



The SPERRY UTS 60 display station is a powerful and versatile color/graphics terminal system. It offers up to 2M bytes of memory and is totally programmable, making the UTS 60 an extremely useful interactive color/graphics terminal and stand-alone business computer.

The terminal supports a wide range of peripherals, including three printers, one of which supports dot graphics and color options; a 5¼-inch diskette subsystem; a graphics input tablet; and a multi-pen plotter.

Operator convenience and comfort were major considerations in the design of the UTS 60. The ergonomic features of the terminal include a low profile keyboard; a flicker free 14½ diagonal color display; up to 16 colors; increased CRT focus and intensity control; and an optional tilt rotate base and polarized screen bezel.

The "personality" of the UTS 60 is loaded from the diskette subsystem, providing for easy updating and flexibility. The personalities of the UTS 60 are UNISCOPE, for using the UTS 60 as an interactive or stand-alone terminal, and CP/M 68K\*, for personal/professional computer operation. A variety of programs are available for both personalities.

For UNISCOPE operation, the UTS 60 supports UTS COBOL, as well as several utility programs. The CP/M\* operating system offers a wide variety of compiler languages and application programs available at a low cost from both Sperry and independent software vendors.

The CP/M 68K operating system contains all the features of previous CP/M systems.

When it comes to high performance, versatility and flexibility, the UTS 60 is the terminal.





## More About the SPERRY UTS 60

Much of the UTS 60's high performance comes from the 16-bit MC68000 microprocessor and its versatility from the large memory expansion capabilities. Memory can be increased from the standard 128K bytes up to 2M bytes.

The color graphics are assisted by the hardware, which increases screen painting speed. SPERRY and CP/M 68K utilities also support the graphics. There are eight alphanumeric colors and 16 graphics colors to provide the flexibility needed in most applications.

The ease-of-use features of the UTS 60 make it simple to take advantage of the terminal's speed and graphics capability. The 14½-inch diagonal display is angled to provide comfort and minimal glare. For difficult situations, a bezel/filter feature is available to eliminate practically all reflection and enhance display contrast.

Also reducing glare and improving visibility are low contrast grey colors on the casework, keyboard and bezel and improved CRT focus capabilities.

To reduce fatigue and stress, a tilt/rotate base is available to allow the operator to adjust the height and angle of the CRT. The low profile keyboard is styled after a typewriter and requires little operator training. All the control keys required to operate the terminal and initiate data transfer are located on the keyboard and are easily accessible. The keyboard is virtually silent, but an audible click can be activated to reassure operators that data was entered successfully.

The terminal comes with proven field control features that can provide basic data entry without the need of a user program. These features include right justify;

alpha/numeric checking; automatic tabulation settings; color selections; and non-display. Field control is provided for all 24 lines and each of the 80 characters per line.

A number of parameters can be selected to satisfy operator preferences or meet application requirements. These parameters, controlled by a supervisor who gains access to them using a special key, include:

- Choice of character and background color
- Communications speed
- Destructive or non-destructive space bar
- Screen time out values
- Audible keystroke feedback.

For communications with a host system from remote locations, the UTS 60 is equipped with an RS232/V.24 communications interface. The SPERRY Terminal Multiplexer permits the UTS 60 to share a line with other terminals. Terminal multiplexers and modems may be multidropped on the same line. The UTS 60 transmits synchronously in ASCII code, the industry standard, at speeds up to 9600 bits per second. The terminal can be connected directly at the host site.

The peripherals available for the UTS 60 are impressive. An SA 400 diskette interface supports up to four 5¼-inch diskette drives, each having a capacity of 737K bytes, formatted. A diskette serves as the load as well as storage device. A Small Computer System Interface (SCSI) can support a hard disk with a capacity of 60M bytes.

A graphics input tablet and a multi-pen plotter are supported when

graphics capabilities are added to the terminal. Three types of printers are available: a Model 25 high quality/medium speed matrix printer, a Model 31 correspondence quality printer; and a Model 35 high quality/medium speed printer that has optional color and graphics.

## SPERRY UTS 60 Features Programmability

- UTS COBOL (subset of ANSI std. X.325—1974) UTS COBOL programs are compiled on a Sperry Host system (Series 1100, System 80 or Series 90)

## CP/M

- The CP/M Software package enables the UTS 60 to operate as a personal/professional computer. The CP/M 68K operating system is supplied by Sperry on diskette. The package includes an assembler, utilities and extensive documentation. CP/M compatible high level language compilers and application programs may be purchased directly from independent software vendors.

## Peripheral Configurability

- Up to 2.9 mega-bytes of 5¼-inch diskette storage.
- Choice of two of the following printer models:
  - Model 25 high quality/medium speed matrix printer
  - Model 31 correspondence quality printer
  - Model 35 high quality printer with color/graphics options
- Graphics input tablet and multi-pen color plotter are supported when a graphic feature is installed.
- Up to 60 megabytes of disk storage.

## Software Utilities

- Diskette file management
- Edit processor
- Business graphics utility
- Character set utility
- File transfer utility



Other features of the UTS 60 include:

- Screen bypass
- Character descenders
- User entry site parameters including station and device identifiers
- 25th display line for indicators
- Line monitor function via control page.
- UNISCOPE character protect in basic unit.
- Up to 80 field control characters per line.
- Emphasis attributes such as underline and strike-through.
- Non-display field option.
- 16 color graphics.
- Selectable character or background color in any field.
- Merge of text and line graphics or separate use of each.

### **SPERRY UTS 60**

#### **FUNCTIONAL CHARACTERISTICS**

##### **Display Format Selections**

Any display format may be selected from 2 lines of 2 characters each to 24 lines of 80 characters each. The 25th line is for status display.

##### **Display Size**

14.6 inch diagonal

##### **Character Generator**

9 x 15 dot matrix, refresh rate of 60 times per second.

##### **Character Generator**

Soft character generator for storage of 384 characters.

##### **Transmission Code**

7-level ASCII plus parity bit

##### **Transmission Mode**

Half-duplex

##### **Transmission Facilities**

Voice grade (telephone switched network or private line)

##### **Transmission Type**

Synchronous

##### **Transmission Rates**

Up to 9,600 bits per second

##### **Communications Interface**

EIA RS2323C/CCITT V.24

#### **Data Integrity Provisions**

- Minimum single bit error detection on communication line and peripheral transfers.
- Automatic retry with communication line and peripheral transfers.
- Internal parity checking.
- Memory error detection and correction on user memory.

#### **Single Keylock Two Key Security**

Operator Key  
Supervisor Key

#### **Selective Addressing**

Host processor can select any terminal or peripheral device or both. Host can initiate data transfer from the terminal or peripherals.

#### **Low Profile Keyboard**

- Expanded typewriter (full function with numeric keypad).

#### **Color/Graphics**

Eight colors are provided with alphanumeric and 16 colors for graphics. The dot spacing is 51 per inch (2 dots per MM). Graphics pixels are 375 vertical x 512 horizontal.

#### **Language Selections**

Domestic (U.S. ASCII)  
United Kingdom  
French  
German  
Spanish  
Danish/Norwegian  
Finnish/Swedish  
Italian

#### **Protected Format**

Protection of specified data fields as defined by field control characters or UNISCOPE character protect sequences.

#### **Editing and other Function Keys**

- Cursor control
- Character, field, line, screen editing
- Peripheral Control
- Miscellaneous

Program attention keys generate unique codes for use as requests or indicators to host or user programs, extending operation and system control.

#### **PHYSICAL CHARACTERISTICS**

Width: 19.5 inches (49.5 cm)  
Height: 14.8 inches (37.6 cm)  
Depth: 19.3 inches (49.0 cm)  
Weight: 65 pounds (29 kg)

#### **POWER REQUIREMENTS**

##### **Nominal Voltage**

110, 120, 220, or 240 volts

##### **Nominal Frequency**

50 or 60 Hz

##### **Phases and Lines**

Single phase, 3 wire

##### **Input Power Required**

360 volts-amps

##### **Heat Dissipation**

826 BTU/hr.

##### **Power Dissipation**

242 Watts/hr.

#### **PERIPHERAL DEVICES**

##### **SPERRY 8439 double-sided Diskette Subsystem**

#### **CHARACTERISTICS**

##### **Storage capacity per diskette**

737 bytes (maximum 2 diskette drives per subsystem)

##### **Transfer Rate**

31.25 kilobytes per second

#### **PHYSICAL CHARACTERISTICS**

Width: 14.50 inches (36.8 cm)  
Height: 3.25 inches (8.3 cm)  
Depth: 13.10 inches (33.3 cm)  
Weight: with single diskette drive  
10 pounds (4.55 kg)  
with dual diskette drive  
13 pounds (5.91 kg)

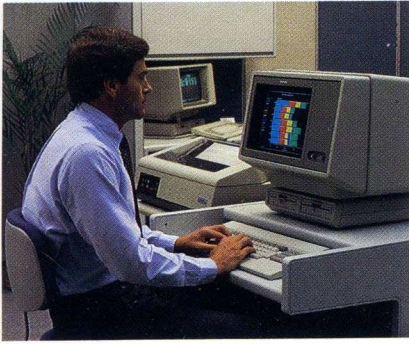
#### **POWER REQUIREMENTS**

##### **Nominal Voltage**

100, 120, 220 or 240 volts

##### **Nominal Frequency**

50 or 60 Hz



### SPERRY Model 31 Printer Correspondence Quality Printer

#### FUNCTIONAL CHARACTERISTICS

**Print Speed**  
55 CPS Shannon text

**Character Sets**  
More than 100 different type styles  
and character sets

Daisywheel full form characters

#### PHYSICAL CHARACTERISTICS

Width: 23.33 inches (58.5 cm)  
Height: 6.63 inches (16.8 cm)  
Depth: 16.75 inches (42.5 cm)  
Weight: 37 pounds (16.6 kg)

#### POWER REQUIREMENTS

**Nominal Voltage**  
120/220/240V 50/60 Hz

### SPERRY Model 25 Printer High Quality Printer

#### FUNCTIONAL CHARACTERISTICS

**Print Speed**  
160 CPS (10 C/1)—9 x 7 Matrix  
40 CPS (10 C/1)—18 x 40 Matrix

**Character Sets**  
A selection of national sets  
available.

**Character Matrix**  
9 x 7—draft quality printing  
18 x 40—high quality printing

#### PHYSICAL CHARACTERISTICS

Width: 19.33 inches (49.1 cm)  
Height: 6.22 inches (15.8 cm)  
Depth: 9.65 inches (24.5 cm)  
Weight: 16.5 pounds (7.5 kg)

#### POWER REQUIREMENTS

**Nominal Voltage**  
120/220/240V 50/60 Hz

### Sperry Model 35 Printer High Quality Printer

**Character Sets**  
A selection of national sets  
available.

#### FUNCTIONAL CHARACTERISTICS

**Print Speed**  
400 CPS (10 C/1)—9 x 7 matrix  
(DQP)  
167 CPS (10 C/1)—18 x 40 matrix  
(HQP)

Graphics and 4 color printing  
capability available.

Loadable character set option  
permits user definable character  
set.

#### PHYSICAL CHARACTERISTICS

Height: 9.4 inches (240 mm)  
Width: 28.8 inches (656 mm)  
Depth: 18.1 inches (461 mm)  
Weight: 70 pounds (32 kg)

#### POWER REQUIREMENTS

**Nominal Voltage**  
100/120/220/240V 50/60 Hz

### SPERRY 8441 Mass Storage Subsystem

#### FUNCTIONAL CHARACTERISTICS

**Storage Capacity**  
5¼" disk 30 MB formatted  
5¼" diskette 737 KB formatted

Combinations of above storage  
devices are available.

#### PHYSICAL CHARACTERISTICS

Width: 16.75"  
Height: 6.25"  
Depth: 17.55"  
Weight: 27 pounds Max.

#### POWER REQUIREMENTS

**Nominal Voltage**  
100-120V 200-230V  
50 or 60 Hz 50 Hz

