

## FABRICATION OF AUTOMATIC FIRING BASED ON MICROCONTROLLERS

### SYNOPSIS

The main aim of Defence is to guard the border and to ensure that no ANE, infiltrators or smuggler enters our country. Defence is deployed in very hard and sensitive areas at Border as well as for internal security duty. Keeping in view the area of responsibility given to Defence and availability of man power some times it is not at all possible to guard some vulnerable point round the clock, at that time it becomes imperative to develop an electronic system through which the weapon can be operated remotely or automatically. To overcome this problem, we have designed a unique system i.e., remote controlled / auto firing device which can be sited at such places and is capable to fire automatically and also remotely whenever any unwanted person enters an unattended point / place.

### INTRODUCTION

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Circumstances that we find ourselves in today in the field of microcontrollers had their beginning in the development of technology of integrated circuits. This development has made it possible to store hundreds of thousands of transistors in to one chip. That was a prerequisite for production of microprocessors, and the first computers were made by adding external peripherals such as memory, input lines, timers and other. Further Increasing of the volume of the package resulted in creation of integrated circuits. These integrated circuits contained both processor and peripherals. That is how the first chip containing a microcomputer or what would later be known as a microcontroller came about.

In modern days, still we are using the rifle for manual firing. There is no automatic firing rifle available in Defence and state police.

Here we have designed one model, which provides automatic firing, controlled by 89c51 micro controller and IR receiver. It is very useful for Defence and state police. Also we can use this in bank treasury. It has the following operation.

- i) Automatic firing.
- ii) Sound operated firing.
- iii) Pc based controller
- iv) It moves in 45° angle.

The system can be operated remotely within a distance of 20 meter.

- 1) It can move 22.5 degree left and 22.5 degree right (total 45 degree) from center position by remote control.
- 2) Unmanned.
- 3) It is fully electromechanical system.
- 4) Can be used to deceive the enemy during war time.
- 5) The system is very useful for fixed line firing.

- 6) It is easy to operate.
- 7) It will fire automatically, when somebody crossed by front of the rifle . It will sense the blood
- 8) It will fire when it gets sound.
- 9) It is useful in Defence.
- 10) It can be used as home security system without rifle
- 11) We can monitor the all activities in PC through spy camera which is Working without wire