

AUTOMATED TRAILING CART

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ABSTRACT

Nowadays technologies developed so well as much influence in human daily life. Things like trailing cart or commonly known as trailer can be improve by apply those technologies. Automated Trailing Cart is designed to more efficiency, reliable, aiding and replacing human work in terms of logistic. The new type trailing cart can be apply into shopping complex, golf club even in heavy industry that need a cart to carry goods, people or some raw material. Hence people no need to work out, which the cart will automate follow the hand held signal device hold by all the time. Whenever there is no force need to apply to the cart manually people can do other thing at the same time like phone talk, carry other item by free hands. Eventually sort of burden is lesser and it could be say that time and energy saving purpose is achieve.

Another advantage that is very obvious is those mechanical and electronic being has no distraction whereas humans are tend to be emotional. The command to do the task will be given wireless and the cart will move control by a programmed controller. The receiver should seek; allocate the position and direction of the signal source continuously when the system is beginning.

The ultrasonic sensor plays the main component in this project with PIC16F877A as the main controller. The cart will maintain a certain distance by forward or backward with a signal device that will lead the receiver seek with all the time. The prototype will also be designed as it reduces speed when travel downs the slope and ramp up speed when moving up a slope with tilt angle about 25 Degree, which it could be define as the cart should have a constant speed when doing the task all the time.