years ago Telextronix storage tube (DVST) technology plummeted the price of graphics to a fraction of its former cost.

Today, about four out of five CRT graphics terminals are of Telextronix origin. Most are from our high-resolution DVST family. Our customer base is as broad as business and industry, government and education.

We're sensitive both to the graphics needs of new customers, and to the needs of experienced graphics users to expand capabilities at minimal cost.

Our 19-inch, high resolution display, introduced in 1974, was a response to the requests of sophisticated computer users for a bigger and more detailed graphics workspace. About the same time we satisfied the requests of newcomers—in education and business environments, for example—for basic graphics capabilities priced under $3000.

Other DVST terminals are also offering enhanced capabilities—from plug-in intelligence to combined refresh and storage.

The state-of-the-art is based on stated needs.

Now we are introducing our 25-inch 4016-I terminal. Several years in development, it has been built with specific markets in mind. Customers from network modeling, mapping, and IC design and layout let us know the value of increased graphics capacity. Plus 86 lines of 179 alphanumeric characters per line.

Size alone called for breaking through several technological barriers. At the same time, the design team integrated various features and options based on direct customer input: like detachable keyboard, larger display copy, local digitizing.

Final criteria was based on conformity with existing customer systems.

Users of our smaller screens will be able to expand their capabilities, as necessary, to 25-inch graphics with little or no modification to existing applications software and communications support.

At Telextronix, innovation is a partner with practical application. That means knowing the market—existing customers and new—and knowing how to provide for their individual needs.
"Many of our customers are ready for color. Now for the first time, color is ready for them."

Tektronix has long been a leader in refresh capability. Our first, highly-rated alphanumeric terminal was a pioneer in forms ruling.

Now we have increased this capability to meet new needs. Our recent additions have brought new levels of both graphics simplicity and sophistication into the marketplace.

The 4020 Series offers general business environments an easy evolution to graphics.

Expandable from simple alphanumericics to graphics, this new series makes graphing capability as easy as alphanumeric output has been for years. Yet it's versatile. Rather than fix a few graphing formats in firmware, we designed a complementary English-language, PLOT 10 Easy Graphing software package. Now many non-graphic information systems can easily add graphics capability.

Even more significant may be the introduction of our new color terminal, the 4027.

It literally sets the standard for color graphics—from the one company with the expertise, the service and reputation to give real value to color capability.

This represents the first effort to bring universal order to color graphics.

When we brought out our first storage tube terminal and supporting software years ago, we developed standards and coding systems that are still in use today. The same will be true for color.

We've also made sure that our current customers can make an easy transition from present graphics to color with compatible software. Multi-color plotter support, Gray-scale hard copy... and continued innovation as our customers' color requirements advance.

Tektronix color is designed to facilitate graphical interpretation of statistics in business graphing, and to answer the needs of computer-assisted instruction, laboratory analysis, mapping and network modeling.

Until now, these applications could only imagine the possibility of color graphics. We're making it practical.
We plan our intelligent products to expand upon many of the same time, cost, and labor-saving benefits of graphics by reducing routine processes, intelligence can keep each customer working at the decision-making level.

Our goal is to make each product as simple and personally manageable as possible. By understanding our customers and answering their applications one by one, we make our intelligent graphics products an extension of the mind.

The smartest thing about our personal computer is how well it works with its operator.

The desktop computer user expects an immediate comfort level. He looks for simplicity. An easy-to-use language, a familiar keyboard, and fast answers. So when we built our 4051 graphics system, we made it powerful enough to command a system of peripherals and to operate as an intelligent terminal. But we also designed it to be inherently simple to operate and easy to understand.

It is so consistent that once you've mastered it you don't have to live with a set of manuals.

While designing a non-restrictive hardware package responsive to the expectations of most personal computer users, we've individualized software to specific users groups. Including utilities for sophisticated programmers. Easy application packages like Modeling & Reporting. A PLOT 50 library that includes statistics, mathematics and electrical engineering. Plus a business planning package that produces bar charts, pie charts and line graphs with little more input than the numbers themselves.

Customer needs are leading graphics intelligence into new territories.

Recognizing some major bottlenecks in the nearly universal engineering technique of finite element analysis, we designed the FEM(8), a complete stand-alone applications package that can cut the long, arduous task of finite element modeling by up to two-thirds the time and cost.

You can be sure, too, that with Tektronix customer orientation these future developments will be done not only with intelligence but with good common sense based on your future needs.
"We saw the need to distribute information. Which is why we now lead the art of putting graphics on paper."

To the computer builder, graphics is just one more peripheral to his central system. But at Tektronix, we regard all our products as peripheral to the central idea of quality graphics solving customer needs.

That's why peripherals like our plotters and hard copy are graphics leaders in their own right.

Take plotters. In 1976 we introduced the first smart B-size (11"x17") unit, and led the trend away from analog to digital devices, with the 4662. Its customer base ranges from advanced research environments to office timesharing systems.

The C-size plotter: Not just bigger. More versatile.

Now we are introducing a C-size (17"x22") plotter, the 4663. The thinking behind it, and inside it, is as advanced as it looks.

Although C-size plotters are now rare in printed circuit design, numeric control, civil engineering and drafting environments, much of their work can be done on a C-size work station... cutting time and costs significantly.

Many of our customers have already begun redefining their needs to fit the benefits of the C-size plotter alternative.

Its local intelligence distributes the graphic workload, and configures easily with existing Tektronix products.

It offers increased character generation capability. Circular interpolation. Automatic paper advance. All in a flexible, easy-to-use package.

In display hard copy, too, we've achieved a quality and simplicity any user would appreciate.

Hard copy from the push of a button. It's a simple operation that hides the advanced technology behind high quality copy. It provides sharp, dry copies directly from the screen in a matter of seconds, with reliability that lives up to Tektronix standards.

Our customers take for granted the fact that hard copy is now personal, quick, and economical. The more people can take us for granted, the better we're doing our job.
"We sell the same thing to every system builder: a reliable and responsive partnership."

A few years ago, Tektronix committed itself to a separate organization specifically to serve the OEM needs of the system builder.

It was really the only way. Compared to other markets, many OEM needs are as different as night and day.

Or as different as today and tomorrow. Because what the system builder looks for, more than product reliability, are far-sighted technologies and long-term, close working relationships with their manufacturers.

Our responsibility to the system builder begins with an introduction to our graphics' concept and potential. It involves helping define needs and prove systems feasibility—often years in advance of actual OEM product purchase.

The GMA display series: our first graphics designed specifically for the systems builder.

Planning often includes our GMA modules: combining refresh and storage capability within the same tube, they bring our customers the high detail and economy of storage display, plus the dynamics of refresh. They are designed around a modular chassis that enables easy threading of system cables and addition of a wide range of optional components.

This modular approach helps many system builders cut costs by ordering custom configurations virtually "off the shelf." At the same time, our engineers and manufacturing people are on-call to further tailor the product to meet individual needs.

Inherent to our OEM concept is upward-extendibility. System builders who switch to our new 25-inch display, for example, will be able to do so with no modification to software, timing, or interfaces.

In the OEM market, corporate strength is also a product feature.

Vendor "staying power" is especially important to the OEM. We appeal to people who seek not simply a product, but an extension of their own manufacturing lines.

You’ll find too, that we value our OEM customers for many of the same reasons they value us. The benefits are truly reciprocal: it is through other innovators exercising our product concepts that we learn the full potential of our own technologies...and, in the long run, learn to make graphics better and better for the end user. That's what good partnerships are all about.
"We designed PLOT 10 IGL to anticipate the needs and new equipment that come with growing markets."

One of the biggest pitfalls in computation has been around since William Burroughs invented the adding machine 80 years ago. Burroughs had 50 of his first model built before realizing that no customer was ever likely to get the hang of its operation. Hardware builders have been falling into the same pit ever since.

At Tektronix, we make our products' operation as easy as possible, and provide the tools for future expansion. That includes operational software and documentation that is the most thorough in the industry.

PLOT 10 Software has set a standard for the industry to follow.

Our PLOT 10 Terminal Control System was the industry's first major effort at packaging the building blocks of graphics programming. Today virtually all other graphics suppliers have made their equipment PLOT 10-compatible.

That's a leadership role we plan to maintain, by continuing to support our customers' specific software needs. Towards this end, our latest software package may be the most versatile ever.

Known as the PLOT 10 Interactive Graphics Library, this latest package is completely I/O and device-independent. It allows a customer to run programs today, for example, on a color graphics terminal, then on a storage terminal tomorrow. He can also update his graphics to new applications by selecting advanced capabilities, like 3-D and line smoothing, one at a time.

Our PLOT 50 library, designed for personal computers, includes the most comprehensive series of statistics volumes yet developed, plus other powerful applications software. Plot 80, developed for the 4081 Interactive Graphics Terminal, includes wide-ranging operational and graphics software, host-resident support subroutines, utilities and diagnostics.

The power and convenience of these software packages don't accrue only to the sophisticated programmer, but to users of all experience levels as well. Although the sophisticated innovator is usually our first customer, we're concerned with looking ahead to those users who will be starting with graphics tomorrow.