GOVERNMENT TECHNOLOGICAL COLLEGE

(PATHEIN)

DEPARTMENT OF ELECTRONICS & COMMUNICATION

PROJECT OF THREE – TONE DOOR BELL

BY

GROUP (3)

ABSTRACT

In recent year, there have been dramatics changes in technological on both national scale and international scale legislation has increased, Powerful regulatory institution have been established ,and new Techniques have found global recognition. These changes have found Global recognition. These changes have had a major impact on All our lives.

The demands for good management and the resulting structural Change not only makes good training a necessity, but also creats. The need for an increasing number of qualified specialist in different Fields. Thus, a strong emphasis has been said on the fundamental Principles of the procedures and concepts of engineering technology.

We have attempted to impact knowledge in the field technology and to focus on new technological development so as to ensure a quick and complete grasp of the future working requirement.

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We certify that we have examined and recommended for acceptance of the seminar report Project of auto theft alarm by group (1) in partial Fulfillment for the degree of Bachelor of Engineering (Electronics).

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Contents

Required Equipment

1.	Uniserval printed circuit board		1 No
2.	Resistor (10k)		1 No
3.	Resistor (100k)		2 No
4.	Resistor (22k)		1 No
5.	Resistor (27)		1 No
6.	Resistor (4.7μf)		1 No
7.	Capacitor (0.01f)		1 No
8.	Capacitor (100uf)		1 No
9.	Capacitor (0.1uf)		1 No
10.	IC (741)		1. No
11	Transformer	(220/9)	1. No
12	Transistor	(2SC383)	1. No
13.	Transistor	(2SA683)	1. No
14.	Push-Button Switch		1. No
15.	Speaker	(8&!)	1. No
16.	Connection Wire		1 No

Ckt Construction

The ckt is mounted inside the car with safety. Switch S 1 and S2 is placed to unseen easily . The wire from pin A 1 is connected to Lignition switch and the wire from pin A 2 is connected to Doom Light switch . Both other wire of lignition switch and Doom light Switch are not connected to (12V) . The wait time that is defined by R1 and C1 is not sounded when the car owner open the door switch .

1.2 Component

1.2.1 Resistors are used in electric circuits primarily to limit current and there is a wide variety of resistors available from many different manufactures. Electrical resistance is measured in units of ohms , abbreviated Ω . The wire wound resistor is used in applications. Where considerable power is dissipated in the resistor . Metal film resistor is used primarily in low power applications when a very accurate amount of resistance is required. The most widely used general purpose resistor are widely available in resistance sizes from a few ohms up to a few megaohms , and wattage rating from 1/8 watt up to zero watt.

1.2.2 Capacitor stores electric charge . It does not allow direct Current to flow through it and it behaves as if alternating current does flow through . There are two condenser , fixed condenser and variable condenser . Fixed condenser is used according to the defined value express Farad (F) .

1.2.3 Diodes

They are called pn-junction diode which contain cathode and anode . Diode allow current flow when + voltage is connected to anode and cathode is connected by - voltage . Therefore diode modify AC voltage into DC voltage as rectifier.

1.2.4 The transistor TR1 C945 is bipolar junction transistor BJT. N P N silicon type. The function of 2SC945 is to generate Amplified voltage to the voltage gate of SCR C106 D.

1.2.5 SCR C106D

Semiconductor Power Switches (or) Thyristor SCR consist of anode and cathode and gate . The diode is through current in forward bias but also SCR is not . SCR need to supply the gate with + voltage then the current through SCR. In reverse bias , - v supply is connected to anode and + v supply is connected cathode . Q_1 and Q_2 is taken place cut off . So current is not through from A to K .In forward bias , + v Supply is connected to anode and - v supply is connected to Cathode . But also trigger pulse 1v is supply to the gate . SCR is ON until holding current I h < I a . To reach off Condition , I_h is greater than I_a . So that ON / Reset switch is parallel connected between A and K to cut off the current.

1.3 Component of power supply

1.3.1 12 V Battery

In auto theft alarm circuit, it is supplied from 12 V car battery. It is also lead acid battery type. Battery is constructed by small room with series connected. One cell Contain + lead plate and - lead plate. The plates are emerged in the salphuric acid. One cell can produce 2.05v. So that 12 V need 6 cells.

1.4. Switch

In auto theft alarm, ignition switch, Doom light switch, Arm switch and ON / Reset switch are contained. When the theft open the door switch arm switch S 1 is closed. The current from the 12 v battery is through R1 and C1 and TR1 C945. So that the gate voltage is appeared to Operate SCR C106D and alarm is sound continuously until SCR is off. Switched S2 is push to break switch to cut off SCR.

1.5 LOAD

(Alarm or Horn Relay)

Horn need 12 V DC to operate circuit which produce two frequencies sound 24 W. The speaker produce high and low Frequency alternately. The ground 0 V is connected to Battery (-) node.

OPERATION

The circuit which provides the three unique voices is called a three-tone door bell. This circuit consists of six resistors, 741 IC, a transformer, switches, a speaker, the resistors and the capacitors. By setting up the push-button switches at three places, it is distinguished where the bell is alarmed.

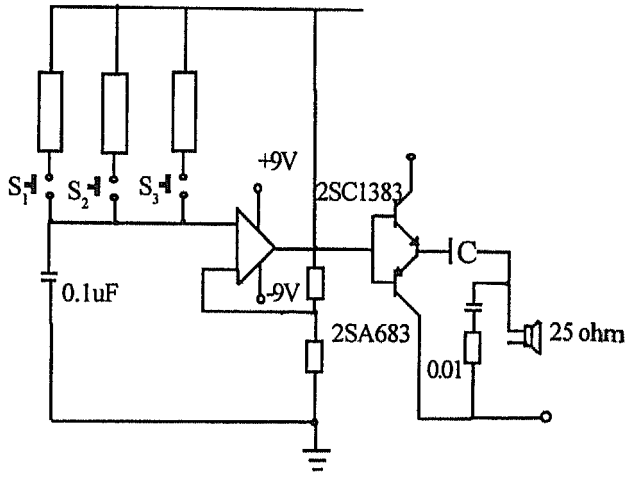

Fig Operation of three tone bell