

Terrapin Logo Quick Reference Card

GRAPHICS COMMANDS

BACK (1)	BK	Moves turtle backward.
BACKGROUND (1)	BG	Background color.
CLEARSCREEN	CS	Clears graphics screen.
DRAW		Clears graphics screen—homes turtle.
FORWARD (1)	FD	Moves turtle forward.
FULLSCREEN	<CTRL>F	Full graphics screen.
HEADING		Returns turtle's heading in degrees.
HIDETURTLE	HT	Makes turtle disappear.
HOME		Moves turtle to center of screen.
LEFT (1)	LT	Rotates the turtle to the left.
NODRAW	ND	Clears the graphics and text screen. Enters text only mode and homes cursor.
NOWRAP		Exits wrap mode. Error occurs if turtle moves off screen.
PENCOLOR (1)	PC	Sets color of lines drawn by the turtle.
PENDOWN	PD	Causes the turtle to leave a trail (line) when it moves.
PENUP	PU	Causes the turtle to leave no trail (line) when it moves.
RIGHT (1)	RT	Rotates the turtle to the right.
SETHEADING (1)	SETH	Rotates the turtle to the specified heading. Zero is straight up.
SETX (1)		Moves the turtle horizontally to the specified position.

SETXY (2)		Moves the turtle to the specified X,Y coordinate. The center of the screen is 0,0.
SETY (1)		Moves the turtle vertically to the specified position.
SHOWTURTLE	ST	Causes the turtle to appear.
SPLITSCREEN	<CTRL>S	Mixed graphics and text on screen.
TEXTSCREEN	<CTRL>T	Text only on screen.
TOWARDS (2)		Rotates the turtle to point toward the X,Y coordinates.
TURTLESTATE	TS	Returns status of the turtle.
WRAP		Allows the turtle to move off the screen and reappear at the opposite edge.
XCOR		Returns the turtle's X-coordinate.
YCOR		Returns the turtle's Y-coordinate.
COLORS:	NUMBER COLOR	
	0	Black
	1	White
	2	Green
	3	Violet
	4	Orange
	5	Blue
	6	Reverse

NON-EDITING CONTROL CHARACTERS

<CTRL> F	Full graphics screen.
<CTRL> G	Stops program execution.
<CTRL> S	Split screen.
<CTRL> T	Full text screen.
<CTRL> W	Pause during listing.
<CTRL> Z	Pause.

KEYBOARD EDITING COMMANDS

<DELETE>	Erases character to left of cursor.
<ESC>	Erases character to left of cursor.
<ARROW KEYS>	Moves cursor.
<CTRL> A	Moves cursor to the beginning of the current line.
<CTRL> B	Displays previous screen of text.
<CTRL> C	Exits editor—makes changes.
<CTRL> D	Erases character at cursor.
<CTRL> E	Moves cursor to end of current line.
<CTRL> F	Displays next screen of text.
<CTRL> G	Exits editor—no changes.
<CTRL> X	Deletes to end of line.
<CTRL> L	Scrolls line with cursor to center of screen.
<CTRL> N	Moves cursor to the next line.
<CTRL> O	Open a new line.
<CTRL> P	Moves cursor to the previous line.
<CTRL> Y	Restores most recently deleted line(s).

 **Terrapin**TM
The Original Logo People

Terrapin Inc., 222 Third Street
Cambridge, MA 02142, (617) 492-8816

Other Terrapin Logo Commands

NUMERIC OPERATIONS

+	Addition.
-	Subtraction.
*	Multiplication.
/	Division.
>	Greater than.
<	Less than.
ATAN (2)	Returns the arctangent of the quotient of two inputs.
COS (1)	Returns cosine.
INTEGER (1)	Truncates the fractional part of a number.
NUMBER? (1)	Returns TRUE if input is a number.
QUOTIENT (2)	Returns the integer quotient of two inputs.
RANDOM (1)	Returns a repeatable sequence of random numbers.
RANDOMIZE (0)***	Varies the input seed for random.
REMAINDER (2)	Returns the integer remainder.
ROUND (1)	Returns the nearest integer.
SIN (1)	Returns the sine.
SQRT (1)	Returns the square root.

WORDS AND LISTS OPERATIONS

=	Compares inputs and returns TRUE or FALSE.
BUTFIRST (1) BF	Returns all but the first element (character) of a list (word).
BUTLAST (1) BL	Returns all but the last element (character) of a list (word).
COUNT (1)	Returns the number of elements in its input.
FIRST (1)	Returns the first element (character) of a list (word).
FPUT (2)	Returns a list of the first input then the elements of the second input.
ITEM (2)	Returns the specified (by first input) element of the second input.
LAST (1)	Returns the last element (character) of a list (word).
LIST (2)*	Returns a list of its inputs.
LIST? (1)	Returns TRUE if input is a list.
LPUT (2)	Returns a list of second input then the first input.
SENTENCE (2)* SE	Returns a one-level list from inputs.
WORD (2)*	Concatenates the characters of the input words.
WORD? (1)	Returns TRUE if the input is a word (or number).

DEFINING AND EDITING PROCEDURES

DEFINE (2)	Used by procedures to define other procedures.
EDIT ** ED	Enters edit mode.
END	Terminates a procedure definition.
ERASE ** ER	Erases designated procedures from the workspace.
ERNAME (1)	Removes the global variable from the workspace.
TEXT (1)	Accepts a procedure name and returns procedure text as a list.
TO **	Begins procedure definition. Enters edit mode.

NAMING

LOCAL (1)	Creates a local variable.
MAKE (2)	Makes the second input be the value of the first input (variable).
THING (1)	Returns the value of the variable named by the input (word).
THING? (1)	Returns TRUE if its input has a value associated with it.

CONDITIONALS

ALLOF (2)*	Returns TRUE if all inputs are true.
ANYOF (2)*	Returns TRUE if any input is true.
ELSE	Used IF ... THEN ... ELSE.
IF	Tests a condition.
MEMBER? (2)	Accepts two inputs and returns TRUE if the first is a member of the second.
EMPTY? (1)	Returns TRUE if the input is an empty word or list.
IFFALSE IFF	Executes remainder of line only if preceding TEST was FALSE.
IFTRUE IFT	Executes remainder of line only if preceding TEST was TRUE.
NOT (1)	Returns FALSE if input is TRUE, TRUE if input is FALSE.
TEST (1)	Tests a condition for use with IFFALSE and IFTRUE.
THEN	Used with IF ... THEN ... ELSE.

CONTROL

GO (1)	Transfers control to a line with that label.
GOODBYE	Clears workspace and restarts Logo.
OUTPUT (1) OP	Causes the current procedure to stop and return the input to the calling procedure.
REPEAT (2)	Accepts a number and a list. The list is executed the designated number of times.
RUN (1)	Runs the input list as if it had been typed as a series of Logo commands.
STOP	Current procedure stops and returns control to the calling procedure.
TOPELVEL	Stop all procedures and returns to toplevel.

INPUT AND OUTPUT

OUTDEV (1)	Designates an output device.
ASCII (1)	Returns the ASCII code of the input character.
CHAR (1)	Returns the character corresponding to the input ASCII number.
CLEARTEXT	Clears the textscreen and homes the cursor.
CLEARINPUT	Clears the character input buffer.
CURSOR (2)	Moves the cursor to the input row and column position.
PADDLE (1)	Returns a number 0-255 describing the position of the input paddle number.
SHOWTEXT	Prints the contents of the edit buffer to the current output device.

PADDLEBUTTON (1)

Returns TRUE or FALSE indicating the state of the input paddlebutton number.

PRINT (1)* PR
PRINT1 (1)*

Prints the input on the screen.
Prints the input on the screen. Doesn't terminate with a return.

RC?

Returns TRUE if a character is already available from the keyboard.

READCHARACTER RC
RC

Returns character from keyboard, waiting for character input if necessary.

REQUEST RQ
SETDISK (2)***

Waits for an input line terminated with a return.
Directs file commands to the specified Slot/ Drive and optionally Volume.

FILING AND MANAGING WORKSPACE

CATALOG

Prints the names of the files on the currently mounted disk.

DOS (1)

Accepts Apple DOS commands.

ERASEFILE (1)

Erases specified file from the disk.

ERASEPICT (1)

Erases specified picture from the disk.

PRINTOUT ** PO

Lists the specified procedure(s) on the screen.

POTS

Lists all procedure names in memory.

READ (1)

Reads a file from disk.

READPICT (1)

Reads a picture file from disk.

SAVE (1)***

Saves the contents of the workspace on disk.

SAVEPICT (1)

Saves the picture on the screen.

DEBUGGING

CONTINUE CO

Resumes execution after a PAUSE or <CTRL>Z.

PAUSE <CTRL Z>

Stops program execution.

NOTRACE

Turns off tracing.

TRACE

Causes Logo to pause before executing each procedure.

MISCELLANEOUS COMMANDS

.ASPECT (1)

Changes the vertical scale at which Logo graphics are drawn.

.BPT (1)

Returns control to the Apple monitor.

.CALL (2)

Calls a machine language subroutine.

.CONTENTS

Returns a list of all words known to Logo.

.DEPOSIT (2)

Places one byte of data in a specified memory location.

.EXAMINE (1)

Returns the value of the byte at the specified address.

.GCOLL

Forces garbage collection.

.NODES

Returns the number of currently free nodes.

;

Causes the rest of line not to be evaluated.
Useful for including comments in procedures.

() Number of inputs.

* Takes a variable number of inputs and operates on all of them.

** Takes unquoted inputs. See technical manual.

*** Takes a variable number of inputs and performs special actions. See technical manual.