

# **CLIBASIC Language Manual**

## Commands:

<code>{CHDIR CD} DIR\$</code>	Changes the current directory to <code>DIR\$</code> .
<code>CLS [COLOR]</code>	Clears the screen with optional color.
<code>COLOR {FGC, [BGC]   [FGC], BGC}</code>	Sets the foreground color to <code>FGC</code> and the background color to <code>BGC</code> .
<code>DEL {VAR\$ VAR}</code>	Deletes the variable <code>VAR\$</code> or <code>VAR</code> .
<code>FILES</code>	List the files and directories in the current directory.
<code>EXIT [CODE]</code>	Exits with <code>CODE</code> (or <code>0</code> if <code>CODE</code> is undefined).
<code>LOCATE {X, [Y]   [X], Y}</code>	Moves the cursor to <code>X, Y</code> .
<code>PRINT [{STRING\$ NUMBER} {, ;} ...]</code>	Prints text on the screen, <code>;</code> means print without newline and <code>,</code> means print tab.
<code>PUT [{STRING\$ NUMBER} ...]</code>	Puts <code>STRING\$</code> or <code>NUMBER</code> on the terminal.
<code>QUIT [CODE]</code>	Refer to <code>'EXIT'</code> .
<code>RESETTIMER</code>	Resets the timer.
<code>RUN FILENAME\$</code>	Opens and runs <code>FILENAME\$</code> .
<code>{{SET LET} {VAR\$ VAR}, {STRING\$  NUMBER}   {VAR\$ VAR} = {STRING\$  NUMBER}}</code>	Sets the variable <code>VAR\$</code> or <code>VAR</code> to <code>STRING\$</code> or <code>NUMBER</code> .
<code>{SH EXEC} COMMAND\$</code>	Runs <code>COMMAND\$</code> in <code>sh</code> on Linux and Command Prompt on Windows
<code>{SRAND SRND} SEED</code>	Seeds the random number generator with <code>SEED</code> .
<code>WAIT SEC</code>	Waits for <code>SEC</code> seconds.
<code>WAITMS MSEC</code>	Waits for <code>MSEC</code> milliseconds.
<code>WAITUS USEC</code>	Waits for <code>USEC</code> microseconds.
<code>_AUTOCMDHIST</code>	Enables automatic history saving (saves to <code>'_clibasic_history'</code> to the user's home directory, remove this file to disable this feature).
<code>_DEBUGOFF</code>	Disables the printing of debug text.
<code>_DEBUGON</code>	Enables the printing of debug text.

<code>_LOADCMDHIST FILENAME\$</code>	Loads the command history from <code>FILENAME\$</code> .
<code>_PROMPT STRING\$</code>	Sets the prompt string to solve to <code>STRING\$</code> .
<code>_PROMPTTAB WIDTH</code>	Sets the prompt tab width to <code>WIDTH</code> .
<code>_SAVECMDHIST FILENAME\$</code>	Saves the command history to <code>FILENAME\$</code> .
<code>_SHATTRIB {ATTRIB\$ ATTRIB}, {VALUE\$ VALUE}</code>	Sets the 'SH' attribute <code>ATTRIB\$</code> or <code>ATTRIB</code> to <code>VALUE\$</code> or <code>VALUE</code> .
<code>_TXTATTRIB {ATTRIB\$ ATTRIB}, {VALUE\$, VALUE}</code>	Sets the text attribute <code>ATTRIB\$</code> or <code>ATTRIB</code> to <code>VALUE\$</code> or <code>VALUE</code> .
<code>_TXTLOCK</code>	Stops the keyboard from echoing on the terminal.
<code>_TXTUNLOCK</code>	Undoes the effect of ' <code>_TXTLOCK</code> '.

## Functions:

<code>ASC (STRING\$, [POSITION])</code>	Returns the ASCII code of character <code>POSITION</code> (starting at and defaulting if not specified to zero) of <code>STRING\$</code> .
<code>BGC ()</code>	Returns the current background color.
<code>{CHDIR CD} (DIR\$)</code>	Attempts to change the current directory to <code>DIR\$</code> and returns 0 on success and an error code on failure (the error code is taken directly from the C variable 'errno' set by the C 'chdir()' function).
<code>CHR\$ (CODE)</code>	Returns ASCII character <code>CODE</code> .
<code>CWD\$ ()</code>	Returns the current working directory.
<code>CINT (NUMBER)</code>	Returns <code>NUMBER</code> rounded.
<code>COS (NUMBER)</code>	Returns the cosine of <code>NUMBER</code> .
<code>COSH (NUMBER)</code>	Returns the hyperbolic cosine of <code>NUMBER</code> .
<code>CURX ()</code>	Returns the X position of the cursor.
<code>CURY ()</code>	Returns the Y position of the cursor.
<code>EXP (NUMBER)</code>	Returns the exponent of <code>NUMBER</code> .
<code>FILES\$ ()</code>	Returns a list of the files in the current directory.

<code>FGC ()</code>	Returns the current foreground color.
<code>INKEY\$ ()</code>	Returns a character from the terminal.
<code>INPUT\$ (PROMPT\$)</code>	Returns a string after prompting for <code>PROMPT\$</code> (asks “?: ” if <code>PROMPT\$</code> is not defined).
<code>INT (NUMBER)</code>	Returns <code>NUMBER</code> rounded down.
<code>LCASE\$ (STRING\$)</code>	Returns the lower-case version of <code>STRING\$</code> .
<code>LEN (STRING\$)</code>	Returns the length of <code>STRING\$</code> .
<code>LINE\$ (LINE, STRING\$)</code>	Returns line <code>LINE</code> (starting at zero) of <code>STRING\$</code> .
<code>LINES (STRING\$)</code>	Returns the line count of <code>STRING\$</code> .
<code>LOG (NUMBER)</code>	Returns the natural logarithm of <code>NUMBER</code> .
<code>LOG10 (NUMBER)</code>	Returns the common logarithm of <code>NUMBER</code> .
<code>MOD (NUMBER)</code>	Returns the modulus of <code>NUMBER</code> .
<code>PI ()</code>	Returns Pi.
<code>{RAND RND} ({MAX MIN, MAX})</code>	Returns a random number from <code>MIN</code> (0 if <code>MIN</code> is undefined) to <code>MAX</code> .
<code>{SH EXEC} (COMMAND\$)</code>	Runs <code>COMMAND\$</code> in <code>sh</code> on Linux and Command Prompt on Windows and returns the exit status.
<code>SIN (NUMBER)</code>	Returns the sine of <code>NUMBER</code> .
<code>SINH (NUMBER)</code>	Returns the hyperbolic sine of <code>NUMBER</code> .
<code>STR\$ (NUMBER)</code>	Returns <code>NUMBER</code> as a string.
<code>TAN (NUMBER)</code>	Returns the tangent of <code>NUMBER</code> .
<code>TANH (NUMBER)</code>	Returns the hyperbolic tangent of <code>NUMBER</code> .
<code>TIME ()</code>	Returns the current time in seconds.
<code>TIMEMS ()</code>	Returns the current time in milliseconds.
<code>TIMEUS ()</code>	Returns the current time in microseconds.
<code>TIMER ()</code>	Returns the timer value in seconds.
<code>TIMERMS ()</code>	Returns the timer value in milliseconds.

<code>TIMERUS()</code>	Returns the timer value in microseconds.
<code>UCASE\$(STRING\$)</code>	Returns the upper-case version of <code>STRING\$</code> .
<code>VAL(STRING\$)</code>	Returns the numeric value of <code>STRING\$</code> .
<code>_BITS\$()</code>	Returns the executable bit format.
<code>_DEBUG()</code>	Returns 1 if in debug mode and 0 otherwise.
<code>_HOME\$()</code>	Returns the path to the user's home directoy.
<code>_OS\$()</code>	Returns the current operating system name.
<code>_PROMPT\$()</code>	Returns the prompt string.
<code>_TXTLOCK()</code>	Returns 1 if the text lock is in effect and 0 otherwise.
<code>_VER\$()</code>	Returns the CLIBASIC version.

## Logic Commands:

<code>DO</code>	Begins a DO block.
<code>DOWHILE CONDITION</code>	Begins a DO block while <code>CONDITION</code> is true.
<code>ELSE</code>	Inverts an IF command.
<code>ENDIF</code>	Ends an IF block.
<code>FOR VAR, INIT, CONDITION, I</code>	Begins a FOR block, sets <code>VAR</code> to <code>INIT</code> and loops while adding <code>I</code> to <code>VAR</code> while <code>CONDITION</code> is true.
<code>IF CONDITION</code>	Begins an IF block and runs commands if <code>CONDITION</code> is true.
<code>LOOP</code>	Jumps to the beginning of a DO/LOOP block.
<code>LOOPWHILE CONDITION</code>	Jumps to the beginning of a DO/LOOP block if <code>CONDITION</code> is true.
<code>NEXT</code>	Jumps to the beginning of a FOR block.
<code>REM</code>	Comments out one command.

## Symbols:

?	Shortcut to PRINT.
'	Comment until the end of the line.