

Value of the light sensor

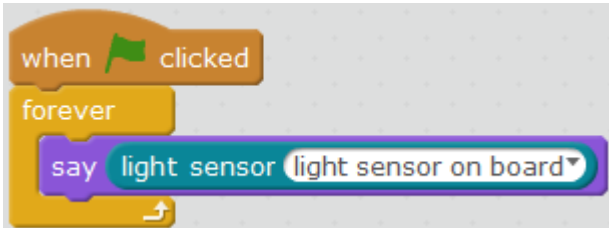
Hardware requirements:

mBot/mCore Control Panel

Implementation:

Online debugging (serial/Bluetooth connection)

Example programs



Script description

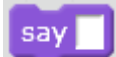
In this case light sensor, for example, explains how to capture sensor values and display them in real time. Other sensors use the same method to collect data.

As it involves the stage show, it is necessary to use a Usb cable to connect the computer with the control board via a serial port rather than burning the program to the Arduino board.



Use the “when the green flag is clicked” block to start the program and perform online debugging.



Use  to show the value of the light sensor in a way where a stage character (a panda) speaks the value out.



By repeating, to allow the values of the light sensor be displayed continually.

Knowledge points

Point 1 Introduction of Light Sensor

Sensors are used to detect events or changes in the environment and send information to the electronic components of other electronic devices. While the program is running and debugging, it is often required to collect real-time sensor values to help us understand the environment light, sound, distance and other information.

Light sensor value range: 0~1000, exposed under sunshine (> 500), evening (0 ~ 100), lighting (100 to 500).

Point 2 What if it is not repeated?



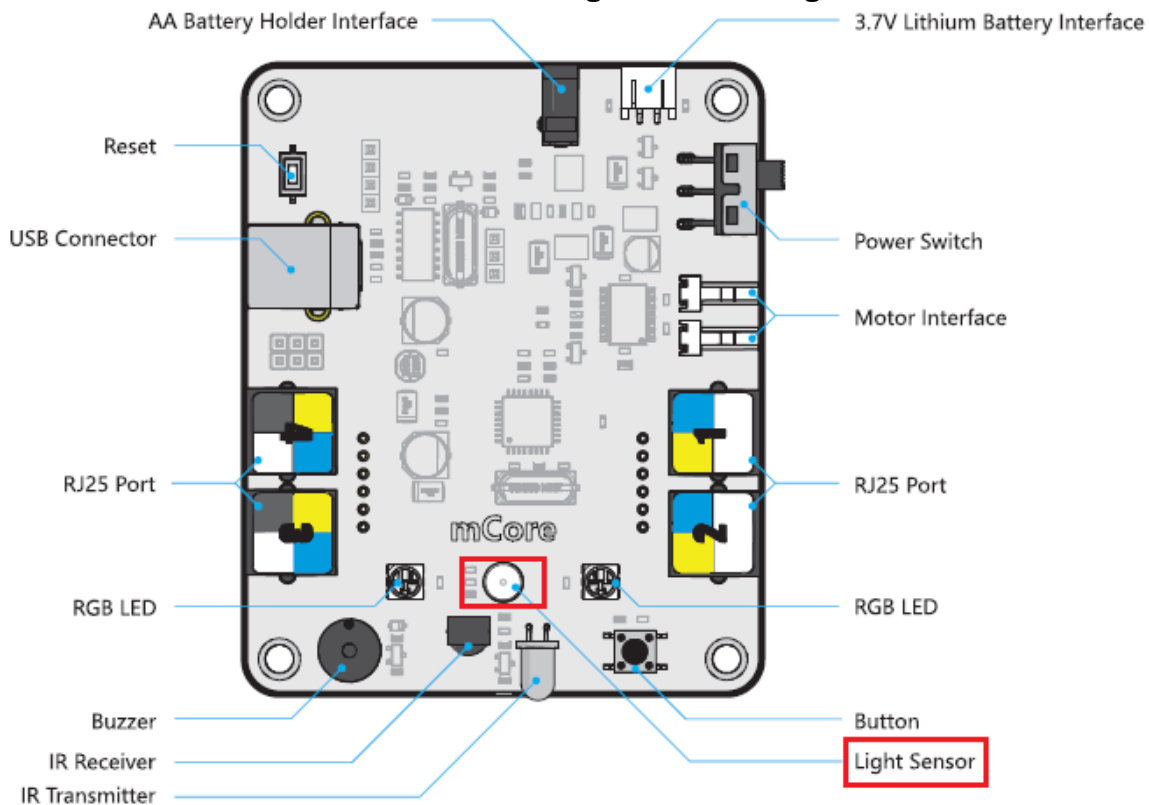
blocks can ensure the light sensor display real-time values, or only the start-up values are displayed continually.

Also, if the ambient light is not stable (e. g. fluorescent lamp), you can see the rapid change of sensor values (the script is running fast and the values vary with the



ambient light in real time). Now **wait 1 secs** block can be added to reduce the speed of value changing and you can see it clearly.

Attached -mCore main control board light sensor diagram



Download: [Light Sensor Value.sb2](#)