Basic Reference

Binary Operators

Precedence	Operator	Notes
5	!	Byte and Word indirection. e.g. A!5 means “the word at address A+5”. (See Ch39 of the BBC Micro User Guide for more). Replaces PEEK, DEEK and so on.
	?	
4	*	
	/	Forward slash is floating point divide. 22/7 is 3.142857
	\	Backward slash is integer divide, 22/7 is 3
	%	Modulus of integer division ignoring signs
	>>	Logical shifts up to 32 places, inserting zeros at the appropriate ends.
	<<	
3	+	
	-	
2	<	Compares as numbers or strings. If either is floating point it is compared as such, and the match is not exactly equal, but about 1 part in 100,000. Returns -1 for true, 0 for false.
	<=	
	>	
	>=	
	<>	
	=	
1	&	Binary operators on integers, but can be used as logical operators. Equivalent to and, or and exclusive or.
	|	
	^	

Unary Operators

Operator	Notes
$nn	Unary operator, $nn is a hexadecimal marker.
asc(s$)	Return ASCII value of first character or zero for empty string
atan(n)	Arctangent of n in degrees
chr$(n)	
cos(n)	Cosine of n, n Is in degrees.
event(v,r)	
exp(n)	e to the power n
inkey$()	
int(n)	Whole part of the float value n. Integers are unchanged.
isval(s$)	Converts string to number, returns -1 if okay, 0 if fails.
key()	
left$()	
len(a$)	Return length of string in characters.
log(n)	Natural Logarithm (e.g. ln2) of n.
mid$()	
rand(n)	Random integer 0 < x < n (e.g. 0 to n-1)
right$()	
rnd(n)	Random number 0 < x < 1, ignores n.
sin(n)	Sine of n, n Is in degrees.
sqr(n)	Square root of n
str$()	
tan(n)	Tangent of n, n Is in degrees.
time	
val(s$)	Convert string to number. Error if bad number.

BASIC Commands (General)

Command	Notes
‘ <string>	Comment. This is a string for syntactic consistency. The tokeniser will process a line that doesn’t have speech marks as this is not common. REM this is a comment is now ‘ “this is a comment”
assert <expr>	Error generated if <expr> is zero
clear	Clear out stack, strings, reset all variables.
end	End Program
new	Erase Program
run	Run Program
stop	Halt program with error
sys <address>	Call 65C02 machine code at given address. Passes contents of variables A,X,Y in those registers.