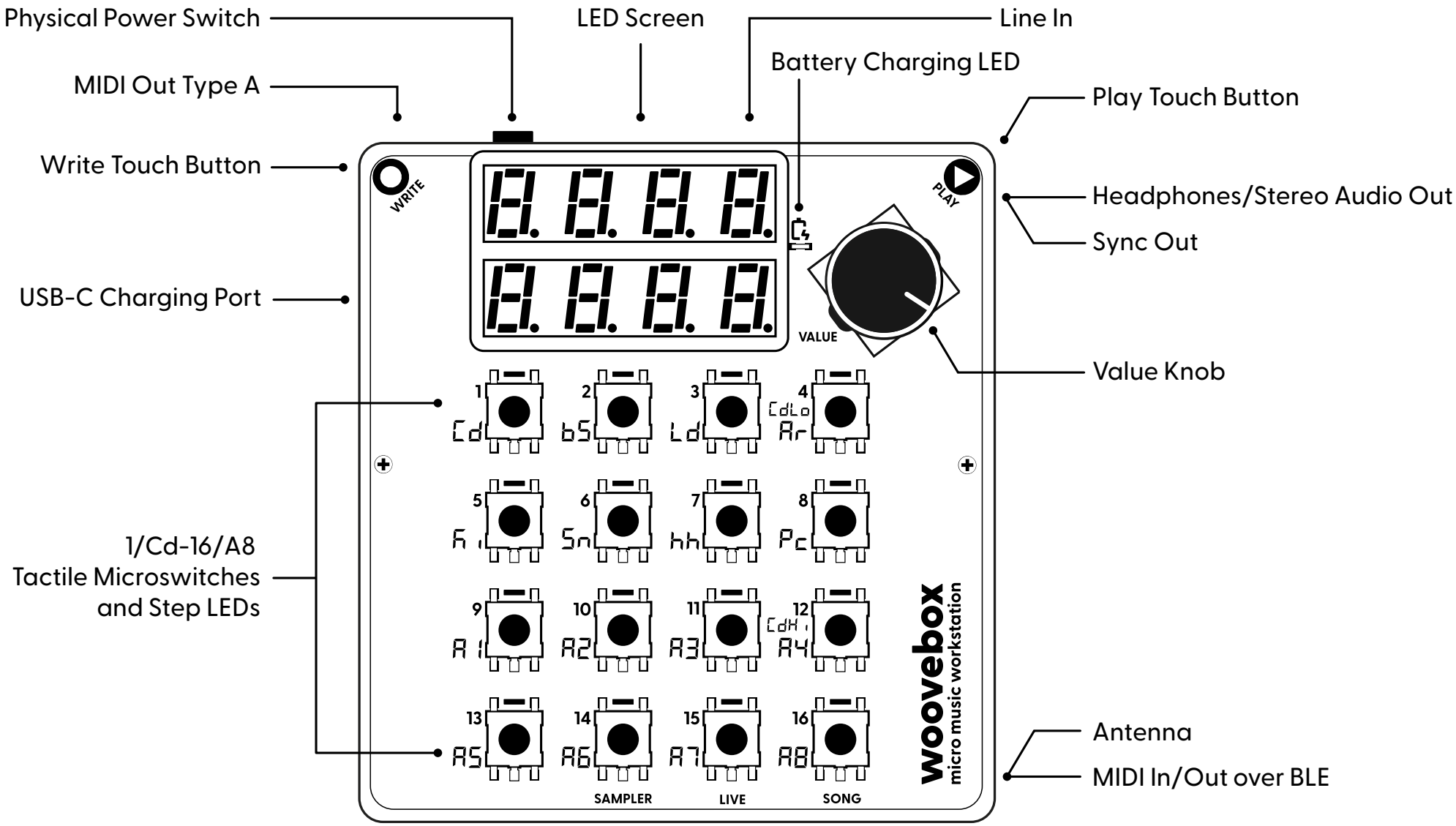
woovebox

reference guide

V1.2.2 220225

quick start


Physical Power Switch
LED Screen
Line In
Battery Charging LED
MIDI Out Type A
Play Touch Button
Write Touch Button
Headphones/Stereo Audio Out
Sync Out
USB-C Charging Port
Value Knob
1/Cd-16/A8
Tactile Microswitches
and Step LEDs
Antenna
MIDI In/Out over BLE
WRITE
PLAY
VALUE
SAMPLER
LIVE
SONG
woovebox
micro music workstation

GLOBAL

Set output volume
Hold **play**, turn **value** knob

Switch to track Cd-A5
Hold **value** + **short**-press desired track **1/Cd-13/A5**

Switch to track A6-A8
Hold **value** + **long**-press desired track **14/A6-16/A8**

Switch to Sampler/Resampler/Vocoder
Hold **value** + **short**-press **14/A6/Sampler**

Switch to Live Mode
Hold **value** + **short**-press **15/A7/Live**

Switch to Song Mode
Hold **value** + **short**-press **16/A8/Song**

Play Song or Pattern
Press **play** to start playing
Press **play** once more to stop playing

Change parameter
Hold **1-16**, turn **value** knob (optional) For fast value changes, hold **1-16**, press **value** knob in and turn value knob (optional) For snapping to nearest min, max or half value, hold **1-16**, press value knob in

Open context menu
Hold **write**, short press **value** repeatedly to cycle through options

Action context menu item
With context menu open, **long**-press **value**

Set duration of note, live scene or song fragment
Hold **write**, turn **value** knob

Show long parameter name
Hold Parameter **1-16** for an eight-character description

Undo (restore before last save)
Switch to Song mode and turn value knob to scroll to the "**GLob**" page.
Hold **write**, **short**-press **value** repeatedly to open the context menu and cycle through options
Find the "**Undo**" option.
Hold **write** and hold **value** to action the "**Undo**" item.

SEQUENCER / TRACK EDIT MODE

Program note or slice on step 1-16
Audition note or slice by pressing **1-16**
Hold **write** and press step **1-16**

(optional) Still holding **write**, cycle through parameters by pressing **value**

(optional) Turn **value** to change parameter

Delete note or slice on step 1-16
Hold **write** and press existing step **1-16**

Select pattern 1-16
Hold **play** and short press **1-16**

Solo current track Cd-A5
Hold **value** + **short**-press current track **1/Cd-13/A5**
Repeat to unsolo

Solo current track A6-A8
Hold **value** + **long**-press current track **14/A6-16/A8**
Repeat to unsolo

Change playing octave
Hold **play**, then also hold **write** and turn **value** knob

Live recording overdub (auto quantized)
Hold **write** + **short**-press **play**
Short-press **play** to stop recording

Live recording erase (auto quantized
Hold **write** + **long**-press **play**
Short-press **play** to stop recording

(Sequencer "SEq" only) Edit note or slice on step 1-16
Hold step **1-16** until blinking
Cycle through parameters by pressing **value**
Turn **value** to change parameter

(Sequencer "SEq" only) Multi-step edit
Hold first step **1-16** until blinking
While still holding step hold **write** and let go of step **1-16**
Still holding Write, select other steps **1-16**

Cycle through parameters by pressing **value**
Turn **value** to change parameter for all selected steps at once

Select preset patch
Turn **value** to select Patch "**Pach**" page
Long-press any of the **1-15** keys that have an LED lit, to activate preset

(optional) Hold key **16** to revert back to the patch before entering "**Pach**" page

(optional) Change "**Snd**"**/6** parameter on "**GLob**" page for other sound categories

LIVE MODE

Mute/unmute tracks in Live scene or programmed scene 1-16
Hold **write** and press **1-16**

Switch between Live scene or programming scene 1-16
Hold **value** and press **15/Live**

Use Live scene (mutes/unmutes/solos) in Sequencer / Track Edit mode
Hold **value** and **long** press **1/Cd-16/A8** to use mutes/unmutes/solos in track **1/Cd-16/A8**

Select track to improvise and play melodies on
Hold **play** for 2 seconds until screen reads "Slct trak"
Still holding **play**, select the track **1/Cd-16/A8** you wish to improvise or play melodies on

Switch to scene immediately
Hold **play** and **short**-press **1-16** to switch to scene 1-16 immediately

Switch to scene when ready playing (schedule scene change)
Hold **play** and **long**-press **1-16** to select scene 1-16
The next scene will be scheduled for when the current scene length has elapsed

Edit track Cd-A8 behavior, pattern #, chord lock, retriggering fx for scene
Hold **1/Cd-16/A8** until blinking
Cycle through parameters by pressing **value**
Turn **value** to change parameter

Edit multiple tracks at once for scene
Hold first track **1/Cd-16/A8** until blinking
While still holding track **1/Cd-16/A8**, hold write
Still holding **write**, let go of track **1/Cd-16/A8**
Still holding **write**, now select other tracks **1/Cd-16/A8**
Cycle through parameters by pressing **value**
Turn **value** to change parameter for all selected tracks at once

SONG MODE

Add new Song fragment to end
Turn **value** knob to scroll to first "End" fragment
Hold **write** + turn **value** knob to set fragment length

Mute/unmute tracks for fragment
See "Mute/unmute tracks in Live scene or programmed scene 1-16"

Use Fragment (mutes/unmutes/solos) in Sequencer / Track Edit mode
See "Use Live scene (mutes/unmutes/solos) in Sequencer / Track Edit mode"

Edit track Cd-A8 behavior for song fragment
See "Edit track Cd-A8 behavior, pattern #, chord lock, retriggering fx for scene"

Edit multiple tracks at once for song fragment
See "Edit multiple tracks at once for scene"

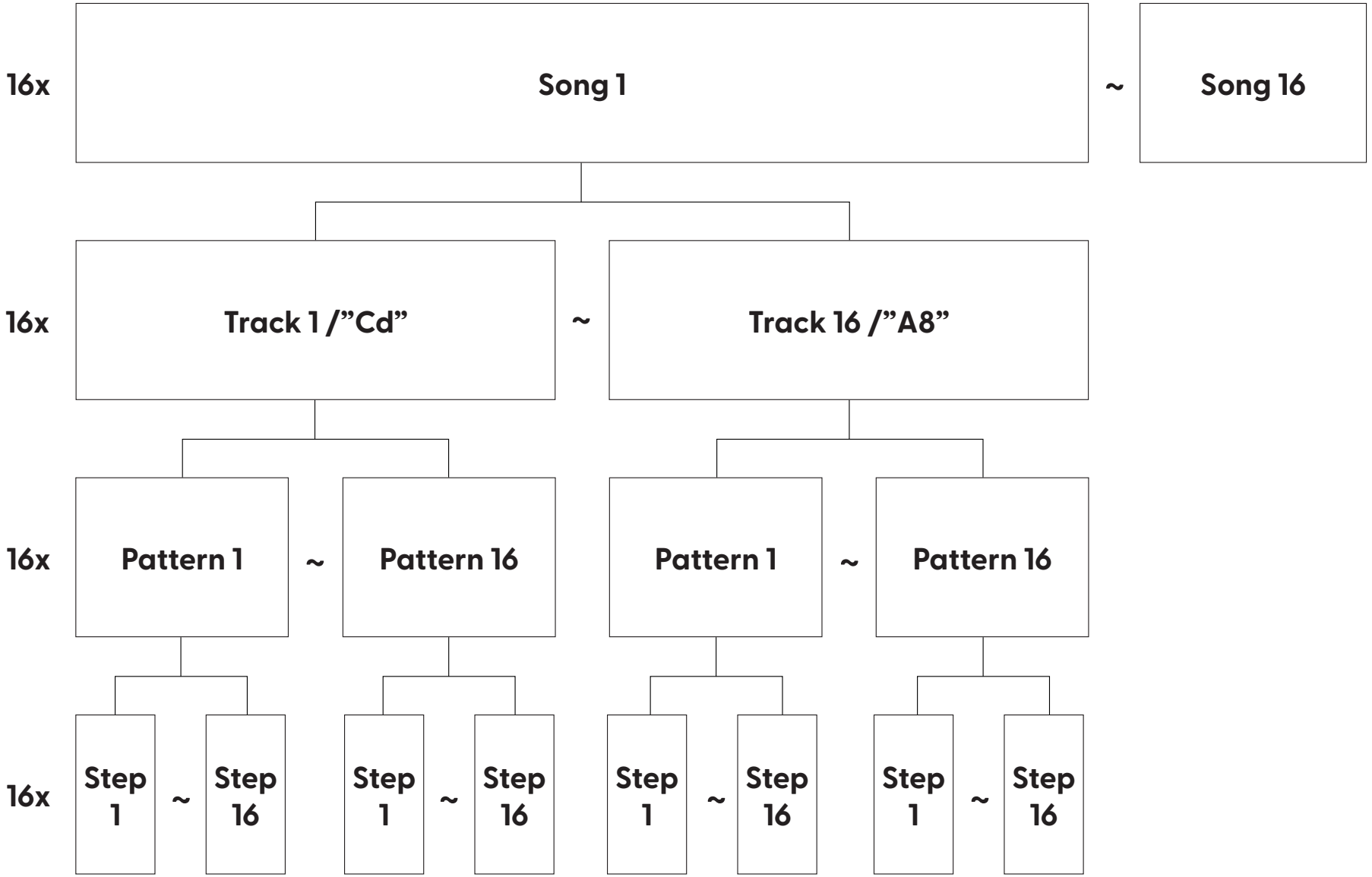
SAMPLER

Record sample from audo input
Hold **write** + **1-16** to record sample to slot 1-16

Select kit US.01-US.16
Hold **play** and short press **1-16**

Use kit on track Cd-A8
Select and action **"SMPK Pach"** from context menu
Switch to track **Cd-A8** (**"Pach"** page opens automatically)
Select and action **"Pste Pach"** from context menu

song and tracks structure



pattern page

The pattern page controls the current selected pattern (out of 16). Patterns can be chained or customized for speed, allowing for complex polyrhythms and time signature changes. Mute/unmute cycling and song mode effects add rhythmic complexity, enabling intricate compositions even using just one pattern per track.

1. b.div BPM Divisor Specifies the pattern speed, dividing the default BPM by the value.	**2. Pt.Ln Pattern Length** Sets the pattern length in steps (less than 16 causes errors).	**3. Ch.ne Chain Next** Specifies the next pattern to play after the current one.	**4. Ch.rP Chain Repeat** Specifies how many times the pattern repeats before switching.
5. Mu.Ln Mute length Specifies how long the pattern mutes. Offset can be applied.	**6. UM.Ln Unmute length** Specifies how long the pattern un-mutes after mute period.	**7. M.U.OF Mute unmute offset** Offsets mute start time to adjust pattern mute behavior.	**8. Pt.rS Playthrough Counter Reset Behavior** Controls playthrough counter reset for conditional behavior.
9. FLW.C Follow Chord Override Specifies an optional override of global follow chord behavior.			
	14. Md.Pc MIDI Patch Specifies MIDI patch change number when pattern starts.	**15. Md.bM MIDI Patch bank MSB** Specifies MIDI Patch bank MSB with the patch change.	**16. Md.bL MIDI Patch bank LSB** Specifies MIDI Patch bank LSB with the patch change.

More details: https://www.woovebox.com/support/guides--tutorials/patterns

global page

The global page controls the global settings for a track, such as volume, effects sends, synthesis algorithm, and transpose options. The synthesis algorithm specifies how oscillator 1 and 2 are combined.

1. M.VoL Master Volume Specifies the master volume as a value between 0 (silent) and 127 (max).	**2. trSP Transpose** Specifies the amount of semitones (12 semitones is one octave) to transpose any recorded notes before they play.	**3. ALGo Synthesis Algorithm** Specifies the algorithm by which the oscillators for this track should be combined. Please see the sound design section for more information.	**4. FLW Follow Chord** Specifies how (if at all) notes (played or sequenced) on this track should be adapted and transformed to follow the currently playing ('Cd' track) chord.
5. QLty Spectral Quality The Spectral Quality ('QIty') parameter controls a novel signal processing feature that further optimizes DSP usage, that can also be used for creative effects.	**6. Snd Sound Category** Describes the general "human-identifiable" sound/role that this track plays in the composition.	**7. bEhv Track Behavior** Track behavior defines how a track should behave in terms of playback, UI, functionality, stem rendering, file management and more.	**8. MIdI MIDI channel assign** Specifies the MIDI channel that the track should send its note and controller messages on.
9. SwnG Swing Specifies the amount of swing that should be applied to notes played on the track.	**10. bt.Cr Bit Crush** This parameter specifies how many least significant bits should be set ("crushed") to 0, assuming a 16-bit (~96db) nominal dynamic range.	**11. SatU Saturation** Progressively saturates louder parts of the signal, making them sound subtly "warmer" and analog.	**12. dist Distortion** Specifies one of two types of distortion and an amount.
13. rEvb Reverb Send Specifies the amount of signal to send to the reverb unit.	**14. chor Chorus Send** Specifies the amount of signal to send to the chorus unit.	**15. dely Delay Send** Specifies the amount of signal to send to the primary delay unit.	**16. dly2 Delay 2 Send** Specifies the amount of signal to send to the secondary delay unit.

More details: https://www.woovebox.com/support/guides--tutorials/tracks

oscillator 1 / 2 pages

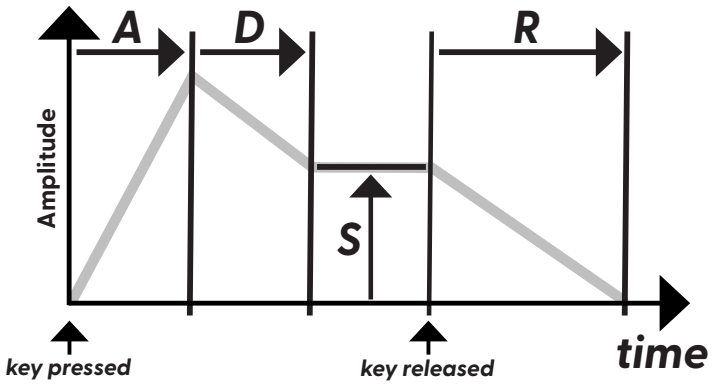
These oscillator 1/2 pages control basic settings for oscillator 1 and 2, such as waveform selection and, output levels and tuning.

1. WaVE waveform selection Specifies the waveform to be used as a sound source for the oscillator, with options like 'NOIS', 'Sin1', 'Tri1', etc.	**2. LEvL oscillator output level** Defines the output level (amplitude) of the oscillator.	**3. dEt.C Pitch detune (coarse)** Coarse pitch detune defined in octaves.	**4. dEt.F Pitch detune (fine)** Fine pitch detune, defined in semitones (12 semitones in one octave).
5. AEG.d Amplitude Envelope Generator depth Defines the strength and nature of the Amplitude Envelope Generator (AEG) effect.	**6. A.L.tr Amplitude LFO trigger** Defines the behavior of the oscillator's amplitude LFO when a new note is triggered.	**7. P.L.tr Pitch LFO retrigger** Defines the behavior of the oscillator's pitch LFO when a new note is triggered.	
9. PL.Md Oscillator Play Mode Defines how the selected waveform should be played.	**10. Ph.Md Phase Mode** Allows the waveform's starting position to depend on the note pitch being played.	**11. Ph.St Phase Start** Specifies the start position (in percentage) for the waveform.	**12 Ph.rn Phase Range** Defines a range between Phase Start and the end of the waveform.
13. Ky.FW Key Follow Defines how a note's pitch maps to the oscillator's pitch.	**14. StyL Oscillator Style** Specifies different playback styles for oscillators to emulate various gear quirks.	**15. SL.SL Slice Select** Determines which sample slice is selected when a note is played.	**16. SM.Ho Sample-and-hold** Allows for playing back an oscillator at a lower sample rate than the master sample rate.

More details: https://www.woovebox.com/support/guides--tutorials/sound-design/oscillators

amplitude page

The amplitude page controls amplitude-related settings for oscillator 1 and 2, such as their Attack, Decay, Sustain, Release (ADSR) envelope generator timings/levels, as well as their amplitude LFOs.

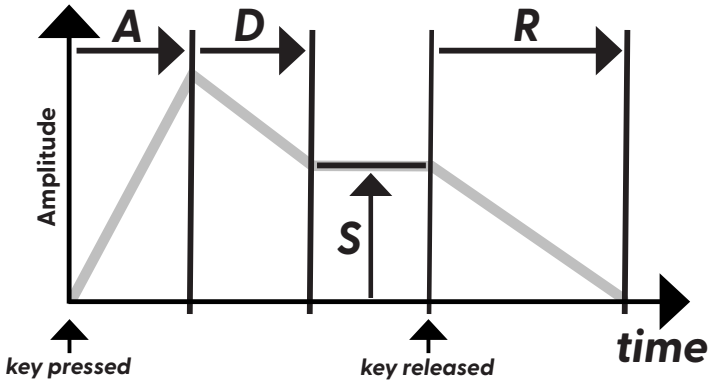


1. AtK.1 Amplitude Envelope Generator Attack Oscillator 1 Attack time (ms) to ramp up from 0 to full amplitude (attenuated by AEG.d).	**2. dcy.1 Amplitude Envelope Generator Decay Oscillator 1** Decay time (ms) from full amplitude to sustain level (attenuated by AEG.d).	**3. SuS.1 Amplitude Envelope Generator Sustain Oscillator 1** Sustain level (0-127) during note on (attenuated by AEG.d).	**4. rLS.1 Amplitude Envelope Generator Release Oscillator 1** Release time (ms) from sustain level to 0 after note off.
5. L1.Wv LFO 1 Waveform Specifies the waveform for oscillator 1's amplitude LFO: 'nOiSE' (random noise), 'SinE' (sine), 'tri' (triangle), 'SaW' (saw), or 'Sqr' (square).	**6. L.1.de LFO1 depth** Specifies the LFO strength affecting the filter, with negative values inverting the waveform.	**7. L.1.rt rate for cutoff frequency LFO** Specifies the speed by which the LFO should oscillate. Speed is specified in steps and is thus synced to your song's BPM.	**8. L.1.ho hold duration for cutoff frequency LFO** Specifies the LFO hold duration (ms), creating rhythmic patterns when combined with the LFO rate.
9. AtK.2 Amplitude Envelope Generator Attack Oscillator 2 Attack defines the time it takes (ms) to ramp up from 0 full amplitude (attenuated by AEG.d).	**10. dcy.2 Amplitude Envelope Generator Decay Oscillator 2** Decay defines the time it takes (ms) to ramp down from full amplitude (attenuated by AEG.d) to the sustain level.	**11. SuS.1 Amplitude Envelope Generator Sustain Oscillator 2** Defines the proportion (0-127) of full amplitude (attenuated by AEG.d) that should be sustained during note on.	**12. rLS.2 Amplitude Envelope Generator Release Oscillator 2** Time (ms) to ramp down from sustain level to 0, triggered on note off.
13. L2.Wv LFO 2 Waveform LFO 2 waveform: Choose from 'nOiSE' (random noise), 'SinE' (sine), 'tri' (triangle), 'SaW' (saw), or 'Sqr' (square).	**14. L.1.de LFO2 depth** LFO2 depth: Controls LFO effect strength on filter. Negative values invert the waveform (e.g., square wave toggles 0/"off" to 1/"on").	**15. L.2.rt rate for cutoff frequency LFO** Specifies the speed by which the LFO should oscillate. Speed is specified in steps and is thus synced to your song's BPM.	**16. L.2.ho hold duration for cutoff frequency LFO** Specifies the LFO hold duration (ms), creating rhythmic patterns when combined with the LFO rate.

More details: https://www.woovebox.com/support/guides--tutorials/sound-design/amplitude-modulation

filter page

The filter page controls filter-related settings such as filter type selection, cut-off frequency, resonance, Attack, Decay, Sustain, Release (ADSR) envelope generator timings/levels and filter frequency LFO.



1. type Filter type Specifies the filter type applied to the patch, e.g., low-pass, band-pass, or high-pass.	**2. Cut.F Filter Cutoff** Specifies filter cutoff frequency.	**3. rESo Resonance** Specifies filter resonance.	**4. KEy.t Filter cutoff frequency key tracking** Defines how the pitch affects filter cutoff frequency.
5. FEG.d Filter Amplitude Generator Defines the strength of the Filter Envelope Generator (FEG) effect on the filter.	**6. LF.rt** Defines what happens to the cutoff frequency LFO when a new note is triggered.	**7. C2dc Filter cutoff to decay** Allows filter cutoff to influence AEG decay for tension buildups.	**8. C2EF Filter to effects** Allows filter cutoff to influence effect sends to reverb and delay.
9. Attk Filter Envelope Generator Attack Defines the time for the filter to ramp up from 0 to full cutoff.	**10. dcAy Filter Envelope Generator Decay** Defines the time for the filter to ramp down to the sustain level.	**11. SuSt Filter Envelope Generator Sustain** Defines the proportion of cutoff frequency sustained during note on.	**12. rLSE Filter Envelope Generator Release** Defines the time to ramp down from sustain level to 0 upon note off.
13. L.C.Wv Waveform for cutoff frequency LFO Specifies the waveform for the cutoff frequency LFO (e.g., sine, square, or noise).	**14. L.C.de depth for cutoff frequency LFO** Defines how much the LFO affects the filter, with negative values inverting the waveform.	**15. L.C.rt rate for cutoff frequency LFO** Specifies the LFO speed, synced to the song's BPM.	**16. L.C.ho hold duration for cutoff frequency LFO** Defines the duration for which the LFO holds a sampled value.

More details: https://www.woovebox.com/support/guides--tutorials/sound-design/filters

pitch page

The pitch page controls advanced pitch-related settings for oscillator 1 and 2, such as pitch quantization, portamento/glide, and pitch LFOs.

1. L1.Md LFO 1 Mode Specifies pitch LFO source for Osc1 and quantization mode (e.g., normal, chord, scale).	**2. L2.Md LFO 2 Mode** Specifies pitch LFO source for Osc2 and quantization mode (e.g., normal, chord, scale).	**3. O3.Lv Oscillator 3 Level** Specifies the volume level of Osc3. Can adopt Osc1/2 pitch and amplitude modulation.	**4. O3.Oc Oscillator 3 Octave** Specifies the octave shift for Osc3 relative to the parent oscillator.
5. Prt.S Portamento Speed Specifies speed of portamento in step durations. “Off” turns it off.	**6. Prt.P Portamento Probability** Specifies the probability of portamento when playing consecutive notes.	**7. LEG.S Legato Speed** Specifies legato speed in step durations. “Off” turns it off.	**8. LEG.P Legato Probability** Specifies probability of legato when a note overlaps with another.
9. L1.Wv LFO 1 Waveform Waveform for LFO 1: Noise, Sine, Triangle, Saw, Square.	**10. L1.dp LFO 1 Depth** Depth for LFO 1 (-4 to 4 octaves). Negative values invert the waveform.	**11. L1.rt LFO 1 Rate** Specifies LFO 1 rate in steps per cycle.	**12. L1.Ho LFO 1 Hold** Hold time for LFO 1 in milliseconds.
13. L2.Wv LFO 2 Waveform Waveform for LFO 2: Noise, Sine, Triangle, Saw, Square.	**14. L2.dp LFO 2 Depth** Depth for LFO 2 (-4 to 4 octaves). Negative values invert the waveform.	**15. L2.rt LFO 2 Rate** Specifies LFO 2 rate in steps per cycle.	**16. L2.Ho LFO 2 Hold** Hold time for LFO 2 in milliseconds.

More details: https://www.woovebox.com/support/guides--tutorials/sound-design/pitch-modulation

panning page

The panning page controls panning-related settings such as left/right balance, auto panning, auto start position, and pitch-to-stereo spread.

1. Pan Specifies where in the stereo field the the primary (static) placement of voices should.			
5. P.2.Pn Pitch to Pan Use note pitch as in input for placing voices in the stereo field.			
9. AU.Wv Auto-Pan LFO waveform Waveform for Auto-Pan LFO: Noise, Sine, Triangle, Saw, Square.	**10. Auto-Pan LFO depth** Depth for the auto-pan LFO. Negative values invert the waveform.	**11. AU.rt Auto-Pan LFO rate** Specifies the LFO speed, synced to the song's BPM.	**12. Au.Ho Auto-Pan LFO Hold** Specifies the hold time for the auto-pan LFO in milliseconds.
13. St.Wv Start Position LFO waveform Waveform for Start Position LFO: Noise, Sine, Triangle, Saw, Square.	**14. Start Position LFO depth** Depth for the start position LFO. Negative values invert the waveform.	**15. St.rt Start Position LFO rate** Specifies the LFO speed, synced to the song's BPM.	**16. St.Ho Start Position LFO Hold** Specifies the hold time for the start position LFO in milliseconds.

More details: https://www.woovebox.com/support/guides--tutorials/sound-design/panning/panning-page

dynamics page

The dynamics page controls dynamics-related settings such as the per-track compressor/limiter, and inter-track gating and side-chaining.

1. r.buS Receive Bus Specifies the bus controlling volume attenuation for this track (includes fake pulse option).	**2. S.buS Send Bus** Specifies the bus to send the track's signal to.	**3. S.Src Signal Source** Specifies the signal to be sent to the send bus (e.g., note length, oscillator 1/2, audio).	**4. S.Lvl Send Level** Specifies the volume (0-127) of the signal sent to the send bus.
5. Sd.dP Sidechain Depth Specifies the amount of signal attenuation for sidechain effect.	**6. Sd.Gt Sidechain Gate** Specifies the gating effect for sidechain signal.	**7. Sd.At Sidechain Attack** Specifies speed of sidechain attack. Lower number = faster.	**8. Sd.rL Sidechain Release** Specifies speed of sidechain release. Lower number = faster.
9. CM.Th Compressor Threshold Specifies the compressor threshold above which it activates (0-100).	**10. CM.rt Compressor Ratio** Specifies the compression ratio for signals above the threshold.	**11. CM.At Compressor Attack** Specifies speed of compressor attack. Lower number = faster.	**12. CM.rL Compressor Release** Specifies speed of compressor release. Lower number = faster.
13. Gb.du Global Multi-FX Ducking Specifies how much the track should duck the master reverb, chorus, and delay outputs.	**14. rv.du Reverb Send Ducking** Specifies how much the track ducks its reverb send volume.	**15. dL.du Delay Send Duck** Specifies how much the track ducks its delay send volume.	**16. noiS Noise Generator** Generates noise based on track amplitude, used for analog feel or sound design.

More details: https://www.woovebox.com/support/guides--tutorials/sidechaining/settings

global song page

The song globals page controls global song-related settings, such as tempo (BPM), key, scale and master compressor.

1. bPM song tempo Song's global tempo in beats per minute	**2. root song scale root note** Song scale's root note.	**3. ScaL song scale, tonality or mode** Song scale, tonality or mode.	**4. FrE.C free chord selection and playback** Free play back of chords of out-of-scale root notes.
5. noi.F Noise Floor Introduces artifical analog noise.	**6. noi.c Noise Character** Sets character of artificially introduced noise	**7. SEEd random number generator seed** Enables repeating pseudo random sequence.	**8. LG.Pi legacy pitch behavior** Adopt legacy behavior for up/dn note pitch conditional for use for songs < FW 4223.
9. MC.th Master Compressor threshold Sets activation threshold above which the master compressor/limiter should kick in.	**10. MC.th Master Compressor ratio** Sets the compression ratio for the master compressor.	**11. MC.at Master Compressor attack** Specifies how fast the master compressor/ limiter should respond to positive threshold excess.	**12. MC.rL Master Compressor release** Specifies how fast the master compressor/ limiter should respond to negative threshold excess.
13. Sync analog sync pulse Enables sync pulse on output port. Use breakout cable to split audio and sync signal.			

More details: https://www.woovebox.com/support/guides--tutorials/song-mode/parameters

effects page

A multi-effects block exist with configurable reverb, chorus/phaser/flanger and 2x delay units (2nd unit provides optional "sparkle" delay algorithm). Send amounts to reverb, chorus and the dual delay units are available per-track.

1. dLLn Delay 1 length Length of delay in beats for delay unit 1.	**2. dLFb Delay 1 feedback** Feedback strength for delay unit 1.	**3. dLwd Delay 1 width** Delay between left and right channel for delay unit 1.	**4. d2.Al Delay2 Algorithm** Specifies the algorithm for the second delay unit.
5. dLLn Delay 2 length Length of delay in beats for delay unit 2.	**6. dLFb Delay 2 feedback** Feedback strength for delay unit 2.	**7. dLwd Delay 2 width** Delay between left and right channel for delay unit 2.	**8. Vn.Cr Vinyl Crackle** Amount of emulated vinyl crackle to introduce into the mixer.
9. chSP Chorus speed Speed of the chorus effects unit bouncing between chorus times.	**10. cht1 Chorus time 1** Time delay 1 between original and output signal for chorus unit.	**11. cht2 Chorus time 2** Time delay 2 between original and output signal for chorus unit.	**12. ch.AL Chorus Algorithm** Specifies the chorus unit algorithm to be used.
13. rvFb Reverb feedback Reverb feedback setting.	**14. rvtM Reverb time** Reverb time setting.	**15. Hal.N North pole Hall sensor mapping** Specifies magnetic north pole parameter mapping	**16. Hal.S South pole Hall sensor mapping** Specifies magnetic south pole parameter mapping

More details: https://www.woovebox.com/support/guides--tutorials/song-mode/parameters