Command line arguments

-h or --help: display this message -rand <n>: set random seed to 'n'

-null: disable graphics

Commands to change modes

g: desi(g)n mode v: evol(v)e mode h: c(h)amp mode

Commands to switch viewpoint

y: side view

o: t(o)p view

b: (b)ack view

Commands in "Design" mode

[: switch to previous active element

]: switch to next active element

-: raise selection level (robot, object, or environment)

+: lower selection level (robot, object, or environment)

c: copy

X: delete

w: forward; W: forward fast

a: left; A: left fast

s: backward; S: backward fast

d: right; D: right fast

e: up;E: up fast

z: down; Z: down fast

J: increase object 1st size dimension; j: reduce K: increase object 2nd size dimension; k: reduce

L: increase object 3rd size dimension; l: reduce

P: rotate 30 degrees in x; p: rotate 3 degrees in x

Q: rotate 30 degrees in y; q: rotate 3 degrees in y

Q. Totate 30 degrees in y, q. Totate 3 degrees in y

R: rotate 30 degrees in z; r: rotate 3 degrees in z

(: mark an object;): unmark

@: connect active joint to marked objects

>: increase joint range for joints; <: reduce

Commands in "evolve" mode

M: increase mutation probability; m: decrease T: increase evaluation period; t: decrease

Other commands

f: load environment from next saved file (design mode only)

F: save environment to a file

i: start or stop recording a mov(i)e