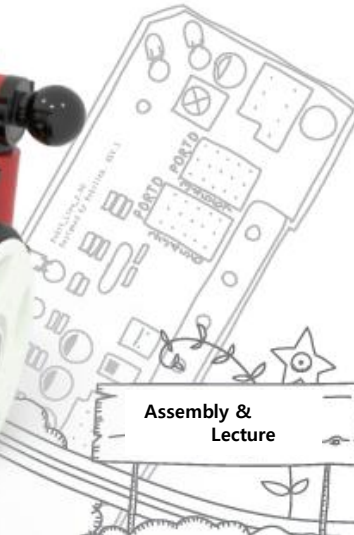
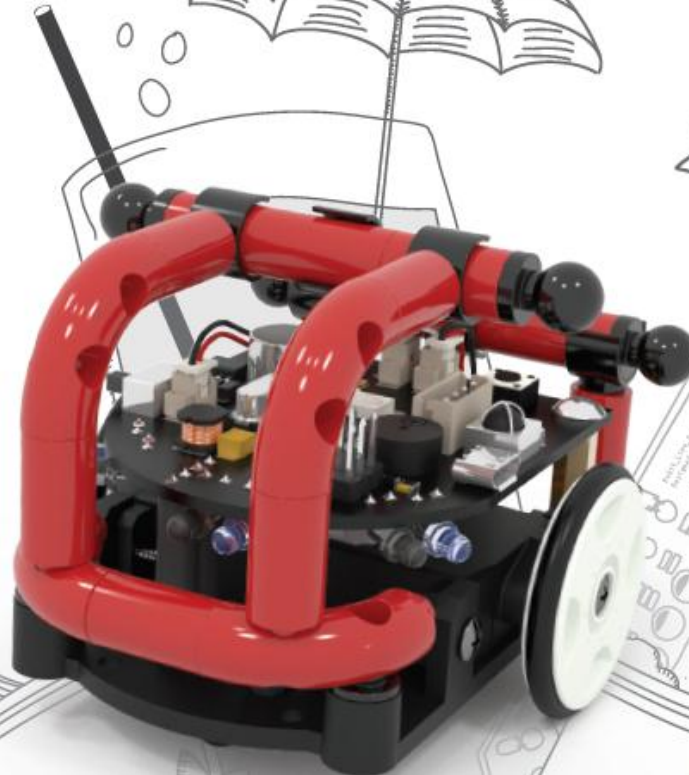
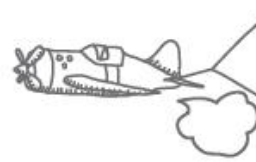
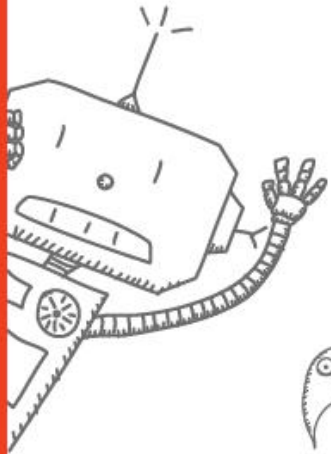


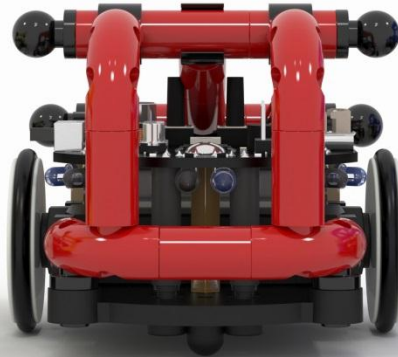
CUBEWORKS

LINKY



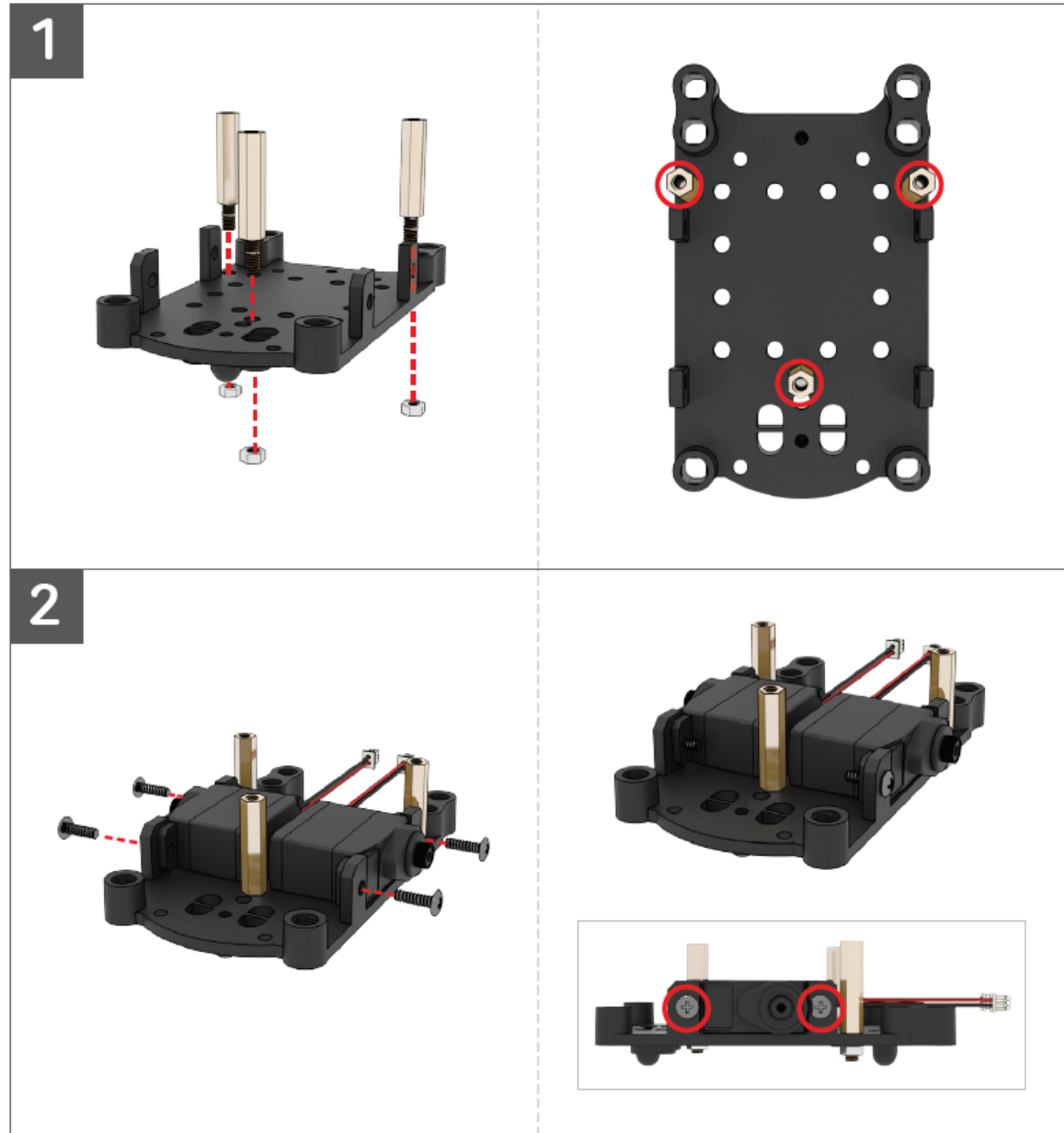
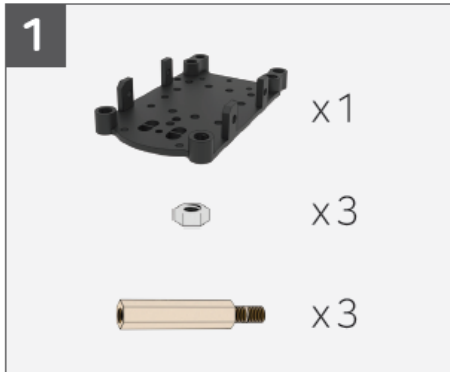
Assembly &
Lecture

Linky Assemble Guide



BASE

Base Assemble



3



3

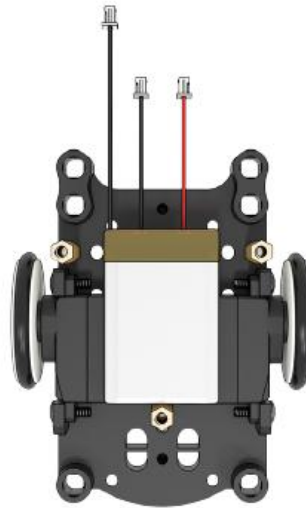
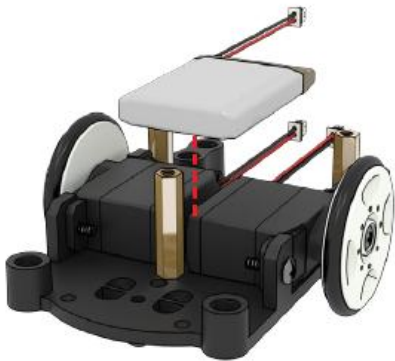


x2

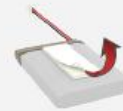


x2

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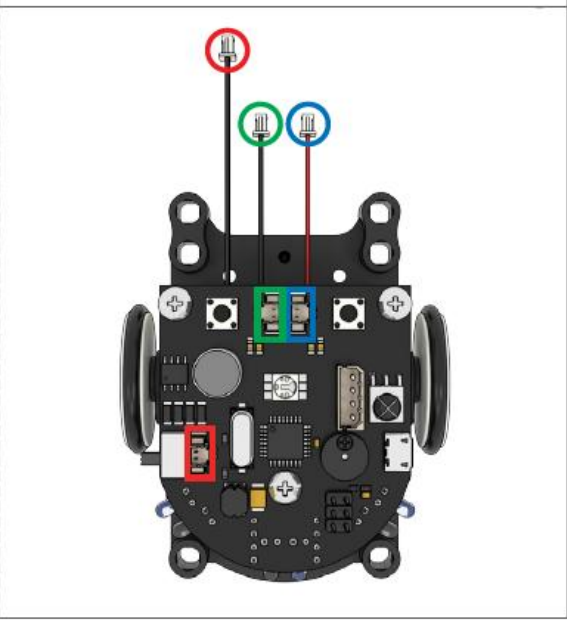
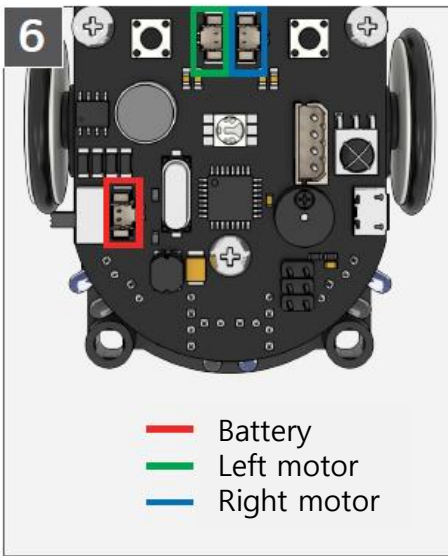
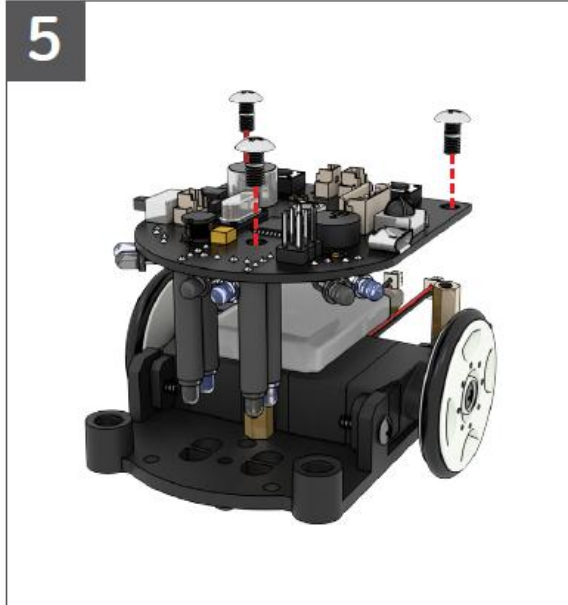
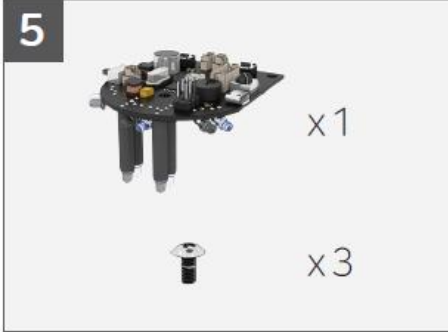


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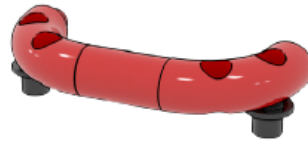
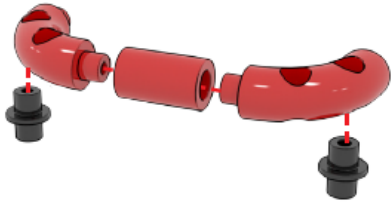


x1

Paste Tape on Battery



1



2



BASIC

Top Assemble

1



x2



x2



x1

2



x2



x2



x2

3



x1



x2



x1

3



4



x4



x2



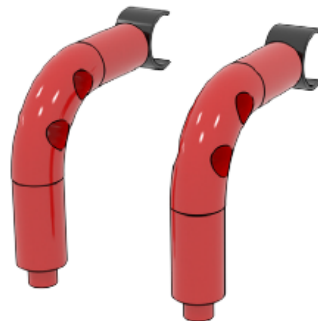
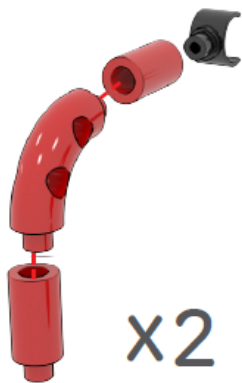
x2



x2



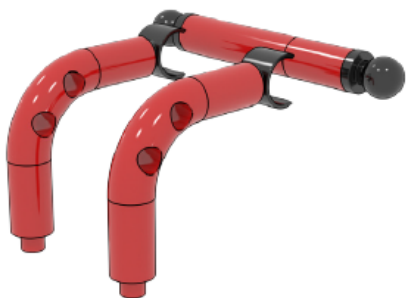
5



5



6



6



7



x2

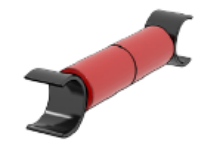
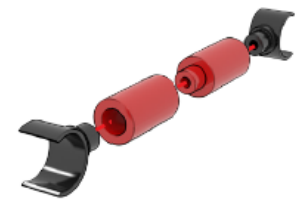


x1



x1

7



8



x1

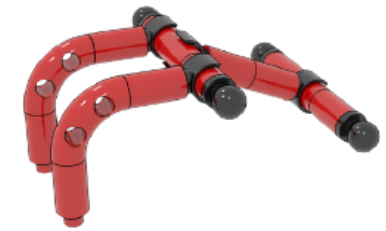
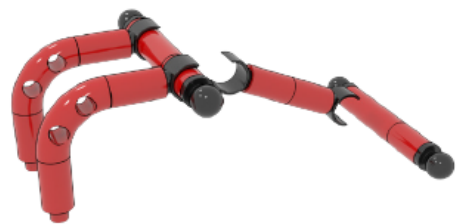


x1



x1

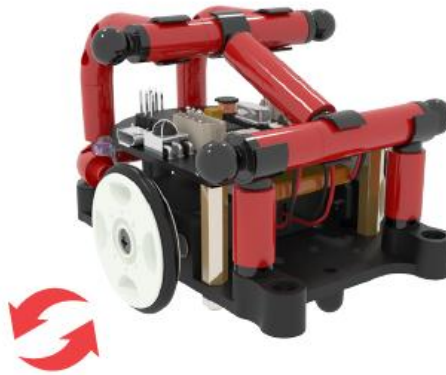
8



9



10



9

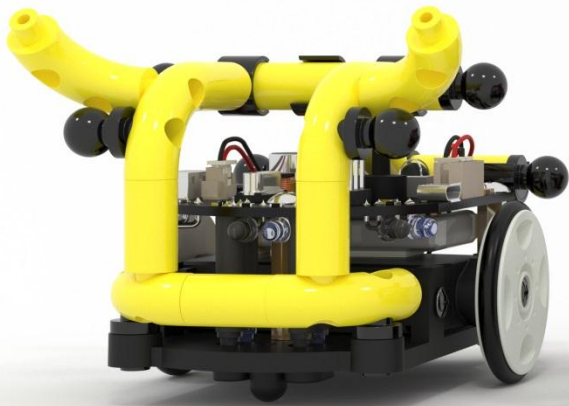


x1



x1

How to use linky

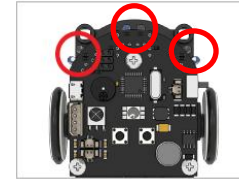


Basic control

Power Off

For 2 second

Sensor checking



If detect Left sensor

If detect middle sensor

If detect Right sensor

If no detect any sensor

Avoider

Remocon Play

Line follower

Coding Software

Remocon Command

If it press any key

Unplug

If it press F4 key

Remote control

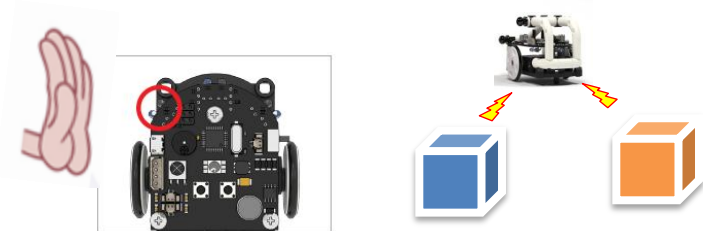
1. Robot Moving Function (without PC)

Linky is Three embeded function.

(you can select mode using sensor for 2 second after power on)

1) Mode 1 : Avider Function

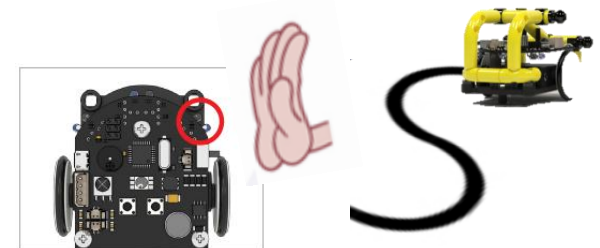
As soon as power on, You detect left IR sensor



2) Mode 2 : Line Follower Function

As soon as power on, You detect Right IR sensor

※ Before Entering Mode, You have to put linky on white floor
After bottom sensor detection, you can listen beep sound. And then you can put black line

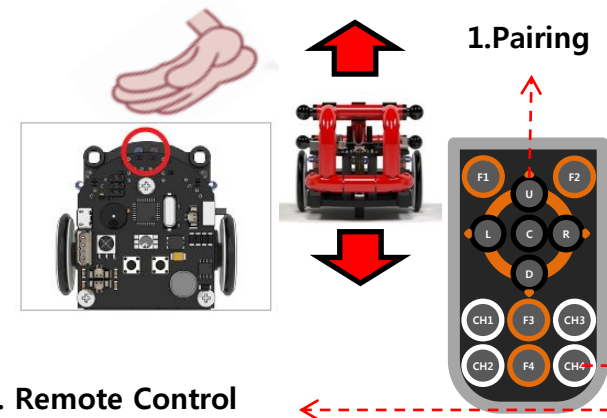


3) Mode 3 : Remocon Control Function

As soon as power on, You detect Middle IR sensor

★ Pairing : while you click U button, you can see brink of linky led
(This process needs only 1 times)

★ Remote Control : After you press ch4 key, you can control robot with remocon



2. Remote Control

2. Unplugged Programming (with Remocon / without PC)

After selecting Mode 3 ,
You can make sw program using ch1(led), ch2(buzzer), ch3(motor), F1(Front- sensor), F2(bottom- sensor)

Step.1 Remocon Mode



1. Remocon Command Button

(F1)Delay

Press the left and right arrows
(◀▶) to set the time
Half a second per buzzer

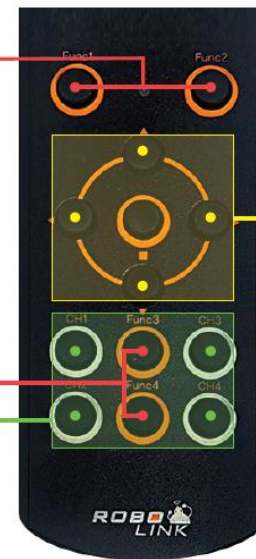
(F2)While

(◀) while
(▶) no while

(F3) If detect Front 3 sensor

(F4) If detect Bottom 2 sensor

CH1-LED
CH2-SOUND
CH3-DC Motor
CH4-Remocon



(▲) Channal
Change Remocon channel

(◀▶) Select Value
You can select value
Using left,right button

(■) save program
You can press button long time to
play program

(▼) delete Program
Clear one program line by
pressing until it beeps.

Clear all program line by
pressing until the receiver rings
twice.

Step.2 Coding Comand



Unpuged Coding Key

Remote Control Key

3. Coding Programming (with PC)

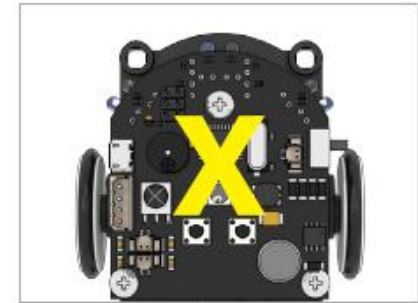
If you want to use Block Program (Scratch or Rokit Brick), No detect any sensor

No detect sensor to enter program mode

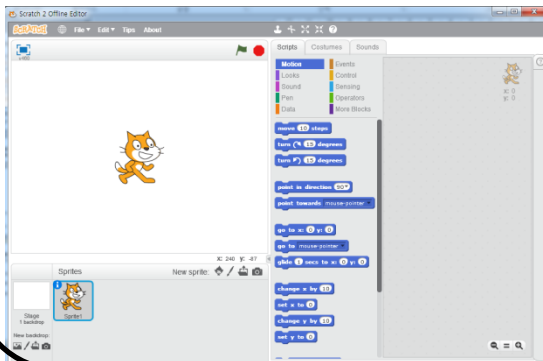
1. You should refer to this url (we will update about SW)

http://roboLink.co.kr/download_eng.html

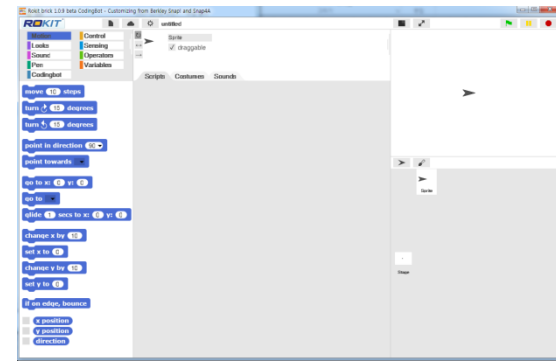
2. You can choose sw for Linky coding



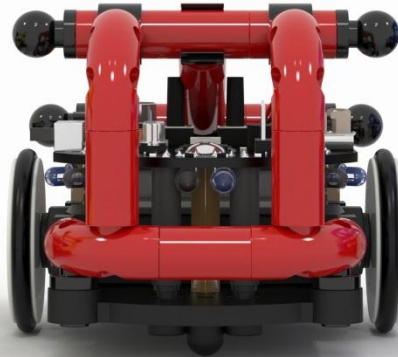
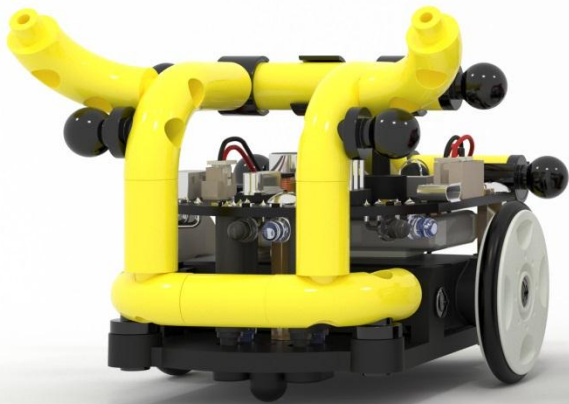
<Scratch + Helper>



<Rokit Brick>

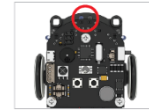


How to use remocon



Remote Control Mode

You can play remote control after remocon mode - press ch4 key



Control

- U Forward
- D Backward
- L Left
- R Right
- F1 Speed Up
- F1 Speed Down

Motor correction

- CH1 Increase left Motor Speed
- CH2 Decrease left Motor Speed
- CH3 Increase right Motor Speed
- CH4 Decrease right Motor Speed
- F4 Initialize all motor speed



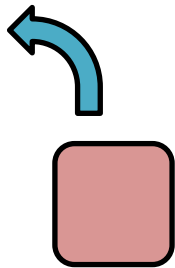
Remocon Mode – Correction Motor Speed

You can use his function in only remote control mode

This is used at this time

-> In case of not moving forward

-> you can collect motor speed using ch1,ch2(left motor) / ch3, ch4(right motor)



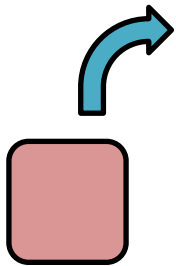
1. In case of moving left side



1) Increase left motor speed



2) Decrease right motor speed



2. In case of moving right side



1) Decrease left motor speed



2) Increase right motor speed

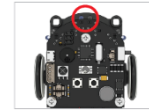
3. Initailize



Initailize all motor speed

Unplugged Coding for Linky

You can play remote control after remocon mode



Button Explanation

Action

Input Comand

CH1 LED
 CH2 SOUND
 CH3 DC MOTOR
 CH4 CONTROLLER

F1 Delay
 F2 While
 F3 If (front sensor)
 F4 If (bottom sensor)

L Previous Action
 R Next Action
 U Remocon Channal
 D Program Delete
 C Program Save / Play

C Select (Previous)
 C Select (Next)
 C Select (TRUE)
 C Select (FALSE)

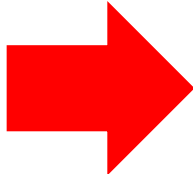


Linky Programming Memory

Normal Program Line

```
While(1)
{
  Led(red);
  Delay(1);
  Led(blue);
  Delay(1);
}
```

Linky Program Line

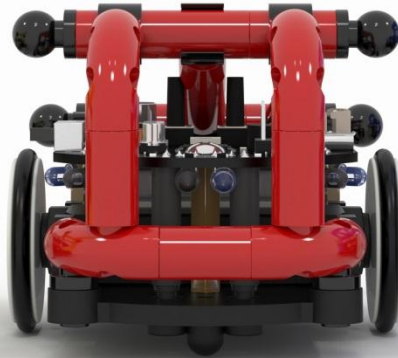
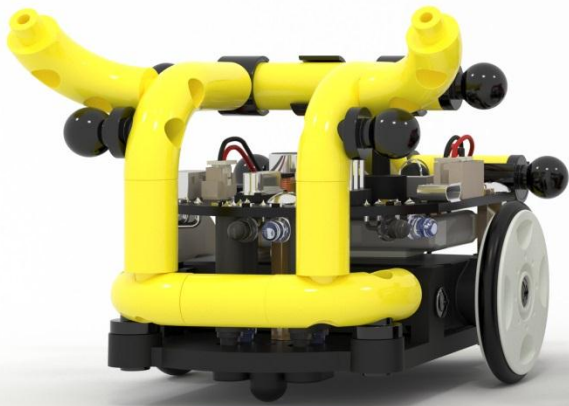


line1	line2	line3	line4	Line5
♪	♪♪	♪♪♪	♪♪♪♪	♪♪♪♪♪
CH1(LED)	F1 (Delay)	CH1(LED)	F1 (Delay)	F2 (while)
L/R ●	L/R ♪♪ 1 sec	L/R ●	L/R ♪♪ 1 sec	L/R ● <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes
C(enter)	C(enter)	C(enter)	C(enter)	C(enter)



Program Play => You should press C button for 2 second

How to use arduino



You can download arduino guide (we will update soon)

http://roboLink.co.kr/download_eng.html

[Linky]

Quick Start Guide

Assembly Manual

USB Driver

Win 7/8/10	64bit	Win 7/8/10	32bit
Win Vista	64bit	Win Vista	32bit

Mac OSX Download

Helper App for Scratch

Win 64bit Download (v1.2)	Win 32bit Download (v1.2)
Mac Osx Download (v1.2)	Scratch 2.0 Download link

Helper App Manual Version Info >

Unplugged

Unplugged Manual

Rokit brick for Linky

Win 64bit Download	Win 32bit Download
Mac Osx Download	Version Info >

USB Helper

USB Helper Download

How to Restore Firmware with USB Helper >

