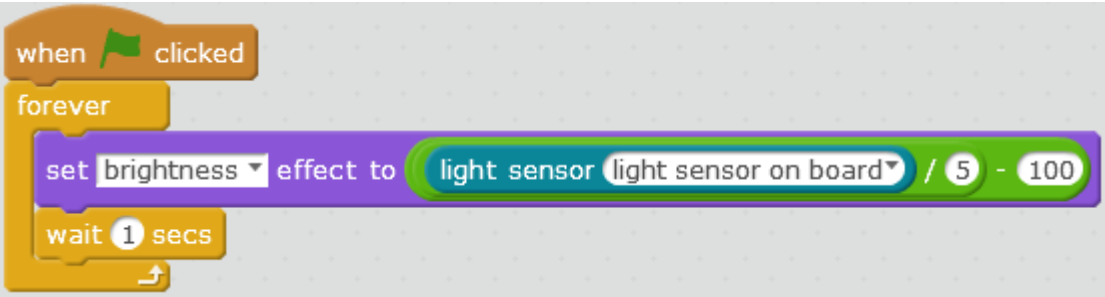
Stage background brightness

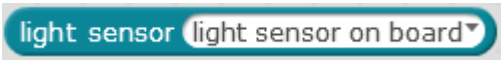
Hardware requirements:
mBot/mCore Control Panel

Implementation:
Online debugging (serial/Bluetooth connection)

Example programs



Script description

	Use the “when the green flag is clicked” block to start the program and perform online debugging.
	The value of this block is the brightness of the stage background.
	This block indicates the on-board light sensor values.
	Add a wait time in “repeat” to avoid the background brightness change not too fast.

Knowledge points

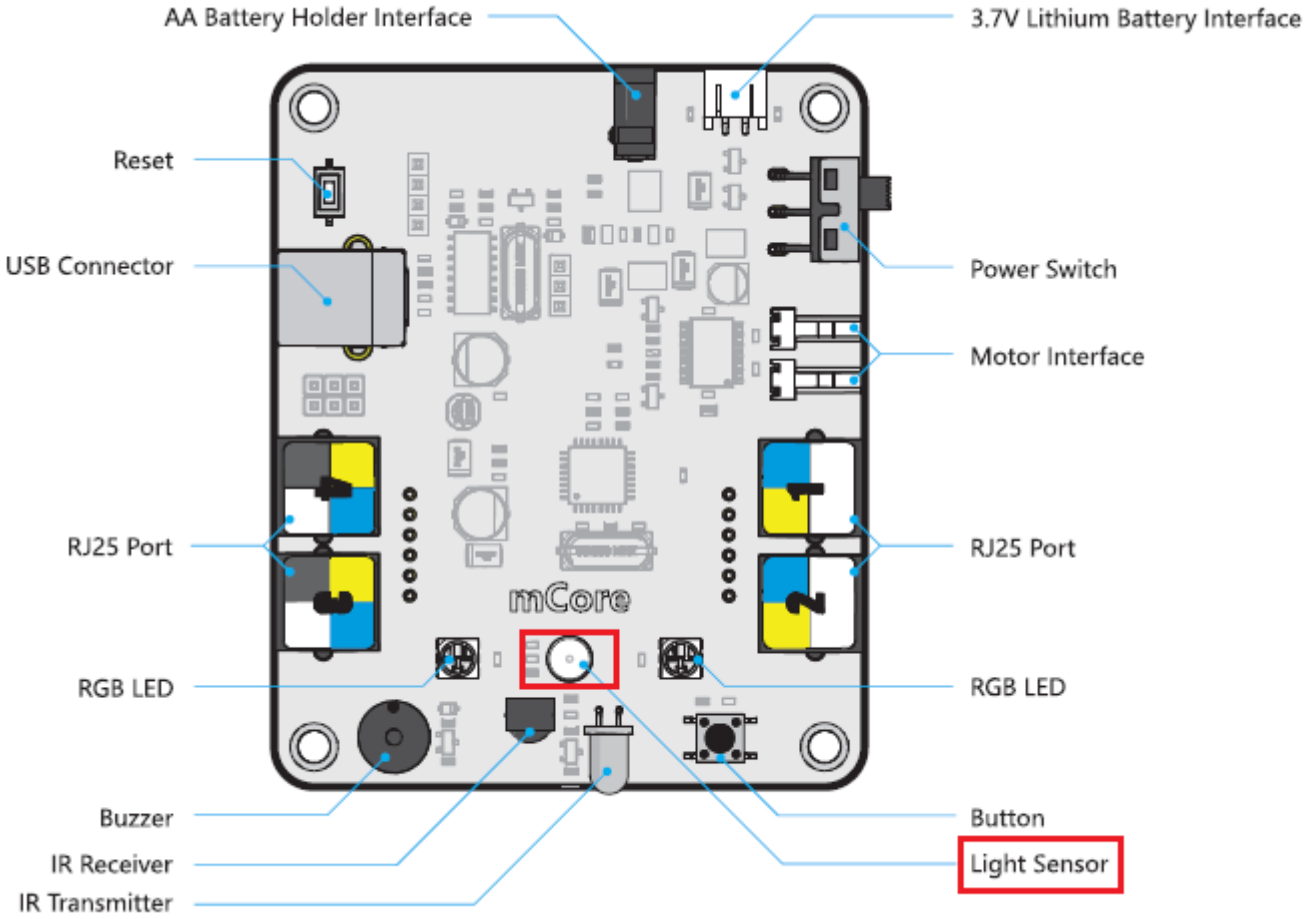
The brightness range of the light sensor is different from that of the stage background, so it needs conversion.
Light sensor value ranges from 0 to 1000. The higher the brightness of the surrounding environment is, the larger the value is. mBlock stage background brightness ranges from -100 to 100. When the brightness changes gradually from -100 to 100, the background changes from black to pure white.
As the range of values of the light sensor is different from that of stage background,

conversion is needed (the value of the light sensor/5-100) to match the light sensor values with the stage background

Extended tasks

Task 1	Stop the sample program to replace the “brightness” in Block  with other effects, such as color, , ultra wide angle lens and then execute the program to see the effects.
Task 2	Let the light sensor to control the brightness of the panda character

Attached -mCore main control board light sensor diagram



Download: Control the stage background brightness.sb2