

FINAL YEAR PROJECT REPORT

OBJECT TRACKING ROBOT MACHINE GUN
(OTROM)

G-1

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This is a concept project solely based on military base defense and offence purpose and to minimize the number of lives lost during wars. We intend to complete our project in time and give an eye opening demonstration.

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“THE OTROM”

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ABSTRACT

In the modern world there is a quest for power from every emerging nation. UNITED STATES OF AMERICA is currently the most powerful country and also has the largest army in the world. This is because it has been constantly upgrading its weaponry regarding defense and offense. This project is mainly based on the same purpose i.e. to construct a working model of a defense and offense mechanism which would help PAKISTAN ARMY to go one step further in modern warfare. OTROM is using object tracking material color tracking that can easily track the substance. The process is relay on the tracking of any substance in morning or evening and engages into battle in spite of loosing human life. The camera which is built on the driving part it looks out for a moveable targets in any defined area. If there is any moving subject, the camera will start chasing the object and so would the gun built with the camera on the driving area. After the camera starts to chase the substance, it will also distinguish the entity through gait recognition and check for friend or foe. The OTROM identify and choose either to shoot or not. The wireless based controlled driving part is being used because an automated driving part would cost more as it would be required to be programmed. The OTROM consists of a driving part (wireless user controlled), a wireless camera with tilt/pan motors and infrared, mounted machine gun, chip board (PCB), interfacing between camera and machine gun, wireless user control, visualization of the target. The concept of this final year project is to provide Pakistan army a new upgrade in weaponry. This working model has the ability to be applied any where during the war. It can be used as base defense by connecting RPGS', sniper, G3 or any anti aircraft gun. This project is a concept objected to lessen the number of human lives lost during the war.