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4 Way Traffic Light Using Assembly Language

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Table of Contents

**Chapter 1**

The Project1

Facts1

Objectives

General Objective2

Specific Objective2

**Chapter 2**

Project Design3

Description3

Hardware Design**4**

Software Design5

Illustrations6

**Chapter 3**

Final Design7

Final Design Picture9

Assembly Codes10

Evidence of Group Work13

Members Information15

**Chapter 1 – The Project and Its Background**

**The Project**

A four way traffic light is a device that is located at the road intersection to control the flow of traffic and avoid any accidents within the intersection. It become the most effective tool for sequential control of the teaming number of vehicles on the road and help the pedestrians cross the road safely.

Traffic light nowadays is commonly used in city and can also be used in universities, malls, airports or any road that has intersection. It also helps the driver confidence by engaging the right ways.

**Facts**

Four way traffic light is made of a circuit with the help of counter IC, which is mainly used for Sequential Circuits. We can also call it as Sequential Traffic Lights. Sequential Circuits are used to count the numbers in the series. Coming to the working principle of Traffic Lights, the main IC is 4017 counter IC which is used to glow the Red, yellow and green LED respectively. 555 timer acts as a pulse generator providing an input to the 4017 counter IC. Timing of glow of certain lights totally depends upon the 555 timer’s pulse, which we can control via the Potentiometer so if you want to change the time of glow, you can do so by varying the potentiometer, having the responsibility for the timing.

**Objectives**

**General Objective**

To maintain the control of traffic and to organize and discipline all the drivers on the road due to the increasing number of vehicle in the country.

**Specific Objective**

* To avoid accidents on the road intersections.
* To avoid vehicular collisions and traffic jams.

**Chapter 2 - Project Design**