PROJECT ON

TRAFFIC BLINKER LIGHT BY SOLAR SYSTEM

REGENT EDUCATION AND RESEARCH FOUNDATION

GROUP OF INSTITUTIONS

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TRAFFIC BLINKER LIGHT by SOLAR SYSTEM

Introduction

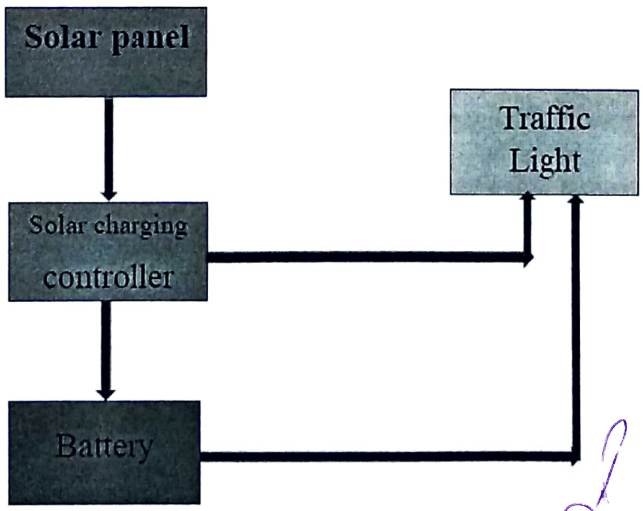
Traffic Blinker Light is an autonomous LED Flashing system Its purpose is to warn motorist and emphasis them to speed control when reach close to school, fire station, military zone, village road, small town, pedestrian cross walk, diversions, blind or sharp turns where the motorist are unable to judge the route or direction and severe hazard ahead. It blinks (flash) at specified rate (can be customised).

However, these signals come with some rules associated with them. Basically, the traffic signal rules form the very backbone of these signs and following them is vital for ensuring smooth and risk-free road travel. A traffic signal is used as an instructing device that indicates the road user to act according to the displayed sign. Following the traffic signal ensures road safety and to make things simple to understand, these signals have been using a universal colour code.

In recent years, with the rapid growth of privacy car, urban road transportation load enlarges suddenly and many roads' sections approach to saturated limit in peak time interval. Traffic congestion has been the universal problem for most big cities. Traffic congestion is one of the worldwide urban problems, which can lengthen journey time, increase energy consumption, aggravate environmental pollution and result in traffic accident. If we take no measure to govern it, not only individual journey cost will be enhanced, but also the entire municipal transportation system will paralysis and urban sustainable development will be restricted. Therefore, how to solve traffic congestion becomes the hot issue for each big city.

The essence of traffic congestion is the unbalance transportation of supply and demand. Increasing road supply is one kind of solutions to alleviate supply and demand contradictory. However, practices coming from various countries indicated that dependence on constructing more roads would inevitably result in the vicious circle of "traffic congestion -road building -congestion alleviation - attracting more transportation demand - producing new congestion - building more roads", which could not truly solve the traffic congestion problem. Therefore, more and more experts hope to find new breach from the demand management aspect and have proposed many demand management methods, in which traffic congestion charging as one of the effective measures has aroused widespread interest in city administration department.

Proposed System design & Operation:



The solar panel receives the sunlight to generate electricity, and the controller of which is used for battery charging. The controller has functions of preventing inverted connection, inverted charging, excessive discharge,

overcharging and overloading and automatic protection for short circuit, boasting features such as automatic identification of day and night, automatic detection of voltage, automatic storage battery protection, easy installation and no pollution. The battery discharges electricity to the signal machine, transmitter, receiver and signal light via the controller.

Cost:

SL.NO	APPARATUS NAMES	APPARATUS OUANTITYS	APPARATUS PRICES (in Rs.)
01	SOLAR PANEL	1	600
02	CHARGE CONTROLLER	1	800
03	BATTERY	1	1500
04	RELAY	1	200
05	SIGNAL LIGHT	1	2000
06	POLE	1	2300
07	BATTERY MOUNTING BOX	1	500
TOTAL PRICES (in Rs.)			7900

Conclusion

By this project, we are trying to establish an approach through which we are provided hands on training of our students to the renewable energy as well as make our campus green. In old scenario by making the poster or painting we have to intimate that school or college ahead. By implementing this project, we are conveying the same message digitally i.e., through signal.

Reference

[1] ELECTRONIC TRAFFIC SIGNAGE& EL SEGUNDO, CA US, "An illuminated display apparatus for supplementing street signals includes a housing containing an LED array capable of producing multicoloured and animated images, a bracket system holding the housings together wherein a row of multiple housings and LED arrays may be assembled together to create larger displays, and wherein a system of brackets supports the housings at an angle from vertical for viewing by passing vehicles below. The display may also include a solar array, loudspeakers, strobe apparatus and automatic brightness dimming."

[2] Emergency traffic light system & EL SEGUNDO, CA US, "A supplemental system of stop lights for use in conjunction with a primary stop light system. Solar powered supplemental stop light units are mechanically attached nearby the stop light units of the primary system. Should the primary system fail, the supplemental stop lights become active to re-establish control of the traffic flow and substitute for the disabled primary stop light system. The supplemental stop light system uses at least two visual displays: a graphics display and an alphanumeric verbal display. In an alternative use in conjunction with emergency vehicle traffic, an alphanumeric numeric display can be advantageously.

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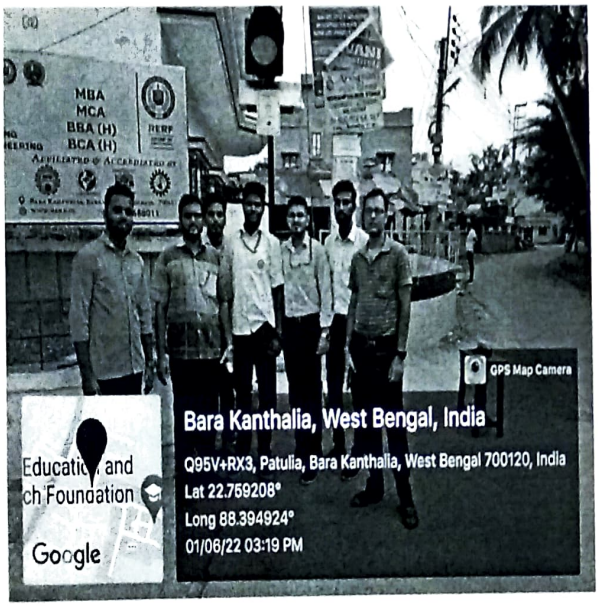
Geo-Tagged Image:



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