

## IR Follower Cart

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**Abstract**---The IR Human Follower Cart is made by using a microcontroller STM32. This trolley can be used in industries for moving goods from one place to another. This can be done by giving one man the transmitter and the receiver is on the trolley. This receiver and transmitters are the IR sensors. We can also put the transmitter at the back of first transmitter and then a second trolley can follow the first one. By this way we can form a queue of trolley and move the goods where we want by the help of single man just for guiding the trolley without doing a laborious job.

**Keywords:** Human follower trolley, Microcontroller interfacing, smart cart.

### I. INTRODUCTION

This trolley can be used in industries for moving goods from one place to another. This can be done by giving one man the transmitter and the receiver is on the trolley. This receiver and transmitters are the IR sensors. We can also put the transmitter at the back of first transmitter and then a second trolley can follow the first one. By this way we can form a queue of trolley and move the goods where we want by the help of single man just for guiding the trolley without doing a laborious job. This will also save the cost of labor.

### II. DESCRIPTION

Most modern carts are made of metal or a combination of metal and plastic and have been designed to nest within each other in a line to facilitate collecting and moving many at one time and also to save on storage space. The carts can come in many sizes, with larger ones able to carry a child. There are also specialized carts designed for two children, and electric mobility scooters with baskets designed for disabled customers.

Retail .This trolley can be used in industries for moving goods from one place to another. This can be done by giving one man the transmitter and the receiver is on the trolley. This receiver and transmitters are the IR sensors. We can also put the transmitter at the back of first transmitter and then a second trolley can follow the first one. By this way we can form a queue of trolley and move the goods where we want by the help of single man just for guiding the trolley without doing a laborious job.

We are going to interface with microcontroller to Motor and Display and we also use a tracker in this cart .So, security purpose manager also show transfer process of the goods in the computer screen. In this system transmitter is used to transmit the signal. A transmitter is given to Any Customer and Transmitter is Moves According to Customer. And receiver receives this signal and receiver is connected to microcontroller and motor driver is and motor. Accordingly to Moving if the transmitter the Recover Mover. Receiver is connected with Trolley so trolley also

moves and Barcode reader for Cost Estimating for Customer.

### III. BLOCK DIAGRAM OF PROJECT

As Show In the Fig: 1 There Is an Infrared Transmitter Which Is Shown In the Below Circuit

Diagram. The Infrared Transmitter Is the Is Made from a Single 555 Timer IC and there is at the receiver side the TSOP Series receiver. There Is Microcontroller Is used to control the all devices. There Is the Led Indication LEDs Is also Connect with the Microcontroller. For the Following the Trolley there is the L293D Motor Driver IC Is Used to control The Dc Motor.

We are going to interface with microcontroller to Motor, which Helps Trolley Can follows to worker. In this system transmitter is used to transmit the signal. A transmitter is given to any worker and Transmitter is Moves According to worker. And receiver receives this signal and receiver is connected to microcontroller and motor driver is and motor. According to Moving if the transmitter the Receiver moves. Receiver is connected with Trolley so trolley also moves.

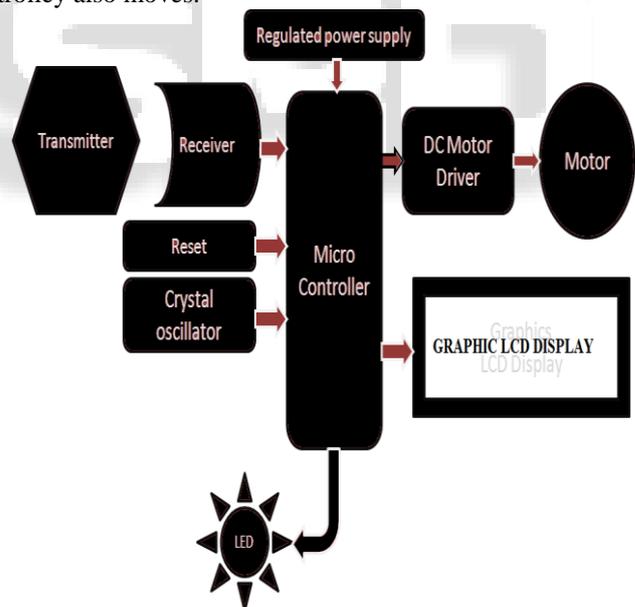


Fig.1: Block diagram of project

### IV. LIST OF COMPONENT OF PROJECT

#### A. Hardware:

- IR Transmitter
- IR Receiver
- Microcontroller
- L293D motor driver IC
- LCD Display

*B. Software:*

- KeilVision4.0
- Embedded C

V. CONCLUSION

As an engineer we should try to help the society by our technical knowledge. So, we decided to make the Human follower cart so as to help in the. This smart IR cart will also help the retailers to gain the attraction of customer.

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