

# **CELL PHONE OPERATED SEARCH VEHICLE WITH WIRELESS VIDEO CAMERA**

## **ABSTRACT**

The search vehicle that is equipped with wire less video monitoring system can be controlled through any mobile phone based on the concept of video analyzing. Generally Infrared or RF based remote controlled technology is used for controlling the Robots, but hear mobile phone is used for controlling the vehicle, that moves in all directions depending up on the commands received through another mobile phone. The wireless video camera, which is arranged over the vehicle, and which is designed to rotate for capturing the live video of surrounding area is also controlled through the same mobile. The receiving part of the project work, from where the vehicle is controlled through cell phone is equipped with a small TV set along with it's video receiver. This technology dominates the other remote controlled systems because of the un-limited range.

To prove the concept practically, one mobile phone is supposed to be attached to the robot and it is controlled by another mobile phone. After establishing a communication link between two mobiles, the caller mobile key pad numbers can be activated to generate different tone frequencies, and at receiving side with the help of DTMF (Duel Tone Multy Frequency) decoder chip, different binary codes are produced corresponding to the button pressed at transmitting side. The out put of this DTMF decoder is fed to the microcontroller and depending up on the binary code produced by DTMF chip, the controller is programmed to control the motors independently. Three DC motors with reduction gear mechanism are used to drive the complete mechanical transmission section, depending up on the control signals, the vehicle moves in all directions and camera is also controlled independently.

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## BLOCK DIAGRAM

