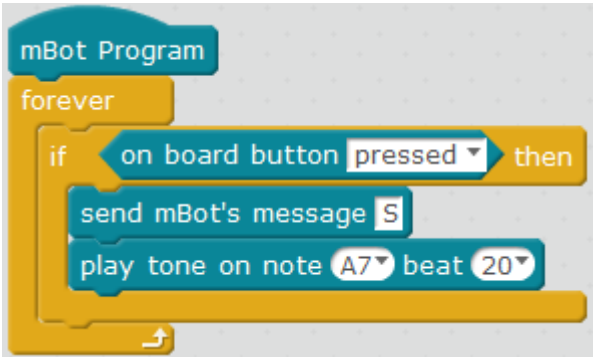
Infrared communication

Hardware requirements:
mBot/mCore Control Panel

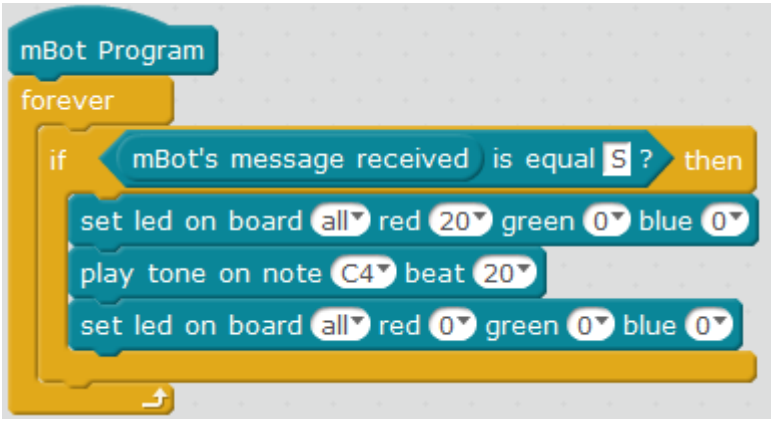
Implementation:
Upload the program to Arduino

Example programs
* To complete this example, you need to prepare 2 mBot/mCore. Upload Program 1 to mBot1/mCore1 and Program 2 to mBot2/mCore2.

Program 1 – Sending
Upload to mBot1/mCore1



Program 2 – Receiving
Upload to mBot2/mCore2



Script description
This example is implemented by using the mCore onboard IR receiver and IR emitter. Prepare two mBot/mCore, and upload Program 1 to mBot1/mCore1 while Program 2 to mBot2/mCore2.

Program 1 – Sending a message: Simply press the on-board button and mBot1/mCore1 sounds and sends a message, which is sent by the on-board infrared emitter. The message content can be customized . In this example the message is set as “s”.

Program 2 – Receive messages: As long as the message “s” is received, the mBot2/mCore2 control board will send out red light and the buzzer sounds (imitating the “hit” effect).
If there are other mBots, you can use the example program to communicate and interact between multiple mBots/mCores as long as the messages sent/received are the same.

Knowledge points

Point 1 Characters in infrared communication：

The message defined in Block 

is used as a signal. Fill in English characters or strings which occupies as less space as possible to avoid error when the program is complicated.

Point 2 

Block use

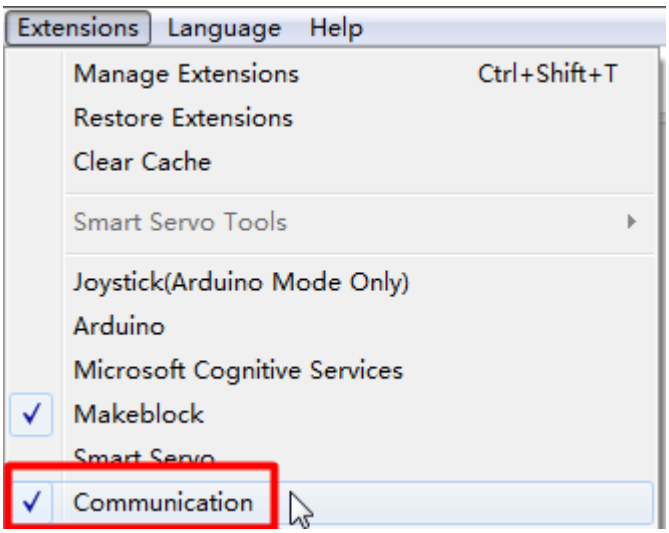
block is used to determine whether a signal is matched to a infrared communication. It cannot be replaced by a calculation block 

in this case.

Point 3 To implement Program 2 you need to drag the communication block out

Use 

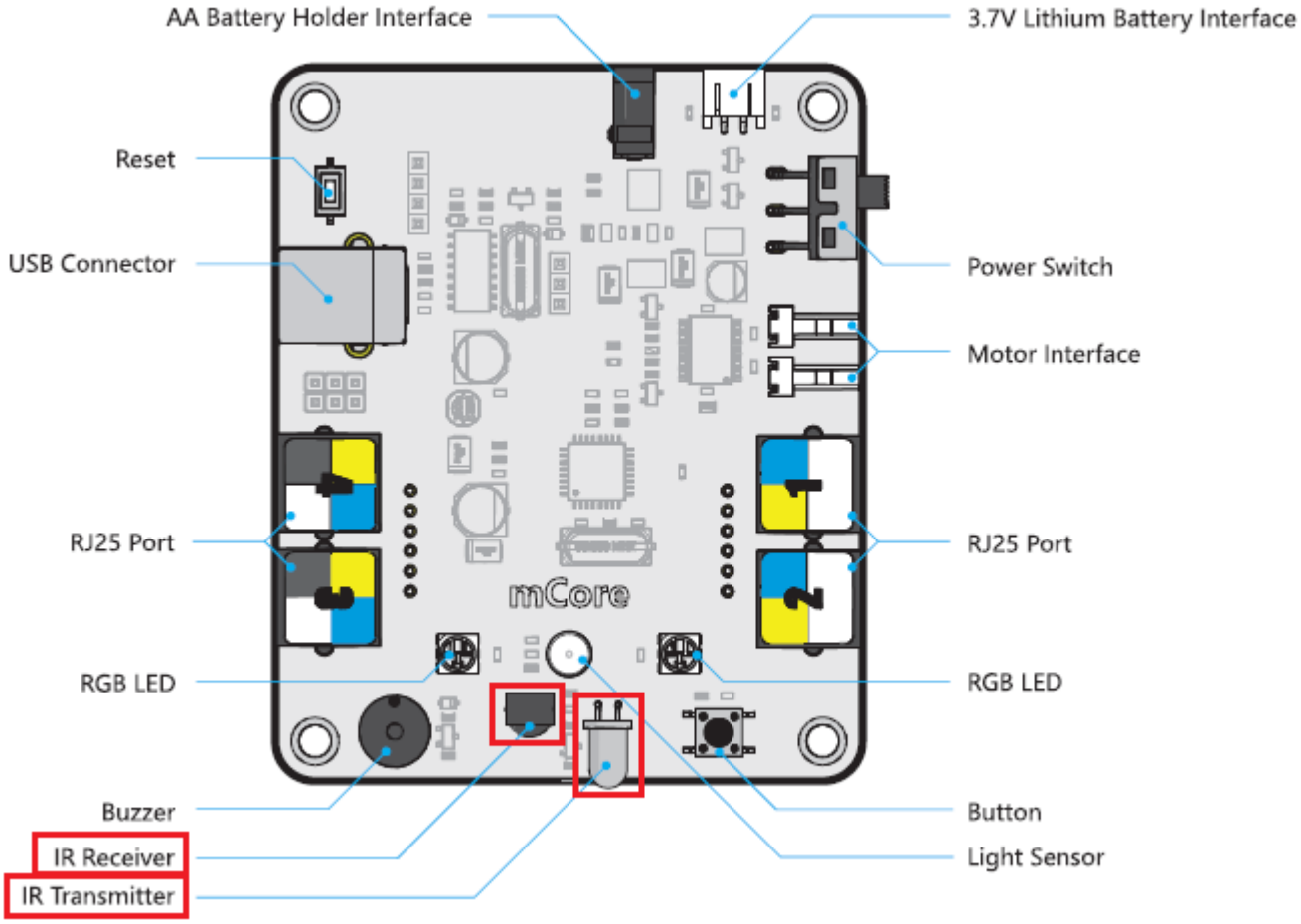
block. You need to select “extensions” – “Communication” in the mBlock menu to drag the Communication block out in the robot module area.



Extended tasks

Change the script: When mCore1 senses a strong light, it will send another message When mCore2 receives the message, it will show “full resurrection” with sound and light effects.

Attached -mCore main control board Infrared communication diagram



Related resources

Download

Infrared communication (sending).sb2

Infrared communication (receiving).sb2

Origin: http://www.mblock.cc/example/infrared-communication/