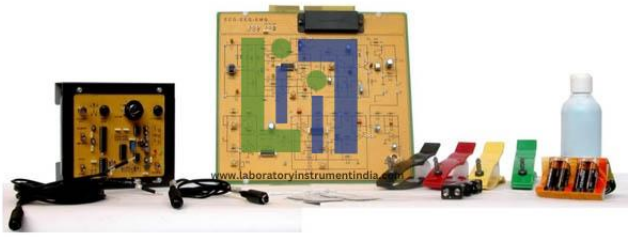
Email : sales@laboratoryinstrumentindia.com

Product Name :	**Product Code :**
ECG EEG EMG	LBNY-0005-12400036



Description :

The measurement of the bio electrical phenomena is, therefore, used to learn the electrochemical activity of such tissues. The most widely used bio electrical signals, such as the electro cardiogram, the electroencephalogram and the electromiogram, have a very low amplitude and are generated by sources that have a high internal impedance. In this course we will study first of all the general specifications of the systems for the measurement of bio electrical signals and subsequently the characteristics of some special systems. This course comprises a further instrument, the ECG Simulator, which is mandatory to provide power supply to the circuit and provides a simulated ECG signal for performing experimental activity. The bio-electrical potentials are currently recorded as a routine in several specialities of the modern clinical practice. Such potentials are the result of an electrochemical activity of a class of cells, named excitable cells that form the nervous, muscular and glandular tissues.

Theoretical topics:
The muscles and the measurement of their electrical activity
The brain and the measurement of its electrical activity
The bio-potentials and their measurement
The heart and the measurement of its electrical activity

Circuit blocks:
Electroencephalograph: to record the cerebral electrical activity
Electromiograph: to record the electrical activity of the muscles and of the relevant nervous fibres
Electrocardiograph: to record the potentials that are generated on the surface of the body during the process of stimulating the cardiac musculature.

Technical Specification :

ECG Simulator

ECG Simulator is mandatory when an actual ECG measurement is performed on a patient. In fact the external block provides a multiple switching which permits to select the correct LEAD when electrodes are placed on the patient. This is an external block which is provided together with .ECG Simulator provides the power supply to the ECG EEG EMG panel inorder to meet the requirements for patient safety. A calibration fixed level of 1 mV can be selected to perform ECG calibration. Moreover a simulated ECG signal is generated with amplitude of 4 mV pp. ECG signals are available with two frequency rates, such as 60 or 120 bpm (beats per minute).