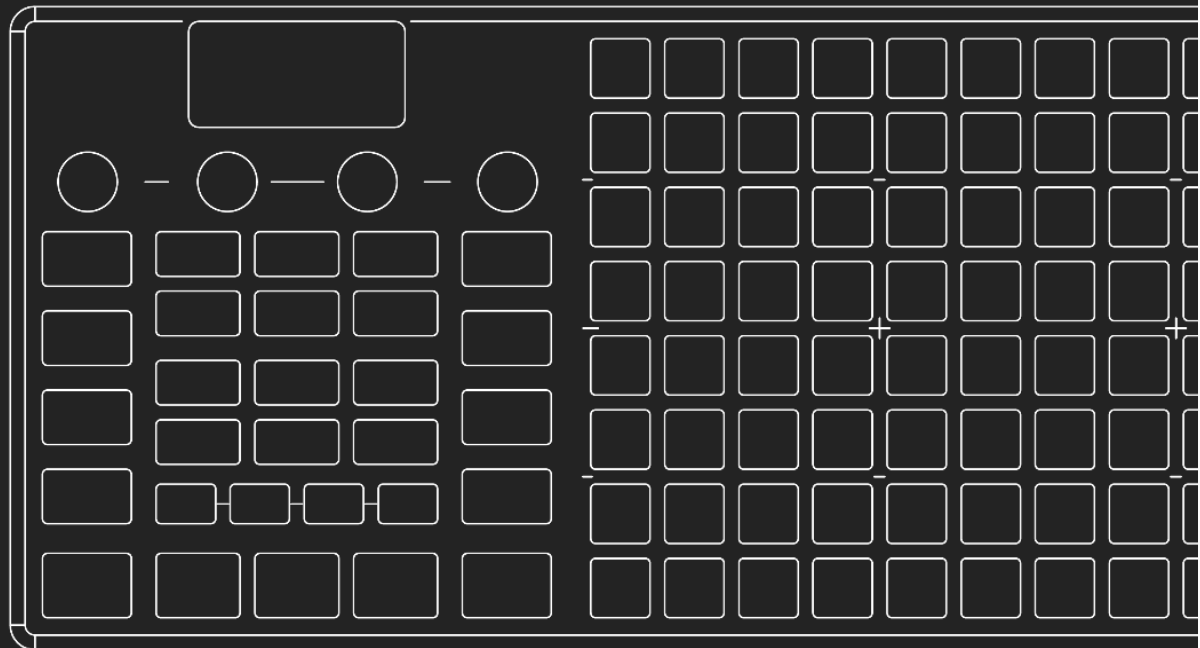




INSTRUMENTS
ONE

USER GUIDE



www.oxiinstruments.com

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Revision date: October 2024

Hardware version: OXI ONE v1.0
Manufacturer: OXI Instruments

Thanks to all who contributed to this manual.
Special thanks to AGL, Ekkomouse and A Thousand Details.

Specifications Subject to Change:

The information contained in this manual is believed to be correct at the time of printing. However, OXI Instruments reserves the right to change or modify any of the specifications without notice or obligation to update the hardware that has been purchased.

WELCOME

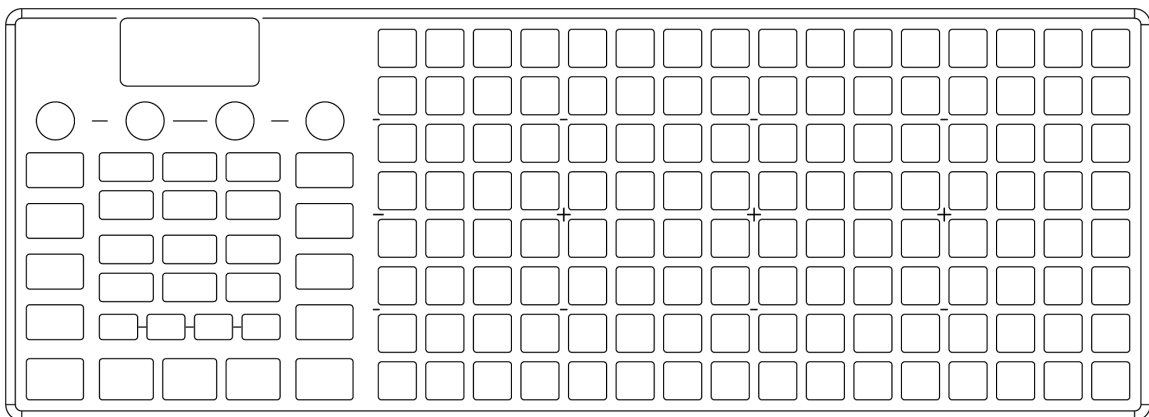
Thank you for purchasing OXI One.

The OXI One is the result of a couple of musicians in need of a more inspiring sequencer.

By supporting us, you are helping to keep this instrument up to date, to bring new features over a long period of time and to develop other instruments and tools in the near future.

This is our *Opera Prima* and we hope you enjoy it as much as we did developing, broadcasting, manufacturing and shipping it to your door.


— **OXI team**



PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep these precautions in a safe place for future reference.

Plug your unit to a USB power supply and do a full battery charge before using it for the first time. The battery is fully charged when the  icon stops blinking. While OXI One is powered off there's no battery charging indicator.

WARNING:

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

- Do not open the instrument or attempt to disassemble the internal parts or modify them in any way. The instrument contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified OXI Instruments service personnel.
- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings.
- Use the specified cable provided by OXI Instruments only (or another one with same specifications) to plug your OXI One to a computer or to charge OXI One's battery.
- Use only a 5V supply to power or charge your OXI One. Using the wrong power supply will damage your OXI One and it won't be covered by the product warranty.
- Do not connect any TV or monitor to the Pipe interface (HDMI Micro connector) as this could damage both devices. Use **ONLY** with compatible accessories like the OXI Pipe. Any damage caused by a wrong operation won't be covered by the product warranty.
- Do not connect any headphone or amplification line directly to any of the TRS jack plugs as this may damage both devices. Any damage caused by a wrong operation won't be covered by the product warranty.
- Before cleaning the instrument, always remove the electric plug from the outlet. Never insert or remove an electric plug with wet hands.
- Keep this product always out of reach of children. It is not a toy.
- The instrument, when used in combination with an amplifier, headphones or speakers, may be able to produce sound levels that could cause permanent hearing loss. **DO NOT** operate for long periods of time at a high level or at a level that is uncomfortable, or a level that exceeds prevailing safety standards for hearing exposure. Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, damages, fire or other risks. If you encounter any hearing loss or ringing in the ears, consult an audiologist immediately. It is also a good idea to have your ears and hearing checked annually.

- Do not place the product and the cable charger near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.
- When removing the cable charger from the instrument or an outlet, always hold the plug itself and not the cord.
- Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of damage to the internal components.
- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected cables.
- When cleaning the instrument, use a soft brush or a soft and dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths. Also, do not place vinyl or plastic objects on the instrument, since this might discolor the keyboard.
- Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
- Do not operate the instrument for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.
- Always turn the power off when the instrument is not in use.
- The OXI One should not be exposed to water (dripping or splashing) and no objects filled with liquids, such as vases, should be placed on the apparatus.
- Do not use the OXI One in conditions with extremely low air pressure.

OXI Instruments cannot be held responsible for damage caused by improper use or modifications to the instrument, or data that is lost or destroyed.

INTRODUCTION

Along the journey of learning any new instrument, having access to a complete guide can be a very valuable tool. You can rest assured knowing that all of the information needed to quickly get the most out of your OXI One sequencer has been assembled here for convenient referencing.

Exploring a new instrument and manual for the first time can be very fun and informative, but take your time! There's a lot going on in the OXI One and attempting to master every aspect of it should not be the goal 'right off the bat'. Feel free to gloss over this manual in its entirety or jump straight to the chapters that excite you the most. If you'd prefer to figure things out on your own, no problem! With OXI One, exploration is encouraged. The important thing is that you're having fun! An initial read-through of a manual can build a strong base of information that will be helpful moving forward. This is when you'll first become acquainted with the parameters of your new instrument; the tools at your disposal and how they interact with each other.

Regardless of where you are on the journey to mastering the OXI One sequencer, this manual has something to offer for every user level, day 1 or day 1,000. Each subsequent read-through has the potential to add upon the knowledge that you have obtained and invite you to dive in a bit deeper. Has an update brought new features to explore and investigate? Perhaps you'd like to refresh your memory on a feature that you haven't used often? Revisiting a manual with a good understanding of the base subject allows us to interpret the ideas and information within its pages differently, from a more informed stance. This is when new doors start opening. We are now using the guide less as a source for information and more as a source of inspiration.

ENJOY.

SPECIFICATIONS

Electrical specifications:

5V DC 1.7A (USB type C supply)

Li-Po Battery 2200mAh

Radio equipment:

Bluetooth 5.0, 2.4GHz, Tx Max: 4 dBm

Mechanical specifications:

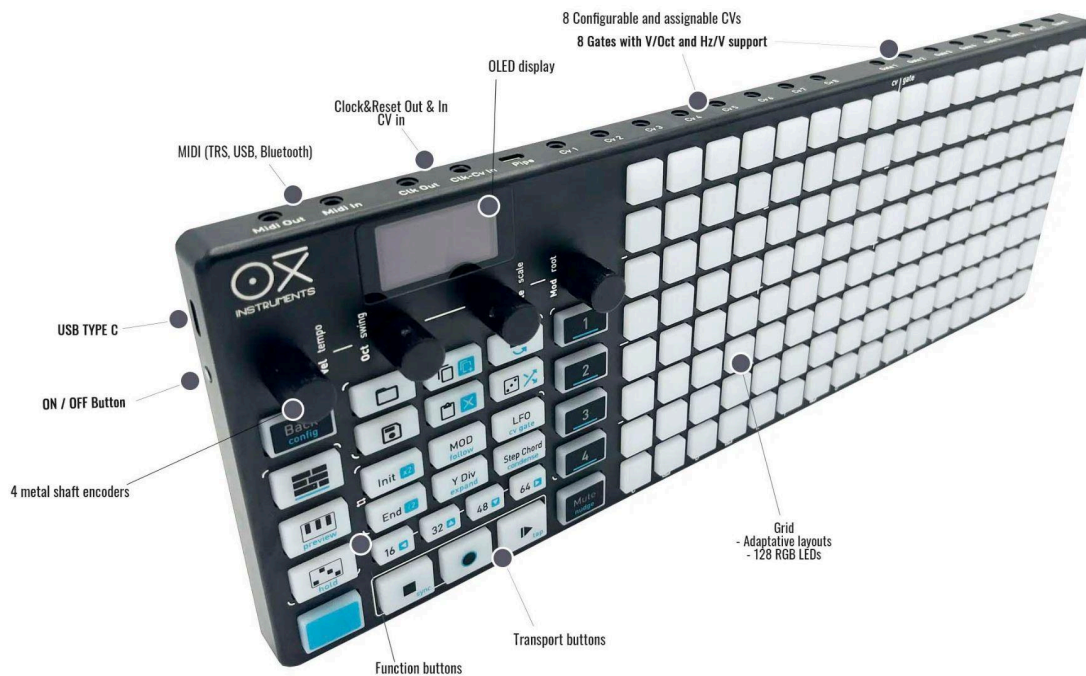
Aluminum chassis & Silicone buttons

Dimensions: 36 x 13 x 3 cm

Weight: 890 gr.

Operating temperature:

10 °C to 36 °C



INPUTS AND OUTPUTS

- USB C for 5V power supply and MIDI USB. It also charges the internal Li battery
- MIDI TRS input and output (Din adapter included). MIDI Out is 5V, MIDI IN accepts both 5V and 3.3V
- MIDI Bluetooth BLE 5.0 bidirectional, peripheral and central roles.
- CVS (1 to 8) outputs: from -3V to 5V
- GATE (1 to 8) outputs: 5V or 10V configurable
- Clock Out and Clock/CV In (can be independent with a splitter)

ACCESSORIES

INCLUDED IN THE PACKAGE

- USB C to A cable
- MIDI DIN to TRS adapter (**Black color**) Type A

NOT INCLUDED

- TRS to DIN5 Clock adaptor (**Grey color**) - [available here](#):
 - Exposes One's Clock and Start-Stop IN and OUT to other gear's DIN SYNC ports
- TRS to TR-TR stereo splitter (**Pink color** or **Black** and **Red**) - [available here](#):
 - Splits the Clock and Reset outputs of the OXI One in two mono outputs.
 - Splits the Clock/Gate IN and Reset/CV IN inputs in two mono inputs.
- OXI Split: increases the number of MIDI Outputs available. - [available here](#).
- OXI Pipe: Eurorack module to break out the CV/Gate outputs. - [available here](#).

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WHAT'S NEW

4.5.2 | 2024-10-10

- 4.5: Project loading is quantized according to the LOAD Quantization setting.
- 4.5.2: Clear modulation values with full clear only
- 4.5.2: Invert backlight logic of Mute and Shift (per request)
- 4.5.2: REC CC Transport Message sent changed to Toggle to make it compatible with Ableton

4.5.0 | 2024-09-15

- Project loading is quantized according to the LOAD Quantization setting.

4.4.7 | 2024-08-21

- 4.4.7: Fix locked Logic condition in TIED notes in MONO sequencer.
- 4.4.7: Do not clear Pick and Place notes when using sequencer PAGE buttons.
- 4.4.6: Improve drum patterns generator rhythms from the original Grids code.
- 4.4.6: Fix copy track issue in multitrack.
- 4.4.5: Fix MOD Dest issue with POLY arp.
- 4.4.4: Fix EXT MOD Matrix (copy) menu issue.
- New MIDI Remote control implementation Documentation.
- New double row knob menu for LFO, ARP and Random Generator screens.
- Fix Mute/Unmute and Mute-prepare during Snapshot.
- Fix auto-off when the screensaver was off.

4.3.7 | 2024-06-12

- Toggle between Global OCTave and Y offset when pressing the second left encoder.
- Randomize matriceal parameter pages by holding 1 or more page buttons and hitting random (no need of shift).
- Improve Power Off visual feedback.
- Reload project after receiving it from the app if loaded.
- Fix transport initial uOffset
- 4.3.8: Fix step mute issue.

4.3.6 | 2024-05-30

- **new:** ARP in POLY mode now supported.
 - Trigger conditions, randomizations etc apply as well.
- **new:** TEMP MEMORY
 - OXI One will store the latest changes you made so they are available after reboot. If you want to discard them, simply reload the project.
 - Selectable Inactivity auto turn-off.
- **new:** MOD lanes parameter: MOD RANDOM which adds a % of randomization.
- A few extra chords for BANK B, mainly dominant chord and variations.

- Shift arranger Slots. Hold the slot and press left or right arrow buttons (16 and 64 page buttons).
- Other improvements
 - Rework Alternate direction and add already existing Ping Pong.
 - Inverted TIE gesture, adds straight triggers.
 - Bank select is sent along a PC message.
 - Pitch Bend can now be recorded in a MOD lane, as a unipolar amount, external PB modulation must be moving to be recorded in a step
 - Fix LOOP and SNAPSHOT interaction. Releasing the snapshot will release the loop too for smoother transitions.

4.2.14 | 2024-04-23

- Fix Seq SETUP menu.

4.2.13 | 2024-04-23

- **new:** Add Bank Select LSB or MSB option to MIDI settings.
- **new:** During a SNAPSHOT, it is now possible to prepare the Mute state of individual sequencers and tracks in Multitrack they will have after the snapshot is released. To do so, double tap the sequencer button or track first pad while MUTE is pressed or latched.
- **new:** Add copy and paste Scale and Root between sequencers. Press and hold Copy button and tap the 3rd or 4th encoder.
- **new:** In the step parameters, single tap of the encoder velocity Mutes/Unmutes the note. Double tap resets the step velocity value.
- Implement note preview to Multitrack Piano Roll view.
- Improve CV Trig envelope decay and release in TIED notes.
- Fix how Gate modulations and randomizations affect CV Trig envelopes decay.
- Do pick and place of selected sequencer only.
- Add MIDI merge for the USB input.
- Fix LOCKED steps in multitrack.

4.2.11 | 2024-04-12

- 4.2.9 Fix error in Gate assignment.
- 4.2.10 Streamline step Tie gesture. Add preview notes when dialing step pitch in Multitrack.
- 4.2.11 When copying the loaded pattern, the current state is copied rather than the stored one.
- 4.2.11 Pick&place improved so it doesn't interfere with other interface operations.

4.2.8 | 2024-04-02

- Keyboard ARP considers velocity/groove during recording.
- Fix LFO to CV voltage range.
- Fix REC. 1/8th notes sometimes recorded as tied and note off issues on startup.
- Avoid entering Save Load views with Reload and Quick Save All.
- Fix matriceal transport desync on pattern load.

You check the full Changelog in this [link](#)

VERY QUICK START

OXI One is a battery powered performative sequencer, controller and composition instrument that has 4 fully independent Sequencers. Each Sequencer can play simultaneously and can be configured to any of the 6 modes available. The OXI One can be configured so it adapts to your workflow, not the other way around. Most configurations in this sequencer are flexible, giving you the freedom to adapt them to your own preferences under the different menus.

The interface of the OXI One is based on linear relationship between layouts, avoiding nested menus thus making it very intuitive to use, without sacrificing functionality, and adding innovative layers for performance.

Turn **ON** your OXI One by pressing the power button on the left side. OXI One will show you the main view: the **Sequencer Layout**. To start playing, press the **Play** button. The transport bar will start moving and looping on the grid.

TIP: Pressing the Sequencer Button **1...4** toggles the view between them.

Ensure the selected **Sequencer** (**1...4** buttons) is active. To activate or deactivate a Sequencer, press **MUTE** + **1...4**. The number button will blink white and blue indicating the Sequencer is selected and active for playback. This is a nice way to launch or stop each Sequencer from playback without stopping the rest.

In the Sequencer view the grid pads recognise two types of interaction:

- A quick tap activates or deactivates steps.
- A long press (hold) accesses the step parameters.
- SHIFT + press (hold) a step to momentarily display additional step parameters.
- A long (TIED) note can be entered by pressing two pads in the same row. Inverted gesture (from right to left) add straight triggers.

Bottom to top is lower to higher note, and left to right the order in the time sequence. To access higher and lower notes other than the eight rows displayed, press the **Div** (Division) button and turn the leftmost encoder **↑↓** or press the octave encoder to enable scrolling.

To select a Sequencer, press its corresponding button number; the Function buttons, the screen and the grid will show the parameters of this selected sequencer.

SHIFT + Sequencer button **1...4** to enter its sequencer settings. You can change the sequencer mode between: Mono, Chord, Polyphonic, Multitrack, Stochastic or Matriceal and also the sequencer MIDI Channel, output Port and other settings.

Each sequencer mode focuses on several tasks that it does best; for example, a **Mono** sequencer has an instant visual feedback of the melody and more compositional centered tools, meanwhile in **Multitrack** mode you have 8 mono tracks with instant mute and solo buttons per track. **Chord** mode is a great tool to write the foundation chord progression of a song, meanwhile **Polyphonic** mode offers total freedom up to 7 notes per step. **Stochastic** and **Matriceal** are two types of generative modes.


We'll cover more in detail how each works in the [Sequencer modes](#) section.


TIP: *It's possible to have any combination of the existing sequencer modes on the 4 available sequencer slots.*

Turn **OFF** OXI One by holding the power button for at least 2 seconds. It will remember its last state after the next startup: loaded project and configuration.

BATTERY

The battery icon shows a rough estimation of the battery status.

The battery is charging when the  icon is blinking, and fully charged when it is steady and not blinking. The OXI One battery should last between 4 and 8 hours depending on the usage and the LEDs consumption.

When the status icon is , it means that the battery voltage has dropped to around 3.7V which is the nominal voltage of the battery. The OXI One will still have plenty of hours of use left.

BATTERY CHARGE

Any wall USB power adaptor will work to charge the battery, the more power the brick delivers, the faster the charge will be. OXI One incorporates an intelligent battery management IC.

USB A to C cables are valid as well as USB C to C ones.

INTERFACE OVERVIEW

GRID

The grid has 128 RGB LED lit pads. On power up, the **Sequencer View** is displayed.

Depending on the selected sequencer Mode, each column of pads represents a step of the sequence and each row represents a note (in Mono, Poly and Chord modes) or a track (in Multitrack mode). Other sequencer modes like Stochastic and Matriceal have their own grid representation.

The grid also shows Keyboard, Arranger and CV Gate views that will be explained later. Independently of the grid layout or screen menu, you can reach the main Sequencer View by pressing the BACK button.

Other function buttons like Keyboard  or Arranger  will toggle between their view and the Sequencer view.

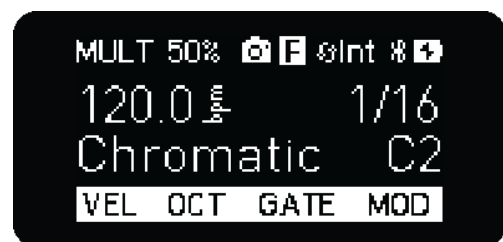
TIP: Tie steps across pages by holding a step, then pressing a different page button, and tapping the step you want to end the step.

SCREEN

The screen shows information or parameter values depending on the function button or mode selected. The default or **Main** screen is the **Sequencer screen**, shown on power up.

From left to right the top line indicates:

- the **Mode** of the selected sequencer,
- **Swing** of the selected sequencer,
- if a **Snapshot** has been taken,
- if **Follow** is enabled,
- the **Clock Source**,
- **Bluetooth** connection
- **Battery** state



Second line:

- global **BPM**
- **Time Division** of the selected sequencer or time division of the last selected track in Multitrack mode.

Third line:

- **Scale**,
- **Root note**
- **Global octave**

Fourth line: in this last line you can see the parameters the encoders modify when there is no other menu opened.

When the **SHIFT** button is held, the secondary functions of the encoders are shown in the main screen as follows:



SHIFT BUTTON

SHIFT in combination with any other function button, activates its secondary function. For example, the secondary function of **undo** is **redo**.

*TIP: Hold **SHIFT** and press a button to access secondary functions, those printed in **turquoise**.*

You can latch the **SHIFT** button by double tapping it. For this, Latch SHIFT setting must be enabled.

SEQUENCERS **1**...**4**

Pressing a sequencer number button selects the sequencer that is displayed on the interface.

- **Hold MUTE and tap Sequencer** button **1**...**4** to toggle the state of the specific sequencer. This function can be used to activate/deactivate or to mute/unmute depending on the Mute behavior explained in Mute Options.

It is possible to activate/deactivate several sequencers at once.

- **Hold SHIFT and tap Sequencer** button **1**...**4** to access the first of three pages of the Sequencer Setup menu.

SEQUENCER SETTINGS PAGE 1

GLOBAL MIDI CHANNEL

for the selected Sequencer. You have to press the encoder to confirm the new MIDI channel.

For Multitrack Sequencers, each of the eight tracks can be assigned a separate MIDI channel and output. See the Multitrack Mode section for details.



NOTE: The MIDI In Channel Filtering setting defines how OXI One routes the input MIDI data to the different sequencers.

MIDI OUTPUT

Defines where the Sequencer MIDI data is sent : **ALL**, **TRS**, **USB** or **BLE** destinations. This setting doesn't affect the CV-Gate outputs.

Note: This parameter is set per track in Multitrack Mode.

PROGRAM CHANGE

Sends a MIDI Program Change message to the selected MIDI channel and Output destination on pattern load or in the Arranger if configured. Bank select is sent along with a PC message. Bank Message Type can be set to either cc 0 or 32 in Config settings.

Note: This parameter is set per track in Multitrack Mode.

SEQUENCER MODE

Mono, **Poly**, **Chord**, **Multitrack**, **Stochastic** and **Matriceal** mode selection.

SEQUENCER SETTINGS PAGE 2

Hold **SHIFT** and tap **Sequencer** button **1**...**4** again to access the second Sequencer Setup menu. From left to right in this page you can change:



PUNCH-IN QUANTIZATION

Sets the countdown for the sequencer to be **launched (activated)** when playback is not active so it starts in sync with other sequencers. This parameter is also considered when doing a playback Reset. A playback reset means that the transport bar will be back to the start step after the Punch In quantization occurs.

Note that this parameter is saved within your project so a new project will have a default value in here. The default value is "Global", which means it will take into account the Global quantization setting set for the project in the Launch settings menu.

RESET

Reset the sequence after a selected number of bars (1 - 64). Useful in Multitrack to realign tracks or to get back to sync the sequencer when time or division modulations are applied to it.

BANK

Sends a MIDI Bank Select message to the selected MIDI channel and Output destination on pattern load or in the Arranger. Bank Message Type can be set to either cc 0 or 32 in Config settings.

Note: This parameter is set per track in Multitrack Mode.

TRANSCOPE **new**

Enables note transposition on the selected sequencer. The transposing amount is relative to the root/base note of the sequencer (or track in Multitrack mode).

It can be either:

- **OFF**, disabled.
- **Same**. Checks if the MIDI channel of the incoming note matches the global MIDI channel of the sequencer.
- **Ch1 to Ch16**. All notes received on this channel will be used to transpose the pattern. Different sequencers can have the same MIDI channel assigned for transposing, meaning that they will all be transposed when receiving a Note On on this channel.

Note that when this setting is enabled, the incoming MIDI notes won't be used for other purposes (like recording, arpeggiator, etc.). Note Off will be ignored.

Transpose works even with [MIDI Channel Filtering Off](#).

SEQUENCER SETTINGS PAGE 3

SHIFT + Sequencer button **1**...**4** again to access the third Sequencer Setup menu, right now reserved for:



INSTRUMENT DEFINITIONS **new**

You can select an **Instrument CC definition** for your sequencer, so the MIDI CC numbers are already pre selected to match the parameters of your favorite synth, showing directly the parameter names of it. [View list of available definitions here](#).

COLOR

Color of the sequencer notes on the grid, Piano Roll, Keyboard, Patterns and Arranger Lanes.

Note: some of the [available colors](#) may provide better visual feedback than others.

POLY SEQUENCER ADDITIONAL SETTINGS (*available only in Poly Sequencer Settings)

Number of voices is available on encoder 1 on the 3rd page of the settings, you can allow up to 7 notes per step or limit the number of notes to less than 7.

STEP PARAMETERS

In any of the available Sequencer Modes you can find the following step parameters: **Velocity**, **Octave**, **Gate** and **Mod**.

They can be modified Globally or on a per step basis. To modify the global parameters, turn the encoders while in the main sequencer screen. The grid will take Velocity and gate last values (from the last placed step or the OXI One keyboard) as default for the new steps.

In Gate values, after the maximum value of 100 you have TIE, to set two steps as tied notes.

After TIE there's LEGato, in which the Note ON message of the next note is sent before the Note OFF of the previous one to enable the legato behavior on the synth, for example for glides.

TIP: To tie notes quickly hold one pad on the grid and tap another pad on the same row of the grid, this will tie steps in between both tapped pads.

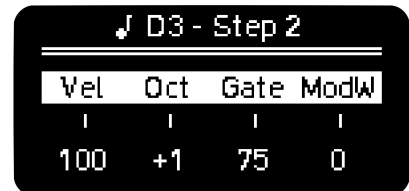
In order to Tie across pages, press and hold one pad of the selected page, go to another page using the page buttons and, on the same note row, continue the tied note by tapping the end of your note on a different pad.

MODULATION PARAMETER

Every Sequencer has 4 Modulation Lanes except for Multitrack that has 8 (1 per track in 2 banks of 4), to access them press the **MOD** button. These 4 modifiers can be configured in the CC Configuration screen. Each Lane has a value per step that would be saved with each Pattern.

In this view, each encoder acts as a global control of each modulation lane.

The last Modulation Lane used before exiting the **MOD** screen will be set as the global Mod control of the 4th encoder.



ADDITIONAL STEP PARAMETERS

There are extra step parameters that can be accessed by holding SHIFT and pressing any grid pad or pressing the **Step-Chord** button (a quick tap latches this button). This is an overview of these parameters, all the information can be found in the [Sequencer Modes section](#).

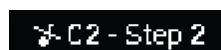
- **Glide**, sets the time of the pitch to change continuously between two consecutive notes. At the moment it only affects the CVs pitch output.
- **Prob**, and **Logic conditions**. Logic conditions appear after 100% probability when you turn the 2nd encoder CW.
- **Retrigger** (ratcheting), sets the times the note is triggered during the step duration, up to 5 times. For better resolution change the Time Division of the Sequencer or Track.
- **Timing Offset**, sets the time deviation of the note from -45% to 45% of the current time division. $\pm 25\%$ is a quarter deviation from the duration of the step.

STEP MUTE **new**

In Mono, Poly, Chord, and Multitrack modes, steps can be muted by pressing and holding the MUTE button and then tapping any step. Muted steps do not play back. To unmute, hold MUTE and tap the step once more.

You can also mute steps while in the step parameters page, single tap of the velocity encoder Mutes / Unmutes the note.

Muted steps appear **purple** in the grid and are indicated by a specific icon in the step parameter menu:



Be aware that MUTE + First column is reserved to mute the whole sequencer.

SEQUENCER DATA

Each **Sequencer** (1 to 4) has its own global parameters that are configurable **independently** per Sequencer and saved per pattern:

- **Sequencer view** and steps pages
- **MIDI** channel configuration (up to 32 tracks on different channels, 32 channels available for the USB output in two separate virtual ports and up to 48 MIDI channels using the OXI Split).
- Keyboard layout, designed for each mode
- **Tracks**, depending on mode
- 16 Pattern slot memory per **Sequencer (64 slots per Project)**
- Scale and root note
- Arpeggiator (per track)
- Looper (per track)
- Swing
- Randomizer engine
- Random Generator engine
- Initial and End steps (per track)
- Time Division signature (per track)
- Playback direction (per track)
- MOD configuration (4 or up to 8 in Multitrack)
- LFOs
- Instrument CC definition
- Transpose (pitch) MIDI channel
- Color
- External MIDI and CV Mappings
- Euclidean Generator (Multitrack Only)
- Grids Drum Pattern Generator (Multitrack Only)

ENCODERS

The encoders function as the interface to all parameter changes.

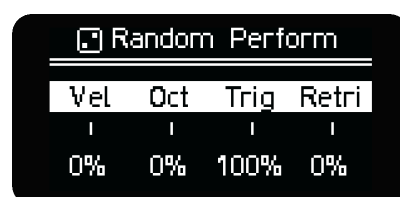
We will be referring from now on as “CW” to clockwise rotations and “CCW” to counter clockwise rotations of the encoders.

In **Sequencer view**, the parameters each encoder modifies applies to the selected Sequencer (1-4):

- **VELocity** (secondary function: **Tempo**)
- **OCTave** (secondary function: **Swing**)
- **GATE** (secondary function: **Scale**)
- **MODulation** (secondary function: **Root**)

The encoder values appear as a pop-up on the screen.

For most of the **function buttons** and secondary functions, the screen will display 4 parameters, as shown on the right. The encoders modify the corresponding parameter position on the screen. For that, hold or tap the function button and turn the encoder.



- Most parameters don't require confirmation by pressing the encoder button. Some do require confirmation.
- In general, pressing the encoder button resets the corresponding parameter to its default value in most of the menus. In some functions shift + press will reset the value to default.

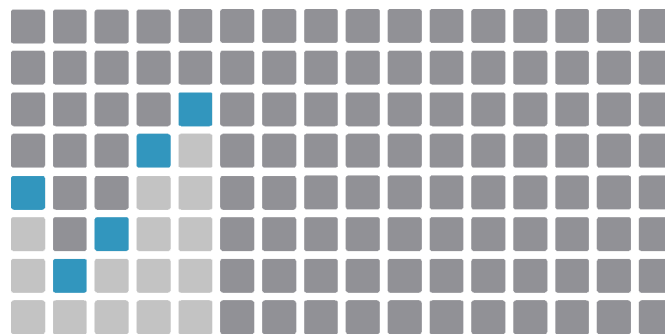
PRIMARY FUNCTIONS

VELOCITY

Turning the VEL encoder changes the velocity value for all the steps of the selected Sequencer (or the currently selected track in Multitrack). If there are different velocity values on steps, the screen will show the minimum and maximum values. Turning the encoder offsets each step value.

Pressing and holding a grid button will show the Step menu, in which you can change the Velocity of the step. By holding several grid buttons and turning this knob, you can modify the velocity of several steps at once. Single tap of Velocity encoder will Mutes/Unmutes the note. Double Tapping the Velocity encoder will reset the step velocity value. **new**

Press the VEL encoder and the grid displays the velocity values of the active steps in **column chart form**. You can edit the velocity values per step from here as well as toggling steps.



Velocity column view

Tapping the VEL encoder toggles the **Step Velocity View** with each ACTIVE step's velocity value displayed visually as a column, pressing and holding the VEL encoder will show the **Step Velocity View** momentarily. Velocity values can be changed per step with immediate visual feedback. To adjust all ACTIVE steps at once, simply turn the VEL encoder. Notice that the display shows a minimum and maximum velocity value as you turn the encoder, this ensures that each individual step's velocity value is increasing or decreasing relative to the velocity value that is assigned to it. INACTIVE steps without any note data are not affected when the VEL encoder is turned.

Holding a step button and performing a quick double press of the VEL encoder, the velocity of the selected step is reset to the default value. Default velocity value is fixed to 75 and can be changed in **Configuration**.

Velocity affects the amplitude of the AD trig envelope in CV Out by default.

OCTAVE

The default octave is C2. Rotate the 2nd encoder to change the base octave for the selected sequencer. This base octave serves as a base point for the notes in the grid. The octave value of every step acts as an offset of this base note.

In the sequencer view, PRESS once and turn the OCT encoder to **scroll up and down** the grid. A white row visually represents your root note. (Applies to MONO, POLY and CHORD modes). PRESS again to jump the grid view back to the base octave. PRESS a third time to return to octave control.

In MULTITRACK mode: **new**

- Tapping the encoder will give you access to the **Piano Roll** view of the selected track.
- Once in Piano Roll, turn the OCT encoder to do Vertical Scroll on the Piano Roll view of the selected track.
- Alternatively you can hold the OCT encoder to enter the Piano Roll view momentarily until you release it.

GATE

This parameter sets the duration of the note as % of the total length of each step which depends on the selected division. Thus, if the sequence is set to 1/16th, and gate is 50, the note will last half of a 1/16th note

Same as velocity, if there are different gate values on steps, the screen shows their maximum and minimum value. It acts as a global control. After gate = 99 you have TIE. Note that you can change this parameter per step as well which also will give access to TIE and additionally LEGato per step.

- **TIE** holds the current note for a number of steps. It can also be introduced by holding a step on the grid and pressing another step to the right and on the same row that defines the end of the tied note. The inverted gesture (from right to left) adds straight triggers instead of tied notes.

Tied steps are indicated with a soft white light. The steps must be on the same row and octave to be tied, otherwise they would be considered as different notes.



TIED steps representation

TIP: To tie steps across pages, press and hold one pad of the selected page, go to another page using the page buttons and, on the same note row, continue the tied note by tapping the end of your note on a different pad.

- **LEGato** creates a transition between consecutive notes (different pitch), so there's no time gap between them.

While turning the GATE encoder at a slow or steady rate in either direction, all steps will begin to be affected with the exception of TIED (or LEGato) steps, which will remain TIED or LEGato. In order to

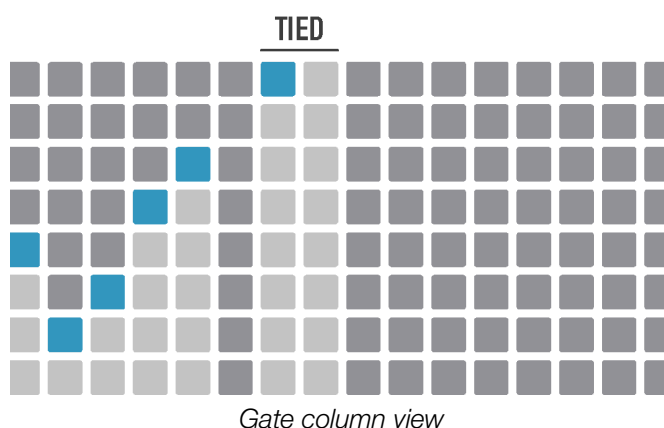
remove the TIES or LEGato on these steps, you will need to do a quick extra CCW turn of the knob to break the TIEd notes.

When adding to GATE value with a CW turn of the encoder, you can TIE steps with a quick extra turn. This will TIE steps which are adjacent to one another.

If you turn the encoder slowly towards 99, you will see the gate value stop changing at 99 until you complete an additional quick turn to activate TIEs, the same works in reverse.

TIP: Gate affects directly the Decay time of the AD Trig envelope in CV Out.

Press the GATE encoder to enter the Gate column edit. Here you will be able to adjust gate values in **column chart form** as well as toggling steps. The top value sets the note as TIE, and Tied notes are displayed in white soft color.



MOD

One press of the **MOD encoder** displays the modulation values of the active lane in **column chart form**. The screen shows the MIDI parameter destination. Turn the encoder to change the selected modulation lane. You can draw modulation curves in the grid and perform quick actions like change the start and end points (using Init-End buttons), change the speed (x2 and /2 buttons), duplicate or clear. While in the MOD view, these actions only affect the focused MOD lane.

You can change the MIDI parameter or internal destinations and other modulation lane settings in the MOD settings which is explained later.

GLOBAL CONTROL

When globally adjusting the step parameters Velocity, Gate and Mod, it will act as an offset when they have different settings, showing instead the minimum and maximum step values. For example, the velocity of your sequence ranges from 50 to 110, then moving the global velocity CW will give you +1 increments on all the steps (51-111, 52-112 ...).

When the maximum or minimum value is met and passed, the extreme values will be limited/clipped and this range will be reduced. With this implementation you can perform over global parameters. By reaching extreme values, you can “flatten” the variation of that parameter and quickly set the same value for all steps again.

SECONDARY FUNCTIONS

TEMPO

Tempo affects all the Sequencers. To modify it, press SHIFT + turn the 1st encoder. The default tempo value can be modified in the config menu. It only works when the OXI One is in **INT** (internal) synchronization mode (see Synchronization section). Project tempo is saved per project and can be loaded along the project data depending on the Load Project BPM update during playback setting.

Additionally, when loading a new project while transport is running, Global Launch Quantization will determine when the new project loads. **New 4.5.2**

TIP: Press SHIFT + Play repeatedly to TAP the tempo to the desired beat.

SWING

Press **SHIFT** and turn the **2nd encoder** to modify Swing. Every sequencer has its own Swing value. Since every sequencer may have its own, different time signature or time division, the Swing value must be set carefully to get musical results. By pressing SHIFT and the encoder 2 button, Swing is reset to its default value of 50 (no swing!).

SCALE

Press **SHIFT** and turn the **3rd encoder** to choose among different scales.

There are two ways of working with scales that depend on the scale quantization setting.

- When scale quantization is **disabled**, the new scale will be automatically applied after turning the encoder. The steps present in the pattern will preserve their position but the resulting notes may be completely different from one scale to another. For example switching from a C Chromatic (12 notes) to a C Major scale (7 notes), an E note would be translated into a G note. The intervals don't change but the resulting notes may differ. In this case, pressing SHIFT + press encoder 3, the scale is set to the default value which is Chromatic.

- When scale quantization is **enabled**, the new scale is not automatically set and it has to be confirmed by holding SHIFT + 3rd encoder press. When a new scale is applied, the existing steps are adjusted so the resulting notes are the closest as possible as they were before the scale change, this is the scale quantization. So for example a G note in C Major, 5th interval and 5th grid row, would be quantized to a G note in C Chromatic which is actually the 8th interval, 8th grid row.

Scale quantization is useful when you need to keep your melody as similar as possible between scales or when you are looking for a specific scale and you don't want to listen to all the scales in the middle. On the other hand, keeping scale quantization OFF provides a more direct access to the different scales and interesting results when listening to the same set of steps through them as the notes will be updated on each turn of the scale encoder.

There's a very nice feature that we will cover in the HARMONIZER mode section, in which notes in a Sequencer follow harmonically the notes of the chord played on another Sequencer. This ensures that all your instruments stay in key and follow your chord progression. The HARMO scale setting is found one CCW encoder turn before the Chromatic scale. It is only supported in Mono, Poly, Multitrack and Stochastic modes.

Input notes from the OXI One keyboard or coming from external MIDI sources can be quantized to the scale depending on the Scale note quantizing setting.

SCALES LIST

- 1) Chromatic
- 2) Major
- 3) Minor
- 4) Dorian
- 5) Frigyan
- 6) Lydian
- 7) Mixolydian
- 8) Locrian
- 9) PentatonicMajor
- 10) PentatonicMinor
- 11) Harmonic Minor
- 12) Melodic Minor
- 13) Blues
- 14) Arabian
- 15) Romanian
- 16) Balinese
- 17) Hungarian 1
- 18) Hungarian 2
- 19) Oriental
- 20) Raga Todi
- 21) Chinese
- 22) Japanese 1
- 23) Japanese 2
- 24) Persian
- 25) Diminished
- 26) Phrygian Dominant
- 27) Byzantine
- 28) Spanish Phrygian
- 29) Neapolitan Minor
- 30) Neapolitan Major
- 31) Ukrainian Dorian

TIP: Scale will not reset when changing Sequencer Modes.

ROOT NOTE

The default root note is C2, but we can easily change it by pressing **SHIFT** and rotating **encoder 4**. As with the previous parameters, by pressing **SHIFT** and the encoder button, the root note is set to the default value, C2.

Both Scale and Root can be locked on the Configuration menu to prevent any unwanted modification during a performance.

FUNCTION BUTTONS

TIP: Jump to the [Sequencer Mode](#) section and skip the Function Buttons section if you want to start working with Mono, Chord, Multitrack or Polyphonic sequences right away. There are links to bookmarks to help you navigate when a Function Button is mentioned.

However, reading the function buttons section first helps to get familiar with the general workflow through all the sequencers.



TRANSPORT

The following behavior applies to Internal [Synchronization](#):

Rec enables [recording](#) from the Keyboard view or from any MIDI input..

Stop halts and resets all the Sequencers to step 1.

Play/Pause/FILL works as expected by default, but you can change this in the [Config menu](#) to:

- Reset all the sequencers playhead to the start points
- Pause
- FILL modifier
- Do nothing

Recording: the sequencers will receive the incoming MIDI information depending on the [MIDI In channel filtering](#) configuration option. If [MIDI In channel filtering](#) is ON, every sequencer will listen to its own MIDI channel. If OFF, the selected sequencer will listen to any channel. More information about Recording on its [own section](#).

Step Recording: Rec + Play will enter [Step Record Mode](#).

TIP: Shift + Stop will reset the sequencer

MUTE OPTIONS **new**

Press and hold mute plus any sequencer button, steps, first column pads of multitrack and more for various mute actions. To latch mute, double tap the mute button and its state will persist allowing you to mute one handed. In the config menu you can select the [Mute behavior](#) that works best for your workflow. Depending on this setting Mute works as follows:

Toggle Instant

Mute + sequencer press: activates or deactivates the sequencer playback.

When the sequencer is inactive, transport in that sequencer is stopped. Activating the sequencer starts transport according to the [Punch-In](#) quantization setting.

Toggle On Release

Hold Mute and press as many sequencer buttons as you want. The sequencers will be enabled/disabled on release of the Mute button rather than on the instant press of the Mute button. This allows you to activate or deactivate several tracks/sequencers at once while mute is held, they will take effect on release of the Mute button.

When a sequencer is disabled, the transport bar stops.

To mute the sequencer but keep the playhead moving, press MUTE + First Pad of the sequencer.

Mute Instant

Mute + sequencer press: mute / unmute playback, instead of the sequencer transport stopping and the sequencer becoming inactive

With this setting, in a Muted sequencer the transport bar is still running but no notes or cv-gate information is output. This setting will enable mute on Press of the Mute Button.

Mute On Release

Mute / unmute acts the same as Mute instant, but in this setting mutes aren't applied until mute button is released. This allows you to prepare more than one sequencer or track for mute/unmute before releasing the Mute button

RECORDING

Everything about recording can be found in its [specific section](#).

OTHER TRANSPORT COMMANDS

Play/Pause button behavior can be set in config as:

- "OFF", or pause disabled
- "ON", pause enabled. When the OXI One is playing, a tap on Play will Pause all the sequencers.
- "RESET", instead of Pausing, tapping the Play button when the OXI One is running will reset the playback head of all sequencers according to their punch in settings.

SHIFT + STOP (during playback) RESETS the playback of all the sequencers according to their Punch In setting.

SHIFT + MUTE + Sequencer button **1**...**4** resets the playback of the selected sequencer according to its Punch In setting.

SHIFT + MUTE opens the Nudge menu

MUTE + Any pad of the 1st column mutes the selected sequencer. It means its playback head continues moving but the sequencer doesn't emit any MIDI or CV event.

Long press **SHIFT + Play** for more than 3 seconds to take a rest from sequencing ;)

TRANSPORT **CC** COMMANDS

In order to control the Transport of a DAW or any other device when OXI One is not the Master (thus realtime messages are ignored by the master), you can assign a MIDI CC message to Stop, Play and Rec.

These MIDI CC messages will be sent from the OXI One through the selected MIDI channel, port A.

- Stop: CC 105
- Play: CC 106
- Rec: CC 107

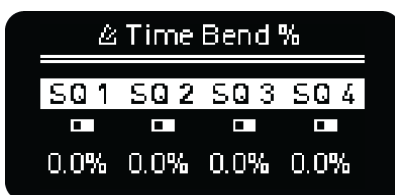
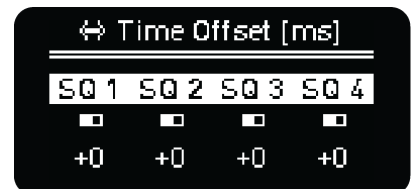
This feature can be enabled in Config, MIDI section: CC Transport Msgs Channel
Can be "Off" or any channel from 1 to 16 of the Port A.

When this setting is not "Off", you can tap any of the buttons and the OXI One will emit the corresponding CC message so you can use MIDI learn in your DAW to quickly assign these three commands.

NUDGE

Nudge allows you to make small adjustments to the timing of each of the four sequencers independently.

SHIFT + Mute opens the Time Offset screen where you can change each of the four sequencers' timing by +/- 100 milliseconds. Tapping the corresponding sequencer's encoder will reset the time offset value to zero. To adjust all four offset values at the same time, hold shift while turning any encoder.



SHIFT + double tap Mute

opens the Time Bend screen which allows you to increase/decrease the playback speed of each individual sequencer by a percentage relative to the global tempo. Tapping the corresponding sequencer's encoder will reset the time bend value to zero. To adjust all four time bend values at the same time, hold shift while turning any encoder.

SHIFT + Press any Encoder toggles between Time Offset and Time Bend menus.



KEYBOARD - PREVIEW

All the information about the OXI One Keyboard layout can be found in the [Keyboard section](#).

SHIFT + Preview activates/deactivates playback on the grid Piano Roll view when you press a step (or change the chord type or the step note with an encoder), this way you get instant feedback through MIDI and CV if configured, of notes and chords you add to the sequences.

PAGES

Press **16, 32, 48** or **64** to select which step page the grid displays. To access the **80, 96, 114** and **128** pages, hold the corresponding Sequencer button (1-4) and desired page number or double tap the page number: 16 will show 80, 32 will show 96 and so on. The page button will be lit up in blue in this case.

OXI One makes it more fluent to navigate between the 4 first pages or the last 4 pages, since it takes into account which of them you are on before switching to another block.

While the Sequencer is running, the grid normally displays the current page, so the **16, 32, 48** or **64** buttons will affect the display only until the Sequencer leaves that page. To lock the display on a particular page, turn off the [Follow](#) function.

Pressing any page button from any screen other than Sequencer view will take you to this view.

ARROW MOVEMENTS

SHIFT + Page moves the sequence on the grid according to the arrows displayed. Move the sequence left, up, down and right one step at a time to **rotate** horizontally or **transpose** vertically.

It applies to the active range of steps only.

Alternatively, you can also shift a range of steps by holding two pads on different columns of the grid and **SHIFT + Page** button .

WORKING WITH PAGES

Notes about step editing on different pages:

- You can turn [Follow](#) to OFF (SHIFT + MOD button to toggle [Follow](#) on/off), so the OXI one doesn't switch to another page.
- You can quickly loop pages by holding: INIT + END + Page button (Enters loop mode available since firmware 4.2).
- You can set INIT and END points using the page buttons.

For example, Hold Init + and press page 32 button. It will cleverly move both init and end points simultaneously keeping the initial step range.

COPY AND PASTE

In OXI One there are several copy/paste actions available.

In general, to copy; press and hold the COPY button, then select the item you wish to copy. Alternatively, hold the item first and then press COPY. The same sequence applies for pasting: hold PASTE, then select the target location, or hold the target location and press PASTE.

AVAILABLE ACTIONS:

PATTERNS

- **Copy/paste patterns** from the Load, Save or the Arranger views. You can also transfer patterns between sequencers, placing them at any desired position, one by one.

COPYING/PASTING A SEQUENCER

To copy a sequencer, press and hold the COPY button, then press the Sequencer button (1-4) for the source sequencer. To paste, press and hold the PASTE button, then press the Sequencer button corresponding to the target sequencer. This action duplicates the content from one sequencer into another. Remember you can hold the sequencer button first and then press COPY.

- **Copy/paste a Mono sequencer into Multitrack tracks.** Copy the mono sequencer first and then press Paste and tap the first pad of the destination track (1-8). This is very useful to use Mono mode power to compose and Multitrack as a storage to free up a Sequencer slot.
- **Copy/paste one Multitrack track into another.** Press Copy and tap the first pad of the source track, then press Paste and tap the first pad of the destination track.
- Pasting from a Poly sequencer will overwrite the Sequencer mode.
- Pasting from a Chord sequencer will overwrite the sequencer mode except pasting in Poly, which you can use to fine tune your chord sequences by note.
- Pasting from a Stochastic sequencer will overwrite the sequencer mode except pasting into Mono, where the notes of the stochastic buffer will be translated to the monophonic sequence.

STEPS

- **new Copy/paste single or multiple steps** with all its parameters. These steps can be pasted relatively on different positions and even different pitches. The maximum number of steps you can copy is limited by the size of the step clipboard buffer.
- **Copy/paste pages of steps** (16, 32, 48, etc.) onto another page. Hold Copy/Paste and press the page buttons.

- **Copy/paste** single or multiple **TIED notes**. **new**
- **Copy/paste** single or multiple **columns of steps in Poly** sequencers by pressing Copy and pressing on an empty step on that column. It will copy all the notes of the selected steps.
- **Copy/paste** Matriceal copy and paste parameter lanes, tracks and step values.

SCALE AND ROOT **new**

- **Copy/Paste** Scale and Root information between sequencers. Press and hold the Copy button and tap the 3rd or 4th encoder to copy the Scale and Root.


MOD LANES and MOD MATRIX

- **Copy/Paste** is available within the Mod Lane and MOD Matrix settings to copy all parameters and values from one Mod Lane to another or Mappings from one MOD Matrix Mapping to another.
- **Quick Copy/Paste** Hold copy and click encoder then hold paste and click another encoder to copy MOD values from one MOD Lane to another.

OTHERS

- **Copy/paste arranger slots** in the arranger view.


DUPLICATE


 **SHIFT + Copy duplicates** the current sequence's steps onto the following ones, thus doubling the sequence length. This action also automatically adjusts the sequence's End point to accommodate the new length.

If the sequence is for example 80 steps long, only the remaining 48 steps would be copied until the maximum length of 128 steps.

CLEAR

SHIFT +  **Paste** activates **Clear**.

In the sequencer view, press **SHIFT** +  **Clear** to erase all the note events of the sequencer or selected track in Multitrack mode.

Press **SHIFT** and **long press**  **Clear** to **Full Clear** the sequencer. Steps information, time division, pattern length, note offset, randomization settings, etc. will be set to default values but setup settings like MIDI channel and MOD destinations won't be affected for convenience in most cases. Although, you can fully erase these remaining settings using the [Save layout](#).

You can use this function to clear the loaded song/arrangement in the **Arranger** layout and you can clear the **MOD lanes'** values when the MOD screen is open.





UNDO AND REDO

Undo has the last 10 states stored, press it repeatedly to undo unwanted takes. Press **SHIFT** + **Redo** repeatedly to redo.



- Step toggling creates a new undo step. **new**
- Entering and removing TIED notes adds a new undo step. **new**
- A new undo state is created when using the Random Generator, Expand, Condense, Clear, Duplicate, Copy, Paste, Start and finish Recording and Loading a different pattern to avoid data loss. The new undo step is indicated by a quick blink of the button LED.

INIT, END and LOOP

Change the initial and final step of the active Sequencer or per track in Multitrack. You can hold **Init** or **End** and:

- either press any step on the grid,
- turn encoder 2 and 3,
- or press the pages buttons 16 , 32 , 48  and 64 .

Double press on the page buttons to select pages **80**, **96**, **114** and **128**.

When any of the **Init**  or **End**  buttons are held, the grid LEDs will indicate the start and end points of the pattern in **purple** color.



SHIFT + **Init** **x2** or **End** **/2** doubles or halves the time division of the selected Sequencer respectively.

In Multitrack mode, you can change Init and End steps of all the tracks at once by holding its Sequencer number button + Init or End and the desired step.

In order to improve the workflow, setting the pattern start step further than the current final one will offset both positions in an amount equal to the pattern length.

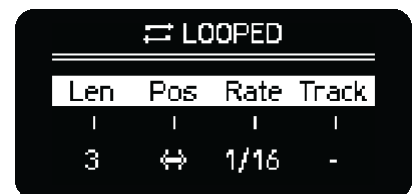
Example: Start step is 1 and end step is 16 and you press Init + page 32, the new start and end points will be 17 - 32 respectively.

You can also use **Init** or **End** buttons in conjunction with any track step in **Matriceal** mode to set the start and end points of any of the parameter tracks.

LOOP MENU new

Watch Looper Tutorial [here](#).

To enter the **LOOP** screen, press both **Init** and **End** buttons. Loop works on Mono, Poly, Chord, Stochastic and Multitrack Modes.



Once in the LOOP menu, you can activate the loop by simply pressing two steps of two different columns on the grid, those will become the looping points (or the same column and two different rows to loop 1 single step). This works the same way in Multitrack mode to set loops either all at the same time by selecting All on the track encoder, or by selecting any track on the track encoder to allow individual track loops to be set by grid press of two steps on the tracks respective row.

The loop will be active on this sequencer until it's manually disabled by pressing **Init** or **End** buttons. When so, the Loop will be released in sync according to the Loop release sync setting. Separate loops can be enabled and disabled on each Sequencer.

The options you will find on the loop menu are

- **Len:** Adjusts the loop's length by doubling or halving it, facilitating quick changes to either extend or shorten the loop while keeping its initial position static. Activating this option will enable the loop if it's not already active.
- **Pos:** Shifts both the initial and end points of the sequence simultaneously, by moving the loop's location 1 step without altering its length. It can be used with or without an active loop. If you hold SHIFT while changing the Position, the loop is moved a number of steps equal to the actual loop length.
- **Rate:** Rate or division of the playback head in the loop.
- **Track:** Track (or tracks) affected by the looper on a Multitrack sequencer.

TIP: With a LOOP activated, you can still transpose the sequence and toggle steps on or off in the grid.

When the LOOP is active in a specific sequencer, the Init and End point markers are constantly displayed, albeit slightly dimmed to ensure visibility of active notes at these points. You can set the INIT/END of a LOOP by choosing pads on the grid also with the init and end button held.

TIP: You can LOOP within a Snapshot and Snapshot within a LOOP. Exiting snapshot in either scenario will return you to the pattern and exit the LOOP. Exiting the LOOP will not exit the Snapshot, but exiting the Snapshot will exit the LOOP and leave your Init/End at the prior LOOP point.

Y DIV - EXPAND

It activates the Division menu. From left to right:

- **Grid Vertical Scroll / Track selection (Multitrack)**
- **Playback direction**
- **Random Time Division**
- **Time Division**



A quick tap will open the menu, a long press will open it momentarily until button release.

The Piano Roll view on the grid is set to the octave selected by OCT and the root note being the lower row. To move the view up or down to reach higher or lower octaves and further edit steps, use the **Vertical Scroll** (first encoder). When you move vertically through the grid, you'll see the rows highlighted, those indicate the position of your root note.

Pressing **SHIFT** while doing so will jump in increments of octaves instead of scale intervals.

TIP: You can also **hold and Turn 2nd Encoder (Oct)** to quickly perform Vertical Scroll.

In Multitrack, the first encoder changes the selected track.



Playback direction being forward, backward, pendulum, random, ping pong and drunk. In Multitrack mode, this parameter is independent for each track.

Drunk direction: for each step there is a 50% chance to advance to the next, 25% to repeat the same step, 25% chance to back up a step.

TIP: Ping Pong and Pendulum are similar, pendulum will play the last step of the pattern twice to allow the pattern to start at the 1 after returning to the first step.

Random Time Division introduces division changes to give more or less unpredictable rhythms to your sequence. If active, the Sequencer will be out of sync but it still follows the clock tempo. In Multitrack mode, this parameter affects ALL tracks.

Time Division. In Multitrack mode, this parameter affects the selected track only.

SHIFT + Division activates **Expand**. It works as a zoom in on the sequence: length duplicates and time division halves. Active notes TIE to following steps to keep its duration. Expand it's only limited by the maximum step number, which is 128.

***TIP:** Use expand to quickly increase resolution.*

The opposite of Expand is the **Condense** function. It's a destructive zoom out function, notes may disappear when using it.

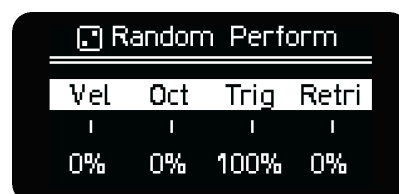
Both expand and condense generate a new Undo step.

RANDOMIZER & GENERATORS

RANDOM PERFORM (non destructive)

An easy and musical way to create non destructive variations on a sequence is to use **Random Perform**.

A quick tap will open the menu, a long press will open it momentarily until button release.



The parameters affect all the steps per track.

From left to right:

- Rand **Velocity** can be unipolar or bipolar. + values only add positive random variation. +/- values add positive and negative variation.
- Rand **Octave** can be unipolar or bipolar. + values only add higher octaves randomly. +/- values add higher or lower octaves randomly. A greater random value adds not only more probability of playing the note in different octaves, but also increases the octave range of the randomization.
- Rand **Trigger** probability of notes being played, 100% means no randomization.
- Rand **Retrigger** probability, which introduces ratcheting effect on steps.

In Mono and Multitrack modes, Retrigger also affects Skip (step parameter) the following way:

- With negative values, add **skips** to the steps.
- Positive values from 0% to 32%, steps set to Skip start to be triggered, some **retriggers** might appear as well.
- 33% to 100%, increase the probability of retriggers appearing. Steps set to Skip have even more chance of being triggered.

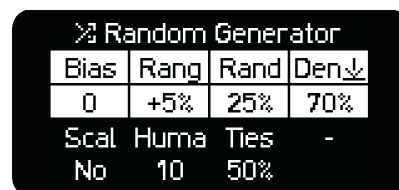
In Multitrack mode instead of Random Octave you have Random Gate, it doesn't affect the TIEs.

In Matriceal and Multitrack modes Random Perform parameters are **independent per track**.

Random Perform can be enabled/disabled on individual tracks in Multitrack mode. Pressing the Random Button, the first column will light up orange. While it is held, press a pad from the respective track to stop Random Perform from affecting it.

RANDOM GENERATOR (destructive)


SHIFT + **Random** activates the **Random Generator** menu. It allows you to generate a sequence based on different parameters you can fine tune to come up with melodic and rhythmic ideas in any Sequencer mode.



⌘ Random Generator			
Bias	Rang	Rand	Den↓
0	+5%	25%	70%
Scal	Huma	Ties	-
No	10	50%	

Holding **Random** button plus any of the 3 blue pads on the grid will enable/disable the Drum Pattern Generator in Multitrack Mode in those three tracks. More about it on Multitrack Mode.

In Multitrack mode **SHIFT** + **Random** toggles between the **Euclidean Generator** and the **Random Generator**. (Euclidean Generator is explained below).

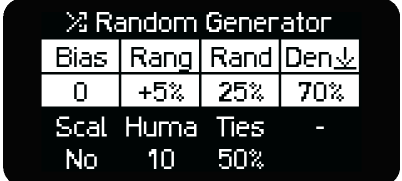
A new pattern is generated after pressing the 4th encoder. Remember, the  icon means encoder press action is necessary to confirm.

First set of parameters:

- **Bias**: sets the root-note offset (in scale intervals), serving as the central point for the generation of new notes.
- **Rang**: defines the range of step-intervals where the new notes are generated. It can be set to bipolar or unipolar modes.
 - In bipolar mode (\pm), new notes are generated within the range of Bias plus or minus the Range value. If the Bias is set to 0 and Range is greater than 0, new notes will be generated both above and below the root note.
 - In unipolar mode, new notes are only generated above the Bias point.
- **Rand** controls the degree of variation in the notes that are generated. Lower values result in more consistent patterns, suitable for arpeggios, while higher values produce more varied and less repetitive sequences.
- **Dens** changes the amount (density) of notes generated. The minimum amount is 1%. Turn past 1%, there are available the following features:
 - **Huma**: applies humanization to the existing sequence (randomization of velocity, gate and micro timing offset) according to the Humanization amount, see next options.
 - **Order**: instead of generating a new sequence from scratch, the Randomizer shuffles the order of notes of the actual sequence, creating variations of it. Ties on notes will not be retained.
 - **Pitch**: instead of generating a new sequence from scratch, Randomizer shuffles the pitch of the active steps of the current sequence. Ties on notes will not be retained.
 - **Invrt**: inverts the order of the pattern from the start to the end points. **new**

Second set of parameters (Encoder press to toggle between them):

- **Random scale:** if “Yes”, it randomizes the scale and root note of the sequencer.
- **Humanize** introduces time offset, gate and velocity variations on the generated pattern.
- **Ties:** sets the probability amount of TIED notes appearing.



⌘ Random Generator			
Bias	Rang	Rand	Den↓
0	+5%	25%	70%
Scal	Huma	Ties	-
No	10	50%	

The **Random Generator is destructive**, it works from the **start to the end** points of the pattern, overwriting what is there. Press **Undo** to return to the previous sequence.

New The **Random Generator** will not alter steps that are set with FIXED or LOCKED logic conditions. This feature allows you to maintain certain steps unchanged while using the random generator to introduce variations and create dynamic patterns.

TIP: Press *SHIFT + ENCODER* to set back the default value of the selected Random Generator Parameter.

EUCLIDEAN GENERATOR (destructive)

The **Euclidean Generator** menu is only available in Multitrack mode. Press **SHIFT + Random** to get into its menu.

DRUM PATTERN GENERATOR (non destructive)

The **pattern generator** is a new tool available in Multitrack mode based on the MI Grids module. It can be used to generate drum patterns for Kick/Bassdrum, Snare and HiHat but, you can of course trigger any other sound. The generated patterns are the result of a mix of many different rhythms from traditional to more experimental ones that are combined offering interesting results. This mix is adjusted with two controls X and Y.

All the information about this feature in the Multitrack mode section.

LFO - CV GATE

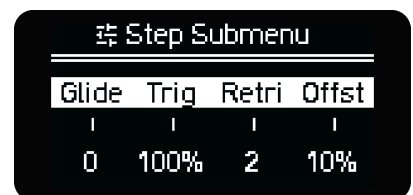
There are 2 **LFOs per Sequencer** and both can modulate one internal and one MIDI parameter. A quick tap will open the menu, a long press will open it momentarily until button release. Tap again to enter in the second LFO menu. All the details about the LFO can be found in the [LFOs section](#).

Access to the **CV GATE** routing layout by pressing **SHIFT + LFO button**. This layout is explained in the [CV Gate](#) section.

STEP-CHORD - CONDENSE

The **Step-Chord** button allows you to enter additional parameters of the sequence steps, the Step Submenu.

The available options depend on the Sequencer Mode so they are explained in the respective MODEs section.



In general a **short press** latches this button on or off. When it is latched on and you press any step, the screen will show these additional parameters. You can also press **SHIFT + a pad** to access the same Step Submenu in most sequencer modes. In these modes, **SHIFT Latch** will allow the Step Submenu to be accessed without using two hands.

In chord mode, a first tap will enable the step chord menu. When enabled, pressing a step will show the chord settings for that step: chord type, voicing and spread. Another tap latches the Step Submenu.

SHIFT + Step-Chord: CONDENSE, collapses the current sequence into a lower resolution. 1/4 notes become 1/2 notes. It is a destructive function that can be undone.

MOD - FOLLOW

MOD (modulation) toggles the MOD layout. This feature is deep enough to be placed in its own section: [MOD LANES](#). A quick tap will open the layout, a long press will open it momentarily until button release.

SHIFT + MOD to toggle the **Follow** function. Press it to automatically change the displayed page on the grid and to keep track of the steps pages with the play head. Turn it off to keep the selected page static so you can make changes in specific pages even with the Sequencer running.

TIP: If Follow is active and you have at least one step pressed, the page will remain static.
Your **Follow** setting is remembered after a power cycle.

BACK - CONFIG

Back gets you back to the previous screen. Keep it pressed to go to the main sequencer view.

SHIFT + Back opens the Configuration menu. Go to the [Configuration](#) section to learn more.

Hold **SHIFT** first and then **Back** for a few seconds to go directly to the MIDI (input) monitor.

LOAD AND SAVE

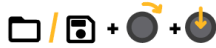
MEMORY ACCESS

STORE UP TO 15 PROJECTS

PROJECT INFO

- Name
- 12 Arrangements / Songs
- Tempo
- Song Names

16 PATTERNS PER SEQUENCER
64 PATTERNS IN TOTAL PER PROJECT

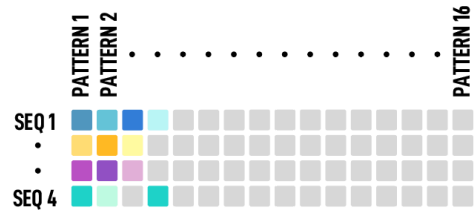


LOAD or SAVE from the Menu

- 1st Encoder selects **project**
- 2nd Encoder selects **pattern**



You can QUICKLOAD/SAVE patterns directly from the Grid.



4 FIRST ROWS show the project patterns.
Unlit positions are empty.

OXI One can store **15 Projects**, each **Project** stores up to **16 Patterns** per **Sequencer**, for a total of **64** patterns per project. Each pattern stores all sequencer data, including its mode (Mono, Chord, etc.), and different patterns of a sequencer can be for different modes. There is also a Templates folder with **32 pattern templates**.

OXI One will store the latest changes you made so they are available after a reboot in a **TEMP MEMORY**. If you want to discard them, simply reload the project.

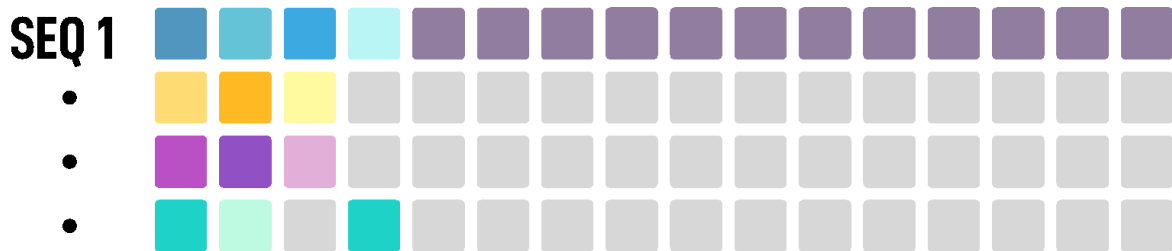
TIP: To quick reload the project press shift + Load Button.

To save a sequence, hold the **Save** button, **Memory Access** view for the current project will show up on the grid. This layout is independent of the Sequencer you have selected.

The 4 top rows of pads of the grid show the Patterns, one row per Sequencer. Each slot contains one pattern of one single sequencer.

Each Sequencer can load and play any of its 16 patterns independently of which pattern the other sequencers are playing, so we've arranged the Memory Access with a matrix style correlation to tidy up the structure.

You can also load patterns from other projects. To load from other projects, enter the Load Menu, turn encoder 1 to select the project but don't push the encoder. Then turn encoder 2 to select a pattern and push to confirm load or push a pattern button on the grid (patterns on the grid for the currently active Load Menu Project are visualized).



*The patterns row of the selected sequence is Highlighted in soft purple color.
This helps you to load/save the right pattern.*

TIP: In OXI One all loading events, being Pattern or Project, are done without playback interruption.
This behavior virtually removes all boundaries of songs, patterns and steps limits.

Depending if you are in Load view or Save view, you can load from or save your patterns in any slot by pressing any pad on the row of the **corresponding Sequencer**.

QUICK LOAD

To quickly **Load a Pattern** from the grid you can do it in two different ways.

A quick tap of the Load button will permanently show the Memory layout in the grid.

Once opened, tap any pattern slot of the grid and it will be instantly loaded according to the Load quantization setting (when the arranger is OFF) or immediately if OXI One is stopped.

If the load quantization is OFF, the new pattern will be instantly loaded in sync with the previous one, and the playhead will keep its previous position. Otherwise, the pattern will be loaded when the quantization happens, and the playhead resets from the beginning.

A long press of the Load button will temporarily open the LOAD view until you release the button. Tap any pattern of the grid to load it, same as before. You will be back to the previous view on button release.

TIP: When a new Pattern is loaded, any changes made to the previous one will be lost unless you previously save it manually.

You can change the **Load Quantization** settings for patterns in the Launch Settings menu located in the Arranger.

Press any of the 4 bottom pads of column 16 in the arranger and choose the “Global” setting to your needs. This defines how quickly a pattern loads upon Press, ranging from instant to 8 bar. When set to Off (Instant) the transport playhead does not reset to the beginning of a pattern which can offer creative uses. [Video showing instant pattern switching and transport continuation.](#)

LOADING PATTERNS FROM OTHER PROJECTS **new**

Note that you can load patterns from different projects directly on the grid by turning the first encoder and choosing any other project. The grid will display the available patterns of the selected project.

You can save the new loaded pattern on any slot of the active project.

QUICK SAVE


To quickly **Save** the current loaded **Pattern** using the grid you can do it in two different ways.

A quick tap of the Save button will permanently show the Memory layout in the grid in saving mode. In this **save** view you have to double tap any pattern of the grid to save the currently loaded pattern into this slot. This way you avoid accidentally overwriting any other pattern.

A long press of the Save button will temporarily open the **save** view until you release the button. In this **SAVE** view, tap any pattern slot of the grid and it will be instantly saved.

You can save 4 patterns (1 per Sequencer) on the grid INDEPENDENTLY of the selected sequencer (1-4).

QUICK ERASE

To quickly **Erase** one or several patterns at once, tap the Save button to permanently show the Memory layout in the grid in saving mode, hold the desired patterns and press **SHIFT +**  **Clear**. Fully cleared patterns remain unlit in the storage view.

NOTES ABOUT PATTERN STORAGE

- Each row stores the patterns for each sequencer. Upper row 1 = sequencer 1, row 2 = seq 2, etc.
- Patterns of sequencer 1 can only be saved to and loaded from the slots of row 1 and so on. This helps to keep the patterns organized.
- Every slot can store one pattern. The **sequencer MODE** (Mono, Chord, etc.) is part of the stored data, so different patterns of the same sequencer could be of different modes. The sequencer will automatically change its mode when the pattern is loaded.
- Other information like **MIDI channel, Arp settings, MOD Lanes with CC assignments, Ext Mappings**, etc. is also **stored per pattern**.
- Saving a pattern means that the current information of the project like BPM, active sequencers, loaded patterns, cv assignment, etc. are also updated in the memory.

TIP : *In order to maintain consistency between patterns, we recommend configuring everything necessary such as MODE, MIDI channel and CC assignments in a first pattern.
Then save this pattern in successive memory slots.*

Patterns can also be saved as templates to store all the required settings.




LOAD SAVE MENUS

The Load and Save screen menus offer additional options of using the grid. They are also the only way to load and save projects.

In these menus, **encoder 1** is used to navigate the projects list and project submenus and the **encoder 2** is used to navigate the patterns list and pattern submenu. This may sound unconventional at first, but it helps to reduce the menu depth and facilitates the navigation when you need to move from project to patterns or vice versa.

Things that can only be done from these menus are:

- Load patterns from other projects
- Save patterns into a different project
- Load pattern from a template
- Save pattern as a template
- Rename projects and patterns
- Clear projects and patterns

The  symbol represents that the operation needs some time to be performed, from a couple of milliseconds (like “Clear project ”) to a couple of hundred (“Duplic proj here ”). This means that if you do it when the OXI One is playing, it may have a negative impact on your performance.


PATTERN MENU

Some menus differ if the selected slot is the loaded one or not.

Pattern Load menu:

- Reload (from non volatile memory)
- Load from template
- Clear pattern

Pattern Save menu:

- Save pattern (in non volatile memory)
- Rename grants you access to the Rename screen that allows you to rename your patterns and projects.
- Save as template 
- Clear pattern




PROJECT MENU



Project Load menu:

- Load project (loads the project info and the 4 active patterns from non volatile memory)
- Load is quantized according to the LOAD Quantization setting. **new**

Project Save menu (for the loaded project):

- **Save project** (saves the project info and the 4 currently loaded patterns in non volatile memory)
- **Rename**
- **Clear project**  (completely removes the project data and all its patterns from non volatile memory).

Project Save menu (if different from the loaded one):

- **Duplic proj here**  (copies the currently loaded project and its patterns into the selected slot)
- **Clear project** 

RENAME MENU

In this screen you can rename your projects and patterns, the same screen is also used for renaming in other menus.

Starting from the left, the first encoder scrolls through the letters and symbols. When pressed, it will insert the chosen character directly after the cursor.

The second encoder shifts the cursor's position. Pressing on this encoder will remove the character currently beneath the cursor.

The third encoder cancels the process and gets you back to the previous screen when pressed.


Lastly the fourth encoder confirms the new name and saves your project or pattern.

PATTERN TEMPLATES

The templates folder can be found right after the 15th project in the projects folder.

Any of the 4 loaded patterns can be stored as a template. On the other hand you can recall a template at any time and the template will be loaded in the selected sequencer.

The pattern template is a copy of the saved pattern. You can set up the pattern for a specific setup or instrument (MIDI Channel, MIDI CCs, Scale, etc.) and you can use it later as many times as you need.

Pattern templates can be renamed. To do so, tap save, navigate to the Templates folder with the first encoder, select the template using the 2nd encoder and press "Rename template .

QUICK PROJECT SAVE

To QUICK save everything, press **SHIFT** and **Save**  . This will save the project settings and the current loaded patterns.

CHANGE PATTERN WITH PROGRAM CHANGE **new 4.0**

You can assign a Global MIDI channel to accept Program Change (PC) messages, with values ranging from 1 to 16. This can be set in the PC (Program Change) receive global Channel option located within the MIDI settings of the configuration menu.

When a Program Change message is received with a specific value, the corresponding pattern with that number will be loaded. For instance, if a PC message with a value of 2 is received, pattern number 2 will be loaded for each of the four sequencers and so forth.

This is done following the Load quantization setting, or the Launch quantization setting if the Arranger is engaged.

KEYBOARD

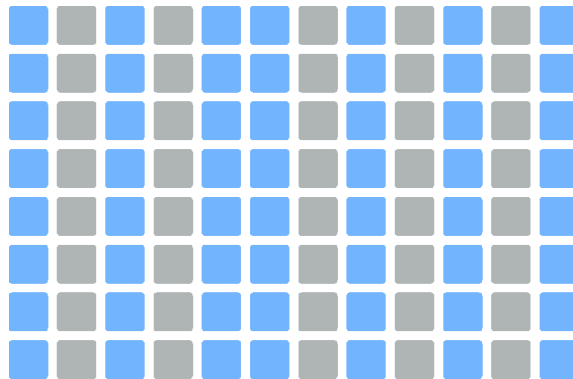
It shows the keyboard layout on the grid. Each Sequencer mode has its own dedicated Keyboard layout.

There are two keyboard layouts, the classic one specifically designed for the OXI One and the Isomorphic layout. It is possible to select which of them is displayed in the Configuration menu.

CLASSIC LAYOUT

In the **classic layout**, different columns of pads will be highlighted on the grid depending on the scale selected, to act as a visual guide of the notes that belong to the scale. Each column represents a semitone, moving vertically each row jumps an octave up and down.

When other than a Chromatic scale is selected, the notes that don't belong to the scale are lit in soft red.



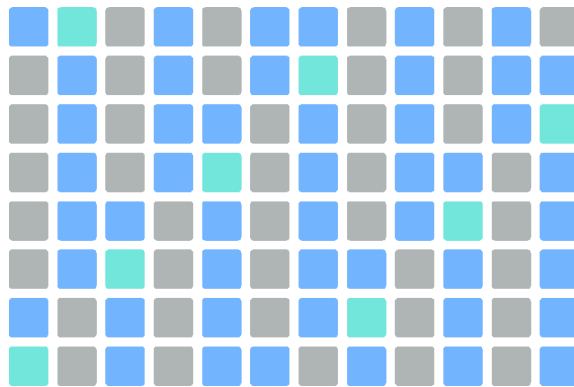
Classic layout in any Chromatic Scale.

In classic layout the notes of the base octave are Highlighted (except in chromatic scale). **new**

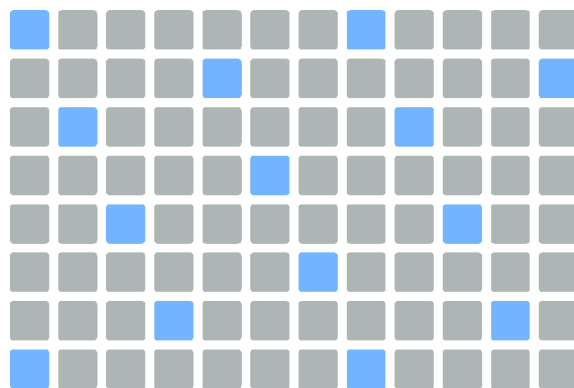
ISOMORPHIC LAYOUT

The **isomorphic layout** has been added in the 3.0 update. The main difference with the classic layout is that there is a fixed interval between one pad and the one just above it. This interval can be a perfect 4th or a perfect 5th. This rule makes sure that the notes are arranged in a completely different way.

One of the main advantages of the isomorphic layout is that the interval relationship between two pads is always the same, making it easier to play a specific chord among the keyboard.



Isomorphic layout in 4ths, C Chromatic Scale.



Isomorphic layout in 5ths, Major Scale.

In isomorphic layout the base note is Highlighted (except in chromatic scale). **new**

The encoders in this mode modifies:

Velocity of the notes triggered from the keyboard.

Pitch Bend. Works as a pitch bend of a keyboard. Press the encoder to set it to 0. Each sequencer will remember the last set pitch bend value.

Pressure/Aftertouch for the configured **Cv outputs**. Pressure knob also works as a GLIDE control for better performability with modular gear over CV.

Base octave note of the keyboard, independent of the sequencer.



TIP: The last played note (or chord in Chord mode) is shown in the menu title.

Press **Rec** to record notes when **Play** is active. You can adjust quantization and other parameters pressing SHIFT + Rec.

Keyboard, including arpeggios, sends any number of notes pressed. This means the Mono keyboard can be used to perform over polyphonic synths without issues, the limit is set by the synth or sound engine being controlled.

Specific Keyboard layouts for Chords and Multitrack modes will be explained on their sections.

Below both Arpeggiator and Roller are explained.

SCALE QUANTIZATION

Scale quantization can be switched on/off in the Config menu. When it's ON, non-scale notes are quantized to the upper closest scale note.

PICK AND PLACE

The **Pick and Place** function allows you to play a note or chord on the Oxi Keyboard or from an External Keyboard and Oxi will store the notes temporarily to allow you to exit the keyboard and place the notes on the grid. This functionality works only in **MONO, POLY AND CHORD** type sequencers.

In order to complete a pick and place, first go to the keyboard or play a chord from your external controller, then press either the keyboard button to close the keyboard and return to the grid. Or if you are already on the grid, then simply place your notes by pressing a column you would like them to be placed. OXI One will place them in the correct row even if the row is not currently visible on the grid.

If you wish to clear the temporary buffer and avoid Pick and Place, simply press the sequencer button before tapping the grid. Pressing a page button will not clear the Pick and Place temporary memory.

ARP

Press **Arp** to enter the arpeggio menu, if you are not in Keyboard view, the Keyboard will be shown as well. Unless in chord and polyphonic modes that have their own built-in arpeggiator. **new**
 Each Sequencer has one arpeggio that can run independently of what is playing on the Sequencer.

- Turn it ON with encoder 1 and continue turning CW to choose the **arpeggio mode** or algorithm. The name of the arp mode is displayed on top of the screen. Hold SHIFT and press the first encoder button to toggle the Arp On and Off. The arp will maintain its last chosen mode during toggling on/off.
- Encoder 2 changes **octave voicing range**. Will add a number of Octave higher or lower notes to your arpeggio in a repeating rhythmic pattern. Arp 8 Patt Reset affects the start point of the pattern. Encoder 3 changes the **gate** or note **length** of the arpeggio.
- Encoder 4 for **time division**.

Thumb			
Type	OctV	Gate	Div
ON	1	50	1/16
Accn	Len	Puls	Rept
+0	13	9	0

The new improved ARP engine incorporates a rhythm generation (based on euclidean patterns) and a groove engine. **new**

There is a second of four parameters for this purpose. To toggle between them you have to press the respective encoder buttons. Pressing and holding SHIFT plus encoder press resets the corresponding parameter. This particular workflow, which contrasts with other areas of the interface, ensures a more efficient workflow for quick adjustments during performance with the Arpeggiator.

Thumb			
Type	OctV	Gate	Div
ON	1	50	1/16
Accn	Len	Puls	Rept
+0	13	9	0

- **Accent** or groove amount. Adds velocity modulation according to a predefined groove to the generated notes. It can be positive or negative.
- **Length** of the euclidean pattern.
- **Pulse**. Number of pulses created by the euclidean pattern.
- **Repeat** count. Number of notes that are generated after an euclidean pulse.

If you set **Len** and **Puls** to the same value, you'll create a constant stream of notes like in a classic arpeggiator.

You can choose from a wide range of arpeggiator modes and we encourage you to test them all! Arpeggio only works when **Play** is on, independently if the Sequencer is active or not.

The parameters of the Arpeggiator like mode, octave range and rate can be modulated with the internal LFOs, the internal MOD Lanes or the MOD Matrix.

Press **Rec** to record the arpeggio on the Sequencer. Keyboard ARP will consider velocity/groove during recording (it does not work for arpeggiated chords in Chord mode).


TIP: In a Polyphonic Sequencer and with overdub on, you can record several layers of the arpeggios played.

SHIFT + Arp activates **Hold**. This way you can add and remove notes of the arpeggio without having to hold them manually. If an arpeggio is held, exiting the Keyboard view or changing Sequencer won't turn it off, this way you can have 4 arpeggios held at the same time. This also works for incoming MIDI for all sequencer types keyboards.

- Use **Hold** with the Arp disengaged to create drones.
- With **Hold** active, you can arpeggiate notes independently of each sequencer at the same time.
- **Hold** can be used with the Roller as well.

ROLLER

The **Roller** is a feature available in the Mono, Poly, Multitrack and Stochastic modes. It takes the notes held on the keyboard to create rhythmic patterns.

In any of those modes press the keyboard button  to go to the keyboard view.

13th column of the grid from the left is the **Roll** rate selection. From bottom to top the rate of the rolls increases. The rate is absolute and not depending on the sequencer settings.

- 1/4 , 1/4T, 1/8 , 1/8T , 1/16 , 1/16T, 1/32, 1/32T

The roller will work with one (mono) or several notes (polyphonically) at once.

Press **SHIFT + Hold** to hold the notes of the keyboard and you will have the roller working on top of them, creating another kind of rhythmic pattern.

SEQUENCER MODES

There are 6 Modes available: Mono, Polyphonic, Chords, Multitrack, Stochastic and Matriceal. Each Sequencer Mode is designed to accomplish a specific purpose. Stochastic and Matriceal are two kinds of generative engines.

To change the mode in the selected sequencer hold SHIFT and tap the sequencer button to enter the sequencer settings menu. Then select the desired mode from the list using the rightmost encoder.

MONO

Mono mode is a great place to create the leads and main melodies of your song, perform or automate them.

In Mono mode, every row represents the note position according to the selected scale, starting from the selected root note. For example, in the C Major scale, steps would be C, D, E, F, G, A, B and C in a higher octave.

There's up to 128 steps, review Init and End function buttons to recall how to change the length.

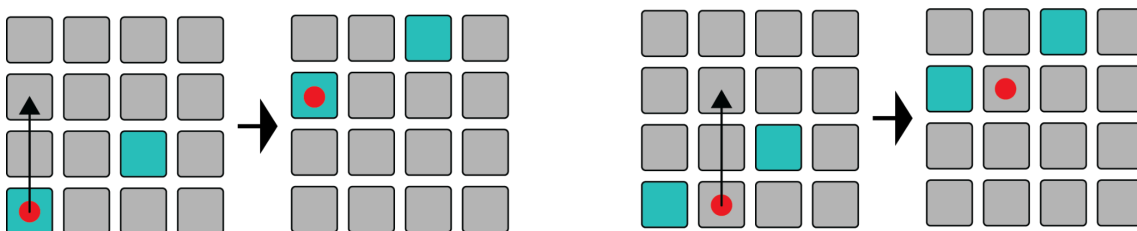
To enter notes, short press on the pad you want to set on. To remove them, short press on the active pad. You may enter or remove several notes at once by doing this.

- Remember to use Y DIV and first encoder **to scroll** up/down to reach higher/lower notes. You can also **push + turn the 2nd encoder**. The row being highlighted is your root note.

When one note is on a higher or lower octave, a led will light up on the top or bottom row indicating the higher or lower pitch, the note will be also visible on its respective row, so it helps you to have all the notes at sight and controlled.

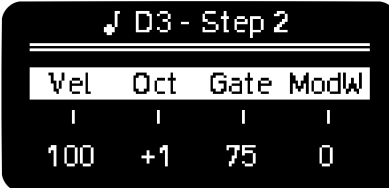
You can have notes that are longer than a single step by adding **TIEs**. To enter a TIED note, hold the first step you want to activate, and press the last step you want the TIE to be active on the same row (note that this action requires holding the first note before pressing the second). The same action also removes TIED notes. You can also remove a TIED note by tapping its first step. The inverted gesture (from right to left) adds straight triggers.

You can quickly **transpose** the whole sequence by holding the respective Sequencer button and pressing an empty note higher or lower than an active one. The distance from the active note to your pressed pad in the column will dictate the transposition direction and distance.



STEP PARAMETERS

Hold one or more notes at the same time (active or not) to see their step parameters and the note information. You can change with each encoder the **Velocity**, **Octave** (a pad will light up on the edge of the column as indication of the octave positive or negative offset), **Gate** and the **Mod** defined in the MOD section, by default it sends ModWheel.

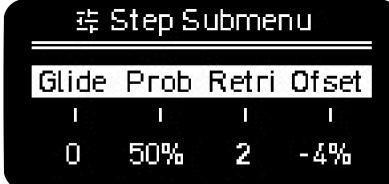


↓ D3 - Step 2			
Vel	Oct	Gate	ModW
100	+1	75	0

ADDITIONAL STEP PARAMETERS

With **Step-Chord** activated, holding a step will take you to the Step Submenu. You can also press SHIFT + hold a step to access this second layer of step parameters.

In this screen you can modify the following parameters:



⚙ Step Submenu			
Glide	Prob	Retri	Offset
0	50%	2	-4%

Glide, it sets the time of the pitch to change continuously between two consecutive notes. At the moment it only affects the CVs pitch output.

Prob, and **Logic conditions**. There's two behaviors:

STEP PROBABILITY

- By default it's set to 100%, that means that the step has a 100% chance of triggering a note. Turning the second encoder CCW lowers the probability of the step triggered notes. You can toggle 100% probability and Fixed Logic in the Step Menu.

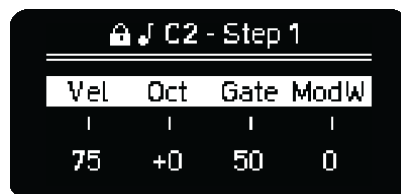
LOGIC CONDITIONS

- Turning the encoder CW will take you to **A | B** logic triggering. **A** and **B** are numbers in which B sets the number of bars and A in which of those bars the note is triggered. For example 3 | 4 means that the note will be triggered on the 3rd of each 4 bars. This tool is handy to create longer patterns or launching samples every once in a while and not in every loop.
- After A | B you will find **NOT A | B** logic condition. **A** sets the number of the bar where the note is NOT triggered and **B** sets the number of bars before the condition is again evaluated.
- Next comes **PRE** and **NOT PRE**. PRE triggers the note if the previous step also triggered a note. NOT PRE triggers a note if the previous didn't trigger a note.
- **FIRST** and **NOT FIRST**. FIRST triggers note only the first time after playback starts. NOT FIRST triggers note always but the first time after playback starts.
- **FIXED** means that the step trigger is not affected by any modulation or randomization source and it's always triggered. Pressing the encoder toggles between 100% Probability and Fixed.
- **FILL** and **NOT FILL** The Play button acts as a FILL modifier. When it's held, steps set to FILL will play and steps set to NOT FILL won't.

- **LOCKED new** the step is not affected by any modulation or randomization source **at all**. For example velocity, gate or pitch randomizations or modulations won't affect this step.

Random generator and Euclidean generator don't affect steps with FIXED or LOCKED logic conditions.

Steps that are either FIXED or LOCKED are identified by a lock icon within the step parameter menu.



TIP: Press the second to quickly toggle between **100%** and **FIXED** logic condition. **new**

Retrig, sets the times the note is triggered during the step duration, up to 5 times. For better resolution change the Time Division of the Sequencer or Track.

When fully CCW you get to **SKIP**, if selected the step timing will be ignored by the transport bar, thus making the sequence length shorter. Skip is only supported in Mono, Multi and Matriceal modes.

TIP: Use **Skip** to abruptly change the timing and feel of the pattern.

Randomize Skip steps to get different sequence lengths every bar by adding and removing notes, in Retrig on Random Perform screen.

Offset, sets the time deviation of the note from -40% to 40% of the current time division. $\pm 25\%$ is a quarter deviation from the duration of the step.

When recording live from the keyboard or using external MIDI, the quantization percentage on the Recording menu sets the time offset of the notes. If quantization is set to 100% the offset will be 0%, other than that it'll be more or less exact to the grid.

STEP MUTE **new**

You can Mute steps by holding MUTE and tapping on any step. Muted steps are displayed in **purple** color and their playback is deactivated. Hold MUTE and tap the step again to Unmute.

Note that MUTE + First column is reserved to mute the whole sequencer.

KEYBOARD

Check the keyboard and ARP section to know more.

CHORD

Watch the video tutorial [here](#).

In Chord mode, each step can play a chord with up to 8 notes.

In the Piano Roll or Sequencer view, every grid row represents each degree of the selected scale. For example, in the C Major scale, from bottom to top the grid rows would represent Cmaj, Dmin, Emin, Fmaj, etc.

CHORD EDITING

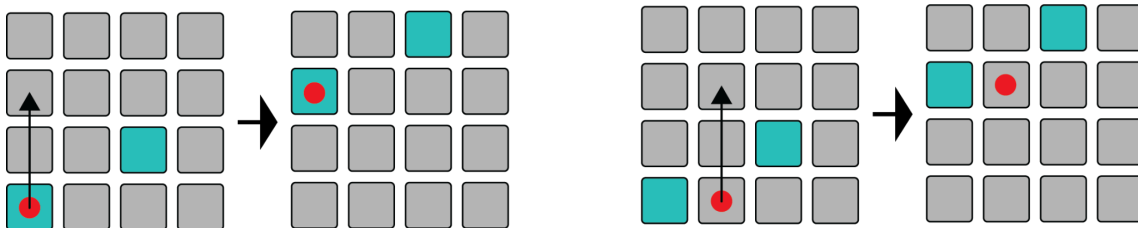
Chord mode was built around the premise of being an inspirational and learning playground. You can create from simple triad progressions to complex chord progressions with all kinds of tensions, inversions and all that related to the scale degrees, in a very intuitive manner.

There are **two banks** of chords available, bank **A** and **B**.

Bank A avoids more dissonant chords like augmented, diminished and dominant chords, that are generally more difficult to use by non musically trained users. You will find all those chords in Bank B.

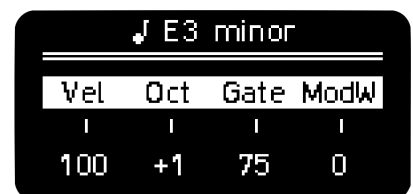
The **auto voicing** engine, in charge of assigning the best possible voicings to every chord in order to get the least voice movement, is enabled by default.

You can quickly **transpose** the whole chord progression by holding the respective Sequencer button and pressing an empty pad higher or lower than an active one. The distance from the active note to your pressed pad in the column will dictate the transposition direction and distance.



STEP PARAMETERS

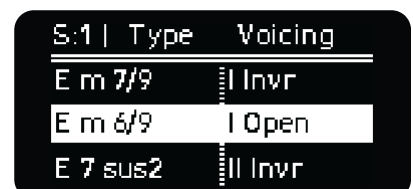
Hold one or more pads at the same time (active or not) to see their main step parameters and the chord information. You can change with each encoder the **Velocity**, **Octave** (a pad will light up on the edge of the column as indication of decentralized octave), **Gate** and **Mod**, by default it sends Modulation Wheel and can be changed on CC Configuration.



STEP CHORD MENU

You can change the chord of every step in the chord menu. In order to do so, press the **Step-Chord** button to enable the chord menu (the button will start blinking). Now press the desired step and the chord menu will show up. If successive steps are tied (same root note, chord type, voicing and spread), the changes made to the selected step will apply to the tied ones.

The first encoder sets the **Spread** value per step (S:1 in the right example). It increases the voices of all the chords (limit of 8 notes) with higher octave notes of each grade by ascendant order.



The second encoder sets the chord **Type**, by default it has the triad of the corresponding degree. The inversions (voicing) are then set for every degree to ensure the chord voices are more musically balanced (If Auto voicing is ON). Chords are ordered from less to more complexity (with complexity we mean the number of voices and tensions). Suspended 2, suspended 4 chords and fifths and octave intervals appear later.

The third encoder, sets the inversion or **Voicing**. The options are no inversion, Open, Open 1st and 2nd and Inversion 1st and 2nd.

ADDITIONAL STEP PARAMETERS

A double tap on the **Step-Chord** button (steady white light) will enable the step submenu, which can be seen by holding one or several steps at once. You can also press SHIFT + hold a step to access this second layer of step parameters.

In this screen the parameters available for edition are:

Strum, it ranges from -100 to 100. Positive values introduce a time separation between notes that goes from lower to upper notes, in negative values it goes from upper to lower notes. This effect sounds like strumming guitar strings.

Prob, or **Logic Conditions** explained in the [Trigger Conditions section](#).



Retrig, sets the times the note is triggered during the step duration, up to 5 times. For better resolution change the Time Division of the Sequencer or Track. **Skip** is not supported in Chord Mode.

Offset, sets the time deviation of the note from -45% to 45% of the current time division. An offset of 25% is a quarter deviation from the duration of the step and $\pm 50\%$ would be half the step.

SHIFT + Step-Chord takes back to main step screen editing.

STEP MUTE **new**

You can **mute** steps by holding MUTE and tapping on any step. Muted steps are displayed in **purple** color and their playback is deactivated. Hold MUTE and tap the step again to Unmute.

Note: MUTE + First column is reserved to mute the whole sequencer.

STEP CHORD BUTTON BEHAVIOR

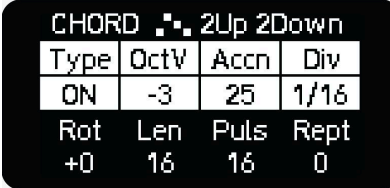
- Hold the Step-Chord button -> opens the **Chord Global** menu
- Press once -> latches **Chord Step menu**
- Second press if there hasn't been any chord modification in the menu -> latches **Substep menu**
- Second press if there has been any chord change from the menu -> Back to main step parameters

CHORD BUILT-IN ARPEGGIATOR **updated**

Chord mode features a built-in arpeggiator that uses chord notes as inputs, offering a unique way to generate musical phrases. When used alongside the rhythm generator and groove engine, it enables the creation of compelling musical textures. Arp parameters are stored within the pattern data and can be recalled per pattern.

ARPEGGIATOR PARAMETERS:

The arpeggiator parameters are equivalent to the ones shown in the ARP, parameters are accessed by pressing the ARP button when on the grid note view. These sequencer ARP parameters are different than the Keyboard ARP which is accessed by pressing the ARP button from the keyboard view.



CHORD 2Up 2Down			
Type	OctV	Accn	Div
ON	-3	25	1/16
Rot	Len	Puls	Rept
+0	16	16	0

Accent is shown in the third position of the first set of four parameters, replacing Gate. The arp note gate length can be controlled globally with the 3rd encoder while in note grid view.

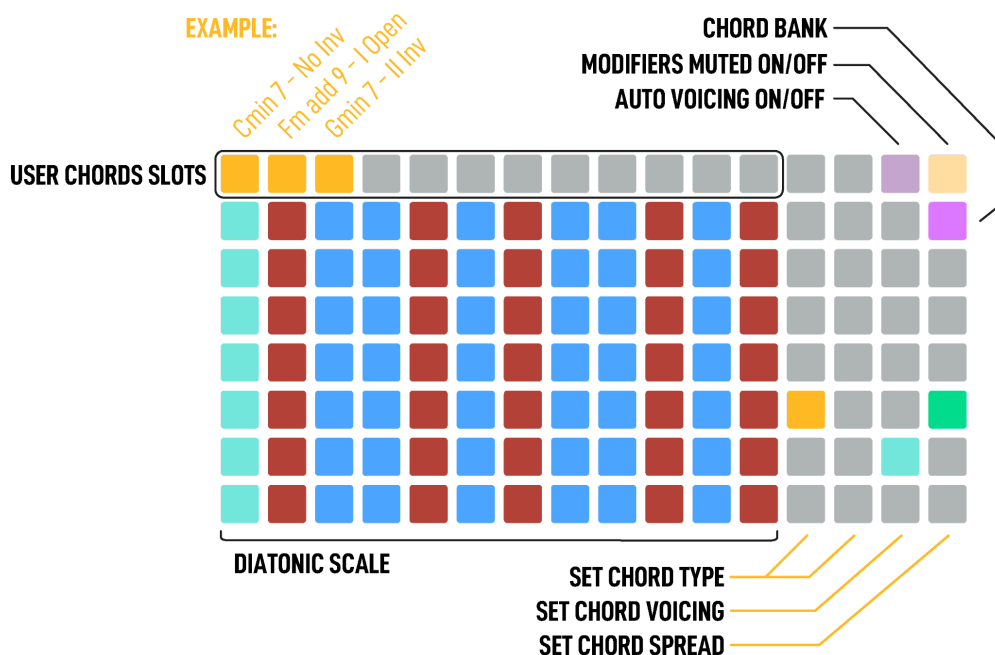
You may apply a Euclidean pattern to the ARP by using Rot, Len, Puls settings. The Euclidean pattern **Rotation** sets the number of Rotations or steps in which the pulses are shifted to the right (for positive values) and to the left (for negative values).

ARPEGGIATOR SPEED VARIATION:

The arpeggiator can run at a different speed than the sequence.

CHORD KEYBOARD

The keyboard layout includes a large amount of intuitive shortcuts and tools to make playing chords equally fulfilling for the experienced music theorist as for the inexperienced, to allow for learning and exploration without barriers.



The keyboard is split in two sections, the first 12 columns of the Grid are the performance area that triggers the chords. Each pad is defined by the root note of the chord it triggers. Each column is a semitone filtered by scale, moving vertically is an octave up or down.

The second section is from the 13th column to the end.

13th and 14th columns select the **chord type** given the scale and the root note played.

15th column selects the **voicing** of the played chord.

16th selects the **spread** of notes in the chord. Remember the chord can have up to 8 notes.

Top right pad toggles between the chords **modifiers** of this section to trigger chords when pressed or not.

Chord Bank toggles between chords Bank A and Bank B.

Auto Voicing enables or disables intelligent voice stack (least chord voices movement).

TIP: You can **arpeggiate** the played chords turning on the keyboard arpeggiator from the ARP screen.

USER CHORD SLOTS **new**

Once you have found one chord you like, you can store it on the top row. The root note, type, inversion and spread value will be stored in one of the 12 available slots.

To store one chord into one slot, hold the chord pad (not the modifiers) and then hold the chord slot for 2 seconds. To clear one slot, do the same but hold longer for 4 seconds.

User chord slots work like any other chord and can be arpeggiated and recorded.

PICK AND PLACE CHORDS

After playing any chord on the keyboard, getting back to the sequencer view, the next chord you enter in the grid will be exactly the same as the one you last played. This function is called Pick and Place.

GLOBAL CHORD MENU

Hold **Step-Chord** button while in Keyboard to access Global Chord menu, the parameters are the following:

Spread affects the sequence globally, it increases the voices of all the chords (limit of 8 notes) depending on their position per step.

Type affects the sequence globally, it changes the type of all the chords, offsetting them depending on their position per step.

Voicing affects the sequence globally, it changes the voicing of all the chords, offsetting them depending on their position per step.

Bass affects the sequence and the keyboard globally, it adds a lower octave note of the root of all chords. The bass note has preference over spread on the 8 note limit.



CHORD BANKS

As explained, there are two banks of chords available, bank **A** and **B**.

Bank A avoids more dissonant chords like augmented, diminished and dominant chords, that may be more difficult to fit in the composition without musical theory background. Any of those chords are substituted by other options like minor or minor variants in any other inversion or 6th chords, some of them introducing modulations (chords out of the scale with notes out of the scale). Avoiding this way the augmented 3rd or the diminished 5th intervals.

Augmented, diminished and dominant chords, among others, can be found in Bank B, depending on the selected scale. Bank B has been added in 3.0 fw.

The currently supported scales in Chord mode are:

The 7 diatonic scales: Major, Minor, Dorian, Phrygian, Lydian, Mixolydian, Locrian, Pentatonic Major and Minor, Harmonic Minor and Melodic Minor (ascending).

RECORDING CHORDS

Chords can be recorded per step, one chord per step that contains the chord info. Chords can also be recorded using the Chord modifiers of the Chord built-in keyboard: Chord Type, Voicing and Spread.

But recording the arp notes generated by the chord arpeggiator is not supported.

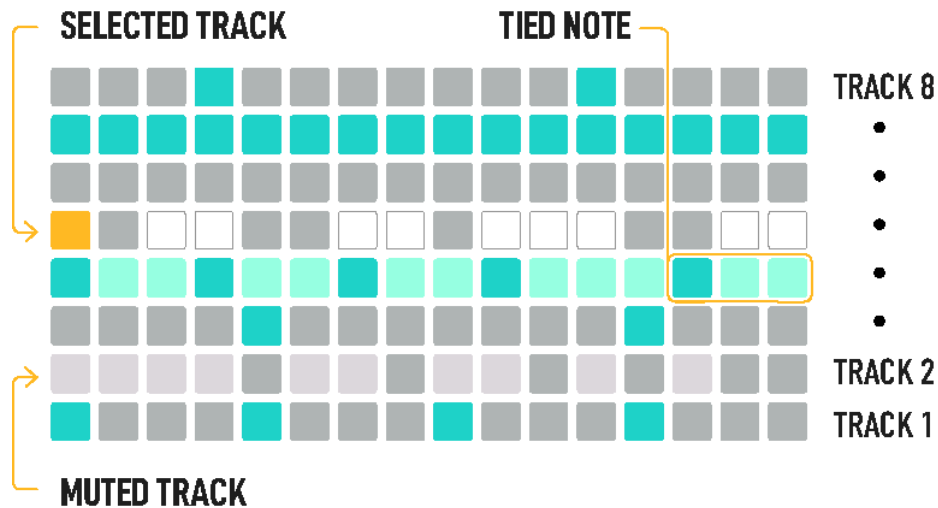
CHORDS INTERNAL MODULATION

All the chord parameters but chord Bank and Auto Voicing can be modulated with the available modulation sources: LFOs, MOD Lanes and MOD CV IN. It can be checked in the [Internal destination table](#).

MULTITRACK

Watch the Multitrack tutorial [here](#).

The Multitrack Sequencer is one of the biggest values of the OXI ONE, with its 8 separate tracks it's perfect for drawing drum patterns or monophonic melodies as well to have direct control of them in one layout.



Every row represents a separate track, which is a monophonic sequence with **independent Init/End** steps, time **division** and **length**, up to 128 steps.

A MIDI **channel** and **output** can be assigned to any of the tracks and several tracks can share the same MIDI channel. The MIDI channel of all the tracks is by default the MIDI channel of the sequencer (see sequencer settings). The pads can be used to trigger a Drum Kit or samples in general, or even extra melodic lines. This means several up to 8 steps can be activated per column.

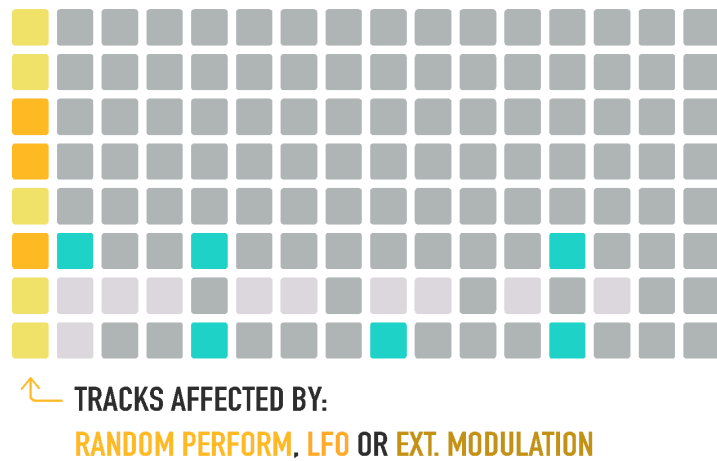
There are shortcuts for **Mute** and **Solo** tracks, as well as to enable/disable tracks from being affected by random and LFO modulation:

- MUTE + 1st column: Mute/Unmute the respective tracks
- MUTE + 16th column: Solo/group Solo/no Solo the respective tracks
- MUTE + Any other column: Mute/Unmute the selected step for playback.

Holding MUTE button the Mute/Solo states are shown in the grid with blue and yellow colors respectively.

Consider adjusting the Keep Mutes in Multi mode when loading patterns to your needs when performing with different Multitrack patterns.

By holding the **RANDOM** or the **LFO** button the grid will show the 1st step of every track in yellow and orange respectively, this indicates which tracks are affected by Randomization and LFOs parameter changes. By default all tracks are enabled.



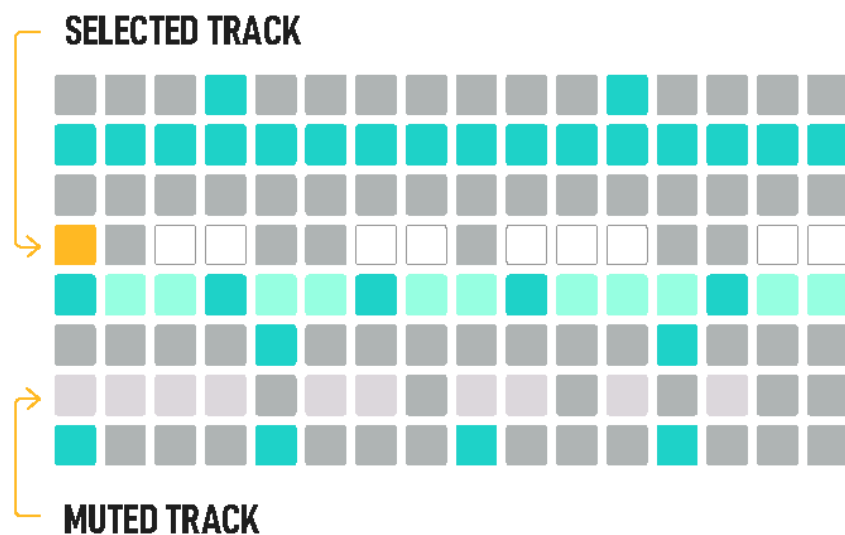
In Multitrack mode instead of Random Octave you have Random Gate, it doesn't affect the TIEs.

For example, this is handy to use the LFO to send velocity modulation on a hi-hat track and not affect other tracks.



SELECTED TRACK & MULTITRACK EDITING

In Multitrack mode, the function buttons affect by default **the selected track**. This way you can copy, paste, duplicate, extend, clear, x2 / /2 the time division, activate the randomizer, rotate and transpose individual tracks without affecting all tracks in the sequence. Global Velocity, Gate and Modulation encoders also affect the selected track only.

The **selected track** is highlighted with a different color (some color settings may provide easier visualization in this mode) and also indicated with the pads of the 1st and 16th columns of the track row in yellow color (when the step is not enabled).



CLEAR SINGLE OR ALL TRACKS

Press SHIFT +  Clear to erase all the note events of the selected track. Or press SHIFT and **long press**  Clear to **fully reset** all tracks. Steps information, time division, length and note offset will be set to default values but MIDI channels and MOD destinations of every track won't be affected.

TRACK SELECTION

It is possible to change the selected track in different ways:

- Press the sequencer button and any pad
- Hold any pad long enough not to toggle the step, the track of this row will be selected
- When Track Selection Priority setting is enabled, tapping any pad of a different track will not toggle the step but set that track as selected.

In the case you want to use these functions **to affect ALL tracks** at once, this means clear all tracks, extend all tracks, randomize all tracks, rotate all tracks, etc. **press FIRST** the respective **Sequencer button** and then the regular button commands. This also works for Global Velocity, Gate and Modulation, affecting all tracks at once.

For example, Randomizer (Random generator) on a track (SHIFT + Random) creates a Mono sequence on the selected track by randomizing the pitch, gate, velocity and time offset. But Randomizer on ALL tracks (Seq button + SHIFT + Random) creates a rhythmic pattern on ALL tracks, keeping the same note per track, ideal for drum kit use. It randomizes the triggers, velocity, gate and offset of all tracks.

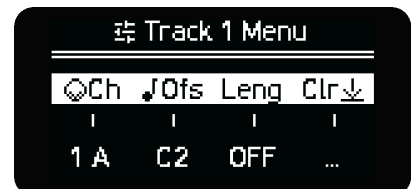
A row pad + SHIFT + Random: randomizes the velocity of the steps of the selected track.

TRACK PARAMETERS

As explained, each Track has its own Init and End points, with individual length and time divisions. Review Init and End.

To access Track parameters hold the first pad on the desired track and hold the Sequencer button in which Multitrack is active or hold the Sequencer button and press the first pad of any track row.

In this screen you can modify:



- **Track MIDI Channel.** By default all track channels are the same as the Sequencer MIDI channel, change this parameter to send each track on individual or grouped MIDI channels to have total flexibility. You have to press the encoder to confirm the new MIDI channel.
- **MIDI Output.** By default the MIDI output port is the same as the Sequencer. But you can adjust this setting per track.
- **Note Offset** changes the base note of all the steps of the track, by semitone on chromatic or by degree in any other scale. It's useful for setting drum racks or samplers.
- **Time Division** per track. We'll expand this later on.

DIVISION (Y Div)

In Multitrack, Division menu parameters are set per track. This means you can select:

Track Selection to choose which track you are editing on the same screen.

Playback Direction of the track, being Forward, Backward, Pendulum, Random and Drunk.

Division Randomization of the track, from 0 to 100% of probability each step that the track's Time Division is going to change.

Time Division of the track. This is the same value that the Track Menu screen seen above.

You change **all** track's Time Division at once by holding the Sequencer button and then press SHIFT + Init **x2** or End **/2** to duplicate or split all the Time Divisions by two with each press.

Hold **Init** and **End** and any two steps to create a **LOOP** of all tracks between those steps. The different time divisions will create rhythmic and melodic variations.

One way to reset the sequencer playback is by pressing SHIFT + MUTE + Sequencer button. To reset all the sequencers at the same time, remember there is this option available, check the transport section.

Tracks will also be reset/realigned after X bars if the Sequencer Reset parameter is enabled.

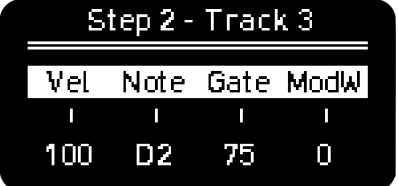
STEP PARAMETERS

Hold any step of any track to access its parameters. Here you can modify per step:

Velocity and **Gate** as in other modes.

Note, you can edit the notes of one or more steps using the encoder, the values depend on the active scale. Pressing the encoder resets the note to the base note of the selected track.

Alternatively you can enter the Piano Roll view to draw your notes like in a mono sequencer.



Step 2 - Track 3			
Vel	Note	Gate	ModW
100	D2	75	0

Modulation, here you can change the value of the selected MOD Lane per step.

When **Step-Chord** button is active, holding a step will take you to the **Step Submenu**, here you can edit:

Tglid or Track Glide. As the name suggests, this is a track parameter. It changes the time it takes for the continuous pitch to reach the next note.

Note that the sound engine must support pitch bend in order to work.

Prob, or **Logic Conditions** explained in the Trigger Conditions section.

Retrig sets the times the note is triggered during the step duration, up to 5 times. For better resolution change the Time Division of the Sequencer or Track.

When fully CCW you get to **SKIP**, if selected the step timing will be ignored by the transport bar, thus making the sequence length shorter.

TIP: Use **Skip** to abruptly change the timing and feel of the pattern.

Randomize Skip steps to get different sequence lengths every bar and adding and removing notes, in Retrig on Random Perform screen.

Offset, sets the time deviation of the note from -40% to 40% of the current time division. $\pm 25\%$ is a quarter deviation from the duration of the step.

PIANO ROLL **new**

You can enter the Piano Roll view of the selected track by pressing or holding the OCT encoder. Here you can do Vertical Scroll of the grid like in the other modes and use note Preview, to preview the notes you enter on the grid..

COLUMN VIEWS **new**

Press the first, third and fourth encoder to display the Velocity, Gate and Mod column views respectively.

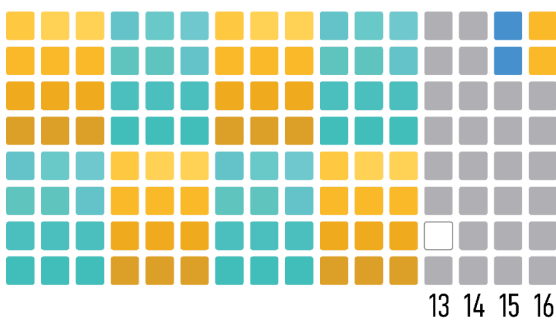
MULTITRACK KEYBOARD

In Multitrack Keyboard you can perform all tracks at once as a drum kit or each track individually with the full keyboard with the press of a button. There's also handy shortcuts for soloing and muting individual tracks.

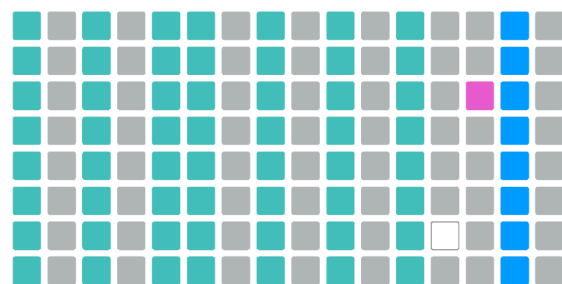
1st to 12th column is the performance area.

It changes from drum view with different velocity levels for each track, to play a drum kit for example; or a regular keyboard for a single track when one track is selected/armed (14th column).

NO TRACKS ARMED - DRUM VIEW



TRACK 6 ARMED - REGULAR KEYBOARD



Example View when a Track is Armed.

The Keyboard and Recording will only affect the Armed Track. Regular view equivalent to other modes.

- **13th** column is the **Roller** function, which controls the rate of the note repeat.

- **14th** column selects **Arm(ed) Track**.
 - Without any selection and by default, the 8 track-drum view is displayed. If you select/Arm one track in the 14th column, the keyboard will be displayed as a regular full keyboard for that track
 - The different MIDI channels set per track are taken into account.
 - Activate Recording without any armed track play with the track triggers as a drum pad with different velocity levels. Arm one track to play and record a specific synth with the full keyboard. Review the Rec menu to take full advantage of the features.
- **15th** column is **Mute** per track.
- **16th** column is **Solo** per track, pressing several pads of the column makes Solo groups.

EUCLIDEAN GENERATOR (destructive)

The **Euclidean Generator** menu is only available in Multitrack mode. Press **SHIFT + Random** to get into its menu.

The options are:

Len: sets the overall Length of the phrase. Adjusting the track length (outside of this menu) automatically updates this parameter to match.

Puls: the number of equally spaced Pulses for the defined phrase length.

Rot: the number of Rotations or steps that the pulses are shifted to the right (for positive values) and to the left (for negative values).

Inv: this Inverts the result of the algorithm toggling the active steps into inactive steps and vice versa.

A new pattern will be immediately created after modifying any of these parameters.

The **Euclidean Generator is destructive**, meaning the track steps will be overwritten. However, the Euclidean Generator doesn't affect steps with FIXED or LOCKED logic conditions. **new**

EUCLIDEAN MODULATION

The **Pulses** and **Rotation** parameters of the Euclidean Generator can be modulated per track with any of the current modulation sources: LFOs, MOD Lanes and MOD CV IN.

When any modulation is applied to **Pulses**, new triggers will appear in the range defined by the Length parameter of the Euclidean Generator in the affected track.

To add even more variation it's also possible to modulate the **Rotation** parameter, that will rotate the generated pulses in the range of steps determined by Length. In order for Rotation modulation to take effect, there must be a modulation going on over Pulses. The notes/triggers manually entered won't be affected.

The new triggers generated by adding modulation are represented on the grid in orange color when the sequencer is running.

DRUM PATTERN GENERATOR (non destructive)

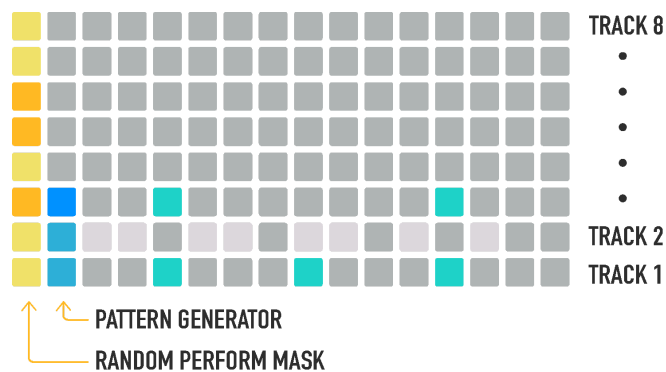
The **pattern generator** is a new tool available in Multitrack mode based on the MI Grids module. It can be used to generate drum patterns for Kick/Bassdrum, Snare and HiHat but, you can of course trigger any other sound. The generated patterns are the result of a mix of many different rhythms from traditional to more experimental ones that are combined offering interesting results. This mix is adjusted with two controls X and Y.

Since version 4.4.6 the Drum Pattern Generator has improved the initial starting division internally to allow a greater range of usable patterns. This will affect patterns and projects saved with Drum Pattern Generator previously saved in older versions.

There are three engines available, they can be enabled in the first three tracks. The first (bottom) track generates the triggers corresponding to the Kick or Bassdrum, the second one to the Snare and the third one to the HiHat.

To **activate** any of the three **lanes**, hold  button and tap any of the 3 pads (second column) in dimmed blue color, one for each lane. A tooltip in the screen should appear indicating the status of the engine in the corresponding track.

If the pattern generator is enabled, the corresponding pad will be lit in brighter blue.



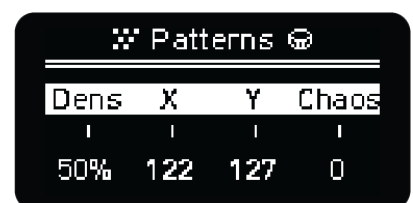
Pattern generator is disabled on tracks 1 and 2 and enabled on track 3.

The triggers generated by this engine are represented on the grid in orange color when the sequencer is running.

To enter the **generator settings**, press the sequencer button

 and any of the three blue pads on the 2nd column.

You can also enter this menu by pressing **SHIFT + Random**. The Pattern Generator menu will be shown for the tracks where this engine is active.



- **Dens:** chance of getting a new event in the selected lane.
- **X:** X position in the drum patterns map (same for all lanes in the current version).
- **Y:** Y position in the drum patterns map (same for all lanes in the current version).
- **Chaos:** amount of randomization introduced in the pattern engine.

Density control is independent for each track, meanwhile **X**, **Y** and **Chaos** are common to all of them.

The great thing about the pattern generator is that it works on top of the notes you enter in the grid. This means you can easily add spice and variation to any pattern you had programmed in a non-destructive way, so you can always turn it off to go back to what you have displayed on the grid. All the existing options are available when the generators are running.

The length of the generated patterns goes up to 32 steps, so make sure to set the track length to at least 32 to get the full flavor and variations of the patterns.

In 4.0 a new bank of rhythms has been added which can be found in the last values of the **X** parameter.

The list of patterns available can be found on the [Drum Patterns section](#). Remember that patterns will be mixed depending on the X and Y controls.

INCOMING NOTE FILTERING

- **MIDI In channel filtering.** There are three options explained below.
 - OFF
 - MIDI Channel
 - Ch & Note (MULTI)

OFF NO ARMED TRACKS	OFF ONE TRACK ARMED
Filter events per note ignoring the MIDI channel. If the base note matches 2 or more tracks, send to the first one only.	Send all events to this track, no matter the input MIDI channel

MIDI Channel NO ARMED TRACKS	MIDI Channel ONE TRACK ARMED
Filter events per track's MIDI channel. If MIDI channel matches 2 or more tracks, send to the first track that matches.	Send events to this track if the track's MIDI channel matches. The base note of the track is irrelevant.

Ch & Note NO ARMED TRACKS	Ch & Note ONE TRACK ARMED
Filter events per MIDI channel and base note. If MIDI channel and base note matches 2 or more tracks, send to the first track that matches only.	Send events to this track if the track's MIDI channel matches. The base note of the track is irrelevant.

POLYPHONIC

Polyphonic allows you to have total freedom with up to 7 notes per step and up to 128 steps.

STEP PARAMETERS

- Glide (only affects the cv outputs set to pitch)
- Probability and logic conditions per note
- Retrigger per note
- Micro offset per note
- Velocity per note
- Octave offset per note
- Gate per note
- 4 modulation lanes per step

Notes can be TIED through different steps.

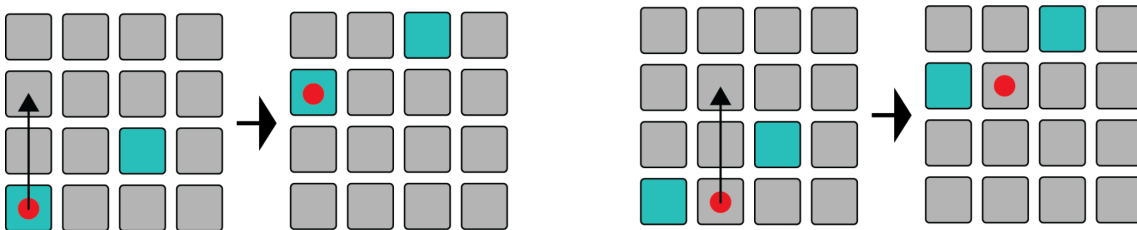
You can **Mute** steps by holding MUTE and tapping on any step.

To enter the same note with different octave offsets you will need to move the grid vertically. Remember you can do so in two ways:

- Get into the **Y Div** menu and use the first encoder.
- Push and turn the second encoder in the main sequencer screen.

Since there can be up to 7 notes active per step, adding the 8th note will remove the first previously entered note and so on.

You can quickly **transpose** the whole sequence by holding the respective Sequencer button and pressing any pad. The distance from the **lowest** note to the pressed pad in the column will dictate the transposition direction and distance.



You can Copy chord Sequencers and Paste into polyphonic ones to fine tune your chord progressions.

Copy and Paste operations in POLY mode are very powerful. You can:

- **new Copy/paste single or multiple steps** with all its parameters. These steps can be pasted relatively on different positions and even different pitches. The maximum number of steps you can copy is limited by the size of the step clipboard buffer.

· **Copy/paste** single or multiple **TIED notes**. **new**

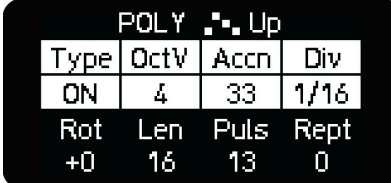
· **Copy/paste** single or multiple **columns of steps** by pressing Copy and pressing on an empty step on that column. It will copy all the notes of the selected steps. This is a fast way of copying chords.

POLY BUILT-IN ARPEGGIATOR **new 4.3.6**

Poly mode features a built-in arpeggiator that uses notes from the grid as inputs, offering a unique way to generate musical phrases. Arp parameters are stored within the pattern and can be recalled per pattern.

ARPEGGIATOR PARAMETERS:

The arpeggiator parameters are equivalent to the ones shown in the ARP, parameters are accessed by pressing the ARP button when on the grid note view. These ARP parameters are different than the POLY Keyboard ARP which is accessed by pressing the ARP button from the keyboard view.



Type	OctV	Accn	Div
ON	4	33	1/16
Rot	Len	Puls	Rept
+0	16	13	0

Accent is shown in the third position of the first set of four parameters, replacing Gate. The arp note gate length can be controlled globally with the 3rd encoder.

You may apply a Euclidean pattern to the ARP by using Rot, Len, Puls settings. The Euclidean pattern **Rotation** sets the number of Rotations or steps in which the pulses are shifted to the right (for positive values) and to the left (for negative values).

ARPEGGIATOR SPEED VARIATION:

The arpeggiator can run at a different speed than the sequence.

STOCHASTIC

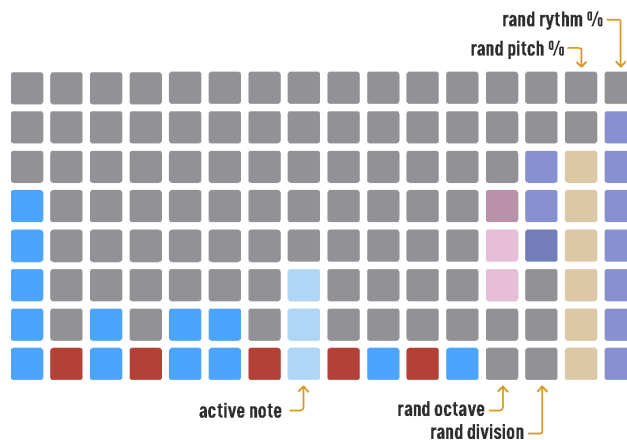
The stochastic mode is a generative mode to generate rhythmic and melodic ideas in a controlled random way.

In this mode, the grid acts as an interface to parametrize a stochastic pattern generator. Although the playhead movement is shown on the grid, it has no positional relation to the controls of the generator. It is, in fact, playing an invisible evolving pattern that you can lock if you choose to. Stochastic can have up to 128 steps, you can view the gates or velocity for all steps by entering Gate or Velocity view. Press the Velocity Encoder to see the Velocity View.

Press the Gate encoder to see the Gate View. In these views, you can see your sequence shift/rotate by pressing Shift + Arrow Left/Right. Loop Mode works in this Mode as well as Snapshot Mode.

GENERAL CONTROLS

- First 12 columns set each note's probability of being played.
- 4th and 3rd columns from the right sets the range up/down of the octaves and the time division randomization named Long and Short, starting from the middle rows.
- Last two columns set the % of steps in which pitch and rhythm are being randomized: at 100% all the pitch or rhythm is randomized following the matrix settings, at 0% no pitch or rhythm are being randomized thus looping the same pitch or rhythm (or both).



The setting of the 1st column from the right defines the probability that the next step is triggered. Rhythmic flavor is added by the division randomizer given by the setting in the 3rd column from the right.

For each trigger determined by the rhythm engine, two stages of pitch randomization are applied:

1. With a certain probability - defined by the 2nd column from the right (pitch randomization) - a new note is generated depending on the note's probabilities.
2. Octave shifting is applied to the previous resulting note. The octave shift amount is randomly taken from the settings in the 4th column from the right.

The resulting note is stored in the internal “buffer”. When pitch probability is set to 0%, no new notes are generated but taken from the internal buffer instead. The higher the pitch probability, the higher chance to get new notes!

Many existing functions in the OXI One work in this mode as well, like Random Perform, Time division settings, CV-Gate layout, MOD lanes, etc.

TIPS

- Set 0% on those last two columns to instantly capture the current sequence, and then low % to make the rhythm evolve a little bit over time
- Set LFO to pitch, it'll take you to notes outside the ones set in a beautiful way (set a low amount for better results)
- Rand Perform Trig % acts as an offset of the probability set on all notes (columns), effectively acting as a POST notes-density control
- Play with Random Perform -> Retrig
- Encoder 2 changes octave offset of the whole sequence, nice to adjust for drum machines
- Loop is available to use, please do so (same with Start and End points)
- CCs and CVs (and CC to CV) are available, plus Stochastic generates CV glides. The glide amount depends on the resulting gate length and the division randomization
- CV pitch is a GREAT source of random CV to use on your rack that is also very controllable in real time (lock a sequence like explained above to make the random CV repeat itself on the length of the sequence, loop it manually, change the range of the random using the octave settings...). Short gate lengths produce stepped random, long gate/legato produces smooth random
- Shift your sequencer left and right using the arrow buttons.
- Use Init/End to create longer or shorter sequences with Stochastic Mode, to view the longer sequence, enable Follow and go to Gate or Velocity view.
- Gate controls CV Glide, above 50 Gate will introduce some glide to your CV signal which will increase the glide as you increase the Gate Length.
- Shift + Preview: Allows performing notes on the sequencer grid view, you will hear the note as you press the grid.

You can further evolve your stochastic recipe by using any of the modulation sources (MOD lanes, LFOs and CV In) to modulate some of the Stochastic engine parameters. Check the [Internal destinations table](#).

STOCHASTIC & HARMONIZER

Stochastic sequencers can follow any Chord sequencer when the scale setting is set to HARMO. In this case, the columns represent the probability of the currently active chord degrees and not of the scale notes.

MATRICEAL

Matriceal is a new and innovative generative mode. It consists of **4 independent tracks** each of them with 10 matrices of **independent parameters**, also called **lanes**. Each parameter lane has 16 steps. Each parameter lane has its own settings with different Init and End points, speed (or time division) and direction. These settings are reached by holding a parameter page button.

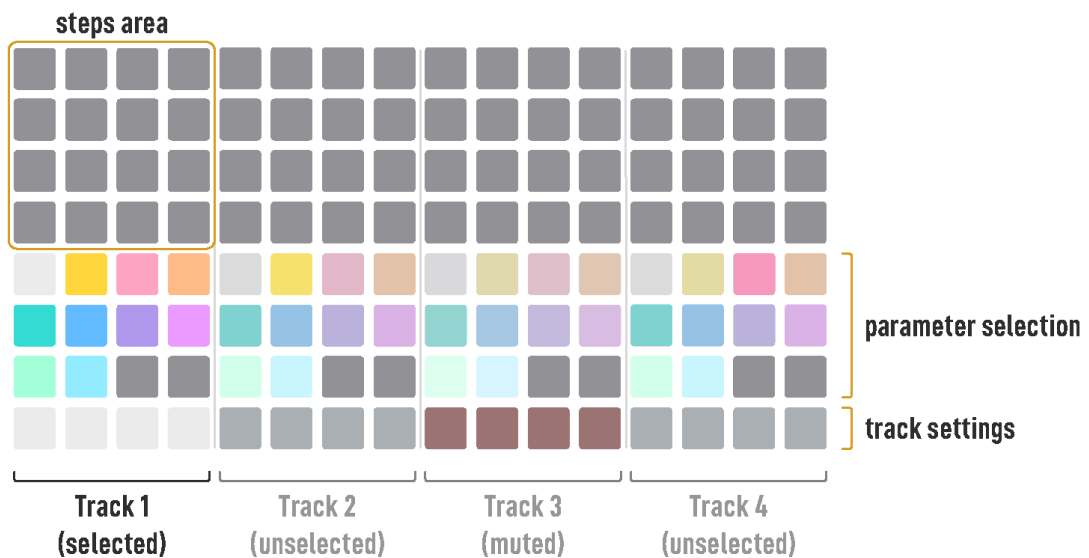
Parameters available: Trigger, note, interval, pulses, velocity, octave, gate, trigger probability, retrigger and glide.

When the trigger transport reaches a new active trigger, the parameter values are evaluated and taken from their respective transport positions (which can be different from the transport position of the triggers lane!). This way, different parameters can be decoupled from each other.

TIP

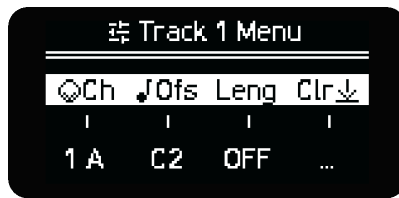
Assigning different lengths and speeds to different parameter lanes can create evolving and complex patterns with very few steps; this is the magic of the Matriceal mode. And you have 4 tracks in one single sequencer to experiment with!

LAYOUT



GLOBAL TRACK SETTINGS

The selected track is indicated with 4 white lit bottom pads. Hold any of them to show the Global Track settings screen. It will also change the selected track.



Global Track settings

From left to right:

- Track **MIDI Channel**, by default it is the same as the sequencer channel.
- Track **Note offset**, by default it is the same as the sequencer root note. It is the **base note**.
- Track **RLength**, defines the Reset-Length of the sequence (in trigger steps plus pulses), by resetting every parameter playhead on this track
- Track **clear**, as the name suggests, clears every parameter page on the track.

NOTE: Tapping any pad of the track area will set it as the **selected track**.

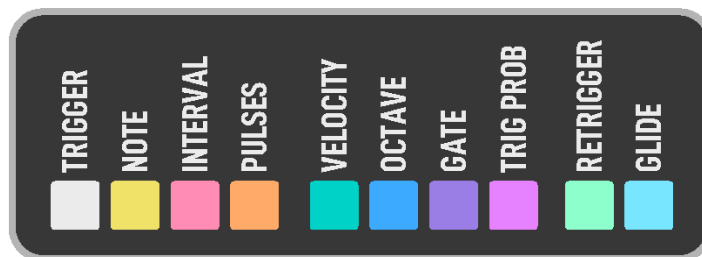
PARAMETERS PAGES

There are 10 parameter pages for every track. How the values are shown in the grid depends on the selected parameter.

They are displayed as follows:



Where every color represents:



Hold any Parameter track button to access its settings screen.

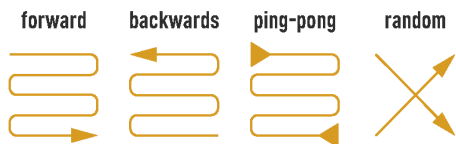


Note lane settings

Each parameter lane can have different:

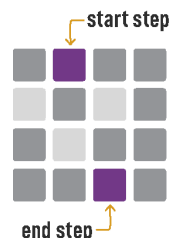
- **Start and End points**, hold Init and End buttons and tap any step on the matrix to set them.
- **Time division**. This setting is available in each parameter screen.
- **Playback direction**. This setting is also available in each parameter screen.

Randomize can also occur by holding the parameter step settings button and pressing the random button. Each parameter lane can have its own individual randomization amount which is set by each respective parameters randomization value.



Playback directions

*Pendulum and Drunk directions aren't represented**



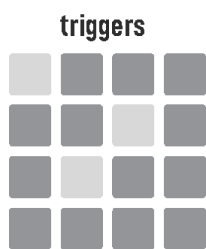
Start End points indicated in purple color

TRIGGERS (white)

The first parameter of Matriceal mode is the **triggers** page. When its transport bar reaches an active trigger, a note is sent.

Triggers are the foundation of every Matriceal track. Any of the other parameters is evaluated every time there is a new trigger, to determine the values of the new notes.

The trigger transport settings are defined in the trigger track settings.



Triggers represented in the matrix



Triggers lane settings

There is a **euclidean and a random generator** that helps us to add triggers.

Hold any of the sixteen steps of the matrix to open the **trigger step screen**.

From left to right:



- Sets the **length** of the trigger euclidean engine (and sets the length of the triggers lane)

- Sets the number of **pulses** of the euclidean engine.
- **Clear**. Push to remove all the steps
- **Random** trigger placement. Press to randomly add triggers. Higher values means more triggers. 100% to enable all 16 triggers. Randomization can also occur by holding the parameter step settings button and pressing the random button.

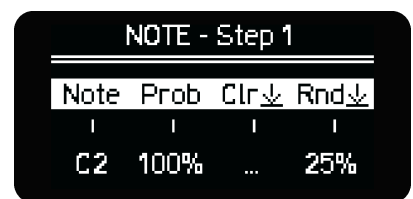
Turning the length or pulses encoders will immediately create a euclidean pattern. However, to clear and to randomize you have to press the respective encoder button. Holding a trigger step will allow you to begin a euclidean pattern from the held step.

You can also enter triggers **manually**: quick tap to toggle triggers on and off.

Once we have a few triggers we can continue to the next parameters, the additional lanes will affect note output when the triggers you just placed intersect with the parameters values.

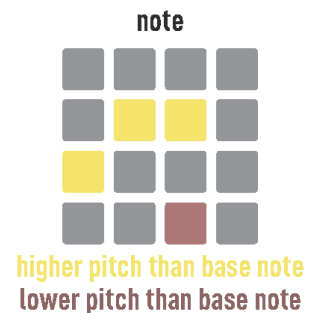
NOTE (yellow)

Note lane determines the **pitch of the note**. While the Note parameter page is selected, hold any step to show the **Note step screen**. This menu shows from left to right:



- The step **note value**. It is relative to the track Note offset found in the track settings by holding the 4 white pads of row 1, which is the track base note. Turn the encoder to modify and press to reset it.
- The **probability** of the step note value being applied. 0% means the default base note (defined on the global track settings) value will always be applied and no note offset will occur.
- Press the 3rd encoder to **clear** and reset all the note values of the track.
- Turn the 4th encoder to adjust the randomization amount and press to **randomize** the note values. Remember that randomization can also occur by holding the parameter step settings button and pressing the random button.

The grid represents the step values relative to the track Note offset. Higher pitch values are shown in yellow; the higher the pitch, the higher the LED brightness. Lower pitch values are shown in red.



The end pitch of the triggered note will be calculated taking into account the sequencer octave, root, the track Note offset, the step note value, the step octave and the accumulated interval.

INTERVAL (salmon pink)

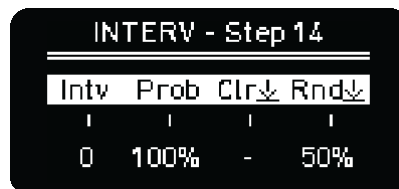
The interval lane is one of the most interesting features of this mode. Instead of defining a static pitch value, **it is an accumulative value** that defines the **next interval** or position **of the** selected **scale**. Everytime the transport of the Interval lane, the interval value of the step is summed with the note value affected by all note offsets. Once the accumulated value reaches the Minimum value (**Min**) or Maximum value (**Max**) defined in the Interval lane settings, it ~~goes~~ jumps back to the opposite Minimum (**Min**) or Maximum value (**Max**) set in the parameter lane settings; and vice versa.

The interval is also evaluated between ratchets/step repeats.



Interval lane settings

The **Interval step screen** is equivalent to the note step screen.



Interval step options

TIP: Play with subtle interval variations mixed with simple pitch sequences with different speed and length to get a simple but evolving melodic idea.

■ PULSES (orange)

This parameter draws inspiration from classic sequencers like the M185. It allows you to repeat steps (pulse), essentially keeping the playback head of all parameters within a specific step for a defined number of pulses. You can fine tune the trigger behavior during that step by selecting different pulse types.

- Trigger on every pulse/repeat (default).



All pulses

- Trigger only during the first pulse/repeat.



First pulse

- Triggers span across the entire duration of the pulses. The triggers would be “TIED” in this setting.



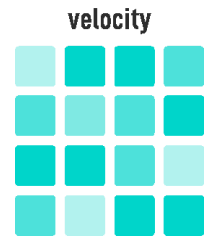
TIED pulse

Note: when any step's pulse value is different than 1, those extra pulses account for the **RLength** calculation.

■ VELOCITY (turquoise)

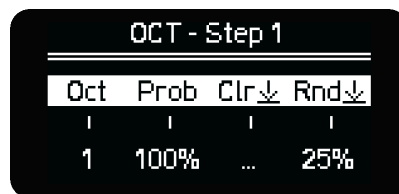
Velocity defines the MIDI **velocity** of the triggered notes.

Velocity values are represented with proportional brightness levels in the grid.



■ OCTAVE (blue)

Adds positive or negative **octave offsets** to the pitch. You can set the probability of this offset to happen on a step basis.



Octave step

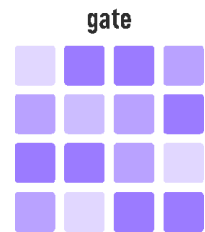
■ GATE (purple)

Like in other sequencer modes, Gate defines the **note length**.

Gate values are represented with proportional brightness levels in the grid.

Gates can go from 5% of the step length to 100%. After that you'll find TIE and LEGATO.

TIE combines two consecutive triggers in one single note and LEGATO adds the Legato effect where the Note On of the next note is sent before the Note Off of the previous one.



TIP: Set some steps to TIE and combine it with different time divisions and lane length to get interesting results.



Gate step

While the Gate parameter page is selected, hold any step to show the **Gate step screen**.

- First encoder sets the step gate value.
- Press the 3rd encoder to reset all steps to the default gate value.
- Turn and press the 4th encoder to adjust the randomization amount and randomize the gate values.

The gate values are displayed with different brightness levels.

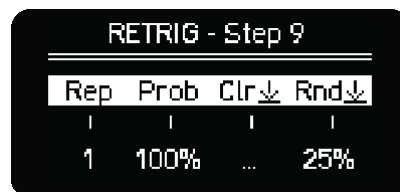
■ TRIGGER PROBABILITY (violet)

Chance of a step being played/triggered.

■ RETRIGGER (green/cian)

Determines the number of note repetitions within the step duration when there's a new trigger and the chance of that happening.

You can also set the step to SKIP by turning counter clockwise, which skips one trigger pulse. This introduces more rhythmic variation and it's another way of decoupling triggers from other parameters.



Retrigger step

■ GLIDE (light blue)

Glide affects the CV outputs only.

EXTERNAL NOTE INPUT

You can enter pitch information with an external keyboard in Matriceal Mode.

Enable REC, hold a step inside the Note parameter page, and press any key on your external keyboard to register the pitch information. Note that the entered notes will be quantized to the scale selected.

MATRICEAL KEYBOARD

A keyboard is available to trigger notes on the first tracks assigned MIDI channel only. The keyboard can not be used to record into Matriceal lanes, it is available to play over the Matriceal output.

HARMONIZER

The Harmonizer is a scale setting for Mono, Polyphonic, Multitrack and Stochastic Sequencer modes (Followers).

The pitch of the notes is taken from the active chord of the **Chord** Sequencer or the active set of notes in a **Poly** sequencer (“**Leader**”).

This works as follows: the rhythm and the pitch trend are set by the sequencer of the Follower, but the final pitch is based on the active chord progression of the “Leader”

HARMO SETUP

Set at least one of the sequencers in Chord or Poly modes. When there is one sequencer in Chord or Poly mode, the other sequencers (in Mono, Poly, Multitrack or Stochastic modes) will have a new scale option available: **HARMON**.



In the sequencer view, change the scale until HARMON is shown on the screen: press SHIFT + turn 3rd encoder CCW. The HARMON scale is followed by “Sq #”. # is the number of the Chord Sequencer that will act as the “Leader”.

Note that the octave parameter of the follower sequencer is still shown on the bottom right corner of the screen.

Once the scale is set to HARMO, the respective Sequencer will follow the notes of the active chord progression. To change the “Leader” sequencer just press SHIFT + turn the 4th knob (like for root note).

PERFORM WITH HARMONIZER

In this mode you are not only in key, but any changes applied to the leader sequencer will affect the rest of the sequencers with Harmonizer ON. For example, changing the scale, transposing or modulating the leader sequence or playing directly on the powerful Chord Keyboard, the Poly keyboard or any external MIDI keyboard or controller will impact the Follower sequencers in a musical way.

The HARMONIZER works also when using the keyboard of the “Leader” sequencer.

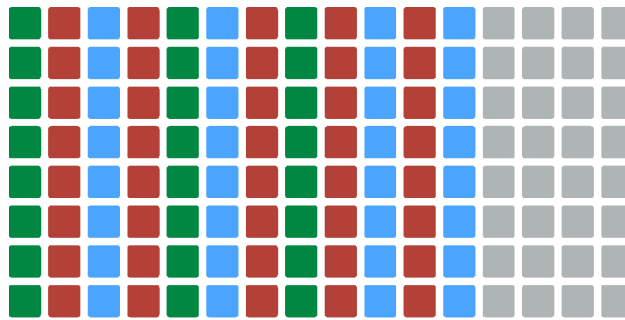
In order to keep the last chord played from the chord keyboard or the last set of notes of the Poly keyboard, the “Leader” Sequencer has to be deactivated/off. Keyboard HOLD works as expected.

If the “Leader” Sequencer is running and playing a set of chords or notes and the user triggers any chord or set of notes in the keyboard mode (or external MIDI keyboard), the latter will have preference over the sequence.

If the “Leader” sequencer is muted and your Mute Behavior is set to disable the “Leader” sequencer (toggle), then the harmonization of the follower sequencers will stop and the sequencers following the leader will output current notes instead. The transport must be running for the Harmonizer to effect the following sequencers.

FOLLOWER KEYBOARD

The keyboard in the Follower sequencer will show the set of notes used by the Harmonizer engine in real time. You can easily perform over that set of notes to get nice musical results.



Notes used by the harmonizer represented in green

NOTES ABOUT THE HARMONIZER

When you place a step in a lower octave the resulting notes being harmonized may not have a lower pitch, due to the octavation effect of the harmonizer.

So, if there’s a step in C3 and another in C2 in the Follower sequencer, the resulting notes after the harmonizer engine are one octave from each other (not necessarily a C, it depends on the chord).

But if instead of a C2 or a D2, a B2 is set (still lower than C2), the resulting note depends on the chord that the master is playing at that moment, and it can result in a higher pitch note. The harmonizer takes chord degrees starting from the root note C2.

Note as well that any modulation or randomization applied to the master are taken into account by the harmonizer and applied to the follower sequencers.

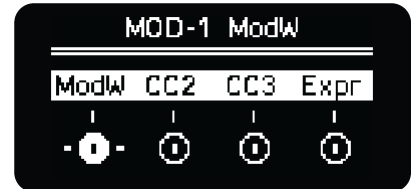
The Harmonizer Octave (Jump) max setting determines the maximum octave leap that a follower sequencer is permitted to make.

MOD LANES

Press the **MOD** button to enter the modulation layout. There are 4 independent modulation lanes per sequencer (8 in Multitrack Mode).

The modulation lanes can be used for different purposes:

- To automate or manually control **MIDI parameters**: CCs, Aftertouch, Pitch Bend and Program Changes
- To automate or manually modulate **internal parameters** described in the [Internal destinations table](#).
- Routed to any **CV output** as well (see [CV Gate configuration](#)).



If the MOD lanes have any MIDI parameter assigned, the respective encoder will send values over MIDI, so you can control with the 4 encoders at the same time any external parameters of any DAW, hardware synthesizer or sampler, modular synth or mobile apps.

If there's any automation curve, this means, there are different values per step in the modulation lane, the encoders will act as an offset of the step values. Turning an encoder will increase/decrease all modulation values for the selected modulation lane and will maintain your curve. Turning all the way to the positive or negative range of the encoder will flatten the curve. The display shows a minimum and maximum value as you turn the encoder.

TIP: To maintain the Mod Lane shape, if you don't want to clip the upper and lower values while turning the knob, you can use the MOD lane offset feature. Hold shift and turn the encoder to apply offset.

Each encoder modifies **MOD 1 to 4** respectively.

TIP: To fine tune the value of a modulation, hold any step you want to modify and use the encoders to adjust the four respective modulation values.

The MOD lanes main screen labels indicate the active modulation destination. They will show the enabled destination in this order of preference: MIDI/CC, Internal destination 1, Internal destination 2 or all OFF.



The name of the MOD Lane can be manually edited, maximum 4 characters. Alternatively, if you assign an [Instrument CC definition](#), those CC values which have any parameter assigned, will display the abbreviated label.

LANE SELECTION

The selected MOD lane is indicated in the screen. When you turn or press any encoder, the respective MOD lane is selected. The grid will display its values accordingly.

TIP: In Multitrack Sequencer to access 5-8, hold the mod button and select a row 5-8.

The last selected/touched modulation will be the one assigned to the Mod control (encoder 4) in the main Sequencer view and also in Keyboard layout. In Multitrack mode the last selected track prevails and its modulation lane will be the one assigned to this 4th knob.

In the step menu, as well as the velocity, octave, and gate, the value of this selected modulation lane can be edited.

MULTITRACK LANE SELECTION

In Multitrack mode there are 8 modulation lanes, one per track. How can you select all of them with the encoders?

If the selected track is one of the first four (1 - 4), the MOD menu will show the modulation lanes of tracks 1 to 4. And if the selected track is one of the last four (5 - 8), it will show the information of these last four. Press the MOD button and any grid row to quickly change the selected lane.

Since there are 8 modulation lanes available, 2 different ways of toggling from the 4 first lanes and the 4 later ones have been implemented.

1- Hold the MOD button and tap any of the rows of the grid. This will automatically show the modulation lane of the new selected track.

2- Hold any step and the screen will show the modulation value of that step and the selected track. Turn the first encoder to change the track.

Use the 4th encoder to adjust the modulation value of that step.

MOD LANE ON - OFF

Press the **encoder button** to turn each lane on or off, preventing it from sending MIDI messages or internal modulations. When the MOD lane is OFF:

- The selected MIDI parameter will keep its current value.
- The internal modulation will be disabled and the destination will remain untouched

Any twist of the encoder will turn it ON again and jump to the next value.

Hold **SHIFT + encoder press** to enter the MOD lane **settings**.

MOD LANE OFFSET

By holding **SHIFT** and **turning** the **encoder**, you can adjust the MOD Lane **offset**, which ranges from -127 to +127. This offset adjustment is confined within the Maximum and Minimum values specified in the MOD Lane settings, ensuring that the output values do not exceed these set limits.

LANE SETTINGS

Press **SHIFT + encoder turn** or **SHIFT + encoder press** to enter the MOD lane settings. Turn the encoder of the respective lane to navigate the lane settings menu, press the encoder to enter into a setting and use back to leave the submenus.

- **CC DEST:** selects the MIDI parameter (Channel Pressure, Program Change, Aftertouch, Pitch Bend or CC) the modulation lane sends.
- **MOD MAX:** maximum MOD value that can be set per step for this lane. From 7 to 127. This is a fast way to select the maximum modulation value for an internal destination or CC parameter.
- **MOD MIN:** minimum MOD value that can be set per step for this lane. From 0 to 120.
- **INT DEST 1:** Internal parameter destination of this lane. Check the [Destination table section](#) for all the routing options.
- **INT AMT 1:** % Amount applied After the MOD value. An extra control useful for fine tuning the range of the internal modulation.




NOTE: As this version of the firmware, the Amount is an absolute value. Depending on the destination parameter, the MOD Amount required may be as little as 1 - 2 units - Octave, Arp Division, etc. - or up to 100 for other parameters like Velocity, Gate, Trigger probability.

TIP: *The range of a MOD lane is 0-127.*

- **INT OFF 1:** Offset to the MOD lane values before applying the internal modulation. Use it to get **negative** or **bipolar** modulation values.
- **INT DEST 2:** Defines the 2nd internal destination.
- **INT AMT 2:** Amount of the 2nd internal destination.
- **INT OFF 2:** Offset of the 2nd internal destination.
- **DIVISION:** Time division of the MOD lane. Remember it is also possible to use the **x2** and **/2** quick actions in the MOD Lane view.
- **SMOOTH:** factor that controls the time required (slew) to go from one modulation step value to the next one. 0 means the smooth factor is 'Off' and the modulation instantly jumps from one step value to the next one. This parameter affects the CV outputs as well when a MOD Lane is assigned to a CV in the [CV Gate view](#).
- **LINKED:** MOD Lanes are by default linked to the note sequence, this means that any change applied outside the MOD view (start/end points, division, clear, expand, condense, etc.) will also affect them. You can manually disable this behavior by setting Linked to 'No'. Additionally, when performing any changes to the parameters of a MOD lane inside the MOD view, the current lane will be automatically unlinked for convenience.

- **INIT:** Start step of the MOD lane. Can be also set using the Init button.
- **END:** End step of the MOD lane. Can be also set using the End button.
- **RENAME:** rewrite the name of that particular CC MOD lane so it's displayed instead of the default CC or Destination value. The rename screen is explained [here](#).
- **COPY:** copy settings and values to be pasted in any other MOD lane.
- **PASTE:** paste settings and values previously copied from another MOD lane.
- **CLEAR:** clear values and settings.

MOD EDITING

You can edit the modulation step values in a performative way with **Motion Recording** or **Drawing** them directly in the **grid**. It is also possible to **randomize** the entire modulation lane by using the SHIFT +  command.

MOTION RECORDING

Real-time recording of MOD lane value changes is possible by pressing the Rec button while in the MOD lane menu and manipulating the encoders. You can record the encoder movements by playing along with the sequence, which will generate a looping automation envelope that lasts for the duration of your sequence. It's important to note that modulation recording does not adhere to the sequencer's Record settings and it's possible for previous modulations to be overwritten.

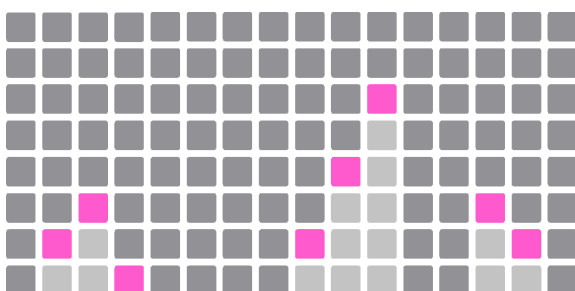
Furthermore, incoming MIDI messages from external devices like Pitch bend can also be recorded, provided that the message kind and value on your external device corresponds to the one set on the MOD lane (ensure to match the MIDI channel of your sequencer if you are filtering by MIDI channels in your configuration).

Press any of the encoder buttons to turn OFF that motion. Turn or press the encoder to turn ON and continue the motion.

DRAWING MODULATIONS

Each modulation lane can also be edited (drawn) directly from the grid in the **sequencer view** (see [the section below](#)). However, in the **keyboard view**, we have maintained the keyboard layout showing only the MOD screen so you can play notes at the same time you tweak the modulation values.

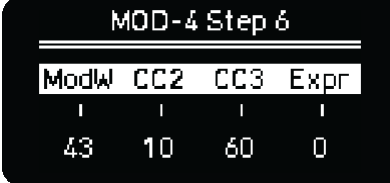
The grid shows from bottom to top, lower and higher values of each step for the shown modulation, being 0 the minimum and 127 the maximum. The minimum and maximum values can be adjusted in the MOD lane settings menu.



Modulation lane displayed on the grid

PER STEP MODULATION

If you press any step, the modulation value will be automatically set. For finer adjustments you can hold any pad of the grid and use the encoders. When doing so, the screen will show the 4 modulation values of that step, you can modify any of them with the encoders. Press the encoder button to reset the modulation value to 0.



MOD-4 Step 6			
ModW	CC2	CC3	Expr
43	10	60	0

Step 6 modulation values

TIP: To adjust modulation from a previous value, first press shift, then select press the pad column you want to adjust, release shift and turn the encoder, your old value will be maintained and you will adjust the step value from that initial starting point.

To **reset** the modulation value of any step back **to zero** you can also tap the bottom pad twice. First tap sets the lowest value and second tap sets it to zero.

TIP: Remember, to change the shown modulation lane, simply turn or press a different encoder or hold MOD and press any pad of the grid, from bottom to top every row represents a modulation lane.

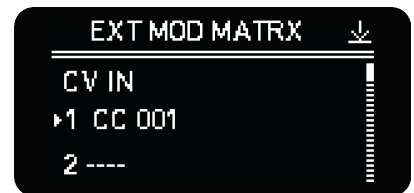
EXTERNAL MOD MATRIX **new**

The OXI One is now equipped with a versatile matrix capable of both receiving and sending data through its MIDI ports (USB, TRS, BLE) and CV inputs. This allows for modulation of internal parameters or re-routing to other MIDI devices.

TIP: Plug any modulation source to your CV input or connect any external MIDI controller —whether wired or via BLE wireless— to unlock a new dimension of control possibilities with your OXI One.

To access the External Mod Matrix menu, simply double-tap the MOD button.

This menu allows you to assign the **CV input** for modulation tasks and to configure up to 16 **MIDI mappings**. Each mapping can be directed to various internal destinations or relayed to external MIDI devices.



Let's explore these configuration options in more detail.

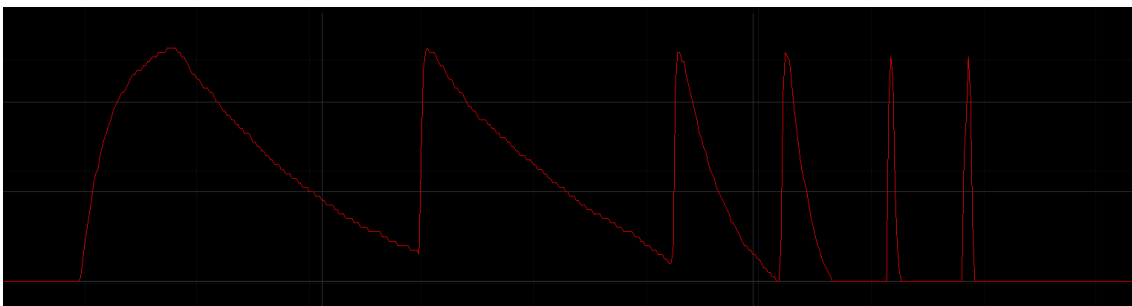
CV INPUT

CV TO MIDI

The CV input on your OXI One serves a dual role as both a Start-Stop/Reset In and CV modulation input. It can be flexibly routed to either affect internal parameters or be redirected to send Control Change (CC) and other MIDI commands to external MIDI devices.

In the following graph you can see an example of how an analog AD envelope is smoothly translated into a CC (Mod Wheel in this case) parameter. Complex modulations generated in a modular system can be translated to MIDI for a tight modular to MIDI integration.

Only Positive voltages will be converted, negative values will be clipped to zero (except when using for sending Pitch Bend).



Analog envelope to MIDI CC

CV AS INTERNAL MODULATION

Another interesting use of the CV input is modulating internal parameters. The [Internal destination table](#) is the same as for the LFOs and the MOD lanes.

There are 2 internal destinations, the modulation amount can be independently set per destination. It accepts both positive and negative voltages for bipolar modulation.

MIDI MAPPINGS new

Once you access the new MIDI matrix/mapping tool by tapping twice on the MOD button, now apart from routing your CV input you will be able to route up to 16 incoming MIDI signals per sequencer to internal destinations, sequencer parameters, MIDI Output or all of them at the same time. [MIDI Port Merge](#) will allow incoming MIDI to be merged and mappings sent to MIDI Ports A, B and C.

In the newly introduced MOD matrix tool you can not only configure the CV input, but you can also route up to 16 incoming MIDI signals per sequencer to:

- Internal sequencer destinations like velocity, gate, pitch, etc.
- Specific sequencer parameters like Scale, Root, randomizer settings, etc.
- Global parameters like tempo or FILL activation
- Forward incoming data as single or multiple messages to simultaneously control various parameters on external MIDI devices.
- And a combination of the above!

MIDI MAPPINGS SETTINGS

For every Mapping on the list, you will be able to configure the following parameters:

- **TYPE** MIDI message for it to be recognized and processed.
- **MIDI In channel**, there are several options:
 - **Same** listens to the (general) MIDI channel of the sequencer (not of the track channel in Multitrack or Matriceal modes),
 - **ALL**: listens to any MIDI channel if the CC or Note value matches
 - **1-16**: listen to that MIDI channel specifically.
- **LEARN** allows you to map any incoming signal to that specific mapping.
- **TRACK** only works on Multitrack and Matriceal sequencers, and lets you select the track (or tracks in Multitrack mode) affected by the incoming signal (example: mute several tracks, control the random amount in one or more tracks to create fills, etc.)
- **CC FWRD Out**. Stands for CC Forwarded message to the MIDI Outputs.
Sets the CC number or MIDI message to be externally forwarded to the same MIDI channel assigned to the sequencer (or track in Multitrack and Matriceal modes).
In Multitrack mode, the message will be only forwarded to the first track assigned not all.
- **CC-INT AMT 1**. CC and Internal Destination Amount 1.

Sets the amount of the modulation applied to both the CC forwarded message and the Internal destination 1, depending on which is active.

- **CC-INT OFS 1.** CC and Internal Destination Offset 1
Applies an offset to both the CC forwarded message and the Internal Destination 1, depending on which is active. Useful when working with different unipolar and bipolar destinations.
- **INT DEST 1 and 2.** Internal Destination 1 and 2.
These settings display the parameters that are available for modulation, which can be found in the [Internal Destinations section](#). The modulation applied is **non-destructive** and is implemented as an offset, meaning it can either increase or decrease the initial value of the destination parameter. There are 2 Internal Destinations per Mapping.
- **INT AMT 2.** Internal Amount 1.
Set modulation amplitude applied on Internal Destination 2.
- **INT OFS 2.** Internal Offset 2.
Applies an offset to the Internal Destination 2, useful when working with different unipolar and bipolar destinations.
- **PARA 1 and 2.** Parameter 1 and 2.
The second list of modulatable parameters includes **sequencer settings** such as Mute, Scale, Randomizer options, Start/End points, and global settings like Tempo or FILL enabling. It's important to note that these are "**destructive**" assignments; they will alter the value of the selected parameter permanently, and it will not revert to its original value prior to the modulation (unlike the non-destructive modulation applied via the Internal Destinations). There are 2 parameter modulations per Mapping.
- **PARA AMT 1 and 2.** Parameter Amount 1 and 2.
Set the modulation amplitude applied to these parameters respectively.
- **PARA OFS 1 and 2.** Parameter Offset 1 and 2.
Define the center point of these parameter modulations.
- **CONSUME.** This option allows you to determine whether the incoming signal is passed on to subsequent MIDI mappings or sent through additional MIDI outputs (Consume **No**), or if it is not forwarded at all (Consume **Yes**).
- **COPY MAP.** This enables you to duplicate the settings from the **Currently** selected mapping or from **All** mappings of the sequencer. The copied values are stored in memory, allowing you to transfer and paste Mappings to any other sequencer or pattern within the current project or a different one.
- **PASTE MAP.** This function works in accordance with your last copy action. If you copied a single mapping, you'll be able to paste that specific mapping (**Paste Current**). If you copied all mappings from a sequencer or pattern, you'll be able to paste the entire set of mappings to a different sequencer or pattern (**Paste All**).
- **CLEAR MAP** resets all the settings of the currently selected mapping to their default values.

- **LAST VALUE** shows the last received value on the selected Mapping.
This specifies the type of the MIDI message that must correspond in order to be recognized and processed. It lets you choose between CC, Note On or Note Off messages.
 - Note On messages are interpreted with a value of 127.
 - Note Off messages are interpreted with a value of 0.
 - For CC messages the actual received value will be used
- **NUMBER.**
This specifies the Control Change (CC) or Note number that must correspond to the incoming

TIP: You can consult the list of MIDI Mappings [here](#).

LFOs

Another great way to create variation on your sequences is to automate parameters with the LFOs. There are 2 **LFOs per Sequencer** and both can modulate one internal and one MIDI parameter.

LFO RANGE

The LFO output range depends on the chosen destination. It has been adjusted to get the optimal control for each use case. When the LFO is applied to an internal parameter, the values are bipolar (-128 to 127) while if the LFO is sent to a MIDI CC, the values are adjusted to the optimal MIDI range which is 0 to 127.

CC Destinations

When the LFO is sent to a CC parameter and the amount is 100%, the CC range goes from 0 to 127. Reducing the amount, for example to 50%, will set the range from 0 to 63. It is possible to apply an offset so the CC parameter minimum value is shifted. If the offset is +64 and the amount is 50%, the CC will go exactly from 64 to 127.

PITCH BEND

The maximum range is adjusted to -8192 to 8191 in this case.

INTERNAL Destinations

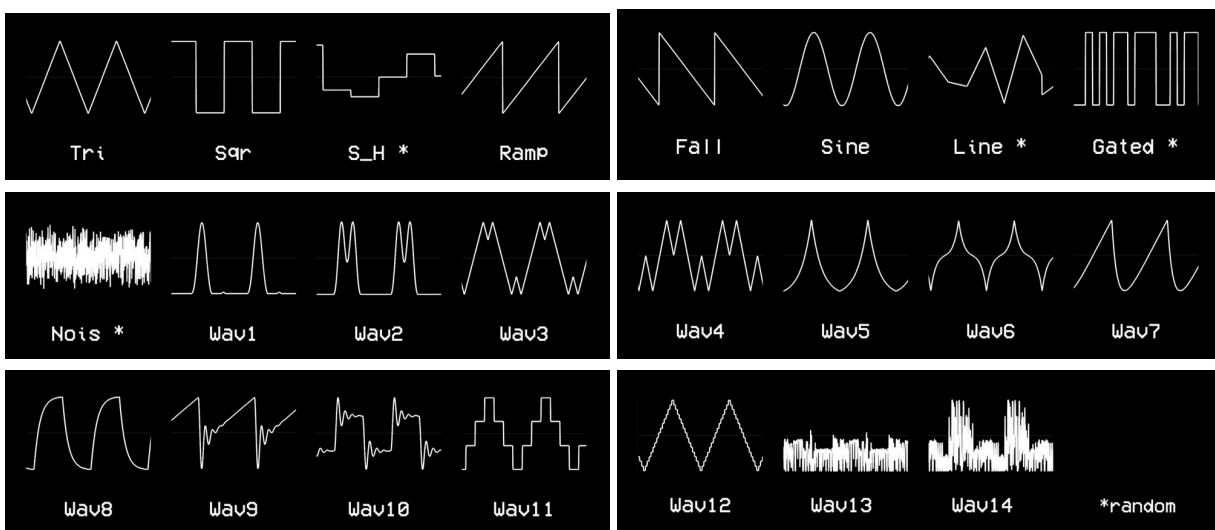
When the LFO is applied to an internal destination it will introduce positive and negative changes. It's a bipolar value controlled by the Amount and Offset settings in the LFO.

Take into account the LFO resulting value is not normalized between destinations. It depends on how many values the parameter has. Check the [Internal Destinations section](#) for more information.

LFO SCREEN

The LFO screen consists of two pages (note the 1/2), each one with the same information and parameters available for each LFO available on that sequencer:

Waveform, there are many to choose from, even unusual shapes as showed next



Press the **1st encoder** to access the **Retrigger** setting, to choose if you want or not to retrigger the LFO with the notes on the sequence.

Rate can be clocked up to 16 bars moving the encoder to the left. Moving to the right will get you to free running LFO. LFO's only works when the OXI One is running. Free running mode will reach a maximum of approximately 200Hz. Press the **2nd encoder** to adjust the **Phase** of your LFO.

^ LFO 1 / 2			
Wave	Rate	Arnt	InDst
Sqr	1/16	OFF	Gate
Retrg	Phase	Offst	⊙Dst
OFF	0%	+0	OFF

Amount, sets the modification range of both the internal and external modulation. Alternatively you can press SHIFT + encoder turn to adjust the external/MIDI amount separately.

Offset, adds offset to the LFO value. Useful for unipolar destinations like CCs and AT messages or for certain internal destinations.

Press the **3rd encoder** to toggle the 3th parameter between Amount and Offset, and be aware that this offset is not applied over the CV outputs, as they have their own offset setting over the CV / Gate Mode

Internal Destination. The number of internal destinations depends on the sequencer mode. Some examples are Velocity, Note (quantized to scale), Octave, Gate, CV Pitch Bend, Time Division, etc. The full list of available parameters for each mode can be found in the [Internal Destinations Table](#).

NOTE: As this version of the firmware, the Amount is an absolute value. Depending on the destination parameter, the LFO Amount required may be as little as 1 - 2 units - Octave, Arp Division, etc. - or up to 100 for other parameters like Velocity, Gate, Trigger probability.

External/MIDI Destination like CC messages, Program Change, Aftertouch and Pitch Bend, this way you can automate parameters in DAWs, hardware synths or mobile apps.

^ LFO 1 / 2			
Wave	Rate	Arnt	InDst
Sqr	1/16	OFF	Gate
Retrg	Phase	Offst	⊙Dst
OFF	0%	+0	OFF

To change between Internal and External destination press the **4th encoder**

CV LFOs

LFOs can be routed to any CVs out as well. This routing is independent of the Destination parameter above, so you can have the LFO as internal and/or external-MIDI modulation plus CV out modulation. The CV out has its own offset value that can be adjusted from the [CV GATE](#) layout.

CV LFO Output Range

The maximum range of the CV LFO output is 0 to +5V initially upon assignment. Adjusting offset from the LFO menu will not result in negative LFO voltages, as values will still be clipped between 0 and +5V. In order to get voltages down to -3V which is the limit of the hardware, you need to adjust the offset of the CV output from the CV / Gate Mode. CV Outputs have an 8v range -3v to +5 volt so full offset on LFO will result in a center voltage of 1v with peaks at -3v and +5v.

LFOs in MULTITRACK Mode

LFO can be enabled/disabled on individual tracks in **Multitrack** mode: when the LFO button is pressed, the first column will light up orange, press a pad from the respective track to stop LFO from affecting it. The selection is independent for LFO 1 (Orange Colored) and LFO 2ss (Pink Colored).

TIP: Press *SHIFT + ENCODER* to set back the default value of the selected LFO Parameter.

TIP: *LFO to Pitch is a fun way to modulate a sequencer, which would still adhere to the chosen scale. See this in action creating a one note Arp Style Modulation.*

HOW MODULATIONS ARE APPLIED

Amount is not normalized between destinations. It depends on how many values the parameter has.

For example 1 amount is 1 semitone or 1 octave. LFO waves have 23 or so values, so once you reach that value increasing the amount, you are maxing out the modulation and whatever portion of the wave that goes above will keep the maximum parameter. It "clips" the modulation introducing a plateau of no changes.

LFOs and **Ext CV Input** are **bipolar**, introducing positive and negative changes.

MOD Lanes are **unipolar**, so the values are always "increased/added" to the parameter destination.

LFOs and MOD Lanes have an **offset** control. You can use it to remove the negative component of a LFO or to add a negative offset to a MOD Lane.

TIP: *The list of all Internal Destinations is available [here](#).*

● RECORDING

MIDI INPUT CHANNEL FILTERING

When Recording is active, the sequencers will receive the incoming MIDI information depending on the MIDI In channel filtering configuration option.

- OFF: the Selected sequencer will listen to any incoming MIDI note from any channel.
- MIDI Channel: every sequencer will listen to notes only from its own MIDI channel. In multitrack, notes are filtered by the track's channel and in case all tracks share the same MIDI channel, all messages will go to track 1 only.
- Ch & Note (MULTI): every sequencer will listen to notes only from its own MIDI channel and in Multitrack mode, apart from track's channel filtering, only the MIDI messages whose note matches the root note of any of the tracks will be taken into account (drum mode).
More details in the Multitrack Mode section.

Another setting to take into account is the MIDI In Port (A-C) Merge. If enabled, incoming MIDI data will be forwarded not only to the sequencers whose MIDI Port is A but also to ports B and C as long as the MIDI channels match. This setting is useful when using Ports B and C of the OXI Split. This merge will occur on incoming notes from USB and TRS. MIDI Merge for CC, Pitch Bend, Aftertouch and PolyPressure has been implemented.

Specific to the Multi Sequencer mode, if the MIDI filter by channel is ON, then each track may have a different channel assigned and your external keyboard channel needs to match in order to record into that track. If you have multiple tracks with the same MIDI channel, only the lowest track (track 1 is on bottom, track 8 is on top) with that channel will receive external MIDI during recording.

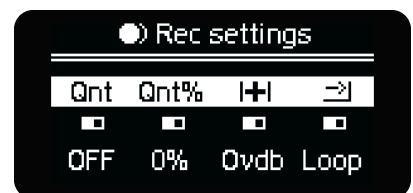
RECORDING MENU

Press **SHIFT + Rec** to access page 1 of the **Recording Menu**, parameters from left to right. To exit press Back button or press Shift + Rec to cycle pages and exit:

Quantization (Qnt). Toggles recording quantization ON/OFF, when quantization is ON, the recorded notes are automatically quantized to the grid division. The setting can be enabled/disabled during actual recording.

Time Quantization % (Qnt%). Percentage of quantization to the division of the selected sequencer. To apply the quantization, confirmation is required by pressing the same encoder. This is a destructive process that can be undone with **undo**. The percentage will affect steps recorded when (Qnt) is enabled or can be applied after a recording when (Qnt) is off. The quantization can be applied during actual recording or after recording has ended while the transport is moving.

Overdub, recording behavior. If ON, the sequencer will keep the already existing notes, adding new ones as played. If OFF, the transport bar will delete the events of the sequencer that are in its path. The setting can be enabled/disabled during actual recording.



Looping, 1-Shot or Extend.

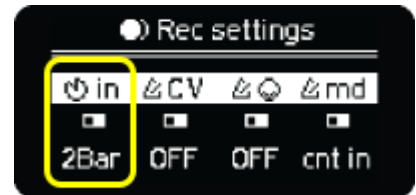
Three different behaviors that work as follows.

- **Looping** will continue recording events inside the actual track length; the initial and end steps will remain unchanged.
- **1-Shot** will stop the recording once the transport bar reaches the final track step.
- **Extend**, the length of the track is increased until you stop the recording or the transport bar reaches the maximum possible track size. This behavior allows **MIDI Live Looping** using external MIDI input or the OXI One Keyboard layout.

COUNTDOWN **new**

In the Recording Menu press **SHIFT + Rec** to show the second page of the Recording menu, where you can find the countdown and metronome settings.

Starting from the left, the first encoder enables the **Countdown** and sets its duration. If enabled, a Countdown will appear on the screen when hitting the Rec button and if the playback is active.



The countdown will be shown according to the selected setting: 2 Bar, 1 Bar, 1/2 Bar, Beat or Off.

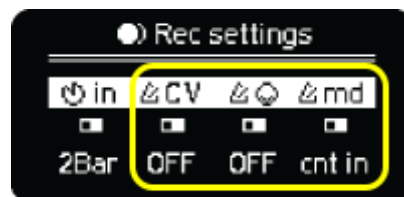
If the OXI One is stopped, it will start playing after the Countdown when you hit Play.

If the selected sequencer is inactive, it will start playing after the countdown. Otherwise, it will start recording immediately and the countdown will just serve as a time reference, **but it won't prevent you from starting recording events.**

METRONOME **new**

Watch the metronome tutorial [here](#).

On this screen you can choose the Metronome settings.



Starting from the left, the second encoder selects the CV or Gate output for the metronome. The CV/Gate metronome is an audible signal 5Vpp ready to be connected to your mixer or headphones. If using a Gate output, remember to check the Gate voltage to avoid damaging your headphones, mixer or speakers.

The third encoder selects the MIDI channel to output a MIDI metronome signal.

The fourth encoder selects the metronome mode as “always” or “only during count in”.

EXTERNAL NOTE INPUT

When the OXI One is stopped, press the **Rec** button and the step recording will be enabled. Then, in the sequencer view, keep any step pressed and any input MIDI note from an external source (MIDI keyboard or controller) will be recorded into the pattern.

STEP RECORDING

Another way to program notes is the Step Recording (SH-101 style).

Hold the REC button and press Play to enter this Mode.

This mode allows for note entry from both internal and external keyboards individually or at the same time, operable during playback or while the sequencer is paused. When external MIDI is used, the encoders will still be required to insert Rests and Ties.



SCREEN CONTROLS:

- **Reset.** Press the first leftmost encoder to RESET the writing pointer to the beginning of the sequence, enabling fresh input from the initial position. This will reset your pattern length to one step.
- **Pos.** Rotate the second encoder to navigate the writing pointer throughout the sequence, selecting the position for new steps. This will also change your pattern length.
- **Rest.** Press the third encoder to insert rests into the sequence, effectively increasing its length by adding pauses between notes.
- **Tie.** Press the fourth encoder to insert ties between notes, creating legato connections that also extend the sequence's length.

The display also provides real-time feedback on the sequence's length, updating dynamically as steps are added via the internal or external keyboard.

In order to exit Step Recording mode, press the Record + Play button combo again.

In Multitrack, you can record into any of the 8 tracks by selecting the track first and inputting notes from the OXI keyboard, or external keyboard. In this case the external keyboard must also have a matching MIDI channel to the sequencer or tracks. With MIDI filtering enabled, any matching MIDI channel from an external keyboard can send the track MIDI, the track must be selected. Each track can be reset separately to start from the beginning step.

RECORDING QUANTIZATION

OXI One can record in quantized or unquantized ways. Recording can be done from the built-in keyboard or from an external controller or MIDI hardware.

Quantization can be toggled ON/OFF by pressing SHIFT + REC inside the Rec Settings Menu.

When quantization is OFF, the original timing of the recording is preserved.

You can later **apply quantization by pressing the 2nd encoder**. The quantization amount is set by the **(Qnt%)** parameter and it reduces the timing offsets of each step until they are 0 (fully quantized).

This is a destructive process; but it can be undone by pressing **undo**. It will also remove the manually set timing offsets.

CV GATE Configuration

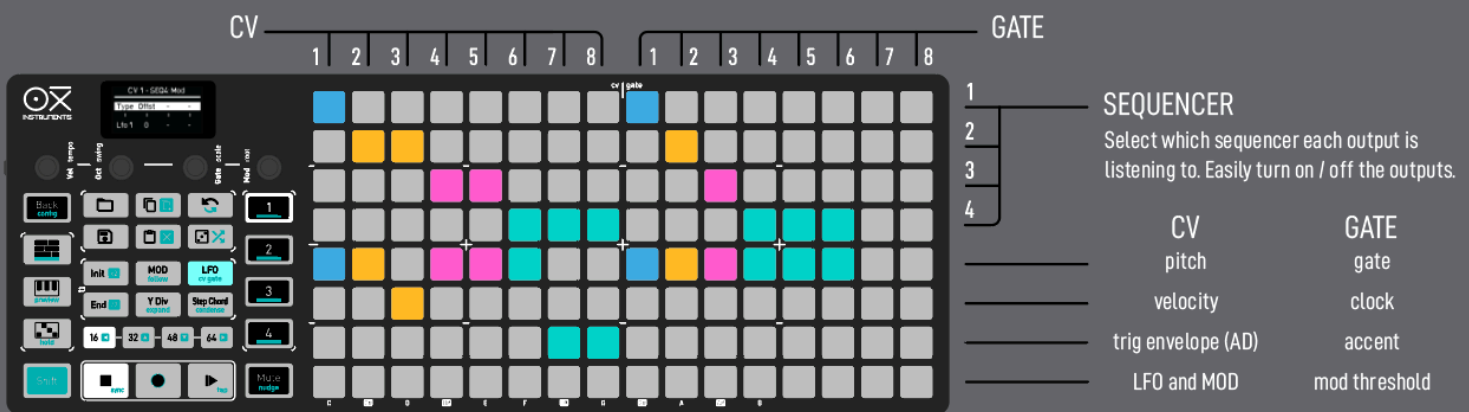
SHIFT + LFO opens the **CV Gate** grid layout.

This mode is shared by all Sequencers to avoid overlapping routings, so this configuration is unique for the project and it is not saved per pattern.

There're 8 cvs and 8 gates that can be fully configurable in real time with playback on, this means you can use this layout as an innovative tool for performance. You can turn on/off outputs, change voice or Sequencer, modulation source or clock division with the press of a button.

The CV GATE configuration is stored in the project data and not per pattern since it affects all the sequencers.

The diagram below explains how the layout it's distributed.



WORKFLOW

1- Sequencer selection:

The first 4 top rows select which Sequencer is providing the source, 1 to 4. Pressing again on the active pad will turn off the corresponding output.

Tip: you can use this layout to create transitions in your performances adding and removing voices and rhythms. Pressing on a highlighted sequencer turns it OFF.

2- Control signal selection:

Once you have selected the sequencer that will be sending information through this CV or Gate, you need to choose which type of control signal this CV or Gate will output.

There are the following available options:

ROW from the top	CVs	GATEs
5	Pitch	Gate
6	Velocity	Clock
7	Trig Envelope	Accent
8	Modulation - Sequencer LFO - Sequencer Modulation lanes	Modulation Threshold

By default, the pitch of the first voice (or track if it's a Multitrack mode sequencer) is selected when activating one CV or the Gate of the first voice/track when activating one Gate. The OXI One will automatically increase the voice/track number when assigning additional CV/Gate Outputs on that Sequencer.

The selection is remembered if you change the sequencer source but it's cleared when you remove the sequencer.

CV ROUTING

NOTE: The CV range is constrained by hardware to -3 +5 V. CVs come calibrated for precise pitch tracking, but if you need to recalibrate, please follow the instructions on [Calibration](#).

Each Sequencer mode has a different amount of voices available that you can route to the CVs and Gates:

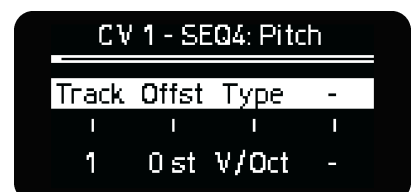
- Mono 1 voice
- Chord up to 8 voices
- Polyphonic up to 7 voices
- Multitrack up to 8 voices (1 per track)
- Stochastic 1 voice
- Matriceal up to 4 voices (1 per track)

Pitch, Gate, Velocity and Trig Envelopes modulation sources are correlated by **voice number**. After selecting one of these sources you can choose which voice it reads from with the first encoder, for example:

PITCH

If the cv is set to pitch, the first parameter is the voice index.

Voice index: always 1 for Mono and Stochastic sequencers, from 1 to 7/8 for Poly and Chord modes or track 1-8/4 for Multitrack and Matriceal respectively.

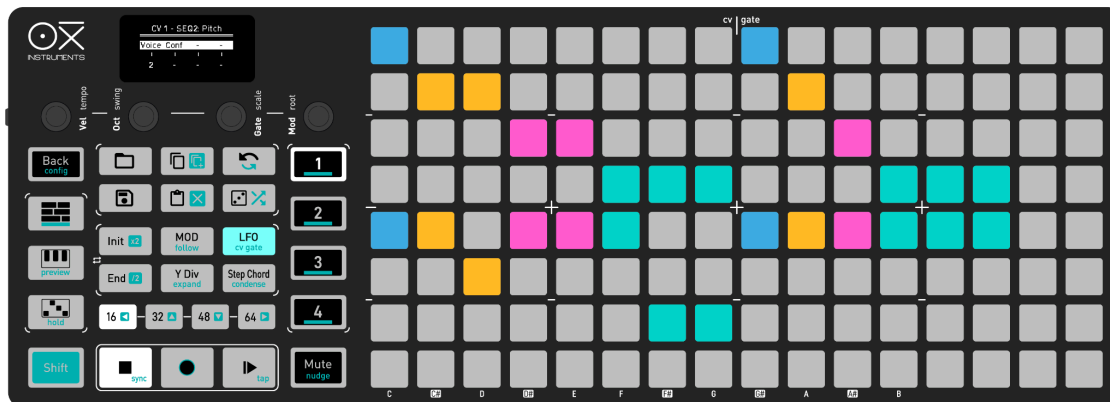


The second parameter is **note offset** in semitones.

The fourth parameter specifies the **CV voltage format**. It can be either:

- **V/Oct** (most modular and semimodular systems). From -3 to +5 V.
- **Hz/V** (Korg standard pitch tracking). From 0 to +5 V.
- **1.2V** (Buchla standard pitch tracking). From 0 to +5 V.

To carry a typical modular voice you need to choose the same Sequencer and voice number for Pitch, Gate or Trig Envelope and Velocity.



Configuration example

CV Settings

- CV 1 set to Pitch and assigned to SEQ 1
- CV 2 set to Pitch and assigned to SEQ 2
- CV 3 set to Vel and assigned to SEQ 2
- CV 4 and CV 5 set to pitch Voice 1 and Voice 2 assigned to SEQ 3
- CV 6 set to Pitch and assigned to SEQ 4
- CV 7 and CV 8 set to TrigEnv and assigned to Track 1 and Track 2 respectively of SEQ 4

GATE Settings:

- Gate 1 assigned to SEQ 1
- Gate 2 assigned to SEQ 2
- Gate 3 assigned to SEQ 3
- Gate 4 to 6 assigned to Track 1 to Track 3 of SEQ 4

VOICE PITCH ALLOCATION

You choose the amount of voices and which CVs you want to route them through. Sequencing chords and polyphonic melodies on your modular synth is very straightforward and as flexible as it can get because you can **select the number of voices you want to output**. In case of having fewer CVs than the total available voices for Polyphonic and Chord modes, the voices will be sorted by the last played.

When working polyphonically (Poly and Chord modes), how the available CVs and Gates (voices) are assigned to the played notes depends on the CV & Gate voice allocation setting.

- LRU: The least recently used CV or Gate will be assigned for the new note event. The voices won't play in unison since each CV or Gate has assigned a different note.

- UNISON: All available CV and GATES voices configured for the sequencer play in unison for single notes. Further notes are divided among the voices to maximize the use of the assigned CVs and Gates. If there are more notes than the available CVs or Gates, the voices will still be sorted by the last played.

TIP: The current voice allocation settings do not result in the same notes always being sent to the same output, the sorting will result in some rotation of outputs when more than 1 voice is assigned in the matrix.

TIP: Use the UNISON setting with paraphonic modular configurations and synths to control the pitch of the different oscillators independently, creating unison and glide effects.

You can also output the same signal through different CVs, for example the Trig Envelope of the same voice through 2 different CVs and each envelope with different attack or the same LFO with different offset setting.

NOTE VELOCITY

Same as pitch but for the voice velocity information. Note velocity is assigned to the CVs the same way as note pitch but.

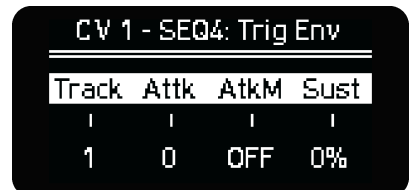


If the CV is set to Vel, the second parameter chooses if gated behavior or not:

- Gated: the voltage is proportional to the note velocity during the length of the note, it goes back to 0V when the note finishes.
- Not Gated: the voltage of this output is always proportional to the velocity of the last note.

TRIG ENVELOPE

In the OXI One we have introduced Triggered Envelopes, a kind of ADSR envelope that changes dynamically with the sequence step settings.



By default, the maximum **Amplitude** of the envelope is proportional to the velocity of the step that triggers the envelope. When the velocity is 127, the voltage reaches +5V. You can adjust velocity from the velocity encoder on the grid or velocity view in some Sequencer modes.

The **Decay**/Release duration is proportional to the step gate length. They cannot be set independently. You can adjust gate length from the gate encoder on the grid or the gate view in some Sequencer modes.

The **Attack** can be manually adjusted in the CV setting or modulated by any of the following sources:

- Sequencer's LFO (access from the LFO Button)
- Any of the sequencer's MOD lanes (access from the MOD Button)

In case of tied notes the **release** will be defined by the Gate length of the last tied note. Ties can be adjusted from the Grid view or from the global gate encoder on the grid.

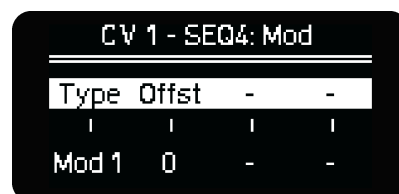
Sustain is defined by a percentage of the max amplitude level, being 100% the value defined by the velocity, so you will set the amplitude by either your default Velocity value or how you have altered the values after input, or how you are modulating velocity. The transition from the peak of the envelope to the sustain level (decay stage), is a slow curve. This decay time cannot be set independently.

This implementation tends a bridge between MIDI and CV messages, by having a dynamic envelope ready to modulate parameters of your modular synth like VCA, LPG, LPF and any other fun acronyms on your rack.

TIP: You can apply modulation and/or randomization to Gate and Velocity to also modulate Amplitude and Decay of the Trig Envelope.

LFO - MOD

The last sources for modulation, at the bottom row, are the **LFOs** and the **Modulation Lanes**. When selected, the 1st encoder lets you choose from LFO 1 or 2 or Mod Lanes from 1 to 4 (1 to 8 on Multitrack sequencers) as source. These are configured respectively on the LFO and the MOD screens, visit their respective sections to know more.



CV 1 - SEQ4: Mod			
Type	Offst	-	-
Mod 1	0	-	-

LFO works independently of the parameter destination set on its configuration screen but it's affected by the LFO's Amount and Offset controls.

Mod responds to the instant value generated by the assigned MOD Lane as well as the On/Off behavior.

TIP: You can perform over your LFOs and CCs routed to MIDI (USB, TRS and BLE) and CVs at the same time, that means you can create automation, record envelopes manually, offset them and turn them On/Off affecting all MIDI parameters and CV outputs you want.

The range of the CV output when assigned to a LFO or a MOD lane is 0 to +5V.

In order to get voltages down to -3V which is the limit of the hardware, you need to adjust the **Offset** (2nd encoder) of the CV output in the CV Matrix menu. CV Outputs have an 8v range -3v to +5 volt so full offset on LFO to -100 will result in a center voltage of 1v with peaks at -3v and +5v.

Remember, by default Lfo and Mod outputs are unipolar, from 0 to +5V.

GATE ROUTING

GATE

Outputs a trigger that remains active while a note is held. As for pitch, the voice/track setting of the gate has to be properly set to output the right events.

Each gate can be configured as V-Trig or S-Trig.

- V-Trig: when the trigger is active, the output voltage is HIGH. Low otherwise.
- S-Trig: when the trigger is active, the output voltage is LOW. High otherwise.

The output voltage can be set for ALL the gates to 5V or 10V, in the [Config, Analog section](#).

S-Trig can also be used as an **inverted gate** for patching purposes.

CLOCK new 4.0.6

Outputs a 50% pulse clock signal at the chosen clock division, independent from the sequence division.

The clock division is 1/16th by default. Clock trigger width is one half of the chosen clock value.

ACCENT new 4.0.6

The gate level goes high when the velocity of a note within the pattern reaches the Threshold value. You can select the track number or voice assigned to this value. You can use this trigger output to add accents to your patch. This accent gate will remain high until the next step on the grid is below the threshold value set.

TIP:

THRESHOLD new 4.0.6

When the value of the modulation reaches the Threshold value, the trigger level goes up.

You can select between any of the modulation sources: LFOs or MOD Lanes. The gate will output when the LFO or MOD lane meets the threshold and remains high until the LFO or MOD Lane goes below the threshold.

CV GATE STATUS

The CVs and Gates status is represented in the grid in real time.

When any CV out has a positive or negative voltage (different than 0), the corresponding column will be illuminated in blue or red color respectively.

When any Gate is active, its column will be lit in blue color.

MIDI to CV conversion

The OXI One offers versatile options for converting **MIDI** data, such as notes or CCs, from various external sources including TRS, USB, or Bluetooth, into **CV** signals. [MIDI Port Merge](#) will allow incoming MIDI to be merged and sent to MIDI Ports A, B and C.

EXTERNAL MIDI NOTES TO CV

You can easily convert MIDI notes and Pitch Bend messages into CV pitch. This feature is particularly useful when using an external keyboard.

Follow these steps to enable this functionality:

- 1. Sequencer Configuration:** Ensure the sequencer routed to the CV and Gate outputs you want to use is configured to receive the correct MIDI channel.
- 2. MIDI Channel Global Settings:** Adjust the [MIDI channel of the Sequencer](#) and the [MIDI Channel filtering setting](#) to ensure proper communication.
- 3. Monophonic and Polyphonic Play:** Assign one CV output to pitch and one Gate (or Trigger envelope) for monophonic play. For polyphonic capabilities, assign multiple CV and Gate outputs. As many as voices you want to play.

MIDI CC to CV for MODULATION **new**

OXI One also allows you to map CC and Aftertouch MIDI messages from external sources to any of the CV outputs. This feature enables the conversion of digital signals from MIDI controllers or Digital Audio Workstations (DAWs) into analog signals suitable for modular synthesizers.

Usage Example:

Consider the following scenario for a practical application:

- 1. CV Output Setting:** CV1 is set to MOD 1 of Sequencer 1.
- 2. CC Assignment:** In Sequencer 1, MOD 1 has CC 1 (modwheel) assigned to it.
- 3. MIDI Message Reception:** When a CC 1 message is sent to OXI One, it translates and outputs a corresponding voltage through CV1, proportional to the CC value.

Important Note: Ensure that MOD Lane 1 is turned OFF. If left ON, the MOD Lane's settings will override the external CC value.

Recording Functionality: If the REC function is enabled under these conditions, the external CC value will be recorded into MOD Lane 1, allowing for dynamic modulation recording. And it won't be translated to the CV output

CV INPUT

OXI One has one CV input which also acts as Start-Stop / Reset In. You need a TRS to TR-TR splitter to be able to use this input.

Double tap the MOD button to enter the EXT MOD MATRIX menu where you can choose the CV input routing options. It is explained in its corresponding [section](#).

Please note: Should you require this input for synchronization, ensure that the control voltage (CV) is not employed for modulation.

ANALOG CLOCK

OXI One reads and outputs MIDI clock according to a 24 ppq timing. The analog clock input and output resolutions, as well as the Start-Stop/Reset behavior can be changed on [Configuration](#).

SNAPSHOTS

Snapshots allow you to temporarily save the state of all four sequencers and revert to that state after making any adjustments in your patterns, such as changes to notes, modulations, or sequencer settings like mute states, most parameters available to save within a pattern are available for Snapshot, modification during the Snapshot and recall to return back to the original state prior to entering Snapshot mode. It's a great tool to create transitions and breakdowns in your performances.

Press Load and Save simultaneously **to create a snapshot** of all the sequencers. Load and Undo buttons will start to blink.

Once a Snapshot has been taken, **press Load or Undo to release the snapshot.**
The Snapshot is always released with 1 Bar Sync.

To cancel a snapshot you can press and hold SHIFT and press Load or Undo buttons.

During a **SNAPSHOT**, it is now **possible to prepare the Mute** state of individual sequencers and tracks in Multitrack they will have after the snapshot is released. To do so, **double tap the sequencer button or the multitrack track first pad** while MUTE is pressed or latched. **new**

You can still Save your changes in the sequencer before going back to the previous state in case you want to keep them. Note: When snapshot is active, saved patterns are not set as the loaded one.

ARRANGER

This is the place to create your Songs, link several patterns or launch them manually.

To activate the Arranger playback hold **SHIFT + Arranger**, you'll see "Arranger ON" on the screen. The Arranger is then ready for playback. Turn OFF Arranger from playing with the same command.

The Arranger is deactivated once you play Stop. Re-enabling the Arranger loads the patterns of the first slots of the current song.

ARRANGER SCREEN

The arranger screen shows the Song that is loaded. A song represents the arrangement, how the patterns are set in the timeline. Every project contains 10 songs.



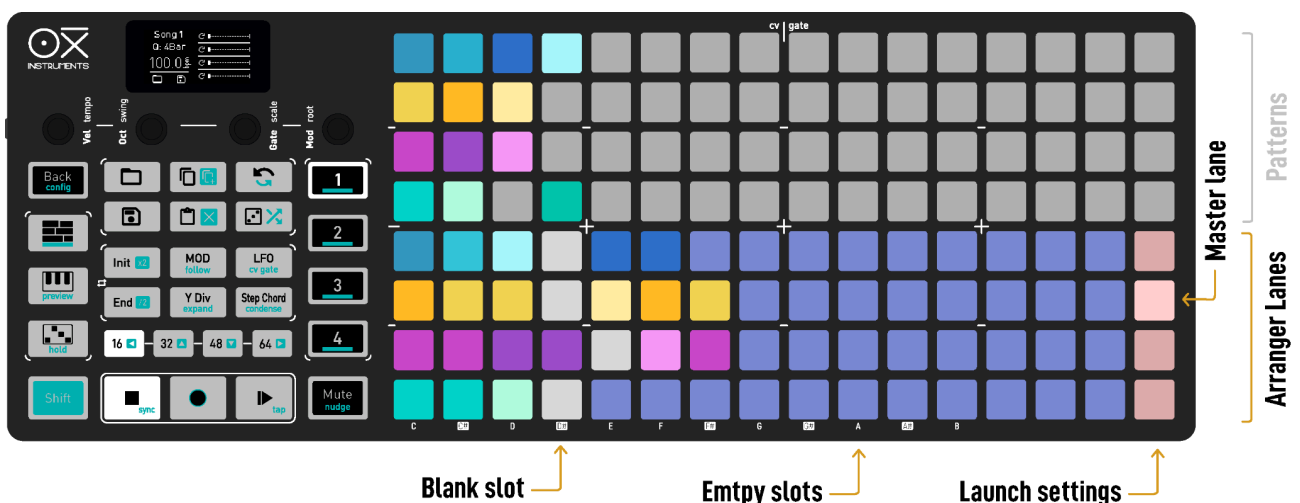
The arranger status, the global quantization bar and the progress bar of each sequencer is also displayed.

Lastly, the two **Load** (folder) and **Save** (disk) icons indicate that you can navigate the **songs** loading and saving them with the 1st and 2nd encoder respectively.

GRID LAYOUT

The bottom 4 rows of the grid represent a 15 position sequence for each Sequencer respectively, so you have 4 lanes of pattern playback. The top 4 rows are the Memory Access where you can see the saved patterns of the 4 Sequencers.

The 4 bottom pads of the last column set the Master Lane.



To add a pattern on the arranger, simply hold its slot pad and press a pad in the desired position of the corresponding Sequencer lane of the arranger. If there's a gap between the last arranger slot when adding a new pattern, the middle slots will be filled with blank patterns.

TIP: Holding the slot pad in the arranger view shows in RED color the pattern assigned to this slot.

LAUNCH-LOAD QUANTIZATION SETTINGS

Once in the Arranger layout, hold any of the four pads of the launch settings region to show the Launch quantization settings menu.



From left to right:

- **Master lane:** it can be 'Off' or it can be any of the 4 sequencers.
- **Launch quantization.** Sets the amount of internal clock bars to complete one pattern repetition cycle. When set to 'Off', the pattern has to reach the last step. The Arranger must be ON for this setting to take effect.
- **Glob(al) or Load quantization.** Same as Launch quantization but in this case applies when the Arranger is OFF and the patterns are manually loaded. The term **Global** is used because this value is also taken by default for the Punch-In sequencer "Global" setting.

New 4.5 TIP: Project loading is quantized according to the LOAD Quantization Setting.

ARRANGER'S LOGIC

When the pattern playhead has met the launch quantization settings, the play count decreases by one. When the repetition count reaches 0 the next pattern is loaded. In case of the Multitrack mode, track number 1 is taken as the reference one.

When the repetition parameter is set to **infinite**, the play count is not decreased thus the pattern will be **looped** in the arranger. The Arranger will remember the last repeat option when creating more slots or placing patterns.

The Arranger is **deactivated** once you press **Stop**. Re-enabling the Arranger loads the patterns of the first slots of the current song.

The arranger can send **Program Change** and **Bank Select** MIDI messages just before (2 clock ticks) launching the next pattern. Bank Message Type can be set to cc 0 or 32 in Config settings.

Blank slots don't play any notes or modulation and serve as silence or separation between patterns. Their duration is one bar (16 steps at 1/16th) and the number of repetitions of it can be changed, so one single blank pattern can be set to a number of repetitions or loop to infinity. Blank patterns are represented in white.



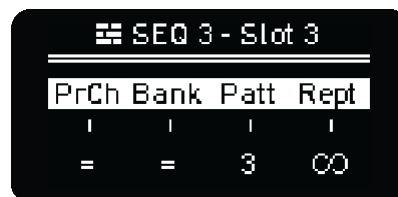
TIP: Setting blank patterns on a lane with infinite repetitions allows you to have parts where one sequencer stops sending notes until you manually launch the next pattern of your song.

Empty slots, that is any slot with no pattern assigned, will be simply skipped.



Hold any pad of the arranger lanes to see the parameters of the slot:

- **Program Change**, it can have different settings.
 - = means the selected slot will send the same Program Change as the one stored in the pattern.
 - Off avoids sending any Program Change message.
 - 1-16 to force a Program Change message for the selected slot.
- **Bank Select**, same as Program Change but for the Bank Select CC message. Bank Message Type can be set to cc 0 or 32 in Config settings.
- **Pattern** that the selected slot launches
- **Repeats** or repetitions of the pattern in the selected slot. From 1 to **infinite** repetitions (after 19 you will see the infinite icon displayed).



You can **copy/paste** arranger **slots** using the Copy and Paste buttons. You can clear arranger slots by doing SHIFT + X (clear).

Hold any pad of the pattern lanes and you will get another way to change the **pattern color** of each sequencer. Useful to identify patterns in the arrangement.



You can shift arranger slots by holding the slot and press left or right arrow buttons (16 and 64 step page buttons).

TIP: To set the Arranger ready for playback press **SHIFT + Arranger**, you'll see "Arranger ON" on the screen. The Arranger then ready for playback. Turn OFF Arranger from playing with the same combination of buttons.

On the main screen you can see on the right the countdown for each arrangement track pattern to change to the next one and a progress bar of it. If the current pattern is looped a round arrow will indicate this.

IMPORTANT NOTE

Be sure to save all your changes in your patterns because every time a new pattern is automatically loaded by the arranger, changes are lost.

SONGS

Songs are states of the Arranger, that means you can save and recall structures of sequenced patterns per Project. Any unsaved changes to the patterns being played won't be saved on your Songs.

Any time you save a Pattern or a Project, the current Song will be also saved.

Press SHIFT +  Clear to clear the song. You can undo by pressing Undo.

CLIP LAUNCH

Quick tap any slot of the Arrangement **to launch** the pattern assigned to the slot according to the launch quantization setting. This is helpful to move to a different section of a song when the patterns are looping. You can launch several patterns at once, one per sequencer.

The slot waiting to be launched will blink until launched.

Note that you can launch patterns from different projects directly on the grid by turning the first encoder and choosing any other project.

PATTERN OVERRIDE

When the arranger is ON a different pattern can be loaded in the slot that is being played by the arranger. The new pattern will be loaded synchronously:

- Press LOAD + any arranger slot.

MASTER LANE

The master lane is the one that controls the progression of the arrangement. Any of the 4 sequencers can act as the master.

The sequencer set to master will carry the progression of the arrangement, so the other sequencers move to the same slot of the master independently of the pattern length and slots repetitions.

It's meant to be used together with the Clip Launch feature and to control the progress of the arrangement when the involved patterns have different lengths or time divisions.

How is this especially useful?

- Enter a few patterns in the arranger with different repetitions but not looped (less than infinite).
- At a certain position in the arranger, say slot number 5, set the pattern repetition to infinite.
- This means that at some point, all the sequencers will be looping and stuck in the slot 5 of the arrangement.

Clip Launch a different pattern on the Master Lane and you will see that, at the same time the master sequencer changes to the next slot, the others sequencers will follow.

SHORTCUTS

Turquoise represents the secondary color, all secondary functions are triggered/accessed with the **SHIFT** button.

GENERAL

- **SHIFT** + Sequencer 1-4: Sequencer configuration screens
- MUTE + Sequencer 1-4: Turn On/Off the sequencer for playback
- MUTE + 1st column pad: Mute/Unmutes the sequencer or track in Multitrack
- **SHIFT** + MUTE + Sequencer 1-4: Restart the sequencer playhead according to the punch in settings
- **SHIFT** + Keys (Preview): Turn On/Off preview to pre-listen the pressed notes on the sequencer view
- **SHIFT** + Step: Show additional step parameters
- Step + Copy / Copy + Step: Copy selected step parameters
- Step + Paste / Paste + Step: Paste selected step parameters
- Long press + **X**: Full clear sequencer: pattern and settings
- Sequencer 1-4 + Copy: Copy selected Sequencer
- Sequencer 1-4 + Paste: Paste selected Sequencer (It behaves differently depending on which modes are both the copied and the pasted Sequencers)
- Page button (16, 32...) + Copy: copy page (16 steps)
- Page button (16, 32...) + Paste: paste a previously copied page
- **SHIFT** + Rec: recording settings and turn recording quantization On/Off
- Init + End: Enter Loop Mode, press Init or End to exit mode
- Save + Load: Enter Snapshot Mode, press Save or Undo to exit mode
- **SHIFT** + Stop: Reset Sequencer upon Global Launch Setting
- Rec + Play: Enter Step Record Mode, repeat combo to exit
- First Pad + Single Velocity Encoder Press: Mute Step
- First Pad + Quick Double Press Velocity Encoder: Reset step velocity to Default

ENCODERS

- 1st encoder turn: Set Global Velocity
- 2nd encoder turn: Set Global Octave Offset
- Push 2nd encoder: Set encoder to control Grid Note View on MONO, POLY and CHORD, or piano roll view per selected track in MULTI
- 3rd encoder turn: Set Global Gate
- 4th encoder turn: Set Global CC Modulation

- 1st encoder press: Velocity column edit view
- 2nd encoder press: Piano roll view on Multitrack sequencers
- 2nd encoder Hold & Turn: Scroll up and down the grid
- 3rd encoder press: Gate column edit view
- 4th encoder press: Mod lanes edit view

- **SHIFT** + 1st encoder turn: Change tempo
- **SHIFT** + 2nd encoder turn: Change sequencer swing
- **SHIFT** + 3rd encoder turn: Change sequencer scale
- **SHIFT** + 4th encoder turn: Change sequencer root note of the scale
- **SHIFT** + 1st encoder press: Back to the stored project tempo
- **SHIFT** + 2nd encoder press: Reset swing (no swing)
- **SHIFT** + 3rd encoder press: Reset scale to default (or confirm scale change): chromatic
- **SHIFT** + 4th encoder press: Reset root note to default: C
- Hold a step and press Velocity encoder to toggle Mute Note On/Off, will not remove note.

MONOPHONIC, CHORD AND POLYPHONIC

SEQUENCER

- MUTE + 1st column: Mute/Unmute the sequencer. The playhead keeps moving.
- Sequencer 1-4 + any pad not active : Transpose the sequence (MONO & CHORDS) distance and direction set by the pad pressed
- Double press Page number: Access to 80, 96, 112 and 128 Pages respectively
- Init + Page button (16, 32..., press twice to access longer Pages; 80, 96...): Select the first step of the selected page as the initial step of the sequencer.
- End + Page button (16, 32..., press twice to access longer Pages; 80, 96...): Select the last step of the selected page as the end step of the sequencer.


CHORD

KEYBOARD

- 13th and 14th column: Chord inversion
- 15th column: Chord voicing
- Top right pad: Modifier triggering On/Off
- 16th column: Chord spread

MULTITRACK

SEQUENCER

- Sequencer 1-4 +  : Clear all tracks
- Sequencer 1-4 + 1st column pad: Track configuration
- MUTE + 1st column: Mute/Unmute the respective tracks
- MUTE + 16th column: Solo/group Solo/no Solo the respective tracks
- Hold Random, LFO or MOD (in ext Mod menu): 1st column toggles which track is affected by Random, LFO or external Modulation
- Paste + Step: Paste a copied Mono sequence into the respective track of that row
- Sequencer + Shift + Expand/Condense: Expand or condense all tracks (will offset current track setting)

- [See some Multitrack Button Combos in practice](#) [Tutorial].

KEYBOARD

- 14th column: arm the respective track to have full keyboard for that track
- 15th column: Mute/Unmute respective track
- **SHIFT** + Random: randomizes pitch, gate, velocity, time offset of the last selected track
- Sequencer 1-4 + **SHIFT** + Random: randomizes the triggers, gates and offsets of all tracks
- Row pad + **SHIFT** + Random: randomizes the velocity of the selected track
- Sequencer 1-4 + Init / End + Step: Select the initial and end steps of ALL the tracks.
- Init + Page button (16, 32..., press twice to access longer Pages; 80, 96...): Select the first step of the pressed page as the initial step of the selected/highlighted track.
- End + Page button (16, 32..., press twice to access longer Pages; 80, 96...): Select the last step of the pressed page as the end step of the selected/highlighted track.

CLOCK SYNCHRONIZATION

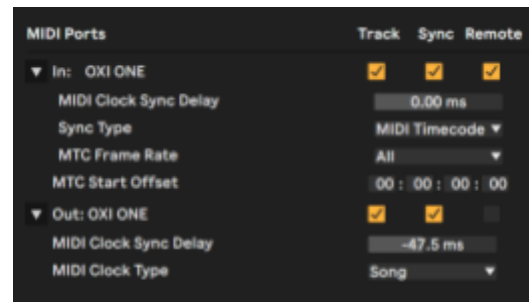
When the OXI One starts up, Sequencer 1 is selected by default and Internal synchronization mode is set.

The following sync options can be changed by tapping **SHIFT + STOP (sync)** button when the sequencer is stopped:

- **INT**: OXI One follows internal timing, according to the selected tempo.
- **USB**: OXI One follows the clock timing received only through the MIDI USB port.
- **MIDI**: OXI One follows the clock timing received through the MIDI TRS jack or MIDI Bluetooth.
- **CLK**: OXI One follows the clock timing received through the clock input.

OXI One reads and outputs MIDI clock according to a 24 ppq timing. The analog clock input and output resolutions can be changed in the [Config](#) menu.

When OXI One is synchronized with a DAW in which either of them act as a master clock, remember to adjust the **MIDI clock sync delay** in your DAW settings to correct the latency generated by the DAW. The bigger the audio buffer, the greater the latency is and it also increases with the project CPU load.



Ableton Live settings

AUTO SYNC

Autoclock can be enabled/disabled in the [Config](#) menu.

When Autoclock is enabled and the OXI One is stopped, it will start automatically playing once a MIDI Start message is received from an external source: MIDI TRS, MIDI BLE or MIDI USB. The OXI One will automatically follow the external source's tempo.

Autoclock for Analog clock is also implemented from firmware version 3.8.

INTERNAL CLOCK FALLBACK

When the OXI One receives a MIDI Stop message or when the MIDI external synchronization source is lost, it will automatically revert to internal sync.

This behavior is not present when the sync source is the analog clock.

ANALOG CLOCK

OXI One has one Input and one Output clock ports. They allow you to interface with modular synthesizers and pre-MIDI technology that was capable of clock synchronization (such as early drum machines produced by Korg and Roland). OXI One is capable of both sending and receiving synchronization signals.

Both input and output clock ports are TRS jacks. The clock signal is wired to the Tip and the Start-Stop/Reset signal to the Ring of the jack connector.

The Start-Stop/Reset input and output signals can behave in two different ways according to the Reset/Start-Stop IN/OUT setting in [Config](#):

- **OFF** ignores the input reset and deactivates the output reset signals. When OXI One's sync is set to Clk, it will start running as soon as it receives clock pulses. You should set this option if you are not using the Start-Stop/Reset signal (patching a mono TR cable for example).
- **PULSE RESET**: Both input and outputs will behave as RESET signals.
 - **Output**: A short 4ms pulse is sent through the Reset out before the first clock out pulse when OXI One starts or continues playing.
 - **Input**: When OXI One's synchronization is set to Clk and a reset pulse is received in the Reset Input, OXI One will reset, this means reset the sequencers playheads.
- **RUN-STOP**. Other synths or drum machines expect a different kind of reset signal. The run-stop or start-stop **output** is high when the OXI One is playing and low when stopped. On the other hand, when Sync is set to Clk the OXI One will only play if the run-stop or start-stop **input** signal is high and stop otherwise.

The Reset/Start-Stop Input is an analog signal: **CV In**. Its usage as an analog input is described in the [MOD CV IN section](#). You can use the Clock Input and the CV Input at the same time, but make sure the *Reset/Start-Stop IN/OUT* setting is set to OFF to avoid undesired effects.

CONFIGURATION

This menu shows global parameters that affect OXI One as a whole. Some of them are presented as customization options so the user has the best experience with the instrument. You can choose what options adapt best to you.

To navigate through the list, use the first encoder. To advance to the next level of the menu press the encoder button. The Configuration menu is divided in the following sections.

MIDI

- **OXI Split selection.** If activated, MIDI TRS would be compatible with the OXI Split increased bandwidth. (Note: in the current HW version it is mandatory as well for Bluetooth to work)
- **MIDI Transport Msgs Send.** If activated, Clock, Start, Stop and Continue MIDI messages will be sent through TRS, USB and Bluetooth.
- **Start Stop Msgs Ignore.** If activated, OXI One transport won't be controlled externally.
- **MIDI TRS Thru.** If activated, OXI One will echo the MIDI messages received through TRS on .
- **MIDI USB Thru.** If activated, OXI One will echo the MIDI messages received through USB.
- **MIDI BLE Thru.** If activated, OXI One will echo the MIDI messages received through Bluetooth.
- **MIDI In channel filtering.**
 - OFF: the Selected sequencer will listen to any incoming MIDI note from any channel.
 - MIDI Channel: every sequencer will listen to notes only from its own MIDI channel. In multitrack, notes are filtered by the track's channel and in case all tracks share the same MIDI channel, all messages will go to track 1 only.
 - Ch & Note (MULTI): every sequencer will listen to notes only from its own MIDI channel and in Multitrack mode, apart from track's channel filtering, only the MIDI messages whose note matches the root note of any of the tracks will be taken into account (drum mode).
More details in [Multitrack Mode section](#).

- **MIDI In Port (A-C) Merge.** If enabled, incoming MIDI data will be forwarded not only to the sequencers whose MIDI Port is A but also to ports B and C as long as the MIDI channels match. This setting is useful when using Ports B and C of the OXI Split.
- **Keyb Scale note quantizing.** Input notes are quantized to the scale of the sequencer that receives the event.
- **Send CC of MULTI muted tracks.** If activated, muted tracks will still send modulation information.
- **MOD-CC Smooth Factor.** Default value of the MOD Lanes smooth factor.
- **CC Transport Msgs transmit Channel.** Selects the MIDI channel where the transport CC messages (start, stop, continue, rec) are sent.
- **PC (Program Change) receive global Channel.** If enabled, allows to change the loaded pattern of the different sequencers with PC messages from external sources. More details in the [Change pattern with PC section](#).
- **Bank Select LSB or MSB.** Selects if Bank Select will be LSB or MSB.

ANALOG

- **PPQ Out.** Changes the pulses per quarter note OXI One sends through analog Clock Out. (24PPQ, 1PP16, 2PPQ, 1PPQ)
- **PPQ In.** Changes the pulses per quarter note OXI One receives on analog Clock In.(24PPQ, 1PP16, 2PPQ, 1PPQ)
- **Reset/Start-Stop IN/OUT.** Configures the behavior of the analog Reset/Start-Stop IN and OUT signals.
 - OFF ignores the input reset and deactivates the output reset signals. When OXI One's sync is set to Clk, it will start running as soon as it receives clock pulses.
 - PULSE RESET: Both input and outputs will behave as RESET signals.
 - Output: A short 4ms pulse is sent through the Reset out before the first clock out pulse when OXI One starts or continues playing.
 - Input: When OXI One's synchronization is set to Clk and a reset pulse is received in the Reset Input, OXI One will reset, this means reset the sequencers playheads.
 - RUN-STOP. Other synths or drum machines expect a different kind of reset signal. The run-stop or start-stop output is high when the OXI One is playing and low when stopped. On the other hand, when Sync is set to Clk the OXI One will only play if the Reset input signal is high and stop otherwise.
- **Gate V Out.** Configures the output voltage of **all** the gates to 5V or 10V.
- **Remember params when On/Off individual outs.** If Off, all the settings of a CV/Gate output are reset, otherwise they are remembered when turning the output back on.
- **CV & Gate voice allocation.** Both options are described in the CV GATE section.
- **Pitch bend range.** Let you set the number of semitones of the CV Pitch bend range.

PERFORMANCE

- **Play/Pause behavior** determines how the Play button behaves when the OXI One is playing.
 - OFF, pause is disabled. This means the Play button only has any effect when the OXI One is stopped.
 - ON pause is enabled. While the OXI One is playing, tapping the Play button will pause.
 - RESET instead of pausing the playback, it will Reset the playback head of all the sequencers according to their punch in settings.
 - FILL, play button acts as FILL modifier button. When it's held, steps set to FILL will play and steps set to NOT FILL won't.
- **Mute behavior.** Explained in [Mute section](#).
 - Toggle Instant
 - Toggle On Release
 - Mute Instant
 - Mute On Release
- **Keep Mutes in Multi mode when loading patterns.** When this option is set to "Yes," the mute status of tracks will be preserved even when a new pattern is loaded. This continuity applies only if the new pattern being loaded is not empty; if it is, mute statuses will be reset.
- **Keyboard Layout.** The available Classic or Isomorphic layouts explained in the [Keyboard section](#).
- **Auto Sync.** Enables or disables [Autosync](#).

- **Taps count for tempo.** Sets the number of taps that are taken into account for calculating the new BPM value. Infinite means that the average calculated tempo is never reset thus offering a smoother transition. On the contrary, a smaller value will offer more immediate tempo adjustments.
- **Keyb Arp Velocity.** If PER NOTE PLAYED, the keyboard arpeggiator will respect the velocity of the notes at the time they were played. If GLOBAL, the keyboard arpeggiator will apply the current keyboard velocity when playing the notes.
- **Keyb latch when hold is active.** This selects how the arpeggiator will behave when new notes are entered from the internal or an external keyboard and HOLD is active.
 - Latched (or sequencer mode) will keep adding new notes to the pattern until the note buffer is full.
 - Normal (Non Latched) will reset the played pattern when a new set of notes is entered.
- **Arp Patt Reset on Note Change.** If set to 'Yes', it resets the arp pattern to the beginning every time there's a change in the set of arpeggiated notes.
- **Loop Sync release.** Changes the behavior of the LOOP function when it's released, SYNC BAR: the sequence will continue on the next bar; SYNC BEAT, the sequence will continue on the next beat or step; NO SYNC, the sequence will continue exactly when it's released.
- **Harmonizer seq Octave (Jump) max.** This performance setting determines the maximum octave leap that a follower sequencer is permitted to make.
- **Harmonized seq stays in base octave.** If set to "Yes," the follower sequencer ignores the octave pitch offsets from the master sequence's notes, ensuring all notes are played within its base octave. This maintains the harmony around the root note, regardless of the master sequence's octave variations.
- **Load Project BPM update during playback.** Chooses if the BPM is updated with the saved BPM of the next newly loaded project during playback or not.

WORKFLOW

- **Lock root and scale during playback.** If activated, the scale and the root won't be modifiable during playback to avoid unintentional changes.
- **Confirm scale change and quantize.** This setting is thoroughly explained in the Scale section.
- **Lock sequence steps with preview ON.** If activated, Disables entering or removing steps from the sequence when Preview is enabled. This allows for example in multitrack mode, that if you created a customized layout of steps with different notes and velocities, you can trigger samples on a drum machine without deactivating the steps.
- **Latch SHIFT with double tap.** Enables the latch SHIFT by double tapping it.
- **Track select priority in multitrack.** Explained in the Track Selection section.
- **Reset step parameters when clearing.** The new entered notes or chords will have default values instead of the previous ones. This affects only the modes Mono, Chords and Multitrack. In Poly mode the new steps are always reset.
- **Default Velocity value.** Default Velocity value of new notes and the keyboard.
- **Default Gate value.** Default Gate value of the new notes and the keyboard arpeggiator.
- **Selected track indicator.** In Multitrack sequencers this setting lets you turn on/off the yellow colored grid pads that indicate the selected track.

SYSTEM

- **MIDI IN Monitor.** Incoming MIDI data monitor.

- **LEDs Animations.** Set the amount of fading and other LED effects.
- **LEDs Brightness.** Two level brightness setting.
- **LEDs Transport bar keyboard.** Show the transport bar in the keyboard view, it will always be shown if recording is activated.
- **Screensaver animation.** Enable or disable the screensaver.
- **Inactivity Power-Off Time.** Sets how long until OXI One powers off when not in use.
- **Bluetooth ON/OFF.**
- **USB Mode**
 - **Device:** OXI One acts as a USB MIDI Device getting power from the USB.
 - **Host+Power:** OXI One acts as a USB MIDI Host providing power to other USB devices.
 - **Host No Power:** OXI One acts as a USB MIDI Host without providing power. Required by some USB adaptors.
 - **Device Self Powered:** OXI One acts as a USB MIDI Device without getting power from the USB outlet. This avoids possible ground loops caused by the USB supply. Reconnect the USB cable for this to take effect.
- **FW & HW Version.** Displays firmware, hardware and BLE versions.
- **RESET.** Resets OXI One to factory settings while maintaining calibration settings.

MIDI ROUTING

By default OXI One will *MIDI Thru* messages from one source to another. For example, the MIDI data received via Bluetooth MIDI (BLE MIDI) will be output through USB MIDI, TRS MIDI output and, if any CV/gate assigned to a sequencer, to the respective CVs or gates.

TIP: *This means OXI One can act as a MIDI hub and-or a MIDI to CV converter for all kinds of setups and situations.*

Thru messages from one source to another can be deactivated from the [Configuration](#) menu.

The MIDI data generated by OXI One will be sent to the corresponding MIDI channel through all the selected communication vias, say MIDI USB, MIDI TRS and MIDI BLE. Check the [Sequencer settings](#) to know more about this.

Each sequencer will listen to input MIDI data depending on the global configuration set in Configuration, [MIDI In channel filtering](#).

MIDI MONITOR **new**

You can check the incoming MIDI data using the MIDI IN Monitor. It can be accessed from the Config menu, under [System section](#) or from anywhere by holding SHIFT and Back for a couple of seconds. It shows the last three messages received indicating the source of the message.

OXI SPLIT

The OXI Split expands your OXI One with 3 independent MIDI ports, giving you 48 configurable channels (16 per lane). This allows you to connect more instruments and switch between them effortlessly.

It also solves the issue of MIDI bandwidth limitations by offering 3 buffered lanes, ensuring fast and reliable data transmission to all your devices.

To use your OXI Split, you must first activate it. Navigate to the MIDI Settings in the Configuration Menu, and enable "OXI Split selection" . A blue LED below the IN jack will light up to indicate that the Split is powered by the OXI One.

TIP: If you remove the Split device and leave Config Option OXI Split Selection On, standard MIDI will not work. Turn it off before using a single MIDI cable.

With the OXI Split enabled and connected, you can utilize the extra ports B and C on your OXI One. The blue LED will blink to signal when data is being received by the Split.

MIDI Channels from **1A to 16A** will be outputted from the **PORT 1/A** of the OXI Split.
MIDI Channels from **1B to 16B** will be outputted from the **PORT 2/B** of the OXI Split.
MIDI Channels from **1C to 16C** will be outputted from the **PORT 3/C** of the OXI Split.

This way you have a total of 48 MIDI channels at your disposal.

All the MIDI information received by the OXI One (from any of the MIDI sources: USB In, TRS In or BLE In) will be sent through the **THRU port** of the OXI Split if the **Thru Setting** of that MIDI source (USB, TRS or BLE) is active in settings.

The Split MIDI outputs are 3.3V (unlike OXI One port which is 5V). The TRS ones are Type A like the main OXI One's MIDI output port. You can buy it over on this link.



OXI PIPE

OXI Pipe is a breakout module that replicates the 8 CVs and 8 Gates outputs and the Clock and CV/Reset inputs of the OXI One. It doesn't add any extra signal to the OXI One.

Both Pipe and One's outputs can be used simultaneously (like a passive Mult), but inputs should not be used at the same time on the One itself and the Pipe.

A HDMI cable is included for free with each Pipe. If you need a cable with different characteristics (length, connector angle, etc.) you need to purchase a HDMI cable that is 2.0 or higher specification.

Note: Some generic HDMI 2.0 Cables are not always wired correctly even if they state 2.0 Specs. These 2 cables are proved to work flawlessly with the OXI Pipe:

[UGreen HDMI 2.0 Cable Link](#)

[DeleyCon HDMI 2.0 Cable Link](#)

You can buy it over on this [link](#).



MIDI BLUETOOTH

OXI One incorporates MIDI over Bluetooth (BLE) and it is a dual role device. There are two ways of using it.

Note: For optimal performance with iOS, Mac or Windows devices, we strongly recommend using any kind of dongle like the WIDI Master, WIDI Jack or WIDI UHost (for USB MIDI devices like iPads). The BLE MIDI performance in Android is slightly better.

Using a WIDI UHOST will drastically improve the bluetooth performance. Surprisingly the BLE performance on iOS is not enough for tight timing sequencing.

CENTRAL ROLE

OXI One can act as a hub for other MIDI Bluetooth peripherals like:

- Piano keyboards (ROLI Seaboard, CME Xkey Air, etc.)
- BLE dongles (CME WIDI BUD, DORE MIDI cable, etc.)
- BLE MIDI adaptors (WIDI Jack, WIDI Master, etc.)
- Controllers (AKAI LPD8, Korg nanoKEY, etc.)
- Others like the OP-Z

OXI One will automatically connect (“pair”) to one peripheral device if it is on and advertising (which means it’s looking for some central device to pair with them).

Only one connection at a time is currently supported.

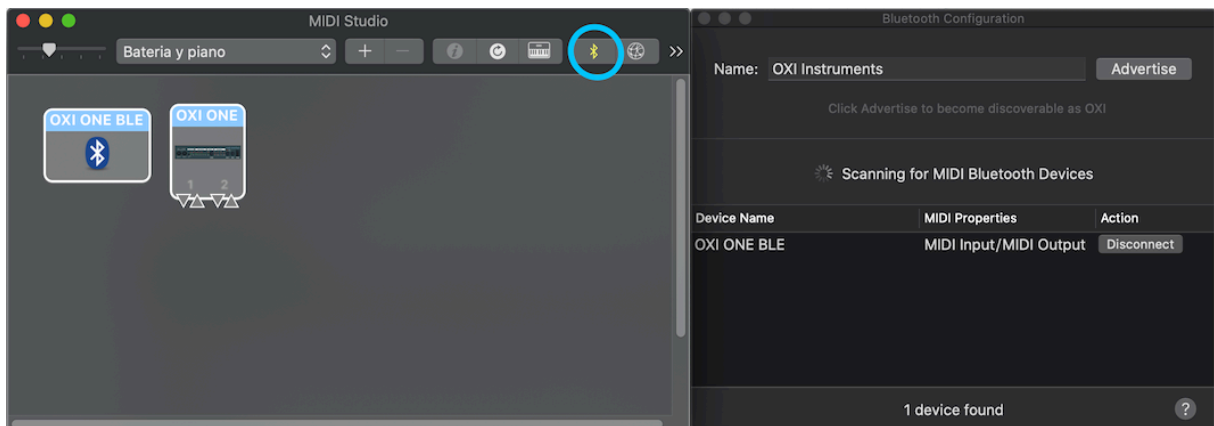
PERIPHERAL ROLE

On the other hand, OXI One can be connected to other central devices like iOS or Android devices, computers (Mac and Win natively support MIDI Bluetooth in their recent versions) and other Central devices like CME WIDI Master.

The process of pairing the OXI One is different depending on the other device.

MAC OS X

You should open the native application Audio MIDI Setup and open the Bluetooth settings on the *MIDI Studio* window:



Press the Bluetooth icon and press “connect” on the Bluetooth Configuration Window and that’s it. Your OXI One will be shown in your audio-MIDI apps as a MIDI device like **OXI ONE BLE**.

WINDOWS (Windows 8.1 or above)

First you must connect Windows with the Bluetooth MIDI device.

Press the Bluetooth icon in the task tray, and choose “Show Bluetooth Devices”.

In the Bluetooth device management screen, choose a device indicated as “Ready to pair” and press “Pair.”

When the indication shows “Connected,” pairing is completed.

Last step is to download the MIDlberry app which makes the Bluetooth MIDI ports available for other apps.

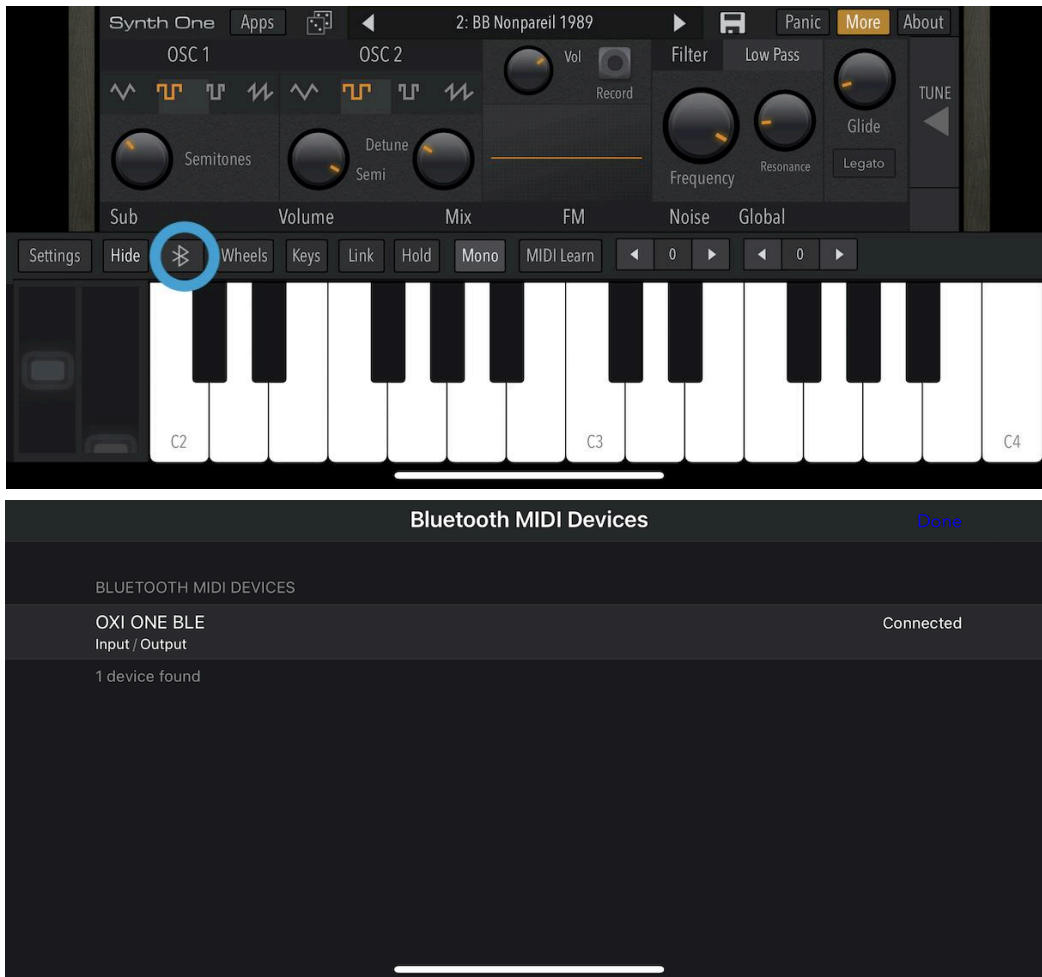
Start your MIDI application, and select the MIDI IN port and MIDI OUT port as necessary.

iOS

The connection has to be established from MIDI and Bluetooth settings of the app itself.

Let's use the free iOS app Synth One for this example.

Go to the Bluetooth settings by pressing on the Bluetooth icon. (Sometimes this menu is found inside other menus, like the MIDI settings menu).



Select **OXI ONE BLE** and give it a few seconds to establish the connection. It will be ready to use!

ANDROID

The process is equivalent to the one described for iOS.

You can try with a free app like FluidSynth MIDI for Android. Once in the app, press in the menu (dots icon), open MIDI Bluetooth and select OXI ONE BLE.

OXI ONE BLE will appear as a MIDI device in the MIDI settings of the app (tap MIDI inside FluidSynth to open this menu).

Notes:

You can turn the Bluetooth ON/OFF from the global settings **Conf:** "Bluetooth ON/OFF".

Your selection will be remembered after rebooting so make sure you have it ON if you want to play via BLE MIDI.

USB MIDI

USB MODES

OXI One's USB can be configured in the following modes in the system settings [USB Mode](#).

- **Device:** OXI One acts as a USB MIDI Device getting power from the USB.
- **Host+Power:** OXI One acts as a USB MIDI Host providing power to other USB devices.
- **Host No Power:** OXI One acts as a USB MIDI Host without providing power. Required by some USB adaptors.
- **Device Self Powered:** OXI One acts as a USB MIDI Device without getting power from the USB outlet. This avoids possible ground loops caused by the USB supply. Reconnect the USB cable for this to take effect.

USB MIDI HOST

When the OXI One operates in **Host+Power** Mode and powers external devices, you may notice a decrease in the battery level indicator. This drop reflects the additional power consumption required to support the connected device.

KNOWN SUPPORTED DEVICES:

- Roli Seaboard
- Arturia Keystep
- Arturia Keystep 37
- Arturia Keystep Pro
- AKAI LPK25
- Korg nanoKONTROL2
- ASM Hydrasynth
- OXI One
- Miditech Minicontrol-32
- Teenage engineering TX-6
- Teenage engineering OP-1 Field
- Roland MC101
- Akai MPD218
- Moog One 16 and 5
- Novation Launch Control XL
- Waldorf Streichfett
- Waldorf Blofeld
- Novation 25 SL Mk2
- Novation Launchpad Pro Mk3
- Novation Launchpad S
- QuNexus
- Conductive Labs NDLR
- Roland MC707
- Elektron Syntakt

USB SOLUTIONS

OXI One in Device Mode

- Use a **USB Isolator** with external supply input to avoid supply/ground loop noises. The isolator requires an external power source, such as a wall charger. Without this, the power supplied to the OXI One will be insufficient, resulting in a gradual depletion of its charge.



[LINK](#)

Alternatively to avoid grounding noise you can set the OXI One in **Device Self Powered** mode. This may not work with some hosts.

OXI ONE in Host Mode

Tested setups:

- Some devices like the Roli Seaboard work with a USB C to C cable. No need for any adaptor.
- A simple USB C to A adaptor is another great solution to use the OXI One as a USB Host and power supply. The OXI One has to be set in “Host + Power” in this case. Note the power and battery limitations in this case when connecting “hungry” devices.



Found in [Amazon](#)

- **USB C Power splitter.** Use this kind of adaptor when you want to power the OXI One and have a USB MIDI device connected at the same time. The OXI One should be set to “**Host No Power**”.

The USB C male port should be connected to the OXI One which is the Host, the MIDI device should be connected to the USB A female plug (it can be a USB C in some splitters and should be identified with a “data” (instead of power) symbol) and the USB C female plug is the power input.

Here are some recommendations for this kind of adaptor.



LINK1



LINK2



LINK3



LINK4



LINK5

DESIGN NOTES

MODES DIFFERENCES

MONO vs POLY ?

Both are 128 steps long.

Both have 4 modulation lanes.

Mono can only have one active note per step meanwhile Poly can have up to 7 active notes per step. Then, why would you use a Mono track? Since a mono track can only have one active note per step at a time, it is convenient for quick changes on the melody, when for example you have a one-voice lead or when you are sequencing a mono synth.

For the rest of the situations, a poly track gives you more freedom, and also offers an Arp available from the Grid which is not available in Mono Mode.

It is possible to transpose in both modes by pressing the sequencer button and any of the pads of the grid. The poly sequence will be transposed according to the lowest note.

CHORD vs POLY ?

Both are 128 steps long.

Both have 4 modulation lanes.

These two modes work totally differently. Chord mode allows you to enter chords from a predefined palette with different types and voicings, the grid view will appear to have individual steps placed while actual notes sent from the OXI One will be chords forming multiple notes.

Meanwhile Poly gives more freedom since you can enter notes as you wish, chord provides instant inspiration with a set of well organized chords in different scales (only diatonic scales are currently supported). Poly does not have access to the chord keyboard.

If you started writing a chord progression in Chord mode, and you feel you need further adjustments, bridge notes or other flourishes that chord doesn't provide, you can convert the mode to a Poly mode. There are two ways, copying the chord sequence into a poly sequencer or changing the mode of the sequencer from Chord to Poly. You cannot convert a Poly mode sequencer into a Chord sequencer and retain your current note grid.

MULTITRACK ?

128 steps.

8 tracks

1 modulation lane per track

Multitrack mode can handle 8 melodic or drum/sample tracks.

You can copy one track that you made in a mono sequencer to one of the tracks of a multitrack sequencer. Multitrack does not copy back to Mono Sequencers, it is a storage place for your Mono sequences

You can also access the Piano roll view of your selected track by pressing the OCT encoder.

Multitrack is not only for drums! You can set notes per step and other parameters similar to mono mode, furthermore there is a transposition setting per track, along with independent length, time division, and MIDI channel. Although, there is only one modulation lane per track (8 in total) and the

glide control affects all the steps on the track, if you use Multitrack with all tracks set to the same MIDI channel, you will have 8 Modulation lanes available to send along with 8 note polyphony.

MONOME GRID

Keep the **SHIFT** button pressed when powering on your OXI One to enable the operation as a **128 GRID** device. To go back to normal operation, restart your OXI One by pressing the power button.

MIDI REMOTE CONTROL

If you want to Remote Control OXI One from your DAW or any other MIDI device you can do so. Here you can find the MIDI [Remote Control Documentation](#).

MIDI MAPPINGS

MIDI MAPPINGS PARAMETERS

INTERNAL PARAMETER	OPTIMAL RANGE
Seq Enable (On/Off)	0 - 127 [Above offset is Disabled, else is Enabled]
Seq Mute	0 - 127 [Above offset is Muted, other is Unmuted]
Seq Division	0 - 8 [1 Bar, 1/2, 1/4, 1/8, 1/12, 1/16, 1/24, 1/32, 1/48]
Seq Direction	0 - 3 [Forward, Backward, Alternate, Random]
Seq Scale	1 - 31 [According to the Scales list]
Seq Root	0 - 11 [C, C#, D, D#, etc.]
Seq Swing	-40 - 40
Seq Roll	0 - 8 [OFF, 1/4, 1/6, 1/8, 1/12, 1/16, 1/24, 1/32, 1/48]
Seq Loop	0 - 127 [Sets the loop length from the start point]
Seq Loop Release	- [Loop is released independently of the value]
Seq Time Stretch	-120 - 120
Seq Time Offset	-100 - 100
Track Init*	0 - 127
Track End*	0 - 127
Mod Lane Enable	0 - 1
Mod Lane Offset	-100 - 100
Mod Lane Division	0 - 8 [1 Bar, 1/2, 1/4, 1/8, 1/12, 1/16, 1/24, 1/32, 1/48]
Mod Lane Init	0 - 127
Mod Lane End	0 - 127
Random Velocity	-100 - 100
Random Oct/Gate	-100 - 100

INTERNAL PARAMETER	OPTIMAL RANGE
Random Trig Probability	0 - 100
Random Retrigger	-100 - 100
Global Tempo	The input value will be multiplied by 10.
Global Fill	0 - 1
Global Reset	0 - 1
Random Generator	0 - 1
Pattern Reload	0 - 1
Tap Tempo	0 - 1
Record Toggle	0 - 1

* Also Affects Euclidean Length

INTERNAL DESTINATIONS

Depending on the sequencer mode, there are different internal destinations available.
Remember: LFOs and Ext CV are bipolar while MOD lanes are unipolar (unless offset is applied).

COMMON TO ALL MODES	Optimal Range	Available in LFO	Available in Mod Lane	Available in Mod Matrix MIDI Assignment	Available in Mod Matrix CV Assignment
Velocity	0 - 100	Yes	Yes	Yes	Yes
Pitch (scale quantized)	0 - 36	Yes	Yes	Yes	Yes
Octave	0 - 4	Yes	Yes	Yes	Yes
Gate	0 - 100	Yes	Yes	Yes	Yes
CV Pitch Bend	0 - 100	Yes	Yes	Yes	Yes
Division Mod	0 - 100	Yes	Yes	Yes	Yes
Retrigger	0 - 8	Yes	Yes	Yes	Yes
Trigger Probability	0 - 100	Yes	Yes	Yes	Yes
CV Glide	0 - 100	Yes	Yes	Yes	Yes
Keyboard Arp Division	0 - 3	Yes	Yes	Yes	Yes
Keyboard Arp Oct	0 - 3	Yes	Yes	Yes	Yes
Keyboard Arp Type	0 - 10	Yes	Yes	Yes	Yes
LFO 1 Wave	0 - 10	Yes	Yes	Yes	Yes
LFO 1 Rate	0 - 10 (if synced) or 0-100 (free running)	Yes	Yes	Yes	Yes
LFO 1 Amount	0 - 100	Yes	Yes	Yes	Yes
LFO 2 Wave	0 - 10	Yes	Yes	Yes	Yes
LFO 2 Rate	0 - 10 (if synced) 0-100 (free running)	Yes	Yes	Yes	Yes
LFO 2 Amount	0 - 100	Yes	Yes	Yes	Yes

POLY	Optimal Range	Available in LFO	Available in Mod Lane	Available in Mod Matrix MIDI Assignment	Available in Mod Matrix CV Assignment
Poly Arp Div	0 - 3	Yes	Yes	Yes	Yes
Poly Arp Oct	0 - 7	Yes	Yes	Yes	Yes
Poly Arp Type	0 - 10	Yes	Yes	Yes	Yes

CHORD	Optimal Range	Available in LFO	Available in Mod Lane	Available in Mod Matrix MIDI Assignment	Available in Mod Matrix CV Assignment
Chord Root	0 - 7	Yes	Yes	Yes	Yes
Chord Type	0 - 10	Yes	Yes	Yes	Yes
Chord Voicing	0 - 7	Yes	Yes	Yes	Yes
Strum	0 - 100	Yes	Yes	Yes	Yes
Spread	0 - 7	Yes	Yes	Yes	Yes
Chord Arp Division	0 - 3	Yes	Yes	Yes	Yes
Chord Arp Octave	0 - 7	Yes	Yes	Yes	Yes
Chord Arp Type	0 - 10	Yes	Yes	Yes	Yes

MULTITRACK	Optimal Range	Available in LFO	Available in Mod Lane	Available in Mod Matrix MIDI Assignment	Available in Mod Matrix CV Assignment
Euclidean pulse	0 - 16	Yes	Yes	Yes	Yes
Euclidean rotation	0 - 16	Yes	Yes	Yes	Yes
Pattern generator: Kick density	0 - 100	Yes	Yes	Yes	Yes
Pattern generator: Snare density	0 - 100	Yes	Yes	Yes	Yes
Pattern generator: Hihat density	0 - 100	Yes	Yes	Yes	Yes
Pattern generator X	0 - 100	Yes	Yes	Yes	Yes
Pattern generator Y	0 - 100	Yes	Yes	Yes	Yes
Patt generator Chaos	0 - 100	Yes	Yes	Yes	Yes

STOCHASTIC	Optimal Range	Available in LFO	Available in Mod Lane	Available in Mod Matrix MIDI Assignment	Available in Mod Matrix CV Assignment
Note probability	0 - 7	Yes	Yes	Yes	Yes
Pitch Lock %	0 - 7	Yes	Yes	Yes	Yes
Rhythm Lock %	0 - 7	Yes	Yes	Yes	Yes
Positive division %	0 - 3	Yes	Yes	Yes	Yes
Negative division %	0 - 3	Yes	Yes	Yes	Yes
Higher Octave	0 - 3	Yes	Yes	Yes	Yes
Lower Octave	0 - 3	Yes	Yes	Yes	Yes

MATRICEAL	Optimal Range	Available in LFO	Available in Mod Lane	Available in Mod Matrix MIDI Assignment	Available in Mod Matrix CV Assignment
Note interval	0 - 5	Yes	Yes	Yes	Yes

MOD MATRIX PARAMETER DESTINATION COMMON TO ALL MODES	Optimal Range	Available in LFO	Available in Mod Lane	Available in Mod Matrix MIDI Assignment	Available in Mod Matrix CV Assignment
Seq Enable (On/Off)	0 - 127 [Above offset is Disabled, else is Enabled]	No	No	Yes	No
Seq Mute	0 - 127 [Above offset is Muted, other is Unmuted]	No	No	Yes	No
Seq Division	0 - 8 [1 Bar, 1/2, 1/4, 1/8, 1/12, 1/16, 1/24, 1/32, 1/48]	No	No	Yes	No
Seq Direction	0 - 3 [Forward, Backward, Alternate, Random]	No	No	Yes	No
Seq Scale	1 - 31 [According to the Scales list]	No	No	Yes	No
Seq Root	0 - 11 [C, C#, D, D#, etc.]	No	No	Yes	No
Seq Swing	-40 - 40	No	No	Yes	No
Seq Roll	0 - 8 [OFF, 1/4, 1/6, 1/8, 1/12, 1/16, 1/24, 1/32, 1/48]	No	No	Yes	No

MOD MATRIX PARAMETER DESTINATION COMMON TO ALL MODES	Optimal Range	Available in LFO	Available in Mod Lane	Available in Mod Matrix MIDI Assignment	Available in Mod Matrix CV Assignment
Seq Loop	0 - 127 [Sets the loop length from the start point]	No	No	Yes	No
Seq Loop Release	- [Loop is released independently of the value]	No	No	Yes	No
Seq Time Stretch	-120 - 120	No	No	Yes	No
Seq Time Offset	-100 - 100	No	No	Yes	No
Track Init*	0 - 127	No	No	Yes	No
Track End*	0 - 127	No	No	Yes	No
Mod Lane Enable	0 - 1	No	No	Yes	No
Mod Lane Offset	-100 - 100	No	No	Yes	No
Mod Lane Division	0 - 8 [1 Bar, 1/2, 1/4, 1/8, 1/12, 1/16, 1/24, 1/32, 1/48]	No	No	Yes	No
Mod Lane Init	0 - 127	No	No	Yes	No
Mod Lane End	0 - 127	No	No	Yes	No
Random Velocity	-100 - 100	No	No	Yes	No
Random Oct/Gate	-100 - 100	No	No	Yes	No
Random Trig Probability	0 - 100	No	No	Yes	No
Random Retrigger	-100 - 100	No	No	Yes	No

MOD MATRIX PARAMETER DESTINATION COMMON TO ALL MODES	Optimal Range	Available in LFO	Available in Mod Lane	Available in Mod Matrix MIDI Assignment	Available in Mod Matrix CV Assignment
Global Tempo	The input value will be multiplied by 10.	No	No	Yes	No
Global Fill	0 - 1	No	No	Yes	No
Global Reset	0 - 1	No	No	Yes	No
Random Generator	0 - 1	No	No	Yes	No
Pattern Reload	0 - 1	No	No	Yes	No
Tap Tempo	0 - 1	No	No	Yes	No
Record Toggle	0 - 1	No	No	Yes	No

* Also Affects Euclidean Length

OXI ONE SEQUENCER COLORS

You can personalize the color of the grid pads in any sequencer. To configure the desired color go to the 3rd page of Sequencer Setup (press **SHIFT** + **Sequencer** Number 3 times) and you will be able to select the color you want.

Here is the list of approximate colors:

Value	Color
0	Purple
10	Blue
23	Lilac
30	Violet
34	Baby Pink
39	Yellow
49	Magenta
61	Pink
69	Orange
77	White
79	Turquoise
90	Aquamarine
100	Light Blue

OXI DESKTOP APP

The OXI Desktop APP is available for Windows and MAC OS. Refer to our [website](#) to download it.

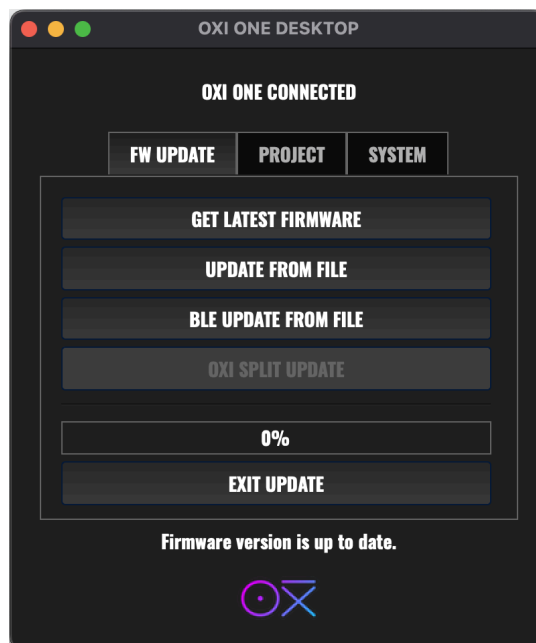
FIRMWARE UPDATE

The App allows you to update to a newer firmware.

Make sure your OXI One is in USB Device Mode. Check the [USB Host section in Config](#), otherwise your OXI One won't be recognized by your computer.

The APP will automatically detect the firmware version of your device and check if there's a newer version available on the server. You can press "Yes" to let the update process automatically start and you can press "What's new?" to read the release notes with all the new features and changes.

You may also use the Update from File button to upload a file version of a released or beta firmware. BLE Update from File is not recommended due to risk of dropped BLE connection during the firmware update.



PROBLEM DURING UPDATE (BRICKED OXI One)

If the update procedure fails you can do the following:

- Force power off by keeping pressed the power button.
- Turn the OXI One in update mode. To do so, press MUTE and then power On again.
- Repeat the procedure.

If the APP is not supported by your OS, you can use alternative ones like Sysex Librarian to send the update file to the OXI One.

PROJECTS BACKUP

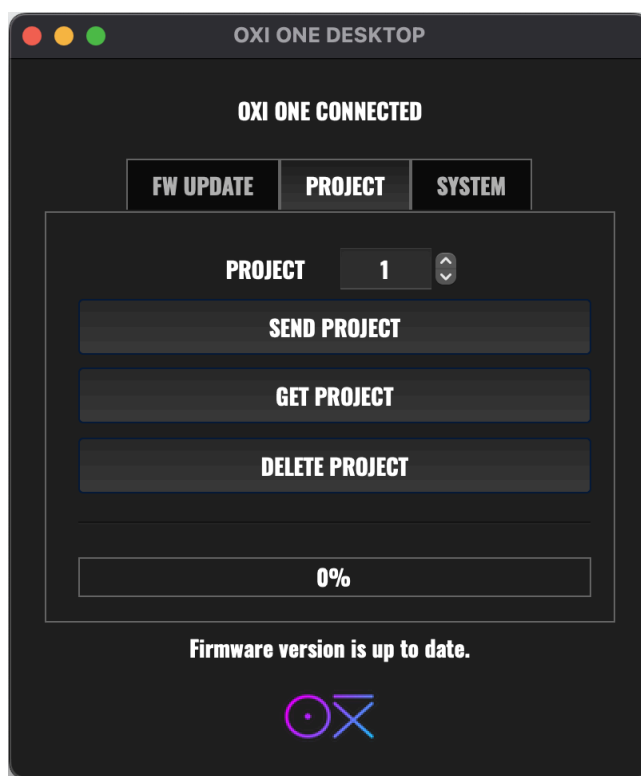
It is also possible to back up your projects on your computer and send them back later to the OXI One.

STOP THE PLAYBACK IN THE OXI ONE AND AVOID SENDING ANY MIDI DATA TO IT FROM ANY SOURCE !!

Select the project you want to backup and press GET PROJECT. A new folder will be created in your computer Desktop called "OXI_Files".

You can send projects back by first, selecting the destination project in the app, then browsing the project ".oxipro" in your computer and lastly pressing SEND PROJECT.

Wait until the procedure ends.



CALIBRATION

Every OXI One comes calibrated from the factory. The calibration has been made using high precision equipment. If for any reason the calibration procedure has to be repeated, please follow these instructions. Make sure to use a good reference like a 5 digit multimeter or a well tuned VCO (with V/Oct CV input) along with a Tuner.

To enter calibration mode, press SHIFT + cv gate for more than 2 seconds until OXI One switches to calibration mode indicated in the screen.

TIP: OXI One's Cvs have a range from -3V to +5V which represent the octaves from C-1 to C7 in the V/Oct format. ONE takes the MIDI note 12 as C-1.

CALIBRATION TABLE:

For each octave the following table indicates the values that ONE should output. This applies to each of the eighth CV outputs.

NOTE	EXPECTED VOLTAGE
C-1 [12]	-3V
C0 [24]	-2V
C1 [36]	-1V
C2 [48]	0V
C3 [60]	1V
C4 [72]	2V
C5 [84]	3V
C6 [96]	4V
C7 [108]	5V

Every point of the table has to be calibrated for each CV.

For example, if pressing C2, OXI shows 0.123V, the CV is uncalibrated in the C2 point by an offset of +0.123V

- To adjust it down you should press the immediate key below C2 which is B1. The output voltage would decrease around -0.002V (+2mV).
- To adjust it up, you should press the immediate key above C2 which is C#2. The output voltage would increase around +0.002V (-2mV).

If your meter does not have many decimal places, you will need to press several times until you start to see the voltage change.

If you press A#1 (instead of B1) or D2 (instead of C#2) the jump is bigger (20mV instead of 2mV) to speed up the process.

Press it repeatedly until the voltage offset is $\pm 0.003\text{V}$ ($\pm 3\text{mV}$) off the expected value.

Once you have finished with all the points of the calibration curve, press C8 to save.

You have to repeat the process with all the CV outputs.

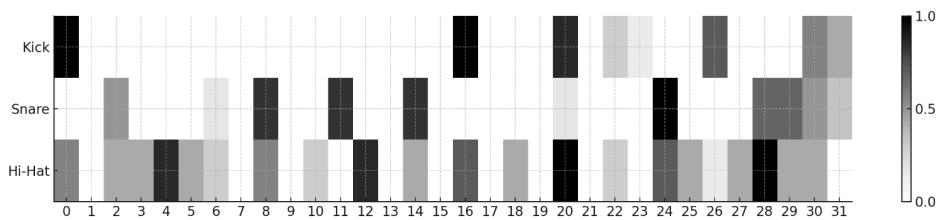
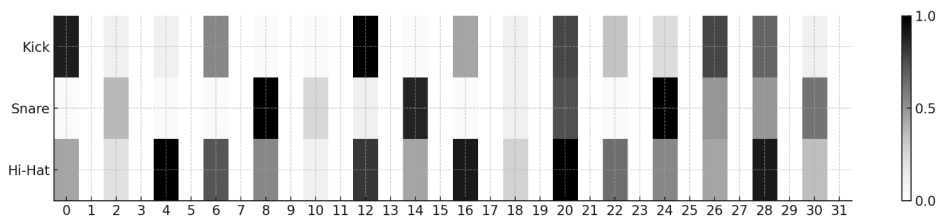
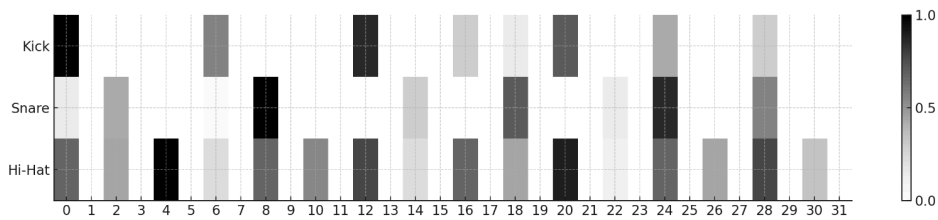
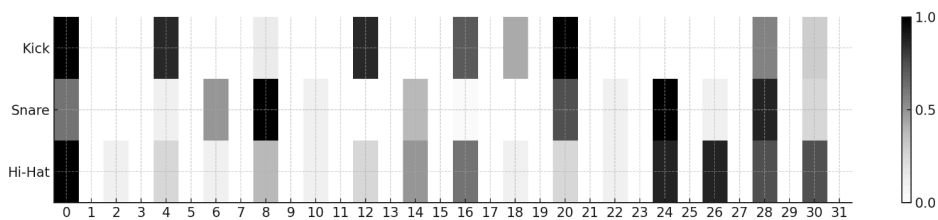
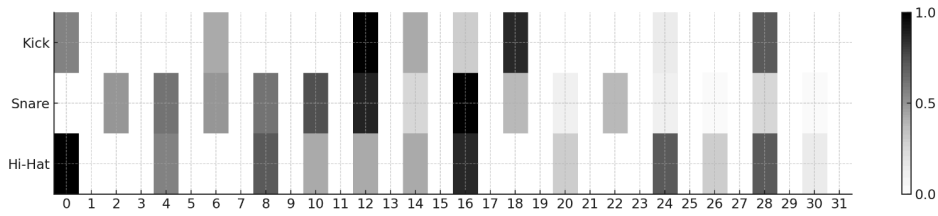
Every CV listens to a different MIDI channel, CV1 listens to MIDI Channel 1 and CV2, to the MIDI channel 2 and so on, until CV8 in channel 8.

You can do it with any keyboard connected to the MIDI IN port, but we recommend doing it in your DAW to better see the octave range.

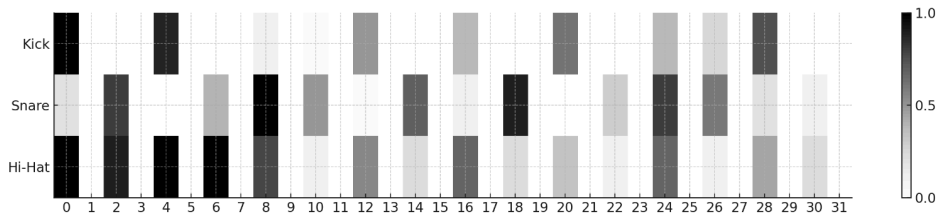
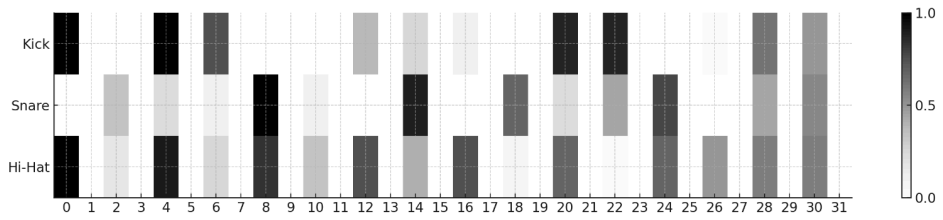
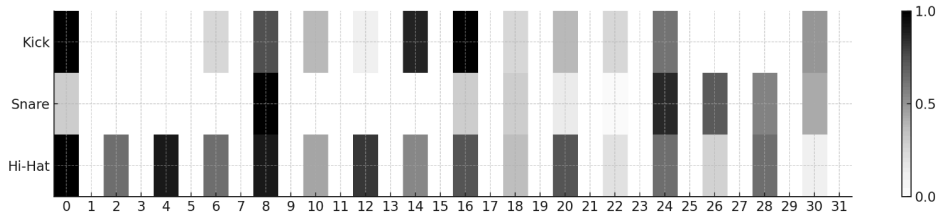
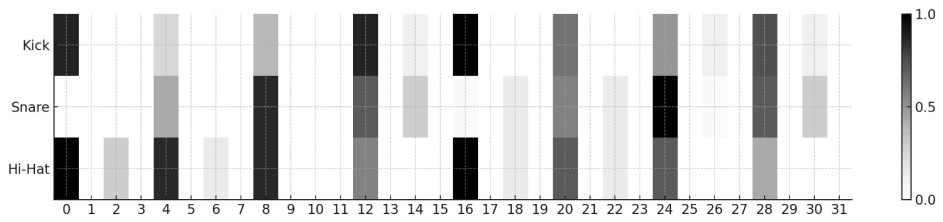
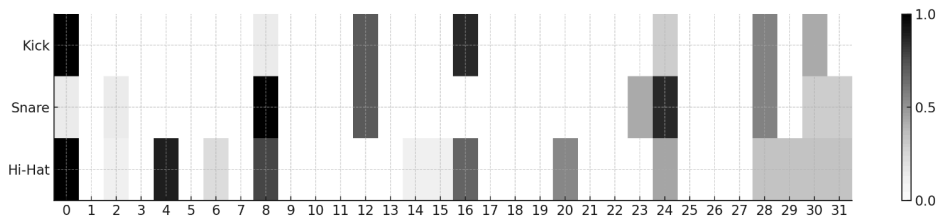
If you are an Ableton user, you can download [this project](#) that will help you along this process.

DRUM PATTERNS

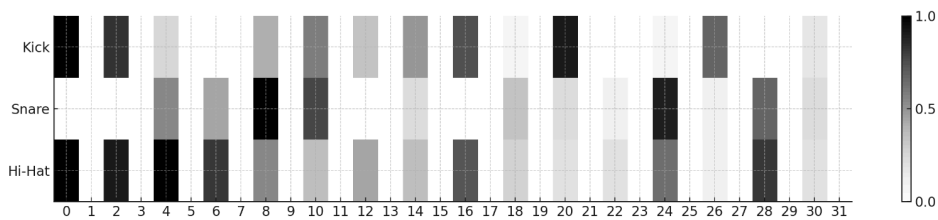
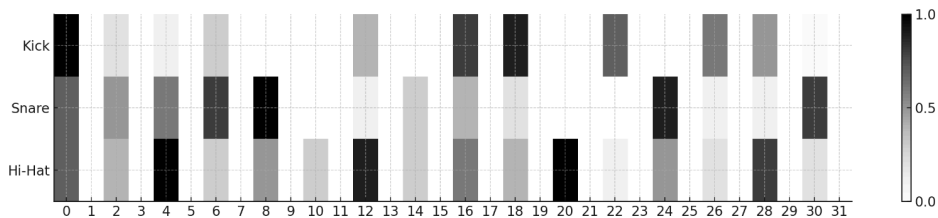
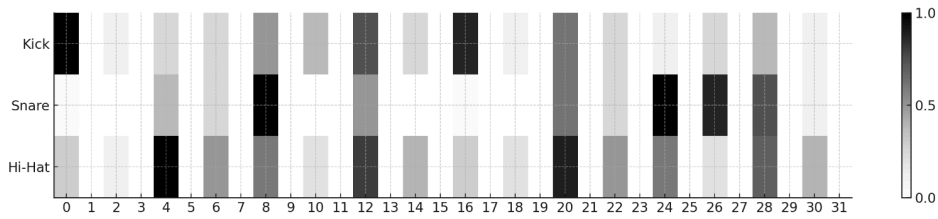
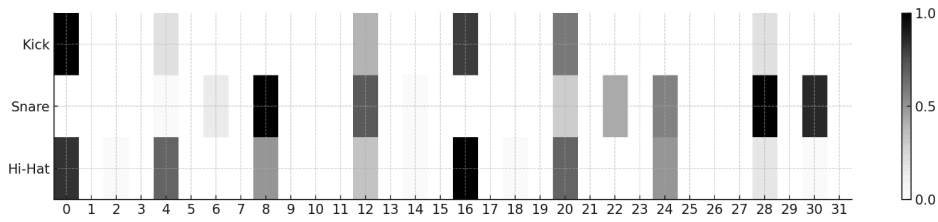
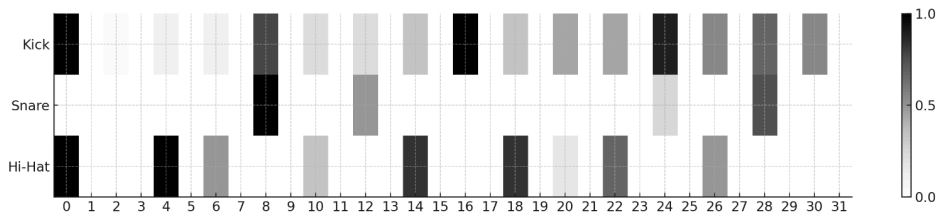
X from 0 to 17



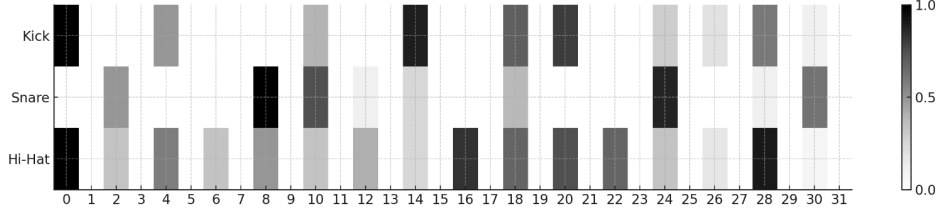
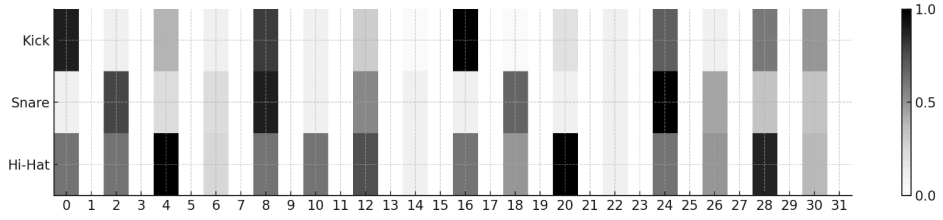
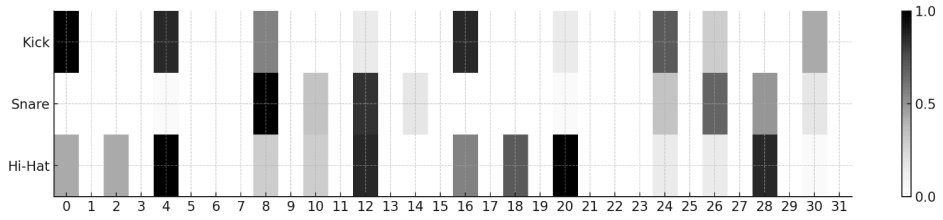
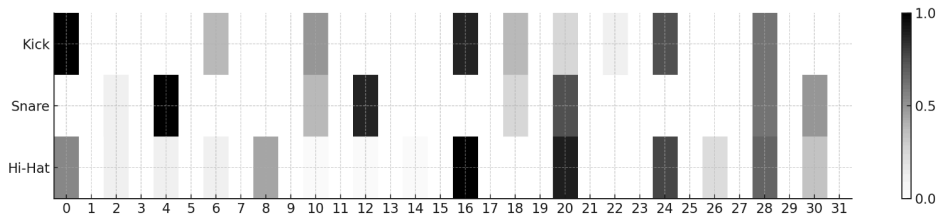
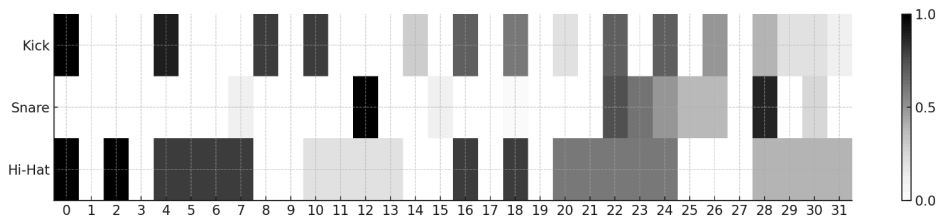
X from 18 to 35



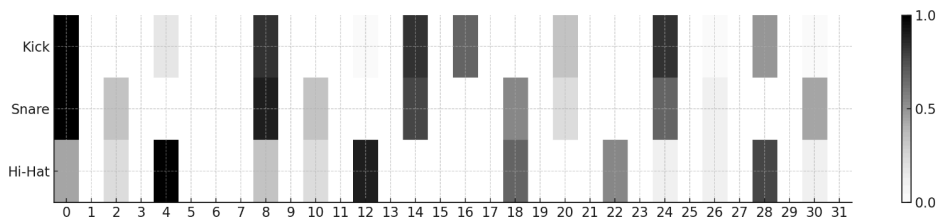
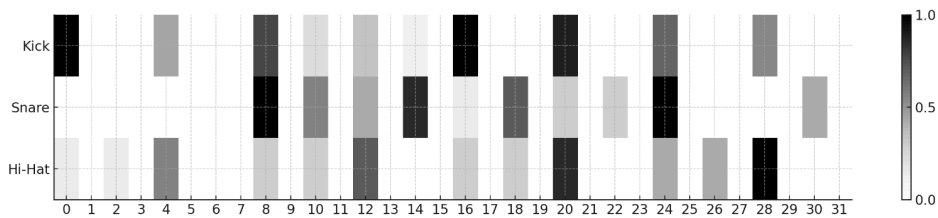
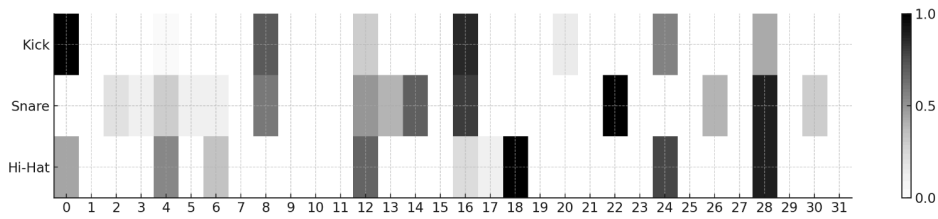
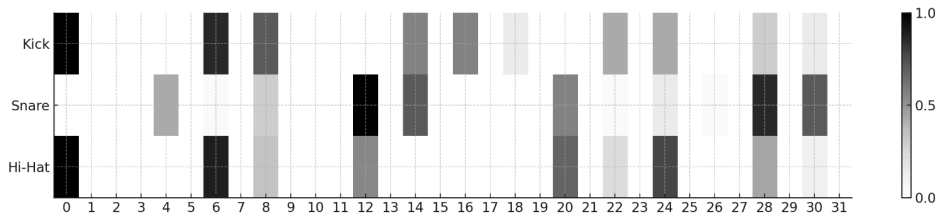
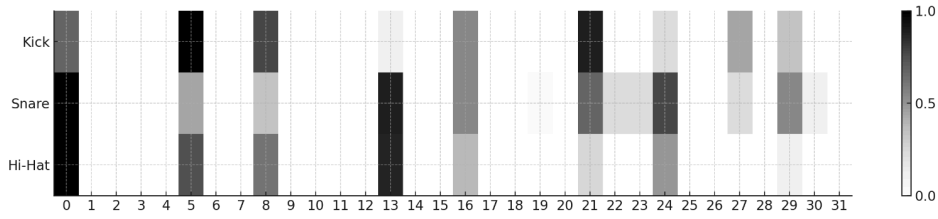
X from 36 to 53



X from 54 to 71

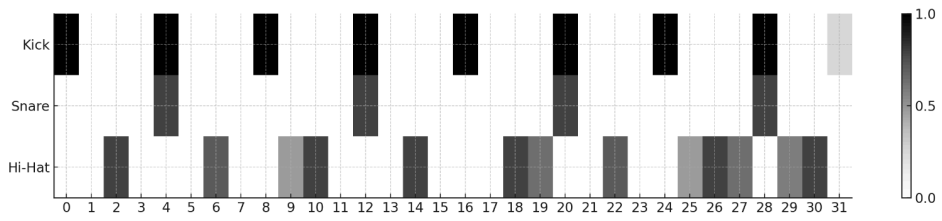


X from 72 to 89

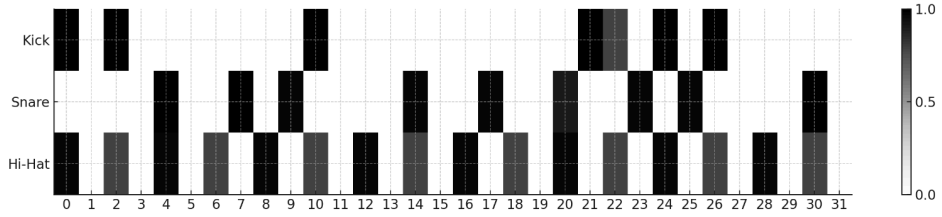


X from 90 to 97

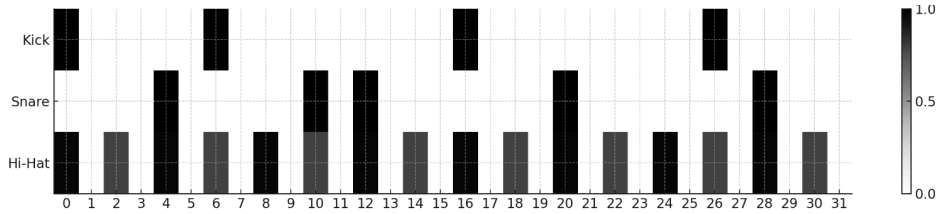
4 to the floor



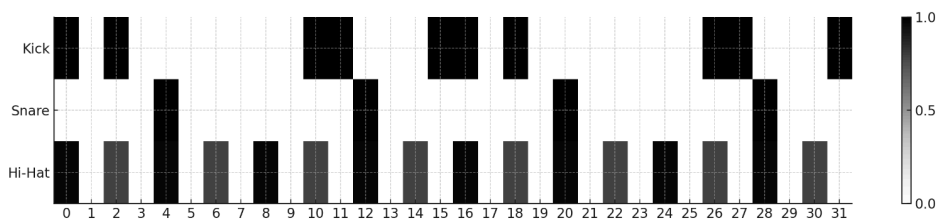
jungle



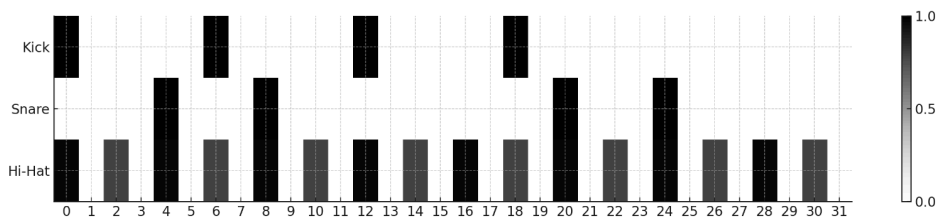
drum and bass



hip hop 1

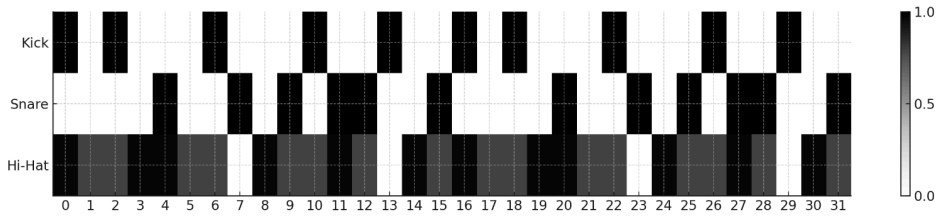


trap 1

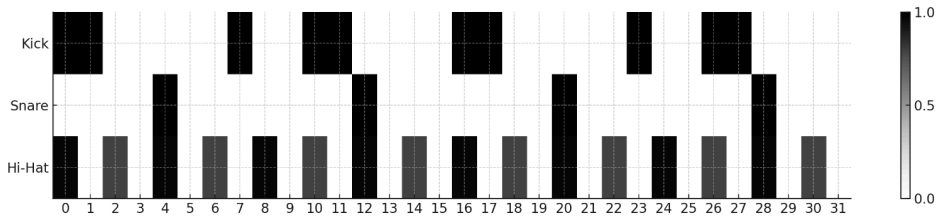


X from 98 to 127

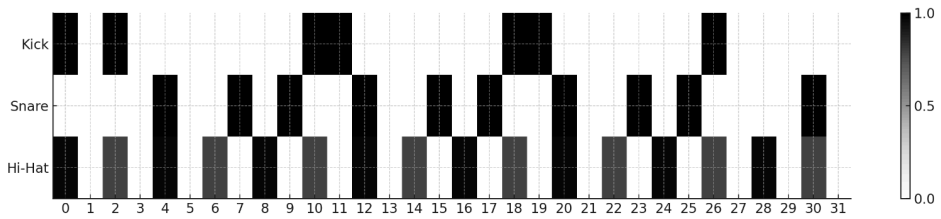
Funky drummer @Capsella



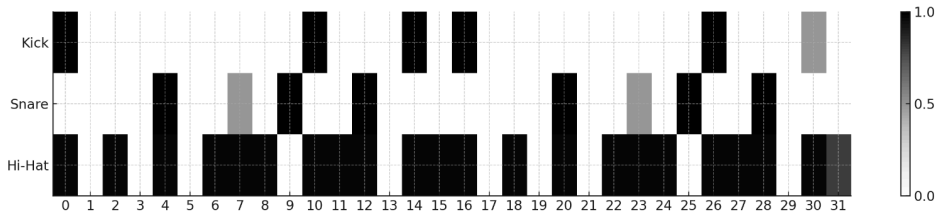
When the levee breaks @Capsella



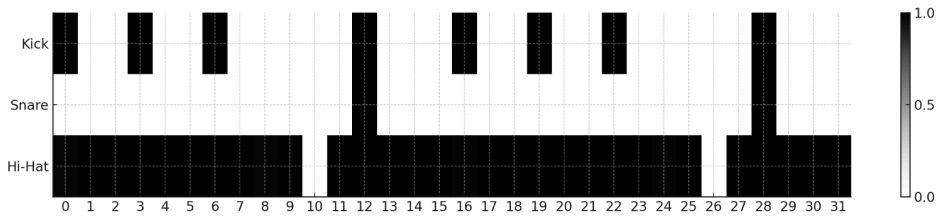
Amen brother @Capsella



Breakbeat @Wabbit



Dub @Wabbit



INSTRUMENT DEFINITIONS LIST

Coral	- OXI Instruments	NordDrum3	- NORD
Hydrasynth	- ASM	S-1	- Roland
MicroFreak	- Arturia	TR-6S	- Roland
Digitakt	- Elektron	TR-8S	- Roland
Digitone	- Elektron	MC101	- Roland
Syntakt	- Elektron	SH4d	- Roland
Analog 4 MKII	- Elektron	SE-02	- Roland
Model Cycles	- Elektron	TR-06	- Roland
Model Samples	- Elektron	System8	- Roland
NTS-1	- Korg	JX03	- Roland
Wavestate	- Korg	TB03	- Roland
Monologue	- Korg	JP08	- Roland
Minilogue xd	- Korg	JU06	- Roland
Monologue	- Korg	TB3	- Roland
Prologue	- Korg	TR09	- Roland
MEGAfm	- Twisted Electrons	TR08	- Roland
Blofeld	- Waldorf	JX08	- Roland
Super 6	- UDO Audio	Skulpt	- Modal Electronics
Grandmother	- Moog	TD3MO	- Behringer
Sub 37	- Moog	OCoast	- Make Noise
Subharmonic	- Moog	Microcosm	- Hologram
uMonsta2	- Audiothingies	Tanzbar1	- MFB
Nymphes	- Dreadbox	TanzbarLite	- MFB
OB-6	- Dave Smith	SynthII	- Gamechanger
Peak	- Novation	Microgranny	- Basil
OP-Z	- Teenage Engineering	QuadSwarm	- Eowave
GR-1	- Tasty Chips	Prophet 5/10	- Sequential

DECLARATION OF CONFORMITY

SPECIAL MESSAGE SECTION

This product utilizes rechargeable batteries. DO NOT connect this product to any power supply or adapter different than one described in the manual or specifically recommended by OXI Instruments. This product should be used only with the components supplied or, in case a non-official accessory is used, please observe that the specifications are the same as the official ones.

IMPORTANT: Don't try to open or disassembly the OXI One. For any technical problem it may have, please contact OXI Instruments for further information. Opening or disassembling the OXI One will void your warranty.

FCC INFORMATION (U.S.A)

1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!

This product meets FCC requirements once it is produced and assembled. Modifications not expressly approved by OXI Instruments may void your authority, granted by the FCC, to use the product.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Contains FCC ID: 2A094-MK02

2. IMPORTANT

When connecting this product to accessories and/or another product use only high- quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3. NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.devices.

DECLARATION OF CONFORMITY

The full text of the US declaration of conformity is available at the following internet address:
www.oxiinstruments.com/



EUROPE

This product complies with the requirements of **European Directive 2014/53/EU & Directive 2011/65/EU.**

The full text of the EU declaration of conformity is available at the following internet address
www.oxiinstruments.com/



ENVIRONMENTAL ISSUES:



This symbol indicates that this product should not be treated as domestic waste. Once its useful life has ended, it must be taken to a relevant collection point for the recycling of electrical appliances. Through the correct recycling of batteries and electrical devices, we contribute to avoiding risks to environmental health and safety.

Product Disposal Note: If this product is damaged beyond repair or, for any reason, its useful life is deemed to have expired, please inform yourself about local, state and European regulations regarding the proper disposal and recycling of products containing lead, batteries, plastics, among other materials, as well as collection points for these types of products.



These symbols indicate that this product contains batteries and cannot be disposed as domestic waste. Once its useful life has ended, it must be taken to a relevant collection point for the correct recycling of its batteries.

This product is classified as **Radio Equipment**.

SERIAL NUMBER LOCATION:

The serial number is located on the instrument body, in the label placed in the bottom side.

TERMS OF WARRANTY

REFUND POLICY (only in European Union)

The consumer has a total of 14 days from the acquisition of the OXI One to be able to return the product thus receiving a full refund of the price of it. The product must be in the same state and with all the original content in order to receive a full refund.

Shipping costs will be paid by the customer.

WARRANTY

OXI Instruments warrants the included hardware product and accessories against defects in materials and workmanship for two years from the date of original purchase. Unless proven otherwise, it will be presumed that the breaches of conformity manifested in a period of six months from the delivery of the product already existed on that date.

The warranty will not cover the repairing costs of the following cases:

- Misuse of OXI One, whether subject to extreme conditions, as using it incorrectly.
- Improper handling of the product.
- Normal wear and tear, nor damage caused by accident or abuse.
- Malfunction due to the use of accessories not authorized by OXI Instruments.

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