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Editing Keywords

ASSEM

Switches into assembler mode.



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Editing Keywords (cont)

BANK Display the current bank number, or change to the [bank[- bank specified. If on/off specified will enable or

bank][, disable the banks.

on/off]]

Editing Keywords (cont)

BASIC Switches out of assembler mode.



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Editing Keywords (cont)

COMP ["filename"[, devnum]]

Will compile the program in memory and optionally save it to a file. filename must be 12 characters or

less if specified.

Editing Keywords (cont)

DELETE

Will delete a range of lines from start to end from your

[start end]

program. With no parameters, acts like NEW.

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ı Kevwo	

DESC *line#*, Create a subroutine *label* and start the code at

label line#.

Editing Keywords (cont)

ERROR Will display the errors.



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Editing Keywords (cont)

EXEC (>) command Will run a single line in immediate mode.

block Shorthand >

Editing Keywords (cont)

FAST Enables speed up of some commands



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Editing Keywords (cont)

FIND text

Searches the program in the current bank for lines containing *text*. Do not use quotes if searching for keywords. If searching for assembly, put a left bracket in front of the instruction.

Editing Keywords (cont)

LIST Will display the program in memory. Can optionally only [line#[- display lines between the given parameters.

line#]]



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Editing Keywords (cont)

LISTER A scrollable LIST. If *line#* specified, will start at that

[line#] line

Editing	1/		_	
	N DW	M// el re		

LITE With no parameter or a 1, will enable LITE mode. 0 will

[0/1] disable.



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Editing Keywords (cont)

LLIST [line#[Displays extended details about the program in - line#[, memory. if the value of printer? is 1, the output will be printer?]]] sent to a printer.

Editing Keywords (co	ш

NEW [bank[- Clears the current program bank, or banks bank]] specified.



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Editing Keywords (cont)

OLD [bank[- bank]]

Attempts to restore the program in the current bank, or banks specified.

Editing Keywords (cont)

PLIST [line#[- line#]]

Sends the program LIST to a printer.



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Editing	Ke	vword	s ((cont)

QUIT Quit Vision BASIC.

Editing Keywords (cont)

RENUM start - end, new[, step]

Will renumber the lines from start to end to new ,

using a step of 10 if not specified.



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Editing Keywords (cont)

RUN [line#]

Runs the compiled, in memory program. If the program is not compiled or has been altered, will compile first. If *line#* specified, will start at that line number, otherwise will start from the first line of the program.

Editing Keywords (cont)

SLOW Run at normal C64 speeds.



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Editing Keywords (cont)

VLIST Will display all of the variables from the program in memory. [num] If num specified, will send the output to a printer.

Keywords related to writing, editing, modifying and displaying programs

Disk and File Commands

DEVICE devnum Sets the device number for the default device.



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devnum]]

Disk and File Commands (cont)

DIR Lists the current device's directory. If num is supplied, will [num] be sent to a printer

Disk and File Commands (cont)

DISK Equivalent to OPEN 15,devnum,15,"command":CLOSE ["comma-15. Uses default device if not specified. Initializes the device if command not specified.



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Disk and File Commands (cont)

GSAVE

on

Saves a copy of the C64 RAM to the GeoRAM expanded memory. If *on* is 1, enables back-up feature.

Disk and File Commands (cont)

LOAD "filename"[, devnum] Load a file from the default device. If filename not specified, will use last specified filename.



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Disk and File Commands (cont)

SAVE "fil- Save a file to the default device. Filename must be 12 ename"[, characters or less. If filename not specified, will use last devnum] specified filename.

Disk and File Commands (cont)

VERIFY "- Verify the program in memory against a file on the filename"[, default device. If filename not specified, will use last devnum] specified filename.

Commands related to using disk drives



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Variables	
variable\$	At the end of a variable name, a \$ specifies that the
	variable is a STRING.

Variables (cont)

CLR Clears the memory used by all variables.



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Vari	ah.	00	(cont)
vali	au		

DECIMAL variable[, variable[, variable[, ...]]]

Creates new decimal variables.

Variables (cont)

DIM [DECIMAL] variable(-value)

Create array variable of value size.



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Variables (cont)

GLOBAL Restores the global variable scope

Variables (cont)

LET Assigns a simple value to a simple variable. Useful for speed.



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Variables (

LOCAL Starts a local scope for variables.

Variables (cont)

TAG tag = Creates a TAG named tag with the value value. Like a

value label in assembler.



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Variables (cont)

VARIABLES Moves the program variable table to *address* or

[address] 32768 if not specified.

Variables must start with a letter, and can be up to 8 characters long.

Numbers and the symbols !, @, #, %, & and ? are allowed in variable names.

Anything past 8 characters is silently ignored.

Variable names can *contain* keywords, but cannot start with keywords.

Strings must be terminated with a dollar (\$) sign.

All variables are assumed to be integer variables by default.

Tags cannot be to the left of an equals sign in a math expression.

Math	
vov AND vov	Performs a logical (bitwise) AND.



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Math (cont)		Math (cont)	
vov OR vov	Performs a logical (bitwise) OR.	vov EOR vov	Performs a logical (bitwise) Exclusive OR.



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Math (cont)		Math (cont)		
ABS(vov)	Returns the absolute value of vov.	INT(vov)	Returns the integer value of vov, rounded down.	



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Math (cont)		Math (cont)	
SGN(vov)	Returns the sign of vov.	WHOLE(vov)	Returns the integer value of vov without rounding.



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Math (cont)	Math (co	Math (cont)		
FRAC(vov) Returns the fractional value	of <i>vov</i> , stripped of the sign. ABS(<i>vov</i>)	Returns the absolute value of vov.		



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Mat	th.	(cont)	

RANDOM [seed]

Initializes the random number table. If no parameter, will use SID voice 3, otherwise will be seeded with *seed*.

Math (cont)

RND Generate a random number. If 0 supplied, will limit numbers [0] to 0-255, otherwise 0-65535.



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Math (cont)

π The value of PI in decimal.

Parentheses are **not** allowed in mathematical expressions. e.g. A=4*(3+4) is not allowed and would need to be expressed as A=3+4:A=A*4

Order of operations is **not** followed. All expressions are strictly evaluated from left to right.

e.g. 4+3*5-2*6 would be evaluated as 4+3=7, 7*5=35, 35-2=33, 33*6=198.

The functions USR, FRE, POS, SQR, LOG, EXP, COS, SIN, TAN and ATN are not available.

Speedy Math

 $ADD \ vop = vov + vov$



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Speedy Math (cont)		Speedy Math (cont)	
COMPARE vov, vov	Both parameters must be 2 byte ints.	DEC vop	Decrements vop by 1.



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Speedy Math (cont)		Speedy Math (cont)	
DOUBLE vop	Multiplies vop by 2.	HALF vop	Divides vop by 2.



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Speedy Math (cont)

INC vop

Increments vop by 1.

Speedy Math (cont)

SUBTRACT vop = vov - vov

These commands only with with non-arrayed *integer* variables, tags and pointers, except **INC**, **DEC**, **HALF** and **DOUBLE** which also work on non-arrayed *decimal* variables.



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BITMAP [bmp, multicolor, map, drawto, screen, color1, color2, color3, clearcol, clear map]

Turns modes *bmp* and *multicolor* on (1) or off (0).

Bitmap Commands (cont)

BMPCLR [clearmap[, Clears the currently visible bitmap screen if *clearmap* is 1, and color screen if *clearcol* is set to 1. If neither argument is specified, will clear both.

clearcol]]



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Bitmap Commands (cont)

BMPCOL screen, color1, color2, color3, clearcol[, clearmap] Sets the bitmap colors that will be used, and defines which screen to use. If clearmap is added and set to 1, will clear the bitmap.

Bitmap Commands (cont)

BMPLOC map sets with bitmap screen will be visible (0-7). drawto map, sets with screen will be drawn to with the drawing drawto commands.



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Bitmap Commands (cont)

HLINE x, y, len,

color

Draws a straight, horizontal line starting at (x, y) and continuing to the right for len pixels with color color

Bitmap Commands (cont)

LIMITS width, height, x-pos, y-pos, colorplot

Limits the area on the bitmap that drawing commands will affect.



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Bitmap Commands (cont)

LINE Draws a line on the bitmap from (x1, y1) to (x2, y2), in x1, y1[, color *color* if specified. If x2 and y2 are not specified, will x2, y2[, draw a line from (x1, y1) to the current coordinate. *color*]

Bitmap Commands (cont)

PLOT x, y, Draws a pixel on the bitmap at coordinates (x, y) in color color.



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Bitmap Commands (cont)

VLINE x, y, len, color

Draws a straight, vertical line starting at (x, y) and going down for *len* pixels with color *color*

All parameters can be either values or variables. If a parameter is left off, a default or previous value will be used.

Sprite Commands

ALLMOBS *x0, y0, x1, y1, x2, y2, x3, y3, x4, y4, x5, y5, x6, y6, x7,*

Allows you to set all of the sprite positions in a single command.



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Sprite Commands (cont)

CODE Any code following this command will be stored in values.... memory at the location indicated by the "code" pointer.

Sprite Commands (cont)

COLLISION selection

Copies the collision registers and zeros the copied register. If *selection* is 0, copies the sprite-to-sprite register, if 1 copies the sprite-to-foreground register.



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Sprite Commands (cont)

DETECT mob#[, mob#[,

Used after the COLLISION command. Checks is the specified sprites were involved in a collision.

...]]]

Sprite Commands (cont)

MOB
number,
on,
multicolor,
priority,
x, y, x-

Chooses which sprite to make current. Initializes the sprite. *number* chooses which sprite (0-7). *on* turns it on or off, *multicolor* enables or disables multicolor mode, *priority* enables or disables background priority, *x*, *y* choose the initial coordinates, *x-add* and *y-add* set the offsets

offsets.

add, y-

C

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Sprite Commands (cont)

MORCI R

Clears all of the sprite registers. Recommended to use at the beginning of your program if you're using sprites, and also when you want to clear the screen of sprites.

Sprite Commands (cont)

MOBCOL color, shared1, shared2

Sets the sprite colors. *color* sets the color of the current sprite, *shared1* sets the first color shared by all multicolor sprites, *shared2* sets the second.



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Sprite Commands (cont)

MOBEXP *x- expan, y-expan*

Enables and disables the *x-expan*sion and the *y-expan*sion of the current sprite.

Sprite Commands (cont)

MOBPAT shape#, bank

Moves the **CODE** pointer to point at the specified sprite she's data. *shape#* specifies the shape to point at, *bank* specifies the bank where the coded data will be sent.



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Snri	TO (Comma	ndei	CODE

MOBSET shape#, number, number, number, ...

Initialize a sprite from The Spreditor.

Sprite Commands (cont)

MOBXY x, y,

Moves the current sprite to the coordinates (x, y). x-add and y-add set the offsets.





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Sprite Commands (cont)

SHAPE Changes the current sprite's shape. IF more than 1 byte[, byte[, shape specified, will set the shape for the following

byte[, ...]]] sprites.

Commands begin with MOB as a carryover from Simon's BASIC.

Interrupt Commands

HALTINT Stops the interrupt totally, returning interrupts to normal.



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Interrupt Commands (cont)

INTEND flag

Should be the last statement in your interrupt routine. If flag is 0, JMP to BASIC's hardware timer routine, 1 will RTI.

Interrupt Commands (cont)

INTERRUPT raster, line#

Create a new raster interrupt at line raster (50-249)

which calls the code at line#.



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Interrupt Commands (cont)

RASTER raster

Selects the next raster line to interrupt.

Interrupt Commands (cont)

STARTINT Should be the first command in your interrupt routine.

Lets you program raster interrupts.

It is critical to halt your interrupts before exiting your program.



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Using Machine Language

Branching and Simply put the line number after the branch or jump

Jumping command, e.g. JMP1000

Using Machine Language (cont)

Tags and variables Can be used in place of values and addresses



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Using Machine Language (cont)

LABEL Identical to TAG

Using Machine Language (cont)

ML-safe commands

START, GOTO, GOSUB, RETURN., REM, TAG, PROC, MODULE, LOCAL, GLOBAL, ADD< SUBTRACT, COMPARE, HALF, DOUBLE, VARIABLES, HALT, RESUME, VERSION, DEBUG,

STARTINT, RASTER, BYTES, STRINGS



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Using Machine Language (cont)

Specifies the starting location for an ML program. Must **START** [* = be placed at the vey beginning on your ML program, and only used once.

]address

Mnemonics must be enclosed in [] brackets, e.g.

100 [LDA1: ORA #1: STA1]; TURN BASIC ROM ON

A semicolon (;) starts a comment in ML mode.

BASIC Keywords	
ASC(string)	Returns the ASCII value of string



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BASIC Keywords (cont)

BUTTON Returns 1 if the joystick button is pressed, 0 if not. joynum[, Use button# of 1, 2 or 3 to access those buttons,

default is 1,

BASIC Keywords (cont)

BYTES count[, When compiling, will insert count bytes of value byte[, tag[, byte (default 0), with a (string) label of tag, aligned alignment]]] to alignment.



button#]

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BASIC Keywords (cont)

CHR\$(vov[, count])

Appends ASCII character vov to a string, 1 or

count times.

BASIC Keywords (cont)

Sets the CLOCK to jiffies if specified, or 0 if not. CLOCK [jiffies]



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BASIC Keywords (cont)

CLOSE file#, file#, ...

Close 1 or more files.

BASIC Keywords (cont)

CLS [pokecode[, Clears the current text screen. Uses space if *pokecode* not specified. Colors will not be changed unless *color* is

specified.

color]]



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RASI	(KO	MAIORO	s (cont	١

CMD file#[, Redirects all I/O to file file#. Optionally sends string string] to the file.

BASIC Keywords (cont)

COPY start, Copies the memory from addresses start - end to

end, new address new



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BASIC Keywords (cont)

DATA val, val, ...

Hold data to be READ later.

BASIC Keywords (cont)

DEBUG Enable (1) or disable (0) DEBUG mode, which reduces 0 / 1 the number of passes for compilation. Will result in slower and larger programs.



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BASIC Keywords (cont)

DEF *type* Allows you to define all variable types in a more var[, var, structured fashion. type can be TAG, LABEL, INT,

var, ...] INTEGER or DECIMAL.

BASIC Keywords (cont)

DETEXT(*type*) Returns how much extended memory of *type* is attached to the system.



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BASIC Keywords (con

DO *line#, times* Run line *line# times* times.

BASIC Keywords (cont)

DUP\$(string, count)

Duplicates string string count times.



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BASIC Keywords (cont)

ELSE If the prior IF *expression* evaluated to FALSE,

statement will be executed.

BASIC Keywords (cont)

END End the execution of the program and returns screen to normal.



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BASIC Keywords (cont)

FETCH count, destination, reu[, bank] Copies *count* bytes from an attached REU at address *reu* and bank *bank* to C64 address

destination

BASIC Keywords (cont)

FILL start, Fills the memory from address start to address end end[, byte[, with value byte (default 0) incrementing the address step]] by step (default 1)



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BASIC Keywords (cont)

FOR

var=start

TO end

Defines a FOR loop that iterates variable *var* from the value *start* to the value *end*, defaulting to incrementing by 1 if STEP is not defined, or by *val* if it is defined.

[STEP val]

BASIC Keywords (cont)

GET variable

Read a character and put in it variable



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BASIC Keywords (cont)

GET# file#, Read a character from file# and put in it variable variable

BASIC Keywords (cont)

GOSUB Runs a subroutine at *line#*. If more than 1 line# is line#[, line# specified, will run each one in the order they are [, ...]] specified.



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BASIC Keywords (cont)

GOTO tag | line_number Jumps to the *line_number* or *tag* in the program

BASIC Keywords (cont)

HALT Will stop compilation at this point. All previous code will be compiled.



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BASIC Keywords (cont)

expression] THEN statement.

BASIC Keywords (cont)

INPUT var, var, ... Read lines and put the values in var.



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BASIC Keywords (cont)		BASIC Keywords (cont)		
INPUT# file#, var[, var[,	Read lines from file file# and store them	JOIN vop = low, high	The opposite of SPLIT	
17	in <i>var</i>			



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BASIC Keywords (cont)

JOY(*joynum*)

Returns the value of the joystick port *joynum*. *joynum* is typically 1 or 2.

BASIC Keywords (cont)

KEYPRESS [vov[, vov]]

If vov not specified, will wait for any keypress, otherwise will wait for vov to be pressed. If a second vov is specified will act like an IF block and will be FALSE for first char or TRUE for second char.



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BASIC Keywords (cont)				
LEFT\$(string,	Returns count characters from the left of			
count)	string			

BASIC Keywords	(cont)
LEN(string)	Returns the length of string.



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RASI	Ck	(evwords (cont)	١
DAOI	U r	(EVWOIUS (COIIL	u

LOC(x, Moves the cursor to location x, y on the current text y)

screen.

BASIC Keywords (cont)	
LONGPEEK(address)	Will return a single value from address on a
	SuperCPH



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DAGI	CKO	vwords	(cont)
DAOI	C NE	vwuius	· (COHL)

LONGPOKE address, val, val, val, ...

Will poke into the extended memory of a SuperCPU.

BASIC Keywords (cont)

MID\$(string, position, count)

Returns *count* characters, starting at index

position from string.



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BASIC Keywords (cont)

MODULE When compiling, write this section to separate module filename[, file filename for reusability. The default device will be devnum[, used if not specified. Address 49152 will be used for

address]]* loading if not specified.

BASIC Keywords (cont)

MODULE END The end of the module to be written



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BASIC Keywords (cont)

NEXT $\mathit{var}[,$ The end of the FOR loop. var must match the FOR

loop you are continuing.

BASIC Keywords (cont)

ON var GOSUB | GOTO line#, line#, ...

Will jump to *line#* that matches the

value of var.



var[, ...]]

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BASIC Keywords (cont)

OPEN file#, Open a connection to device dev# assigning it to file dev#, file# with a secondary parameter of secondary and

send string through the open file.

secondary,

string

BASIC Keywords (cont)

PADBUT joynum Returns 1 if the paddle button is pressed, 0 if

not.



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BASIC Keywords (cont)

PADDLE joynum

Returns the value of the paddle, 0-255. Paddles 1-2 are in *joynum* 1, 3-4 are in 2. Returned values are bit-reversed.

BASIC Keywords (cont)

PAUSE seconds[, jiffies]

Will pause execution for *seconds* seconds. If an optional *jiffies* is specified, will pause for an additional *(jiffies*/60)s.



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BASIC Keywords (cont)

PEEK(*vov[*, Will return the memory at address *vov*, optionally *index[*) offset by *index*.

BASIC Keywords (cont)

POKE *address*, Will put values *vov* in consecutive memory *vov*, *vov*, *vov*, ... starting at *address*. Can also be used with strings.



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BASIC Keywords (cont)

POLL port#

Tells the C64 which set of paddles you're polling. *port#* is 1 for joystick port 1, 2 for 2. Allows substitution of the required delay. Read the docs for more info.

BASIC Keywords (cont)

PRINT expression

Prints expression to the current text screen



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BASIC Keywords

PRINT# file#, expression

Print expresion to file file#

BASIC Keywords (cont)

READ vop, vop, ... Read values from a DATA statement



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	BASI	C Ke	yword	s (co	nt)
--	------	------	-------	-------	-----

REM Turns the rest of the line into a comment.

BASIC Keywords (cont)

 $\label{eq:RESTORE} \textbf{Resets the pointer to the start of all DATA statements},$

[line#] or to the DATA statement on line line#



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BASIC Keywords (cont)

RESUME

Will resume compilation after a HALT. **Must** be at the beginning of a line, or it will be ignored.

BASIC Keywords (cont)

ETURN End

Ends a subroutine and sends program flow back to the GOSUB statement.



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BASIC Keywords (cont)

REUPEEK(address, Will return the value from an attached REU at bank) address in bank bank

BASIC Keywords (cont)

REUPOKE address, bank, val, val, val, ...

Will write the values to an attached REU starting at *address* in bank *bank*



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BASIC Keywords (cont)		BASIC Keywords (c	cont)
RIGHT\$(string,	Returns <i>count</i> characters from the right of	SPC(vov)	Prints vov spaces
count)	string		



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B.	ASI	C F	(evwc	ords	(cont)

SPLIT low, high[, high2] =

Splits a variable into low and high bytes.

BASIC Keywords (cont)

STASH count, address, reu[, bank] Copies *count* C64 memory bytes at address *address* to the attached REU address *reu* in bank

bank



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BASIC Keywords (cont)

Reads and clears the STatus

BASIC Keywords (cont)

STOP Stops the program execution but does not reset the screen.



STATUS

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RASI	Ck	(evwords (cont)	١
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STR\$(vov) Converts number vov into a string.

BASIC Keywords (cont)

 ${\tt STRINGS} \qquad {\tt With no parameter, stretches the string field to 53247,}$

[size] otherwise to size.



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BASIC Keywords (cont)

SWAP count, c64, reu[, bank] Swaps the main memory at address $\it c64$ with the memory on the attached REU at address $\it reu$ in bank

bank

BASIC Keywords (cont)

SWITCH *start,* Swaps the memory at addresses *start - end* with *end, start2* the memory starting at address *start2*



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BASIC Keywords (cont)

SYS Starts execution of ML code at *address*. If the A, X, Y address[, and ST values are specified, they will be loaded into the

A, X, Y, registers before starting.

STJ

BASIC Keywords (cont)

TAB(*vov*) Moves the cursor to *vov* on the current line.



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BASIC Keywords (cont)

THEN If the prior IF *expression* evaluated to TRUE,

statement will be executed.

BASIC Keywords (cont)

TRAP Sends control of your program to *line#* on error. *vop* if *line#[,* specified must be a non-arrayed int which will have the *vop]* address of the error stored in it.



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RAS	IC k	(eyword	le i	(cont)

VAL(string) Returns the mathematical value of string.

BASIC Keywords (cont)

VERSION Specifies which version of Vision BASIC needed to

number compile the block of code.



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BASIC Keywords (cont)

WAIT Will wait for a non-0 result from PEEKing *address* address, and filtering with AND *and* and EOR *eor*

and, eor

FOR-TO-STEP-NEXT loops and DO loops will only work on integer variables.

POKE 2383,0 to disable the PADDLE bit-reversing.

Functions and subroutines

POINT *vop* = Sets *vop* to the address of the compiled code for

line# line line#.



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Functions and subroutines (cont)

POINT TAG

tag = line#

Creates a tag and points it to the address of the compiled code for line *line#*.

Functions and subroutines (cont)

PROC tag[. vop[, vop[, ...]]]

Defines the start of a subroutine named *tag* with parameters *vop*.



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Functions and subroutines (cont)

PASS vop[, vop[, ...]]]

Defines paramaters \emph{vop} for a subroutine. Must be the first command after PROC if you're passing parame-

ters

Functions and subroutines (cont)

RETURN End the subroutine and send execution back to the calling line.



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Functions and subroutines (cont)

SEND Will make the subroutine return the value *vov*. This must be *vov* the final command before RETURN if used.

Functions and subroutines (cont)

TAG Creates a TAG named *tag*. If *vov* is not specified, tag will get *tag[* = the current address in the program. Used like a LABEL in *vov]* assembler.

Call a subroutine like

tag.vo p,v op,vop

Strings and string variables cannot be returned from subroutines.



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Sound Commands

ADSR attack, decay, sustain, release Specifies the attack, decay, sustain and release parameters for the current voice.

Carrad	Commands	/	v
			1
Count	Communication	(OOIII)	/

CUTOFF Sets the cutoff frequency to *freq* for the SID filtering *freq* system.



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Sound Commands (cont)

FILTER voice1, voice2, voice3, ext, resonance Enables or disables the filters of *voice1*, *voice2*, *voice3*, the output of the *external* input and the *resonance* value.

Sound Commands (cont)

FREQ freq Specifies that the current voice will play frequency freq.



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Sound Commands (cont)		Sound Commands (cont)		
PULSE	Specifies the pulse waveform width for the current	SIDCLR	Clears the sound registers	
width	voice.			



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Sound Commands (cont)

VOICE num Chooses which voice will be used (1-3)

Sound Commands (cont)

VOL Controls the main volume and filter selection. Can enable or disable the low, band and high pass filters. volume, If disconnect is enables, disconnects the output of low, band, voice 3.

high,

disconnect



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Sound Commands (cont)

WAVE gate, wave, ring,

Enables or disables the gate. wave is 1 (triangle), 2 (sawtooth), 4 (pulse) or 8 (noise). ring chooses ring modulate oscillators. sync chooses sync modulate oscillators. test enables or disables the voice oscillator.

All parameters can be values or variables. If a parameter is left off, a previously used value will be used, or a 0 if no value has been specified before.

The commands FREQ, PULSE, ADSR, and WAVE require you to set a current VOICE before calling them.

0 disables, 1 enables

Text Video Commands

Selects the active 16K memory bank for video. This is not BANK for setting REU banks. You will probably not need to ever bank use this command.



sync test

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Text Video Commands (cont)

BLANK Blanks or restores the screen. 1 blanks the screen, 0 [blank[, bg, un-blanks. bg changes the background color, 0-15.

bars 1, bars changes the bar colors.

bars2]]

Text Video Commands (cont)

CATCH Acts like a WAIT command for the rasterline.

rasterline can be 0-255.



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Text Video Commands (cont)

CHARPAT character, charset

Moves the "code" pointer to point at a specific character image. *character* is the character that you want to point at, *charset* is the character set that the character is in.

Tevt \	/idea	Commande	e (cont)

CHARSET charset

Selects the desired character set.



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Text Video Commands (cont)	
COLORS text, border, screen, color1, color2,	Sets the color
color3	registers.

COPYSET Copies the C64 character set to location <i>charset</i> . If	
Copies the	
charset[, case is 0, copy uppercase, if 1 copy lowercase.	
case]	



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Text Video Commands (cont)

EXTENDED on[, color1, color2, color3]

Turns on or off extended color mode. If colors are supplied, will set the 3 background colors.

Text Video Commands (cont)

LOWERCASE [disable]

Changes the character set to lowercase. If *disable* is 1, disables keyboard toggling between upper and lower case.



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Text Video Commands (cont)

MULTI *on[,* Turns on or off multicolor mode. If colors are *color1, color2]* specified, will set the background colors.

Text Video Commands (cont)

NORMAL Resets the screen to normal text mode. 1 will clear the clear line link table, 0 will not.



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Text Video Commands (cont)

UPPERCASE [disable]

Changes the character set to uppercase. If *disable* is 1, disables keyboard toggling between upper and

lower case.

Text Video Commands (cont)

PANX Pans the screen horizontally. *panvalue* (will be bit-repanvalue, versed) can be 0-7 (0=none), if *columns* is 0, sets 38 *columns* column screen, 1 sets 40 column screen.



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Text Video Commands (cont)

PANY Pans the screen vertically. *panvalue* (will be bit-repanvalue, versed) can be 0-7 (3=none). If *rows* is 0, 24 row rows screen, if 1, 25 row screen.

Text Video Commands (cont)

VIDLOC Moves the text screen to and of the 64 1K screens screen, available. screen chooses which 1K to use, printto chooses which screen to print to (you will probably want this to be equal to screen), charset selects the location of the character set. clear of 1 will clear the line link table, 0 will not.

POKE 2384,0 to disable the bit-reversing of PANX, PANY.



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