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Hidden Camera Destroyer using Electromagnetic Pulse

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***Abstract:** An EMP (Electro-Magnetic Pulse) has the destructive tendency to destroy any electronic equipment in its specified range, causing electronic equipment to malfunction. This makes the Electro-Magnetic Pulse one of the most devastating weapon in the world causing huge damage to any devices. Here we include all the bases of Electro-Magnetic Pulse generation & it's possible causes & effects on the nearby electronic components within its specified range capability. The current EMP shields developed can only prevent a small amounts of Electro-Magnetic Pulse. However, a perfect shield against an EMP attack of huge intensity is still not devised, although Ferro-Magnetic cases provides a protective shield against an EMP strike. However it's nearly impossible to realize every structure, building, Electronic gadget or vehicle shielded by Ferro-magnetic Cases. As it doesn't only cause inconvenience in its installation but also has a huge initial cost for its total installation, hence doesn't make it economically viable to construct.*

***Keywords:** Calibrated Devices, Defense Organizations, Electro Magnetic Pulse, Hidden Camera Destroyer, Military Warfare.*

I. INTRODUCTION

The issue of hidden cameras at public places is very paramount these days. These cameras are secretly put up in changing rooms, theatres and many other places which pose a major threat to the privacy of people. Movie shows as soon as they are released are recorded and put up for public use way before the actual legal CDs are made available in the market leading to huge losses for the actual owners who don't get their share of the benefit. This project intends to aid in maintaining the safety and security of people by developing an application with the help of which spy cameras can easily be detected and got destroyed. Also this project finds its application in courts and places where cameras are not allowed. Some people might argue that cameras are easy to find and this proposal is therefore unnecessary, but searching for covert cameras and destroying it,is not an easier job. Manually checking their presence is almost impossible, this system will find its application at such places.

II. EXISTING WORK

In the Existing system, the electromagnetic pulse is produced by a nuclear explosion. But that was since in earliest days of nuclear weapons testing but were not realized for some time. In the trail rooms, people especially can't identify the cameras which are hidden. This actually gives rise to lots of crimes and many women and children fall victims to these crimes. It is practically impossible to detect the cameras by the normal crowd.

III. PROPOSED WORK

The EMP provides the major backbone in its application in security projects. To eradicate the issues of the hidden camera and the women and children falling victims. We introduced a novel system to destroy these kind of hidden cameras in the dressing rooms. The EMP will devastate any devices which it encounters on its range. This can be used in many other applications like military warfare, smart cities.

IV. WORKING PRINCIPLE

Hidden camera works in radio frequency when it is working. The device which we have designed will be carried by a person who goes to a shopping mall or in a Hotels. This device emittes EMP with high frequency range with the help of patch antenna it finds the Hidden camera. If hidden camera is detected the frequency of EMP will be more than the previous frequency. Thus this new developed frequency suppresses the older frequency which intern makes the camera to stop its transmitting video or image. Thus the working of hidden camera is stopped.

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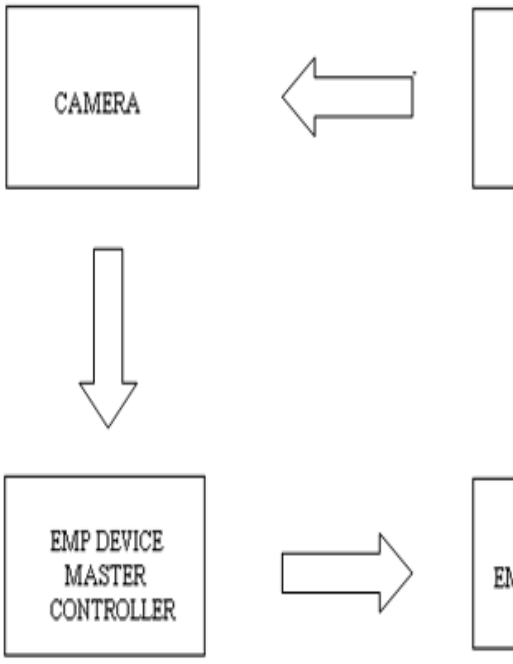

Fig. 1 Working Flow

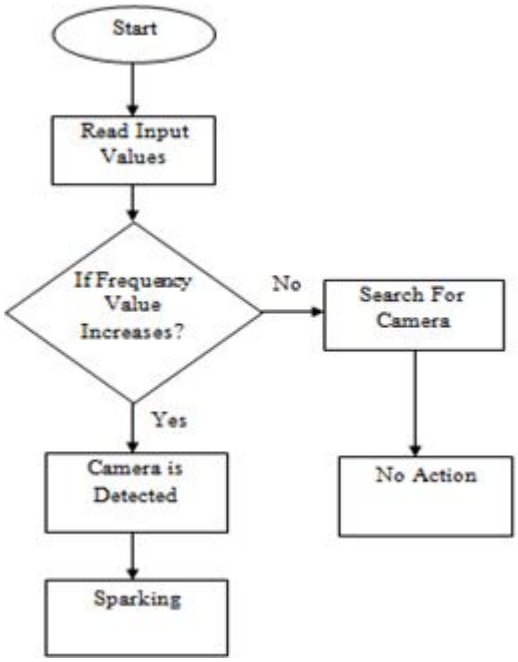

Fig. 2 Flow Chart

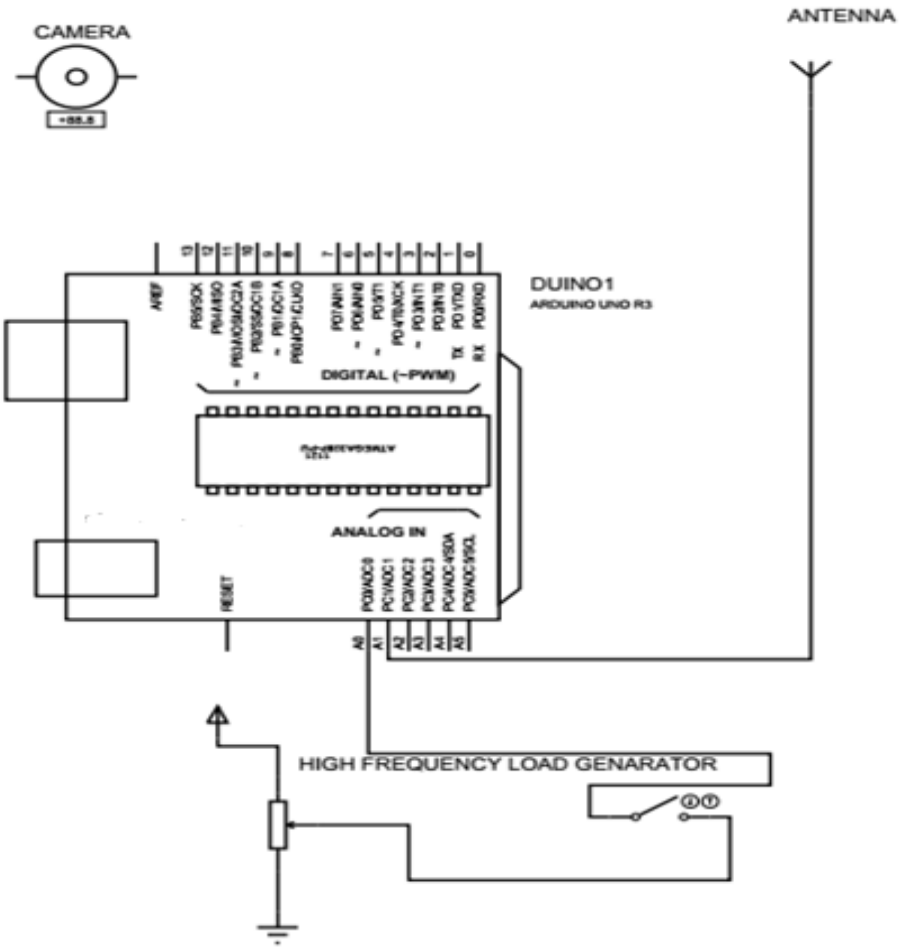

Fig.3 Circuit Diagram

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V. BLOCK DIAGRAM

The wireless camera detector consists of patch antenna which is used to sense the frequency of the hidden camera. Then that frequency is given to the microcontroller. Here ADC is used since microcontroller can understand only digital values. Then the value is sent to inverter and driver circuit through which the voltage is increased step-by-step .Step up transformer is used to improve the voltage and an high frequency is generated. Then that high frequency is given to the spark plug. Thus an spark is produced to destroy the camera.

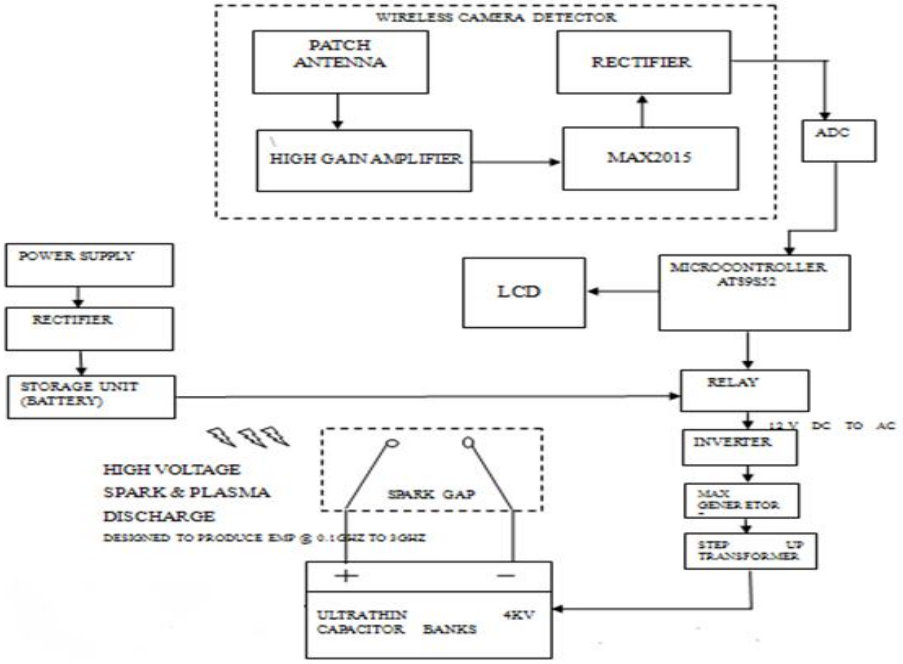
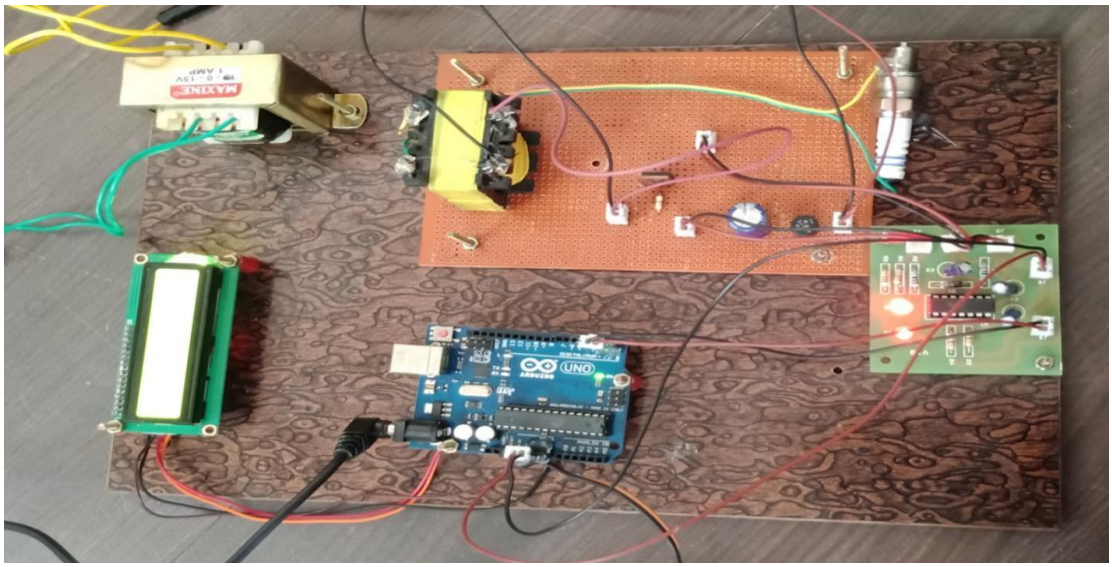


Fig. 4 Block Diagram

VI. PERFORMANCE EVALUATION

Patch antenna is used to detect the frequency of the hidden camera. Initially minimum frequency of the hidden camera is displayed on the LCD. The threshold frequency (freq=107) is fixed, if the frequency goes beyond the threshold value then the camera is detected by an LED indication.



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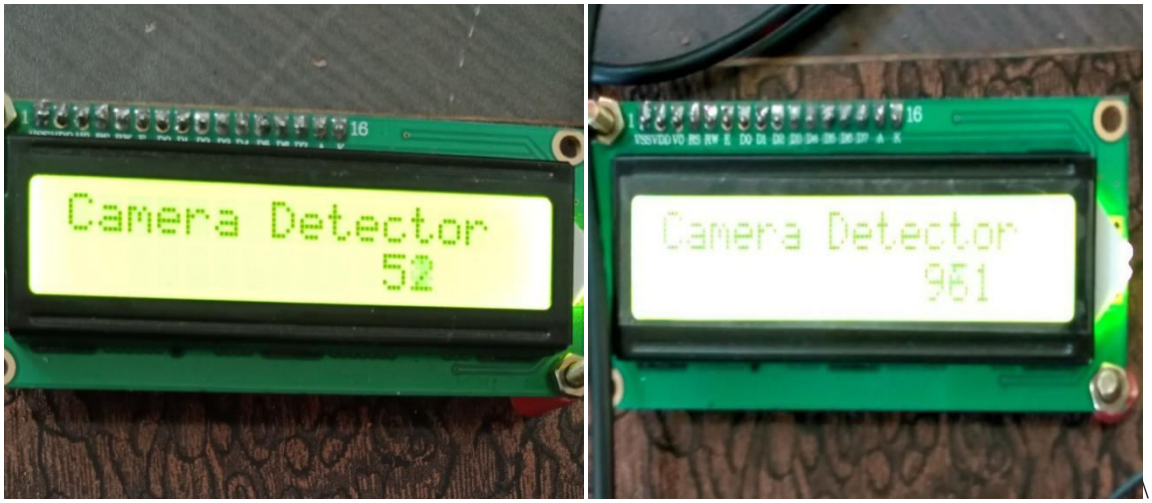

Fig. 5 Output and Result

VII. CONCLUSION

This project can be used to disable and detect hidden cameras and provides protection to all surroundings. It can prove to be essential to all environments like Trail rooms in textile shops, Smart cities, Banking sectors, Military welfare, Medical applications, etc. The device with further calibrations can be even used in multiple military and defense on sides with law and order the less power calibrated devices can be used by the civilians for personal protection, hence with this device we can bring a halt to the immoral trafficking.

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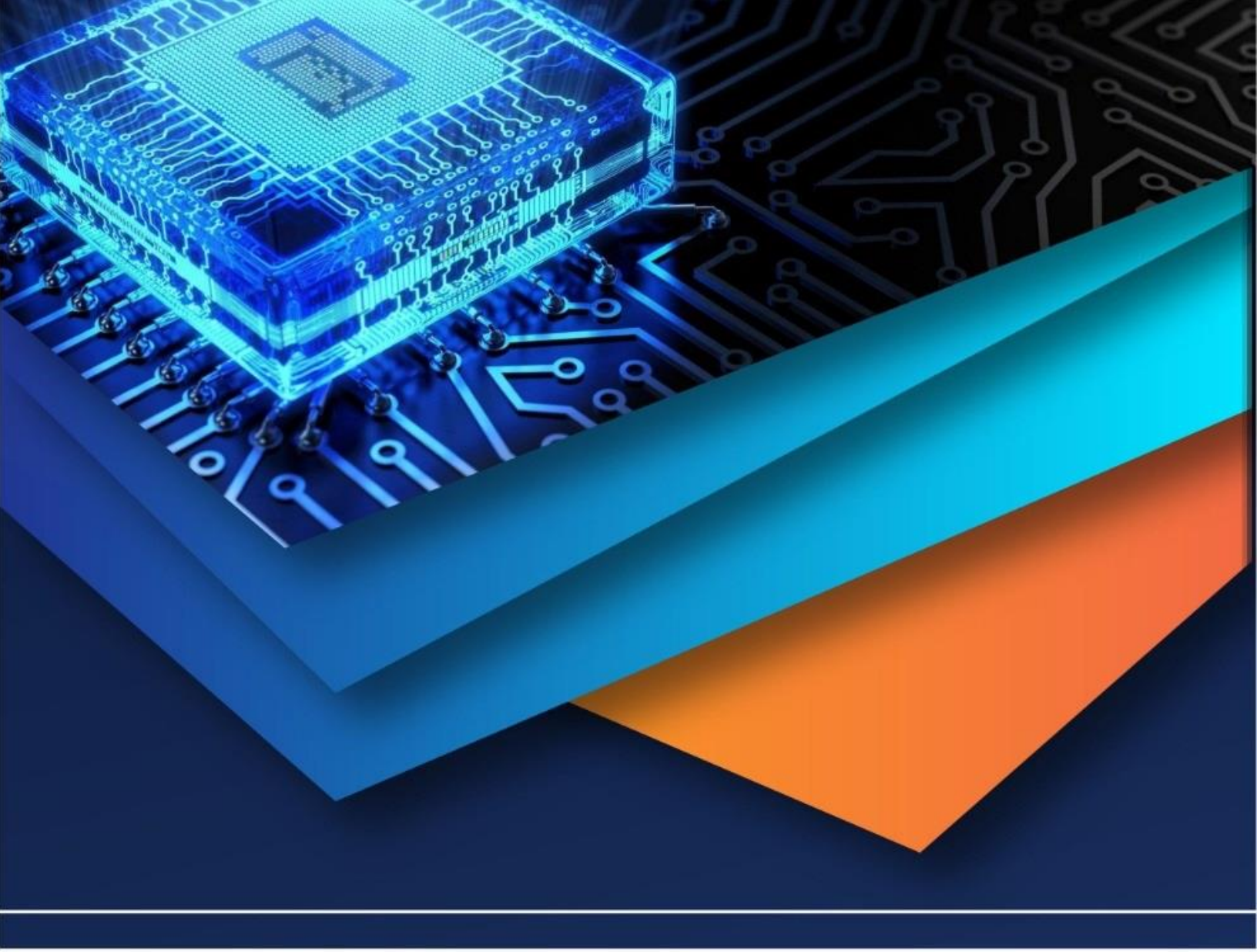

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