

Electro Boxing Pad

Duranga Senanayake^{1(*)}, Thushara Ekanayake¹

06 Nov.

ET27

¹*Department of Science and Technology, Faculty of Applied Science, Uva Wellasa University of Sri Lanka*

(*) Email: durangadbs@gmail.com

Boxing has become one of the most popular sports in every part of the world. The important factors of boxing include the force and power of the punch with no proper mechanism to measure them. Currently, these factors are estimated by the experience of the coach. Due to lack of a proper mechanism to measure these factors, it has become difficult for the players to measure their progress and to have an idea about their development. "Electro boxing pad" is a device, which enables to measure the force of the punch. Load cells in the "Electro boxing pad" are used to measure the force and the indicators display it on a digital screen in kilograms. Arduino technology is used to process the readings. In addition to that, it provides the strike rate, i.e. the number of strikes per minute, which is also displayed on the digital screen. The "Electro boxing pad" helps the players to evaluate their development gained during the practice sessions. This device can measure the punch force up to 50 kg and can indicate within 1 second. It is targeted to develop this device to measure up to 200 kg of punch force in future. This device is portable, small and low cost.

Keywords: Boxing pad, Boxing, punch force, Strike ratio