Talko

” Have your modular speak out the CV “

Intro

This module is performing realtime lpc synthesis and uses no sampling to produce intelligible voice or … not if you choose to.

This module is developed with the help of the Muffwiggler community : **LPC speech synth module**

Technical details

– format: eurorack
– width: 10hp
– depth: 30 mm skiff friendly
– power: + 12V: 65 ma
– audio : un-filtered 5V PWM carrier at 62500 Hz

Functions

Bank Pot

For the moment it can process 12 sound banks or functions :

0: digits (from 0 to 9) male voice
1: digits (from 0 to 9) female voice
2: spell the alphabet
3: nato alphabet
4: vocabulary

5: big numbers
6: voltmeter (reading the CV voltage)
7: frequency meter (just saying “Hertz” instead of “Volts”)
8: counter (each gate trigger increments the counter while any cv change on the Sound entry resets it)
9: number radio (each gate trigger a 4 number sequence while any change on the Sound entry trigger a new “transmission”)
10: time since cv reset (each gate triggers saying the time in minutes/seconds while any cv change on the Sound entry resets the clock to zero)
11: Random vocabulary
12: Sentences :

– s0 : “set the control for the start of the one”
– S1: “C time slow”
– S2: “start the fire
– S3: “smoke the circuit”
– S4: “turn past the time”
– S5: “stop the machine”
– S6: “too_low for you”
– S7: “fire and ice”
– S8: “heavy machine”
– S9: “new ground circuit”
– S10: “repair the machine”

Changing Banks in trigger mode seems unresponsive because the change occurs only when the current speaking finishes.

Hardware

Sound jack & pot

CV signal in allow to choose the words or phrases to be said. Resets counter in bank N°8 and start a new transmission in Bank 9

Gate jack

Level high start the complete sound in trigger mode. (regardless of it’s length)
If the trigger switch is off, the gate will start the sound and hold it as long as the gate level stays up. Very useful to create crazy rhythms.

It needs a gate signal to produce any sound ! No gate= no sound

Trigger Switch

Choose between trigger mode or loop mode.
In trigger mode the speech has the priority and will complete before starting again on the new signal gate going high.
In loop mode the gate has the priority and the speech can be shopped by a low gate level or can be looped with a high gate level.

Bend Switch

If bend is on, the bend pot … well, distords the sound.

Speed jack & pot

Change the speed of the voice

Pitch jack & pot

Change the pitch of the voice

Bend jack & pot

Change the amount of bending

Please note that building & coding this module requires

minimum Arduino knowledge like installing a com port, installing libraries & uploading code.

Build instructions and **source files**