



SHIFT key, f_5 – when pressed prior to another key, generates special ASCII codes. Do not hold key down.

CONTROL key, f_6 – generates ASCII control codes when pressed prior to another key. Do not hold the key down.

SAVE key, f_8 – transmits commands and the EOL character from the 9830A display to the timeshare computer and places the calculator in the receive mode for saving any returned data with line numbers. SAVE must be pressed a second time to save the received data.

TRANSMIT key, f_9 – transmits characters entered in the calculator display to the timeshare computer. Also sends the defined EOL characters at the end of the data.

ERROR MESSAGES

- 79 The RUN command cannot be executed because untranslated program lines are stored in the calculator memory. If the stored program lines are valid BASIC language instructions, execute the COMP command and then execute the RUN command.
- 300 The Binary Synchronous ROM is not plugged into the calculator. The TBATCH statement was executed while in Binary Synchronous mode.
- 301 The STOP key was pressed during the DIAL sequence. Seven DIAL attempts were completed without an answer (this includes a busy line or no answer).
- 302 TBATCH was executed out of TEXT mode.
- 303 BIN code in a TREAD or TWRITE is not allowed in Binary Synchronous mode. Use BWRITE statement.
- 304 The Data Comm. 1 ROM is not plugged into the calculator.
- 305 An ENQ is received in response to an ENQ. ACKCLR is executed automatically.
- 306 ACKs are out of step during a message in the TWRITE statement. ACKCLR is executed automatically and an EOT is automatically sent.
- 307 TWRITE note: 15 ENQs transmitted without response, or bad data was received in response to a message block or ENQ. An acknowledgment was expected but not received. ACKCLR is automatically executed and an EOT is sent automatically.
- 308 TWRITE note: 15 NAKs to a block of text. ACKCLR is executed automatically and an EOT is transmitted automatically.
- 309 An EOT was received as a response after a TWRITE. This indicates one of the following:
 1. Receiver has I/O problems and cannot continue current reception.
 2. Receiver is unable to accept a message at this time.
 ACKCLR is executed automatically.
- 310 TWRITE note: A NAK was received in response to an ENQ. ACKCLR is executed automatically.
- 311 BTMR has expired without any line activity in the TREAD statement. ACKCLR is executed automatically.

HEWLETT-PACKARD 9830A Data Communications Quick Reference Card

Data Comm. 1 ROM Statements

Data Comm. 2 ROM Statements

Data Comm. 3 ROM Statements

Name	Example	Explanation	Name	Example	Explanation	Name	Example	Explanation
DIAL	5 DIAL 1, 3222144	Used with an ACU to dial phone number automatically.	ACKCLR	15 ACKCLR	Resets odd/even block check accumulators in TREAD and TWRITE statements.	COMP	COMP	This command is executed to compile un-compiled BASIC language statements.
EOT	10 EOT 21	Sets the EOT character to the octal number specified.	BSCON	180 BSCON 1	Turns on Binary Synchronous protocol and defines data link control entry point.	ECHOFF	11 ECHOFF	Turns off a previous ECHON statement.
LKEY	115 LKEY 1	Disables RKEY at select code specified.	BSCOFF	190 BSCOFF	Turns off Binary Synchronous protocol.	ECHON	100 ECHON	Turns on echo suppression at 9830A Calculator.
LSTOP	350 LSTOP 1	Turns RSTOP off at select code specified.	BTIMR	200 BTIMR 8	Sets time limit (3 seconds per unit) that TREAD in Binary Synchronous waits to start receiving data.	EOL	60 EOL 3, 2, 9	Defines the end of line character(s) which is sent when the SAVE key, fs, the TRANSMIT key, fs, or the LIST# command is used.
RKEY	105 RKEY 1	Allows calculator keyboard to be accessed from remote calculator or terminal at select code specified.	BWRITE	250 BWRITE (1, EBC) N(I)	Transmits strings, numeric arrays, string variables, or octal character codes in Binary Synchronous via the select code specified.	EXIT	EXIT	Used to EXIT the text mode initiated by TEXT command.
RSTOP	340 RSTOP 1	Makes it possible to stop calculator from remote calculator or computer at select code specified when stop code is received.	PRM	515 PRM 0	Defines the 9830A Calculator terminal as a Primary (PRM 1) or Secondary (PRM 0) terminal.	LIST	LISTX 30, 80	Lists the lines specified. If "X" is included in command, lines are output without line numbers.
RTIM	300 RTIM 26200	Sets time limit for a TREAD statement to start receiving data in non-Binary Synchronous mode.	RVI	35 IF RV12 = 0 THEN 25	The RVI function equals zero unless an RVI is received. The "2" is a dummy variable, RVI can only be referenced once between successive TWRITES.	TBATCH	45 TBATCH 1, 100	Allows free text or BASIC language program lines to be received by the calculator from the select code specified. Line numbers are automatically added if the beginning line number is specified.
SET	100 SET 1, 1400	Defines logic state of the interface at select code specified.	SERROR	50 SERROR X, 320	Provides automatic error recovery from most calculator errors.	TEXT	TEXT	This command places the 9830A in the free text mode. Non-BASIC language text can be stored and edited in text mode. The special function keys, fs, fs, fs, and fs, are redefined as shown on back
SYNC	490 SYNC 1, 62	Defines the octal sync code for synchronous transmission at the select code specified.	TEOT	77 GO TO TEOT 1 + 1 OF 10, 20, 30, 40	The TEOT function tests for EOT, ETX, or ETB if they were encountered in last data block received. 0 = ETX, EOT received 1 = ETB, EOT received 2 = ETX received, no EOT 3 = ETB received, no EOT			
SYSTEM	30 SYSTEM 1, 300, 7, EVEN, ASY1, FD	Programs the interface for the correct data format between the calculator and the select code specified.						
TOFF	75 TOFF 1	Turns off "data terminal ready" signal to modem at the select code specified to drop the communication line.						
TON	70 TON 1	Turns on "data terminal ready" signal to modem at select code specified indicating that the calculator is ready for data.						
TREAD	400 TREAD (1, ASC) AS	Allows the calculator to receive data into a string or numeric array.						
TWRITE	520 TWRITE (1, ASC) BS	Transmits strings, numeric arrays, string variables, or octal character codes via the select code specified.						