

Hi Phreaks.

## A Few Relatively Simple "TENS" Circuits

Created in 2002. Revised in Mar 2006

I initially designed these circuits for a friend who had muscle problems and while he says they did work well for him,

**I "DO NOT" RECOMMEND THE USE  
OF THESE DEVICES BY ANYONE FOR ANY REASON. I ACCEPT NO  
RESPONSIBILITY OR LIABILITY FROM THERE ASSEMBLY OR USE IN  
ANYWAY.**

**These circuit are to be used at your own risk And I do not imply any medical  
benefit can be obtained from their use.**

**GET A DOCTORS ADVICE, BEFORE CONSIDERING USING THESE  
DEVICES!**

### [Circuits 1 and 2.](#)

"T1" in Circuits "1 & 2" is a small audio transformer with the 8 ohm impedance winding connected to the Fet and the larger winding connected to the probe and ground. The Turns ratio of the transformer determines voltage output.

A small 6 or 12 volt power transformer can also be used.

#### Optional Changes:

A transistor such as a 2N3055 can be substituted for the "FET" that is used in Circuits "1 & 2". The Base connects to the Gate, the Collector to the Drain, and the Emitter to the Source. This will result in a lower power output.

## **Circuit 3, This Low Voltage C-mos circuit.**

Is a very low powered, low voltage version, using a choke.

No transformer. It will light up an NE-2 bulb connected to the output. Low powered versions of this type of device are used by some Accupuncturists and instead of pads, the signal is applied to the needles, giving a very localized effect. Various timing capacitors and resistors can be used for different effects.

## **Chemelec**

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