

# **Description**

## **GENERAL**

The WY-300 is a smart editing character oriented video display terminal with the attractive feature of being able to display data in eight colors on the CRT screen. In addition, the WY-300 contains a "soft" character generator into which up to 256 custom symbols may be loaded from the host computer.

The extensive color display features combined with a comprehensive set of data entry, editing and line drawing functions and an attractive, compact and ergonomic design make the WY-300 ideally suited to displaying Gantt charts, histograms, process control flow diagrams, etc. in full color in addition to using color to enhance normal alpha-numeric displays for data entry and text processing applications.

For added convenience, the WY-300 has a Wyse (single page) compatible mode in which the monochromatic attributes of dim, reverse, etc. are translated to colors. This feature allows users to take advantage of color without the need to reprogram the host computer.

#### **VIDEO FEATURES**

The WY-300 includes a 12" (30.48 cm) diagonal CRT capable of displaying eight colors. The eight colors are red, green, blue, yellow, cyan, magenta, white and black.

The display provides a screen format of 80 columns by 26 rows with each character position consisting of a 10 x 11 cell matrix. Each character position on the screen can be individually defined as any one of the eight foreground colors and any one of eight background colors. Changing from one color to another (background, foreground or both) does not require a space on the screen and there is no restriction on how many color changes can be made in any row.

Depending upon the operating mode of the terminals, colors are selectable either from the keyboard or from the host computer.

## SOFT CHARACTERS

The WY-300 includes a soft (RAM) character generator with the capacity to store 256 different symbols. Any of the 256 symbols can be displayed in any of the character positions.

In addition, the WY-300 contains a predefined set of symbols which are permanently stored in ROM and which are loaded into the soft character generator automatically upon power-up. This symbol set includes the full 96 ASCII display symbols, the 32 ANSI control code symbols and an extensive line drawing set.

#### **KEY FEATURES**

- · Clear, 80 column high resolution eight color display
- · Hidden color attributes
- . Extensive alpha-numeric and line drawing symbols
- · Soft downloadable character generator
- . Compact ergonomic design with swivel and tilt CRT and detached keyboard
- . Text editing and forms data entry functions
- 105 key keyboard
- Two independent RS-232 ports to 19.2 Kbps
- Soft keycodes



An attractive feature of the WY-300 is the fact that customer defined symbols may be downloaded from the host computer, stored in the soft character generator and displayed on the screen.

Symbols may be freely designed within a 7 wide by 11 high dot matrix in a 10 x 11 cell. Provision is made for drawing continuous lines in both the horizontal and vertical directions.

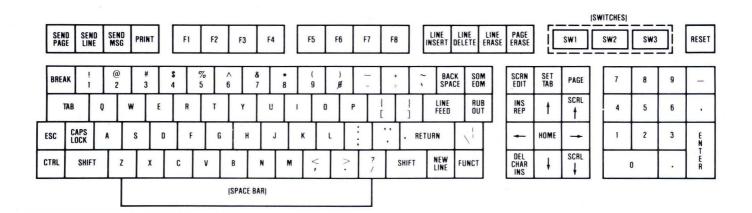
The soft character generator provides the capability to display special fonts such as italics, typesetting symbols, and non-English characters as well as many symbols for line drawings, bar charts, histograms, etc.

## **COMMUNICATIONS**

The WY-300 contains two independent bit serial RS-232 ports each of which operate asynchronously at speeds up to 19.2 Kbps. Speeds, bits per character, stop bits and parity are switch selectable by DIP switches located on the keyboard.



# WY-300 Keyboard Layout



### **KEYBOARD**

The WY-300 includes a detached keyboard connected to the video module by a 6 foot (1.8288 m) coiled cable. The 105 keys are arranged as a typewriter section, a cursor control section and a 14-key numeric pad. There are also special purpose editing keys and eight general purpose function keys (each of which generate separate unshifted and shifted codes).

On power-up, the keyboard table is read from ROM and loaded into RAM. By means of an escape code sequence, the host can modify the "soft" translation table such that customer defined keycodes can be generated.

## **FUNCTIONALITY**

The WY-300 is designed to operate in either of two selectable modes, namely, WY-100 mode and WY-300 mode.

#### WY-100 MODE

The WY-100 mode provides a terminal which is compatible with the single page versions of the WYSE WY-100 terminal except that color is used to replace the monochromatic attributes of normal, dim, reverse and underscore (the blink and blank attributes remain unchanged). In this mode, attributes that take a space on the screen on the WY-100 also take a space on the color version. Likewise; the protect/dim feature, which does not take a space in the WY-100, also does not take a space on the color version. Thus, WY-100 display formats are unaffected by using the WY-300.

In the WY-100 mode, the mapping of attributes to colors is pre-defined as:

normal = yellow dim = red

reverse = green underscore = blue

These default colors may be changed from the keyboard or the host computer for operator convenience.

All of the editing and data entry functions of the WY-100 are supported in this mode with the exception of second page, wordwrap and data validation.

A feature of the WY-100, which has been extended in the WY-300, is the use of the 26th screen row for function key labelling. Instead of being able to display eight labels, the WY-300 allows up to sixteen labels, eight at a time, through the use of the SHIFT key.

The WY-100 mode makes the use of color immediately available to a wide variety of existing systems, such as WordStar<sup>TM</sup>, SuperCalc<sup>TM</sup>, etc. without the need to reprogram the host computers.

#### WY-300 MODE

The WY-300 mode allows the host computer to be programmed to take full advantage of the color and other features of the terminal. To this end the terminal responds to additional escape code sequences which allows the full repertoire of colors to be specified for both foreground and background on a character basis. In this mode, color changes do not take a space on the screen. The normal attributes of reverse, blank, underscore and blink all have the same visual effects as on monochromatic terminals. These attributes do take a space on the screen which is displayed as a blank in the specified background color.

In the WY-300 mode, the text editing and data entry features of the WY-100 mode; the downloading of soft symbols into the character generator and modifications to the keyboard translation table are all supported.

These photographs demonstrate the effective use of color in a common word processing application. Both show a typical WordStar display in which the screen is divided into two sections, the upper section is used to display menu prompts from the WordStar program and the lower section is used to display the text being processed.

The photograph above shows the conventional monochromatic presentation in which the two sections are displayed differently through the use of half and full intensity. The photograph to the right shows how the use of color achieves the same result but in a more effective manner. In this particular example, the selected colors are red and yellow, however, in the WY:300 the choice of which colors are used is selectable by the operator.

# **WY-300 Specification Summary**

## **Dimensions**

**Display cabinet:** 12.5"H × 15"W × 13.5"D (31.75 cm × 38.1 cm × 34.29 cm)

**Keyboard:** 2.6" H × 20.5" W × 7.1" D (6.604 cm × 52.07 cm × 18.034 cm)

**Finish:** Beige and Black **Shipping weight:** 50 lbs. (22.68kg)

## CRT

12" (30.48 cm) Diagonal Eight Color Display Tilting/Rotating Display Front Bezel Power On/Off and Intensity Control

**Display Format:** 24 rows  $\times$  80 characters plus 2 rows for terminal status and function key identification.

**Display Attributes:** Red, green, blue, yellow, cyan, magenta, white and black; blink, underscore, blank, reverse.

**Character Matrix:**  $7 \times 10$  matrix in a  $10 \times 11$  cell

**Character Set:** 256 symbols (96 ASCII, 32 control plus line drawing) in ROM. Soft character generator capable of storing 256 symbols either from the predefined symbols in ROM or downloaded custom symbols.

Cursor: Block, blinking Memory Size: One page

# Keyboard

Detached with 6' (1.8288 m) coiled cable, 105 keys arranged in a typewriter style layout.

**Function Keys:** 8 program function keys plus a special 'funct' key to provide up to 96 codes.

**Numeric Pad:** 14 keys include numbers 0-9 (calculator format), period, comma, minus and enter/tab.

Functional Command Keys: Escape, rubout, break, control, line feed, backspace, return, return/line feed, tab, new line, page, set tab, shift, caps lock.

**Editing Keys:** 6 keys include character or line insert/delete, and line or page erase.

**Cursor Keys:** 8 keys allow paging and scrolling; and cursor movement up, down, left, right, home.

**Send or Print:** 4 keys transmit a line, page or message; or print the screen.

## Communications

Type: ASCII asynchronous, TTY compatible

Interface: EIA RS232

Mode: Block or conversational, half or full

duplex

Baud Rate: From 50 bps to 19.2 Kbps

Data Size: 7 or 8 bits Stop Bits: 1 or 2

Parity: Odd, even or none

## **Power**

Standard: 120 VAC, 60 Hz Optional: 240 VAC, 50 Hz

## **Environmental**

Operating Temperature: 32° - 131° F (0° - 55° C)

**Storage Temperature:**  $-40^{\circ} - + 140^{\circ} F$  $(-40^{\circ} - + 60^{\circ} C)$ 

Humidity: 10% - 90% without condensation

## **Functions**

**Cursor Functions:** Left, right, up, down, home, cursor to start of text, tab, back tab, line feed, return, new line (carriage return and line feed operation), direct X-Y cursor addressing.

**Editing Functions:** Erase memory, erase to end of line/field, erase to end of memory, insert/delete line, insert/delete character.

Form Data Entry: Protected, non-protected fields.

**Host Message Field:** Separate screen area for host computer message. Host computer controllable 26th line to display function key identifications.

