# FAST BASIC ST

The BASIC Interpreter For the Atari ST

Computer Concepts

## SEGMENT BASED KEYWORDS

| | |
|---|---|
| INSTALL | filename, segment |
| SEARCHLIST | segment , segment , ... |
| =SEGFREE | segment |
| =SEGNAME$ | segment |
| =SEGMENT | |
| TRASH | segmemt |

## INPUT/ OUTPUT

| | |
|---|---|
| =GET | |
| =GET$ | |
| =INKEY | |
| =INKEY$ | |
| =INP | device |
| =INPSTAT | device |
| INPUT | "promp" var |
| OUT | device, byte, byte... |
| =OUTSTAT | device |
| RS232 | rate code, protocol code |

## STRING FUNCTIONS

| | |
|---|---|
| =BIN$ | numeric |
| =CHR$ | ASCII code |
| =DATEUK$ | GEM data - see manual |
| =DATEUS$ | GEM data - see manual |
| =ERR$ | |
| =GET$ | |
| =HEX$ | |
| =INKEY$ | |
| =INSTR$ | string,sub string, start position |
| =LEFT$ | string, no of characters |
| =LISTFILE$ | |
| =MID$ | string, start, no of characters |
| =RIGHT$ | string, no of characters |
| =STR$ | numeric |
| =STRING$ | number, string |
| =TIME12$ | see manual... |
| =TIME24$ | see manual... |

## GEM AES KEYWORDS

=ALERT
BEGINUPDATE
CALCCOORDS
CALCWORK
CENTRE or CENTER
CHANGEITEM
CHANGEOBJECT
CHECKITEM
CLOSEWIND
=CREATEWIND
(=)DCLICK(=)
DELETEWIND
DIALOG or DIALOGUE
DOFORM
DRAGBOX
DRAWMENU
DRAWOBJECT
ENABLEITEM
ENDUPDATE
FINDINTSCT
=FINDOBJECT
=FINDWIND
FREESCREEN
FSELECT
GETFIRST
GETNEXT
GETWINDCOORDS
GETWINDFULL
GETWINDPREV
GETWINDWORK
GROWBOX
HSLIDE
HSLSIZE
=IMMHANDLE
INVERTTITLE
MENU
MOVEBOX
OPENWIND
=OUTHANDLE
RELEASEMOUSE
RESERVESCREEN
RUBBERBOX
=SEGHANDLE
SETDESK
SETWINDCOORDS
SETWINDINFO
SETWINDTITLE
SHRINKBOX
=SLIDEBOX
=SYSMENU
TAKEMOUSE
(=)TOP(=)
=TRACKBOX
VSLIDE
VSLSIZE
WAITBUTTON
WAITEVENT
WAITMESSAGE
WAITMOUSE
WAITTIMER

## *FILE HANDLING KEYWORDS*

| | |
|---|---|
| **BLOAD** | filename string, address |
| **=BGET#** | handle |
| **BPUT#** | handle, byte |
| **BSAVE** | filename, address, length |
| **CLOSE#** | handle |
| **DELDIR** | directory string |
| **DELFILE** | filename string |
| **DIR** | |
| **=DISCFREE** | drive |
| **(=)DRIVE(=)** | set/read drive number |
| **=DRIVEMAP** | |
| **=DUPDEV#** | device handle |
| **=EOF#** | handle |
| **=EXT#** | handle |
| **(=)FILEATTS(=)** | set/read file attributes |
| **GETBYTES#** | handle, No. of bytes, addr. |
| **GETREC#** | handle, var list |
| **INPUT#** | handle, var, var,.... |
| **INSTALL** | filename, seg.number |
| **LAUNCH** | see manual |
| **=LISTFILE$** | pathname string |
| **MAKEDIR** | directory name |
| **=MEDIACHANGE** | drive |
| **=OPENIN** | filename string |
| **=OPENOUT** | filename string |
| **=OPENUP** | filename string |
| **(=)PATH$(=)** | set/read pathname$ |
| **PRINT#** | handle, data |
| **(=)PTR#(=)** | set/read ptr value |
| **PUTBYTES#** | handle, No of bytes, address |
| **PUTREC#** | handle, var.list |
| **REDIRECT#** | device handle, handle |
| **RENAME** | filename, new filename |

## *OTHER KEYWORDS*

| | |
|---|---|
| **BEEP** | |
| **CALL** | address |
| **CASE** | see manual |
| **CLEAR** | size |
| **=COUNT** | |
| **DATA** | data, data, ... |
| **DEFAULT** | see manual |
| **DEF FN** | see manual |
| **DEF PROC** | see manual |
| **DIM** | var (size) |
| **DOSOUND** | address |
| **END** | |
| **ENDIF** | see manual |
| **ENDPROC** | see manual |
| **ENDSWITCH** | see manual |
| **=ERR** | |
| **ESCAPE** | ON or OFF |
| **=EVAL** | string |
| **EXEC** | string |
| **=FALSE** | |
| **FOR** | see manual |
| **=FREE** | |
| **=GET** | |
| **GOSUB** | label / line number |
| **GOTO** | label / line number |
| **HELP** | ON or OFF |
| **IF** | see manual |
| **KBRATE** | delay, rate |
| **LASTERROR** | |
| **=LEN** | string |
| **LET** | var = |
| **LOCAL** | var, var, ... |
| **NEXT** | (var) |
| **ON GOSUB** | label, label, ... |
| **ON GOTO** | label, label, ... |
| **ON HELP** | statement |
| **ON ERROR** | statement |
| **(=)PC(=)** | set/read address |
| **=PEEK** | address |
| **PERFORM** | segment number |
| **POKE** | address, value |
| **PROC** | proc name, params |
| **READ** | var |
| **REM** | |
| **REPEAT** | see manual |
| **RESERVE** | var, space |
| **RESTORE** | label |
| **RUN** | |
| **=SNDREG** | num, value |
| **STEP** | see manual |
| **STOP** | |
| **SWAP** | var, var |
| **SWITCH** | expression |
| **(=)SYSDATE(=)** | set/read date |
| **(=)SYSTIME(=)** | set/read clock |
| **THEN** | |
| **(=)TIME(=)** | set/read timer |
| **TRACE** | ON, OFF, KEY |
| **TRACKING** | ON, OFF, KEY, ALT |
| **=TRUE** | |
| **UNTIL** | |
| **=USR** | address |
| **WAIT** | |
| **WEND** | |
| **WHILE** | see manual |

# *EDITOR KEYS:*

| | |
|---|---|
| **Return** | Moves the cursor to start of next line |
| **Tab** | To next set tab position on line |
| | |
| **Backspace** | Deletes backward one character |
| **Delete** | Deletes forward one character |
| **Control-Y** | Deletes the entire line at cursor |
| **Control-[** | Deletes text to the left of the cursor |
| **Control-]** | Deletes text to the end of line |
| ← | Left one position |
| → | Right one position |
| ↓ | Down one line |
| ↑ | Up one line |
| **Control →** | Right one word |
| **Control ←** | Left one word |
| **Shift ←** | To start of current line |
| **Shift →** | To end of current line |
| **Shift ↑** | Up one page (window depth) |
| **Shift ↓** | Down one page |
| **Home** | To start of program |
| **Shift-home** | To end of program |
| | |
| **F1** to **F10** | Opens edit window of segment 1 to 10 if present |
| **Alt-1** to **Alt-4** | Sets the edit font size: 1 is smallest 4 is largest |
| | |
| **Control-S** | Swaps the case of character at cursor |
| **Control-U** | Forces character to upper case |
| **Control-L** | Forces character to lower case |
| **Control-C** | Swaps the case of the marked section |
| | |
| **Alt-C** | Copies the marked text to clipboard |
| **Alt-E** | 'Tops' the current program edit window |
| **Alt-F** | Brings up 'Find' dialogue |
| **Alt-I** | Opens the immediate window |
| **Alt-K** | Kills any messages on error line |
| **Alt-R** | Runs the current program |
| **Alt-L** | Loads a program into current segment |
| **Alt-N** | Finds the next occurrence of find string |
| **Alt-P** | Finds the previous occurrence of find string |
| **Alt-S** | Saves the current program |
| **Alt-T** | Inserts or deletes a tab when in 'Show Tab Ruler' mode |
| **Alt-Q** | Quits FAST BASIC |
| **Alt-V** | Pastes from the clipboard to the cursor position |
| **Alt-X** | Cuts a marked section from program to clipboard |
| | |
| **Control-B** | Begins marking a section of program |
| **Control-E** | Ends marking a section of program |
| **Control-I** | Shows the program information |
| **Control-R** | Brings up replace dialogue |
| **Control-N** | Replaces the next occurence |
| | |
| **Enter** | Executes the current line when in immediate window |

# MENUS

### *FILE MENU*

| | |
|---|---|
| **Save All** | Saves all programs to disc. |
| **Load Program** | Loads a program into the current segment. |
| **Show Info** | Displays information window for current program, showing program name, how long it is, how much room it requires to run, and its disc directory name. Most of these may be altered by the user. |
| **Insert Program** | Inserts a program from disc into the current program at the cursor position. |
| **Quit** | Exits from FAST BASIC. |
| **Delete File** | Allows deletion of files from disc. |
| **New segment** | Creates a new segment to hold a program. |

### *EDIT MENU*

| | |
|---|---|
| **Cut** | Cuts out the marked section and puts it on to the clipboard. |
| **Copy** | Copies a marked section to clipboard, but does not delete it. |
| **Paste** | Pastes the contents of the clipboard into the current program. |
| **Clear** | Deletes a marked section, but does not put it on clipboard. |
| **Search** | Opens search dialogue box. |
| **Replace** | Opens replace dialogue box. |
| **Replace Marked** | Replaces occurrences in marked section only. |

### *LIST MENU*

| | |
|---|---|
| **Print Program** | Prints a current program |
| **Print Clipboard** | Prints the clipboard contents |
| **Show Clipboard** | Shows the clipboard contents |
| **Dump Out Buffer** | Does a screen dump of the output window |
| **Show Codes** | Displays tab and return characters in the edit window |
| **Clear Output** | Clears the output window |
| **Show Tab Ruler** | Allows tab positions to be set or reset |

### *RUN MENU*

| | |
|---|---|
| **Run** | Executes the current program |
| **Trace Program** | Turns trace mode on or off |
| **Delay In Statements** | Turns program delay on or off. |
| **Track Variables** | Opens a variable tracking window and allows the setting of delay speed. |
| **Immediate Window** | Opens an immediate window. |

### *SPECIAL MENU*

| | |
|---|---|
| **Small Clean up** | Re-aligns the FAST BASIC icons. |
| **Large Clean up** | Re-aligns FAST BASIC desktop to large grid |
| **Save Desktop** | Saves FAST BASIC desk layout, icon positions etc. |
| **Load Desktop** | Loads desk layout as saved with previous option. |
| **Clear Errors** | Removes messages from the error line in edit & immediate windows |
| **Preferences** | Opens the preference window |

# GRAPHICS KEYWORDS

| | |
|---|---|
| **ARC** | X, Y, radius, start, end |
| **BAR** | X, Y, X1, Y1 |
| **BLIT** | see manual |
| **CIRCLE** | X, Y, radius |
| **CLG** | colour |
| **CLS** | |
| **ELLARC** | X, Y, xrad, yrad, start, end |
| **ELLPIE** | X, Y, xrad, yrad, start, end |
| **FILL** | X,Y,colour |
| **FILLCOL** | colour |
| **=FILLPAT** | planes, address |
| **FILLPERIM** | 0 or 1 |
| **FILLSTYLE** | style, type |
| **FRRECT** | X, Y, X1, Y1 |
| **GRAB** | X, Y, width, height |
| **GRAFCLIP** | X, Y, width, height |
| **(=)GRAFHEIGHT(=)** | set/read height |
| **GRAFMODE** | mode |
| **GRAFRECT** | X, Y, width, height |
| **(=)GRAFWIDTH(=)** | set/read width |
| **(=)GRAFXBASE(=)** | set/read X base |
| **(=)GRAFYBASE(=)** | set/read Y base |
| **GTXT** | X, Y, string |
| **GTXTALIGN** | align code |
| **GTXTANGLE** | angle |
| **GTXTCOL** | colour |
| **GTXTEFFECTS** | style byte |
| **GTXTFACE** | font number |
| **GTXTSIZE** | size |
| **GTXTWIDTH** | ASCII code |
| **HIDEMOUSE** | |
| **INK** | colour |
| **JGTXT** | X, Y, width, wflag, cflag, string |
| **LINE** | X, Y TO X1, Y1 |
| **LINECOL** | colour |
| **LINEENDS** | start style, end style |
| **LINEPAT** | pattern |
| **LINETYPE** | type |
| **LINEWIDTH** | width |
| **(=)LOGBASE(=)** | set/read address |
| **MARKCOL** | colour |
| **MARKSIZE** | size |
| **MARKTYPE** | type |
| **MOUSE** | var X, var Y, var B, var K |
| **OUTDUMP** | |
| **PALETTE** | colour, red, green, blue |
| **PAPER** | colour |
| **(=)PHYSBASE(=)** | set/read address |
| **PIE** | X, Y, rad., start angle, end angle |
| **PLOT** | X, Y |
| **=POINT** | X, Y |
| **POLYGON** | number, address, address |
| **POLYLINE** | number, address, address |
| **POLYMARK** | number, address, address |
| **PUT** | X, Y, mode |
| **RECT** | X, Y, X1, Y1 |
| **RRECT** | X, Y, X1, Y1 |
| **=SCREENHEIGHT** | |
| **=SCREENMODE** | |
| **=SCREENWIDTH** | |
| **SETCOL** | colour, red, green, blue |
| **SETMOUSE** | icon number, address |
| **SHOWMOUSE** | |
| **TRANSBLIT** | see manual |

# TEXT OPERATIONS

| | |
|---|---|
| **=COUNT** | |
| **CURSDOWN** | |
| **CURSLEFT** | |
| **CURSOFF** | |
| **CURSON** | |
| **CURSRIGHT** | |
| **CURSUP** | |
| **(=)FIELD(=)** | set/read field width |
| **FORMAT$** | see manual |
| **LPRINT** | see PRINT |
| **HOME** | |
| **PRINT** | value [;][,][']... |
| **TXTCLIP** | X,Y, width, height |
| **TXTEFFECTS** | style byte |
| **(=)TXTHEIGHT** | set/read text height |
| **TXTMODE** | mode |
| **TXTRECT** | X,Y, width, height |
| **TXTSCROLL** | deltax,deltay |
| **TXTSIZE** | size |
| **(=)TXTWIDTH(=)** | set/read text width |
| **(=)TXTXBASE(=)** | set/read text base |
| **(=)TXTXPOS(=)** | set/read text X pos. |
| **(=)TXTYBASE(=)** | set/read text Y base |
| **(=)TXTYPOS(=)** | set/read text X base |
| **VDU** | ASCII list |