TouchDescription:

TouchTone is a feedback amplifier system using all six inverters (inverting amplifiers) of a CMOS 4049 chip. Use the inverters in combined digital/analog mode. Two pairs are used as variable frequency oscillators (lower and high frequencies) and third pair is used in mixed amplifying/ filtering/ oscillating (feedback) mode to play around with the existing pads all over the system.

Combining touchable pads in various manners can bring out interesting - very complex results. The “touchables” also give name to this synthesizer - “Touchable Anton” or just DotičniTone (TouchTone)*

LINKS:
www.cirkulacija2.org/
www.3via.org/records/
www.ljudmila.org
wiki.ljudmila.org/Theremidi_Orchestra
www.dirtyelectronics.org

touchtone 4049

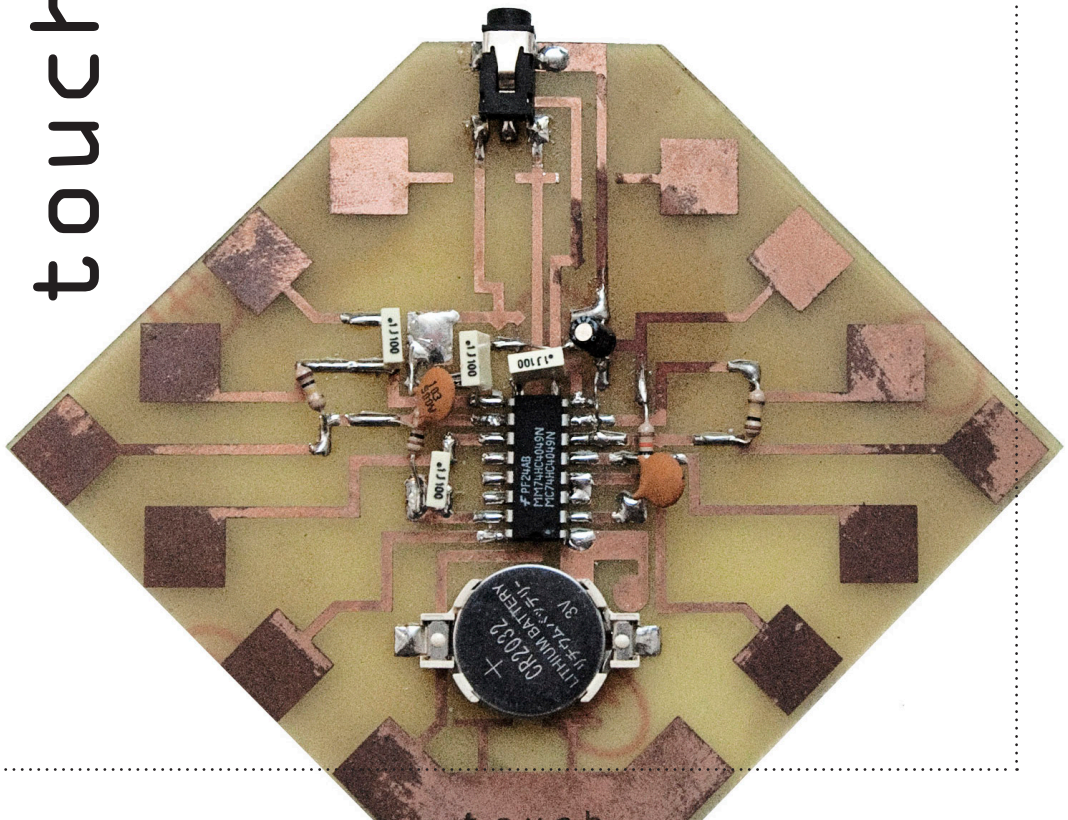
Theremidi Orchestra:

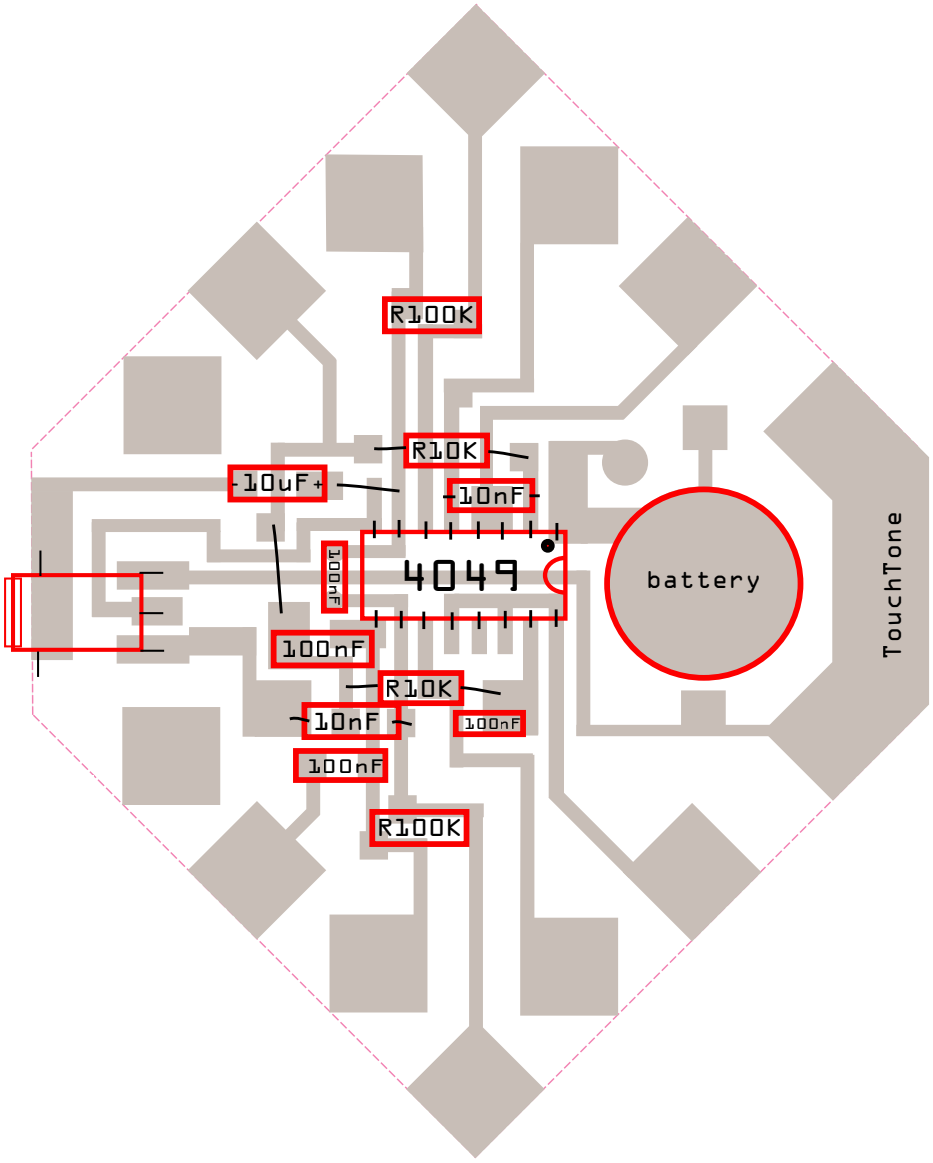
“touchTone 4049 // Finger-Synth

TouchTone is a feedback amplifier system using all six inverters (inverting amplifiers) of the CMOS 4049 chip - said in simple words - TouchTone is a simple noise synth to be played directly with your fingers.

The board was insipired by Dirty Electronics and was developed by Borut Savski, Luka Frelih and Saša Spačal.”

Credits: Cirkulacija 2 // Trivia records // Ljudmila // Theremidi Orchestra // Dirty Electronics





touchTone 4049

List of components:

2x 10KΩ resistor // Lines: brown-black-orange-gold
2x 100KΩ resistor // Lines: brown-black-yellow-gold
4 x 100 nF capacitor // yellow cubes
2 x 10nF capacitor // look like gray cubes
1 x 10 uF electrolytic capacitor
1x HEF(CD)4049 chip - six invertors' CMOS chip (3 to 18 V) // you could also use 74HC4049 - the same chip as high speed CMOS version (3 to 5V)
1 x Female audio socket
1 x 3V battery socket

1 x TouchTone 4049 PCB board - Made in Slovenia with love and poor man's SMD technology ♥

You will also need soldering iron, some tools, soldering station and 3V (cr2032) battery.

HINTS: Solder the chip first and be careful that you put it in the right position. Be aware of the half-circle on the chip - it marks the first leg. Some of the components are polarised (e.i. LED and electrolytic capacitor) - that means you need to solder them in a specific orientation - follow the pluses (+) and minuses (-) on the picture.