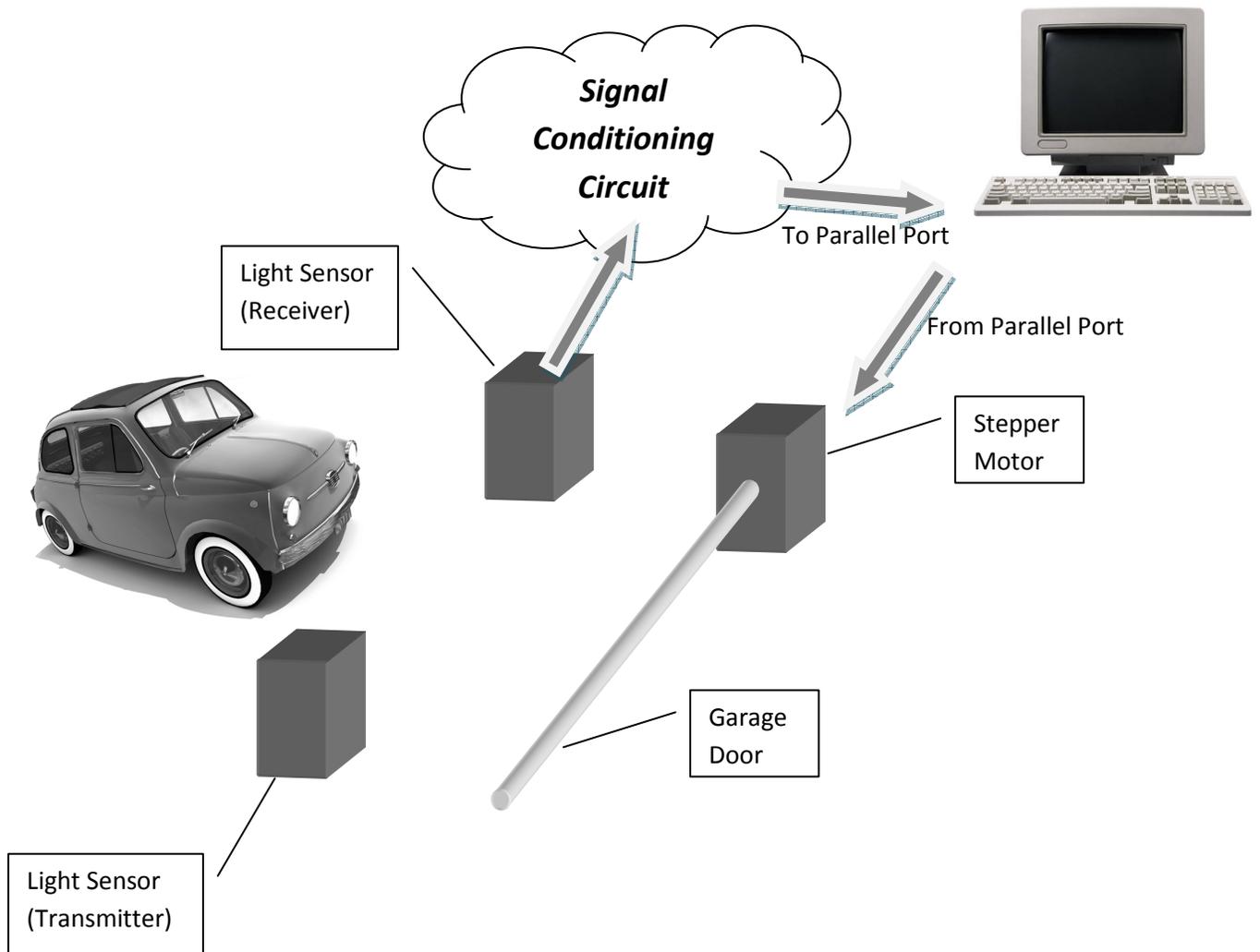


Garage Door Control System

Introduction:

This project aims to design and implement a garage control system. Depending on number of cars inside the garage, this system should open and close the door of a garage when a car intersects a light sensor.



Deliverables:

- 1- Complete kit which holds:
 - a. Light sensor transmitter
 - b. Light sensor receiver
 - c. Stepper motor
 - d. Motor arm (Garage Door)
 - e. Signal Conditioning Circuit

- 2- Computer program (written using C/C++ or Java)

When a Car passes through the light sensor; signal conditioning circuit will generate the right digital signal, which is propagated to the PC through the parallel port.

Your program should generate the right digital control signal (on the parallel port) to open the door and then display number of cars inside the garage. After 5 seconds the garage door should close.

If the garage is occupied with 10 cars, then the door should not be opened and the car driver is prompted with a message *"We are sorry, the Garage is fully occupied"*

Bonus:

Instead of having only an entrance door for the garage; the system should have an entrance door and exit door. The counter on the PC should decrement when a car leaves the garage allowing new cars to enter.