Using the Coil Machine for Low Frequencies

Your coil machine can make the coil's magnetic field change the pole positions (oscillate) from about 20 times per second (20 Hertz) to about 2200 Hertz. There are 3 things that are mathematically balanced in a coil machine – the frequency you want to run, the size of the coil (its inductance), and the amount of capacitance required to run your frequency. The number and sizes of the capacitors in your coil machine are limited to being balanced with the frequencies from about 230Hz to about 2200Hz but not down to 20Hz. To do this range of frequencies you must turn on certain toggle switches on your oak cabinet that correspond to the frequency you choose. To run frequencies from 230Hz down to 20Hz would require much larger capacitors than is feasible from a cost perspective and from having enough space in the cabinet for such large capacitors. To get around this problem your machine is equipped with the A switch.

Whenever you want to run a frequency from 20 to 230Hz, turn on the A switch only – all other switches should be in the off position (down). Enter the frequency you want into the frequency generator and turn on the amplifier as you have done before and your coil will be oscillating at the frequency you chose.

Using the Coil Machine for High Frequencies

The size of your wire coil controls the highest frequency that you can run with your coil machine. A large coil (more wire) will become hot more quickly when you run a high frequency such at 2112Hz than a smaller coil will. The solution to running frequencies as high as 4200Hz is to have a coil that is considerably smaller with an inductance in the 4.0mH to 5.0mH range. The unit mH refers to micro Henries, the unit for inductance. The coil that is most commonly used is in the 7.0 to 8.0 range since most lyme frequencies are fairly low with most being between 300Hz and 1000Hz.