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HUMBER

Police Chase

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Police Station Chase

Set #60370



Module Description

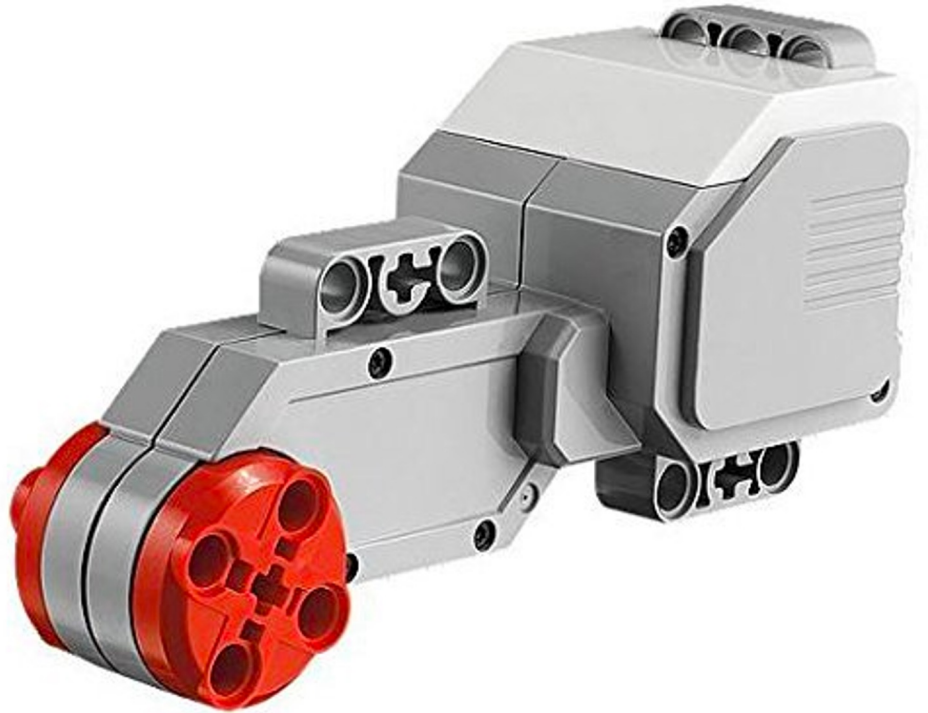
The police will chase and arrest the robber, then escort the robber back to the police station when a siren is triggered



Sensors and Motors

The police car will have two motors: rear wheels and front wheels

The robber will have one motor



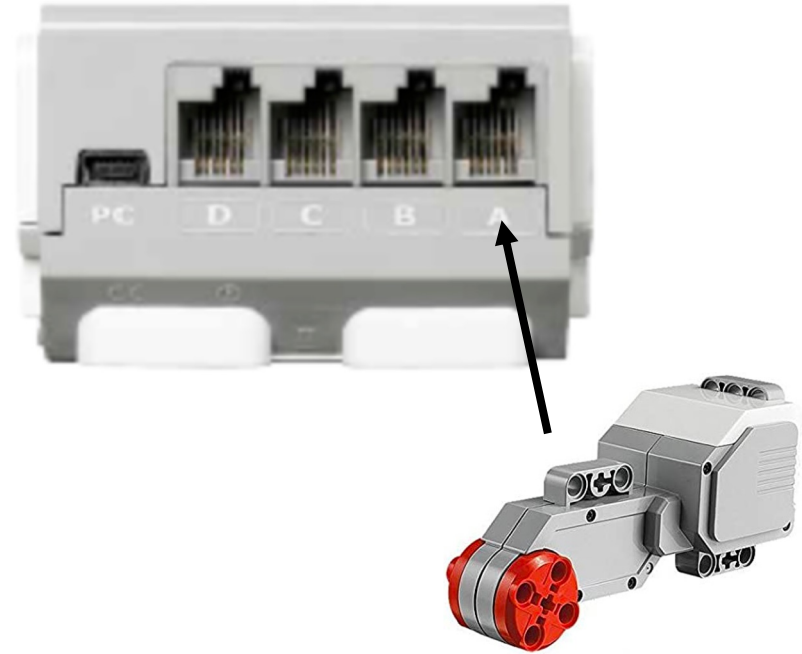
Ports

The police car

- require 2 ports and 1 CPU unit
- light sensor to one port

robbers

- one motor for motor bike



Variables/Settings

Siren status can be set to "on" or "off".

All paths will reset once police has escort robber back to the police station

```
1 {  
2   "status" : "on",  
3   "interval", 10  
4 }
```

IOT Loop

Function Chase Robber

```
WHILE siren NOT triggered
    Continue police patrol route

    IF siren IS TRUE THEN
        Change to police chase route
    END IF
END WHILE
```

Function Arrest Robber

```
WHILE distance between robber and police car < 2 cm
    Robber follow the police car back to police station
    Reset route
END WHILE
```

Function Robber

```
WHILE distance between robber and police car > 2 cm
    Continue robber route
    IF distance between robber and police car < 2 cm
        Call Arrest Robber Fuction
    END WHILE
```