

TAPE CASSETTES

BACKSPACE $\left[\begin{matrix} \#n, \\ /xxx, \end{matrix} \right] \left\{ \begin{matrix} \text{BEG} \\ n \\ nF \end{matrix} \right\}$ Example: 100 BACKSPACE 5F

Backspace to start of file or over 'n' records or 'n' files.

DATALOAD $\left[\begin{matrix} \#n, \\ /xxx, \end{matrix} \right] \left\{ \begin{matrix} \text{"name"} \\ \text{argument list} \end{matrix} \right\}$ Example: 100 DATALOAD A, BS()

Locate a data file by name, or load a logical data record.

DATALOAD BT $\left[(N=\text{expression}) \right] \left[\begin{matrix} \#n, \\ /xxx, \end{matrix} \right]$ alpha array designator
Example: 100 DATALOAD BT AS()

Load an unformatted block of 100 or 256 bytes.

DATA RESAVE $\left[\begin{matrix} \#n, \\ /xxx, \end{matrix} \right] \left\{ \begin{matrix} \text{OPEN "name"} \\ \text{argument list} \end{matrix} \right\}$ Example: 100 DATA RESAVE A, BS

Re-record a file header record or logical data record.

DATASAVE $\left[\begin{matrix} \#n, \\ /xxx, \end{matrix} \right] \left\{ \begin{matrix} \text{OPEN "name"} \\ \text{END} \\ \text{argument list} \end{matrix} \right\}$ Example: 100 DATASAVE #3, END

Record a data header record, trailer record, or logical record.

DATASAVE BT $[R] \left[(N=\text{expression}), [H] \right] \left[\begin{matrix} \#n, \\ /xxx, \end{matrix} \right]$ alpha array designator
Record unformatted data (100 or 256 bytes)

LOAD $\left[\begin{matrix} \#n, \\ /xxx, \end{matrix} \right] [\text{"name"}]$ Example: LOAD /10B, "FILE-A"

Load a program file.

LOAD $\left[\begin{matrix} \#n, \\ /xxx, \end{matrix} \right] [\text{"name"}] [\text{line number 1}] [\text{line number 2}]$
Load a program file under program control.

REWIND $\left[\begin{matrix} \#n, \\ /xxx, \end{matrix} \right]$ Example: 100 REWIND /10B

Rewind the cassette.

SAVE $\left[\begin{matrix} \#n, \\ /xxx, \end{matrix} \right] [P] [\text{"name"}] [\text{line number}] [\text{line number}]$
Record all or part of a program onto a cassette.

SKIP $\left[\begin{matrix} \#n, \\ /xxx, \end{matrix} \right] \left\{ \begin{matrix} \text{END} \\ n \\ nF \end{matrix} \right\}$ Example: SKIP 3F

Skip to the end of file, or over 'n' records or 'n' files.

ERROR CODES

CODE	ERROR	CODE	ERROR
01	TEXT OVERFLOW insufficient memory to store program text.	52	EXPECTED DATA (NON HEADER) RECORD
02	TABLE OVERFLOW insufficient memory to execute program.	53	ILLEGAL USE OF HEX FUNCTION
03	MATH ERROR	54	ILLEGAL PLOT ARGUMENT
04	MISSING LEFT PARENTHESIS	55	ILLEGAL BT ARGUMENT
05	MISSING RIGHT PARENTHESIS	56	NUMBER EXCEEDS IMAGE FORMAT too few # characters.
06	MISSING EQUAL SIGN	57	ILLEGAL SECTOR ADDRESS <0 or > 32767;
07	MISSING QUOTATION MARKS	58	EXPECTED DATA RECORD
08	UNDEFINED FN FUNCTION	59	ILLEGAL ALPHA VARIABLE FOR SECTOR ADDRESS
09	ILLEGAL FN USAGE more than five levels of nesting were encountered.	60	ARRAY TOO SMALL
10	INCOMPLETE STATEMENT	61	DISK HARDWARE ERROR
11	MISSING LINE NUMBER OR CONTINUE ILLEGAL	62	FILE FULL
12	MISSING STATEMENT TEXT	63	MISSING ALPHA ARRAY DESIGNATOR
13	MISSING OR ILLEGAL INTEGER	64	SECTOR NOT ON DISK
14	MISSING RELATION OPERATOR	65	DISK HARDWARE MALFUNCTION
15	MISSING EXPRESSION	66	FORMAT KEY ENGAGED
16	MISSING SCALAR VARIABLE	67	DISK FORMAT ERROR
17	MISSING ARRAY VARIABLE	68	LRC ERROR data integrity check failed.
18	ILLEGAL VALUE	71	CANNOT FIND SECTOR
19	MISSING NUMBER	72	CYCLIC READ ERROR rewrite sector or reformat.
20	ILLEGAL NUMBER FORMAT too many digits, illegal characters, etc.	73	ILLEGAL ALTERING OF A FILE
21	MISSING LETTER OR DIGIT	74	CATALOGUE END ERROR
22	UNDEFINED ARRAY VARIABLE	75	COMMAND ONLY, NOT PROGRAMMABLE
23	NO PROGRAM STATEMENTS	76	MISSING <OR> (PLOT ARGUMENT)
24	ILLEGAL IMMEDIATE MODE STATEMENT	77	STARTING SECTOR GREATER THAN ENDING SECTOR
25	ILLEGAL GOSUB/RETURN USAGE	78	FILE NOT SCRATCHED
26	ILLEGAL FOR/NEXT USAGE	79	FILE ALREADY CATALOGUED
27	INSUFFICIENT DATA	80	FILE NOT IN CATALOGUE
28	DATA REFERENCE BEYOND LIMITS	81	/XXX SPECIFICATION ILLEGAL
29	ILLEGAL INPUT DATA FORMAT	82	NO END OF FILE
30	ILLEGAL COMMON ASSIGNMENT COM preceded by variable.	83	DISK HARDWARE FAILURE
31	ILLEGAL LINE NUMBER greater than 9999.	84	NOT ENOUGH MEMORY AVAILABLE FOR A MOVE OR COPY
33	MISSING HEX DIGIT	85	READ AFTER WRITE ERROR
34	TAPE READ ERROR	86	FILE NOT OPEN
35	MISSING COMMA OR SEMI-COLON	87	COMMON VARIABLE REQUIRED
36	ILLEGAL IMAGE STATEMENT no # characters.	88	LIBRARY INDEX FULL
37	STATEMENT NOT IMAGE STATEMENT	89	MATRIX NOT SQUARE
38	ILLEGAL FLOATING POINT FORMAT	90	MATRIX OPERANDS NOT COMPATIBLE
39	MISSING LITERAL STRING	91	ILLEGAL MATRIX OPERAND
40	MISSING ALPHANUMERIC VARIABLE	92	ILLEGAL REDIMENSIONING OF ARRAY
41	ILLEGAL STR() ARGUMENTS	93	SINGULAR MATRIX
42	FILE NAME TOO LONG	94	MISSING ASTERISK
43	WRONG VARIABLE TYPE	95	ILLEGAL MICROCOMMAND OR FIELD/DELIMITER SPECIFICATION
44	PROGRAM PROTECTED	96	MISSING BUFFER
45	STATEMENT LINE TOO LONG more than 192 keystrokes.	97	VARIABLE OR ARRAY TOO SMALL
46	NEW STARTING STATEMENT NUMBER TOO LOW	98	ILLEGAL ARRAY MODIFIER ARGUMENTS
47	ILLEGAL OR UNDEFINED DEVICE SPECIFICATION		
48	UNDEFINED KEYBOARD FUNCTION no DEFFN statement.	=1	MISSING NUMERIC ARRAY DESIGNATOR
49	END OF TAPE	=2	ARRAY TOO SMALL
50	PROTECTED TAPE write protect tab removed.	=3	ILLEGAL DIMENSIONS
51	ILLEGAL STATEMENT		

NON-PROGRAMMABLE COMMANDS

CLEAR $\left[\begin{matrix} P \\ V \\ N \end{matrix} \right] [\text{line number}] [\text{line number}]$ Example: CLEAR P 10, 500

Clear all or part of program text; all variables or non-common variables.

LIST [S] [line number] [line number] Example: LIST S 100, 999

List all or a part of current program in memory.

RENUMBER [line number] [line number] [integer] Example: RENUMBER 100, 10, 3

Renumber all or part of current program lines in memory.

RUN [line number] Example: RUN 35

Initiate program execution from the start or from statement number.

EXPLANATION OF SYMBOLS

#n	I/O file designator i.e., # 1, # 2, # 3, etc.
/xxx	Device Address i.e., /215, /005
"name"	one to eight character file name i.e., "SAM2" "COSTFILE", etc.
argument list	Sequence of alpha and/or numeric variables and arrays i.e., A, BS, C()
expression	Any legal numeric expression i.e., A+C*(F/SIN(X)) etc.
line number	Up to 4 digit Basic line number i.e., 234, 9492
XX	Two Hexadecimal Digits, 3C, 54, C2
{ }	Indicates one of the enclosed items is required
[]	Indicates enclosed items are optional
com element	Common variables and arrays
variable	Any legal Basic Numeric or Alphanumeric spalar or array variable i.e., A, BS, C()
image	[±] [#..] [-] [#..] {↑↑↑↑}

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