**ANTI-THEFT ALERTING SYSTEM FOR VEHICLES**

**(TWO WHEELER)**

**AIM:**

The main aim of this project is to design ANTI-THEFT ALERTING SYSTEM FOR VEHICLES (TWO WHEELER).

**PURPOSE:**

The purpose of the project is to provide security for vehicle.

**METHODOLOGY:**

**BLOCK DIAGRAM**

**IR transmitter**

**POWER**

**SUPPLY**

**Ignition**

**Key**

**Motor**

**IR receiver**

**LCD**

**Microcontroller**

**KEY**

**Buzzer**

**Power Supply:**

**Regulator section**

**Filter**

**Circuit**

**Bridge**

**Rectifier**

**Step Down**

**Transformer**

**DESCRIPTION:**

If anybody tries to steal your bike, this circuit turns on the horn of the bike to alert you of the impending theft. Usually, a handle lock is used on the handle bar for the safety of bikes, with the front mudguard in a slanted position. When the handle lock is freed, the front mudguard can be aligned with the body of the bike.

This circuit consists of transmitter and receiver sections. The transmitter (IR LED) is fitted on the back end of the front mudguard and the receiver sensor (IR RX) is fitted on the central portion of the crash guard of the bike such that IR rays from the transmitter directly fall on the IR receiver sensor, this will occur when the front mudguard comes in line with the body of the bike.

This signal from the IR Rx will be given to microcontroller which after waiting for some time disables the engine even though the Ignition switch is ON. In this project as the engine we are demonstrating a DC motor and to indicate the status we are using a LCD.

The circuit excluding the transmitter and the receiver can be housed in a small metal box and kept inside the toolbox of the bike. Before you start your bike, make sure that the circuit is switched off using switch.

**Hardware used:**

* Microcontroller
* IR transmitter
* IR receiver
* LCD
* Motor
* Ignition switch
* Key
* Buzzer

**Software used:**

* Keil
* Embedded ‘C’
* Express PCB
* Express schematic

**RESULT:**

According to this project we can design a system to protect a vehicle.