

Software Reference



2010 STREAM Workshop – Artbotics Session

Motor/Light Commands

a,	Selects motor/light <i>a</i>
b,	Selects motor/light <i>b</i>
ab,	Selects both motors
on	Turns on the motor/light
off	Turns off the motor/light
onfor x	Turns on for <i>x</i> tenths of secs
thisway	Motor direction defined on initial Cricket startup
thatway	Opposite motor direction
rd	Reverse direction
setpower x	Sets power level 0-8; default is 4

Example statements:

a, on Turns motor or light
b, setpower 2 Sets the power to 2
c, onfor 10 Turns *c* on for 1 second
d, off Turns *d* off

Sensor Commands

switcha	Reports the state of the switch, as true or false, in the 'a' port on the Cricket; replace 'a' with 'b' through 'f' depending on what port the switch is in
sensora	Reports the sensor value, between 0 and 255, in the 'a' port on the Cricket; replace 'a' with 'b' through 'f' depending on what port the sensor is in

Sound Commands

beep	Plays a short beep
note pitch x	Plays a note of defined pitch for <i>x</i> tenths of secs

Example statement:

note 119 10 Plays C note for 1 second

Control Examples

repeat x [body]	Repeats execution of the code statements in <i>body</i> for <i>x</i> number of times
loop [body]	Continually executes the code in <i>body</i>
if condition [body]	If the condition is true, the code in <i>body</i> is executed
ifelse condition [body1] [body2]	If the condition is true, the code in <i>body1</i> is executed; otherwise the code in <i>body2</i> is executed
waituntil [condition]	Repeatedly checks the condition statement until it is true
when [condition] [body1] loop [body2]	The <i>body2</i> code is continually executed but is interrupted when the condition is true, then executes the <i>body2</i> code

Example code:

To flippy Repeat 10 [a, onfor 10 rd] end	To flippy-forever loop [a, onfor 10 rd] end ----- To flippy-forever A, onfor 10 rd flippy-forever end	to on-wait a, on Waituntil [switchb] off end	to switch-controls a, on loop [ifelse switchb [thisway] [thatway]] end
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Refer to <http://handyboard.com/cricket/program/> for the full program manual.