

# Unique



**User Manual** 

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# **About**

Unique is a pretty versatile virtual instrument.

It is a well-crafted emulation of synthesizers from the golden age of analogue keyboard sounds, delivering a wide spectrum of sound-design options: from dark basses and strong leads to warm pads.

Unique comes with a state-of-the-art vowel filter. The engine of this filter is the result of years of development here at Sugar Bytes in Berlin and it's fair to say that it shaped the sound and workflow of many high-profile electronic musicians since its release.

Unique also includes two effect sections with Sugar Bytes' arsenal of signature effects to pimp your productions.

The sound and the functionality of Unique have been designed together with musicians and sound designers in order to cover a wide range of sounds and possibilities. The user interface is simple but powerful. With Unique you will explore a new world of amazing sounds.

## **Basic Structure**

On top of the screen, you find the <u>Preset System</u>, you can open the menu to choose a preset from a certain category or you can simply step through the presets via the <> buttons.

The <u>Arpeggiator section</u> (top-left) also contains some general settings regarding the MIDI input.

Right beside is the Oscillator section and the MIX SECTION (mix and panning).

On the bottom there's the <u>Filter section</u> (left), the <u>Effect section</u> (middle) and the Master section (right).

<u>The Controllers sections</u> contains 4 freely assignable modulators.

Right beside the Controller section you find the <u>SETTINGS SCREEN</u> which offers additional settings and functions and a link to the manual.

# The User Interface

Unique's user interface has 5 main elements

#### Oscillators

Unique's oscillators (upper third of the GUI) are specially designed to cover a **wide spectrum** of sounds: from dark basses and strong leads to very warm pad sounds. There are 5 generator setups in total:

Saw Tooth Triple Saw Pulse Triple FM Noise (white-noise generator)

Each oscillator can produce **8 voices** in full stereo. The oscillators are **anti-aliased** for clearer sound at high frequencies.

#### **Filters**

The Filter section (middle on the left side of the GUI) offers 5 filter types:

High Pass (2-Pole) Band Pass (2-Pole) Band Pass (4-Pole) Low Pass (4-Pole) Comb Filter

Each of these five filter types can also be used in **Vowel Mode**, where two filters concentrating on vowels can be used in interaction with each other.

This little miracle engine makes it easy to create humanoid line sensations in your setup.

### Controllers

If you tap the red Controllers icon, the upper third of Unique's GUI will change and show the four modulators:

LFO Envelope Sequencer Motion (an x/y pad)

Each and every parameter in Unique can be **modulated**, **automated** or controlled via **MIDI**.

The assignment process is easy and simple. **Right click** any knob to open the modulation assignment screen.

### **Effects**

Unique comes with a line up of Sugar Bytes' signature effects. There are 2 effect sections with a total of 6 effects:

> Delay Reverb Phaser LoFi

Filter on effect 1 / Chorus on effect 2

### <u>Arpeggiator</u>

Unique has a built-in arpeggiator in the MIDI-IN section in the top-left corner. The arpeggiator can be applied independently to the oscillator, letting you explore interesting sounds and melodies. There is an intelligent **double voice mode**.

### Oscillator section

Unique has two main oscillators with five generator options each.

Sawtooth Triple Saw Pulse Triple FM Noise

Both oscillators offer typical ADSR parameter:

**Attack:** adjust the attack time of the amplitude envelope

Decay: the time after the attack phase until sustain

**Sustain:** adjust the amplitude level after the decay

Release: adjust the release time of the envelope

The Octave knob (attenuated) sets the rootnote.

The five positions allow for adding/subtracting one or two octaves.

**Detune** will detune the voices slightly. Usually a good way to add some analogue and warm impression.

### Sawtooth



The Sawtooth is the most basic oscillator and contains the spectral content of all natural sounds. The anti-aliased algorithm produces a crystal clear sound even in high frequency ranges. This oscillator is very efficient regarding CPU consumption.

osc i

OCTAVE DETUNE

### Triple Saw



Triple Saw uses 3 hard synced Sawtooth oscillators to produce a very rich frequency spectrum. **Spread**, a pitch offset between the 3 oscillators, results in a fatter sound. With this oscillator you can create string- and organ sounds, as well as sharp sync leads.

TRIPLE FM

### **Pulse**



The Pulse oscillator can create very dominant and analogue sounding signals.

Modulate pulse width to get a wide range of sounds out of this oscillator.

**PW:** the pulse width of the pulse waveform **PWM RATE:** speed of pw modulation (bpm-synced)

### Triple FM



Triple FM is based on frequency modulation of three oscillators. This oscillator provides classic FM sounds, but also unheard-of and inspiring material, from thin and piano-like to fat, detuned and distorted.

**FM:** intensity of internal frequency modulation **SHAPE:** amount of the shape algorithm

### Noise



The Noise oscillator offers an intelligent noise-generator. It contains a **multimode filter** that can be linked to the current pitch. At high resonance values, the noise oscillator can produce weird sounds close to voices, choir or monster sounds.

**Type:** filter type (LP, HP, BP)

Color: adjust the cutoff frequency of internal filter

Reso: resonance of the internal filter

Track: connect voice pitch to filter frequency

In Track mode, the Color control is used to detune the

oscillator.

### Filter section

Unique's Filter section is an outstanding creative tool. Its expressive potential should not be underestimated.



### The 5 Filter Types

### Highpass 2 Pole:

Only frequencies **above cutoff** are passed. A two-pole has a slope of 12 dB/oct.

### Bandpass 2 Pole:

Only signals around cutoff are passed. Fits perfectly into the Vowel Mode.

### Bandpass 4 Pole:

The 4-pole BP has a **smaller bandwidth** than the 2 Pole. Good fit for the vowel mode. A four-pole has a slope of 24 dB/oct.

### Lowpass 4 Pole:

Only frequencies below cutoff are heard.

#### Comb Filter:

This Filter is based on a feedback algorithm with delay times that correspond to filter frequencies. In Vowel Mode, this filter mutates to a **monster mouth**, providing strong, scary and weird sounds.

### Standard Filter Controls

These controls are identical across all filter types:

Reso: adjusts the resonance of the filter

Drive: adds overdrive to the filter

Mix: mixes the dry with the filtered signal

### Modulation of Filter Parameters

There are five modulation sources:

Envelope

LFO

Four Step

Pitchbend

Modwheel

### Envelope



In this mode there is an ADSR envelope, which modulates the cutoff frequency.

### **Cutoff and Peak**

Use the cutoff and peak knobs to set the start and end of envelope modulation.

During the attack phase, the cutoff frequency moves from its starting point to the defined peak frequency. In the release phase, the cutoff will move from the peak back to the cutoff frequency.

### Trigger

Trigger determines on which particular event the envelope is restarted.

Each: each new note retriggers

**Lowest:** triggers, if a note played is lower than the notes played before (in Legato only)

Loudest: will only retrigger if a note played has a higher velocity than before

First: triggers on the first note played

**Arp:** the arpeggiator's tempo sets the trigger interval

### LFO



LFO lets you modulate between 2 filter frequencies or 2 vowels in Vowel Mode.

Like with the envelope you select a start frequency (Cutoff) and a destination frequency (Peak).

Rate: the frequency rate of the LFO (synced to the host BPM)

Fade: fades in the LFO rate

Fade In: time until the full LFO amount is reached

**Note**: The LFO has one more retrigger option than the envelope. This is the **Clock Start** trigger mode. In this mode the LFO is retriggered when you hit play in your host.

### 4 Step



4 Step lets you setup 4 different frequencies (or vowels) to be played in series.

These steps can be played back at a **defined speed** and **different directions**.

**Tempo:** the playback speed of the 4-Step sequencer

Glide: time to fade from one step to the next

C1-C4/V1-V4: frequency/vowel values of the steps

### **Direction Modes**



Forward mode Backward mode Ping-Pong Inverse Ping-Pong Random

Note that these directions modes are also used in the modulation sequencer and arpeggiator section described later.

#### Pitchbend



Morph between two frequencies with the Pitchwheel.

These 2 frequencies are once again defined by the **Cutoff** and the **Peak** parameter.

With the Slope parameter you can define the fading curve.

If the parameter is in middle position you have a linear fading between the frequencies.

A higher Slope value results in a larger controlling range for the Cutoff parameter while a lower value does the opposite.

#### Modwheel



The Modwheel mode works in the same way as the Pitchbend mode, except that it assigns the MIDI modulation wheel to fade between 2 frequencies (or vowels).

#### Vowel mode



The Vowel Mode emulates the human mouth, opening possibilities that you know from a talk box or a vocoder.

Beside the classic vocals A-E-I-O-U we also added mutated vowels like AE and German *Umlauts*.

The vowel mode is the main feature of Unique and the result of years of hard work at Sugar Bytes. It offers new sound dimensions. When the vowel mode is powered on, the cutoff parameters are changing to vowel parameters.

You can use a vowel parameter in the same way as the cutoff knob, just click and drag to select different vowels.

### Controllers

This section gives you access to the control panel for 4 powerful modulators:

LFO Envelope Sequencer Motion Pad (x + y axis)



To assign them to a parameter, just right click the destination parameter and choose from the available modulators.



### LFO

The LFO Modulator has a BPM synced **Rate** parameter. This **Rate** can be faded in, using the **Fade Rate** knob.

The classic LFO waveforms (sine, saw, square, tri) can be morphed using the **Wave** parameter. Just click and drag the **Wave** view.



You also can fade in the LFO intensity by using the Fade parameter.

### Trigger:

trigger determines on which particular event the envelope is restarted

**Each:** each new note retriggers

Lowest: triggers, if a note played is lower than the notes played before (in Legato only)

Loudest: will only retrigger if a note played has a higher velocity than before

First: triggers on the first note played

**Arp:** the arpeggiator's tempo sets the trigger interval

Via the **Range** parameter you can adjust the minimum and the maximum value of the LFO.

### Envelope



A classic ADSR envelope.

Use **Range** to limit min/max amount.

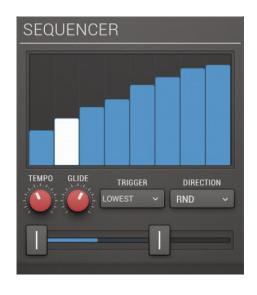
### Sequencer

Eight steps to create individual modulation sequences.

The speed can be adjusted by the **Tempo** (synced to your host BPM).

**Glide** defines a fading time between the steps to smooth step transitions.

The sequencer features different **Direction** modes:



**Direction Modes** 



Forward mode Backward mode Ping-Pong Inverse Ping-Pong Random

And finally the **Range** parameter for calibrating the working range.

### Motion



Use the **Motion Pad** with your finger to record movements. Each modulation target can then read out the current x and the y value.

To do so, just turn on **Record** and click and move the red circle. With the **Smooth** parameter you can smooth the movements.

Again there are the different **Trigger** modes for restarting the motion. (See Filter/Envelope/Trigger)

Trigger determines on which particular event the envelope is restarted.

Each: each new note retriggers

Lowest: triggers, if a note played is lower than the notes played before (in Legato only)

Loudest: will only retrigger if a note played has a higher velocity than before

First: triggers on the first note played

Arp: the arpeggiator's tempo sets the trigger interval

### Pitch and Modwheel



Assign a Pitch LFO to the MIDI modulation wheel (CC 1).

Just click the **LFO** button in the **Settings Screen** of Unique and adjust the **Speed** of the LFO.

There you can also define the pitchbend range of the MIDI - pitchbend wheel.

### Main Controls

The main controls in Unique are knobs. Just click them and drag up or down to turn them. While moving them, a display appears showing the value and unit of the parameter.



The knobs have different colors, which reflect certain functionalities.

White: are modulation-related parameters

**Red:** are midi-related parameters

Blue: are general sound design parameters

Yellow: are amplification parameters



All knobs can be modulated with internal modulators or controlled by MIDI or Host Automation. Just right click on a parameter and a menu with certain modulation sources comes up. The first 5 entries assign a modulator to the knob you just clicked on.

The entry 'MIDI LEARN' puts the knob into MIDI learn mode. Then the next MIDI-CC message you send to Unique will control this knob.

To clear any assignment, just hit the entry 'CLEAR'.

**Note:** If you assigned a knob to a modulator or to a MIDI-CC you should not use Host Automation for this knob. Otherwise the parameter will receive multiple values at the same time, which might cause unpredictable behaviors.

### **Arpeggiator Section**



In this section you can control how your incoming MIDI signals are processed (see **MIDI IN** indicator).

In the right upper corner is a menu to switch between Poly and Unison. Poly is a classic 8-voice polyphonic mode. Unison turns Unique into a monophonic synthesizer with 8 voices playing simultaneously.

Spread adjusts a pitch offset of the eight voices.

**Glide** sets the time to move from the previous note pitch to the currently pressed note pitch. In Poly mode, Unique offers a polyphonic glide, where a glide happens from the last voice to all new voices.

The **Arpeggiator** can be turned on independently for each oscillator with the **OSC1** and **OSC2** buttons. Tapping the ARP button will open the arpeggiator's menu.

The arpeggiator has 5 playing **Styles.** Up, Down, Up and Down, Down and Up and Random.

ARP STYLE TEMPO

1/16 

TRIGGER

DOUBLE CLOCK

**Tempo** sets the speed of the arpeggio (synced to your host).

### **Arp Trigger Settings:**

ClockStart: Clock triggers Arp

Each Note: new note played retriggers Arp

First Note: Arp starts on first note pressed

**Lowest:** if a note sets a new low - triggers arp (Legato)

**Highest:** if a note sets a new high – triggers arp (Legato)

### MIX section



Right between the two oscillators is Unique's Mix section. Here you can adjust level and pan for each oscillator.

Top left and top right you find the **Poly** Buttons, which decide if the panning is handled monophonic or polyphonic. In **Single** mode, the pan is monophonic, like you know it from a classical pan control. In **Poly** mode, each voice has its own position in the stereo field.

Pan defines the width of the stereo effect for each oscillator.

Level controls volume for each oscillator.

Autopan: LFO-controlled Panning

There's an individual auto-pan for each oscillator. Also the auto- pan can work monophonic or polyphonic, like the Pan control mentioned above. So in polyphonic mode, each voice will be auto-panned individually. If you play 2 oscillators with 8 voices using auto-pan, you can have 16 sounds moving around in the stereo field.

Rate sets the frequency of the LFO controlling auto-pan.

### **Effects**



Two multieffect units running in series.

Each unit contains 5 effects. They basically offer the same effects with the exception that Effect 1 offers a **Filter** where Effect 2 has a **Chorus** instead.



### Delay

Time: adjusts delay time (synced to Host-BPM)

Feedback: intensity of internal feedback

Cutoff: controls the cutoff of the built in low-pass filter

Reso: controls the resonance of the built in filter

Mix: controls the dry/wet mix of the signal



### Reverb

Room: size of the reverberation room

Damp: adjust damping properties of the room

Width: controls the stereo widening

Hipass: controls the cutoff of the internal hi-pass filter

Mix: controls the dry/wet mix of the signal



### Phaser

Rate: phasing speed synced to host-BPM

**Feedback:** internal feedback level **Width:** controls the stereo widening

**Stages:** number of stacked phasing stages **Mix:** controls the dry/wet mix of the signal



### Lofi

Crush: bit-crushing intensity

**S-Rate:** amount of sample-rate reduction **Mix:** controls the dry/wet mix of the signal



### Filter

**Cutoff:** the filter cutoff frequency

Reso: resonance of the filter

**Type:** 5 filter-types (LP, LPBP, BP, BPHP, HP) **Mix:** controls the dry/wet mix of the signal



### Chorus

Rate: chorus speed synced to host-BPM

Feedback: internal feedback level

**Depth:** intensity of the chorus

Width: controls the stereo widening

Mix: controls the dry/wet mix of the signal

### Master section

The master section gives you all tools to finally shape the sound.



Of course there is the **Master volume** control to adjust the overall volume.

A special feature of the Master Section is the **Sub Oscillator**, which uses a Sine waveform.

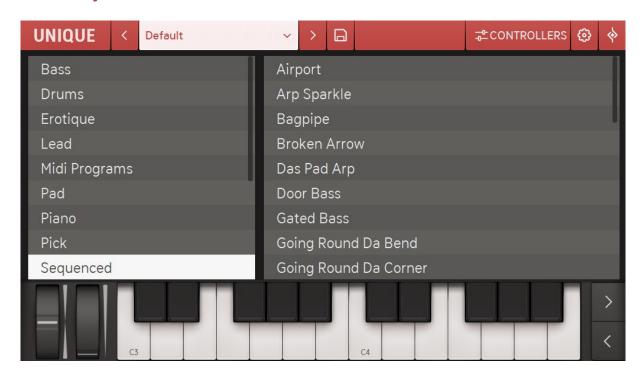
It is connected with Oscillator 1, so it uses the ampenvelope and the arpeggiator assignment of Oscillator 1.

The **Sub- Osc** parameter adjusts its volume. The sub oscillator is very handy if you want to add bass to your sound, but also if you want to add another sound dimension on top. Define its pitch octave via the **Oct** knob.

The Master section also contains a Tremolo effect which modulates the final volume with an internal LFO.

**Tremolo** controls its intensity, the **Rate** defines the speed (BPM-synced) and the **Fade** parameter defines a fade in time for the tremolo. Note that the tremolo fade time is triggered by the first note you press.

### **Preset System**



Unique's presets are accessible via the preset menu in the top area of the interface.

You can easily step through the presets with the arrow buttons on the left and right side. When the preset name is clicked from the top area of Unique, a menu will come up showing all preset categories.

A special folder is the **User folder**. This folder is empty and is meant to store the presets you created.

The little disc icon opens the 'Save Preset' entry and is for saving presets. It should automatically save the preset into the User folder.

### **Settings Screen**



In the settings screen you find some global settings and functions.

### Pitch LFO

Here you can define the amount of pitch modulation caused by the Pitch LFO in the **Modwheel** section and adjust the Speed of the LFO.

#### Pitch Bend

The Range parameter defines the pitchbend range of the MIDI - pitchbend wheel.

#### Global

#### Velocity

Adjusts the velocity behavior of your incoming MIDI notes.

#### Glide On First Note

When activated Glide will work on the first note.

### Tune

With the Global Tune parameter you can change the overall tuning of Unique in order to adapt it to other sound sources.

### MIDI

### CC Recall Lock

When active MIDI Learn Settings will be kept and not be changed when selecting a different preset.

# Installation

Download (requires login) the latest version here.

Double-click on the installer and follow exactly the instructions provided by the installation process.

The standalone version and manual will be installed to: Windows: C:\Program Files\Sugar Bytes\Unique macOS: /Applications/Sugar Bytes/Unique

Presets will be installed into Documents\Sugar Bytes\Unique. Important: Do not relocate Unique presets after installation!

### **WINDOWS**

Default installation paths:

VST2 C:\Program Files\VSTPlugins

VST3 C:\Program Files\Common Files\VST3

AAX C:\Program Files\Common Files\Avid\Audio\Plug-Ins

#### macOS

Default installation paths:

VST2 /Library/Audio/Plug-Ins/VST/

VST3 /Library/Audio/Plug-Ins/VST3/

AU /Library/Audio/Plug-Ins/Components/

AAX /Library/Application Support/Avid/Audio/Plug-Ins

# Uninstallation

To uninstall Unique, please follow the instructions:

### Windows

Uninstall Unique under Control Panel>Add/Remove Software.

#### macOS

Delete all the following files and folders:

/Applications/Sugar Bytes/Unique
/Library/Audio/Plug-Ins/VST/Unique.vst
/Library/Audio/Plug-Ins/VST3/Unique.vst3
/Library/Audio/Plug-Ins/Components/Unique.component
/Library/Application Support/Avid/Audio/Plug-Ins/Unique.aaxplugin

- ~/Documents/Sugar Bytes/Unique
- ~/Library/Preferences/com.sugar-bytes.Unique.plist

/Library/Application Support/Sugar Bytes/Unique /Library/Application Support/Native Instruments/Service Center/Unique.xml /Library/Preferences/com.native-instruments.Unique.plist

,~' means: /Users/YOURLOGINNAME (your home folder) (Please note that in macOS 10.7 and later, the user Library folder is hidden. In case you cannot locate your Library folder in the Finder: Select "Go to Folder" from the Finder's Go menu and enter ,~/Library'.)

# Authorization

The serial number is requested during installation. If the serial number is missing or incorrect, the product will not produce any sound. Check the top area of the Unique interface to verify whether your serial number is VALID. Manually entering the correct serial number there or performing a quick reinstall, should fix any issues.

#### License

License covers both the macOS and Windows version and can be activated for two computers. For use on more than two computers, please buy an additional license.

# Host integration

Unique works as a VST2 / VST3 / AU / AAX plugin in the most commen DAW hosts. Make sure that Unique is installed in the Plugins folder used by your DAW. Some hosts need to perform a plugin rescan when a newly installed plugin is launched for the first time. Please find all detailed instructions for your DAW below.

### Cubase

Perform a full rescan in the Cubase plugin manager.

Make sure that the Unique.dll/Unique.vst3 (Win) or Unique.vst/Unique.vst3 (macOS)file is contained in Cubase's assigned VST Plugins folder. Load Unique as Instrument into an Instrument track.

### Ableton Live

When using macOS, we recommend using the VST version of Unique in Live. Please note: With Ableton Live, plugins sometimes will be marked as unloadable and not rescanned automatically. If this happens to be the case, force a rescan by unchecking and checking the ,Use custom VST Folder' checkbox in Preferences/File Folder/Plug-In Sources. Set up a MIDI track and insert Unique as instrument.

### **ProTools**

When installing Unique, select AAX plug-in format. (AAX is supported by Pro Tools 10.3.5 and higher.) Use Unique as an instrument.

### Studio One

Go to the Studio One menu and choose Options. Click Locations, then VST Plug-Ins. Click the Add... button and select your VST Plugins folder. Press OK. Create an instrument track and pick Unique up from the Instrument list.

### Sonar

Make sure that Unique is installed in the VST Plugins folder used by Sonar. Insert Unique as a "soft synth".

### Logic

Select Unique as an AU-Instrument from the I/O dialogue of a Software Instrument track.

### FL Studio

Go to Channels>Add one>More...There you should find Unique and perform a refresh. You can now open Unique in the Mixer Inserts.

# Native Kontrol Standard NKS

Unique supports Native's NKS standard, giving you the same deep integration with NI controllers like Komplete Instruments.

The main features are a plug-and-play support of Unique's preset browser and trouble-free tagging/organisation for inclusion in the powerful Komplete Kontrol / Maschine browser. This lets you search the presets by sound type (e.g. synth lead), character (e.g. dark), or any combination thereof. We have strived for highly profound control of Unique's sound engine. Knobs and faders can be mapped to match those on the Kontrol and Maschine hardware in logical ways, with similar controls grouped by pages. For example: Skip to the Filter page and you will find the set of controls related to the filter characteristics. All presets have been wrapped into .nksf files which contain preset and tagging information as well as mapped out controls. Different genre and mood categories will speed up the producers' workflow when browsing through libraries, and help you keep your eyes off the computer screen.

### **Controller Mapping**

We have strived for highly profound control of Unique's sound engine.

All mappings are consistent throughout the different presets.

There are seven pages available:

### Page 1: Master

Features the level and pan controls as well as the sub level and drive parameter.

### Page 2 and 3: Osc1/Osc2 + Env1/Env2

Here you will find the controls of Unique's Osc 1 and Osc 2.

Octave, Detune and the Osc's related envelope controls. Depending on the oscillator model selected, you will find the knobs of the Osc mirrored in NI Maschine, e.g.:

Pulse: PW and PWM Rate.

Triple FM: FM and Shape and so on.

### Page 4 and 5: **FX1 + FX2**

These two pages feature the controls for Unique's effects slots.

Depending on the effect type selected, you will find the corresponding effect parameters (e.g. Rate, Feedback, Depth and Width for "Chorus").

The Mix parameter is provided with every effect type.

### Page 6: Filter + ENV

Here are the controls of Unique's filter section.

The Resonance and Mix parameter are provided with every filter type.

Depending on the modulation source selected and on if Vowel mode is active or inactive, we have the knobs e.g.: Vowel1, Vowel2 and the envelope controls for Vowel with Envelope as modulation souce.

#### Page 7: Modulation

This page contains all important controls for easy sound modulation like Unique's Spread, Glide, Tremolo (and its Rate parameters) as well as the LFO-controlled Panning controls (Autopan).

# **Videos**

Here are some links to youtube videos with short tutorials on Unique. They are using the old GUI version so the GUI design is different and the layout differs here and there, but they are very useful understanding some concepts.

OVERVIEW 01:34 (NO VOICEOVER)

MAKING MINIMAL PADS 10:01 (DAN-D, PART 1)

MODULATION & CONTROLLERS 06:58 (DAN-D, PART 2)

A 70's Bass 05:15

DEMO 03:09 - HAVE A LOOK AT THIS TO SEE HOW MUCH FUN UNIQUE IS

# Contact

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