



STING

USER MANUAL

An expressive, algorithmic improvisational
acid line performance system.

VST3 · AU MIDI FX · CLAP

macOS · Windows · Linux

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SYSTEM OVERVIEW

STING is an expressive, algorithmic improvisational acid line performance system that relies strictly on algorithmic rule sets and does not use AI or machine learning to generate anything. It runs as a VST3, AU, or CLAP plugin in any compatible DAW or plugin host on macOS, Windows, and Linux.

Alongside DAW operation, STING includes hardware support that transforms a Novation Launchpad or monome into a dedicated hands-on performance and composition system.

- **4 Generation Engines:** Algo, Arp, Bass, and a multi-voice Counterpoint mode capable of generating two lines, chords, and bass to drive full hardware or software setups.
- **MIDI File Import:** Statistical analysis engine that uses imported MIDI files as jumping-off points for new pattern variations.
- **Modulation Section:** Dual LFOs, a Mod Matrix, and non-linear clock shaping.
- **Themes:** 15 color themes (including options designed for color blindness) alongside custom theme creation.
- **Built-in Accessibility:** Native interface communicating directly with screen readers (VoiceOver, NVDA, Narrator) and DAW tools like REAPER's OSARA, making STING accessible to blind, visually impaired, and sighted users alike.



HISTORY

Sting was born on a low-key afternoon during a residency in Reykjavik in 2013. Starting out as a joke, asking if it was possible to build something that would generate acid, it turned out to be pretty useful.

Over the years, Sting went through several private, public, and hardware iterations. The 2025 Max for Live device (Sting 2) expanded the concept into a full performance platform with Push integration, bass modes, and dedicated arpeggiation tools.

The standalone plugin version opens Sting up to any DAW host for the first time while unlocking deeper sequencing and modulation capabilities.

DAW SETUP AND ROUTING

Because Sting outputs MIDI data rather than audio, host setup varies depending on your DAW's routing architecture:

- **Ableton Live:** Route Sting's MIDI output directly to a second MIDI track hosting your target synth plugin.
- **Bitwig and REAPER:** Insert Sting directly on the track before your instrument.
- **Logic Pro:** Load Sting as an AU MIDI FX plugin directly on the instrument channel.
- **FL Studio:** Set matching MIDI port numbers inside the plugin wrapper settings or connect nodes inside Patcher.

For step-by-step DAW routing diagrams, consult the dedicated setup PDF available on the Sting download page.

ACCESSIBILITY INTERFACE

Accessibility is built directly into Sting's core interface. Every parameter reports its name and current value to screen readers, announcing changes continuously as controls are adjusted.

Every parameter is exposed for full screen reader navigation (VoiceOver, NVDA, Narrator) and DAW parameter tracking via tools like REAPER's OSARA. Refer to the separate Accessibility Manual on the download page for specific screen reader navigation shortcuts.

ALGO ENGINE

Sting features four primary generation engines: Algo, Arp, Bass, and Counterpoint.

Clicking the central smiley face control calculates a complete 16-step sequence built from 16 note patterns and 16 matching velocity, gate, and octave patterns. Because these sets are musically related, layering them yields 256 unique pattern combinations per generation.

	GENERATE click Calculates a fresh set of note, velocity, gate and octave patterns.
	TYPE 1 to 16 Morphs sequence notes from randomized intervals into classic acid-style phrasing.
	DENSITY 1 to 16 Controls the overall note activity and busyness of the pattern.
	STEPS 1 to 16 Sets the loop length.
	OFFSET 0 to 15 Shifts the sequence starting point across the grid.
	ACCENT 0 to 100 Scales output dynamics across off, low, and high velocity layers. At 0, velocity is flat; at 100, dynamic contrast between notes is at its maximum.
	GATE 1 to 200 Scales the durations of the three generated note length values.
	ROOT C to B Sets the key center. Toggling MIDI allows incoming notes to update the root in real time.
+12	TRANPOSE -36 to +48 semitones Pitches the entire sequence globally.
	SCALE 35 scales Toggling Scale forces all generated pitches to conform strictly to the chosen scale.

Pattern

▼

CLOCK MODES Pattern, Song, LFO1, Gate
Choose between Pattern (restarts playhead on transport start), Song (tracks DAW song position), LFO1 (uses LFO1 as clock source), or Gate (plays pattern only while incoming MIDI notes are held).

1 bar

▼

POLYMER RESET 0 to 16 bars
Sets the bar interval at which odd-stepped patterns reset. A 7-step sequence set to a 1-bar reset plays as a 7 · 7 · 2 pattern.

→

←

↔

FWD

BWD

PEND

DIRECTION Forward, Backward, Pendulum
Sets playback direction across the pattern.

50

SWING 0 to 100
Adds swing to the sequence.

20

JITTER 0 to 100 %
Introduces timing fluctuations, causing the sequencer to skip, repeat, or jump backward across steps.

EDITOR SECTION

Expand the Editor panel to access lock toggles for Note, Accent, Gate, and Octave. Disabling a toggle locks that element, preventing it from changing when you hit Generate. This allows you to keep a rhythmic structure while generating new notes, or vice versa.

Manual step adjustments are also available within the Note, Accent, Gate, and Octave tabs.

●

ON

○

LOCKED

RANDOMIZE TOGGLES one per element
The tabs above the sequencer select which element you are editing, and the dot beside each label is that element's randomize toggle. A filled dot means the element is regenerated when you hit Generate; a hollow ring means it is locked and will be left alone.

Note ●

Accent ●

Gate ○

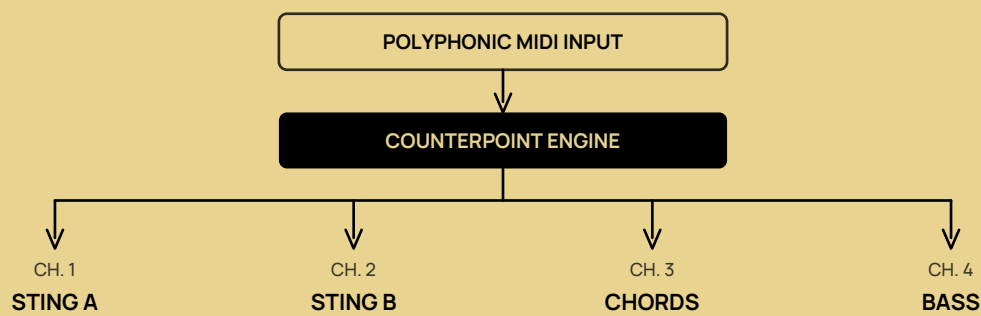
Oct ●

ARP AND BASS ENGINES

Arp	ARP ENGINE requires MIDI input Incoming MIDI notes define the pitch content of the generated sequence, generating a fresh set of pattern variations whenever new notes are received. Combining Arp mode with Editor toggles offers controlled randomness that retains clear musical intent.
Bass	BASS ENGINE requires chord input Requires polyphonic chord MIDI input. Sting automatically detects the root note and builds an accompanying bassline around it. Lower Type settings integrate additional notes extracted from the chord alongside the root. Higher Type settings limit pitch selection, sticking strictly to the root note at maximum values.

COUNTERPOINT ENGINE

Counterpoint mode converts Sting into a 4-part multi-voice generator driven by polyphonic MIDI input, producing two distinct Sting lines, a chord part, and a bassline across four separate MIDI channels.



STING A AND STING B channels 1 and 2 Rather than generating two separate lines, Sting shares a single melodic idea across two channels, preserving clarity and focus.	WEIGHT 1 to 16 Controls how melody notes are split between Sting A and Sting B, from complete routing to one channel, to passing the line back and forth note by note.
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CHORDS AND BASS channels 3 and 4 Fills out the harmony behind the main line. Type re-voices chord inversions and spreads, while Density controls sequence activity.
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VOICE SELECTION Sting, Chords, Bass

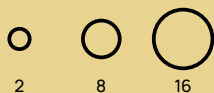
In Counterpoint mode the controls directly below the sequencer switch which voice you are editing. The three segments read Sting, Chords and Bass, and selecting one shows that voice's steps in the editor above.

Each segment carries its own randomize dot, so any voice can be excluded from randomization. A filled dot means that voice is regenerated when you hit Generate; a hollow ring locks it, letting you roll a new bassline while the chords and the melody stay exactly as they are.

Sting ●

Chords ○

Bass ●



2

8

16

HARMONIC DENSITY 1 to 16

Attenuates note playback for the chord and bass channels only, removing active notes while preserving the underlying progression to create extra space.

MIDI FILE IMPORT AND EXPORT

Drag any .mid file onto Sting's window to process external MIDI through the Algo engine.

1-BAR MIDI FILES

Retains original notes, velocities, gates, and octaves as an editable base template for new variations.

LONGER MIDI FILES

Performs a statistical analysis based on step and pitch frequency. No AI or machine learning is used, and no data is stored.



TYPE



DENSITY

IMPORT PROCESSING

The original character is maintained by emphasizing the elements that repeat most often. Type controls pitch variations drawn from the file, while Density determines how much imported material is present.

**MIDI CLIP DRAG** click and drag

Drag the MIDI Clip button into your DAW to export sequences as editable clips. This outputs one clip for Algo, Arp and Bass, or four separate clips for Counterpoint mode.

MODULATION SECTION

Expand the Modulation panel to combine 16-step patterns into evolving, long-form sequences using two LFOs and a Modulation Matrix.

	LFO 1	LFO 2	AFTERTOUCH	VELOCITY
TYPE	64			
DENSITY		-38		22
STEPS		45		
OFFSET	16			
ACCENT				30
GATE			55	
ROOT				
SCALE				
WEIGHT	-70			
HARM. DENS		28		

BIPOLAR DEPTH -100 to +100

Modulation operates centered around current dial positions rather than from zero. To sweep Type linearly across its range, set the Saw Up waveform, set the Type dial to center, and set depth to +16.

 SINE

 RAMP

 RANDOM

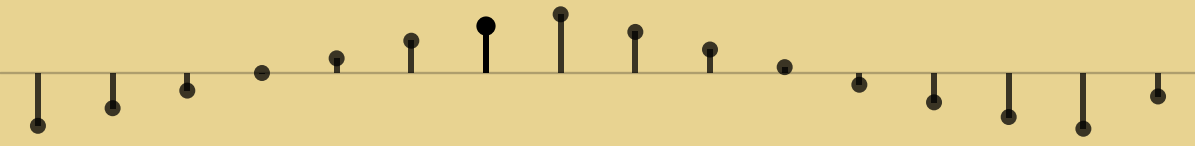
 DRUNK

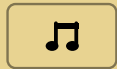
LFO WAVEFORM 7 shapes plus Step Sequencer

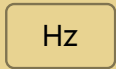
Select from 7 standard waveforms or a Step Sequencer. Use Shape to adjust step counts, or right-click to load presets.

STEP SEQUENCER 16 steps

Draw your own modulation shape across 16 steps instead of using a waveform. Shape sets how long the sequence runs before it loops, and right-clicking anywhere in the sequencer opens a menu of presets.



 SYNC

 Hz
FREE

SYNC AND RATE synced or free in Hz

Each LFO runs tempo-synced or free in Hertz.

 OFF

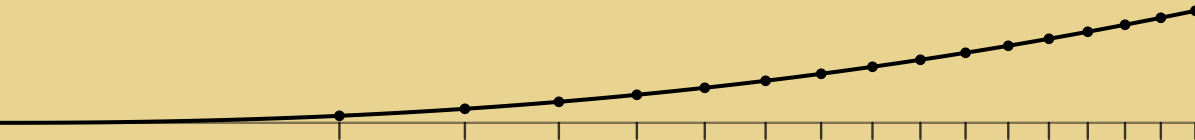
 ON

PHASE RESET off, on

Enable Phase Reset to sync restart with DAW transport.

LFO1 CLOCK ENGINE

When the source is set to LFO1, Sting will use the waveform to drive the sequencer. This can result in very interesting, non-linear rhythms. For example, shaping a saw-up ramp will result in accelerating patterns.

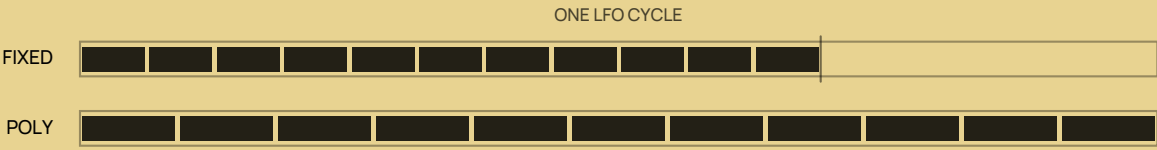


FIXED

FIXED MODE step mode
Step durations remain constant. Reducing step count shortens the total sequence duration relative to the LFO cycle, generating polymetric structures.

POLY

POLY MODE step mode
Locks the sequence duration to span one complete LFO cycle. Adjusting step count evenly distributes those steps across the bar to generate instant polyrhythms, for example 11 steps spread across a bar.



EUCLIDEAN PATTERNS

Independent step lengths and LFO sequence counts allow Sting to distribute notes as evenly as possible across varying cycle lengths. Combining this with LFO2 modulating global step length produces evolving Euclidean structures.


ON

4 bars

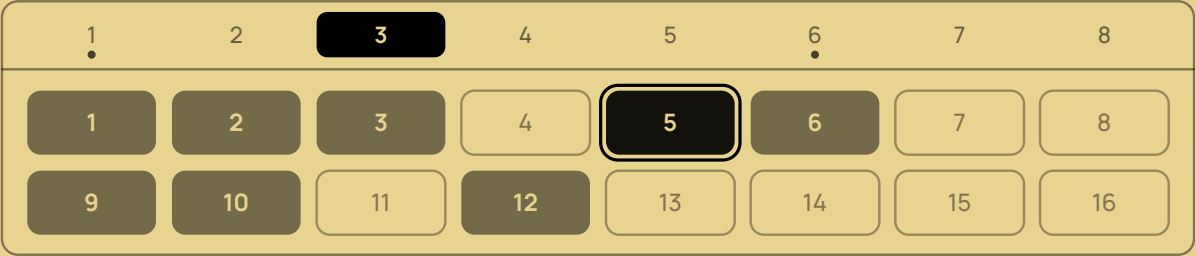
▼

DIV

AUTO GENERATE off, on, with a division
Automatically triggers new sequence generation at set intervals.

SLOTS AND PATTERN MEMORY

Click Slots to display the 128-slot memory interface, organized into 8 banks of 16 slots.



5

FULL

6

EMPTY

STORING DATA

Each slot saves complete sequence states, including active parameters, variations, and modulation routing.

SLOT MANAGEMENT right-click
Right-click any slot to Store, Copy, Paste, or Delete.

AUTOMATION AND CHAINING
Slot parameters are exposed for DAW automation and remote MIDI triggering. When using Launchpad or monome hardware, slots can be chained sequentially to build complete pattern arrangements.

SETTINGS



The Settings panel gathers everything that shapes Sting's output without being part of the pattern itself: the look of the interface, the octave range, articulation, the connected hardware, and where the MIDI goes.

Sting	COLOR THEME 15 themes plus custom Sting ships with 15 color themes, including options designed for color blindness. Custom themes can be created alongside them.
-1 LOW +2 HIGH	PATTERN CHARACTER -1 to +2, low and high Sets the overall octave boundary, constraining generated lines to a single octave or spreading them across a wider range.
Tie OFF Tie ON	TIE MODE off, on Generates patterns using tied note lengths.
Launchpad	CONTROL SURFACE Launchpad, monome Connect a Novation Launchpad or monome grid via the Control Surface panel for direct hands-on control. See the dedicated hardware reference guide for mapping details.
	GRID ROTATION 4 orientations Rotates the monome grid in 90 degree steps so the layout follows the device however it sits on your desk. The bar in each square marks the edge the USB cable leaves from, so you pick the one that matches your setup. A wide 128 grid has its cable on the side, so only the left and right orientations are offered.
Host PORT 1 CHANNEL	MIDI OUTPUT port and channel 1 to 16 Sting can send to the host or straight out of a hardware MIDI port. These settings are deliberately kept out of host automation, so recalling a session cannot reconfigure your hardware.
ON 102 CC	CC ON SLIDE off, on, CC 0 to 127 Transmits the supplementary CC message required to trigger slides on hardware synths like the Roland TB-03.

COUNTERPOINT CHANNELS, TRANSPOSITION AND MUTES per voice

Each of the four Counterpoint voices has its own row. Ch sets the MIDI output channel, Trans transposes that voice on its own, and M mutes it.

Voice	M	Ch	Trans
Sting A	M	1	0
Sting B	M	2	-12
Chords	M	3	0
Bass	M	4	+12

PARAMETER REFERENCE

Sting exposes 126 parameters, 121 of which your DAW can automate. Every one of them is also readable by a screen reader, and every one is listed below.

The five marked No are hardware settings, kept out of host automation so recalling a session cannot reconfigure your gear.

PATTERN

PARAMETER	RANGE	DEFAULT	AUTOMATABLE
Generate	off, on	off	Yes
Type	1 to 16	11	Yes
Density	1 to 16	14	Yes
Step Count	1 to 16	16	Yes
Offset	0 to 15	0	Yes
Accent	0 to 100	50	Yes
Gate	1 to 200	100	Yes
Mode	Algo, Arp, Bass, Counterpoint	Algo	Yes
Randomize Notes	off, on	on	Yes
Randomize Velocity	off, on	on	Yes
Randomize Gate	off, on	on	Yes
Randomize Octave	off, on	on	Yes

PITCH

PARAMETER	RANGE	DEFAULT	AUTOMATABLE
Root Note	C to B	C	Yes
Scale Enabled	off, on	off	Yes
Scale	35 scales, Major to Messiaen 7	Major	Yes
Transpose	-36 to 48	0	Yes
Octave Low	-1 to 2	-1	Yes
Octave High	-1 to 2	2	Yes

TIMING

PARAMETER	RANGE	DEFAULT	AUTOMATABLE
Clock Mode	Pattern, Song, LFO1, Gate	Pattern	Yes
Beat Division	1/64 to 32 bars	1/16	Yes
Polymeter Reset	0 to 16	0	Yes
Direction	Forward, Backward, Pendulum	Forward	Yes
Swing	0 to 100	0	Yes
Step Jitter	0 to 100	0	Yes
Tie Mode	off, on	off	Yes
LFO Step Mode	Fixed, Poly	Fixed	Yes
Auto Generate	off, on	off	Yes
Auto Gen Div	1/64 to 32 bars	1 bar	Yes

STEP EDITOR

PARAMETER	RANGE	DEFAULT	AUTOMATABLE
Seq Step Select	1 to 16	1	Yes
Seq Selected Note	C, C#, D, D#, E, F, F#, G, G#, A, A#, B	C	Yes
Seq Selected Accent	low, mid, high	low	Yes
Seq Selected Gate	short, medium, long	medium	Yes
Seq Selected Octave	-1, 0, +1, +2	0	Yes

COUNTERPOINT

PARAMETER	RANGE	DEFAULT	AUTOMATABLE
Weight	1 to 16	8	Yes
Harmonic Density	1 to 16	16	Yes
Counterpoint Voice	Sting, Chords, Bass	Sting	Yes
Randomize Sting Voice	off, on	on	Yes
Randomize Chords Voice	off, on	on	Yes
Randomize Bass Voice	off, on	on	Yes
Sting A Output Channel	1 to 16	1	Yes
Sting B Output Channel	1 to 16	2	Yes
Chords Output Channel	1 to 16	3	Yes
Bass Output Channel	1 to 16	4	Yes
Sting A Transpose	-36 to 36	0	Yes
Sting B Transpose	-36 to 36	0	Yes
Chords Transpose	-36 to 36	0	Yes
Bass Transpose	-36 to 36	0	Yes
Sting A Mute	off, on	off	Yes
Sting B Mute	off, on	off	Yes
Chords Mute	off, on	off	Yes
Bass Mute	off, on	off	Yes

MODULATION

PARAMETER	RANGE	DEFAULT	AUTOMATABLE
Mod Target Select	Type, Density, Steps, Offset, Accent, Gate, Root, Scale, Weight, Harm.Dens	Type	Yes
Mod Source Select	LFO 1, LFO 2, Aftertouch, Velocity	LFO 1	Yes
Mod Selected Amount	-100 to 100	0	Yes
Mod Type LFO1	-100 to 100	0	Yes
Mod Type LFO2	-100 to 100	0	Yes
Mod Type Aftertouch	-100 to 100	0	Yes
Mod Type Velocity	-100 to 100	0	Yes
Mod Density LFO1	-100 to 100	0	Yes
Mod Density LFO2	-100 to 100	0	Yes
Mod Density Aftertouch	-100 to 100	0	Yes
Mod Density Velocity	-100 to 100	0	Yes
Mod Steps LFO1	-100 to 100	0	Yes
Mod Steps LFO2	-100 to 100	0	Yes
Mod Steps Aftertouch	-100 to 100	0	Yes
Mod Steps Velocity	-100 to 100	0	Yes
Mod Offset LFO1	-100 to 100	0	Yes
Mod Offset LFO2	-100 to 100	0	Yes
Mod Offset Aftertouch	-100 to 100	0	Yes
Mod Offset Velocity	-100 to 100	0	Yes
Mod Accent LFO1	-100 to 100	0	Yes
Mod Accent LFO2	-100 to 100	0	Yes
Mod Accent Aftertouch	-100 to 100	0	Yes
Mod Accent Velocity	-100 to 100	0	Yes
Mod Gate LFO1	-100 to 100	0	Yes
Mod Gate LFO2	-100 to 100	0	Yes
Mod Gate Aftertouch	-100 to 100	0	Yes
Mod Gate Velocity	-100 to 100	0	Yes
Mod Root LFO1	-100 to 100	0	Yes
Mod Root LFO2	-100 to 100	0	Yes
Mod Root Aftertouch	-100 to 100	0	Yes
Mod Root Velocity	-100 to 100	0	Yes
Mod Scale LFO1	-100 to 100	0	Yes
Mod Scale LFO2	-100 to 100	0	Yes
Mod Scale Aftertouch	-100 to 100	0	Yes
Mod Scale Velocity	-100 to 100	0	Yes
Mod Weight LFO1	-100 to 100	0	Yes
Mod Weight LFO2	-100 to 100	0	Yes
Mod Weight Aftertouch	-100 to 100	0	Yes
Mod Weight Velocity	-100 to 100	0	Yes

Mod Harm Dens LFO1	-100 to 100	0	Yes
Mod Harm Dens LFO2	-100 to 100	0	Yes
Mod Harm Dens Aftertouch	-100 to 100	0	Yes
Mod Harm Dens Velocity	-100 to 100	0	Yes

LFO 1

PARAMETER	RANGE	DEFAULT	AUTOMATABLE
LFO1 Wave	Sine, Ramp Up, Ramp Down, Triangle, Square, Random, Drunk, Sequencer	Sine	Yes
LFO1 Sync	Sync, Free	Sync	Yes
LFO1 Div	1/64 to 32 bars	1 bar	Yes
LFO1 Rate Hz	0.01 to 30 Hz	1 Hz	Yes
LFO1 Depth	0 to 100 %	100 %	Yes
LFO1 Shape	-100 to 100	0	Yes
LFO1 Retrigger	off, on	on	Yes
LFO1 Step Select	1 to 16	1	Yes
LFO1 Step Value	-100 to 100	-100	Yes

LFO 2

PARAMETER	RANGE	DEFAULT	AUTOMATABLE
LFO2 Wave	Sine, Ramp Up, Ramp Down, Triangle, Square, Random, Drunk, Sequencer	Sine	Yes
LFO2 Sync	Sync, Free	Free	Yes
LFO2 Div	1/64 to 32 bars	1 bar	Yes
LFO2 Rate Hz	0.01 to 30 Hz	0.25 Hz	Yes
LFO2 Depth	0 to 100 %	100 %	Yes
LFO2 Shape	-100 to 100	0	Yes
LFO2 Retrigger	off, on	off	Yes
LFO2 Step Select	1 to 16	1	Yes
LFO2 Step Value	-100 to 100	-100	Yes

SLOTS

PARAMETER	RANGE	DEFAULT	AUTOMATABLE
Slot Bank	1 to 8	1	Yes
Slot Recall	1 to 16	1	Yes
Store Slot	off, on	off	Yes

OUTPUT AND HARDWARE

PARAMETER	RANGE	DEFAULT	AUTOMATABLE
MIDI Input	off, on	off	Yes
MIDI Output Channel	1 to 16	1	No
MIDI Output Device	0 to 16	0	Yes
CC on Slide	off, on	off	Yes
Slide CC Number	0 to 127	102	No
Control Surface Type		0	No

Control Surface Device	0 to 16	0	Yes
Control Surface Connect	off, on	off	No
Grid Rotation	0, 90, 180, 270 degrees	0	Yes
Grid Variable Brightness	off, on	off	No
Grid Background Level	1 to 14	7	Yes