

Digi-Log Systems TeleComputer II



MANAGEMENT SUMMARY

Founded in 1969, Digi-Log is a small independent firm that has addressed itself to the general-purpose and customized CRT display terminal market. It also produces a diagnostic device called the Data Line Monitor. Its specialized terminals have been integrated into several prominent services that serve a variety of applications. Among these are Stuckey's HELPS, a computerized message service for the traveler, and Mead Data Central's LEXIS, a legal information retrieval service. Digi-Log's TelePost terminal is designed for use by independent businesses over the Western Union Mailgram network, and its portable Travel Agent terminals have been used by American Airlines, American Express, and Divers-Fugazzy to place airlines and host reservations via the SABRE and SPACE BANK reservation systems respectively.

Digi-Log's TeleComputer II combines the characteristics and features of its earlier (now discontinued) Model 209 TeleComputer and Model 33 Interactive terminals, of which about 3000 have been installed. The TeleComputer II has the same physical appearance as its predecessors: a keyboard/controller unit with or without integral acoustic coupler and a separate CRT monitor. Digi-Log offers monitors with screen sizes of 5, 10, or 12 inches. The TeleComputer II's key application is as a portable hand-carried terminal. The keyboard/controller and 5-inch monitor fit snugly into a small, suitcase-like plastic carrying case. The whole package weighs just 23 pounds. And the integral acoustic coupler permits usage at any location where there is a conventional telephone and ac outlet. Digi-Log is one of the few display terminal vendors that offer a portable display terminal.

A significant feature of the TeleComputer II is its provision for switch-selectable, full- and half-line display arrangements. In the half-line arrangement (40 characters), each character is displayed at double width for ease ➤

A low-priced, Teletype-compatible, stand-alone or portable display terminal for general-purpose applications.

Standard features include 15 selectable data rates from 50 to 9600 bps, switch-selectable display line lengths of 40 or 80 characters, and Page and Roll modes. Options include an acoustic coupler, cursor addressability, wrap-around, lower case, blinking, etc.

Consisting of two units, keyboard/controller and CRT monitor, the terminal is available in a suitcase for portability. Monitors feature screen sizes of 5, 10, or 12 inches.

The basic terminal is priced at \$1,395. Quantity discounts are provided. Full pay-out leases are available for one to five years.

CHARACTERISTICS

VENDOR: Digi-Log Systems, Inc., Babylon Road, Horsham, Pennsylvania 19044. Telephone: (215) 672-0800.

DATE OF ANNOUNCEMENT: August 1975.

DATE OF FIRST DELIVERY: September 1975.

NUMBER DELIVERED TO DATE: Over 800.

SERVICED BY: Digi-Log; factory-return service.

CONFIGURATION

The TeleComputer II is composed of two separate units; a controller with integral keyboard and optional integral acoustic coupler, and a separate display monitor. Three display monitors are available that provide screen size of 5, 10, or 12 inches (measured diagonally). The TeleComputer II is also available as a 23-pound portable terminal built into a suitcase-like carrying case for traveling. The portable version includes a 5-inch display unit and is equipped with an acoustic coupler for use with a conventional telephone. The terminal is equipped with an auxiliary RS-232C interface for a user-supplied printer or cassette tape drive. Up to 10 monitors can be directly attached to the controller or daisy-chained up to a cumulative maximum distance of 2000 cable feet.

TRANSMISSION SPECIFICATIONS

Transmission is asynchronous in the half- or full-duplex mode. Data rates are switch-selectable at 50, 75, 110, 134.5, 150, 300, 600, 900, 1200, 1800, 2400, 3600, 4800, 7200, and 9600 bits/second via a 15-position switch. The 10- or 11-unit, 8-level ASCII transmission code is used. Even parity is transmitted but not checked. The Parity Select option provides switch-selection of odd or even parity or marking ("1's"). Parity is transmitted but not checked.

Digi-Log Systems TeleComputer II

▷ of viewing. The major disadvantage of the display arrangement is that only 16 lines are displayed instead of the conventional 24.

The TeleComputer II can also be used as a desk-top terminal with a large-screen monitor. This application may require medium to high transmission speeds, depending on the communications environment. Data rates in excess of 300 bps require an external modem and precludes the use of the optional acoustic coupler. As many as 10 monitors can be connected to the same terminal where several persons need to view the same displayed data. The individual monitors can be located anywhere, provided that the accumulated cable length does not exceed 2000 feet.

Salient features of the TeleComputer II include:

- Teletype compatibility.
- Character-by-character transmission.
- 15 switch-selectable data rates.
- Data rates of from 50 to 9600 bps.
- Switch-selectable line lengths of 40 or 80 characters.
- Page or Roll modes.
- Printer/Cassette (auxiliary) RS-232C interface.
- Both RS-232C and 20/60 ma dc terminal interfaces.
- Lower case options.
- A cursor addressability option.
- Blinking options.

Digi-Log's recently introduced On-Line Classroom is a special application that includes the TeleComputer II terminal. The On-Line Classroom supports student/-teacher interaction with the host computer for on-line instruction. The system includes the TeleComputer II with acoustic coupler; a master control unit; up to 16 student keyboards; and 1 or 2, or as many as 10, monitors. Software support is not provided.

According to Digi-Log, the TeleComputer II is an extremely reliable terminal. Digi-Log quotes a failure rate of 0.6 per year per terminal—or about one in 20 months.

USER REACTION

Datapro interviewed six users on their experience with 315 Digi-Log TeleComputer II terminals. The majority of these terminals belonged to two of the users (one with 200, the other with 100). The ratings of all six users are as follows:

	Excellent	Good	Fair	Poor	WA*
Overall performance	3	2	1	0	3.3
Ease of operation	3	1	2	0	3.2
Display clarity	4	2	0	0	3.7
Keyboard feel and usability	3	2	1	0	3.3
Hardware reliability	4	1	1	0	3.5
Maintenance service	0	1	1	0	2.5

*Weighted Average on a scale of 4.0 for Excellent.

▶ DEVICE CONTROL

Transmission is performed on a character-by-character basis as each key is depressed. Six operating modes are switch-selectable via rocker switches on the keyboard: Local/Remote, Full/Half Duplex, and Page/Roll.

Local mode permits data transfer via the auxiliary RS-232C interface. Remote mode is used for data transmission via the RS-232C terminal interface or optional acoustic coupler.

Page mode permits keyed or received data to fill the screen beginning with the initial character position of the first line and ending with the final character position of the last line. Data entered after the screen is filled is continuously overwritten: (1) on the last line beginning with the initial character position in the 40-character line mode, or (2) in the last character position of the final line in the 80-character line mode.

Roll mode permits data to fill the screen from the initial character position of the first line as in the Page mode; however, after the screen is filled, additional keyed or received data is entered on the last line and all existing lines roll up by one line for each new line entered. Data rolled off the screen is lost.

Cursor control positions the cursor left, down, to the beginning of the next line, and to home. Cursor addressability is optional. The Clear function erases the entire screen. Line length is switch-selectable at 40 or 80 characters per line.

Two wrap-around features are optional. Wrap-Around-On-Space, when enabled, causes an automatic carriage return when a space character occurs anywhere in the last nine character positions of a line. Wrap-Around causes an automatic carriage return when a character is entered in the 80th character position of a line. This is a standard feature in the 40-character line mode.

Answerback automatically displays and/or transmits a 16-character station identification in response to a received ENQ code or keyed "Here Is" when the Here Is option is installed.

The Printer On/Off option controls data transfer between the TeleComputer II and an attached auxiliary device via received commands. Two lower case options are available. Lower Case Transmit permits transmission of lower case keyboard-generated character codes. Lower Case Transmit and Display provides the same function, but also displays received lower case codes in true lower case.

The Audible Tone option produces an audible "beep" when a Bell code is received.

COMPONENTS

DISPLAY UNIT: Data is displayed via a 10-inch, 12-inch, or 5-inch (diagonal measurement) screen. The display arrangement is 16 lines of 40 or 80 (switch-selectable) characters each, for a total screen capacity of 640 or 1280 characters. A 40-character line is displayed with the same line length as an 80-character line; however, each character of a 40-character line is displayed with double-width. The standard character set includes 64 ASCII upper-case symbols; a 96-character set of ASCII upper and lower case symbols is optional. Each character is formed with a 5-by-7 dot matrix. Data is displayed in white. Display options include blinking characters and a blinking cursor.

KEYBOARD: A 54-key, typewriter-style, separate unit that can generate any of 104 or 128 (optional) ASCII character codes. Key functions include Line Feed, Return, Rub Out, ▶

Digi-Log Systems TeleComputer II

▷ Key advantages of the terminals cited by these well-satisfied users are: low cost (cited by all users), flexibility (3), reliability (4), and compact size and portability (5). Few disadvantages were noted. One user commented that there were "only 16 lines displayed instead of the normal 24 lines," and "no APL." Another user complained about "no keyclicking" and "switches on back should be on the front." Only one user (with 11 terminals installed) reported problems and unsuccessful factory service. He emphasized Digi-Log's responsiveness and willingness to satisfy his needs, but felt that technical expertise was lacking. Only two users were able to rate maintenance service; the rest have not needed maintenance for their terminals as yet. □

▶ Repeat, Break, Escape, Clear, Shift, Control Shift, and Space. Cursor control keys are included, but are unmarked.

PRICING

The TeleComputer II is available for purchase or under a full payout lease (via Walnut Equipment Leasing Company). Lease periods are one, two, three, four, and five years. Quantity discounts are available for purchased units. There is no installation charge since the terminal is user-installed. The warranty is 90 days for labor and one year for parts. Digi-Log provides factory maintenance under one of three plans: time and materials, an annual contract for \$15 per month, or an annual contract for \$25 per month that provides a loaner terminal for use during maintenance.

	<u>1-Year Lease</u>	<u>2-Year Lease</u>	<u>3-Year Lease</u>	<u>Purchase</u>
TeleComputer II with 10-inch monitor and acoustic coupler	\$176.50	\$ 96.50	\$71.00	\$1,820
TeleComputer II with 5-inch monitor and acoustic coupler contained in carrying case	193.00	105.50	77.50	1,995

Quantity Discounts

	<u>Purchase Price</u>				
	<u>1-9 Units</u>	<u>10-24 Units</u>	<u>25-49 Units</u>	<u>50-99 Units</u>	<u>100-249 Units</u>
TeleComputer II with integral acoustic coupler (less monitor)	\$1,570	\$1,510	\$1,450	\$1,335	\$1,260
TeleComputer without integral acoustic coupler (less monitor)	1,395	1,335	1,275	1,185	1,095

Monitors*

5-inch screen	325	*	*	*	*
10-inch screen	250	*	*	*	*
12-inch screen	350	*	*	*	*

Options*

Cursor Addressability	95	*	*	*	*
Wrap-Around-On-Space	65	*	*	*	*
Wrap Around	65	*	*	*	*
Blinking Characters	95	*	*	*	*
Blinking Cursor	50	*	*	*	*
Lower Case Transmit Only	100	*	*	*	*
Lower Case Transmit/Display	250	*	*	*	*
Parity Select	75	*	*	*	*
Audible Tone	50	*	*	*	*
Here Is	125	*	*	*	*
Answerback	145	*	*	*	*
Printer On/Off	125	*	*	*	*
Carrying Case	100	*	*	*	*

*Discounts on options and monitors when included in terminal orders are: 10 to 24 units, 4 percent; 25 to 49 units, 7 percent; 50 to 99 units, 10 percent. ■

