



# Making Music without Threshold

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URL: <http://ruippo.fi/baku.pdf>



# Learning Is Changing

*Computer class 60 years ago*

# To the Cloud

## Background

- applications are no longer locally in the computer, services are, instead, in the Internet and we'll access them via browser
- data resources and documents are there, too
- externalized technical support

# To the Cloud

- ever growing variety of resources
- provided by scientific societies, commercial companies, multimedia artists, enthusiasts...
- one has to filter resources
- simple and explicit, better for pedagogical uses

# To the Cloud

- notation, composing, accompaniment, arranging, audio laboratory...
- tools for several teaching positions and needs
- support for pluralistic attitude in music education

# To the Cloud

- ① emphasis on communities
- ① communities are easily integrated while both tools and products are in the net
- ① modern music education benefits the means: make together, publish to each other

# Pros in the Cloud

- immediate access to the tools, no downloading and installation
- no licences, no updating, no backup copying
- tools work everywhere where is a computer and Internet access
- work similarly on different platforms and operating systems (with some exceptions), cont'd.

# Pros in the Cloud

- ① normally the use is free at the basic level
- ① integrated support for communities (publishing, delivery, collaboration)
- ① easy access to (nearly) everyone
- ① empowerment-as-enablement: tools which would not be possible to use otherwise (virtual instruments, orchestras, musicians); enable processes like working in audio laboratory (cont'd)

# Pros in the Cloud

- ① empowerment-as-enablement: enables one's own output, cultural production like composing, arranging, playing

# Cons in the Cloud

- 👁 need of access to Internet, operations depend on the bandwidth in use
- 👁 possible needs of plug-ins
- 👁 browser incompatibilities
- 👁 registrations, sign-ups
- 👁 commercial intrigues functions

# Cons in the Cloud

- 👁 application appears, application disappears
- 👁 may be labile
- 👁 no localization

No Threshold

With Keyboard

Fill the Grid

The Ambience & Groove

Notation

Loops & Sequencing

Creating & Collaborating

No Threshold

# Touch Pianist



# Virtual Drumming



<https://www.virtualdrumming.com>

# Gregorian Voices



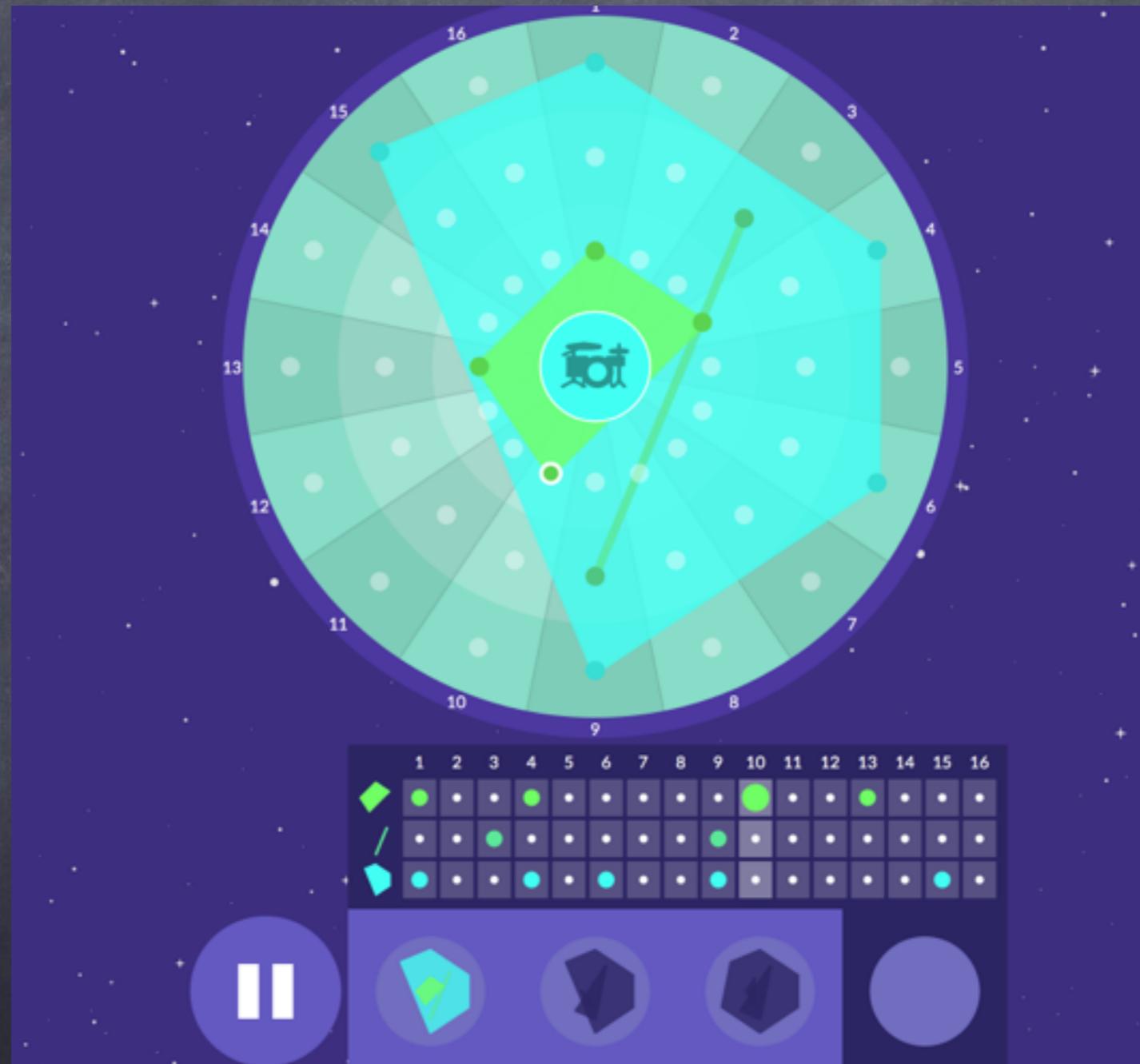
# Viktor NV-1



# Incredibox

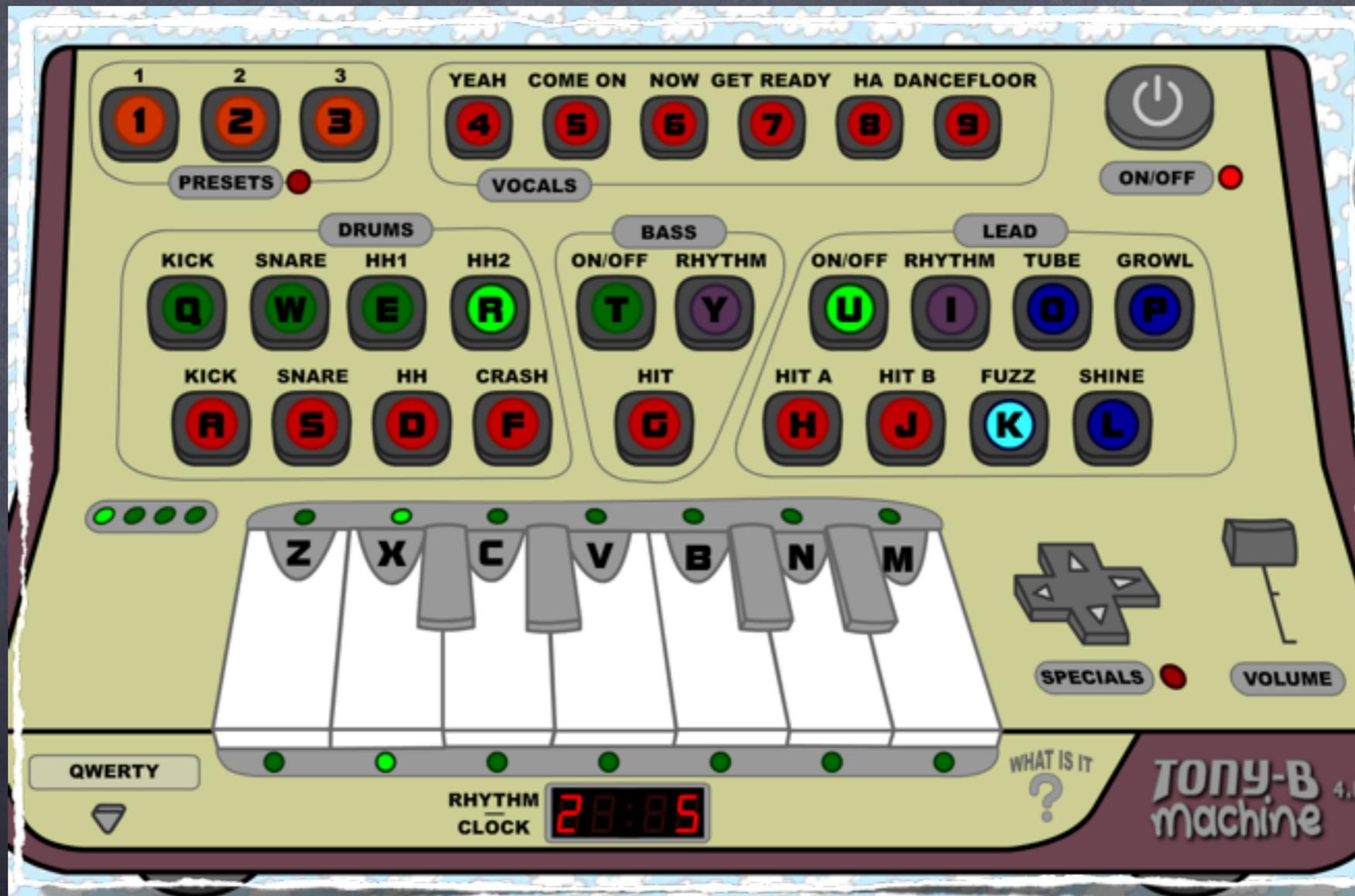


# Groove Pizza

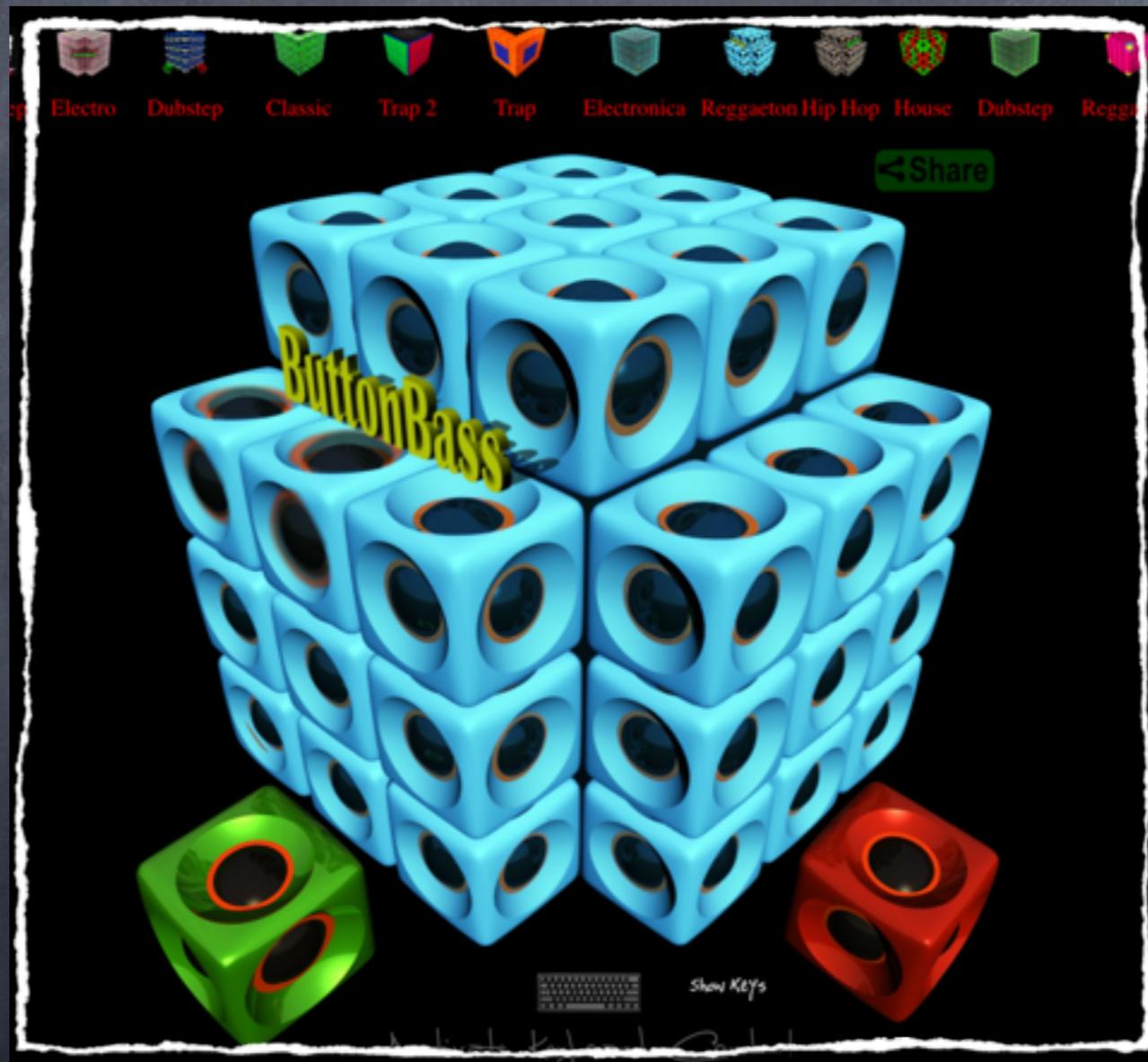


With Keyboard

# Tony-B machine

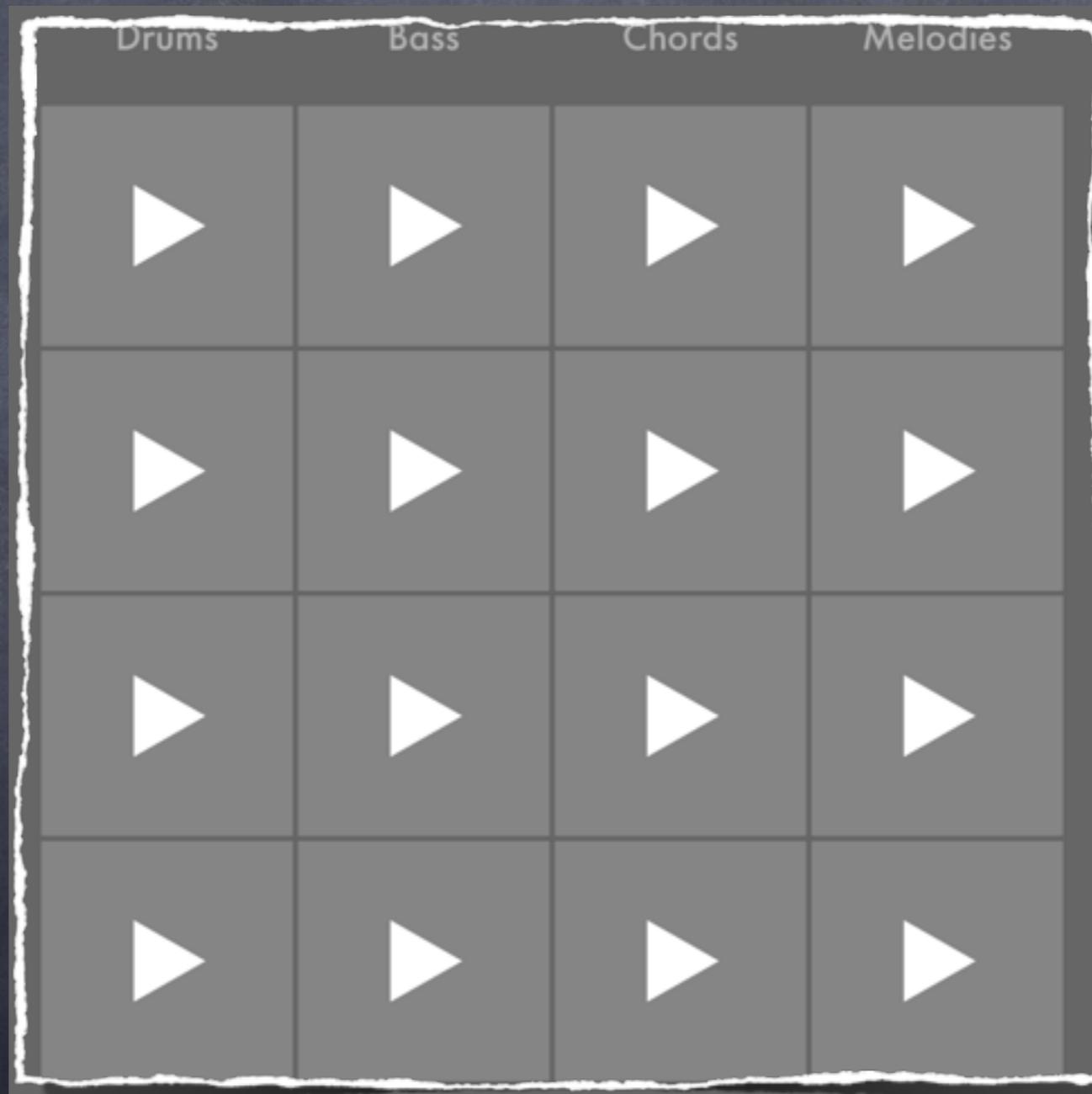


# Button Bass

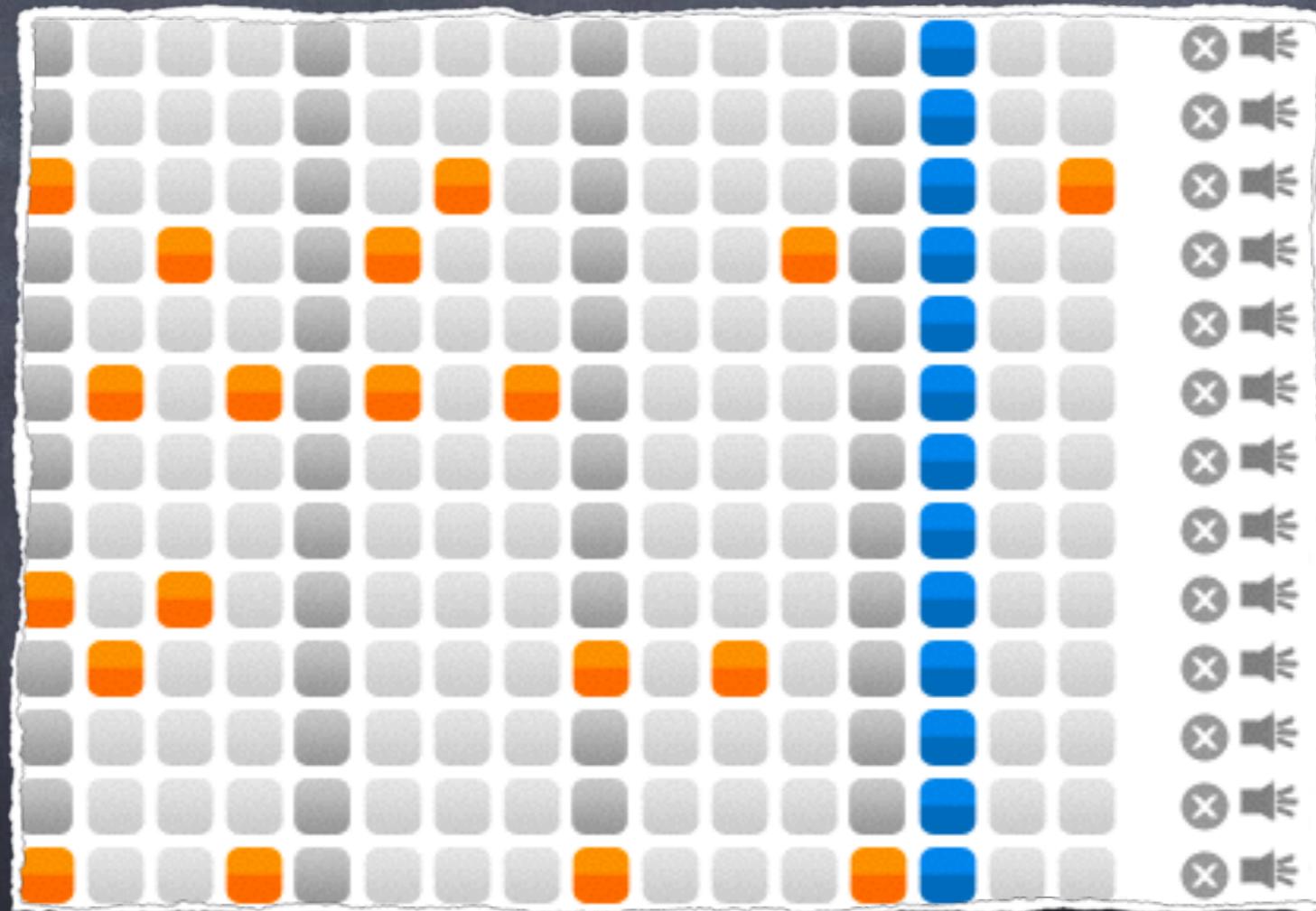


Fill the Grid

# Ableton education



# Beatlab



# The Ambience & Groove

# Ambient Mixer



# YouDJ



# Notation

# Noteflight

The screenshot displays the Noteflight software interface. At the top, there is a toolbar with icons for Play, Transcribe, Record, Save, Instruments, Sync Audio, Page View, Zoom, Keyboard, Help, and Connect. Below the toolbar, there are three rows of controls: 'score' with a fork icon, 'tempo' set to 120, and 'text' with 'la- T f A7 A'. The main area shows the title 'Taikahuilu' with a subtitle '(Subtitle)' and a composer field '(Composer)'. The score is for a piano part, labeled '(Part)', and consists of two staves. The lyrics are: 'Wie stark ist nicht dein Zau - ber - ton weil, hol - de Flö - te, hol-de'.

Noteflight

Play Transcribe Record Save Instruments Sync Audio Page View Zoom Keyboard Help Connect

score *duration* *pitch*

tempo = 120 *text* la- T f A7 A *measure*

## Taikahuilu

(Lyricist) (Subtitle) (Composer)

(Part)

Wie stark ist nicht dein Zau - ber - ton weil, hol - de Flö - te, hol-de

# Loops & Sequencing

# JamStudio

The screenshot displays the JamStudio software interface, which is divided into four main sections:

- SCORE (Top Left):** Shows a musical score for an "untitled" project. The score is in 3/4 time and consists of four staves. The chords are: G, Em, G, A (Staff 1); Am, F, G, G (Staff 2); Dm, D, Am, Am (Staff 3); G, D, D, G (Staff 4). The "Dm" chord in the third staff is highlighted. There are "INSERT" and "DELETE" buttons on the left. A "Play Page Order" field is at the bottom.
- CHORDS (Top Right):** Shows the current key signature as G. A list of chords is displayed, including E, F, F#, G, G#, A, A#, B, C, C#, D, D#. A "Variations" column shows corresponding minor chords (Em, Fm, F#m, Gm, G#m, Am, A#m, Bm, Cm, C#m, Dm, D#m). A "PREVIEW MODE" button is at the bottom.
- MIXER (Bottom Left):** Shows the tempo set to 89. A list of instruments is shown with volume sliders: Guitar.Classic, Drums.Jazz Shot (selected), Bass.Gallop, EGuitar.Convertible, EGuitar.Diamonds, EGuitar.Clean and Dirty, Piano.Titanic, and EPiano.Lullaby. A "Loop Page" checkbox is checked. Playback controls (stop, play, next) are at the top.
- SOUNDS (Bottom Right):** Shows a list of drum sounds under the "Drums" category. The selected sound is "Jazz Shot". Other sounds include Sit Back, Crashin, Poppy, Bouncy Ball, March, Silk, Groovin, Slip N Slide, Sideshow, Big Top, Trot, Cleopatra, and Dallas. A "PREVIEW MODE" button is at the bottom.

# Sound Infusion

A promotional banner for Sound Infusion. The background is a vibrant orange and purple geometric design. At the top, there are images of a xylophone and a drum. The central text reads "Sound Infusion" with a logo of concentric white circles to the left. Below this, the words "MUSIC AND CULTURE" are written in large, white, sans-serif capital letters. At the bottom, there are three buttons: "FREE DEMO" in a blue box, "LOGIN" in an orange box, and "REGISTER NOW" in a blue box. The entire banner is framed by a white, torn-edge border.

Sound Infusion

MUSIC  
AND  
CULTURE

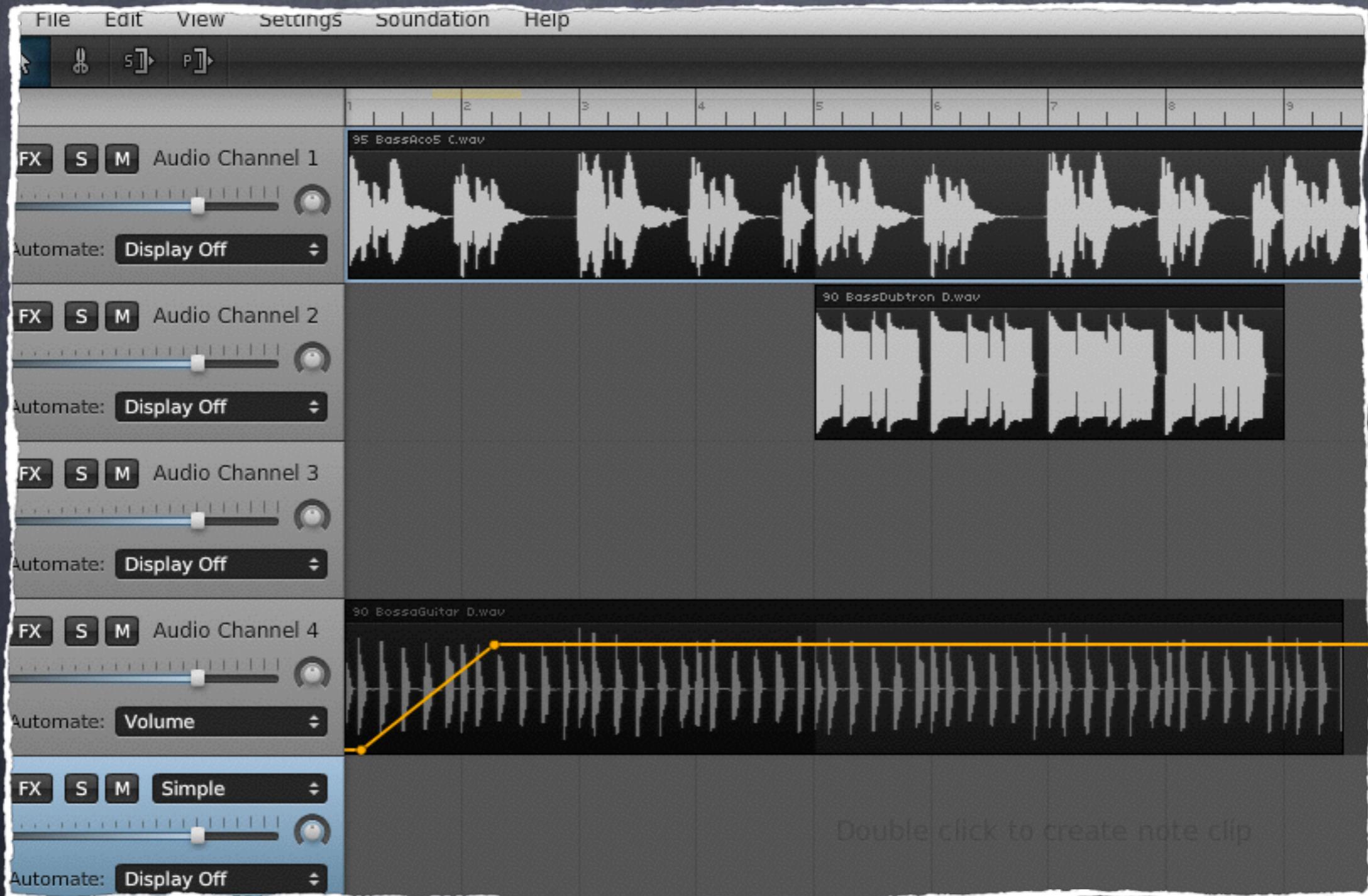
FREE DEMO LOGIN REGISTER NOW

<https://soundinfusion.com.au>

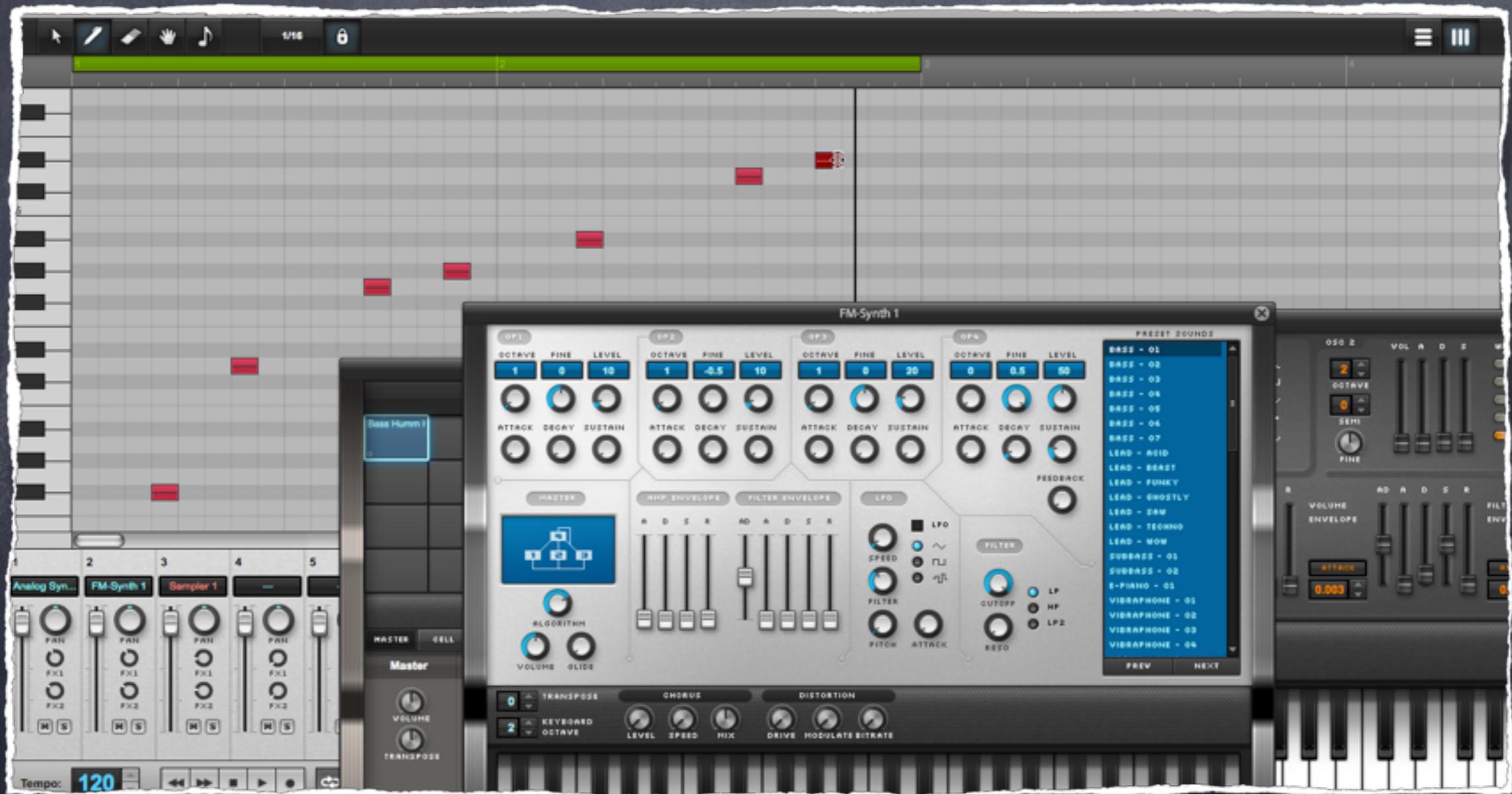
# Looplabs



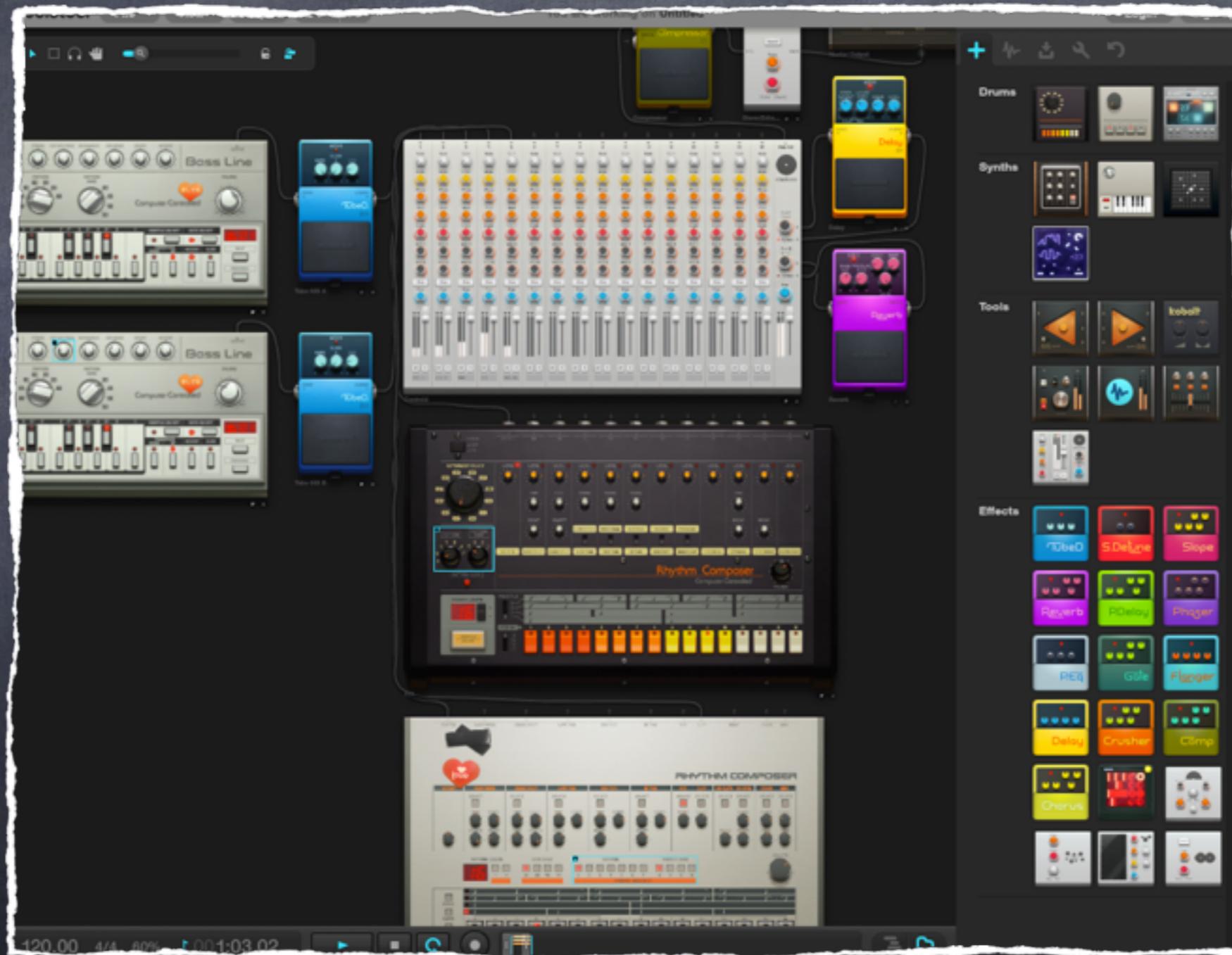
# Soundation



# Audio Sauna



# Audiotool



Creating & Collaborating

# Snapjam

00:00:08.589

Sounds Chat

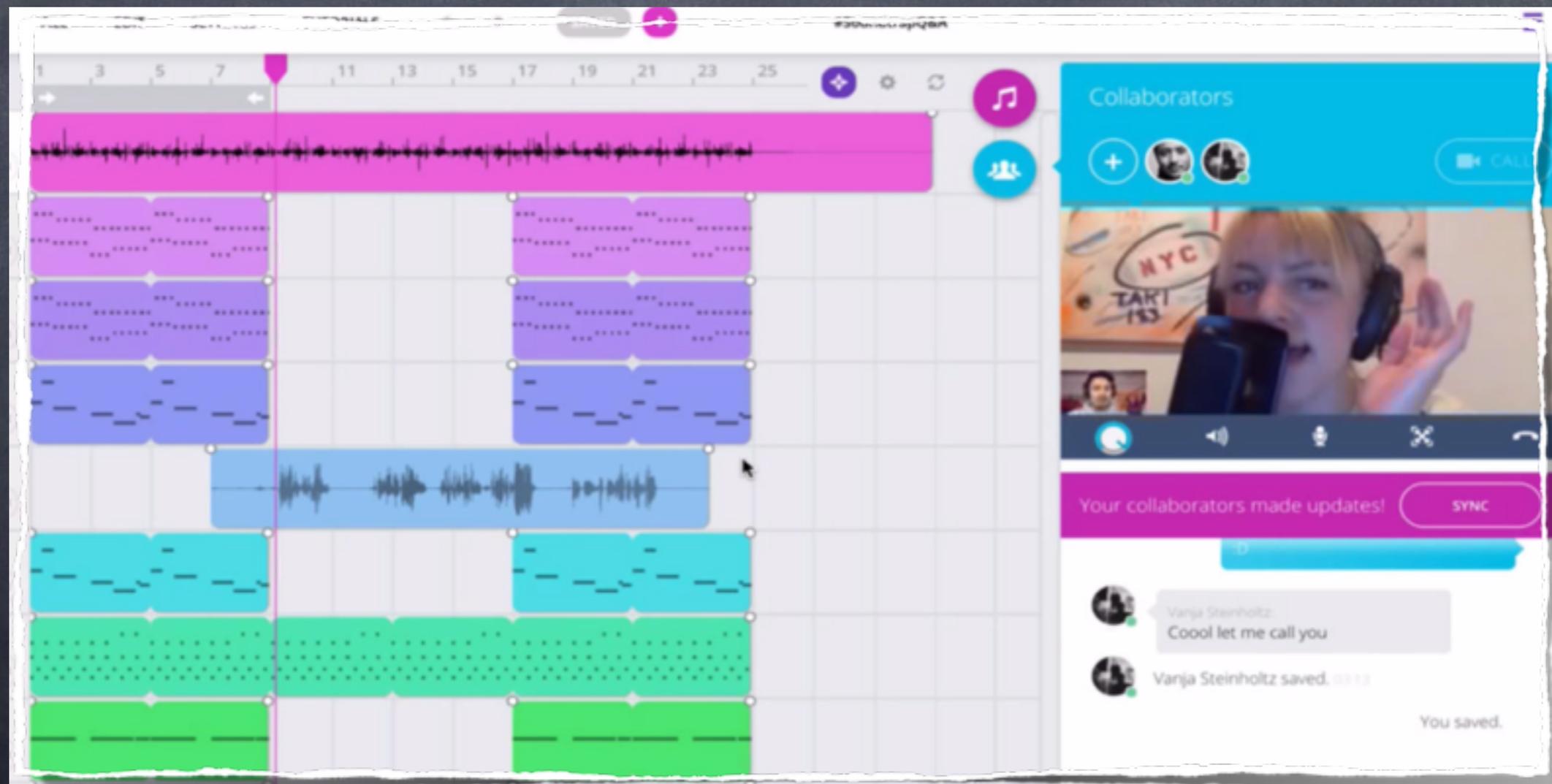
rasscgna2	00:00:24.010
rock5 D 140bpm	00:00:27.450
100bpm_busybossabe...	00:00:28.840
4_EDM busy groove	00:00:32.550
4_EDM busy groove	00:00:32.550

When (sec) Volume

Trim 19.6143 100.0000

Delete

# Soundtrap



# Bandlab

The screenshot displays the Bandlab web interface, a digital audio workstation (DAW) for browser-based music creation. The interface is divided into several sections:

- Top Bar:** Contains playback controls (undo, redo, stop, play, next), a digital display showing 00:00.0, tempo set to 120 bpm, and time signature 4/4. It also includes a volume slider and a download button.
- Track List (Left):** Lists six tracks with their respective icons and settings:
  - Funky Moving Guitar (red waveform)
  - Dance The Night Away B... (blue waveform)
  - Good Lovin' Guitar (purple waveform)
  - Pop Beat 01 (pink waveform)
  - Hard Guitar (green waveform)
  - Track (empty)
- Timeline (Center):** A horizontal axis with numbered markers from 1 to 9, showing the arrangement of audio loops for each track.
- Loop Packs (Right):** A vertical list of music packs, each with a play button, title, description, and '24 Loops' count:
  - Grime: Grit & Grime
  - Electronic Fusion: Tweelectronics!
  - Funk: Get your body moving!
  - Minimal: Minimal soundscapes and master beats.
  - Trap Pop
- Virtual Keyboard (Bottom Center):** A pop-up window titled 'Track' that allows for MIDI input. It features a piano keyboard with keys labeled with letters (S, D, G, H, J, L, 1, 3, 4, 5, 7, 8, 0) and numbers (Z, X, C, V, B, N, M, ., -, Q, W, E, R, T, Y, U, I, O, P). Controls for 'OCTAVE' (set to -2) and 'SUSTAIN' are also visible.

