The Model 2282 Graphic CRT provides high resolution, CRT plotting and fully automatic alphanumeric lettering capability to the 2200 system. The Graphic CRT is connected to the 2200 system in the same manner as a printer. It may be connected to a printer/plotter controller mounted in the CPU chassis, or to the printer/plotter jack in a Model 2236DE, or a Model 2236DW terminal. The user interactive plotting capability of the Graphic CRT can be enhanced by the addition of a Model 2231W-3 Line Printer. This matrix impact printer provides an accurate hard copy reproduction of the graphics information displayed on the Model 2282. When the Model 2231W-3 is not used to copy the CRT image, it responds to normal printing commands from the 2200 CPU. The CRT/printer combination can prepare a wide variety of graphics from bar graphs, pie charts, 3-D plots, graphics of standard mathematical functions, and business curves to engineering drawings, architectural drawings, machine components, and maps.

The Model 2282 has a 12-inch diagonal CRT screen with a 7.8 inch (19.8 centimeters) wide by 5.0 inch (12.7 centimeters) high viewing area. The graphics image is displayed from graphics memory via standard raster scan techniques, thus providing bright clear images under all ambient lighting conditions. The plotting matrix on the screen consists of 800X by 512Y addressable locations (dots). In addition to plotting line vectors, a 112-character ASCII set can be plotted in 15 different sizes. Selective vector and character erasure is also supported.
The Model 2282 is generally controlled and programmed from the 2200 system with the PLOT statement, although other statements including PRINT and $GI0 can also be used. In addition, a Set Character Spacing command allows characters to be spaced any number of addressable locations apart in both the vertical and horizontal direction. Characters are always oriented right side up, but the character spacing command may be used to cause a character string to be printed horizontally, vertically, or diagonally.

Controls and indicators on the Graphic CRT include Contrast and Brightness controls, a CLEAR SCREEN switch, a Power lamp, and an OUT OF LIMITS lamp to alert the operator when the current plot vector falls outside the limits of the screen. In addition, a COPY button permits the image on the Graphic CRT to be reproduced on the Model 2231W-3 Line Printer, and a PRINTER SELECT switch permits normal printer operations to proceed without interacting with the Graphic CRT.

**MODEL 2282 GRAPHIC CRT SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>13.5 in. (34.3 cm)</td>
</tr>
<tr>
<td>Depth</td>
<td>20.5 in. (52.1 cm)</td>
</tr>
<tr>
<td>Width</td>
<td>19.8 in. (50.2 cm)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>38.5 lb (17.4 kg)</td>
</tr>
<tr>
<td><strong>Display Size</strong></td>
<td>12.0 in. diagonal (30.5 cm)</td>
</tr>
<tr>
<td><strong>Viewing Area</strong></td>
<td>7.8 in. x 5.0 in. (19.8 cm x 12.7 cm)</td>
</tr>
<tr>
<td><strong>CRT Phosphor Type</strong></td>
<td>P39</td>
</tr>
<tr>
<td><strong>Screen Array</strong></td>
<td>800X by 512Y addressable locations (dots)</td>
</tr>
</tbody>
</table>

**Refresh Rate**

30 frames per second

**Plotting Time**

0.048 sec (full screen horizontal vector)

**Dot Turn On/Turn Off Time**

60 μ sec

**Controls/Indicator Lamps**

CLEAR SCREEN, PRINTER SELECT, COPY SCREEN TO PRINTER, BRIGHTNESS and CONTRAST, Power, Out of Limits

**Programmable Control Codes**

Binary Plot Vector, “Pen” Up, “Pen” Down, Select “Pen 1”, Select “Pen 2”, Reset, Clear the Graphic CRT, Copy the Graphic CRT, Select the Graphic CRT, Set Character Size, Set Character Spacing, Set Home, Select Printer, Power ON/Set Home

**Character Generation**

112 ASCII, 15 selectable sizes

**Cabling**

8.0 ft (2.4 cm) to power source
12.0 ft (3.7 m) cable with connector to the CPU

**Controller**

Standard Wang Line Printer Controller/CPU interface. When used with the Model 2231W-3 Line Printer, the printer cable plugs into the output connector of the Model 2282.

**Power Requirements**

115 or 230 VAC ± 10%, 50 or 60 Hz ± 1 Hz, 65 W

**Fuse Size**

3 amps @ 115 V, 1.5 amps @ 230 V

**Operating Environment**

50° F to 90° F (10° C to 32° C)
20% to 80% relative humidity allowable
35% to 65% relative humidity recommended
ORDERING SPECIFICATIONS

A Graphic CRT providing complete interactive plotting capability to the Wang System 2200. The CRT must measure 12 inches diagonally, and must be capable of displaying 800x by 512Y addressable locations (dots). The Graphic CRT control panel must have CLEAR SCREEN, COPY, and PRINTER SELECT switches in addition to an Out of Limits indicator lamp. It must plot a 112-character ASCII set with both upper- and lowercase letters in 15 character sizes. The Graphic CRT must respond to programmable PLOT commands and be compatible with Wang Plotter Utilities.

An optional printer must use a dot matrix printing technique to reproduce the graphic image from the CRT. When in the plotting mode, the printer must sweep strips of 800X dots by 8Y dots on the paper. When used as a printer, it must print at a rate of 120 characters per second using a 7 x 8 dot matrix. It must print a 112-character ASCII set in both 14.4 pitch and expanded sizes, and must print a 132-character line. When used as a printer, it should also have a full-line buffer.

Standard Warranty Applies

MODEL 2282/2231W-3
CONFIGURATION
ONE INDUSTRIAL AVENUE
LOWELL, MASSACHUSETTS 01851
TEL. (617) 459-5000
TWX 710-343-6769, TELEX 94-7421