MARA UNIVERSITY TECHNOLOGY

KEU 380

TITLE:
AUTOMATIC ROOM POWER CONTROL

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ABSTRACT

Automatic room power control is used to switch 'ON' and 'OFF' the light automatically.

In this circuit we use two LDRs, which are placed one after another. So that they may separately sense the person going into or coming out of the room. The output of two LDR senses are used in conjunction with a bicolor LED that when the person get into the room it emit green light and when person goes out of the room it emit red light and vice versa.

These outputs are simultaneously applied to two counters. One of the counter will count as +1, +2, +3 etc that when the persons are getting into the room and the other will count as -1, -2, -3 etc when persons are getting out of room. These counter make use of Johnson decade counter CD4017 ICs. The next stage comprise two logic ICs which can combine the output of two counters and determine if there is any person still leave in the room or not. The output of the two counters are ended by AND gates and the wired ORed.
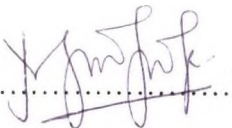
ACKNOWLEDGMENT

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   Lecturer in Faculty Engineering
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2. All of our friends

"THANK YOU VERY MUCH AND MAY ALLAH BLESS ALL OF YOU."

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1.0 INTRODUCTION

Our project entitled Automatic Room Power Control. In this circuit has a small memory, which enables it automatically, switched 'ON' and 'Off' the light is desire fashion. This circuit uses two LDRs sensor, which are place one after another (separated by a distance of say half a meter) so that they may separately sense a person entering the room or leaving the room. The output of the two sensors, after processing, is used in conjunction with bicolor LED. When a person entering the room it emit the green light while a person leaving the room it emit the red light. The counter will count as +1, +2, and etc when a person entering the room and the other counter will count as −1, -2, -3 and etc when a person leaving the room. These counters make use of Johnson decade counter CD4017 ICs. The next stage, comprises two logic ICs which can combine the outputs of the two counters and determine there is any person still left in the room or not.