



ROBOTICS CHALLENGE

Challenge Description

“Robocop”

Design a robot that follows a black line rapidly and plays a siren.

Specifications

Speed is key in this challenge and managing the light sensor.

- Robots must be made with LEGO Mindstorms Robotics Invention System and be programmed with Robolab programming environments.
- Robots can consist of a maximum 1 RCX, 8 Wires, and 3 motors.
- Nothing can be added or removed from the robot during a round.
- No non-lego parts are allowed
- Challenge is maximum 3 minutes long

Adaptations

- Challenge starts anywhere on the circle.
- Flashing light
- Count the number of laps around the play area
- Robot plays a tune

Scoring

- 20 point challenge
- -5 points each time robot stops, gets lost, or must be handled.
- 5 point bonus for each adaptation noted above
- -10 points each time robot falls off the playing area
- Up to 5 points will be deducted from the total score for the total amount of damage sustained by the robot, as determined by the judge.

Hints and Tips

Use a light sensor to follow the line.