Technofist

FABRICATION OF INTELLIGENT COMBAT ROBOT

OBJECTIVE

We cannot forget 9/11 when 101 people including nine foreigners and 14 policemen have lost their lives while about 300 people were injured in the worst terror attack seen in the country in which desperate men fired indiscriminately at people. It struck an idea that, why can't we make a robot to tackle such type of situation.

Our brave solders were Fought against the militants to free all the hostages from Mumbai hotels. For Blocking these kind of attacks we are in need of the robots to save our valuable soldiers life. In such wars these robotic camera can give very vital information to the soldiers and with that they will come to know more about the enemies and they can fight with them efficiently and effectively.

This combat robot is an radio operated, it has got two barrel turret through bullet can be fired, radio camera in synchronization with the turret can rotate up and down ,left and right up to a safe firing limit. turret and camera mechanism has been installed, which has all the function like tank, turning to any angle on its axis, moving forward and reverse turning left and right, running instantly into reverse direction.

FUNCTIONAL DESCRIPTION

This robot is radio operated self-powered, and has all the controls like a normal car. A laser gun has been installed on it, so that it can fire on enemy remotely when required; this is not possible until a wireless camera is installed.

Wireless camera will send real time video and audio signals which could be seen on a remote monitor and action can be taken accordingly by sending the command from the remote. It can silently enter into enemy area and send us all the information through its' tiny camera eyes. It is designed for, fighting as well as suicide attack.

Heart of our robot is INTEL most power family of microcontroller 8051,we are using at89c2051 Two microcontrollers ic2 is first microcontroller which acts as master controller ,decodes all the commands received from the transmitter and is responsible for executing all the commands received from the remote and also generating PWM pulses for the speed control . lD293 motor driver IC which drives two motors M1 and M2.these two motors are vehicle driver motors.

.

BASED ON THE INPUT CODES MASTER WILL EXECUTE THE COMMAND TO

a. moves in forward direction

b. moves in reverse direction,

c. speed controls in both the direction

d. it can even turn left or right while moving forward or in reverse direction.

e. Instant reverse or forward running without stopping

f.   We have also added head light, back light and Turing lights to left a right. These lights automatically come on while robot is in Movement.