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FINAL REPORT OF DIPLOMA PROJECT

FACULTY OF ELECTRICAL ENGINEERING



BEDSIDE LAMP TIMER

SYAZWAN JASNI

NORAZMAN SAAD

ABSTRACT

The course KEU 380 or Project 2 is one of the subjects that compulsory for student in their final year of Diploma in Electrical Engineering. The bedside lamp timer is the choice of our project for this course.

The bedside lamp timer is types of a timer, which will cut the supply to the lamp that, connect to this circuit. The circuit of the timer is not as complicated as other circuit and it is easy to use. When this circuit connected to the lamp, it will automatically cut the supply to the lamp when certain button is pressed in 30 minutes.

This project is useful when we want to go to bed at night and forgot to switch off the bedside lamp. In addition, this circuit can be use with old television set, radio and table fan. The commercial value of bedside lamp timer maybe good after making the project more space saving, low in cost and reliable.

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INTRODUCTION

This is a bedside lamp timer circuit. In this circuit, there are known to be 3 part of the circuit, first the part of the input, second the part of the switch, and the last part, the IC that control the time of the circuit.

The purpose of this circuit is that of power a lamp or other apparatus for a given time (30 minutes in this case), and then turn-to-turn if off. It's useful when reading at bed by night, turning off the bedside lamp automatically in case the reader fall asleep.

After turn-on by P1 pushbutton, an LED lights for c25 minutes, but 6 minutes before the turn-off, start blinking for two minutes, thus signaling that the on time is sending. If the user wants to prolong the reading, can earn another half-hour of light by pushing on P1. Turning off the lamp at user's ease is obtained pushing on P2.

The main components in this circuit are the transistors (BC238 and the BC328), the pushbuttons (P1 and P2), the two IC (4012 and 4060) to make this circuit to operate. This circuit can be applied to any electrical devices that we may forget to turn it off such as lamp, radio, television and etc.