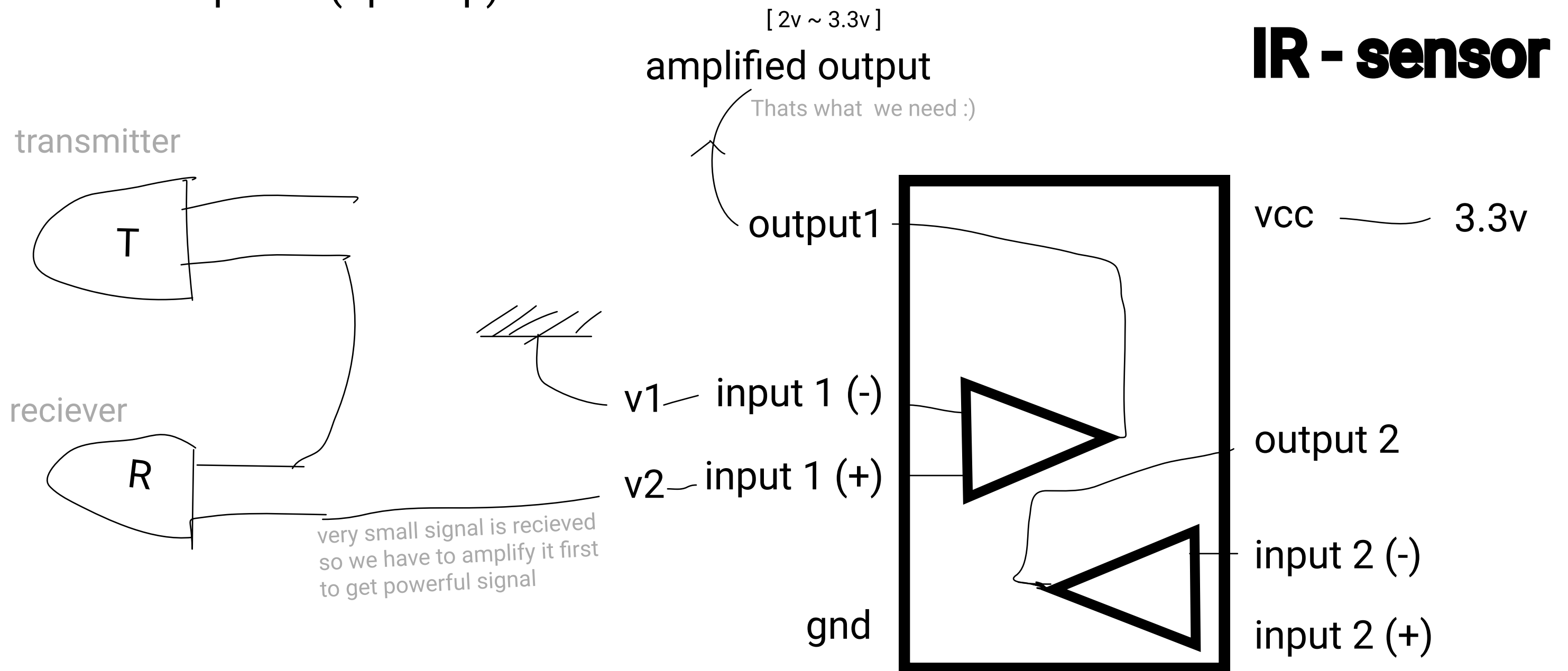


# lecture 20

operational amplifier (op-amp)



## PROJECT

object counter system

1. check if seats are free in cinema hall or not.
2. check if there is free space in parking area using IR sensor.

## inverted logic

active low logic

so if any object is in front of sensor, it will give 0 and if there is no sensor is front of sensor, then we'll get 1.

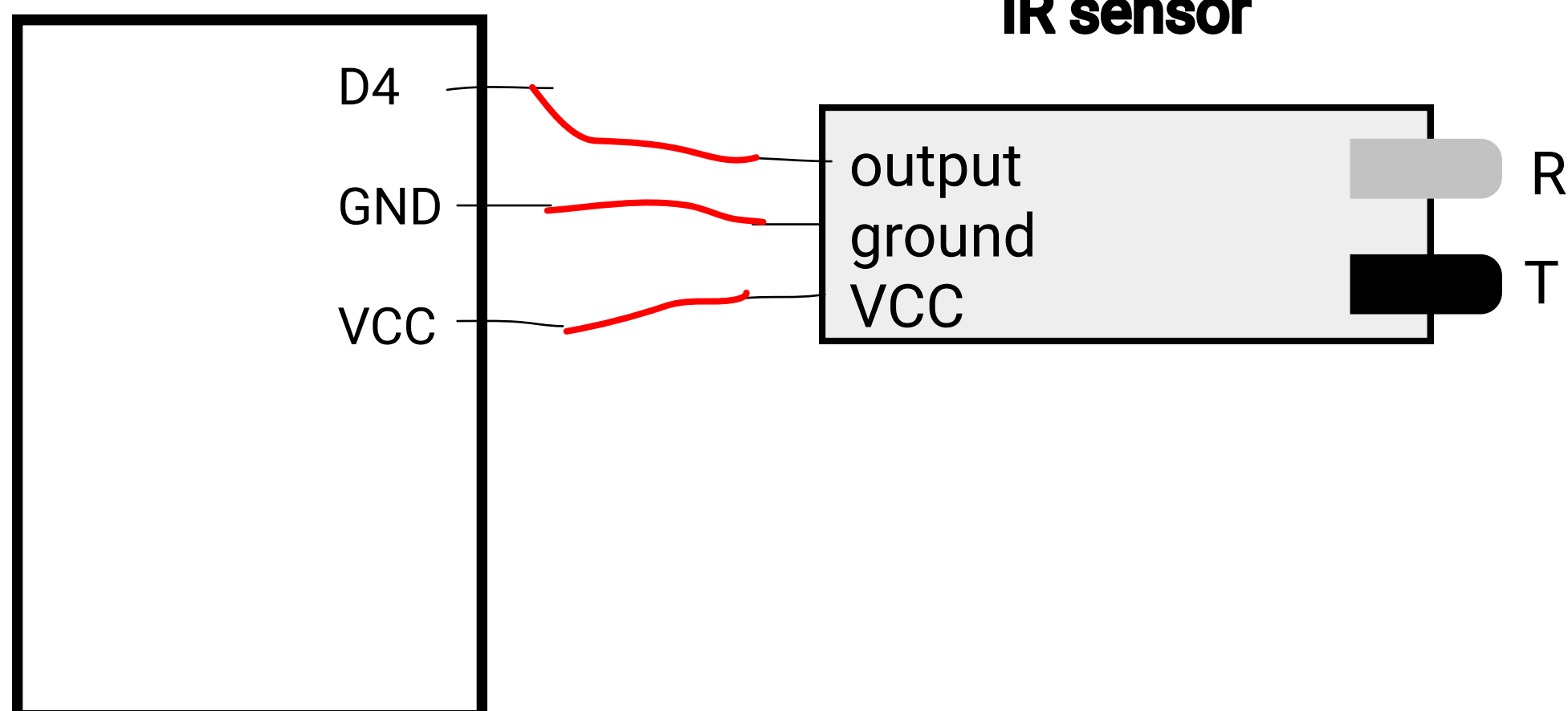
1 => 0  
0 => 1

object -> 0  
no object -> 1

now to solve the confusion if altering the values.  
we will use,  $Z = !Z$

nodeMCU

IR sensor



~ by K. S.