

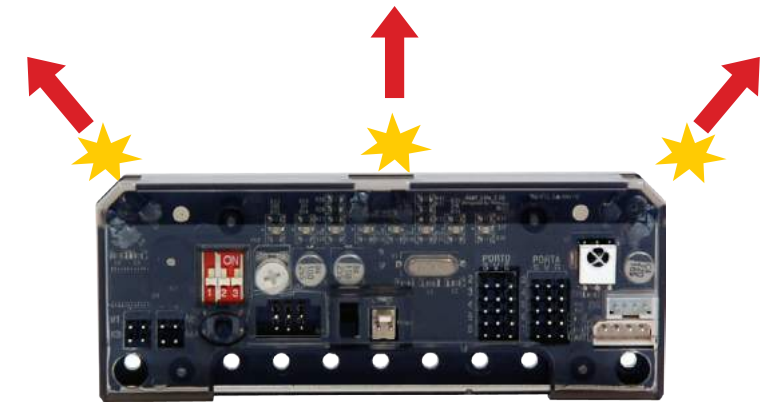
# 1. Obstacle Avoidance Robot

## Introduction and how it works

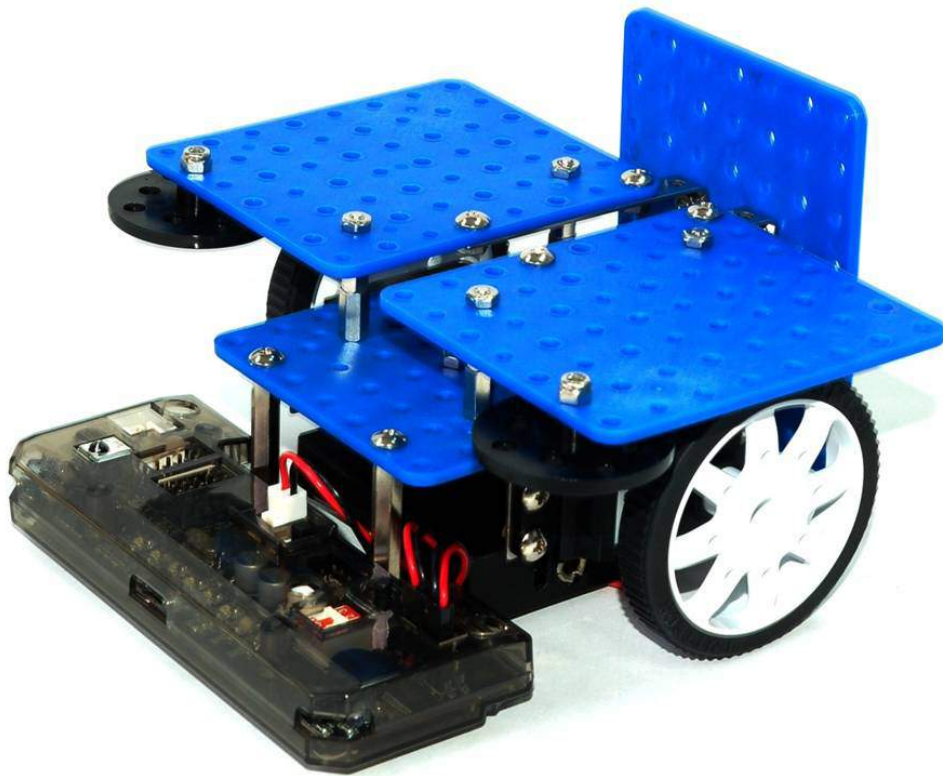


The Obstacle Avoidance Robot detects surrounding obstacles and moves to avoid them. While the robot is moving, three infrared light sensors on the front check whether or not the robot has encountered an obstacle.

Detecting from  
three different  
directions.



Following its object avoidance program, this robot can escape from a maze.

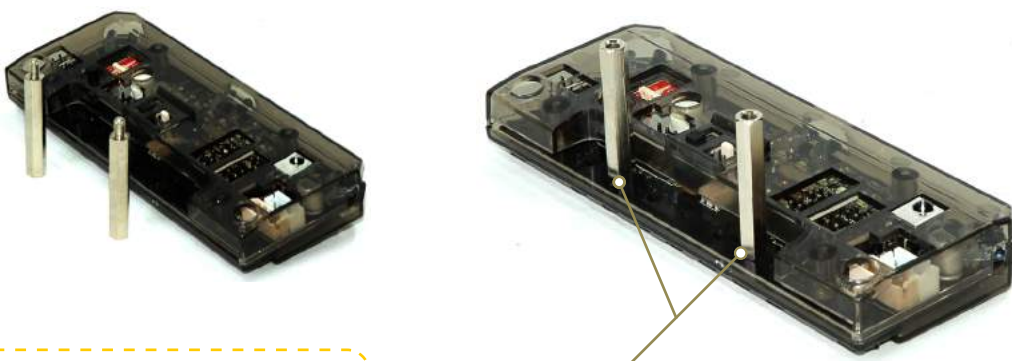


1



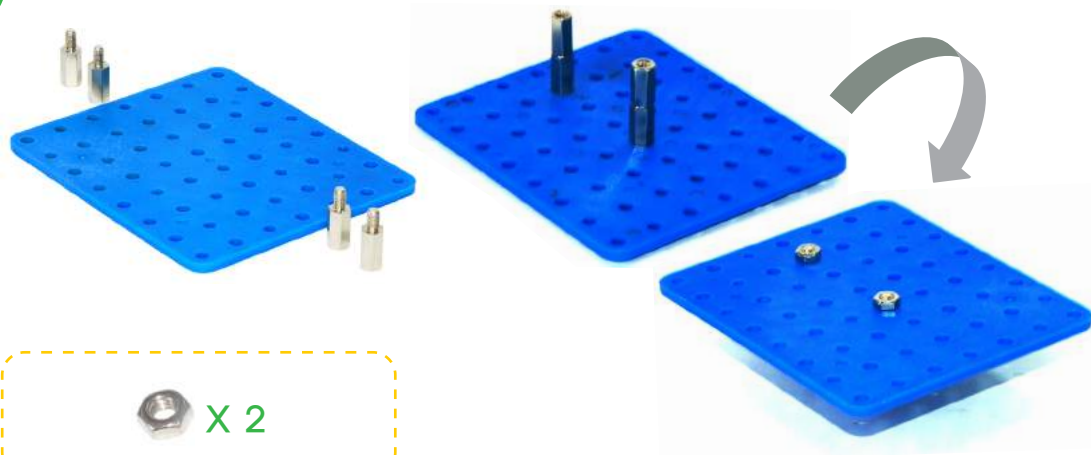
X 8 X 8

2



X 2

3



X 2

4



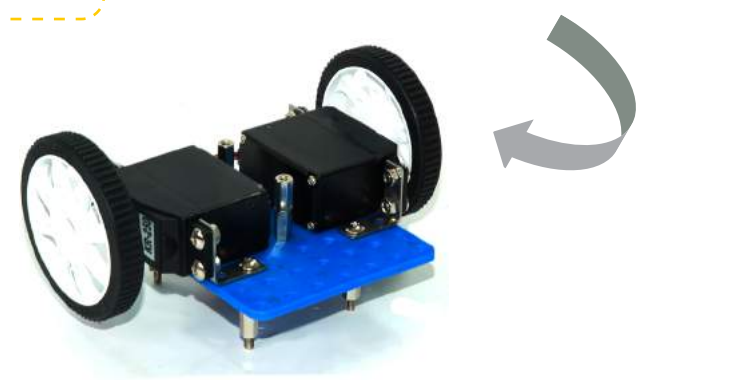
X 4



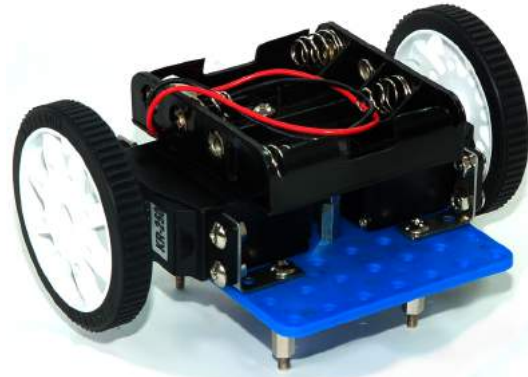
5



X 2



6



X 2



8



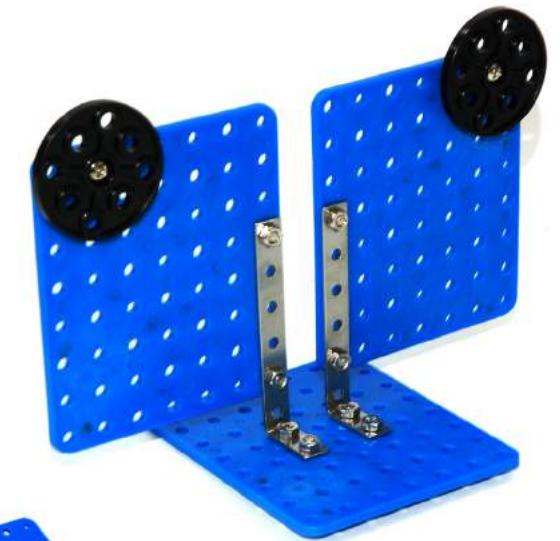
X 4 X 4

7



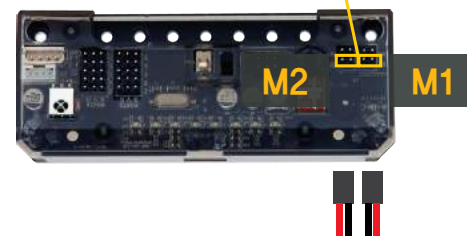
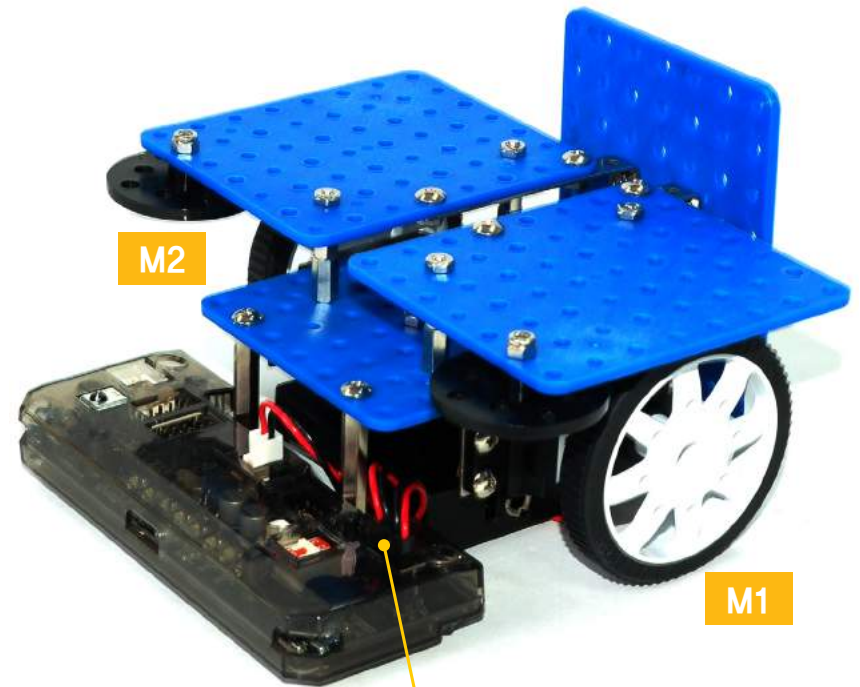
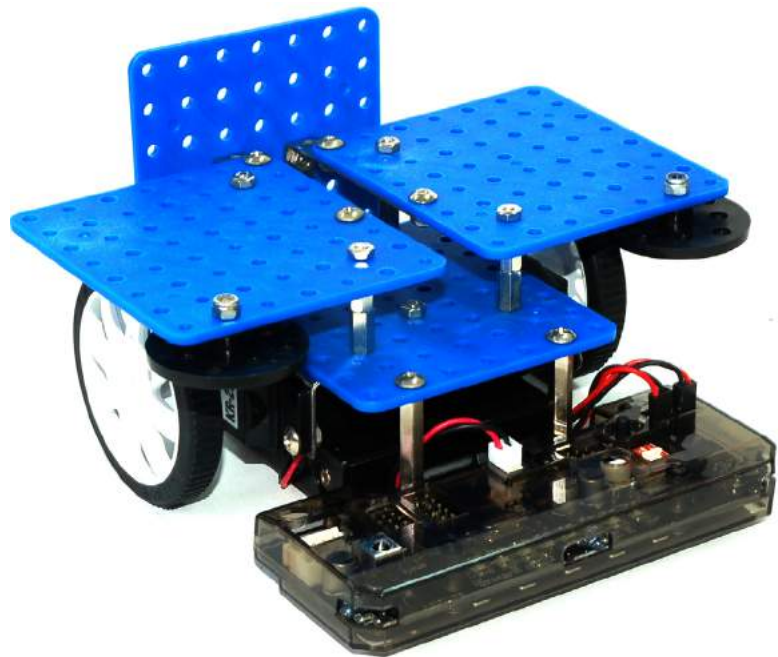
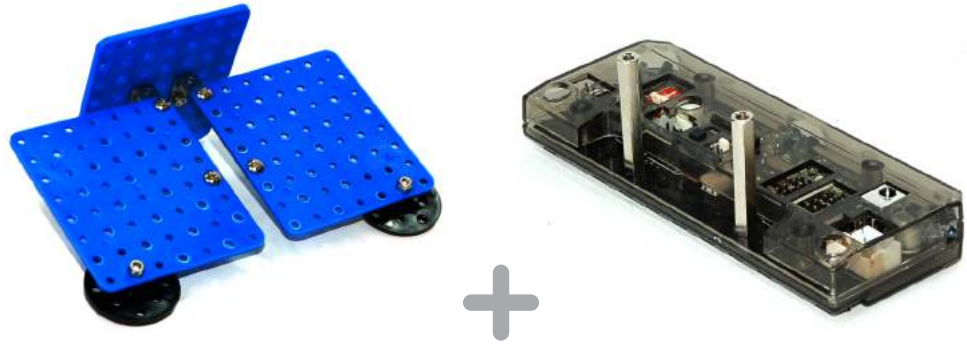
X 4 X 4

9

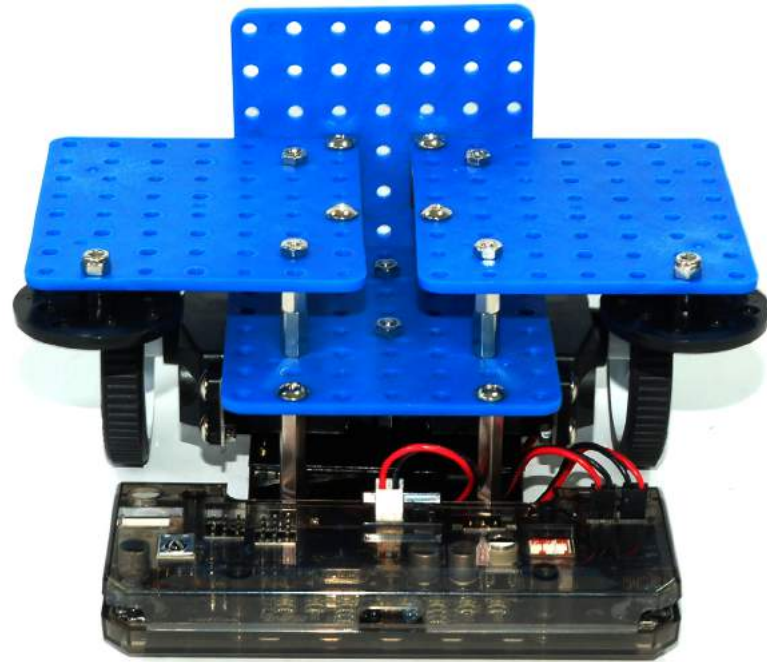


X 2 X 2

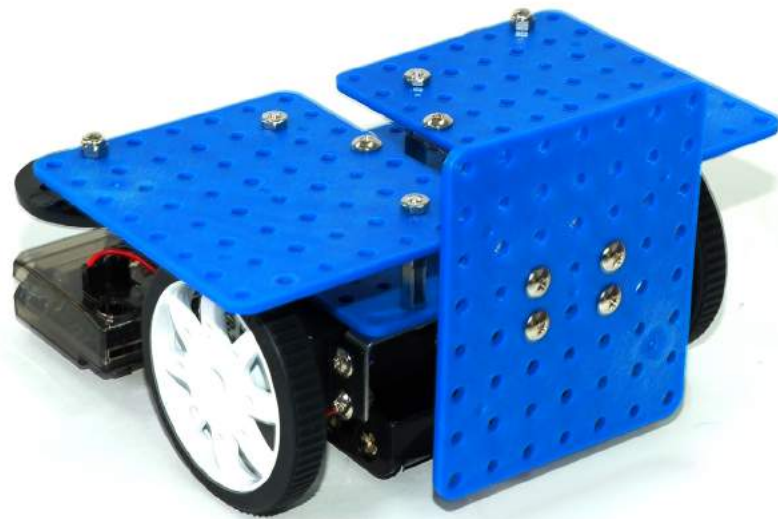




Front view



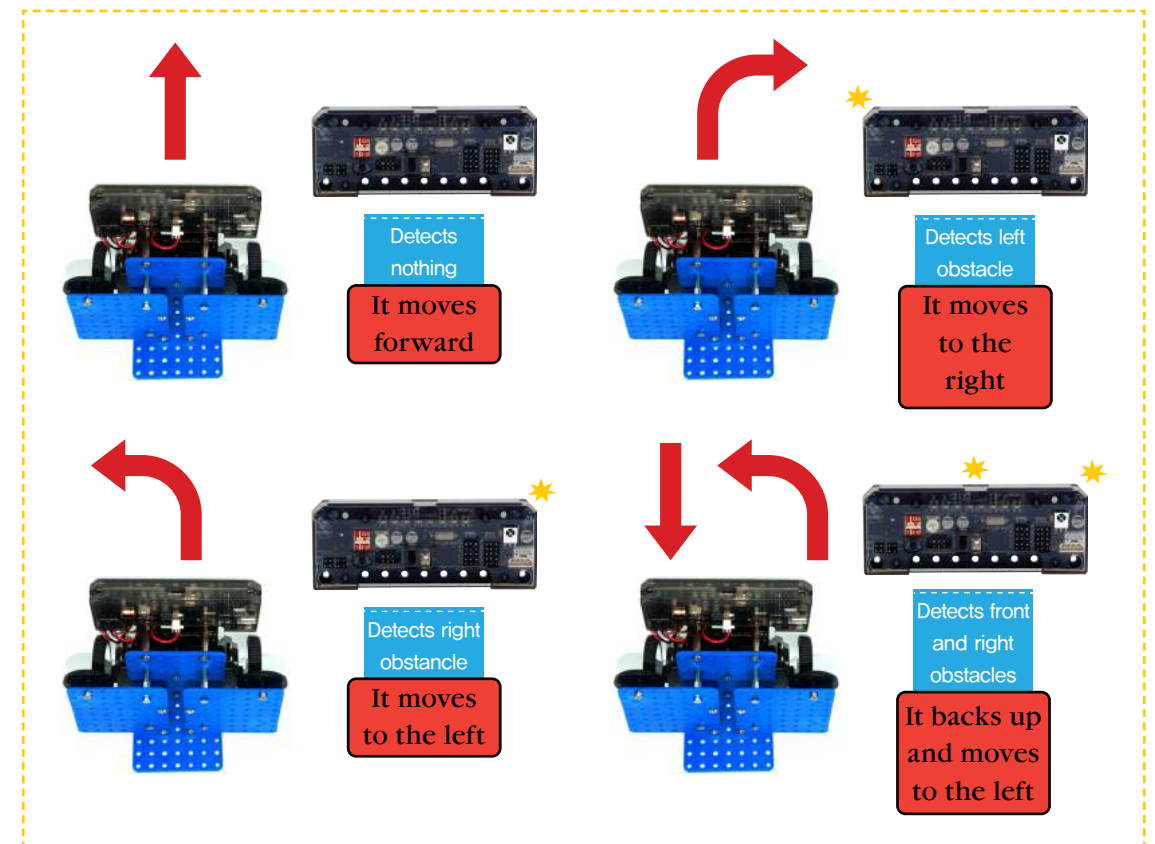
Back view



## Acting Module



Obstacle Avoidance Robot uses program mode 1 to operate.



Obstacle Avoidance Robot avoids walls obstacles by 3 infrared sensors that are facing different directions.

## Play the game!

– Escaping the maze game (Free Driving Game)



1. Make the maze by using boxes, books, or any surrounding objects.
2. Make a starting point, and an end point. See if the robot can escape from the maze.

