General Electric

DATA EDITING DISPLAY

FEATURES

- Page data, bar chart, and tabular presentation
- Self-contained processing and storage
- Keyboard entry
- Instantaneous TV display
- Flexibility
- Low cost

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DEFENSE ELECTRONICS DIVISION / MILITARY COMMUNICATIONS DEPARTMENT / OKLAHOMA CITY. OKLAHOMA

The Data Editing Display is a portable, low-cost alpha-numeric display system that provides rapid communication with computers from local or remote locations. It permits convenient entry and display of data or requests, transmission to the computer, and receipt, storage, and presentation of responses. It consists of a TV-type display module and a processor module. If desired, additional display modules may be used with one processor module.

Entry is made through a typewriter keyboard built into the processor module. Keyboard entries are converted to binary form and stored in an internal memory. The coded characters in the memory are repetitively converted to TV video and, along with synchronizing signals, are transmitted to the display module. Selected portions of the stored information are transmitted on command to the data processor via an output compatible with standard dataphone service. The rate of transmission is limited only by the capabilities of the communication network utilized.

The presentation on the TV module is a fixed-format alpha-numeric display composed of up to 1196 characters and symbols stored in the memory. The characters are arrayed in 26 textual lines of 46 characters each. The character repertoire consists of the English alphabet, Arabic numbers, punctuation marks, and special symbols. Four of the special symbols allow horizontal and vertical lines to be drawn for added emphasis or generating simple diagrams, charts, or tables. In addition, a flashing code allows emergency or other important conditions to be emphasized.

OPERATION

The operator enters data by typing on the keyboard as on an office typewriter. The characters and symbols are instantaneously displayed as they are typed. A special entry marker appears on the display to indicate the location of the next character to be entered. The marker automatically indexes with each character entry or may be manually spaced one or eight character locations at a time and up or down one line at a time. It may also be reset to the first character position on the page.



With the marker at the location desired for the first character, the entry is typed beginning with any preliminary instructions required by the computer and ending with a symbol indicating completion of the entry. Changes or corrections are made by relocating the marker to the erroneous character and typing the correct one. A REPEAT key allows repetitive display reaction when depressed along with another key. Erasure of the entire display is accomplished by depressing the RUB OUT key.

The operator completes the composing, verifying, and correction of the entry with the system offline. When satisfied that the information is correct, the operator locates the marker at the first character to be transmitted and depresses the transmit key. Successive characters are transmitted up to the END symbol.

Reponses from the computer are stored in the memory and immediately appear on the display.

APPLICATION

The Data Editing Display has application in any commercial, Government, or educational function requiring storage, retrieval, communication, or display of human or computer-generated data.

Of major importance is the ability to use the display and processor modules in a wide range of configurations. A single processor coupling several displays can rapidly distribute and display information. For example, it could distribute weather data or the listing of parts on an assembly line. Connected to a computer, it could distribute more complex responses.

Another configuration would utilize both a display and processor at each node of the net, giving each location the ability to enter and receive data. For example, such a system, interconnected through switching and connected to a computer, could provide each station of a missile launching facility access to a variety of TV video from the launch area or computergenerated tabular data from the instrumentation.

Processors to fulfill special requirements can be provided with specialized entry controls to limit access or to automate "canned" entries.



TELEVISION CAMERAS, TELETYPEWRITERS, OTHER INPUT-OUTPUT DEVICES

DATA EDITING DISPLAY

PERFORMANCE SPECIFICATION

Presentation	- Page array of symbols (26 lines x 46 characters = 1196 symbols)
	Bar charts
	Business tables
TV Type Display	- High brightness for use in office light ambients
Symbol Repertoire	- Alphabetics
	Numerics
	Punctuation marks
	Special symbols
Symbol Size	 0.1 inch high on standard display (larger display options available)
Keyboard Input	- Standard typewriter keyboard
Off-line Operation	- Built-in memory allows operator to compose, verify, and correct off-line
Character Code	- ASC11 (easily modified)
Marker	 Entry marker moves automatically with character entry. Readily moved by manual controls.
Transmission Control	- Convenient selection of data for transmission
Circuits	- 99% integrated circuits
Installation	- Self-contained and portable for desk-top use. Also avail- able in rack-mounted configuration
Dimensions:	
Processor Module	- 24-1/4 in. x 14-7/8 in. x 6-5/16 in.
Display Module	- $8-1/2$ in. x $9-1/4$ in. x $7-1/2$ in.

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