

ABSTRACT

Shooting is a competitive and measured sport that requires proficiency in aiming and speed, both using firearms and air guns, hunting is also included in shooting sports. Shooting sports are divided into several categories based on the weapons used, namely bullets, targets, and the distance from the shooter to the target. To be more specific, there are 2 types of shooting sports with wind weapons, namely PERBAKIN (Indonesian Shooting Association) for the national level and ISSF (International Shooting Sport Federation) for the international level. With the development of the era, the world of shooting sports has developed rapidly both in terms of technology in the weapons used and the targets used.

In Indonesia, many areas still use paper as a target and are assessed manually by the human eye, which causes inaccuracy and takes a long time in determining the result of the shot.

Therefore, electronic scoring targets can facilitate, speed up, and reduce costs in the assessment of shot results. By using software that is connected to the infrared sensor as a tool to get the value of the shot. With infrared that relies on light as an assessor, it will maximize the level of accuracy without being disturbed by the movement of the wind made by passing bullets. And software that will display the coordinates and the value obtained.

In this study, an electronic system was designed that will help improve athlete performance. This electronic scoring system uses a raspi camera that will capture light from a laser mounted on the rifle. The program showing an image of the target along with the movement of the laser and the coordinates taken from the movement of the laser. This scoring system has been experimented with 10 athletes by comparing the results of the points obtained with traditional scoring methods and electronic systems. In this experiment, the results of the increase in the average score of athletes from the lowest score of 2.6 to the highest 6.9 points.

Keywords: Scoring Target, International Shooting Federation, Mikrokontroler.