

Analysis of Surface Electromyography for On-Off Control

Abstract

Myogram on-and-off controller is important for improving or assisting the elderly people. One of the most important aspects of the controller development is to determine the on and off time with respect to the body movement. In this project, high accuracy signal filtering, high gain amplifier, signal converter, microcontroller and electrodes are used for circuit simulation and development to obtain muscle signal (Electromyogram). Precision rectifier is used to solve the ordinary semiconductor problem to avoid signal block. To ensure the user-friendliness in the development of this device, non-invasive electrodes are used in this project instead of invasive electrodes.