

# New Talko firmware : VCO mode can play semi-tones

The [rev 2 of Talko's firmware](#) can now play notes over 2 octaves.

It may seem obvious to have a 1V/octave CV to note in a VCO mode but this was quite challenging to achieve. (I may explain the process in another post as it could be also applied for another of my speech synths)

## Connections

Quite easy: just feed a pitch signal into the Pitch entry. Tune the synth up and down with the Bend pot and trigger the note with the Gate.

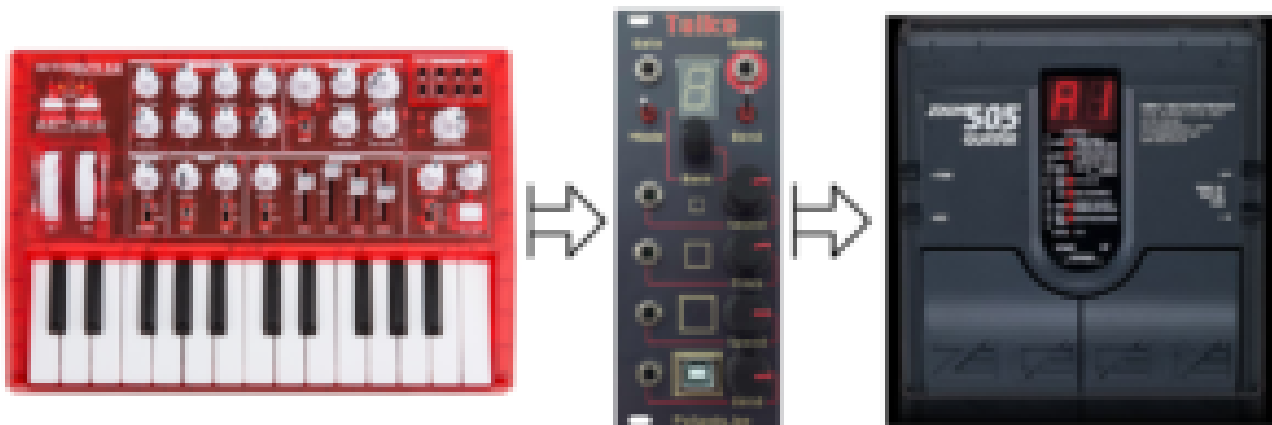
Set it to Bank 16 and play with the Sound pot to choose among the 26 vowels sounds.



(\*) Please note that the Microbrute's gate out can't trigger Talko directly (it's a Microbrute know impedance issue): use a gate buffer in between.

## Sounds

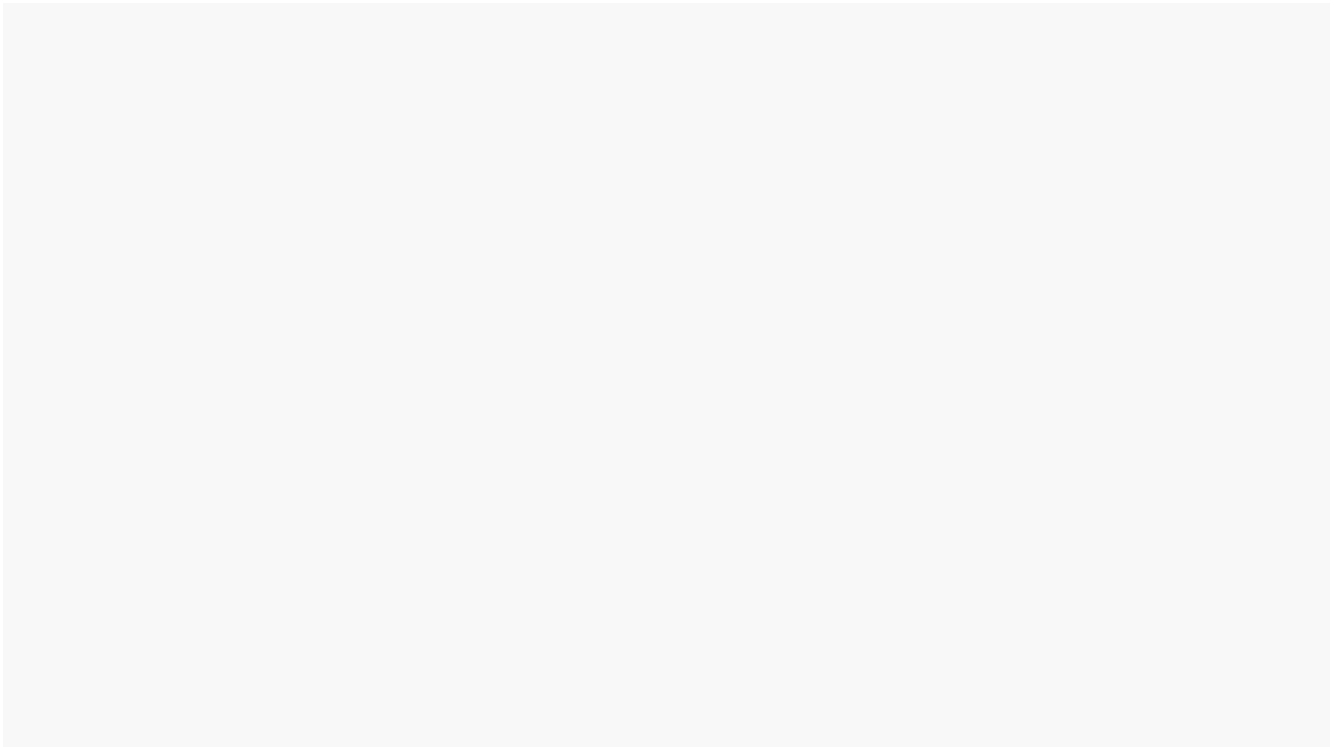
The VC0 sound very much like an organ and it's quite fun to pass the audio through a guitar pedal like the Zoom 505:



#Talko new firmware : the VC0 mode can now play semi-tones ! #arturia keyboard driving #talko pitch cv in . I apologize for my poor keyboard skill (^\_^)

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The Microbrute can also send notes via its sequencer: this allows instant fun for the poor keyboard player like me!



#talko in VCO mode with the #arturia #microbrute as sequencer

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## Firmware

The code is available here: [Talko 1.2 rev2](#)

Right click to save it as a .hex file and use [Easy uploader](#) to install it into Talko.

## User Manual

The manual has been updated to reflect this revision : [http://www.polaxis.be/wp-content/uploads/2016/05/Talko-Manual-1\\_2.pdf](http://www.polaxis.be/wp-content/uploads/2016/05/Talko-Manual-1_2.pdf)

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# EasyUploader

I met Paul Soulsby at Superbooth16 in Berlin, earlier this month.

Paul has developed an amazing piece of hardware based on the ATmega328P: [The Amagatron](#)



Paul also developed a software to allow applying code without the hassle of using the Arduino IDE, installing libraries and compiling code : EasyUploader

Paul made a special version that supports the reset timing that Talko requires.

So have a look on the [Downloads](#) page to see how simple it is now to apply new versions of code to Talko.

EasyUploader is really ... easy to use and works both on Mac & Windows.

