

DESIGN & IMPLEMENTATION OF AN UNMANNED GROUND VEHICLE (UGV) SURVEILLANCE ROBOT

MD. AJIJUL BIN ZABBAR¹ & NAFIZ AHMED CHISTY²

¹Department of MEEE, American International University, Bangladesh American
International University, Bangladesh

²Assistance Professor, American International University, Bangladesh American
International University, Bangladesh

ABSTRACT

This project describes the design, simulation and manufacturing procedure of an Unmanned Ground Vehicle (UGV) surveillance robot which can be operated with a remote manually within a range of 600 meter in open space. The wireless controller is based on Radio Frequency. It has been designed following the design of a tank robot but it is not exactly like the traditional tank robot. It can rotate 360 degree and can tilt 180 degree and after that it can still work normally. This robot can monitor condition of the place like temperature and presence of natural gas. A camera is attached with this robot with which it can observe the condition of the site through internet. It also contain a coil gun with which it can attack enemy within a range of 10 fit and has also obstacle detector to protect itself.

KEYWORDS: Unmanned Ground Vehicle, Radio Frequency, Sensor, Coil Gun, Camera