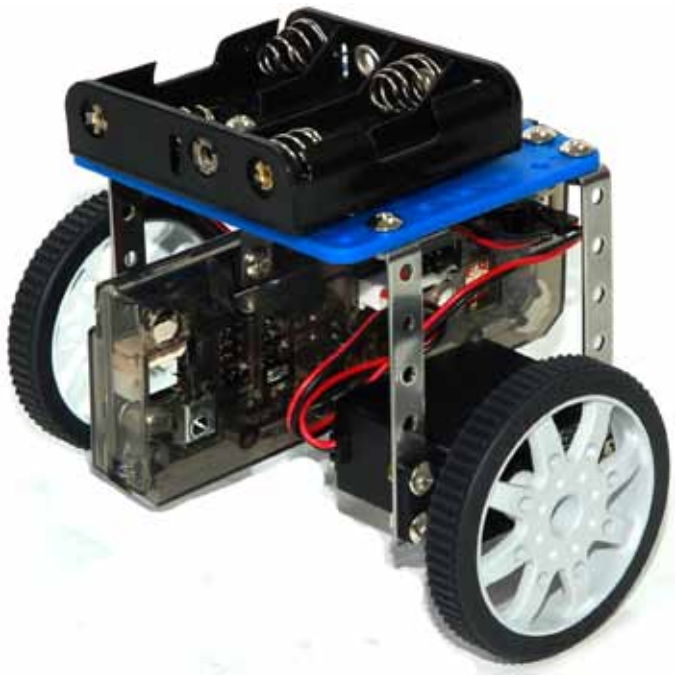
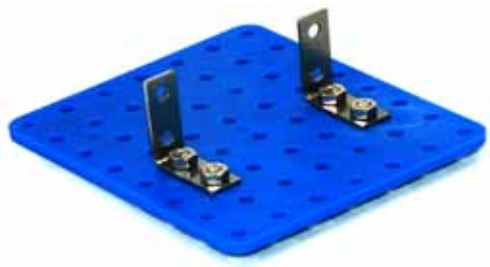
5. Segway Robot



Introduction and how it works

This robot can balance itself on two wheels like a Segway. Infra-red light sensors on both sides of this robot measure the distance between the robot and the ground to find out a required degree change for the robot. Then, the robot decides the required speed, and moves consistently so that it can balance itself.

1

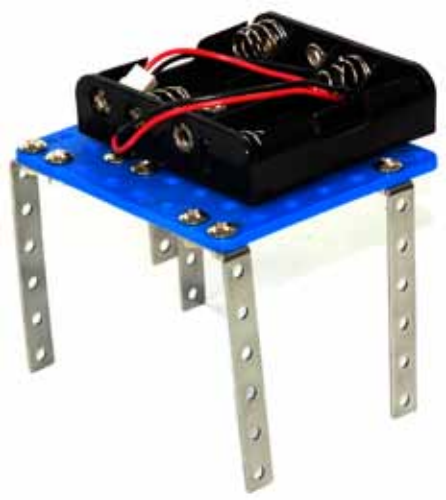


 X 4  X 4

2

 X 8  X 8

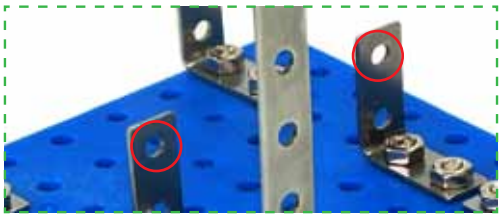
3

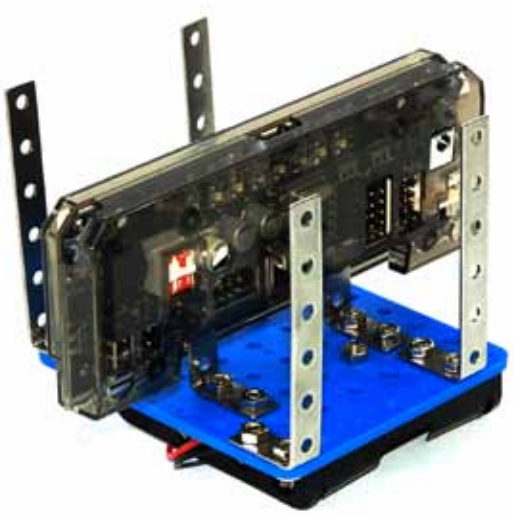


 X 2  X 2

4

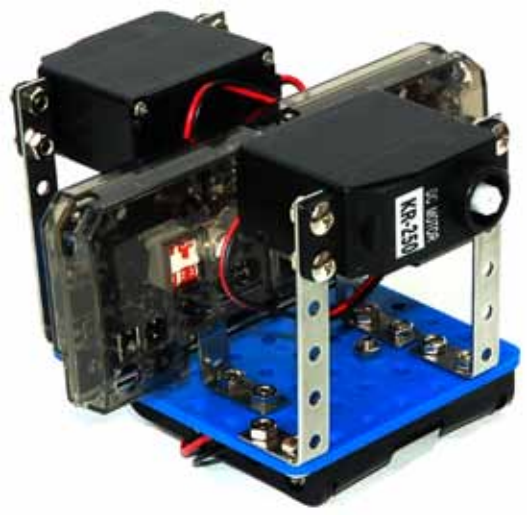
X 2 X 2





5

X 8 X 8



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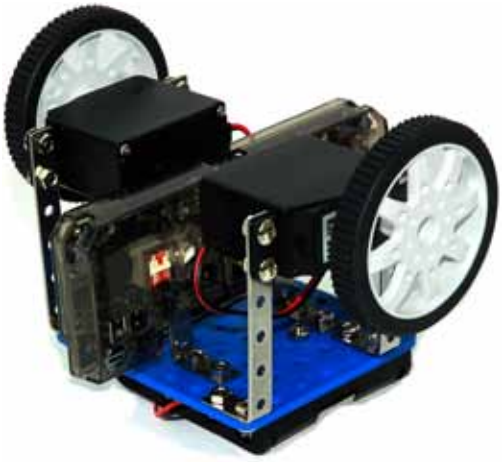
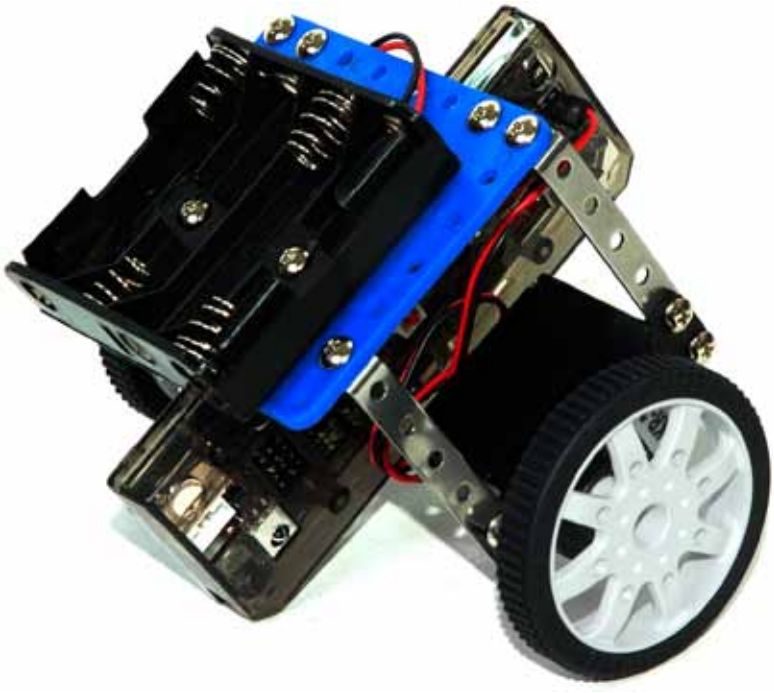
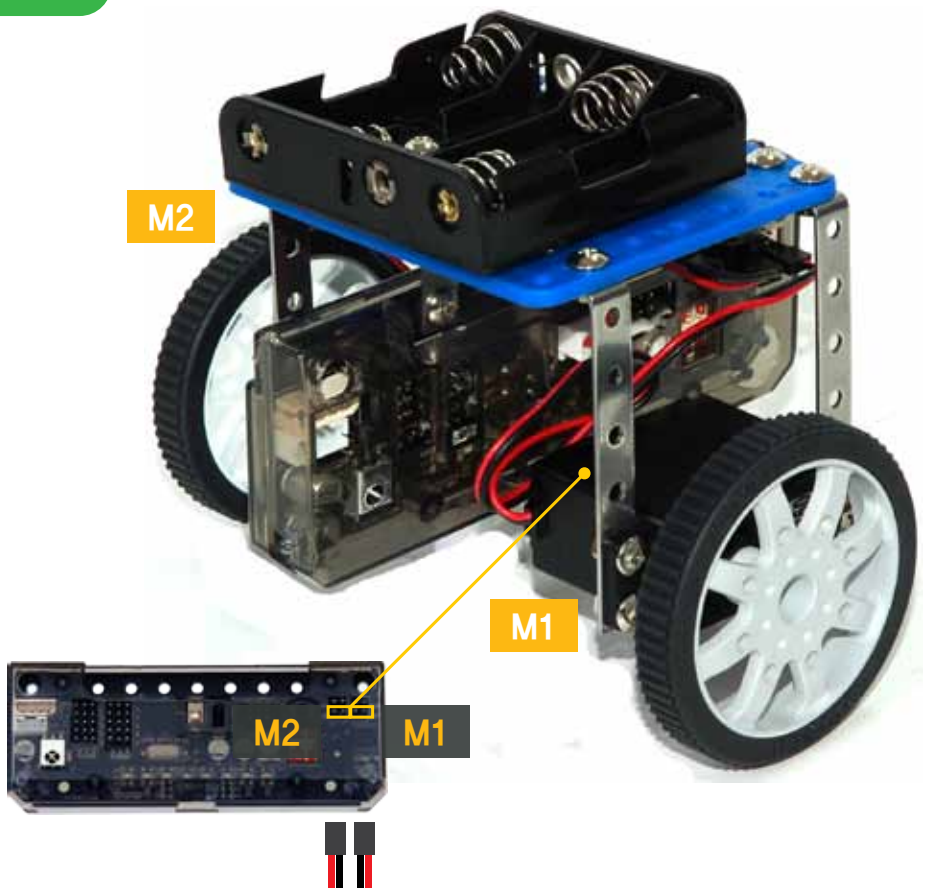
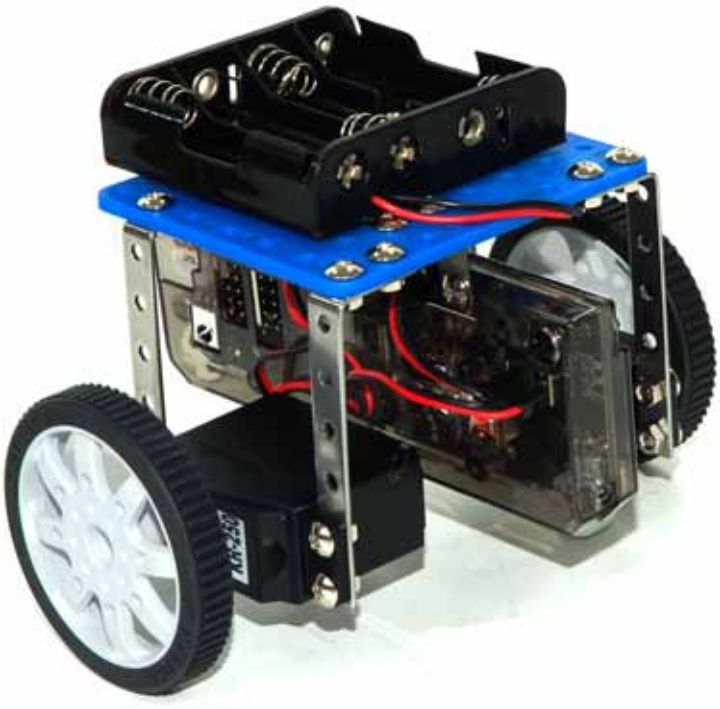


X 2



completion



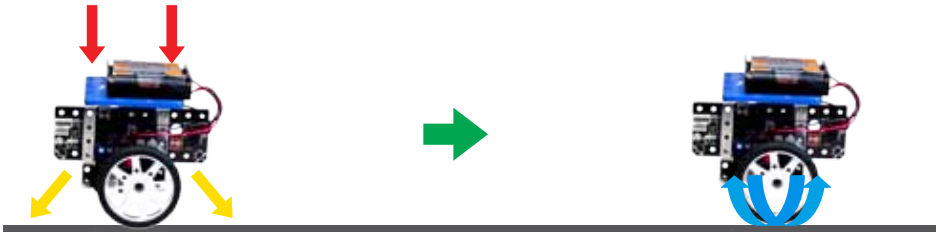


Segway Robot uses the Program Mode 5 to operate.

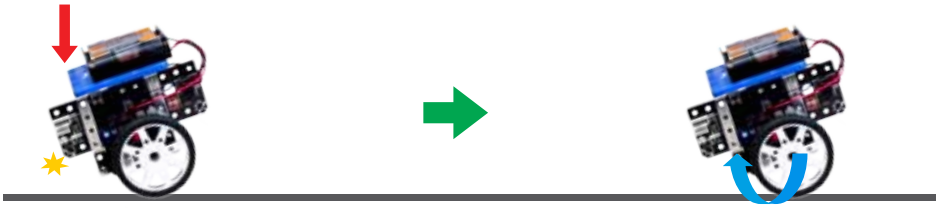
Let's learn about how the robot balances by itself.

Let's learn how to operate the Segway.

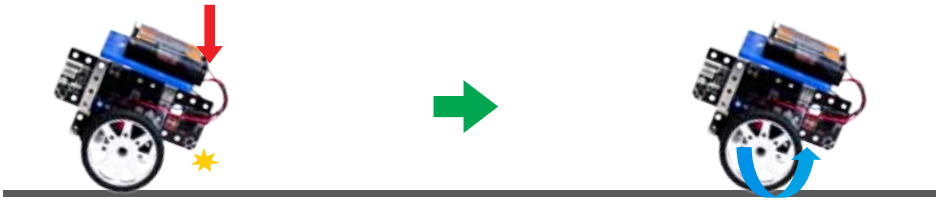
Weight direction	Light direction	Rotation direction



Sensors at both sides measure the distance values and motors move to the left or right.



If left sensor's distance value gets very close, motors at both sides all move to the left.



If right sensor' s distance value gets very close, motors at both sides all move to the right.