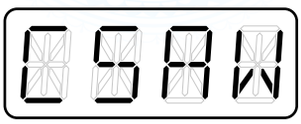
# Braids Renaissance

*Found any errors ? Please let me know at sn.rinia@gmail.com*



**01**




TIMBRE — *Notch width*

COLOR — *Notch depth and polarity*

CS80-like sawtooth with 'notch'

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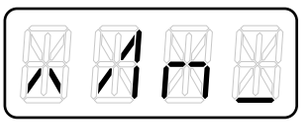
**02**




TIMBRE — *Triangle to sawtooth to square to pulse*

COLOR — *Tone, from a 1-pole filter to a waveshaper*

Classic variable wave analog-style oscillator

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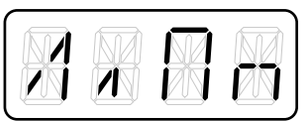
**03**




TIMBRE — *Dephasing of saw, pulse width of square*

COLOR — *Waveshape, saw to square*

Morph from dephased saw to square with pulse width control

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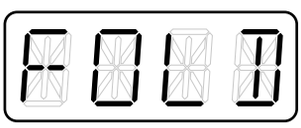
**04**




TIMBRE — *Wavefolder strength*

COLOR — *Sine > triangle*

Blend of sine/triangle oscillators sent to wavefolder

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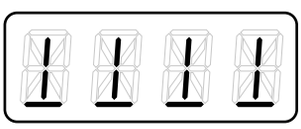
**05**




TIMBRE — *Sine > dirac comb*

COLOR — *Detune*

Two detuned variable sine > comb waveforms

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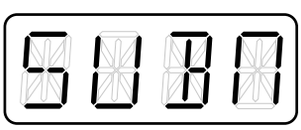
**06**




TIMBRE — *Square pulse width*

COLOR — *Square sub-oscillator mix*
*Off at 12 o'clock, -2 octave fully CCW, -1 octave fully CW*

Variable width pulse with a square sub-oscillator -1 or -2 octaves below

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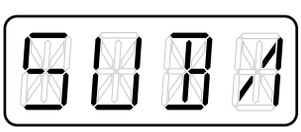
**07**




TIMBRE — *Sawtooth shape*

COLOR — *Square sub-oscillator mix*
*Off at 12 o'clock, -2 octave fully CCW, -1 octave fully CW*

Variable shape saw with a square sub-oscillator -1 or -2 octaves below

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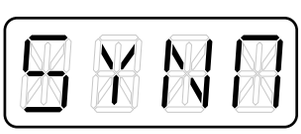
**08**




TIMBRE — *Interval between primary / secondary oscillators*

COLOR — *Oscillator mix*

Two square-wave oscillators, one hardsynced to another

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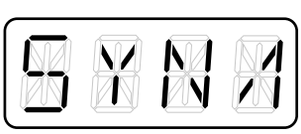
**09**




TIMBRE — *Interval between primary / secondary oscillators*

COLOR — *Oscillator mix*

Two saw oscillators, one hardsynced to another

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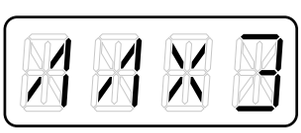
**10**

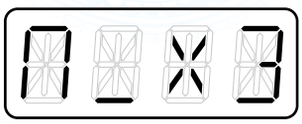



TIMBRE — *Relative frequency of 2nd oscillator*

COLOR — *Relative frequency of 3rd oscillator*

Three independently tuned saw oscillators

**11**




Three independently tuned square oscillators

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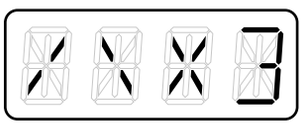
**12**




Three independently tuned triangle oscillators

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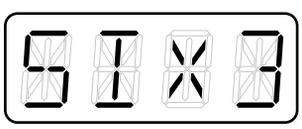
**13**




Three independently tuned sine oscillators

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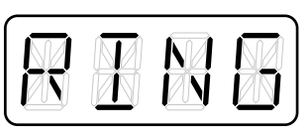
**14**




Three sine wave oscillators ring modulated > waveshaper

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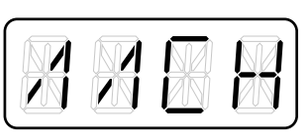
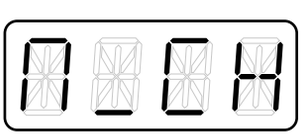
**15**



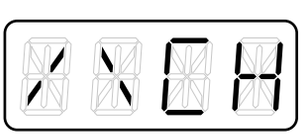

(Up to) 6 note chords. Each note consists of two saw oscillators with controllable detune. When quantizer is disabled, chords are picked from a fixed list. When quantizer is enabled, chords are built using the root, third, fifth, and extension based on the quantizer root and scale.

**16**



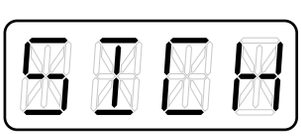

(Up to) 6 note chords. Each note consists of a pulse oscillator with variable width. When quantizer is disabled, chords are picked from a fixed list. When quantizer is enabled, chords are built using the root, third, fifth, and extension based on the quantizer root and scale.

**17**



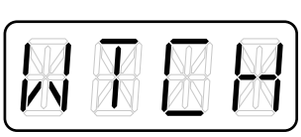

(Up to) 6 note chords. Each note consists of a triangle wave through a wavefolder. When quantizer is disabled, chords are picked from a fixed list. When quantizer is enabled, chords are built using the root, third, fifth, and extension based on the quantizer root and scale.

**18**



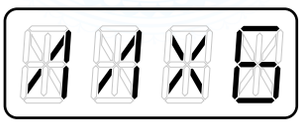

(Up to) 6 note chords. Each note consists of a sine wave through a waveshaper. When quantizer is disabled, chords are picked from a fixed list. When quantizer is enabled, chords are built using the root, third, fifth, and extension based on the quantizer root and scale.

**19**



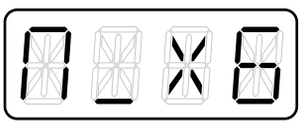

(Up to) 6 note chords. Each note consists of a wavetable oscillator that picks a wave from a fixed linear table (same as original WTx4 mode). When quantizer is disabled, chords are picked from a fixed list. When quantizer is enabled, chords are built using the root, third, fifth, and extension based on the quantizer root and scale.

**20**



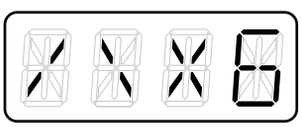

(Up to) 6 note chords. Each note consists of two saw waveforms with variable detuning. When quantizer is disabled, the notes are spaced by a controllable number of semitones. When quantizer is enabled, the notes are spaced by a controllable number of scale steps.

**21**



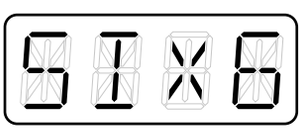

(Up to) 6 note chords. Each note consists of a pulse oscillator with variable width. When quantizer is disabled, the notes are spaced by a controllable number of semitones. When quantizer is enabled, the notes are spaced by a controllable number of scale steps.

**22**



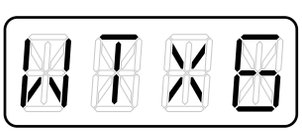

(Up to) 6 note chords. Each note consists of a triangle oscillator through a wavefolder. When quantizer is disabled, the notes are spaced by a controllable number of semitones. When quantizer is enabled, the notes are spaced by a controllable number of scale steps.

**23**



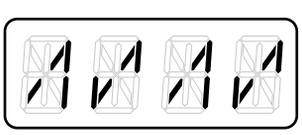

(Up to) 6 note chords. Each note consists of a sine oscillator through a wavefolder. When quantizer is disabled, the notes are spaced by a controllable number of semitones. When quantizer is enabled, the notes are spaced by a controllable number of scale steps.

**24**




(Up to) 6 note chords. Each note consists of a wavetable oscillator that picks a wave from a fixed linear table (same as original WTx4 mode). When quantizer is disabled, the notes are spaced by a controllable number of semitones. When quantizer is enabled, the notes are spaced by a controllable number of scale steps.

**25**




Supersaw. 7 saw waves mixed

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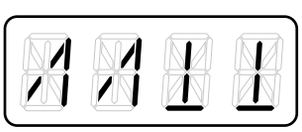
**26**




Saw > tuned comb filter

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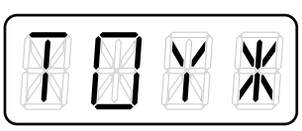
**27**




Circuit bent toy emulation

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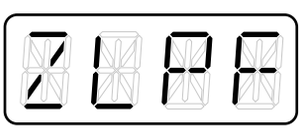
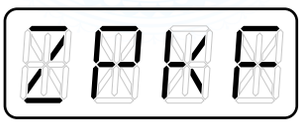
**28**




Synthesis of the response of a lowpass filter excited by a waveform

**29**



TIMBRE: *Filter frequency*

COLOR: *Waveshape saw > square > triangle*

Synthesis of the response of a peaking filter excited by a waveform

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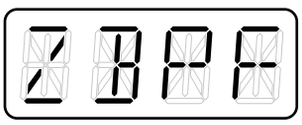
**30**



TIMBRE: *Filter frequency*

COLOR: *Waveshape saw > square > triangle*

Synthesis of the response of a bandpass filter excited by a waveform

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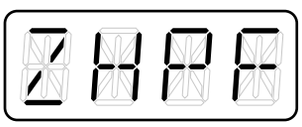
**31**



TIMBRE: *Filter frequency*

COLOR: *Waveshape saw > square > triangle*

Synthesis of the response of a highpass filter excited by a waveform

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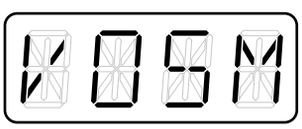
**32**



TIMBRE: *Relative frequency of formant*

COLOR: *Relative frequency of formant*

VOSIM formant synthesis emulation

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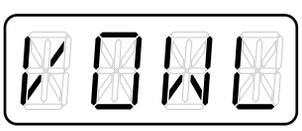
**33**



TIMBRE: *Vowel, a e i o u*

COLOR: *Formant frequency shift*

Vowel speech synthesis

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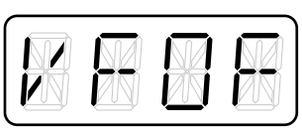
**34**



TIMBRE: *Vowel, a e i o u*

COLOR: *Formant frequency shift*

Vowel speech synthesis

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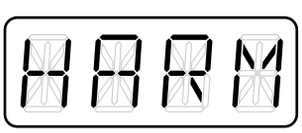
**35**



TIMBRE: *Amplitude distribution*

COLOR: *Center frequency for amplitude distribution*

Additive synthesis of 12 sine harmonics

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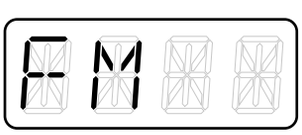
**36**



TIMBRE: *Modulation amount*

COLOR: *Relative frequency*

2-operator phase-modulation synthesis

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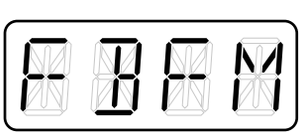
**37**



TIMBRE: *Modulation amount*

COLOR: *Relative frequency*

2-operator phase-modulation synthesis, with carrier feedback

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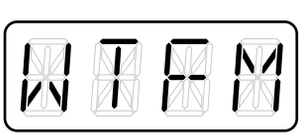
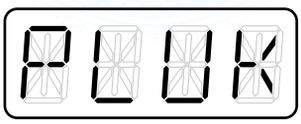
**38**



TIMBRE: *Modulation amount*

COLOR: *Relative frequency*

2-operator phase-modulation synthesis, with 2 feedback paths

**39** 

TIMBRE: *Damping*

COLOR: *Plucking position*

Plucked string synthesis. Requires trigger signal

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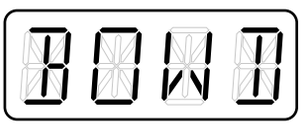
**40** 

TIMBRE: *Friction*

COLOR: *Bowing position*

Bowed string modelling. Requires trigger signal

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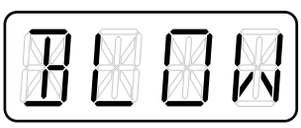
**41** 

TIMBRE: *Air pressure*

COLOR: *Instrument geometry*

Reed instrument modelling

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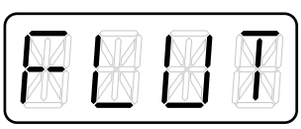
**42** 

TIMBRE: *Air pressure*

COLOR: *Instrument geometry*

Flute instrument modelling

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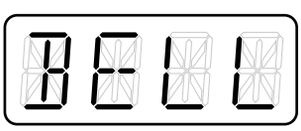
**43** 

TIMBRE: *Damping*

COLOR: *Inharmonicity*

Bell additive synthesis

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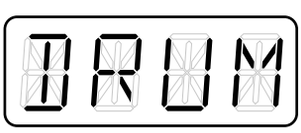
**44** 

TIMBRE: *Damping*

COLOR: *Brightness*

Metal drum synthesis

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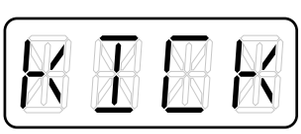
**45** 

TIMBRE: *Decay time*

COLOR: *Brightness / tone*

Simulation of Roland TR808 kick

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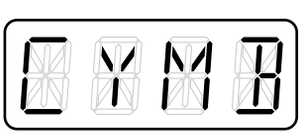
**46** 

TIMBRE: *Bandpass filter frequency*

COLOR: *Oscillator / noise balance*

Simulation of Roland TR808 cymbal

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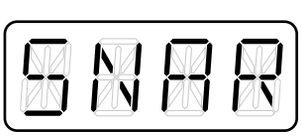
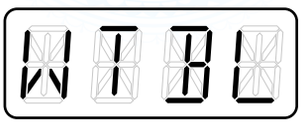
**47** 

TIMBRE: *Tone*

COLOR: *Noise "snappy"*

Simulation of Roland TR808 snare

**48**




TIMBRE — *Sweeps wavetable*

COLOR — *Picks wavetable*

Wavetable synthesis

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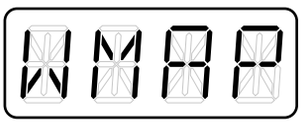
**49**




TIMBRE — *Sweeps wavetable in X direction*

COLOR — *Sweeps wavetable in Y direction*

2-dimensional wavetable synthesis. Waves placed in a 16-by-16 grid, Interpolated in both dimensions

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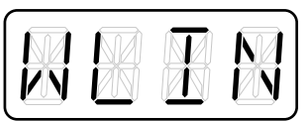
**50**




TIMBRE — *Sweeps wavetables*

COLOR — *Interpolation method. Past 12 o'clock decreases playback resolution*

Wavetable synthesis, 1-dimensional scanning through all wavetables

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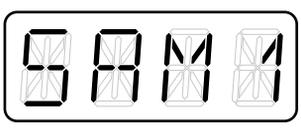
**51**




TIMBRE — *Which 'slice' of the word to play, from start to end of word. Apply a ramp shape to play word from start to end.*

COLOR — *Which word to play*

Classic voice synthesizer, configured as a 16-word granular sample player. Trigger plays back word from TIMBRE position to word end

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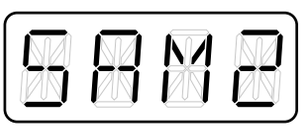
**52**




TIMBRE — *Which 'slice' of the word to play, from start to end of word. Apply a ramp shape to play word from start to end.*

COLOR — *Which word to play*

Classic voice synthesizer, configured as a 16-word granular sample player. Trigger plays back word from TIMBRE position to word end

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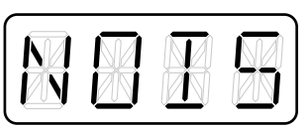
**53**




TIMBRE — *Filter resonance*

COLOR — *Crossfade between lowpass and highpass*

White noise through a state-variable filter. Pitch input controls filter frequency

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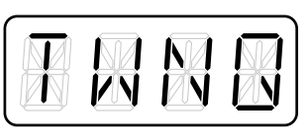
**54**




TIMBRE — *Filter resonance*

COLOR — *Filter frequency spacing*

White noise processed by two bandpass filters

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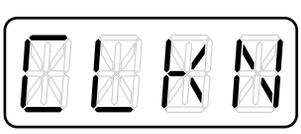
**55**




TIMBRE — *Periodicity*

COLOR — *Quantization, from 2 to 32 distinct values per sample*

Random samples generated at rate determined by main pitch

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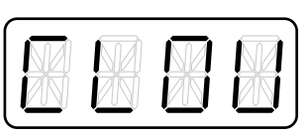
**56**




TIMBRE — *Density and overlap of grains*

COLOR — *Frequency randomization*

Texture generator by mixing short grains of windowed sine waves

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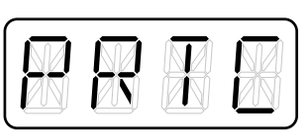
**57**




TIMBRE — *Density and overlap of grains*

COLOR — *Frequency randomization*

Texture generator by mixing short decaying 'pings' of sound