

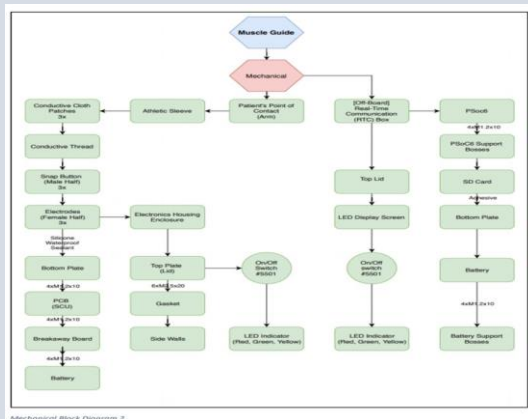
# Notorious EMG The Muscle Guide

## The Problem:

When it comes to physical therapy and athletic training, the line between "just enough" and "too much" is often blurred, as the trainer has no reliable way of gauging when this threshold is crossed, other than their client, occasionally leading to injury.

## Our Solution:

The Muscle Guide will increase the effectiveness of athletic-conditioning workouts. The device will assist athletes in targeting areas that are experiencing muscle fatigue, and this will decrease the amount of time spent unnecessarily training fully-conditioned muscle groups.



## Our Device:

A compact, wearable device comprised of conductive fabric and electrodes for surface electromyography (SEMG) detection. All detection, filtering, amplification, and transmission circuitry will be housed in a wearable sleeve enclosure.



## How it Works:

Detection, amplification, filtering, and wireless transmission via Bluetooth of the user's electrical muscle activity will take place on the user's arm:

- A Real-Time Communications (RTC) box will receive, process, and report results graphically
- Calculate the power output and muscle fatigue factor of user in real time
- Micro-SD storage will be provided for the purpose of historical analysis to better improve the user's workout

