

# **CLIBASIC Language Manual**

## Commands:

CALL FILENAME\$	Opens and runs FILENAME\$ in the current session.
{CHDIR CD} DIR\$	Changes the current directory to DIR\$.
CLS [COLOR]	Clears the screen with optional color.
COLOR {FGC, [BGC] [FGC], BGC}	Sets the foreground color to FGC and the background color to BGC.
DEL {VAR\$ VAR}	Deletes the variable VAR\$ or VAR.
FILES	List the files and directories in the current directory.
EXIT [CODE]	Exits with CODE (or 0 if CODE is not supplied).
LOCATE {X, [Y] [X], Y}	Moves the cursor to X, Y.
PRINT [{STRING\$ NUMBER} {, ;} ...]	Prints text on the screen, ';' means print without newline and ',' means print tab.
PUT [{STRING\$ NUMBER} ...]	Puts STRING\$ or NUMBER on the terminal.
QUIT [CODE]	Refer to 'EXIT'.
RESETTIMER	Resets the timer.
RUN FILENAME\$	Runs FILENAME\$ in a new session.
{{SET LET} {VAR\$ VAR}, {STRING\$  NUMBER} {VAR\$ VAR} = {STRING\$  NUMBER}}	Sets the variable VAR\$ or VAR to STRING\$ or NUMBER.
{SH EXEC} COMMAND\$	Runs COMMAND\$ in sh on Linux and Command Prompt on Windows
{SRAND SRND} SEED	Seeds the random number generator with SEED.
WAIT SEC	Waits for SEC seconds.
WAITMS MSEC	Waits for MSEC milliseconds.
WAITUS USEC	Waits for USEC microseconds.
_AUTOCMDHIST	Enables automatic history saving (saves to '.clibasic_history' 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>_RESETTITLE</code>	Resets the terminal title.
<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>_TITLE STRING\$</code>	Sets the terminal title to <code>STRING\$</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 ‘ <code>errno</code> ’ set by the C ‘ <code>chdir()</code> ’ 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> .

CURX ( )	Returns the X position of the cursor.
CURY ( )	Returns the Y position of the cursor.
EXP (NUMBER)	Returns the exponent of NUMBER.
FILES\$ ( )	Returns a list of the files in the directory.
FGC ( )	Returns the current foreground color.
HEX\$ (NUMBER)	Returns the hexadecimal version of NUMBER.
INKEY\$ ( )	Returns a character from the terminal.
INPUT\$ (PROMPT\$)	Returns a string after prompting for PROMPT\$ (asks “?: ” if PROMPT\$ is not supplied).
INT (NUMBER)	Returns NUMBER rounded down.
LCASE\$ (STRING\$)	Returns the lower-case version of STRING\$.
LEN (STRING\$)	Returns the length of STRING\$.
LINE\$ (LINE, STRING\$)	Returns line LINE (starting at zero) of STRING\$.
LINES (STRING\$)	Returns the line count of STRING\$.
LOG (NUMBER)	Returns the natural logarithm of NUMBER.
LOG10 (NUMBER)	Returns the common logarithm of NUMBER.
MOD (NUMBER)	Returns the modulus of NUMBER.
OCT\$ (NUMBER)	Returns the octal version of NUMBER.
PI ( )	Returns Pi.
{RAND RND} ( {MAX MIN, MAX} )	Returns a random number from MIN (0 if MIN is not supplied) to MAX.
{SH EXEC} (COMMAND\$)	Runs COMMAND\$ in sh on Linux and Command Prompt on Windows and returns the exit status.
SIN (NUMBER)	Returns the sine of NUMBER.
SINH (NUMBER)	Returns the hyperbolic sine of NUMBER.
STR\$ (NUMBER)	Returns NUMBER as a string.
TAN (NUMBER)	Returns the tangent of NUMBER.

TANH (NUMBER)	Returns the hyperbolic tangent of NUMBER.
TIME ()	Returns the current time in seconds.
TIMEMS ()	Returns the current time in milliseconds.
TIMEUS ()	Returns the current time in microseconds.
TIMER ()	Returns the timer value in seconds.
TIMERMS ()	Returns the timer value in milliseconds.
TIMERUS ()	Returns the timer value in microseconds.
UCASE\$ (STRING\$)	Returns the upper-case version of STRING\$.
VAL (STRING\$ [, TYPE])	Returns the numeric value of STRING\$, TYPE is what type the number is (0 = DEC, 1 = HEX, 2 = OCT, etc/not supplied = Auto (sscanf autodetect)).
_BITS\$ ()	Returns the executable bit format.
_DEBUG ()	Returns 1 if in debug mode and 0 otherwise.
_ENV\$ (STRING\$)	Returns the content of the environment variable defined by STRING\$.
_ENVSET (STRING\$)	Returns 1 if the environment variable defined by STRING\$ is set and 0 otherwise.
_HOME\$ ()	Returns the path to the user's home directoy.
_OS\$ ()	Returns the current operating system name.
_PROMPT\$ ()	Returns the prompt string.
_STARTCMD\$ ()	Returns the full/real path to the command used to start CLIBASIC.
_TXTLOCK ()	Returns 1 if the text lock is in effect and 0 otherwise.
_VER\$ ()	Returns the CLIBASIC version.

## Logic Commands:

DO	Begins a DO block.
DOWHILE CONDITION	Begins a DO block while CONDITION is true.

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

## Symbols:

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