



DENSITY BASED TRAFFIC SIGNAL SYSTEM

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INTO:-TRAFFIC PROBLEMS

Nowadays, controlling the traffic becomes major issue because of rapid increase in automobiles and also because of large time delays between traffic lights.

So, in order to rectify this problem, we will go for density based traffic lights system.



SOLUTION FOR MAINTAINING PROPER CIRCULATION ON ROAD.

- Traffic on the road is mainly handled by local traffic police.
- Signal on the road should be check up to date and should be made wherever it is need.
- One should stop on road until the timer of signals get complete.
- In the security process there should be a small CCTV camera.



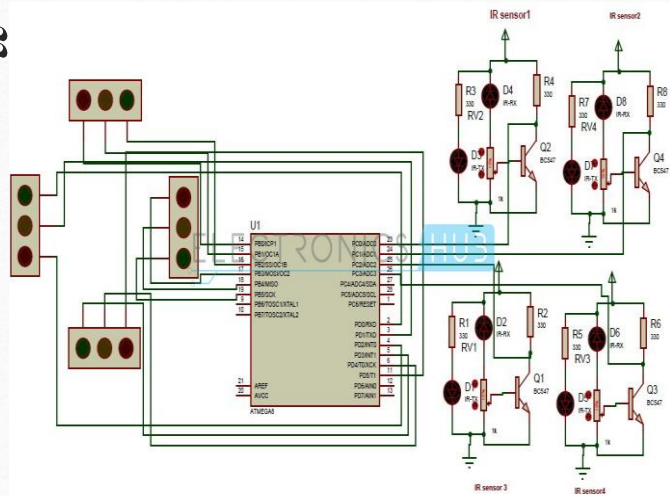
WIRELESS TRAFFIC LIGHT CONTROLLER.

- The best type of function.
- All the signal poles are connected to each other.
- This will also help in control of the traffic.



@ MY PROJECT:

- ✓ In this system, we will use IR sensors to measure the traffic density.
- ✓ We have to arrange one IR sensor for each road; these sensors always sense the traffic on that particular road.
- ✓ All these sensors are interfaced to the microcontroller.
- ✓ Based on these sensors, controller detects the traffic and controls the traffic system.



OPERATION

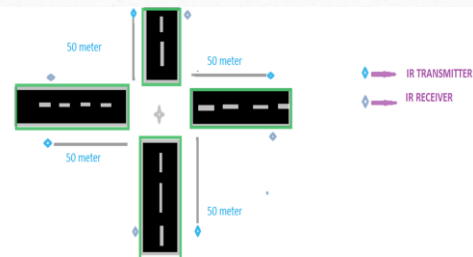
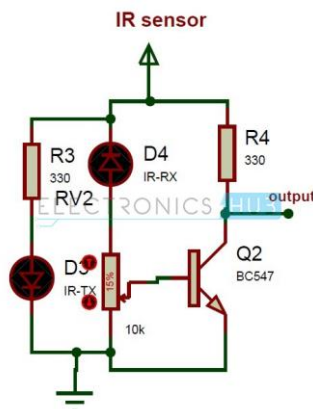
AUTOMATIC MODE

- The IR sensor senses how many vehicles are crossing on the corresponding side. All the sensors send the corresponding output signal to microcontroller.
- The LCD display is used to indicate the side through which the vehicle has to be passed
- The microcontroller compares which road side is the highest density (i.e., more vehicles) and it delivers the corresponding signal to LED driver circuits. The LED driver circuit enables the LED to display for particular time depends on traffic density.

MANUAL MODE

- When this type of system is followed, we are sure that we can control the traffic to certain extent to certain extent.
- From this system, we can free up the traffic in the VIP's traveling road by wireless.
- There is a key pad connected remotely to control that. For each key present in that the corresponding road will be free up and other roads are blocked.

IR SENSORS



APPLICATIONS

- The project is mainly used in the traffic signals
- It is a boon to the automobiles so that there are many advantages
- It can be implemented on some other areas where we need wireless transmission
- It is implemented in the traffic signals also for monitoring the vehicles if there is any misuse it will automatically know




CONCLUSION @ PROJECT

- ✓ The project may be very well used in where the traffic signals is kept and in many other places where we need to full fill the need of the automation. In the future we implement the project's idea in the industries.
- ✓ By using this project in future we can know traffic density in the city and so that remedies can be made according to that.



@SMART IDEAS:

- use of signal breaking identity and system to fine them (currently using in hyderabad)
- technical environment increment causes automatically makes city smarter and smarter .
- to get smart ideas, simply follow the other countrieshahaha....



TO PROMOTE :-

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