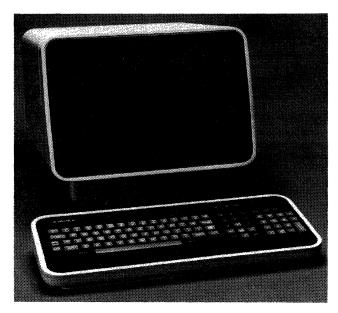
Ampex Dialogue Display Terminals



The Ampex Dialogue 80 is capable of data transmission in either conversational or block mode. Ergonomic features standard on all Dialogue display terminals include a non-glare display screen, detached keyboard, hollowed, non-glare key tops, and an 11° slope on the keyboard for easier reading of key symbols.

MANAGEMENT SUMMARY

Ampex Corporation entered the alphanumeric display terminal market with the introduction of the Dialogue 80, a buffered editing terminal, at the 1980 National Computer Conference in Anaheim, California. The Dialogue line was expanded at the beginning of 1981 when the company added the low-end Dialogue 30, a basic conversational terminal. The 1981 National Computer Conference, held in Chicago, saw Ampex make another addition to the family, this time a Dialogue 80 configured with touch input capability, dubbed the Dialogue TouchTerm 80.

All Dialogue terminals are equipped with a 12" diagonal, non-glare display screen with a display format of 24 lines by 80 columns. A 25th line for status information is provided. Characters are displayed in white on a dark background; brightness control and lower case descenders are also featured. The Dialogue's keyboard is detached (the Dialogue TouchTerm 80 is available with or without the keyboard) and contains sculptured, nonglare key tops. Separate numeric and cursor control pads are standard. In addition, the keyboard features a slope of 11 degrees to allow effective reading of key symbols.

The Dialogue 30 operates in either on-line/local or monitor modes, in half- or full-duplex, at transmission speeds up to 19,200 bps. The unit features a fully addressable and readable cursor, columnar tabbing, and its 128 displayable symbols include 96 ASCII characters, 21 control characters, and 11 line drawing characters. An

A family of interactive ASCII display terminals.

The series consists of the low-end Dialogue 30 and the general purpose Dialogue 80, a buffered editing terminal that operates in either conversational or block mode. A recent addition to the family is a model with touch sensitive input. All Dialogue video terminals contain the following ergonomic features: detached keyboard, sculptured key caps, matte finish on keyboard and key caps to prevent glare, 11° slope on the keyboard for easier reading of key symbols, and non-glare CRT screen.

Prices for the Dialogue terminals range from \$999 for the Dialogue 30 to \$1,434 for the Dialogue 80 with four pages of display memory. The Dialogue 80 with touch sensitive input capability sells for \$2,498. Quantity discounts are available.

CHARACTERISTICS

VENDOR: Ampex Corporation, Memory Products Division, 200 North Nash Street, El Segundo, CA 90245. Telephone (213) 640-0150.

DATE OF ANNOUNCEMENT: Dialogue 80—May 1980; Dialogue 30—January 1981; Dialogue TouchTerm 80—May 1981.

DATE OF FIRST DELIVERY: Dialogue 80—July 1980; Dialogue 30—March 1981; Dialogue TouchTerm 80—June 1981.

NUMBER DELIVERED TO DATE: Dialogue 80—Over 5,000.

SERVICED BY: Ampex.

MODELS

All Dialogue interactive video display terminals are available as desk-top, standalone units. The Dialogue 30 is a basic conversational display terminal. The Dialogue 80 is a buffered editing display terminal which can transmit in both conversational and block modes. The basic Dialogue 80 is equipped with two pages of display memory; two additional pages of memory are optionally available. The Dialogue TouchTerm 80 contains all of the features of the Dialogue 80, while adding touch input capability. The TouchTerm 80 is available with or without the keyboard.

TRANSMISSION SPECIFICATIONS

Transmission on all Dialogue series terminals is asynchronous, in half- or full-duplex modes, at speeds of 50, 75, 110, 134.5, 150, 300, 600, 1200, 1800, 2000, 2400, 3600, 4800, 7200, 9600, and 19,200 bps. The ASCII code is used. An RS-232-C interface is standard; a 20mA current loop interface is also available. A programmable RS-232-C serial printer port is also standard.

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automatic self-test feature checks all functions at power

Two pages of display memory are standard on the Dialogue 80, with an additional two pages available optionally. Editing capabilities on the Dialogue 80 include insert character/line, delete character/line, erase to end of line, and erase to end of page. Twenty programmable function keys are provided (with 256 bytes of memory) for screen formats or command sequences. The terminal is capable of conversational or block transmission, in half- or full-duplex, at speeds up to 19,200 bps. The cursor is readable and addressable. Columnar or field tabs are supported by four control keys. Display attributes include blanking, blinking, underlining, half-intensity, and reverse video. Additional operating modes include protect mode, which displays protected fields at half-intensity while unprotected fields are displayed at full-intensity, and program mode, which displays control codes to assist the programmer. When powered on, the Dialogue 80's self-test feature automatically tests the program ROM, display, data RAM, and loopback of the serial interface.

The Dialogue TouchTerm 80 combines all of the features of the Dialogue 80 with touch input capability. The unit is available with or without the keyboard. The TouchTerm 80's features are initiated by user-defined escape codes to avoid conflict with existing software. These escape codes provide for audible feedback to the operator where the application demands it. Continuous self-diagnostics are provided. The unit responds to a touch on the surface of the display. Stylus size may be varied by each application program. The practical minimum stylus size is a finger, the end of a pen, or a pencil eraser; the practical maximum stylus size is a gloved hand. Up to 1920 targets can be located anywhere on the screen.

Options available for the Dialogue terminals include a green or amber phosphor CRT. The Dialogue 80 can be optionally configured with an additional 2048 bytes of programmable function key memory, as well as the additional two pages of display memory.

➤ DEVICE CONTROL

Dialogue 30: Operating modes include On-Line/Local Mode and Monitor Mode. Monitor mode permits the display of all control codes as a programming aid.

The cursor is fully addressable and readable. Cursor control keys include up, down, left, right, and home.

Dialogue 80: Operating modes include Protect Mode, Write Protect Mode, Auto-Flip Mode, Write Attribute Mode, Programmable Key Mode, and Program Mode.

In Protect Mode, selected areas on the screen can be designated as protected against erasure, change, or transmission. This mode must be used in conjunction with Write Protect Mode, which causes characters to be displayed in half intensity on the screen, where they will be protected in Protect Mode.

Auto-Flip Mode causes automatic switching to the next page of display memory when the last line on the current page is written. At the completion of the last page, the display automatically returns to the first page.

In Write Attribute Mode, character visual attributes such as underlining, flashing, blanking, reverse video, and half intensity can be assigned.

When Programmable Key Mode is set, 20 keys are made available for user-programmed functions. Forms or command sequences can be stored in a 256K-byte memory, and a special escape sequence can be used to select the destination of the key contents, either to the display or to the serial output. An optional 2K bytes of memory can be added to enhance this mode.

Program Mode allows entry and display of all control characters on the screen. The controls are displayed without being interpreted or executed (an exception is the control to exit the Program Mode).

Cursor controls on the Dialogue 80 include up, down, left, right, and home. Editing functions include insert character, delete character, insert line, delete line, erase to end of line, and erase to end of page. All editing functions can be executed via system software or from the keyboard.

Dialogue TouchTerm 80: Can be configured with or without a keyboard. The Dialogue TouchTerm 80's features are initiated by user-defined escape codes to avoid conflict with existing software. The Touch System consists of a grid of infrared light beams, the intersection of which are X and Y coordinates. An interruption of the light beam by a stylus (pen, fingertip, pencil eraser, etc.) pressed against the screen transmits the X and Y coordinates.

There are two touch modes: Point Mode and Stream Mode. Point Mode is similar to the operation of the keyboard. In Point Mode, the Touch System outputs data once each time it is activated. The stylus must be removed so that there is at least one scan, during which there are no broken beams, before the Touch System is reset.

In Stream Mode, the operator moves his/her finger across the display, and data is transmitted each time at least one of the coordinates change. A code is also transmitted if the stylus is removed from the screen. The rate of transmission to the host is determined by how fast the stylus is moved; the scan rate (set at 80 Hz/second); and the transmission rate of data to the host. An audible feedback, which generates a click for each valid touch, is optional.

There are two types of valid touches. A valid touch is recognized by the Touch System when X and Y coordinates are broken anywhere within the total 1,920 characters available on the screen. A valid touch can also be recognized via an external host application program.

There are four types of invalid touches: Multiple simultaneous touches; a touch by a stylus larger than that allowed by the application program; a touch outside of the area of 1,920 character positions and status line; and a touch with a stylus too small to break X and Y beams.

COMPONENTS

CRT DISPLAY UNIT: All Dialogue Series terminals feature a 12" diagonal display screen equipped with a non-glare faceplate. Screen capacity is 1,920 characters in a 24-line by 80-column format. A 25th line for displaying status information is also available. Characters are formed utilizing a 6 x 8 dot matrix in a 7 x 10 field, with half-dot shift capability and lower case descenders. A 96-character ASCII



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set is displayable, plus 21 control characters and 11 line graphic symbols.

Characters are displayed in white (P4 phosphor) on a dark background. The cursor is operator-selectable as a blinking or non-blinking block or underline. Video attributes available on the Dialogue 80 and Dialogue TouchTerm 80 include blinking, blanking, underlining, half-intensity, and reverse video.

The TouchTerm 80 display screen uses scanning infrared beam technology to achieve touch input capability. The unit responds to a touch of the screen by a stylus such as a finger, pen, pencil eraser, etc. Stylus size may be varied by each application program. Up to 1,920 targets can be located anywhere on the screen.

KEYBOARD: All Dialogue Series keyboards are detached and feature a typewriter-style layout. The Dialogue 30 keyboard has 82 keys, including a 15-key numeric pad and function control keys. The Dialogue 80 keyboard (also available with the TouchTerm 80) features 98 keys, including separate numeric and edit keypads and function control keys. Dialogue keyboards also feature sculptured key caps, a matte finish on the keyboard and key caps to prevent glare,

and an 11° slope on the keyboard for easier reading of the key symbols. A lock and unlock function to secure the keyboard from unauthorized use is standard; an optional key lock switch for terminal and data base security is also available.

PRICING

The Ampex Dialogue display terminals are available for purchase only, with quantity discounts available. All Ampex Dialogue terminals have a return-to-factory warranty which provides for factory repair of defective equipment. In addition, the customer can select a support package tailored to his/her individual requirements from a variety of support services

	Quantity 1	Quantity 100	
Dialogue 30	\$ 999	\$ 699	
Dialogue 80			
(2 pages of display memory)	1,249	829	
Dialogue 80			
(4 pages of display memory)	1,434		
Dialogue TouchTerm 80	2,498	1,658	