

Enhances performance of Tek 4691 and 4692 Color Graphics Copiers used as host or workstation based system resources.

COLOR GRAPHICS RASTERIZER

- Provides full resolution output to Tek 4692 and 4691 Color Graphics Copiers
- RS-232 input (four-way multiplexed)
- More than 130,000 selectable colors
- Tek 4100 Series command set; supported by many popular software packages
- Offloads host; turns copier into shared resource

Enhances image quality from color copiers. The 4510 Color Graphics Rasterizer accepts images as high level graphics commands across a 4-channel multiplexed RS-232 interface, converts them into raster format data, and sends them to either the 4691 or 4692 Color Graphics Copiers. The 4510 rasterizes the image at the full resolution of the attached copier—including B-size output from the 4691. In contrast, a 4690 Series copier connected directly to one of the Tektronix family of color display terminals produces output limited to the terminal's resolution (ranging from the low cost 4105's 480 by 360 pixels to the 4115B's 1280 by 1024 pixels). With the 4510, blurred characters become crisp and readable, "stairstepped" raster lines become virtually smooth, and even E-size (34 inch by 44 inch) engineering drawings can be legibly printed on B-size paper by the 4691. The 4510 also expands the color palette for the 4691 and 4692 Color Graphics Copiers by supporting over 130,000 colors and shades that have been carefully selected to optimize the quality of the resulting output.



A shared resource for all system users. With its standard 4-channel multiplexed RS-232 ASCII interface, the 4510 makes it easy to drive the 4692 or 4691 Color Graphics Copiers from one or more hosts or workstations. A host-connected 4510 frees terminals from the burden of driving dedicated copiers while improving copy quality. It offloads the host from the rasterization and spooling tasks required by software rasterizers resulting in faster throughput and lower CPU overhead. It cuts the cost per user by providing many users access to the copier resource. It provides superior quality color hardcopy regardless of the range of terminals in use on the system. And with three separate memory options which can handle approximately 200,000 vectors, the 4510 cost effectively accommodates graphics images ranging from pie charts to printed circuit boards to complex mapping applications.

Easy to install, easy to operate. The 4510 installs easily: plug in the cable from the 4692 or 4691, the RS-232

cable from the host, power it up, and set the communications parameters. Thereafter, the 4510 will require little or no attention from the user. After a copy is initiated from the host or local workstation, status LED's indicate that the 4510 is receiving data, and then that it is rasterizing the data and spooling it to the copier. Multiple copies of the same image can be initiated by a single command without further host involvement.

Extensive software support. Like any graphics peripheral, successful operation of the 4510 requires that the host have access to a small software driver appended to the main application package. The 4510 supports a subset of the 4100/4110 Color Display Terminal command set with minor modifications for use with a non-interactive hardcopy output re-

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source. This means that conversion of existing Tektronix color terminal drivers to support the 4510 is easily accomplished. Drivers for the 4510 will be available for TELL-A-GRAF™ and DISSPLA™, ANSYS™, PATRAN-G™, ANVIL-4000™, PLOT 10 IGL, PLOT 10 TekniCAD and others. A 4510 Programmer's Reference Manual is available to facilitate driver development.

Compatible with Tektronix color terminals. The 4510 can also be connected directly to Tek 4106, 4107, 4109, 4113B, and 4115B Computer Display Terminals for operation in loop-through mode from the host through the terminal's port peripheral interface.

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Performance Characteristics

Addressability (input)

4096 by 4096 points

Resolution (output)

Up to 2048 by 4096 pixels. (Depends on copier resolution, media size and copy orientation.)

Graphic Command Syntax

Tek 4100 format

Line Types

Solid and dashed lines, wide lines (vectors only)—variable from 1 to 4 dots wide

Graphic Primitives

Vectors, panels, markers, rectangles, alphanet, graph text.

Number of Colors

132,651 colors and shades; 256 printable per image

Interfaces

Input: 4 channel multiplexed modular RS-232 interface
Output: 8 bit parallel

Physical Characteristics

Height—13.5 cm (5.3 in)
Length—47.8 cm (18.8 in)

Width—40.6 cm (16.0 in)
Weight—7.0 kg (15.5 lbs)

Environmental Characteristics

Temperature: 0 to 40°C

Humidity: 0 to 90%, non-condensing

Line Voltage

87—128 Vac, 174—250 Vac, all at 48 to 66 Hz

Input Power

120 Watts maximum

Safety

Meets UL 114, UL 478, CSA 154, IEC 380, IEC 435

Options and Accessories

Options

(One of the memory options must be ordered with the 4510)

- Option 30 128K bytes total memory (Capacity: approx. 12,000 vectors)
- Option 31 512K bytes total memory (Capacity: approx. 50,000 vectors)
- Option 32 2M bytes total memory (Capacity: approx. 200,000 vectors)
- Option A1 Universal European 220V/16A Power Cord
- Option A2 United Kingdom 240/13A Power Cord

- Option A3 Australian 240V/10A Power Cord
- Option A4 North American 240V/15A Power Cord
- Option A5 Swiss 230V/16A Power Cord
- Option N1 Warranty Plus Service Plan + 9 months
- Option N3 Warranty Plus Service Plan (OEM only)

Standard Accessories


- Power Cord
- 4510 Operator's Manual
- RS-232 Host port cable

Optional Accessories

- 4510 Programmer's Reference Manual
- 4510 Service Manual
- 4510 Pocket Reference Guide

Copier Cables:

- Interconnecting Cable, 3 meters (10 ft.)
- Interconnecting Cable, 10 meters (30 ft.)

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