

Texas Instruments Model 940 Electronic Video Terminal



The Model 940 Electronic Video Terminal is intended to be the first member of Texas Instruments' OPTI 900 family of displays. A unique feature of the Model 940 is its ability to divide the display screen into as many as 12 independent scrolling regions.

MANAGEMENT SUMMARY

Texas Instruments' OPTI 900 family of video display terminals is intended to complement the company's popular and successful Silent 700 and OMNI 800 teleprinter terminal families. The first member of the OPTI 900 family, the Model 940, offers a variety of advanced features at a price below most currently available terminals with comparable features.

A unique feature of the Model 940 is its ability to partition the display screen into up to 12 independent scrolling regions. The scrolling regions consist of two vertical segments, and up to six horizontal segments. Separate fields can be defined within each region to accept only numbers, only letters, or both. Fields can also be defined to automatically tabulate and send protected or unprotected data.

The Model 940's 12" (diagonal) display screen can accommodate two screen formats. The operator can select the 24-line by 80-character format, or a 12-line by 132-character format. A 25th line displays information in three selectable modes: status, errors, and host messages; tabs, margins, and host messages; and a blank mode for display of selected information. Visual attributes include double size characters, reverse video, and high/normal intensity. Characters are formed using a 7 x 9 dot matrix in a 9 x 11 cell, and are displayed in white on a dark background. Reverse video is available on a letter or screen basis.

The Model 940 features a detached keyboard, connected to the console via a 6-foot coiled cord. The keyboard is equipped with functionally clustered keys divided into typewriter, numeric, editing, and function arrays. Included ➤

The first member of TI's OPTI 900 family of ASCII display terminals.

The Model 940 features a 12" display screen with operator-selectable screen formats of 24 lines by 80 columns or 11 lines by 132 columns. The screen can be divided into up to 12 independent scrolling regions, for data entry and similar applications. The Model 940's keyboard is detached, with functionally clustered keys divided into typewriter, numeric, editing, and function arrays. Optional ergonomic features include a tiltable display monitor, and detachable nonglare screen filters.

The single quantity price for the Model 940 is \$1,895.

CHARACTERISTICS

VENDOR: Texas Instruments, Inc., Digital Systems Group, P.O. Box 1444, Houston, TX 77001. Telephone (713) 937-2000.

DATE OF ANNOUNCEMENT: February 1981.

DATE OF FIRST DELIVERY: June 1981.

NUMBER DELIVERED TO DATE: Information not available.

SERVICED BY: Texas Instruments.

CONFIGURATION

The Model 940 is a stand-alone ASCII display terminal. The basic unit consists of a display monitor and a detached keyboard, connected to the monitor via a 6-foot coiled cord. A tiltable display monitor is available as an option.

TRANSMISSION SPECIFICATIONS

Transmission is asynchronous, in half- or full-duplex, at speeds from 110 to 19,200 bps. An EIA RS-232-C interface is standard, as is an auxiliary output port (also RS-232-C) for hardcopy printouts. A 20mA current loop or an RS-422 interface can be obtained as an option.

DEVICE CONTROL

The Model 940 can transmit data in interactive (character) or block transmission modes. In interactive mode, data is transmitted character by character as it is keyed. In block mode, data is entered into local terminal memory as it is keyed, and transmitted in blocks at a later time to reduce host computer loading.

Cursor controls move the cursor up, down, left, right, and home. Configuration parameters are stored in non-volatile RAM. Editing features include insert/delete character and insert/delete line. Video attributes include double-high and/or double-wide characters, character highlighting, and reverse video. ➤

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▷ are four operator-programmable character string keys (up to 128 characters stored in non-volatile memory), and 12 programmable function keys, which can provide either 24 functions or 12 functions and 12 additional character string keys. Other standard features on the keyboard include automatic character repeat, operator-selectable audible key click, keyboard-controllable multilevel display contrast, erase functions, and an operator-selectable audible alarm.

One page of display memory is standard, with one or three additional pages optionally available. The Model 940 can transmit in character or block mode, at speeds up to 19,200 bits per second. A self diagnostics capability is standard, as is an automatic display disable feature. Additional options available include a tiltable display monitor, detachable non-glare screen filters in neutral, amber, or green, and international as well as graphics character sets.□

▶ The display screen can be divided into up to 12 independent scrolling regions via two vertical segments and up to six horizontal segments. Data contained within each region is handled separately. The operator can define separate fields within each region; these fields can be defined to accept numerics only, alphabetic only, or both. A mandatory enter command requires the operator to complete the field before proceeding, and the fields can be defined to automatically tabulate and send data. Protected fields can be designated to prevent the operator from altering data programmed by, and received from the host. Unprotected data can be altered at the terminal. All data can be justified to the right margin before transmittal. Data within a protected field can be identified as guarded information (not to be transmitted), or as unguarded (to be transmitted).

COMPONENTS

CRT DISPLAY UNIT: A 12-inch (diagonal) display screen with two operator-selectable screen formats: 24 lines by 80 columns, and 11 lines by 132 columns. A 25th display line at the bottom of the screen displays information in one of three operator-selectable modes: status, errors, and host messages; tabs, margins, and host messages; and blank mode for selected information functions and host messages. Characters are displayed in white on a dark background, and formed utilizing a 7 x 9 dot matrix character configuration in a 9 x 11 dot matrix cell, with true descenders and underlining. The 128-character ASCII set is displayable.

One page of display memory is standard. One or three additional pages of memory are optionally available. Other options available include a display tilt mechanism, and detachable non-glare filters in green, amber, or neutral. The display is equipped with an automatic display disable feature, which turns the display off if there is no activity from the keyboard for 15 minutes. The screen is reactivated when the operator begins keying again, or when data is received from the host.

KEYBOARD: A detachable, typewriter-style keyboard. The keyboard is connected to the display monitor via a 6-foot coiled cord. The keys are functionally clustered, divided into typewriter, numeric, editing, and function key groups. Four operator-programmable character string keys are included. Also standard are 12 programmable function keys, providing either 24 functions, or 12 functions and 12 additional character string keys. Other standard features on the keyboard include: automatic character repeat; keyboard-controllable, multi-level display contrast; operator-selectable audible key click; operator-selectable audible alarm; and operator-controlled tabs and margins.

International character sets, and a graphic character set are optionally available.

PRICING

Purchase price for the Model 940 is \$1,895.■