

Low-Cost and Portable Surface Electromyography (SEMG) Acquisition System

TECHNOLOGY DESCRIPTION

This technology is a technique to detect, collect and monitor the myoelectric signal through muscles by interfacing mechanism between the electrode and the computer for monitoring and recording muscle contraction activities.

TECHNOLOGY FEATURES

This technology has 6 Channels and easily portable. The system is familiar with LabVIEW and MATLAB. It has an adjustable gain and allows the selection between adhesive and dry electrodes. The system is anti-interference and allows wire transmission. The invention produces lower noise with the high and accurate data-acquisition system which can be used for various research in surface Electromyography (SEMG) area.

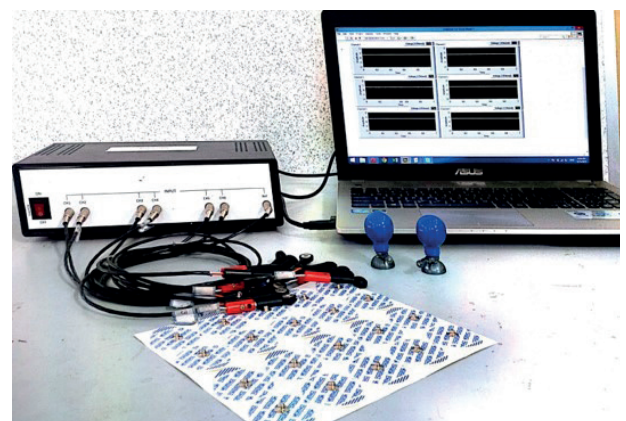
ADVANTAGES

- Compatible with different electrode
- Has accurate two different gain of amplification
- Portable and light weight system
- Low Cost

INDUSTRY OVERVIEW

Prospect Industry: Healthcare/Clinical/Research Laboratory and Medical Industry

Surface Electromyography (SEMG) is a technique to detect, collect and monitor the myoelectric signal through muscles. By commercializing the product, the target price (RM4000-5000) has reasonable benefit and the total price is still at least 3 times lower than other products. Moreover, SEMG Signal Acquisition has been used in many areas and countries. Therefore, the lower price and many significant advantages of the product can be a cause to find foreign market to export. Since the product can be used in many areas such as clinical, research laboratory and robotic, there is potential to produce and export not only in Malaysia but also all over the world.



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