Carterfone

7800

- Choice of communications protocols
- Simplified message preparation
- Full message editing
- Tabulation capability
- Message sequence number
- Real time/date clock
- Priority transmission
- Message format control
- Message reject logic
- Message store
- Form/text storage
- Printer interfaces

The Carterfone 7800 family of Message Preparation Terminals improves the efficiency of private line networks without increasing costs or disrupting operations. The 7800 is specifically designed to reduce message input errors, speed message preparation, and eliminate problems associated with electro-mechanical terminal equipment.

The terminal is modular in hardware and software design and system variations may be implemented through the terminal's keyboard, eliminating software changes.

The 7800 consists of a low profile CRT display featuring a non-glare screen and high resolution characters for easy viewing. The detachable keyboard is designed with sculptured keys similar in layout and touch to a Selectric typewriter and can be positioned by the operator for keying convenience.

The 7800 is adaptable to unique customer applications and is readily altered to meet the requirements of subtle variations in protocol and message format.

The 7800 family of private line terminals consists of a variety of models which allow network managers to configure each user station to exact requirements, and since all models are upwardly and downwardly compatible, network changes are easily implemented. Ideal for replacement of electro-mechanical teleprinters or expansion of an existing network, the 7800 offers flexibility, adaptability and operator convenience.

The 7800 family is the only system of its kind to offer communications management of private line networks the opportunity to upgrade without increasing costs.

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7830

The 7830 is designed for use on either a free-wheeling or Inter-line 83B-3 or 81D-1 type teletypewriter selective calling system. The 7830 operates at telegraph speeds up to 200 baud and in the 5-unit U.S. Domestic or CCITT #2 code. The 7830 replaces the Teletype Model 28 or other equipment currently in use on these systems.

7840

The 7840 is designed for use on either a free-wheeling or Inter-line 8A1 selective calling system operating at telegraph speeds up to 1200 baud and using the 8-level ASCII code. The 7840 replaces the Teletype Model 40/3 or any other terminal currently in use on 8A-1 systems.
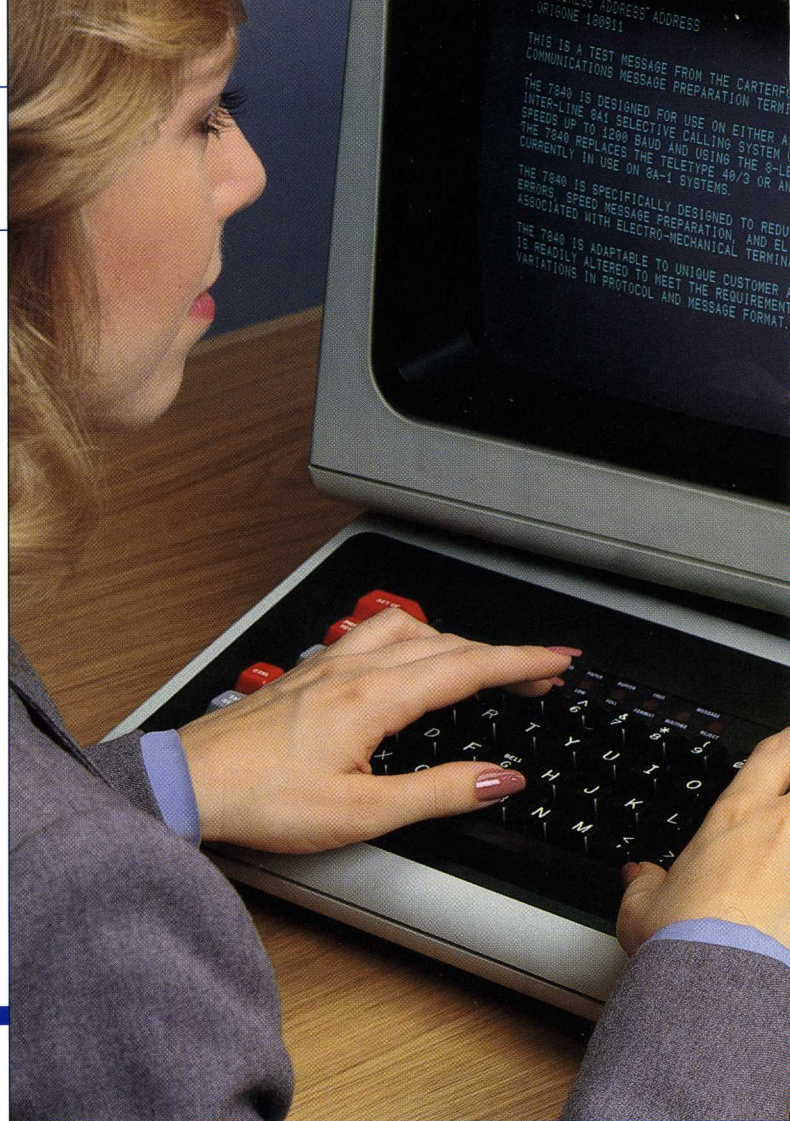
SIMPLIFIED MESSAGE PREPARATION
All fixed format portions of the message are automatically inserted before the transmission is released. This capability saves the operator from keying in character strings for "start of message," "start of text," "end of message," and other necessary protocol functions. The forward word wraparound feature eliminates word-splitting.

FULL MESSAGE EDITING
Increases ease of message preparation with character insert/delete, line insert/delete, scroll up/down, next page/previous page.

TABULATION CAPABILITY
Tab keys are provided for increased ease of message preparation.

MESSAGE SEQUENCE NUMBER
Up to four digits can be automatically generated and assigned to each message.

REAL TIME/DATE CLOCK
Automatically inserts time and date of origin of every message.

PRIORITY TRANSMISSION
A priority code is automatically assigned to each message and can be altered according to the urgency of the message. The unique priority stacking feature ensures that all messages are released in the order of their importance.

7800

7850

The 7850 is designed for use on either a free-wheeling or an Inter-line 85A-1 teletypewriter selective calling system operating at telegraph speeds up to 300 baud and using the 8-level ASCII code. The 7850 replaces the Teletype Model 33, 35, 37 or other terminal equipment currently in use on these systems.

7860

The 7860 is designed for use on communications networks using an X-ON, X-OFF protocol. This protocol allows the terminal to operate on *non-conversational* dial-up networks in conjunction with originate/answer modems. The 7860 can respond with a programmable answer-back of up to 20 characters. Transmission of messages may be in single or batch mode at telegraph speeds up to 1200 baud.

MESSAGE FORMAT CONTROL
Preprogrammed protocol sequence codes, priority levels and other parameters increase operating accuracy and efficiency. Free-form message mode is also possible.

MESSAGE REJECT LOGIC
Relieves operator of manually retransmitting messages rejected by the computer. Continued rejection will return the message to the screen for editing and retransmission.

MESSAGE STORE
The 7800 has a standard configuration of 8K RAM (Random Access Memory). Both 16K and 32K are available options. In each case this memory is allocated between screen memory for message preparation and transmit memory for the storage of data prior to transmission.

FORM/TEXT STORAGE
Customer defined forms or standard message texts may be stored within the terminal and transferred by operator command to the screen.

PRINTER INTERFACE
Up to three printer ports are available on the 7800. One of these ports, identified as the auxiliary device port, may support a printer or other input/output devices for extending terminal flexibility.

THE CARTERFONE 7800's SPECIFICATIONS

Video Display

Screen Size	12 inch diagonal
Phosphor	P4 (white) Standard
Refresh Rate	60 Hz Standard
	50 Hz Standard
Screen Format	7 x 9 dot matrix with 2 dot descenders
	69 or 80 characters per line
	24 lines visible on screen
Character Set	128 displayable ASCII characters
Cursor	Non-destructive blinking underline

Keyboards

Configuration	4-row sculptured-shiftless Baudot (7830) or 128 character ASCII (7840, 50, 60), detachable with serial interface
Cursor Control Keys	Up, down, left, right, home, new line
Editing Control Keys	Insert and delete characters Insert and delete line Clear (screen memory) Scroll up, scroll down Previous page, next page
Function Keys	12 keys for message preparation Tab set, tab clear, tab Shift lock (7830) Caps lock (7840,50,60) Escape (7840,50,60)
Status Indicators	7 LED's for terminal monitoring
Features	2 key roll-over Automatic character repeat (after 1 second depression) 20 times per second Acoustic feedback when depressing key Audio alarm

Memory Organization

8K RAM Standard
16K or 32K Optional

Allocated between DISPLAY and TRANSMIT memories in customer designated portions. The DISPLAY memory to be at least one screen but not to exceed the TRANSMIT memory remaining.

Stored Program: EPROM 32K plus
EAROM of 512 bytes

Communications Line Interface

EIA RS-232-C Standard
Neutral Current Loop (18-67.5 ma) — 7830
Asynchronous mode
Baudot (7830) or ASCII (7840,50,60) Code
1 Start Bit
5, 7 or 8 information bits
Odd, even or no parity
1, 1½ or 2 stop bits

Program Selectable Speeds

Any approved speed for use on communication networks up to 1200 baud

Prime Printer and Auxiliary Interface

EIA RS-232-C
Input speed up to 1200 baud
Output speed up to 1200 baud
Split baud rates available

Additional Printer Interfaces

Up to 2 printers
EIA RS-232-C
Speed and code as on communications line

Message Preparation

Format Checking
Automatic scroll at line 24
Alternate originator sequences with automatic date/time generation keyboard programmable
Message sequence number automatically generated
SOM, STX, ETX, EOM, priority levels, protocol sequence codes and other parameters programmed in EPROM
Forward word wraparound
Diagnostics and print test (Standard)

Message Transmission

Automatic message transmission with priority stacking
Automatic retransmission following open line condition
IMA/Reject logic available

Physical

Dimensions
Monitor 14.5″ H x 18″ W x 14.25″ D
Keyboard 3.5″ H x 18″ W x 8″ D
Combined 14.5″ H x 18″ W x 20.25″ D
Weight 35 lbs (15.9 Kg)

Environment

Operating		
Temperature	$-10° - 40°C$	
	$50° - 104°F$	
Humidity	$10 - 90\%$ RH	
Altitude	$0 - 7800$ feet above sea level	
Storage		
Temperature	$-40° - 66°C$	
	$-40° - 151°F$	
Humidity	$0 - 95\%$ RH	
Altitude	$0 - 30,000$ feet above sea level	

Distortion Tolerances

Distortion	
Transmit	$\pm 2\%$
Receive	$\pm 45\%$

Power

Requirements	$90 - 128$ V RMS
	$180 - 250$ V RMS
	$47 - 63$ Hz Switch selectable
Consumption	150 Watts maximum

Printers

A variety of printers are available for use with 7800 terminals.

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