4016-1

High Resolution 63.5cm (25 inch) Display

TEKTRONIX

Computer Display Terminal

63.5cm (25-inch) screen for displaying high density graphic information. The 4016-1 allows designers of electronic circuit boards, utility networks, automotive components, schematic diagrams, street maps or similar applications to work with fine detail while maintaining the total picture perspective.

With its big 63.5cm (25-inch) diagonal screen, 4096 by 3120 viewable high resolution, and finely etched 10 mil wide vectors, the 4016-1 is uniquely suited for displaying highly complex graphics. Using a direct view bistable storage tube (DVST) display, graphic lines are sharp, stable and flicker-free, making it easy to study the finer details of a map or design. The thumbwheel-controlled crosshair cursor also makes it easy to interact precisely with this detail.
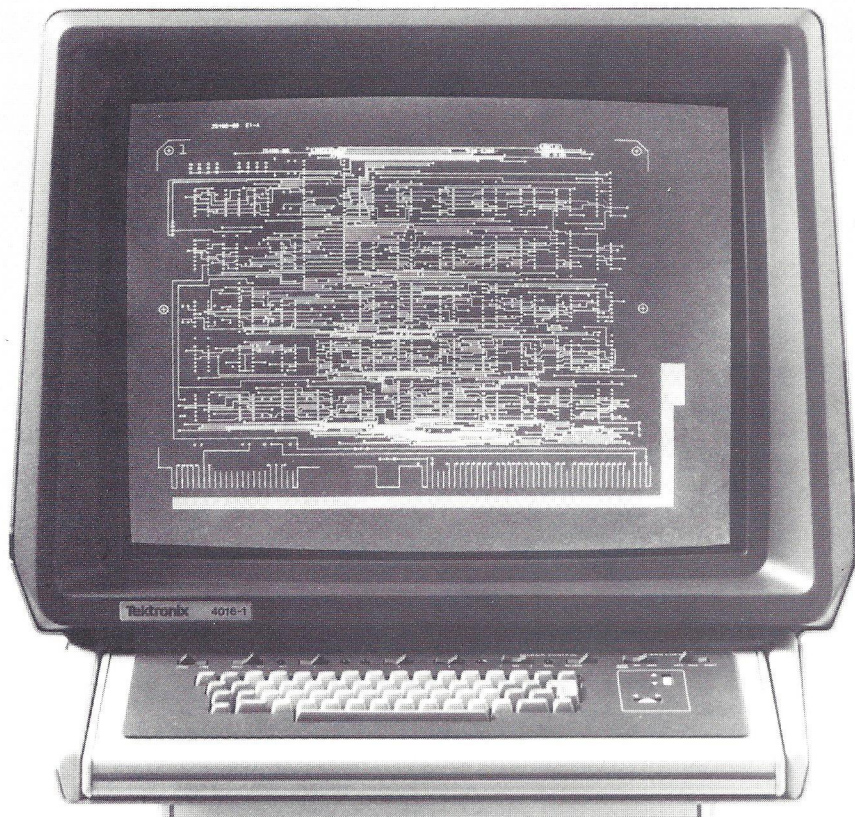
Over 15,000 displayable characters. Besides being able to display and interact with more high density graphic information than any other terminal available, the 4016-1 provides high density alphanumerics for labeling designs and maps. Over 15,000 characters may be displayed simultaneously and may be formatted in 179 alphanumeric characters per line pages like a line printer or as two 85 character per line pages like an open book.

The latter format is particularly useful for developing software and scanning large amounts of alphanumeric output. Three other large character formats are standard with the 4016-1, the largest of which is suitable for group viewing.

Complete Tektronix 4014-1 compatibility. The 4016-1 was designed for complete compatibility with Tektronix 4014-1 application software, communication support, and other Tektronix peripheral devices commonly used with the 4010 series of terminals. The 4016-1 is supported by the family of PLOT 10 software products and proven 4010 series communciations interfacing.

Plug-in intelligence. Using the modular 4010 bus structure, all of the

Tektronix plug-in intelligence options can be used with the 4016-1. Add-on low cost options include up to 26K of usable graphics display memory, scaling, relative graphics, clipping, circular arc generation, rotation by 1° increments, user definable stroke characters, programmable keyboard, GPIB interfacing to the intelligent 4924 Digital Cartridge Tape Drive, 4907 File Manager, and 4662 Interactive Digital Plotter, and local control of these peripherals plus the 4953 or 4954 Graphics Tablet.

Commands also allow a user to digitize data with distance, time or gradient filtering; edit graphics from a host computer, local 4907, 4924 storage device or Option 40 programmed key; access local programmable storage devices; or use off-line plotting of graphics.

Added enhancements. The 4016-1 includes a convenient detachable keyboard and detachable display.

A variety of hardware enhancements are also standard in the 4016-1. They include hardware generated solid, dashed, and dotted lines, point plotting with software controllable point sizes, incremental "relative graphics" plotting, and four hardware character formats.

Hard copy compatibility provides 8½-inch by 11-inch hard copies from a standard Tektronix 4631 Hard Copy Unit.

Contact your local Tektronix Sales Engineer today for more information on the 4016-1 Computer Display Terminal.

Specifications:

Display medium:
Direct View Bi-Stable Storage CRT Written image bright green on green background.

Display area:
45.4 cm (18 inches) wide by 34 cm (13.5 inches) high

Alphanumeric mode:

Character set:
Full ASCII character set (94 printing characters).

Character Format:

Standard Formats:
1. 74 char. per line by 35 lines
2. 81 char. per line by 38 lines
3. 133 char. per line by 64 lines
4. 179 char. per line by 86 lines

Optional Format:
1. 74 char. per line by 35 lines
2. 81 char. per line by 38 lines
3. 121 char. per line by 58 lines
4. 133 char. per line by 64 lines

Alphanumeric Cursor:
7 x 9 dot pulsating cursor

Keyboard:
Typewriter paired upper and lower case with auto repeating keys.

Graphics Mode:
Drawing Time and Resolution
Vector drawing time is 20,000 cm per sec (8000 inches)
4096 (x) by 4096 (y) addressable points (12 bits).
4096 (x) by 3120 (y) viewable points.

Vector formats:
5 formats, including straight, dotted and dashed lines.

Point plotting modes:
Point Plot Mode
Special Point Plot Mode—absolutely addresses points with program control of plotted point size.
Incremental Plot Mode relative addressing 1 of 8 directions, one step at a time.

Graphics Enhancements

Option 40 Programmable Keyboard Capability. Save Graphic displays, picture segments, symbols and alphanumerics in local memory (3K standard) for recall at the keyboard or under program control. Use nested programmable keys, local clipping, alphanumeric refreshed editing for data entry, and buffered communications.

*Option 41 Expanded Symbol and Character package. Add your own alternate stroke drawn character set, local rotation by 1° increments, local scaling of graphics upwards and downwards, local generation of circles and circular arcs, local design of your own symbols and character sets.

*Options 26 and 27 Provides 16K or 32K additional graphics memory for use with Option 40.

***Option 5 Peripheral Control Interface.** Provides terminal control of the following peripherals: 4924 Digital Cartridge Tape, 4907 File Management System, 4662 Interactive Digital Plotter, 4953/54 Graphic Tablet.

Interactive graphic mode:
Thumbwheel controlled crosshair cursor 0 thru 1023 addressable points horizontally. 0 thru 780 addressable points vertically.

Hard Copy Mode:
Switch selectable hard copy of screen using the 4631 Hard Copy Unit.

Power Source:
110/220 (Hi, Med, Low) VAC 48 to 66 Hz 450 W.

Physical Characteristics/Model:
Pedestal model with removable keyboard and removable display monitor.

Dimensions:
Height: 127.76 cm (50.7 inches)
Width: 68.04 cm (27 inches)
Length: 75.60 cm (30 inches)
Weight: 113 kg (250 pounds)

Computer Interfaces:
Basic Data Communications Interface included with the 4016-1 is EIA RS-232-C compatible, Full Duplex. We also offer a range of optional interfacing designed for communications with most of the widely used mainframes and minicomputers.

Companion Products:
4631 Hard Copy Unit
4660 series of Interactive Digital Plotters
4921/22 Flexible Disc Memory Unit
4923 Digital Cartridge Tape Recorder
4952 Joystick
4953/54 Graphic Tablet
4931 Modem
**4924 Digital Cartridge Tape
**4907 File Management System

Software:
PLOT 10 software packages designed to be used with the 4016-1 Graphic Display Terminal, Terminal Control System, Advanced Graphing II, Preview Routines for CalComp Plotters, Minicomputer Software, Character Generation System, APL Graph-II, Interactive Graphic Package, Easy graphing, and the new Intelligent Graphics Enhancement Routines and Interactive Graphics Library.
Contact your Tektronix Sales Engineer for additional data

*Requires Option 40
**Requires Options 5 and 40
***Requires Options 40, 41, and 26 or 27

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