

ELECTRONIC SHOOTING DEVICE

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ABSTRACT

Today in the market there is a famous team sport or a group activity games call Laser tag. Where the games is about getting score buy tagging your opponent with a laser gun where it can be play in both indoor and outdoor.

This project is about the same as the function system of the laser tag. This electronic shooting device basically is divided into three parts; one is the transmitter circuit (Gun), receiver circuit (Target) and the display circuit. The transmitter circuit is a timer circuit that connected to a laser pointer where able to ON for 1 second and OFF for 3 seconds when the trigger of the gun is been pull, but if the user pull the trigger fast then the laser will keep blink.

For the receiver circuit is a combination of the 7 LDR (Light Dependent Resistor), Timer circuit, 7 LED and counter circuit. Where the LDR (targets) with the LED is turn ON in sequence by the counter circuit according to the speed of the of the timer circuit provide.

The shooting range of this project can go up to 4 meters. And the system are control by a microcontroller where the score of the target hit are able to display in the 16x2 LCD screen in the duration of 30 seconds. The microcontroller are able to start system of countdown for 30 seconds by a button and show the time left in the LCD screen, once the countdown is finish then the total score are display in the LCD screen then the microcontroller will restart the system.