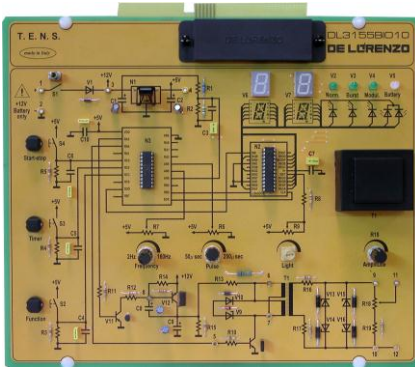




## T.E.N.S.



**DL 3155BIO10**

T.E.N.S., or Transcutaneous Electrical Nerves Stimulation, is a particular low frequency wave form that, once applied through electrodes in the area of the cutaneous projection of the pain (triggers area), allows an almost immediate and long-lasting reduction of the painful sensibility. For this reason it is an effective, safe and innocuous therapy for the treatment of all the muscle and skeleton pains, neuralgias, rheumatic pains, articular pains, headaches, lumbar pains, sciatic pains and other affections.

### Theoretical topics:

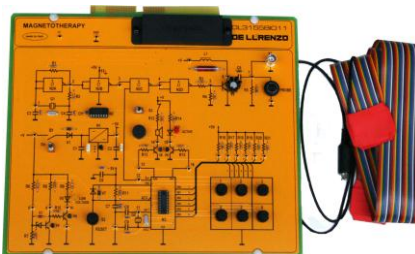
- T.E.N.S. technology
- Physical principles
- The importance of the frequency of the pulses
- Gate control theory
- Theory of releasing the endorphins
- Applications for T.E.N.S.

### Circuit blocks:

- Mechanism through which electrical pulses are able to perform an analgesic effect
- Typical circuit that is used in the transcutaneous electrical nervous stimulation

This board does not substitute the medical device under study. The results of the experiments have no medical value. They are just for demonstration purposes.

## MAGNETOTHERAPY



**DL 3155BIO11**

Low frequency and low intensity magnetic fields and high frequency electromagnetic fields, where the magnetic component is almost equal to the electrical component, act on the whole body through an effect of substitution or activation of the missing electrical currents. Consequently, they cause a fast regeneration of the bony and cutaneous tissues and considerably increase the immune defenses of the body.

### Theoretical topics:

- Outline of electromagnetism
- The electromagnetism in the medical practice
- The magnetotherapy
- Equipment for magnetotherapy

### Circuit blocks:

- Main functions of the magneto therapy
- Typical circuit of a magneto therapy

This board does not substitute the medical device under study. The results of the experiments have no medical value. They are just for demonstration purposes.