

According to: "ON THEREMIN SENSITIVITY "by Fred Nachbaur

| Design description | Induct.L uH | Tank C pF | Center F kHz | dF/dC kHz/pF |
|---------------------|----------------|--------------|-----------------|-----------------|
| Clara Rockmore | 1165 | 750 | 170.266 | -0.114 |
| SWTP ("TECI") max L | 300 | 410 | 453.803 | -0.553 |
| SWTP ("TECI") min L | 150 | 410 | 641.775 | -0.783 |
| Theremax max L | 350 | 120 | 776.597 | -3.236 |
| Theremax min L | 180 | 120 | 1082.913 | -4.512 |
| Doug Forbes C=150 | 500 | 150 | 581.446 | -1.938 |
| Doug Forbes C=100 | 500 | 100 | 711.763 | -3.559 |
| "Theoretical" 1 | 200 | 200 | 796.178 | -1.990 |
| "Theoretical" 2 | 100 | 400 | 796.178 | -0.995 |

According to OpenTheremin notes: "The performance of a circuit is hard to predict. Calculations do not always confirm what is common sense, among Theremins. Measurements do not always confirm calculations... "

So I measured our CapSensorHs and added two lines to the table:

| Design description | Induct.L uH | Tank C pF | Center F kHz | dF/dC kHz/pF |
|--------------------|----------------|--------------|-----------------|--|
| OpenThereminUno | 1000 | 150 | 500 | -1.370 |
| CapSensorHs | 330 | 15 | 2500 | 2.288 - 2.210 MHz = -78 KHz/pF Not theoretic, really measured! |

Here you can see a video demonstrating the CapSensor, over 70 KHz/pF sensitivity. That's more than 50 times the OpenTheremin sensitivity, and also considering the base frequencies, this is over 10 times more.

<http://www.youtube.com/watch?v=5cOPsWWpSJs&list=UU88u9567qRI2RiAq4Dr6Ydw>

That's why we can work without heterodyning and the associated instability and temperature problems.