BASIC Commands and statements

ABS

FORMAT ABS(X)

PURPOSE Returns the absolute value of expression X,

EXAMPLE A= ABS(- 10)

ALARM

FORMAT ALARM [<date>, <time>, <string> [,W]]

PURPOSE Specifies the alarm or wake time.

EXAMPLE ALARM "01/31/84", "10:00:00", "Staff meeting"
ALARM " * */* */* * " ,"08:00:00"; "A:MORNING" + chr$(13), W

ALARM$

FORMAT ALARM$ [<function>]

PURPOSE Returns information about the ALARM setting"

EXAMPLE PRINT ALARM$(1)

ASC

FORMAT ASC(X$)

PURPOSE Returns the numeric value which is the AS-CII code for the first character of string X$.

EXAMPLE A = ASC("A")

ATN

FORMAT ATN(X)

PURPOSE Returns the arc tangent in radians of X.

EXAMPLE A = ATN(X)

AUTO

FORMAT AUTO [<line number>][,[<inerement>]]

PURPOSE Initiates automatic generation of program line nurnbers.

EXAMPLE AUTO
AUTO 100, 50

AUTO START

FORMAT AUTO START <auto start string>

PURPOSE Sets the auto start string.

EXAMPLE AUTO START"A:MELODY"+CHRS(13)

BEEP

FORMAT BEEP [<duration>]

PURPOSE Sounds the PX-8's built-in speaker.

EXAMPLE BEEP ON
BEEP OFF
BEEP 100

CALL

FORMAT CALL <variable name> [(<argument lisr>)]

PURPOSE Starts execution of a machine language subroutine.

EXAMPLE CALL J(X)

CDBL

FORMAT CDBL(X)

PURPOSE Converts numeric expression X to a double Precision number.

EXAMPLE A# = CDBL(X!)

CHAIN

FORMAT CHAIN [MERGE] <file name>[,[<Line number exp>][,ALL][,DELETE<range>]]

PURPOSE Calls the BASIC program designated by < file name > and passes variables to it from the calins program.

EXAMPLE CHAIN "SAMPLE"
C14AIN "A.SAMPLEZ3",,ALL
CHAIN MERGE "SUB",l00

CHR$

FORMAT CHR$(J)

PURPOSE Returns the character whose ASCII code equals the value of integer expression j.

EXAMPLE A$ = CHR$(65)

CINT

FORMAT CINT(X)

PURPOSE Rounds the decimal portion of numeric expression X to the nearest whole number and returns the équivalent integer value.

EXAMPLE A% = CINT(5.6)

CLEAR

FORMAT CLEAR[[<dummy>][,[<upper memory limit>][,<stack airea size>]]]

PURPOSE Clears all numeric and string variables. When options are specified, also reserves an area in memory for machine language programs and sets the stack area size.

EXAMPLE 10 CLEAR ,&HC400

CLOSE

FORMAT CLOSE[[#]<file number>[,[#]<file number ... >]]

PURPOSE Terminates access to files.

EXAMPLE CLOSE # 3

CLS

FORMAT CLS

PURPOSE Clears the currently selected virtual screen.

EXAMPLE CLS

COMMON

FORMAT COMMON<list of variables>

PURPOSE Passes variables to a CHAINed program.

EXAMPLE COMMON B, A$()

CONT

FORMAT CONT

PURPOSE Resumes exécution of a program interrupted by STOP, END or the STOP key.

EXAMPLE CONT

COPY

FORMAT COPY

PURPOSE OutPuts the contents of the LCD creen to the printer.

EXAMPLE COPY

COS

FORMAT COS(X)

PURPOSE Returns the cosine of anfle X, where X is in radians

EXAMPLE A# = COS(1.570796326794897)

CSNG(X)

FORMAT CSNG(X)

PURPOSE Converts numeric expression X to a single precision number

EXAMPLE A! = CSNG(16%)

CSRLIN

FORMAT CSRLIN [« function »]

PURPOSE Returns the vertical character coordinate of the cursor on the virtual screen or the verti- cal Position of the first line of the screen win- dow in the vertical screen.

EXAMPLE A% = CSRLIN

CVI/CVS/CVD

FORMAT CVI (<2-byte string>
CVS (<4-byte string>
CVD (<8-byte string>

PURPOSE Converts ASCII rcpresentations of BCD code to numeric values.

EXAMPLE
```
PRINT CVI (CHRS(5)+CHR$(0)
PRINT CVS (CHRS(0) + CHR$(0)
          +CHR$(32)+CHR$(131»
PRINT CVD (CHR$(0) + CHRS(0)
          +CHR$(0) + CHRS(0)
          +CHR$(0) + CHR$(0)
          +CHR$(32)+CHRS(131)
```

DATA

FORMAT DATA< list of constants>

PURPOSE Stores numeric and string constants which are substituted into variables by the READ statement.

EXAMPLE DATA PX,S,EPSON

DATE$

FORMAT As a statement
DATE$= " <MM>/<DD>/<YY>"
As a variable
X$ = DATE$

PURPOSE As a statement, sets the date of the PX-8's calendar clock. As a variable, returns the date of the PX-8's built-in clock.

EXAMPLE DATE$ = "01/28/84"
AS = DATE$

DAY

FORMAT As a statement
DAY= <W>
As a variable
X% = DAY

PURPOSE As a statement, sets the day of the week of the PX-8's built-in clock. As a variable, returns the day of the week from the PX-8's built-in clock.

EXAMPLE DAY=6
A% = DAY

DEF FN

FORMAT DEF FN < name > (<parameter list>)
= < function definition >

PURPOSE defines and names user-written fonctions.

EXAMPLE DEF FNA(X,Y)=X*3/(Y+2)

DEFINT/SGN/DBL/STR

FORMAT DEF INT <range(s) Of letters>
DEF SNG <range(s) Of lettcrs>
DEF DBL <range(s) Of letters>
DEF STR <range(s) of letters>

PURPOSE Declares type of variables as integer, single précision, double précision, or string.

EXAMPLE DEFINT I-N, W-Z

DEF USR

FORMAT DEF USR [<digit>]=<integer expression>

PURPOSE Used to specify the starting adress of user-written machine language subroutines.

EXAMPLE DEF USR1=&HC000

DELETE

FORMAT DELETE [<line number 1>][-<line number 2>]

PURPOSE Deletes specified lines from a BASIC program.

EXAMPLE DELETE 40
DELETE 40-100
DELETE -40

DIM

FORMAT I)IM <list of subscripted variables>

PURPOSE Specifies the maximum range of array subscripts and allocates space for storage of array variables.

EXAMPLE DIM G%(25), F%(25)

DSKF

FORMAT DSKF «drive name»

PURPOSE Returns the number of kilobytes of free space in specified disk device.

EXAMPLE A% = DSKF("A: ")

EDIT

FORMAT EDIT <line number> .

PURPOSE Enters the EDIT mode at the specified line.

EXAMPLE EDIT 40

END

FORMAT END

PURPOSE Terminates program execution, closes all files, and returns BASIC to the command level.

EXAMPLE END

EOF

FORMAT EOF «file nurnber »

PURPOSE Returns a value indicating whether the end of a sequential file has been reached during sequential input.

EXAMPLE IF EOF(1) THEN 100

ERASE

FORMAT ERASE <list of variables >

PURPOSE Cancels array definitions made with the DIM statement.

EXAMPLE ERASE A, B

ERL

FORMAT ERL

PURPOSE Returns the line number of a command/sialement causing an error during program execution.

EXAMPLE B=ERL

ERR

FORMAT ERR

PURPOSE Returns the error code of errors occurring during command or statement execution.

EXAMPLE A=ERR

ERROR

FORMAT ERROR <integer expression>

PURPOSE Siniulates the occurrence of BASIC errors or arrows the user to define his own error codes.

EXAMPLE ERROR 255

EXP

FORMAT EXP (X)

PURPOSE Returns the value of the natural base e to the power of X.

EXAMPLE A = EXP(X)

FIELD

FORMAT FIELD[#]< file number>,< field width> AS < string variable >, < field width > AS <string variable>, ...

PURPOSE Assigns positions in a random file buffer for use as variables.

EXAMPLE FIELD 1, 20 AS N$, 10 AS ID$, 40 AS ADD$

FILES

FORMAT FILES [<ambiguous file name>]

PURPOSE Displays the names of files satisfying the <ambiguous file name>.

EXAMPLE FILES "L???????.BAS"
FILES "E:"
FILES "A:D???.*"

FIX

FORMAT FIX(X)

PURPOSE Returns the integer portion of numeric expression X.

EXAMPLE A = FIX(X)

FOR ... NEXT

FORMAT FOR < variable > = < expression 1 > TO <expression 2>
[STEP <expression 3>]
:
NEXT [<variable>][,<variable>...]

PURPOSE Allows the series of instructions between FOR and NEXT to be repeated a given number of times.

EXAMPLE FOR I = 1 TO 100 STEP 4
A% = CSRLIN
:
NEXT I

FRE

FORMAT FRE(X)
FRE(X$)

PURPOSE Returns the number of bytes of memory which are not being used by BASIC.

EXAMPLE PRINT FRE(0)
PRINT FRE(A$)

GET

FORMAT GET [#]< file number >[,< record number>]

PURPOSE Reads a record from a random disk file.

EXAMPLE GET # 1, X

GOSUB ... RETURN

FORMAT GOSUB < line number >
:
RETURN

PURPOSE Used for branching to and returning from subroutines.
GOSUB < line number >
:

EXAMPLE RETURN

GOTO or GO TO

FORMAT GOTO < line number >
GO TO <line number>

PURPOSE Transfers program execution to the program line specified by <line number>.

EXAMPLE GOTO 200

HEX$

FORMAT HEX$(X)

PURPOSE Returns a character string representing the hexadecimal value of X.

EXAMPLE PRINT HEX$ (44323)

IF..THEN[...ELSE]/IF...GOTO

FORMAT IF <logical expression>

THEN	<statement>	[ELSE	<statement>	]
	<line No.>		<line No.>	
GOTO	<line No.>			

PURPOSE Changes the flow of program execution according to the result of a logical expression.

EXAMPLE IF A=B THEN PRINT "A=B" ELSE
PRINT "A< >B"

INKEY$

FORMAT INKEYS

PURPOSE Checks the keyboard buffer and returns one character (or a null string if no key has been pressed).

EXAMPLE AS=INKEY$

INP

FORMAT INP (J)

PURPOSE Returns one byte of data from machine port J.

EXAMPLE A=INP(176)

INPUT

FORMAT

INPUT [;] [<prompt string> | ; | , |] <list of variables>

PURPOSE Allows values to be substituted into variables from the keyboard during program execution

EXAMPLE INPUT "NAME";A$

INPUT#

FORMAT INPUT # <file number>,<variable list>

PURPOSE Reads data into variables from a sequential file.

EXAMPLE INPUT# 1, A$, B$, C$

INPUT$

FORMAT INPUT$(X[,[#]<file number>])

PURPOSE Reads a string of X characters from the keyboard buffer or file opened under <file number>.

EXAMPLE A$ = INPUT$(1)
A$ = INPUT$(10, #1)

INSTR

FORMAT INSTR([J,IXS,Y$)

PURPOSE Searches for string Y$ in string X$ and returns a number indicating the position at which it was found.

EXAMPLE A = INSTR(X$, "ABC")

INT

FORMAT INT(X)

PURPOSE Subtracts the decimai portion of X from X and returns the integer value whieh is the result.

EXAMPLE A= INT(- B/3)

KEY

FORMAT < n >, < X$ >

PURPOSE Defines the functions of programmable function keys.

EXAMPLE KEY 2, "LIST" + CHR$(13)

KEY LIST/KEY LLIST

FORMAT KEY LIST
KEY LLIST

PURPOSE Outputs **a** list of the programmable fonction key definitions to the display or printer.

EXAMPLE KEY LIST

KILL

FORMAT KILL <file descriptor >

PURPOSE Deletes the disk device file specified by < file descriptor>.

EXAMPLE KILL "FILE3.BAS"
KILL "D:SAMPLE1.BAS"

LEFT$

FORMAT LEFT$ (X$, i)

PURPOSE Returns a string of J characters from the left end of string X$.

EXAMPLE A$= LEM (X$, 5)

LEN

FORMAT LEN (X$)

PURPOSE Returns the number of characters in string x$.

EXAMPLE A = LE N (XS)

LET

FORMAT [LET] < variable > = < expression >

PURPOSE Assigns the value of an expression to a variable.

EXAMPLE PI = 3.14159
LET PI= 3.14159

LINE

FORMAT LINE [[STEP] (XI, YI)]-[STEP](X2, Y2)[,[<function code>][,(B[F]][,<line style>]]]

PURPOSE Draws a straight line between two specified points.

EXAMPLE LINE (0,0)-(500,300)
LINE -STEP (20,20)
LINE (25,25)-(500,200),4,,&HAAA

LINE INPUT

FORMAT LINE INPUT[;]J<prompt string>;] <string variable>

PURPOSE Assigns character strings entered from the keyboerd during program exécution to variables.

EXAMPLE LINE INPUT "ENTER NAME (LAST, FIRST)";A$

LINE INPUT#

FORMAT LINE INPUT# <file number>,<string variable>

PURPOSE Reads lines of data into variables from a sequential disk file.

EXAMPLE LINE INPUT#1, A$

LIST

FORMAT LIST[*][<line number>][-][< line number>]
LIST[-*][<file descriptor>,][<Iine number>][-][<Iine number>]

PURPOSE Lists BASIC program lines en the display or printer.

EXAMPLE LIST
LIST -50
LIST 50-
LIST 50-200
LIST "LPT0:"

LLIST

FORMAT LLIST [*] [< line number >] [-]
[< line number >]

PURPOSE Outputs a program list to the printer.

EXAMPLE LLIST 1000 - 2000

LOAD

FORMAT LOAD < file descriptor > [,R]

PURPOSE Loads a program into inemory.

EXAMPLE LOAD "LNINPT"
LOAD "B:LNINPT.BAS"

LOC

FORMAT LOC (<file number >)

PURPOSE Returns the random access file record number following that used by the last GFT or PUT statement, or the number of file sectors read/writted since a sequential file was opened.

EXAMPLE A = LOC(1)

LOCATE

FORMAT LOCATE [<X>][,[<Y>][,<cursor switch>]

PURPOSE Moves the cursor to specified virtual screen coordinates.

EXAMPLE LOCATE 1,1,0

LOF

FORMAT LOF (<file number>)

PURPOSE Returns the size of a file in sectors.

EXAMPLE A = LOF(1)

LOG

FORMAT LOG(X)

PURPOSE Returns the natural logarithm of X.

EXAMPLE PRINT LOG(2.7812818)

LOGIN

FORMAT LOGIN < program area no.> [,R]

PURPOSE Switches to the specified BASIC program arca. If R is specified, executes the prograrn in that area.

EXAMPLE LOGIN 2
LOGIN 3,R

LPOS

FORMAT LPOS (X)

PURPOSE Returns the current position of the buffer pointer in the printer output buffer. (X is a dummy argument.)

EXAMPLE A = LPOS(X)

LPRINT

FORMAT LPRINT [<list of expressions>]

PURPOSE Outputs data to a printer connected to the PX-8.

EXAMPLE LPRINT "EPSON PX-8"

LPRINT USING

FORMAT LPRINT USING <format string>;<list of expressions>

PURPOSE Outputs data to a printer in a specific format.

EXAMPLE LPRINT USING "# # # #";A;B

LSET/RSET

FORMAT LSET <string variable> = <string expression >
RSET <string variable> = <string expression >

PURPOSE Prepares character data for storage in a random access file by moving it into a random file buffer.

EXAMPLE LSET A$= B$

MENU

FORMAT MENU

PURPOSE Returns BASIC to the BASIC program.

EXAMPLE MENU

MERGE

FORMAT MERGE <file descriptor >

PURPOSE Merges a program from a file (disk device, disk image RAM or COM0:) with the program currently in memory.

EXAMPLE MERGE "TEST1"
MERGE "COM0:"

MID$

FORMAT As a statement
MID$ (<string expl>,n[,m]) = < string exp2>
As a function
MID$ (X$,J[,K])

PURPOSE As a statement, replaces characters from position n in <string expl > with the first m characters of < string exp2 >. As a function, returns K characters from the middle of X$, starting with character J.

EXAMPLE MID$ (A$,5,7) = B$
A$ = MID$("ABCDEFG",3,3)

MKI$/MKS$/MKD$

FORMAT MKI$ (<integer expression>)
MKS$ (<single precision expression >)
MKD$ (<double precision expression>)

PURPOSE Converts numerie values to strings for storage in random access files.

EXAMPLE A$ = MKI$(X%)
A$ = MKS$(X!)
A$ = MKD$(X#)

MOUNT

FORMAT MOUNT

PURPOSE Reads the microcassette tape directory into memory and prepares the microcassette drive for access as a disk device.

EXAMPLE MOUNT

NAME

FORMAT NAME < old file name > AS < new file name >

PURPOSE Changes the name of a disk device file.

EXAMPLE NAME "SAMPLE1.BAS"
AS "SAMPLE2.BAS"

NEW

FORMAT NEW

PURPOSE Deletes the prograin in the currently selected memory area and clears all variables.

EXAMPLE NEW

OCT$

FORMAT OCT$ **(X)**

PURPOSE Returns a character string representing the octal value of X.

EXAMPLE A$ = OCT$(9999)

ON ERROR GOTO

FORMAT ON ERROR GOTO [<Iine number>]

PURPOSE Causes program execution to branch to the first line of an error handling subroutine when an error occurs.

EXAMPLE ON ERROR GOTO 1000

ON...GOSUB/ON...GOTO

FORMAT ON < numeric expression> GOTO
<list of line numbers>
ON < numerie expression> GOSUB
<list of line numbers>

PURPOSE Branches to one of several specified program line numbers depending on the value returned for <expression>.

EXAMPLE ON A GOSUB 100,200,500,1000

OPEN

FORMAT OPEN "<mode>",[#]<file number>,
<file descriptor>,[<record length>]

PURPOSE Opens a disk file or other device for input or output.

EXAMPLE OPEN"O", #1,"CLIENTS.DAT"

OPTION BASE

FORMAT OPTION BASE | 0 | 1 |

PURPOSE Declares the minimum value for array subscripts.

EXAMPLE OPTION BASE 1

OPTION COUNTRY

FORMAT OPTION COUNTRY < character string >

PURPOSE Specifies the international character set to be used for keybeard input/output, LCD display, and output to the printer,

EXAMPLE OPTION COUNTRY "U"
OPTION COUNTRY "england"

OPTION CURRENCY

FORMAT OPTON CURRENCY <string expression>

PURPOSE Changes the currency symbol.

EXAMPLE OPTION CURRENCY "@"

OUT

FORMAT OUT < integer expression 1 >, < integer expression 2>

PURPOSE Outputs the value of < integer expression 2 > to the machine output port specified in <integer expression 1>.

PCOPY

FORMAT PCOPY < program area no.>

PURPOSE Copies the program in the current program area to another program area.

EXAMPLE PCOPY 3

PEEK

FORMAT PEEK (J)

PURPOSE Returns one byte of data from memory location J.

EXAMPLE A = PEEK (&HE000)

POINT

FORMAT POINT (horizontal position, vertical position)

PURPOSE Returns the setting of the display dot at the specifie graphic screen location.

EXAMPLE PRINT POINT (10,10)

POKE

FORMAT POKE < integer expression 1 >,
<integer expression 2>

PURPOSE Writes the data byte specified by <integer expression 2 > to the inemory address specified by < integer expression 1 >.

EXAMPLE POKE &HC001,A

POS

FORMAT POS (<file no.>)

PURPOSE Returns the current position of the buffer pointer in the file output buffer.

EXAMPLE PRINT POS (1)

POWER

FORMAT POWER OFF[,RESUME]
POWER[<duration>]
POWER CONT

PURPOSE Turns off the power or sets the auto power-off function.

EXAMPLE POWER OFF, RESUME
POWER 10
POWER CONT

PRESET

FORMAT PRESET [STEP](X,Y)[,<fonction code>]

PURPOSE Resets the dot at the specified graphic display coordinates,

EXAMPLE PRESET (X,Y)
PRESET STEP (10,10),l

PRINT

FORMAT PRINT [< list of expression >]

PURPOSE Outputs data to the LCD screen

EXAMPLE PRINT "Name is ";A$
PRINT X,Y

PRINT USING

FORMAT PRINT USING " < format string > ", < list of expressions>

PURPOSE Outputs data to the LCD screen in the format specified in <"format string">.

EXAMPLE PRINT USING "\ \";A$;B$;C$
PRINT USING " # # # #. # # ";A;B;C

PRINT#

FORMAT PRINT # <file number >,
[< list of expressions >]

PURPOSE Writes data to a sequential file.

EXAMPLE PRINT # 1,A$;";";B$

PRINT# USING

FORMAT PRINT # <file number>,USING <format string>;
<list of expression>

PURPOSE Writes data to a sequential file in a specific format.

EXAMPLE PRINT # 1 USING " # # # # . # # ";A;B;C

PSET

FORMAT PSET [STEP](X,Y)[,<function code>]

PURPOSE Sets the dot at the specified graphic coordinates.

EXAMPLE PSET (A,B)
PSET STEP (5, - 5),4

PUT

FORMAT PUT [#] < file number >[,<record numbcr>]

PURPOSE Writes a data record to a random access file.

EXAMPLE PUT#1,X

RANDOMIZE

FORMAT RANDOMIZE [< expression >]

PURPOSE Reinitializes the random number generator.

EXAMPLE RANDOMIZE
RANDOMIZE VAL (RIGHT$ (TIME$,2))

REAL

FORMAT READ < list of variables>

PURPOSE Reads values from DATA statements and substitutes them into variables.

EXAMPLE READ A$,B$,C$

REM

FORMAT REM < remark >
' < remark >

PURPOSE Used to insert explanatory remarks into a program.

EXAMPLE ' REGRESSION ROUTINE

REMOVE

FORMAT REMOVE

PURPOSE Writes the microcassette directory to tape and disables read and write access to the microcassette drive.

EXAMPLE REMOVE

RENUM

FORMAT RENUM [[<new line number>][,[<old line number>][,<increment>]]]

PURPOSE Renumbers the lines of prograrns.

EXAMPLE RENUM
RENUM 300,50
RENUM 1000,900,20

RESET

FORMAT RESET

PURPOSE Resets the READ ONLY condition after a floppy disk in a disk drive has been replaced.

EXAMPLE RESET

RESTORE

FORMAT RESTORE [<line numbcr>]

PURPOSE Resets the pointer which keeps track of the last item read from DATA statements.

EXAMPLE RESTORE
RESTORE 1000

RESUME

FORMAT RESUME
RESUME 0
RESUME NEXT
RESUME <line number>

PURPOSE Used to continue program execution after completion of an error processing routine.

EXAMPLE RESUME 100

RIGHT$

FORMAT RIGHT$ (X$,J)

PURPOSE Returns J characters from the right end of string X$.

EXAMPLE A$=RIGHT$ ("abcdefg",3)

RND

FORMAT RND[(X)

PURPOSE Returns a random number between 0 and 1

EXAMPLE A=RND

RUN

FORMAT RUN [< line number >]
RUN < file descriptor > [,R]

PURPOSE Starts execution of a program.

EXAMPLE RUN 300
RUN "B:SAMPLE",R

SAVE

FORMAT SAVE <file descriptor >[,A]
SAVE <file descriptor >[,P]

PURPOSE Saves the program in memory to a disk file or the RS-232C interface.

EXAMPLE SAVE"ADDRESS.DAT"
SAVE"COM0:"

SCREEN

FORMAT SCREEN (< mode >]
[, [< virtual screen >]
[, [< function key switch >]
[,[<boundary character>]
[WIDTH [<no. columns>]
[,[<no. lines 1 >][,<no. lines 2>]]]]]]

PURPOSE Sets the screen mode and screen parameters.

EXAMPLE SCREEN 2,1,0,"E" WIDTH 20,20,20

SCREEN

FORMAT SCREEN (<horizontal position >, < vertical position>)

PURPOSE Returns the ASCII code corresponding to the character at the specified screen location.

EXAMPLE A = SCREEN(5,5)

SGN

FORMAT SGN (X)

PURPOSE Returns the sign of X.

EXAMPLE A = SGN(X)

SIN

FORMAT SIN(X)

PURPOSE Returns the sine of X.

EXAMPLE A=SIN(X)

SOUND

FORMAT SOUND <pitch>,<duration>

PURPOSE Outputs a tone of the specified pitch and duration frorn the speaker.

EXAMPLE SOUND 1000,100

SPACE$

FORMAT SPACE$(J)

PURPOSE Returns a string of spaces of a specified length.

EXAMPLE A$="AAA"+SPACE$(10)+ "CCC"

SPC

FORMAT SPC(J)

PURPOSE Outputs a string of J spaces to the display or printer.

EXAMPLE PRINT SPC(10);A$

SQR

FORMAT SQR(X)

PURPOSE Returns the square root of X.

EXAMPLE PRINT SQR(2 #)

STAT

FORMAT STAT 1 < program area no. > 1
STAT ALL

PURPOSE Displays the status of BASIC program arcas. STAT

EXAMPLE STAT 1
STAT ALL

STOP

FORMAT STOP

PURPOSE Terminates program execution and returns BASIC to the command level.

EXAMPLE STOP

STOP KEY

FORMAT STOP KEY | ON | OFF |

PURPOSE Disables and reenables the STOP key.

EXAMPLE STOP KEY ON
STOP KEY OFF

STR$

FORMAT STR$(X)

PURPOSE Returns a string representation of the value of X.

EXAMPLE AS=STR$(123)

STRING$

FORMAT STRING$(J,K)
STRING$(J,X$)

PURPOSE Returns a string of J characters.

EXAMPLE PRINT STRING$(10,65)
PRINT STRING$(10,"A")

SWAP

FORMAT SWAP < variable 1 >, < variable 2 >

PURPOSE Exchanges the values of the variables specified in <variable 1 > and <variable 2 >

EXAMPLE SWAP A$,B$

SYSTEM

FORMAT SYSTEM

PURPOSE Terminates BASIC operation and returns control to the CP/M operatins system.

EXAMPLE SYSTEM

TAB

FORMAT TAB(J)

PURPOSE Moves the cursor (print head) to character position J on the display screen (print line).

EXAMPLE PRINT TAB(10);"ABC"
LPRINT TAB(10);"ABC"

TAN

FORMAT TAN(X)

PURPOSE Returns the tangent of X

EXAMPLE A = TAN(3.1416/4)

TAPCNT

FORMAT As a statement
TAPCNT=J
As a variable
J=TAPCNT

PURPOSE Sets or reads the PX-8's microcassette drive counter.

EXAMPLE TAPCNT=0
PRINT TAPCNT

TIME$

FORMAT As a statement
TIMES = " <HH >:<MM>:< SS> "
As a variable
X$ = TIME$

PURPOSE Sets or reads the PX-8's built-in clock.

EXAMPLE TIME$="15:35:00"
PRINT TIME$

TITLE

FORMAT TITLE[<program area name>][,P]

PURPOSE Sets the name and edit attribue of the currently selected BASIC program area.

EXAMPLE TITLE"FINAL",P
TITLE""

TRON/TROFF

FORMAT TRON
TROFF

PURPOSE Starts or stops the trace mode of program execution.

EXAMPLE TRON
TROFF

USR

FORMAT USR[< digit >](argument)

PURPOSE Calls a machine language subroutine defined by a DEF USR statement.

EXAMPLE A = USR0(B)

VAL

FORMAT VAL(X$)

PURPOSE Converts a string composed of numeric ASCII characters into a numeric value.

EXAMPLE A=VAL("123")

VARPTR

FORMAT VARPTR(< variable name>)
VARPTR(# <file number>)

PURPOSE Returns the address of the specified variable or file buffer.

EXAMPLE PRINT HEX$(VARPTR(A))
PRINT HEX$(VARPTR(1))

WAIT

FORMAT WAIT <port number >,J[,K]

PURPOSE Suspends program execution until a specified bit pattern is developed at the specified machine input port.

WHILE ...WEND

FORMAT WHILE <expression>
:
[< loop statements >]
WEND

PURPOSE Repeats the series of instructions included between WHILE and WEND as long as the result of the specified expression is TRUE.

EXAMPLE WHILE X ≤ 100
:
WEND

WIDTH

FORMAT WIDTH [< no. of columns >][, [< no. of lines 1 >][, < no. of lines 2 >]]
WIDTH <file descriptor>,<no. of columns>
WIDTH LPRINT <no. of columns >

PURPOSE Sets the column width of the virtual screens or other specified device or file.

EXAMPLE WIDTH 20,20,20
WIDTH "LPT0:",80
WIDTU #1,80
WII)TH LPRINT 40

WIND

FORMAT WIND[<counter value> | ON | OFF]

PURPOSE Turns the microcassette drive motor on or off, winds the tape until the specified counter value is reached, or rewinds the tape to the beginning and resets the counter to 0.

EXAMPLE WIND
WIND ON
WIND OFF
WIND 3000

WRITE

FORMAT WRITE [<list of expressions>]
PURPOSE Displays data on the LCD screen.
EXAMPLE WRITE A$,B$,C$

WRITE#

FORMAT WRITE# < file number >,< list of expressions >
PURPOSE Writes data to a sequential disk file using the format of the WRITE statement.
EXAMPLE WRITE#1,A$,B$