

TOUCH SCREEN CONTROLLED SURVEILLANCE ROBOT

Nowadays, the number of disasters occurred and the people affected have been increased. Every day, news-papers report new disasters around the world. Immediately after the occurrence of a disaster, the first responders go to the affected region to rescue people and solve eventual problems. These areas offer many dangers to the rescue team. So it is very important to first verify the safety of the environment before sending the rescue team inside the affected area. So intelligent robots equipped with advanced sensors, cameras and integrating wireless networks are attracting attention from researchers and rescuers all around the world.

The advent of new high-speed technology and the growing computer capacity provided realistic opportunity for new robot controls and realization of new methods of control theory. This technical improvement together with the need for high performance robots created faster, more accurate and more intelligent robots using new robots control devices, new drives and advanced control algorithms.

The main goal of this project is that the robot can move on both even and uneven surface areas like stairs, rocky surfaces etc. For that we are using track wheels. The touch screen controlled robot is an embedded system which is used to know what happening in that place by using a camera. This is an automatic monitoring system for controlling the camera direction intellectual using a touch panel. We can change the direction of camera by using the control buttons. Zigbee technology is used so that we can increase the communication between the transmitter and receiver. The microcontrollers used in the project are programmed using embedded C language.

By using the camera, it will scan the surroundings and the video will be transmitted to the receiver through AV transmitter. At the receiver, the video will be displayed on the screen.