

Electronics behind V2K



First read the summary. Otherwise, you might find it confusing.

There are 2 types of voice to skull:

1. The pulsed microwave method: every time the voice wave goes from positive to negative we generate a microwave pulse. For every pulse the brain hears a click. All these clicks are a form of digital audio. This goes through walls.
2. The silent sound method: a steady tone is frequency modulated with a voice wave. The ear hears hissing, but the brain hears a voice. This is a form of analog audio. This doesn't go through walls.

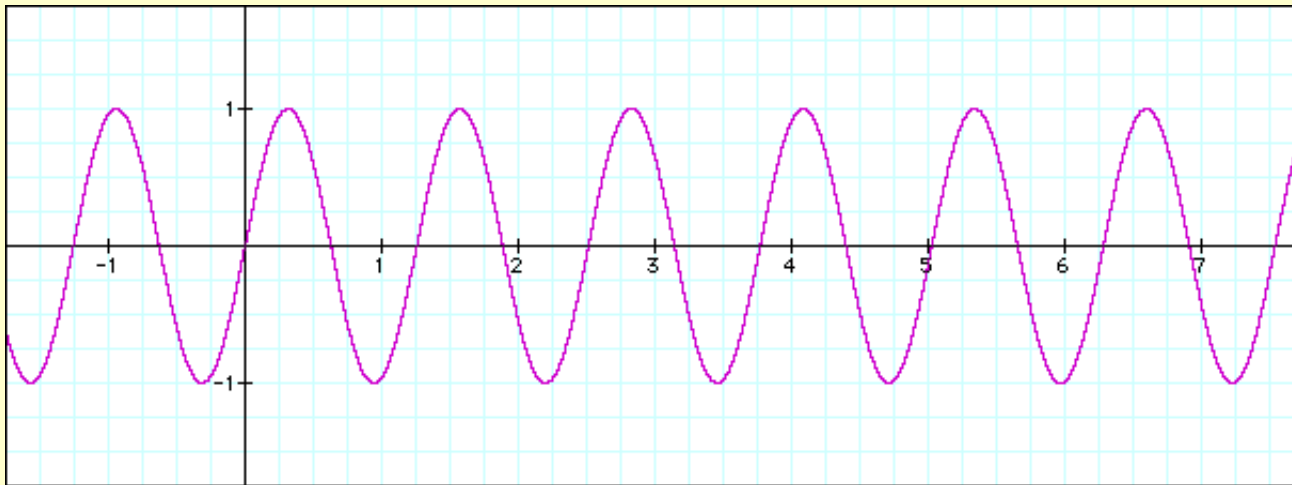
Then we can combine the 2 methods: we use the output of method 2 as the input of method 1. This goes through walls.

1. Pulsed microwave method

1.1. Radio waves versus microwaves

1.1.1 Radio waves

Radio and TV signals have a smooth wave form that we call sine wave.



Such a signal can't penetrate a nerve cell. The wall of a nerve cell has a small electric current that stops the signal.

1.1.2 Microwaves

Microwaves are short strong pulses.

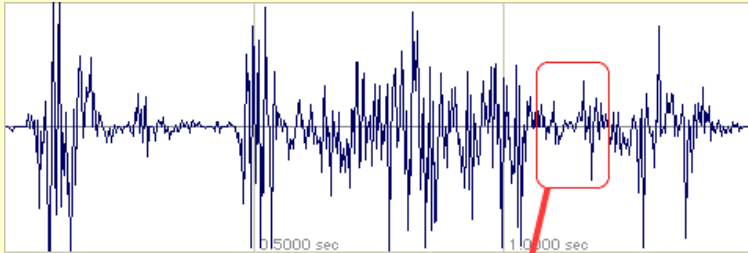


Such a signal can penetrate a nerve cell. This was made public in 1962 by Dr. Allan Frey from Cornell University in New York.

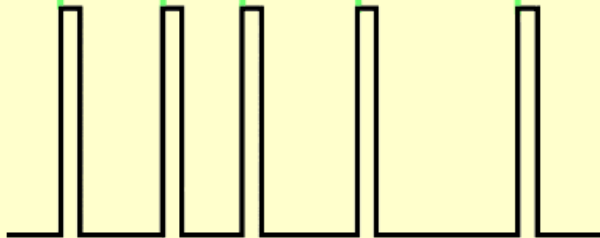
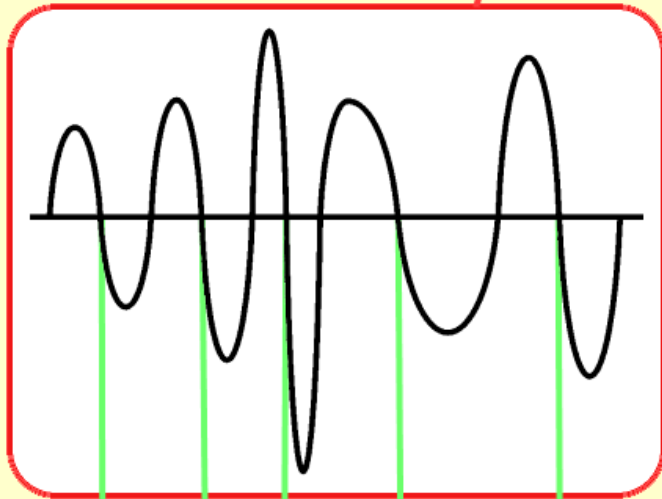
1.2. Voice conversion to pulses

Dr. Joseph Sharp demonstrated microwave voice to skull for the first time in 1973.

Every time the sine wave goes from positive to negative, a microwave pulse is generated.



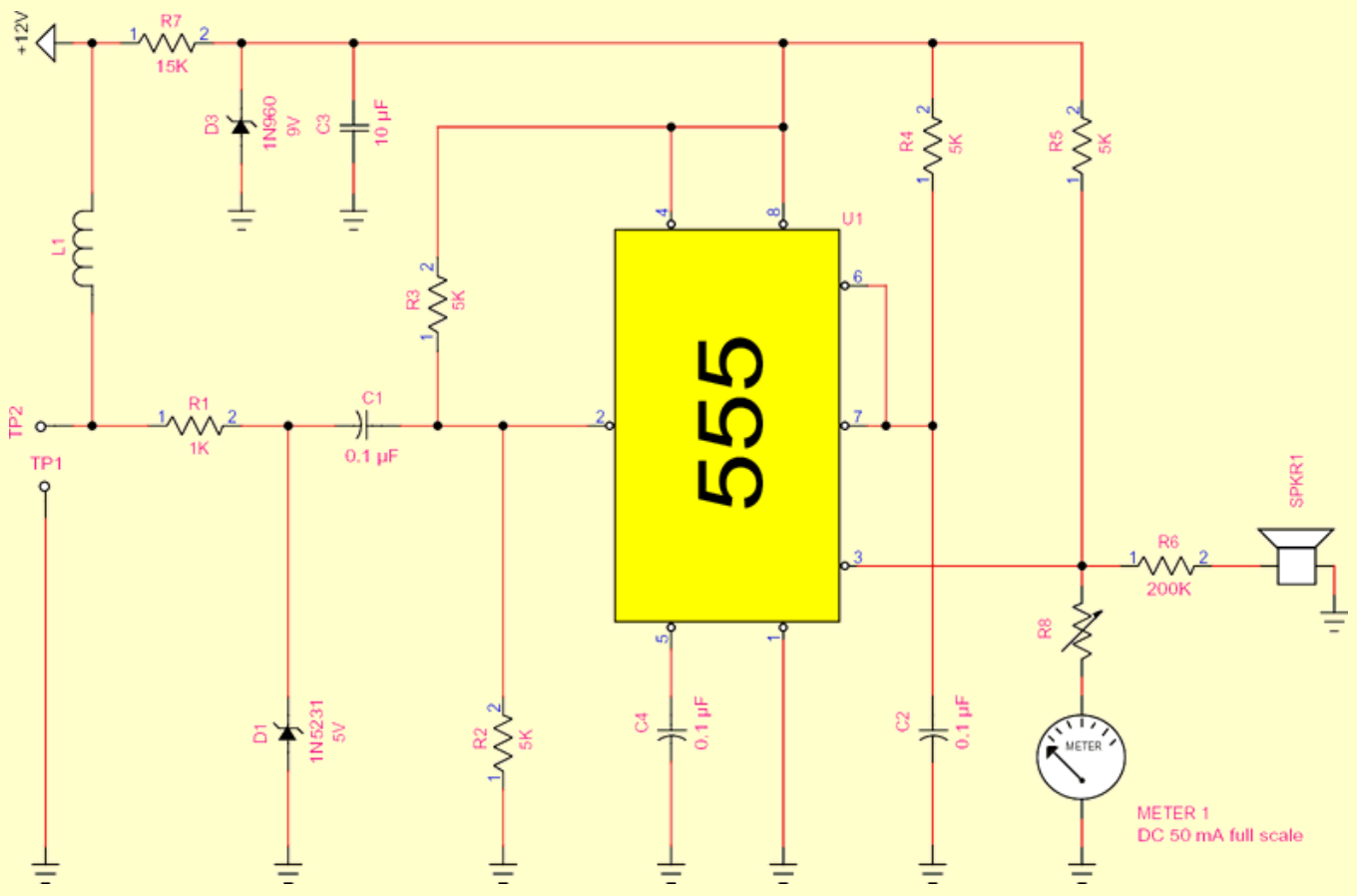
Voice waveform



Radar-like microwave pulses

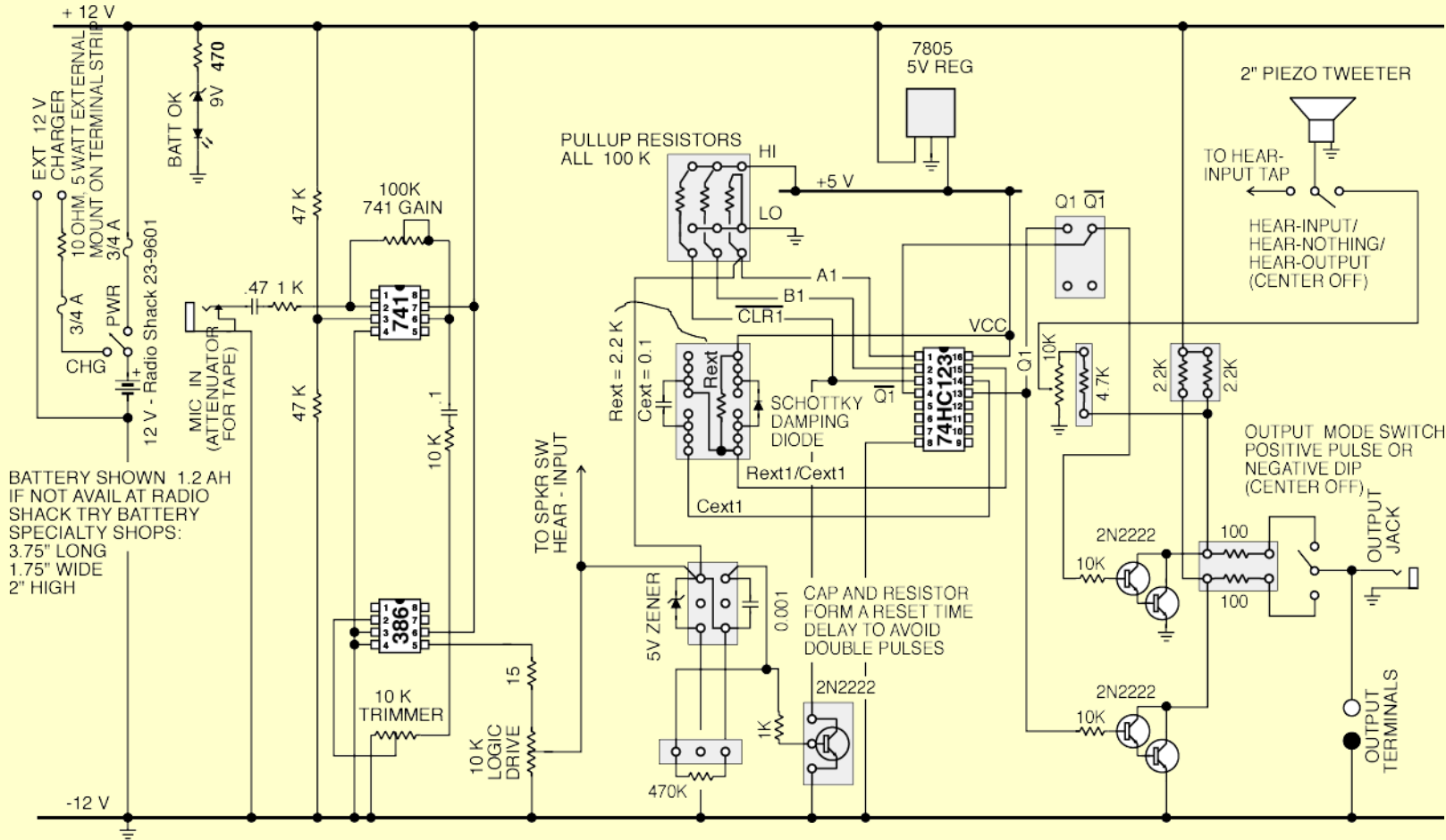
1.3. Microwave voice to skull simulated with a 555 chip tachometer circuit

Eleanor White designed this 555 chip tachometer circuit to simulate Dr. Sharp's microwave voice to skull method. She has built such a device. She has demonstrated it to her colleagues to prove that Joseph Sharp's modulation method, using just clicks, can re-create speech or music reasonably well. It was connected to a normal speaker. To produce voices in the head, it has to be connected to a radar.



1.4. Voice to skull speech processor

Eleanor White designed this exact replica of Dr. Sharp's microwave voice to skull method. It was connected to a normal speaker. To produce voices in the head, it has to be connected to a radar. It should be redesigned with automatic gain control to keep the volume constant. This design worked with careful adjustment of the input volume level.



Capacitors are in microfarads unless otherwise noted.

Resistors are in Ohm unless otherwise noted (K or meg).

Shaded blocks indicate chip sockets which hold quick-change components.

2. Silent sound method

2.1. Slope detection of the brain

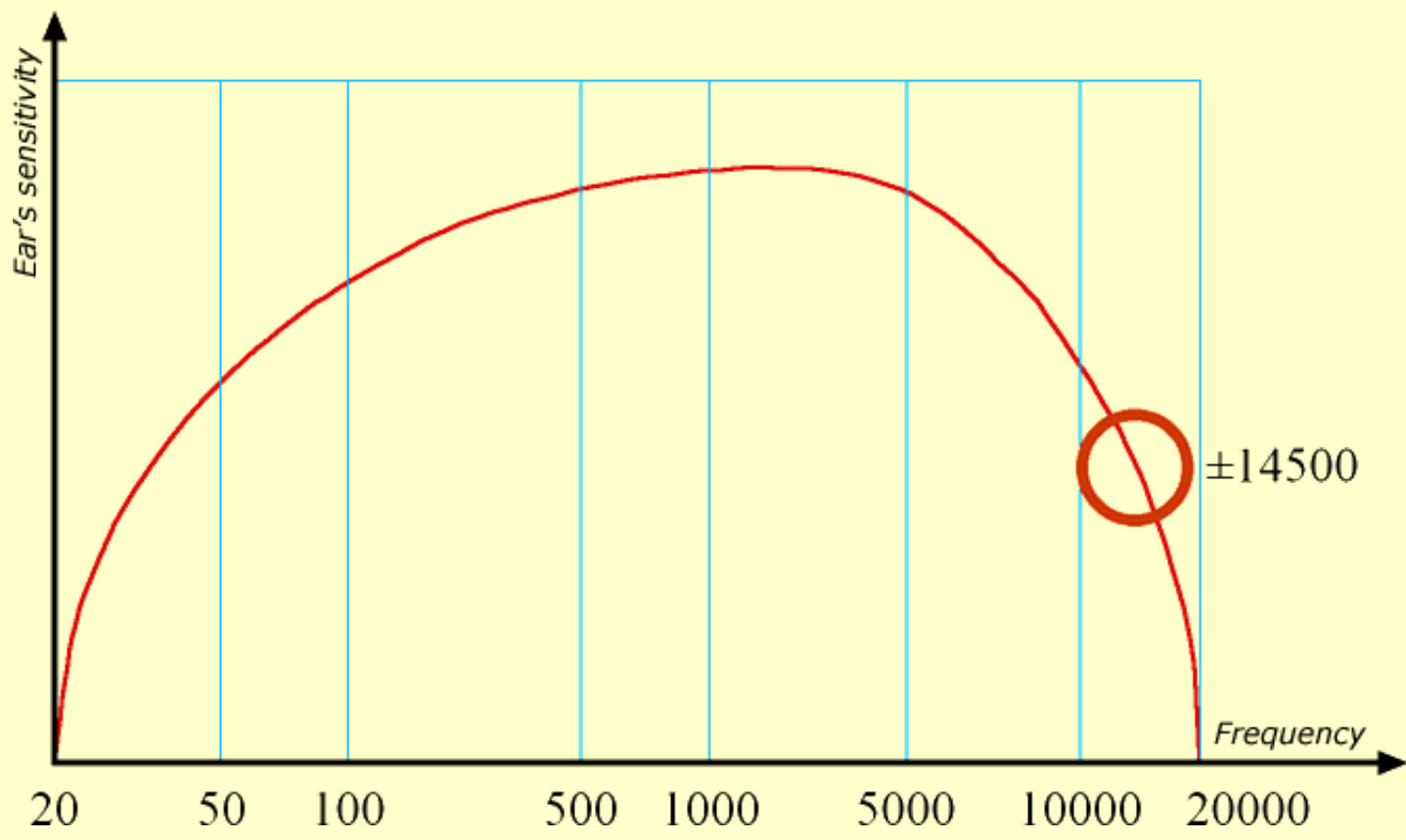
This is the text from patent 5,159,703 for Lowery's *silent subliminal presentation system*:

A silent communications system in which nonaural carriers, in the very low or very high audio frequency range or in the adjacent ultrasonic frequency spectrum, are amplitude or frequency modulated with the desired intelligence and propagated acoustically or vibrationally, for inducement into the brain, typically through the use of loudspeakers, earphones or piezoelectric transducers. The modulated carriers may be transmitted directly *in real time* or may be conveniently recorded and stored on mechanical, magnetic or optical media for delayed or *repeated transmission* to the listener.

As you can read, it has the ideal ingredients for electronic harassment.

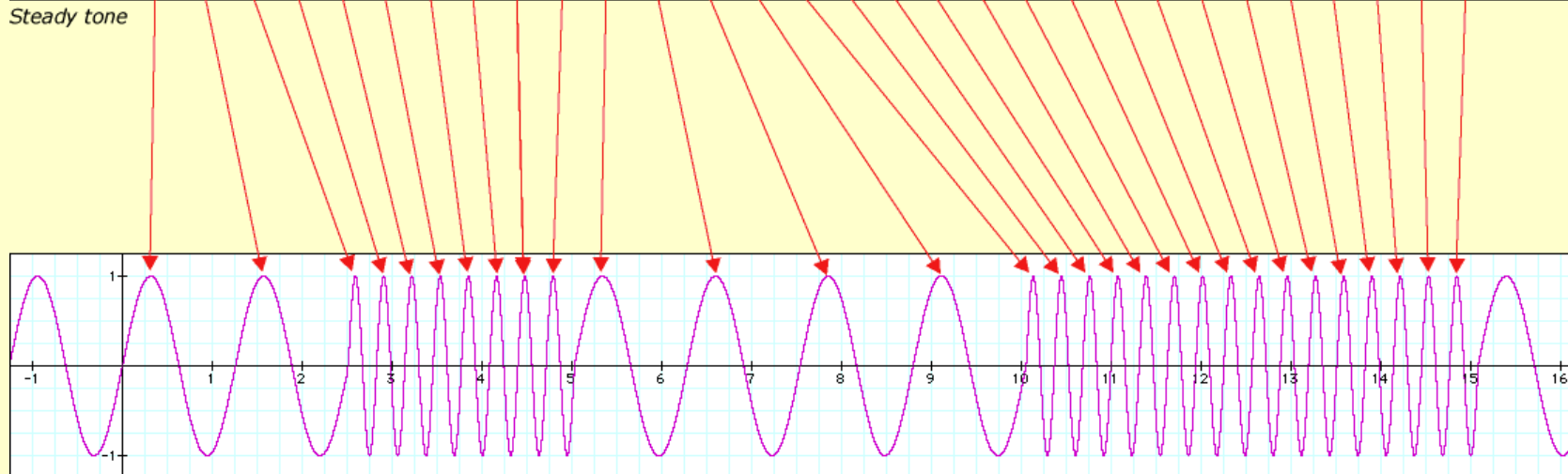
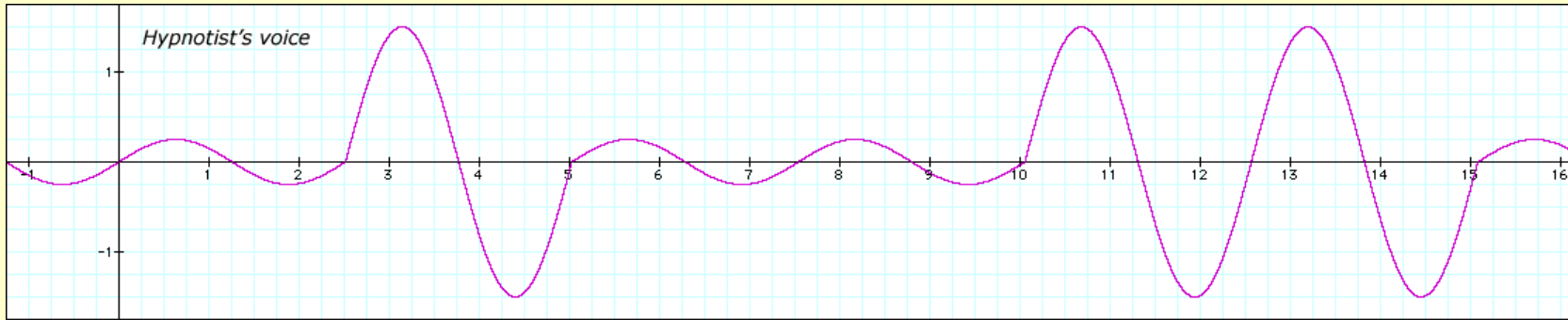
You see also that the patent doesn't say which frequency is used. This seems to be Lowery's secret.

Eleanor White believes that the frequency is around 14500 Hz.



2.2. Hypnosis via voice-FM

A voice wave is embedded in a steady tone by frequency modulation. In this example, a steady tone is stretched where the voice wave has a small amplitude and contracted where the voice wave has a large amplitude.

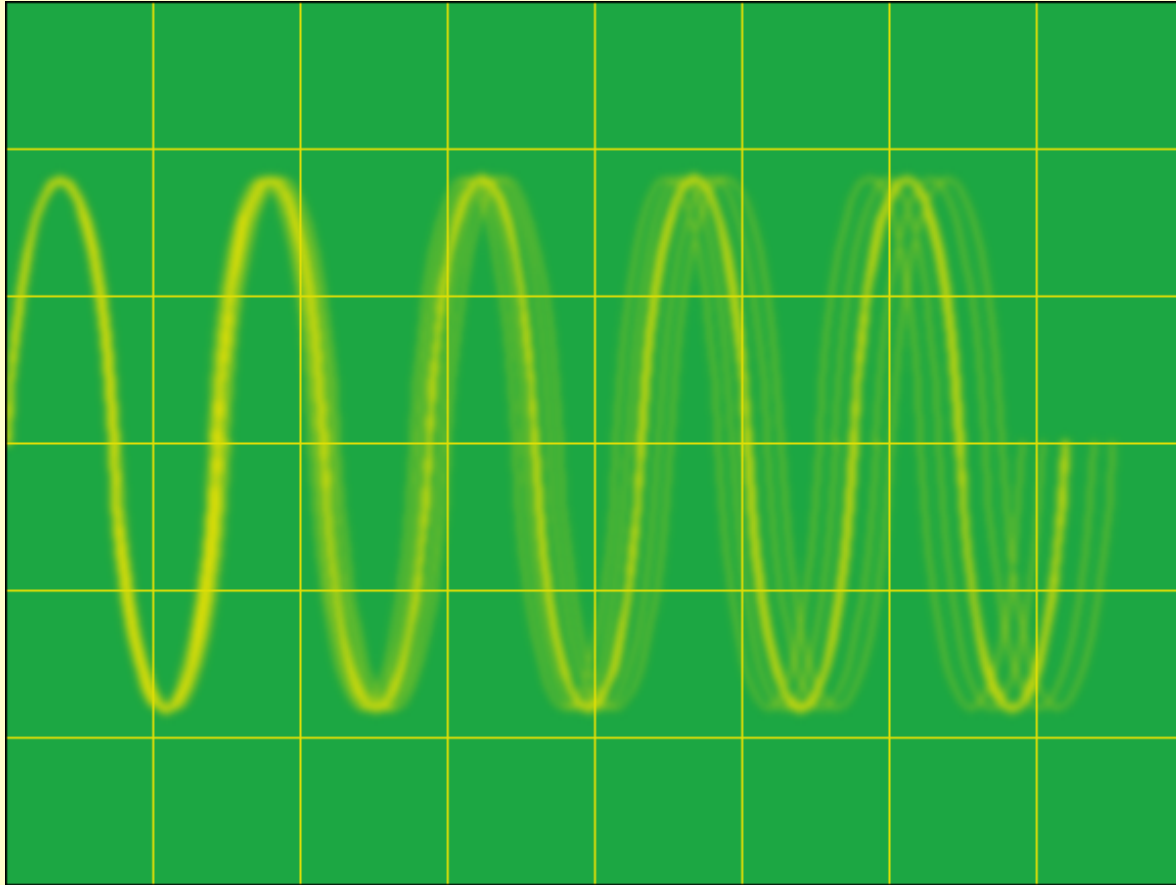


Tinnitus with embedded hypnosis

The ear hears hissing, but the brain hears a voice.

2.3. Verifying the Lowery signal

A Lowery type *silent sound* FM signal should appear on an oscilloscope like this:



At the left of the screen there should be a fixed point where the sine wave starts.

The sine wave of the steady tone is stretched to the right and compressed to the left to the rhythm of the embedded voice wave.

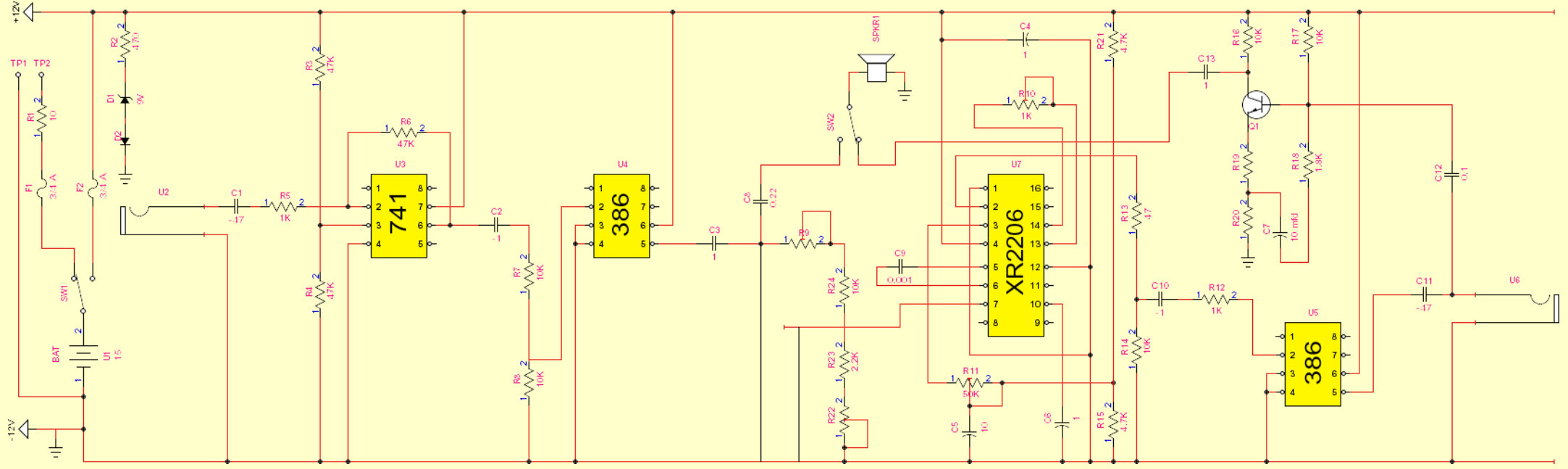
2.4. Silent sound demo device - "Voice-FM device"

Eleanor White designed this device based on patent 5,159,703. She has built this device. The chip that converts from analog to FM was extremely difficult to get in small quantities. She had to lie and say that she was a commercial circuit designer to get a handful of these chips. She demonstrated this device on the street. It produced voices in the head.

You can read more about this experiment in the *Raven1 book*:

- [vfmbuild.htm](#) page 4320
- [vfmdemo.htm](#) page 4324

2.4.1. Top with the schematic



The device is chargeable with a battery of 1.2 AH, 25 ma drain, 48 hours per charge in theory.

If you want to use an ear phone then you have to use an attenuator (signal reducer).

Left is the input jack for the microphone. Right is the output jack for the tape recorder.

Capacitors are in microfarads unless otherwise noted.

Left vertical black bar = V_C .

Right vertical black bar = 3 V.

Q1 is a separate amp for the speaker only.

The output jack gives a better sine wave at lower voltage level.

$R_{10} = R_A$ = controls sine wave distortion, may be an on-board trimmer.

R19 and R20 are 100R.

I_T goes to pin 7 of U7. It has to be limited to less than 3 ma. It controls the carrier frequency as follows:

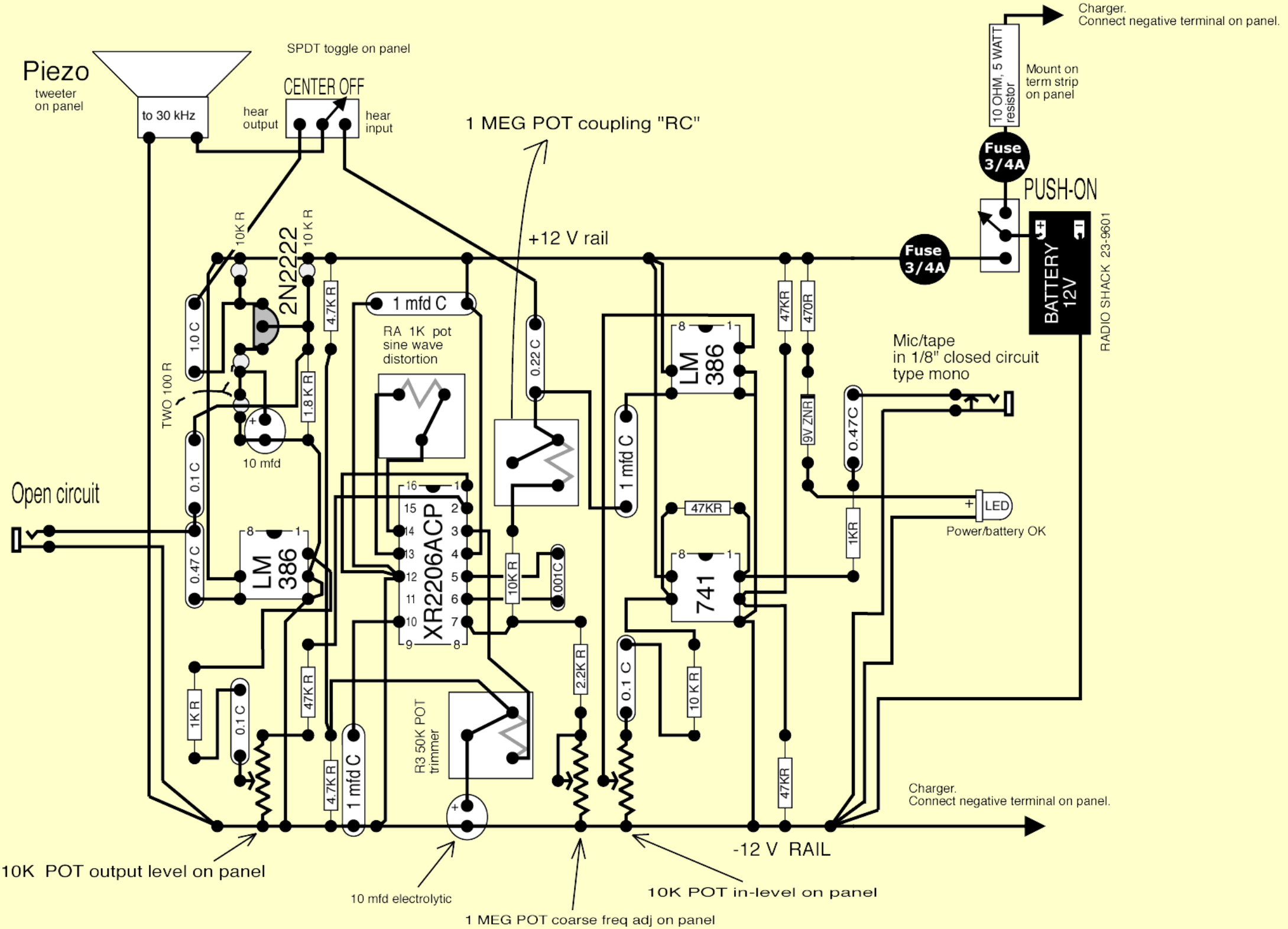
$$f = \frac{1}{R_C} \left(1 + \frac{R}{R_C} \left(1 - \frac{V_C}{3} \right) \right) Hz$$

$R_{22} = R$ = nominal freq pot + 1K (1M pot + 1K)

$R_9 = R_C$ = modulation coupling res (1M pot)

V_C = modulating V ahead of R_C

2.4.2. Bottom with the solder-side layout



Piezo
tweeter
on panel

SPDT toggle on panel

CENTER OFF

hear output

hear input

1 MEG POT coupling "RC"

+12 V rail

1 mfd C

2N2222

1.0 C

10 mfd

RA 1K pot
sine wave
distortion

Mic/tape
in 1/8" closed circuit
type mono

Open circuit

TWO 100 R

LM 386

XR2206ACP

LM 386

741

LED

Power/battery OK

R3 50K POT
trimmer

Charger.
Connect negative terminal on panel.

-12 V RAIL

10K POT output level on panel

10 mfd electrolytic

1 MEG POT coarse freq adj on panel

10K POT in-level on panel

10 OHM, 5 WATT
resistor

Mount on
term strip
on panel

Fuse
3/4A

PUSH-ON

Fuse
3/4A

BATTERY
12V

RADIO SHACK 23-9601

Charger.
Connect negative terminal on panel.

This is the bottom side (solder side, wire side). The components are on the opposite side.

www.partsexpress.com is the source for Springboro OH, source of piezo tweeters.

Leave the solder hole closest to the mounting screw vacant to provide clearance for the nut.

Small shaded circles between perfs are vertically mounted 1/4 watt resistors.

Output jack on panel, 1/8", mono or stereo, builder's choice but must match any plug-in device cords.

Use either crimped or soldered push-on connectors for the battery. Don't solder directly to the battery terminals.

3. Combined method

3.1. Hypnosis via frequency modulation and pulsed-microwave voice to skull

Silent sound goes through walls if you combine it with the microwave method.

