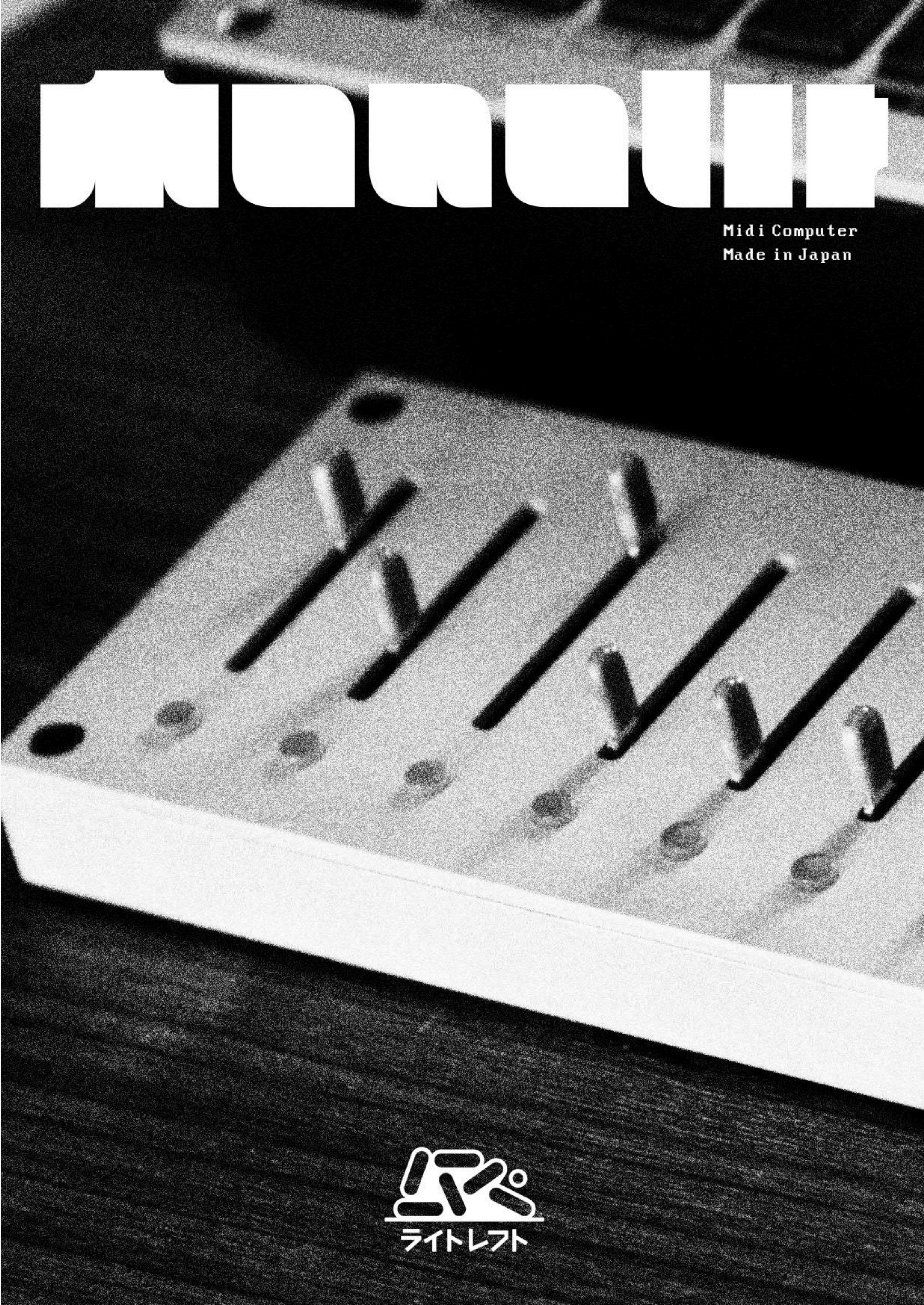
Midi Computer
Made in Japan
ライトレフト

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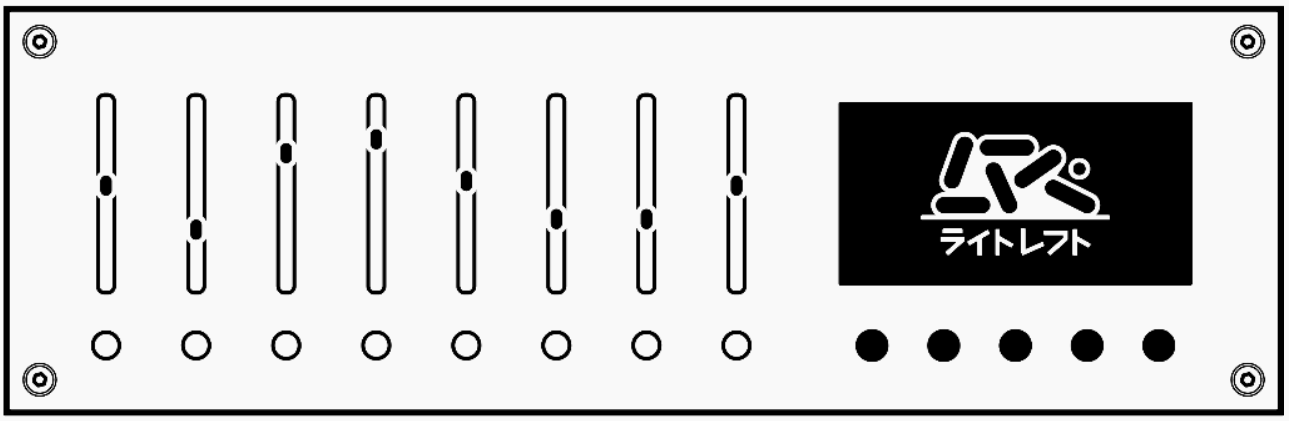
MONOLIT



MONOLIT is a central control hub for a MIDI setup, combining programming, control, and performance in a single device. All core actions are performed directly from the hardware surface, without the need to constantly rely on menus or external devices.

The device is designed so the same controls can serve different purposes depending on the task. Banks, sliders, and buttons are not locked to a single workflow and can be adapted to a specific setup, instrument, or working style.

MONOLIT is built for long sessions and scalable projects. It works equally well for simple patterns and complex structures, in the studio and on stage, for precise programming as well as hands-on performance. As you spend time with it, the workflow opens up naturally without forcing changes to how you work.

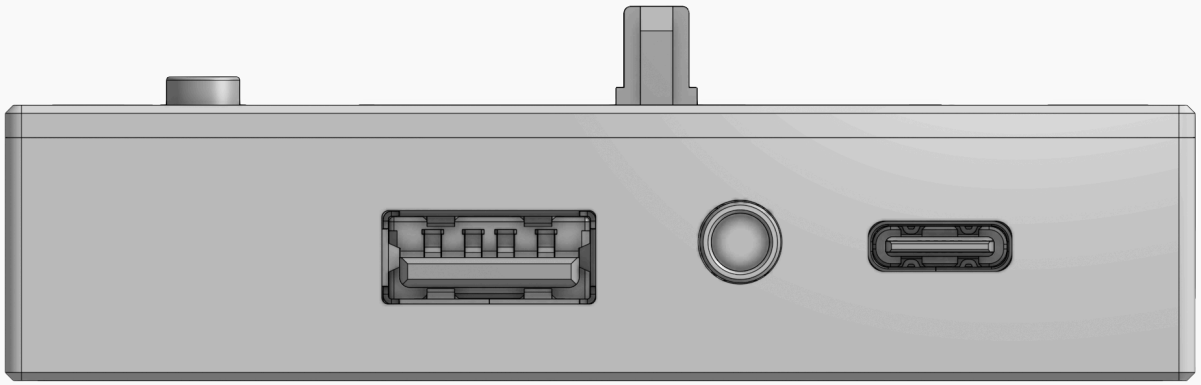
This manual covers the core concepts and operating principles. The best way to fully understand MONOLIT is to use it in a real setup, experiment with assignments, and develop a workflow that fits your way of making music.

SPECIFICATIONS

- **ENCLOSURE:** The casing and front panel are precision-machined from a single piece of aluminum.
- **DIMENSIONS AND WEIGHT:** 230x72x15mm, 350g
- **SCREEN:** 128x64 multi-bright monochrome display with a clear pixel font.
- **CONTROLS:** Eight sliders and thirteen buttons for comprehensive control.
- **BANKS:** Eight banks. Each bank can operate either as a classic slider bank or as a dedicated sequencer track, with full per bank customization.
- **MEMORY:** Easily save, load, edit, and switch between presets.
- **COMPATIBILITY:** MONOLIT integrates seamlessly with any DAW or hardware that supports MIDI.
- **CONNECTIVITY:** Connect external devices via TRS MIDI Type A, USB-C, and USB Host inputs.
- **MODES:** Multiple operation modes including CC, LFO, Motion, Notes, Sequencer and Performance.

HARDWARE INPUT AND OUTPUTS

MONOLIT features three connection ports: USB-C, TRS MIDI Type-A, and USB 2.0 Type-A.



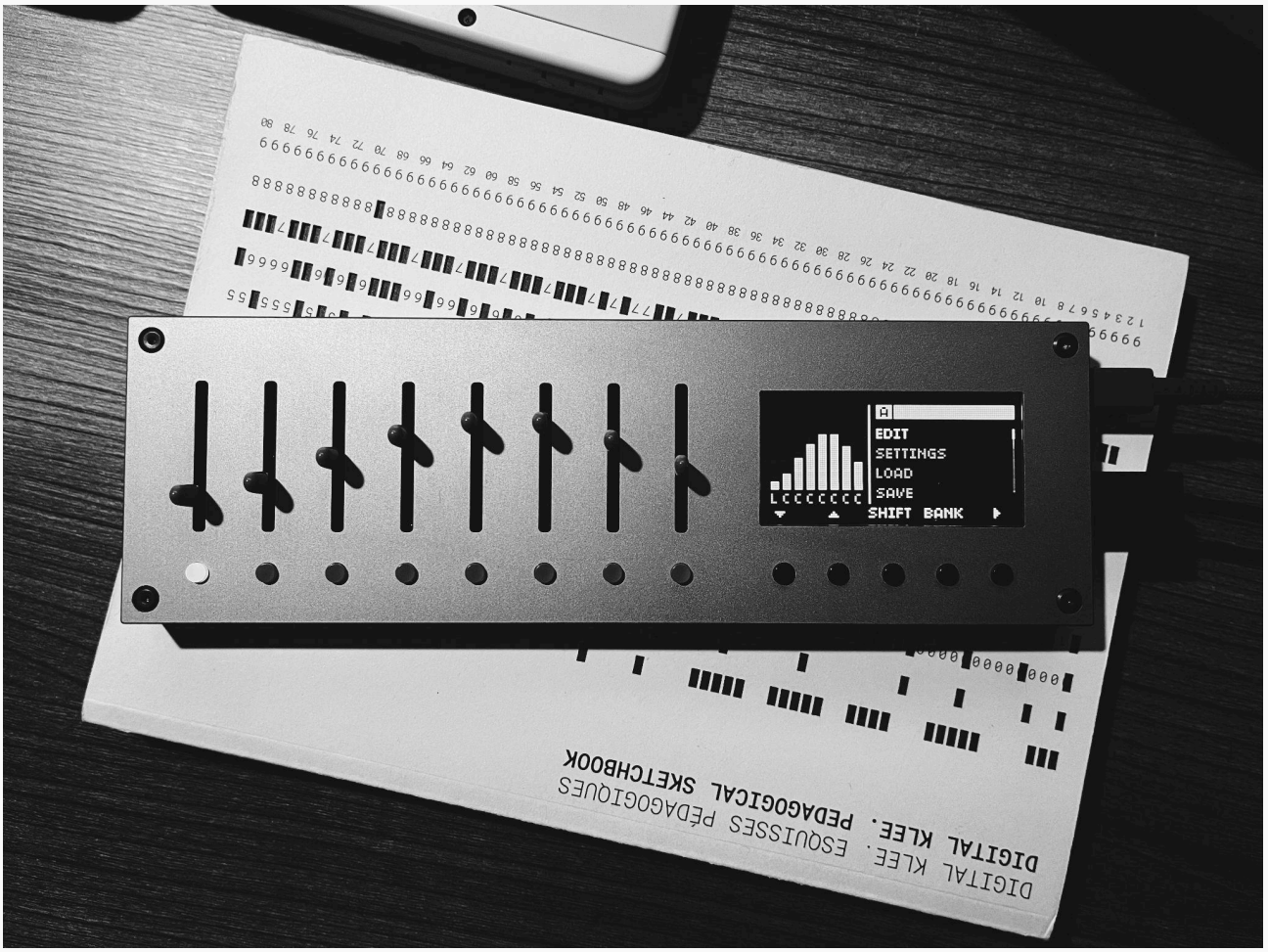
USB-C
The USB-C connection allows MONOLIT to interface with external devices sending MIDI messages directly over the USB-C cable.

TRS
The TRS connection sends MIDI messages out from MONOLIT. This enables the device to function as a MIDI hub.

USB 2.0 TYPE-A
This is used for connecting USB MIDI controllers and gamepads. This provides flexible control options, allowing you to use devices that lack traditional MIDI ports. USB 2.0 ensures reliable performance, broad compatibility, and easy setup.

USER INTERFACE

MONOLIT features a highly intuitive user interface:



On the left side are eight slider button pairs, the primary control surface for all parameters.

On the right side, **MONOLIT** includes a display and five navigation buttons that handle all menu operations. The display shows parameter values, CC numbers, channels, modes, and all edit menus exactly as you adjust them.

The interface is structured so that the left side is always the performance and control area, while the right side is the configuration area. Any time you edit a slider or button, its parameters appear on the display, along with available functions, ranges, and context specific options. This separation allows you to perform with the sliders while navigating menus without interrupting the current state of the controls.

NOTE: Sometimes new features are released faster than the manual is updated. If anything is unclear, you can always contact us through the form on our website, and we do our best to reply quickly.

DEFAULT STATE

On start up, **MONOLIT** assigns all eight sliders and eight buttons to **CC mode** (Control Change mode). In this mode, you can adjust parameters on your connected MIDI devices.

The sliders can smoothly control values across the full range of MIDI values. The buttons, by default, switch between the minimum and maximum MIDI values (0 or 127). They are initially configured in **momentary mode**, when the button is pressed, it sends the maximum value. When it is released, MONOLIT sends the minimum value.

MAIN MENU

In the **main menu**, navigation is handled using the buttons located below the screen. On the left are the **cursor control buttons**, followed by **SHIFT**, **BANK**, and **ENTER**.

- **BANK** – In the main menu, holding the **BANK** button lets you access eight banks for the selected preset. You can switch banks using the forward and backward arrows that appear on the screen or the corresponding buttons beneath the sliders.

  A bank can operate in two modes, Slider and Sequencer. The mode is selected with the **TYPE** button that appears when holding the **BANK** button. For more details on the Sequencer mode, see section SEQUENCER.

- **SHIFT** – Holding the **SHIFT** button activates additional functions, which are typically indicated on the screen. For example, you can copy slider settings. In the main menu, holding **SHIFT** and pressing **START** activates the internal clock, while tapping tempo (**TAP**) adjusts the BPM. Pressing the **PANIC** button while holding **SHIFT** stops all MIDI messages. In the Save menu, holding **SHIFT** allows you to delete a saved file.

NOTE: In the **EDIT MENU**, you can adjust parameter values by holding **SHIFT** and using the slider for the selected track. This method is convenient for quickly changing values across a wide range. For more precise adjustments, use **ENTER** along with the **+** and **–** buttons.

In the main menu all sub-menus are displayed:

- **EDIT** - menu to modify the behaviour of all controllers (sliders and buttons)
- **SETTINGS** - menu to setup or reset the MONOLIT as well as for doing the firmware update
- **LOAD** - load presets
- **SAVE** - save presets
- **EXTERNAL DEVICE** - setup how external MIDI devices are interpreted by the MONOLIT
- **GRID** - setup how Monome Grid is interpreted by the MONOLIT
- **GAMEPAD** - setup how a gamepad is interpreted by the MONOLIT

EDIT MENU

Edit mode allows you to adapt MONOLIT's behaviour to your needs. It can be highly customized.

We can enter the edit menu from the main menu by using the buttons under the display. Here, we can change how each button and slider works.

Once inside the edit menu, you can select the controllers to customize. Pressing a button located under a slider allows you to pair them for editing.

To edit the parameter, press the rightmost button under the display or press shift to start changing the selected slider.

SLIDER AND BUTTON EDITING

The Edit menu has two sections: the first is dedicated to changing the behavior of a slider, and the second to changing the behavior of a button. The button's behavior depends on the selected slider mode. Currently, editing a button's behavior is only available in the slider's CC mode; in the other three modes, the button is preconfigured in its behavior.

NOTE :Use **Shift** in the **Edit** menu to **copy** and **paste** sliders. The entire slot is copied, including both the slider and its button. The button and slider cannot be copied separately.

MODES

The first parameter in the editing menu is the mode. By changing this parameter, we can set up four different modes of behaviour for a selected slider and button. This parameter also changes consecutive parameters, which correspond with the mode.

- **CTRL (CC, PBEND+, PBEND-, CHNL P, POLY AT)**
- **NOTES**
- **LFO**
- **MOTION**

CTRL MODE

CTRL mode lets you assign a specific MIDI message type to a control for direct and flexible parameter manipulation.

- **CC -** Standard Control Change for hardware/software parameters.
- **PBEND+ -** Positive Pitch Bend offset (increase pitch/value).
- **PBEND- -** Negative Pitch Bend offset (decrease pitch/value).
- **CHNL P -** Channel Pressure (mono aftertouch for the entire MIDI channel).
- **POLY AT -** Polyphonic Aftertouch (per-note aftertouch).

CC PARAMETERS

- **CHANNEL -** changes the MIDI channel through which MIDI messages will be sent.
- **CC NUM -** control change number. Up to 128 different CCs (from 0 to 127) can be used per channel. If the chosen CC is already used by other controls, a little cross will be displayed before the number.
- **MIN -** sets the minimum value for the sent MIDI messages
- **MAX -** sets the maximum value for the sent MIDI messages

- **EXT CC** - lets you select a Control Change source that drives the current slider, either from within Monolit or from an external MIDI controller. In the settings, you can select the external CC number and the MIDI channel.
- **TIME -** creates a time lag for changed slider values.
- **RENAME -** allows you to name or change the selected slider. By default, the name includes information about the MIDI channel and message type, but it can be edited. When the name is edited, the first two buttons under the display allow you to navigate between characters and change them using the sliders. By pressing the Shift key, you can delete unnecessary characters. If a USB keyboard is connected to the MONOLIT, it can be used for easier renaming.

CC MODE BUTTON EDITING

In CC mode, a button can be assigned to different message types: CC, NOTE, PROGRAM, or BPM.

- **CC (Control Change)** - lets you change the values of a controlled parameter.
- **NOTE** - allows you to send out a MIDI message as a MIDI note.
- **PROGRAM** - sends a program change MIDI message, for example, to switch between different states or presets of a controlled device.
- **BPM** - changes the tempo of the internal clock.

BUTTON: CC PARAMETERS

- **CHANNEL** - changes the MIDI channel through which MIDI messages will be sent.
- **MODE** - In MOMENT mode, the button sends a high MIDI value when it is held; once it is released, the low MIDI value is sent. TOGGLE mode makes the button work as a switch between high and low MIDI values; the button does not need to be held..
- **CC NUM** - Up to 128 different control change (CC) (from 0 to 127) can be used per channel. If the chosen CC is already used by other controls, a little cross will be displayed before the number.
- **CC STEPS** - (only possible in the TOGGLE mode) increases the number of steps for button output values. The maximum number of steps is 10. That allows you to have MIDI values between the minimum and maximum for the output.
- **MIN** - sets the minimum value for the sent MIDI messages.
- **MAX** - sets the maximum value for the sent MIDI messages.
- **INVERT** - inverts sent button values. In MOMENT mode, the default sent value is a high MIDI value; once it is held, the low MIDI value is output.

BUTTON: NOTE PARAMETERS

- **CHANNEL** - changes the MIDI channel through which MIDI messages will be sent.
- **MODE** - a button can operate in Momentary or Toggle behavior.
- **NOTE** - sets the sent MIDI note from a button. If the note is already used by another controller, a small cross will appear before the set MIDI note value.
- **VELOCITY** - controls the dynamics of the MIDI note being triggered or held.

- **RENAME** - allows you to name or rename the selected slider. When the name is edited, the first two buttons under the display enable you to navigate between characters and change those with sliders. By pressing the shift key, you can delete unnecessary characters. If a USB keyboard is connected to the MONOLIT, it can be used for easier renaming.

BUTTON: PROGRAM PARAMETERS

- **CHANNEL** - changes the MIDI channel through which MIDI messages will be sent.
- **PROGRAM NUM** - changes the MIDI program number to which the button will switch the controlled devices.

You can assign up to three Program Change messages to a single button.

BUTTON: BPM PARAMETERS

In BPM mode, a button has a single function: changing the BPM of the internal clock. For MIDI clock related settings, refer to the Settings menu.

NOTES MODE

The NOTES mode enables a slider to send MIDI notes once a specific section or point on the slider is reached.

NOTES PARAMETERS

- **CHANNEL** - changes the MIDI channel through which MIDI messages will be sent.
- **TYPE** - If TRIG is selected, a MIDI message is sent once when the slider reaches a specific point corresponding to a MIDI note. In Trig mode, two parameters can be adjusted: the trigger point and the length of the triggered MIDI note. If GATE is selected, the MIDI note is held while the slider remains within a specific range between defined points corresponding to MIDI notes. In this case, the button sends a Note Off message for the last played note, allowing it to be turned off manually.
- **MARGIN** - (only available in TRIG type) changes the spacing between MIDI note points.
- **LENGTH** - (only available in TRIG type) changes the length of triggered MIDI notes in milliseconds.
- **VELOCITY** - changes the strength in dynamics a MIDI note is triggered or held.
- **TIME** - creates a time lag for changed slider values. The time lag can fake a sequencer's behaviour in the notes mode.
- **STEPS** - changes how many MIDI note points are laid out on a slider. The maximum number of steps is 6, and the minimum is 2.
- **OFFSET** - creates an offset for all MIDI notes in semitones.
- **NOTE EDIT** - allows you to change the MIDI notes corresponding to the created steps. When editing is entered, the leftmost button under the display allows you to go through the steps and edit their MIDI notes with -/+. To make the process faster, you can hold shift and move the selected slider to edit MIDI notes.
- **RENAME** - allows you to name or rename the selected slider. When the name is edited, the first two buttons under the display enable you to navigate between characters and change those with sliders. By pressing the shift key, you can delete unnecessary characters. Use a USB keyboard to rename items more easily.

Button can not be edited in the notes mode and is currently disabled. Future firmware updates will allow for more flexibility.

LFO (LOW-FREQUENCY OSCILLATOR)

The LFO mode enables the usage of a slider as a low-frequency oscillator to modulate controlled parameters.

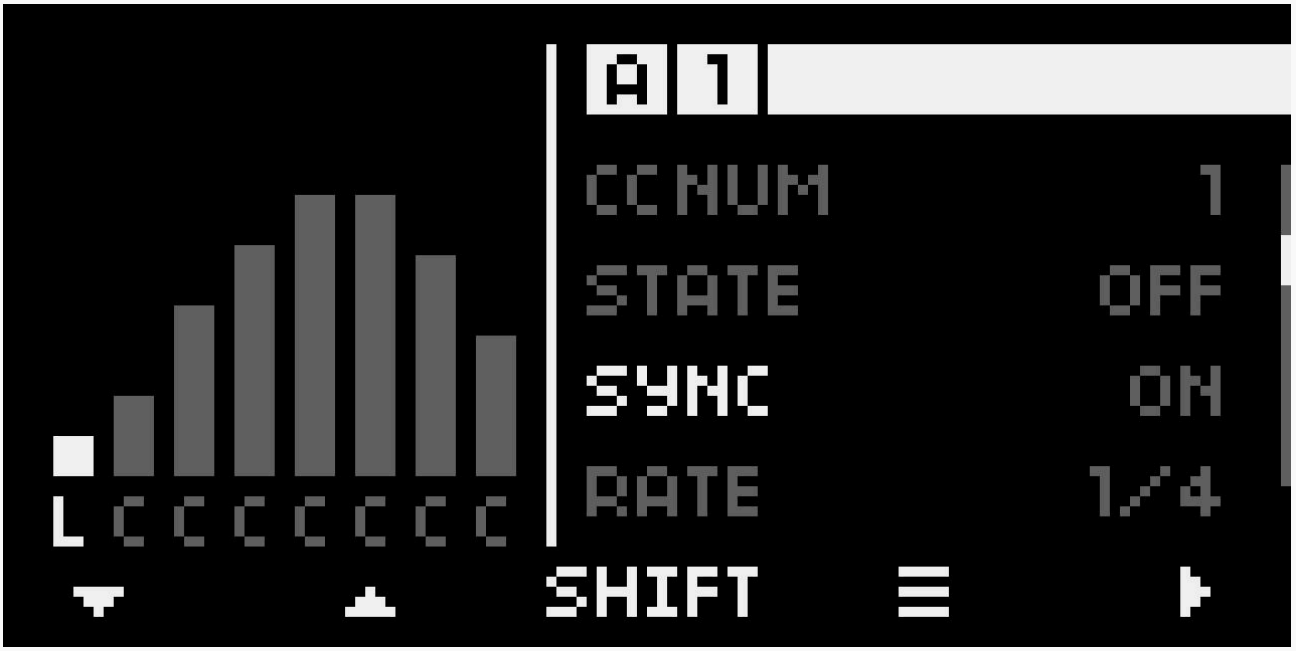
LFO PARAMETERS

- **CHANNEL** - selects the MIDI channel through which MIDI messages will be sent.
- **CC NUM** - control change number. Up to 128 different CCs (from 0 to 127) can be used per channel. If the chosen CC is already used by other controls, a little cross will be displayed before the number.
- **MIN** - sets the minimum value for the sent MIDI messages.
- **MAX** - sets the maximum value for the sent MIDI messages.
- **STATE** - activates or deactivates the LFO by default. In performance mode, you can switch this setting on the fly using the button under a slider.
- **SYNC** - Synchronize the LFO speed with MONOLIT's internal or external MIDI clock.
- **RATE** - changes the speed of the LFO in Hz (When Sync Rate is enabled, the value is set in steps instead of Hz. The rate follows the tempo and is expressed as musical divisions).
- **DEPTH** - changes the amplitude of LFO.
- **WAVEFORM** - switches the waveform of the LFO between sine, saw, square, random and reversed saw.
- **POLARITY** - makes the LFO work in different relations to the set slider value. POS - makes the LFO work in the positive range, starting from the slider value and going above it. NEG - the reverse of the POS (makes the LFO work in the negative range, starting from the slider value and going below it). BOTH - makes the LFO work in both polarities, centering the modulation around the slider value.
- **EXT CC** - lets you select a Control Change source that drives the current slider, either from within Monolit or from an external MIDI controller.In the settings, you can select the external CC number and the MIDI channel.
- **RENAME** - allows you to name or rename the selected slider. When the name is edited, the first two buttons under the display enable you to navigate between characters and change

those with sliders. By pressing the shift key, you can delete unnecessary characters. Use a USB keyboard for easier renaming.

NOTE: On the main screen, pressing the **button** toggles the LFO on or off. In edit mode, use **Shift + Button** to enable or disable the LFO.

LFO SYNC



The **LFO SYNC** function allows you to synchronize the Low-Frequency Oscillator (LFO) speed with MONOLIT's internal clock or an external MIDI clock. To activate the internal clock, press **SHIFT + START** on the main screen, and to stop it, press **SHIFT + STOP**.

To enable synchronization, activate the **SYNC** parameter in the main LFO menu; if the internal clock is selected, a menu will appear to set the BPM value.

LFO SYNC PARAMETERS

- **RATE** - Adjusts the LFO speed in synchronized mode.
- **BPM** - Allows you to manually set the BPM value when using internal synchronization.

MOTION MODE

Motion mode allows you to record the motion of a slider and play it back to create expressive automation of the modulated parameters. Motion is recorded when the button is held, and the slider is moved.

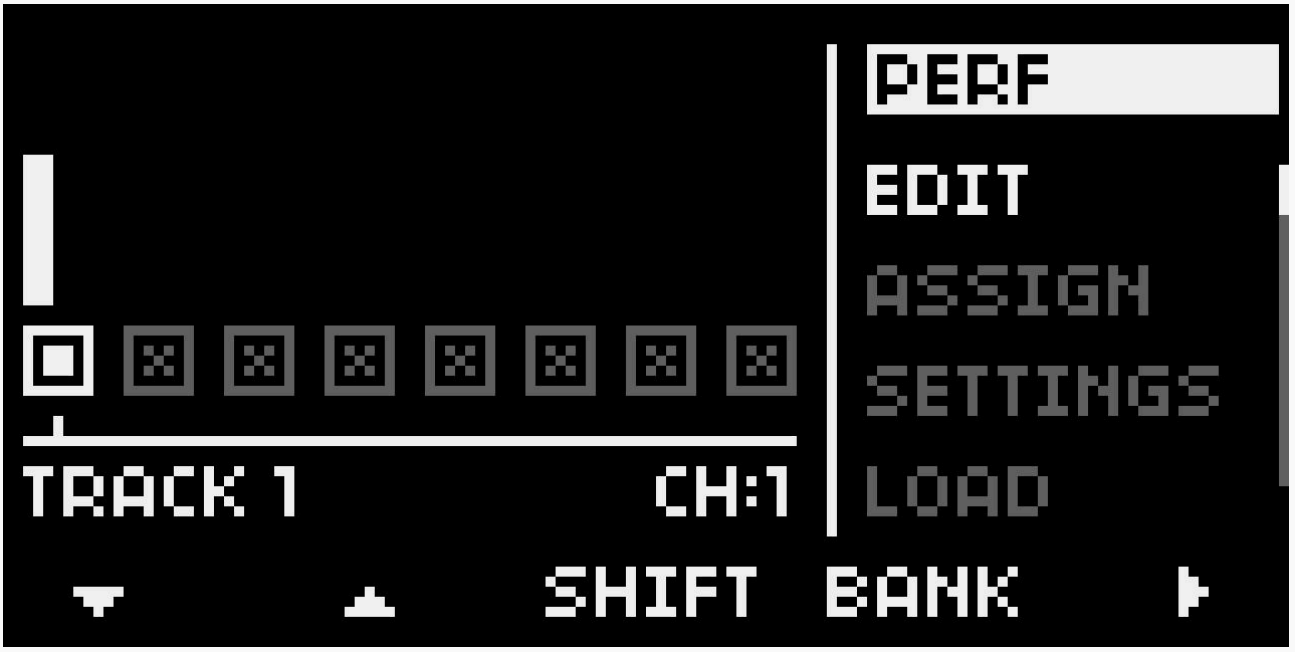
Each slider in Motion mode has a maximum loop time of 10 seconds.

MOTION PARAMETERS

- **CHANNEL** - changes the MIDI channel through which MIDI messages will be sent.
- **CC NUM** - control change number. Up to 128 different CCs (from 0 to 127) can be used per channel. If the chosen CC is already used by other controls, a little cross will be displayed before the number.
- **MIN** - sets the minimum value for the sent MIDI messages.
- **MAX** - sets the maximum value for the sent MIDI messages.
- **PLAY MODE** - when ONE is selected, the recorded motion is played back only once. If LOOP is selected, the motion will be looped after its recording.
- **AUTOPLAY** - this feature allows you to automatically playback the motion after its recording.
- **EXT CC** - lets you select a Control Change source that drives the current slider, either from within Monolit or from an external MIDI controller. In the settings, you can select the external CC number and the MIDI channel.
- **RENAME** - allows you to name or rename the selected slider. When the name is edited, the first two buttons under the display enable you to navigate between characters and change those with sliders. By pressing the shift key, you can delete unnecessary characters. Use a USB keyboard for easier renaming.

Button activates or deactivates the recorded motion. The motion is recorded when the button is held, and the slider is moved.

PERF (PERFORMANCE MODE)



Starting from version 2, each bank can operate either in Slider mode or Performance Mode.

PERF MODE includes two main functions: the **SEQUENCER** and **ASSIGN** mode. The main screen in perf mode shows banks used as sequencer tracks as active squares, while banks marked with crosses are standard slider banks described earlier.

On this screen you see eight cells. If the selected bank is a sequencer track, it is shown as a bright square, indicating that the track is active. Pressing the button toggles the track on and off, functioning as mute. The slider controls the track level, effectively the velocity.

Below, the track name is displayed, which can be changed in the Edit menu, along with the MIDI channel number. Keep in mind that you only control the currently selected bank. It is shown brighter on the screen, while the non selected banks appear dimmer in the background.

To change a bank type, simply press the **TYPE** button when selecting a bank.

You will see an icon in the form of three pixel steps, indicating that the selected bank is a sequencer track. You can also copy and paste banks and sequencer tracks by holding the Bank button.

SHIFT

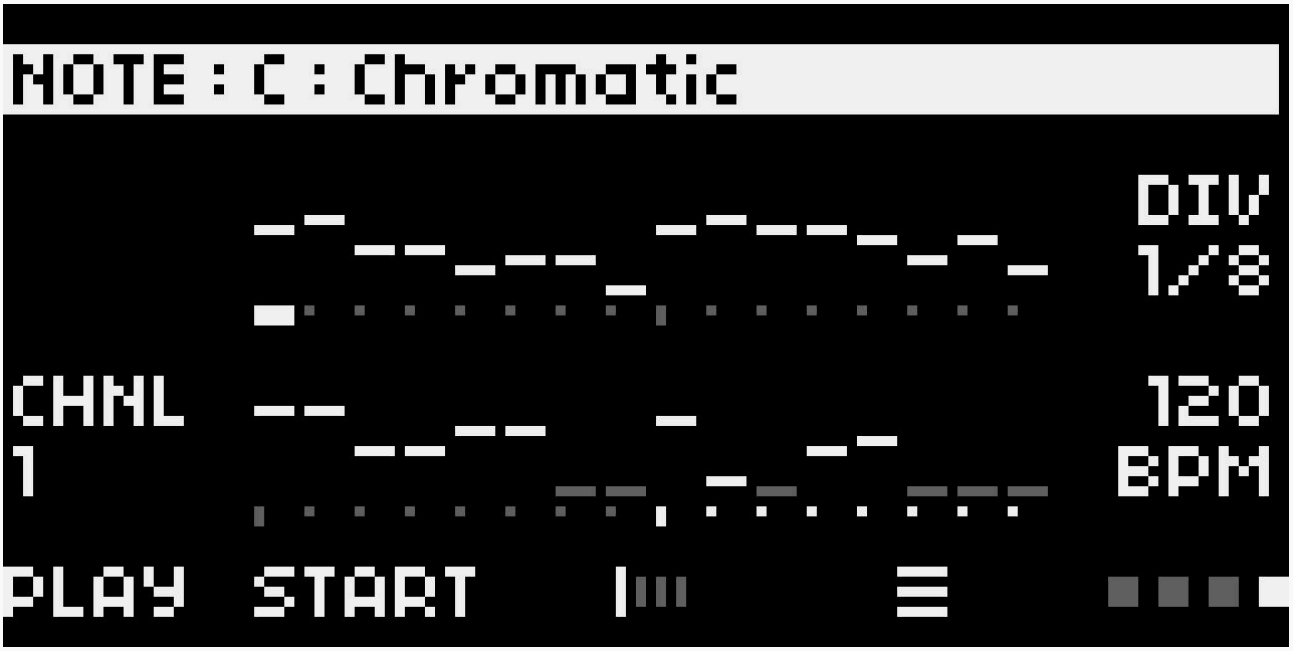
With Shift held on this screen, you can trigger START, which starts the clock and restarts all sequencer tracks from the beginning. STOP also works via Shift and stops the clock. The same screen provides TAP tempo and PANIC, which sends an all notes off message to stop all active signals.

Holding Shift lets you control the sliders defined in the ASSIGN menu.

While holding Shift, pressing the mute buttons sequentially lets you prepare mute and unmute states for multiple tracks at once. When Shift is released, all selected tracks switch their mute state simultaneously.

NOTE: In some cases, the clock may start automatically when certain sliders are activated, for example LFOs synced to the clock. In this case, the sequencer will also start.

SEQUENCER



The main sequencer screen displays the current state of the selected bank and provides full control over playback and track parameters.

The top line shows the note mode. In this example, NOTE C Chromatic means the sequencer operates in a chromatic scale starting from C. This immediately defines the tonal context in which the sequence is generated.

The central area displays the sequencer steps as horizontal markers. Each marker represents an active step. Vertical position corresponds to pitch, while the presence or absence of a marker indicates whether the step is played. Dim dots below form a visual time grid. The indicator beneath the notes shows the current sequencer position.

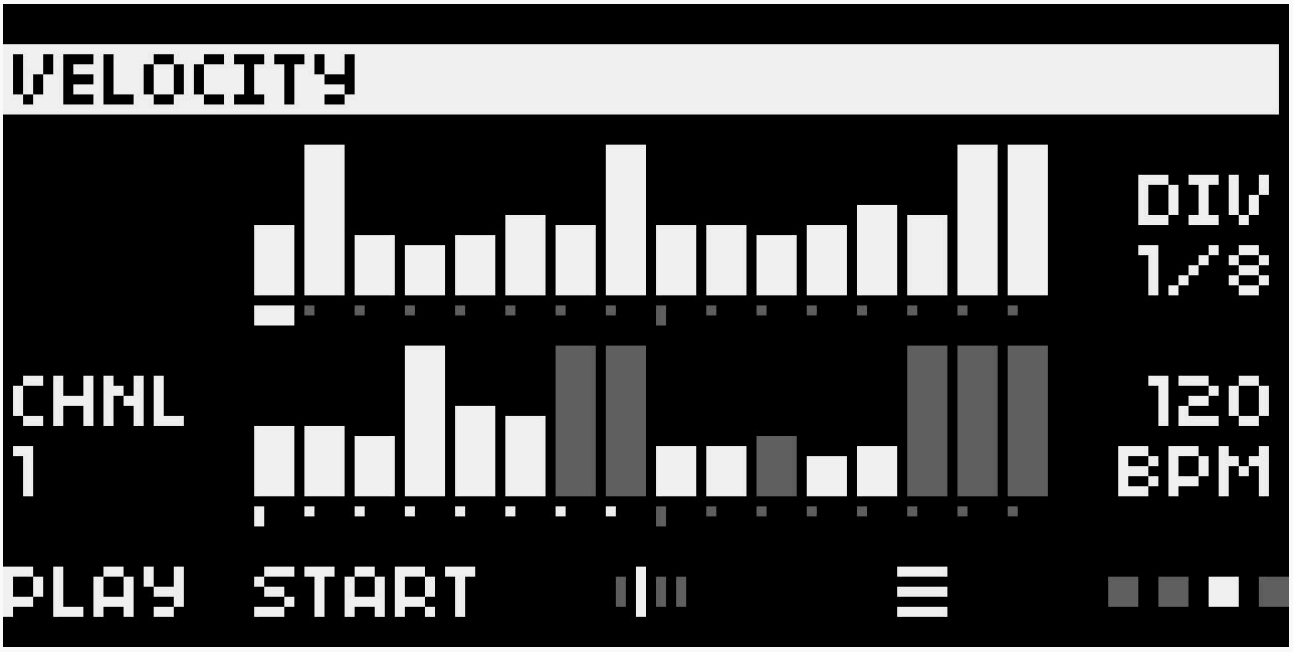
On the left, the MIDI channel of the selected bank is shown. CHNL 1 means the sequencer sends data on MIDI channel 1. All controls apply only to the selected bank, which is displayed brighter than the others.

At the bottom of the screen are the transport controls. PLAY and START trigger playback. On the right side is navigation to the VELOCITY, LENGTH, and TRACK SETTINGS screens.

On the right, the main parameters are displayed. DIV 1/8 defines the step time division. 120 BPM shows the current tempo and is a global setting. These values can be synchronized either internally or via external MIDI clock. The squares on the right indicate pages 1 to 4.

The main screen is designed for fast visual control. It allows you to immediately understand rhythm, melodic movement, tempo, and playback state without entering additional menus.

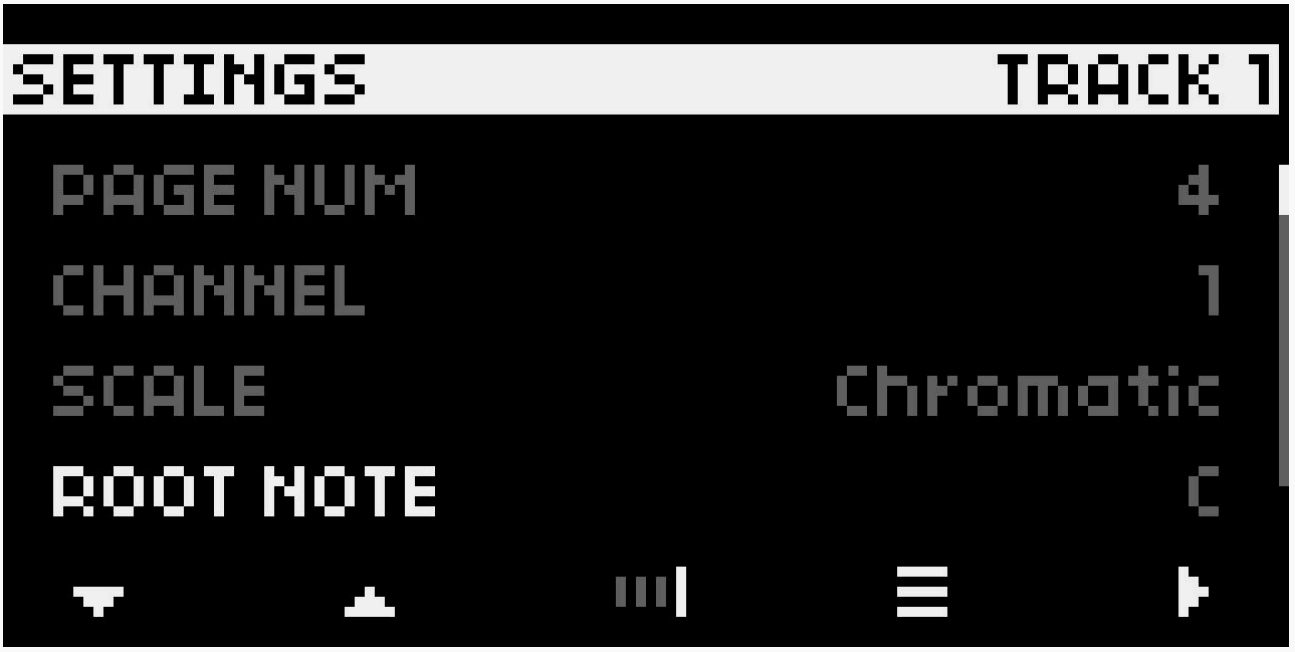
NOTE: Notes can be edited using the sliders, or by holding the button to adjust them step by step with the on-screen - and + controls. A note can also be copied and pasted by using a hold action. Entire pages can be copied as well by holding the page button.



The VELOCITY screen controls the dynamic level of each step in the sequence. Each step is represented visually, and the sliders are used to set velocity values independently per step. Higher positions correspond to stronger note velocity, while lower positions result in softer notes. This screen allows precise shaping of groove, accents, and overall feel without changing the note pitches.

The LENGTH screen defines the duration of each note. Each step can have its own note length, adjusted using the sliders. Short values create tight, percussive notes, while longer values allow notes to overlap or sustain. This screen is used to control articulation and phrasing, making it possible to create staccato patterns, legato lines, or evolving rhythmic textures.

TRACK SETTINGS



The TRACK SETTINGS screen is used to configure the core parameters of the selected track and defines how the sequencer interprets and outputs notes.

- **PAGE NUM** - sets the number of pages for the track. This determines the total length of the sequence. Increasing the number of pages allows for longer and more evolving patterns.
- **CHANNEL** - defines the MIDI channel on which the track sends notes. This makes it possible to control different instruments from the same sequencer.
- **SCALE** - selects the musical scale used by the sequencer. When a scale is selected, notes are automatically constrained to that scale, making it easier to create harmonically correct sequences. When Chromatic is selected, no scale constraints are applied.
- **ROOT NOTE** - sets the root note of the selected scale. Changing this parameter transposes the entire sequence without altering the step structure.
- **DIVISION** - sets the rhythmic resolution of the track, adjustable from 1/4 to 1/32. This defines the step density of the sequencer and how notes are distributed in time.
- **TEMPO** - sets the playback speed in BPM. This parameter is global and affects all tracks when the sequencer is running on its internal clock. When external MIDI clock is used, the tempo is taken from the incoming clock.
- **TRANSPOSE** - shifts all notes of the track up or down by a fixed number of semitones. This allows quick transposition of the entire sequence without changing the programmed steps.
- **SWING** - adjusts the timing offset between steps to add groove. Lower values keep the rhythm straight, while higher values introduce a shuffled, swung feel. Swing affects only timing and does not change note order or pitch.
- **PROBABILITY -** defines the chance that a step will be played. Lower values cause steps to be skipped more often, introducing variation and generative behavior, while higher values make playback more consistent. This parameter adds controlled unpredictability without altering the programmed pattern.

- **RANDOMIZER -** generates new note values for the track without affecting step positions, velocity, or note length. It changes only the pitches of existing steps. When a scale and root note are set, the randomizer works strictly within the selected key, ensuring all randomized notes remain musically consistent.
- **RENAME -** allows you to change the track name. This is useful for organizing projects, especially in setups with multiple tracks, making each track easier to identify at a glance.
- **CLEAR NOTES** - removes all note values from the track, clearing the sequence while preserving timing, velocity and note length.

The TRACK SETTINGS screen is used for global track configuration before fine editing of notes, velocity, and note length, allowing quick adaptation of a sequence to a specific instrument or musical context.

SEQUENCER RANDOMIZER

RANDOMIZER adds pitch variation to an existing sequence without affecting its rhythmic structure or performance dynamics.

The sub-menu consists of the following parameters:

- **STATE** - enables or disables the randomizer.
- **DISTANCE** - defines how far the randomized notes can move away from the original pitch.
- **RANGE** - sets the overall pitch range available for randomization.
- **CHANCE** - defines the probability that a note will be randomized.

ASSIGN

SLOT ASSIGN is used to keep access to sliders from different banks while working in the sequencer.

Each slot can be assigned to a specific slider from any bank. These slots correspond to the sliders shown on the PERF screen. While holding SHIFT, you can access and control the assigned slots directly, without switching banks.

This allows you to tweak multiple parameters across different banks in real time while the sequencer is running, making performance and sound shaping more fluid and immediate.

GLOBAL SETTINGS

It is possible to set up and reset the MONOLIT in the settings menu.

- **INIT PRESET** - Resets MONOLIT to its default preset. If a preset has been saved, it can be reloaded later to restore previous configurations. This feature is useful for starting a new preset from scratch.

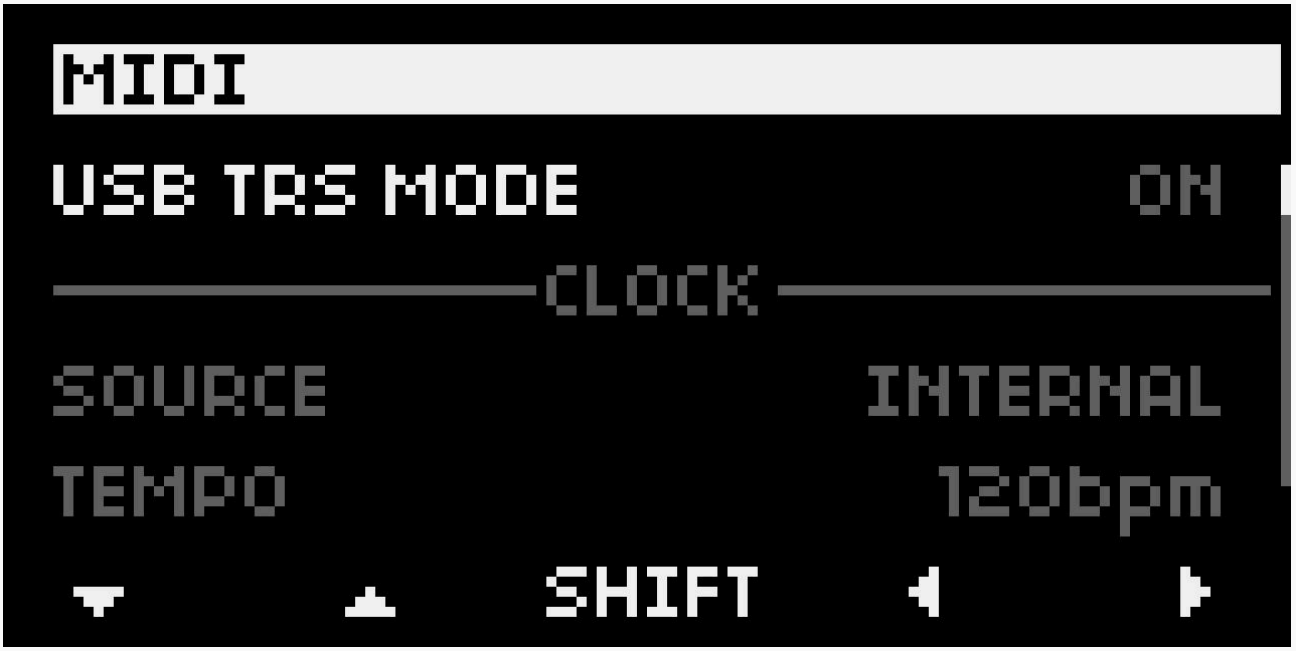
SYSTEM

- **MERGE MODE** - Smooths transitions between banks. When switching banks with different slider values, the parameter gradually adjusts to match the physical slider position, preventing abrupt jumps.

- **SCREENSAVER** - It activates the screensaver after a set period of inactivity to extend the lifespan of the device’s display.
- **STARTUP ANIMATION** - Enables or disables the startup animation. Disabling it will speed up the device's startup process.
- **UPDATE FIRMWARE** - Activates UPDATE MODE, allowing MONOLIT to appear as an external drive on your computer for firmware updates.
- **FORMAT MEMORY** - The Memory settings are presented as a separate section. The Format Memory option completely deletes all presets and resets the device to factory settings.

  Please be aware of this and make a backup beforehand to avoid data loss.

MIDI



- **USB TO TRS** - Enables MIDI messages to be sent and received via a TRS connection. For instance, MIDI signals can be sent from a DAW to an external device through the TRS MIDI output.

In the Clock section, configure MIDI clock source and BPM settings.

- **SOURCE** - Selects the clock source (internal or external).
- **TEMPO** - Adjusts the beats-per-minute value, available only when the internal clock is active.
- **SIGNATURE** - defines the sequencer time signature, from 2/4 to 4/4. It affects how the clock restarts and how the rhythmic cycle is structured.
- **BARS** - sets the sequence length from 1 to 8 bars. This determines after how many bars the clock restarts and the sequence loops.

UPDATE FIRMWARE

Set MONOLIT to update mode, and it will appear as an external drive on your computer.

NOTE: You can enter **UPDATE MODE** with MONOLIT turned off by holding the left black button while connecting the cable.

MONOLIT FIRMWARE UPDATE GUIDE

1. Connect MONOLIT to your computer
Use a USB cable to connect MONOLIT to your laptop or desktop.

2. Open the update menu

- On MONOLIT, navigate to **SETTINGS** and select **UPDATE FIRMWARE**.
- Alternatively, hold the left black button below the screen while plugging in the USB cable.

3. MONOLIT will appear as an external drive
Once the firmware update option is selected, MONOLIT will appear on your computer as an external drive.

4. Update the firmware file

- In the root folder of the drive, locate the existing firmware file.
- Delete the old `.bin` file from MONOLIT.
- Upload the new firmware file into the same folder.

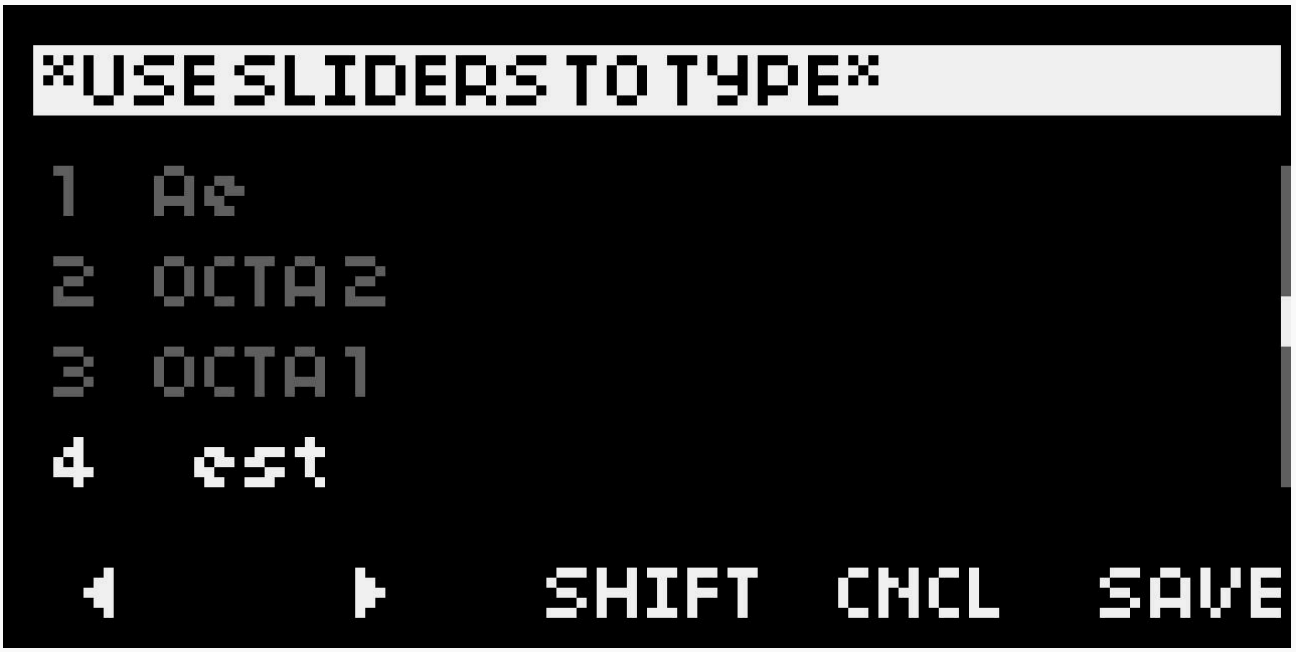
5. Complete the update
After replacing the firmware file, MONOLIT will automatically reboot to complete the update.

NOTE: It is crucial to **delete the old firmware file before uploading the new one**; failing to do so may result in system malfunction. If an error occurs during the update and Monolit does not boot, enter update mode by holding the left black button under the display while connecting the cable to Monolit. Then repeat all firmware update steps.

PRESET MANAGER

The MONOLIT can store presets, allowing you to save and recall complex configurations quickly. Each preset contains 8 BANKS, labeled alphabetically (A through H), which act as separate states within the selected preset. This design enables users to organize multiple configurations under a single preset, enhancing workflow flexibility.

NAMING PRESETS



The process of naming presets is identical to naming sliders or buttons. Use the interface buttons to navigate between characters and sliders to modify them. For faster and more convenient input, an external USB keyboard can be connected to MONOLIT.

LOAD

The LOAD function allows you to recall a previously saved preset. Simply select the desired preset from the list to restore its settings.

SAVE

The SAVE function lets you store the current state of MONOLIT as a preset. This includes all slider positions, button settings, and other parameters configured at the time of saving.

The preset system is designed for quick and efficient management of your configurations, making MONOLIT adaptable for different performance scenarios.

WEB CONFIGURATOR

The web configurator is a convenient tool for creating, editing, and managing MONOLIT configurations from a computer. All changes are applied in real time, allowing you to immediately see and hear the results while working with the device.

The web configurator is available via the Google Chrome browser. Compatibility with other browsers is not guaranteed. To get started, connect MONOLIT to your computer and open https://monolit.jp/

It provides a complete overview of all banks, sliders, and buttons in a clear and structured layout. Each control can be configured in detail, including operating mode, MIDI message type, channel, CC number, value ranges, behavior, and advanced functions such as motion, LFO, and external CC. This makes it easy to build complex control schemes that would be impractical to set up directly on the hardware.

Sliders and banks are displayed side by side, making it easy to compare, copy, link, and unlink parameters across different elements. The C and P buttons are used for copy and paste. The chain icon LINK allows multiple sliders within a bank to be grouped, enabling simultaneous editing of the same parameter.

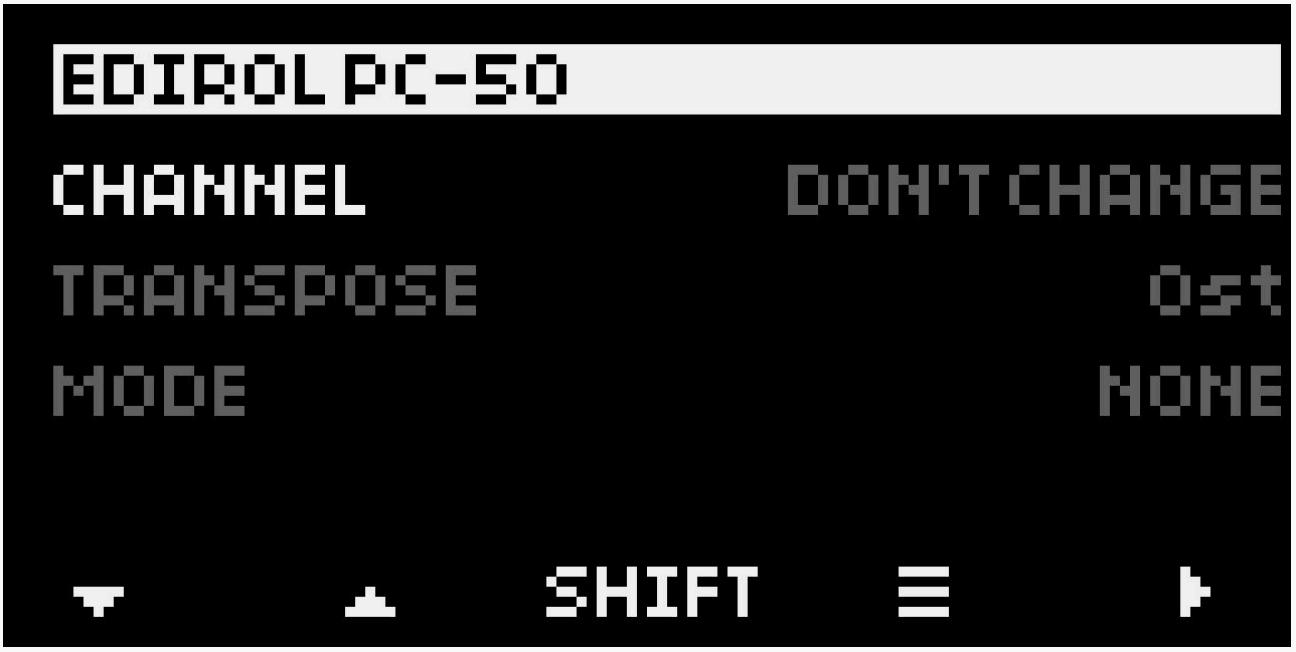
Parameters in the configurator can be entered directly from the keyboard or adjusted with the mouse by clicking and dragging values up or down.

Configurations can be saved, renamed, and loaded. One of the key features of the web configurator is the ability to export and import presets outside of MONOLIT. This makes it easy to create backups and share presets with other users.

Once a configuration is complete, it is sent directly to MONOLIT, ensuring full synchronization between the hardware and the web interface. The web configurator complements the hardware workflow by offering precision and clarity during setup, while keeping performance and hands-on interaction on the device itself.

NOTE: Please note that not all MONOLIT functions can currently be edited through the web configurator. We continue to expand its capabilities over time, and this area will be further improved in future updates.

EXTERNAL MIDI DEVICE



When an external MIDI device is connected to the USB 2.0 Type-A port, a small square will pulse in the upper-left corner of the display, indicating a successful connection.

By opening the **MIDI DEVICE** menu, you can configure how MONOLIT interprets and processes MIDI information from the external device before sending it further.

PARAMETERS

- **CHANNEL** - modifies the MIDI channel through which messages are sent. Selecting "Don’t change" ensures that the MIDI channel from incoming messages is passed through unchanged.
- **TRANSPOSE** - shifts all MIDI notes by a specified number of semitones, allowing quick pitch adjustments.
- **MODE** - selects the algorithm used to interpret incoming MIDI messages for further processing.

MIDI DEVICE MODES

- **NONE -** MONOLIT passes through external MIDI messages without any changes.
- **SPLIT** - divides incoming MIDI notes into two layers: lower and upper. Each layer can be assigned to a different MIDI channel, enabling control of two different synths or sounds with one keyboard.
- **KEY FOLLOW -** mode converts MIDI notes into CC (Control Change) MIDI messages. If **MUTE NOTE** is turned off, the played MIDI note will also pass through.
- **ARPEGGIATOR** - generates rhythmic patterns by cycling through held MIDI notes with options for scale selection and randomization.

SPLIT

SPLIT mode divides incoming MIDI notes into two layers: lower and upper. Each layer is assigned a specific range of MIDI notes, which can be routed to different MIDI channels. This allows you to play and control two separate instruments or sounds simultaneously using a single MIDI keyboard. For example, the lower layer could control a bass sound on one synth, while the upper layer plays a lead sound on another synth.

- **SPLIT POINT** - Defines the note that separates the lower and upper ranges. Notes below this point belong to the lower range, while notes above it belong to the upper range.

LOWER

- **CHANNEL** - assigns a MIDI channel for the lower range.
- **TRANSPOSE** - shifts all MIDI notes in the lower range by a specified number of semitones.

UPPER

- **CHANNEL** - assigns a MIDI channel for the upper range.
- **TRANSPOSE** - shifts all MIDI notes in the upper range by a specified number of semitones.

KEY FOLLOW

The **KEY FOLLOW** mode transforms MIDI notes into **Control Change (CC)** messages, allowing dynamic control of parameters based on played notes. This mode is ideal for creating expressive modulations or mapping specific note ranges to control values. If the **MUTE NOTE** parameter is disabled, the original MIDI notes will also pass through MONOLIT alongside the generated CC messages.

PARAMETERS:

- **CC NUM** - specifies the Control Change number. Up to 128 different CCs (from 0 to 127) can be assigned per channel. If the selected CC is already in use by another control, a small cross will appear before the number.
- **NOTE MIN** - sets the minimum MIDI note in the range to be transformed into CC.
- **NOTE MAX** - sets the maximum MIDI note in the range to be transformed into CC.
- **CC MIN** - sets the minimum CC value for the outgoing MIDI message.
- **CC MAX** - sets the maximum CC value for the outgoing MIDI message.
- **MUTE NOTE** - prevents MIDI notes from passing through MONOLIT.

ARPEGGIATOR

The **ARPEGGIATOR** generates rhythmic patterns by cycling through held MIDI notes in a defined order and tempo. It offers options for **scale selection**, ensuring notes stay within a chosen musical key, and **randomization**, adding variation to the patterns. This feature is perfect for creating dynamic melodies, textures, and rhythmic sequences in real-time.

PARAMETERS

- **STATE** - turns on/off the arpeggiator.
- **STYLE** - switches between different styles of arpeggiation:

    1. **UP** - makes arpeggio to have an ascending melody with held notes
    2. **DOWN** - makes arpeggio have a descending melody with held notes
    3. **UP DOWN** - makes the melody movement ascend and descend without repetition of the highest and lowest notes
    4. **UP AND DOWN** - makes the melody movement ascend and descend with the repetition of the highest and lowest notes.
    5. **PINKY UP** - alternates between low notes of the held chord and the highest one. Goes in such a manner only from bottom to top notes.
    6. **PINKY UP DOWN** - alternates between low notes of the held chord and the highest one. Goes in such a manner from bottom to top and backward.
    7. **THUMB UP** - alternates between the lowest note and higher notes of the held chord. Goes in such a manner only from bottom to top notes.
    8. **THUMB UP DOWN** - alternates between the lowest note and higher notes of the held chord. Goes in such a manner from bottom to top and backward.
    9. **PLAY ORDER** - creates arpeggios with the melody that follows the play order of the held MIDI notes
    10. **CHORD** - creates repeating chords from the held MIDI notes
    11. **RANDOM** - makes arpeggio from randomly picked held MIDI notes
    12. **RANDOM ONCE** - creates only once a random order for held MIDI notes and then repeats it

- **SCALE** - sets scales to quantise the arpeggios. In the case of scales like Major/Minor, there will be an additional parameter to pick a root note.

    1. **MAJOR** – Major scale.
    2. **MINOR** – Minor scale.
    3. **DORIAN** – Dorian mode.
    4. **MIXOLYDIAN** – Mixolydian mode.
    5. **LYDIAN** – Lydian mode.
    6. **PHRYGIAN** – Phrygian mode.
    7. **LOCRIAN** – Locrian mode.
    8. **WHOLE TONE** – Whole-tone scale.
    9. **HALF-WHOLE DIM.** – Half-whole diminished scale.
    10. **WHOLE-HALF DIM.** – Whole-half diminished scale.
    11. **MINOR BLUES** – Minor blues scale.
    12. **MINOR PENTATONIC** – Minor pentatonic scale.
    13. **MAJOR PENTATONIC** – Major pentatonic scale.
    14. **HARMONIC MINOR** – Harmonic minor scale.
    15. **HARMONIC MAJOR** – Harmonic major scale.
    16. **DORIAN #4** – Dorian mode with a raised 4th.
    17. **PHRYGIAN DOMINANT** – Phrygian dominant mode.
    18. **MELODIC MINOR** – Melodic minor scale.
    19. **LYDIAN AUGMENTED** – Lydian mode with an augmented 5th.
    20. **LYDIAN DOMINANT** – Lydian dominant mode.
    21. **SUPER LOCRIAN** – Super Locrian mode.
    22. **8-TONE SPANISH** – Eight-tone Spanish scale.
    23. **BHAIRAV** – Bhairav, an Indian mode.
    24. **HUNGARIAN MINOR** – Hungarian minor scale.
    25. **HIRAJOSHI** – Hirajoshi, a Japanese scale.
    26. **IN-SEN** – In-sen, a Japanese scale.
    27. **IWATO** – Iwato, a Japanese scale.
    28. **KUMOI** – Kumoi, a Japanese scale.
    29. **PELOG SELISIR** – Pelog Selisir, an Indonesian scale.
    30. **PELOG TEMBUNG** – Pelog Tembung, an Indonesian scale.

- **ROOT** - (only active for relevant scales) sets the root note for the selected scale.
- **BPM** - Beats Per Minute tempo for the arpeggiator
- **CLOCK MULTIPLIER** - sets the multiple of the arpeggiator relative to BPM in duplet/triplet note divisions.
- **STEPS** - how many additional steps arpeggiator would generate with the chosen distance (following the parameter)
- **DISTANCE** - a shift value in semitones for the following additional steps related to the held MIDI notes

- **RANDOMIZER -** The **RANDOMIZER** is an additional section designed to introduce variation into generated melodies. It applies random shifts to the arpeggiated MIDI notes, while ensuring these variations remain quantized to the selected scale, maintaining musical coherence.

PARAMETERS OF THE RANDOMIzER:

- **STATE** - turns on/off the randomizer (you can also write “turns the randomizer off and on.”)
- **DISTANCE** - adds random shifts of the arpeggiated MIDI notes in semitones.
- **RANGE** - deviation in semitones of randomly shifted MIDI notes.
- **CHANCE** - probability of adding the randomisation to a MIDI note
- **SIGN** - set the direction in which the randomizer shifts MIDI notes:

    1. **ADD** - adds to MIDI notes some amount of semitones
    2. **SUB** - subtracts from MIDI notes some amount of semitones
    3. **BI** - shifts MIDI notes in semitones in both directions (addition and subtraction combined)

GAMEPAD

GAMEPAD CONNECTION

MONOLIT can automatically convert standard gamepad controls into MIDI messages. To use this feature, connect a gamepad via USB to the USB 2.0 Type-A input. Most industry-standard gamepads are compatible. When a gamepad is connected and interacted with, a small **G** letter will appear in the upper-left corner of the display.

By accessing the **GAMEPAD MENU**, you can configure how MONOLIT interprets and sends MIDI information from the gamepad.

When a gamepad button or control is pressed, the display shows the corresponding name for that control. After interacting with a control, you can assign its behavior. Gamepad controls are divided into two types: **buttons** and **axes**.

- **BUTTONS** can send either MIDI CC or MIDI Note messages.
- **AXES** are converted only to MIDI CC messages.

PARAMETERS FOR BUTTONS:

- **STATE** - enables or disables a button.
- **TYPE** - sets the button to send either **NOTE** or **CC** messages.
    a. If **NOTE** is selected, the button sends MIDI note messages.
    b. If **CC** is selected, the button sends Control Change messages.
- **CHANNEL** - sets the MIDI channel for sending messages.
- **NOTE** *(only in NOTE type)* - assigns the MIDI note number triggered by the button.
- **VELOCITY** *(only in NOTE type)* - adjusts the velocity (dynamics) of the triggered MIDI note.
- **MODE** *(only in CC type)* - defines the button's behavior:
    a. **MOMENT**: Sends a high MIDI value while held and a low value when released.
    b. **TOGGLE**: Toggles between high and low MIDI values on each press.
- **CC NUM** - sets the Control Change number. Up to 128 CC values (0–127) can be assigned per channel.
- **INVERT** - reverses the button's behavior: the default value is high, and pressing the button sends the low value.

PARAMETERS FOR AXES:

- **STATE** - enables or disables an axis controller.
- **CC NUM** - sets the Control Change number. Up to 128 CC values (0–127) can be assigned per channel.
- **CHANNEL** - sets the MIDI channel for sending messages.
- **MIN** - defines the minimum value for the sent MIDI messages.
- **MAX** - defines the maximum value for the sent MIDI messages.

This feature makes MONOLIT highly versatile, allowing users to repurpose gamepad controls for creative MIDI mapping in both studio and live performance scenarios.

GRID CONNECTION (MONOME)

MONOLIT supports connecting the **MONOME GRID** via the USB 2.0 Type-A port. Currently, the GRID functions as a MIDI keyboard with scale selection, similar to the key layout implementation found in devices like Ableton Push or LinnStrument.

This feature is experimental at the moment, but we plan to actively develop it. We are fans of MONOME and highly value their contribution to the culture, which is why we see great potential in integrating the GRID with MONOLIT.

PARAMETERS OF THE GRID MENU:

- **CHANNEL** - Sets the MIDI channel through which MIDI messages will be sent.
- **SCALE** - Selects the scale for the GRID, defining the notes available for play.
- **KEY** Sets the root note of the selected scale, establishing the GRID's starting point.
- **VELOCITY** - Adjusts the velocity of the notes played, controlling the dynamic range.
- **OFFSET** - Shifts the selected scale or key up or down by a set number of semitones.

CONCLUSION

MONOLIT is built to adapt to you, not the other way around. It integrates naturally into your setup and supports a fluid, focused creative process where control and experimentation coexist without friction.

MONOLIT is a living instrument that continues to evolve over time. New functions and refinements may appear ahead of manual updates. If anything feels unclear or unexpected, please reach out to our support team at any time.

We truly value your feedback, it plays a direct role in shaping the future of MONOLIT and the tools we build next.

Welcome to the world of MONOLIT.

Create and enjoy!

https://www.lightreft.jp