



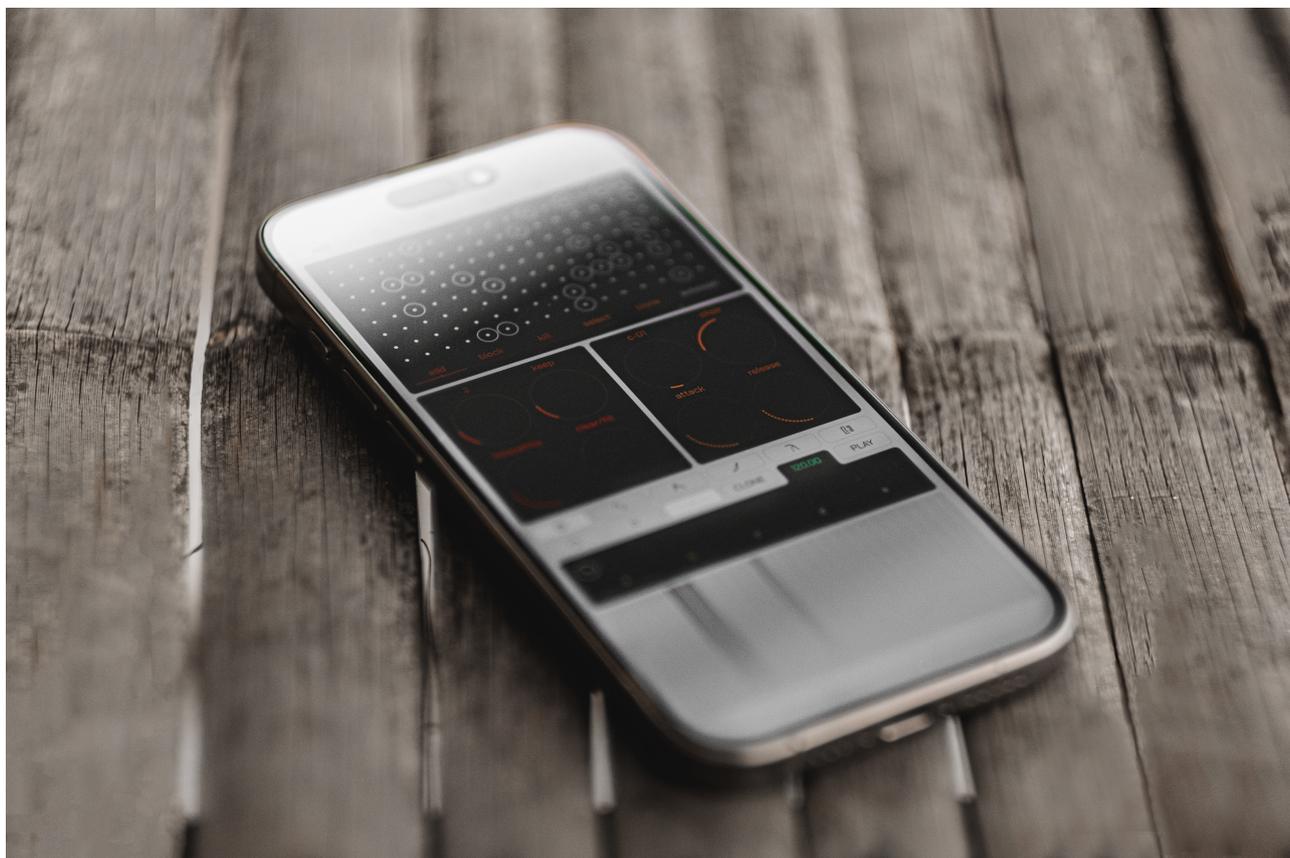
Cellular

Reference and user guide

Cellular

iOS synthesiser with cellular automata

In Cellular, there is a grid of cells called the "Universe". Each cell can be either alive or dead, and their states change over generations. There are rules governing how dead cells can come to life in the next generation and how live cells can either survive or die. This is how life evolves in the Universe. You can group cells into a commune and measure the population density of that commune. The population density determines the strength of the modulation signal, which you can use to control the synthesizer parameters.



Modules

The Cellular interface is modular, offering tools for mapping MIDI commands to buttons and sliders, configuring the "Universe" and "Communes," adjusting global voice parameters, setting up oscillators with wavetable or sampler engines, applying effects such as saturation, filters, and echo, recording and sequencing notes, playing on a keyboard, and saving or loading presets.

Universe	3
Modulator	10
Oscillators	11
Voices	16
Saturator	20
Filter	21
Echo	23
Sequencer	25
Keyboard	28

Universe

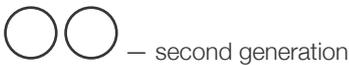
This module is based on a discrete model of cellular automata. The foundation of this model is a space consisting of adjacent cells that form the "Universe." Each cell in the "Universe" can be alive, dead, immortal, or non-revivable. The size of the "Universe" is limited to 8 by 16 cells, but its borders are wrapped: the left side continues into the right, the top into the bottom, and vice versa. The eight cells surrounding each cell are called its neighborhood.

The transition of cells from one state to another is determined by rules you define. These rules are the same for all cells. In one step, the automaton processes each cell and, based on its current state and the state of its neighborhood, determines the new state that will be applied in the next generation. Before launching the automaton, you set the initial state of the cells manually or randomly.

For example, consider the rules of John Conway's "Game of Life," which in the "Universe" module are specified by the values of 3 for the "new" slider and 2 for the "keep" slider. Under these rules, "life" in a lonely cell disappears in the next generation since it lacks either three neighbors to give birth to new life or two neighbors to sustain it.



With two adjacent populated cells, the situation is similar: each of them has only one neighbor, which does not meet the conditions for sustaining life.



However, with three adjacent populated cells, the situation changes. Each cell now has two neighbors, satisfying the condition for sustaining life, so all three cells remain populated in the next generation. Additionally, an unpopulated cell surrounded by three populated neighbors falls under the rule of new life generation and becomes populated in the next generation.



In the second generation, each cell has three neighbors, which satisfies the conditions for life regeneration. This results in the formation of a stable shape known as a "block."



Cell occupancy is measured in arbitrary parts of the "Universe." These parts are grouped into "Communes."

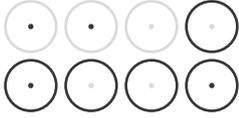


— a commune of four cells is represented by light dots

Each "Commune" either reacts to the occupancy of any individual cell or interprets the occupancy density as a percentage.



— none of the cells in the commune are occupied, the signal is 0%



— one of the four cells in the commune is occupied, the signal is 25%



— two of the four cells in the commune are occupied, the signal is 50%



— three of the four cells in the commune are occupied, the signal is 75%



— all four cells in the commune are occupied, the signal is 100%

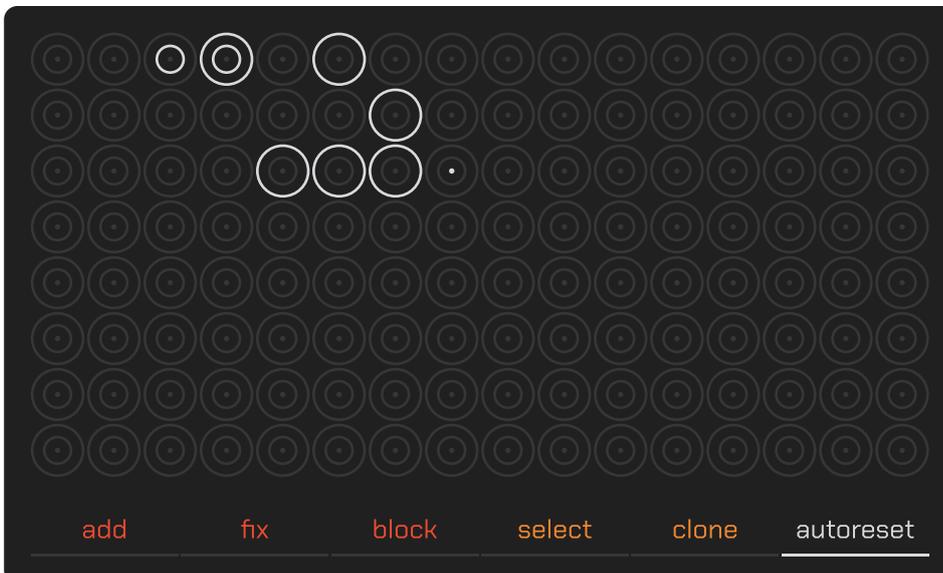
Thus, the development of "life" in the "Universe" transforms into a "living" signal, which can control the parameters of other Cellular modules to make the sound "alive."

REFERENCES

Universe module activation button:



Universe screen:



Note: The universe is infinite— the left edge continues to the right, the bottom continues to the top, meaning each cell has eight neighbors.

Universe cell:

-  — "dead" cell
-  — "alive" cell
-  — editable cell
-  — uneditable cell
- — does not belong to the selected "Commune"
- — belongs to the selected "Commune"

Adding, fixing, or blocking brush activation buttons:



Touching cells with "add" brush adds or clears "life"; with "fix" brush, it sets "immortality"; and with "block" brush, it enforces "non-revivability."

Commune selection and cloning brush activation buttons:



Auto-reset mode button:



Auto-reset mode returns cellular automata to their initial state when a new voice is activated or the last is released. Outside auto-reset mode, "life" continues evolving from the last state.

Cellular automata settings sliders panel:



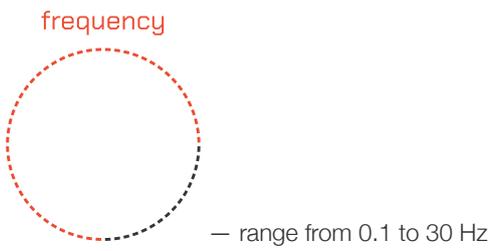
Life birth and rebirth conditions slider:



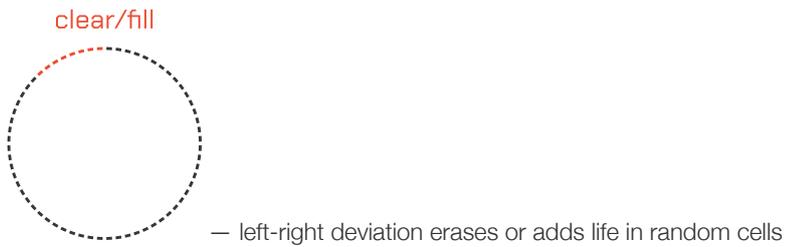
Life sustain conditions slider:



Generation rate slider:



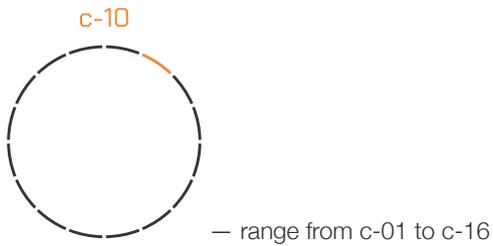
Adding or removing life in random cells slider:



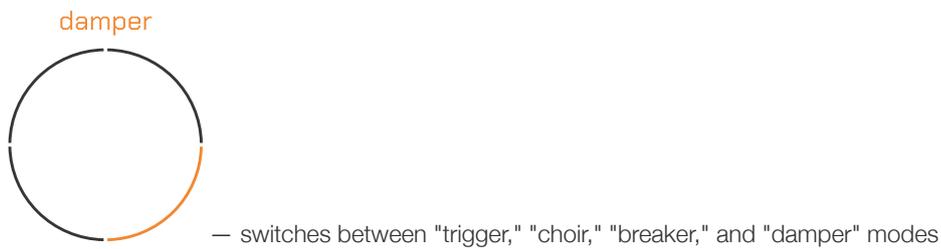
Commune settings sliders panel:



Commune selection slider:

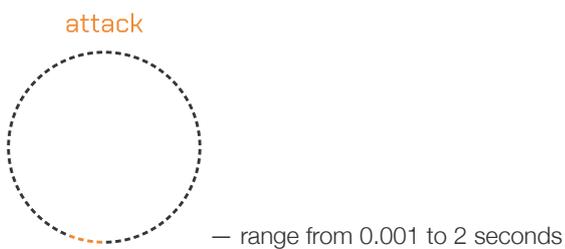


Selected commune mode slider:

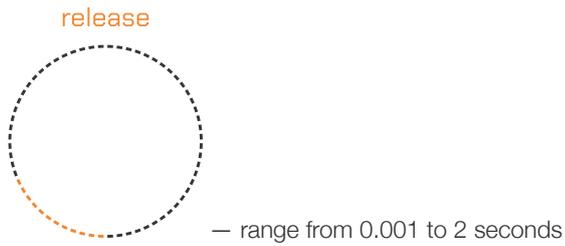


The first mode outputs maximum signal if at least one cell in the commune is populated, the second mode reflects signal strength proportional to the population share, the third outputs a minimum signal if at least one cell is populated, and the last attenuates the signal proportionally to the population share.

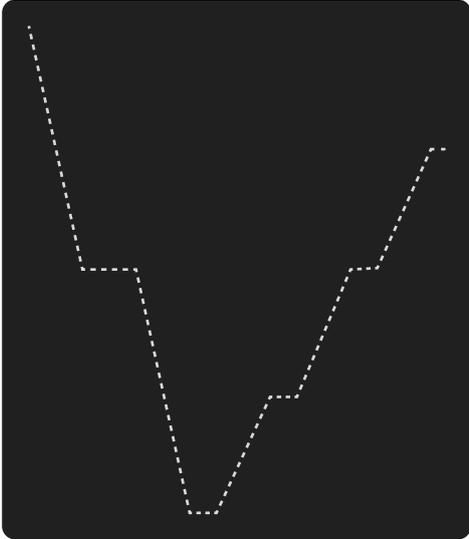
Selected commune signal attack time slider:



Selected commune signal release time slider:



Selected commune signal indicator:



Note: The indicator appears above the cellular automata settings panel only when the commune settings sliders are touched.

GUIDES

How to add or remove "life" in cells?

1. At the bottom of the "Universe" screen, press the "add" button to activate the life-adding mode.
2. Tap a "dead" cell to "revive" it.
3. Ensure that the cell's state has changed.
4. Tap a "live" cell to remove "life."
5. Ensure that the cell's state has changed.

How to make cells "immortal"?

1. At the bottom of the "Universe" screen, press the "fix" button to activate the mode for fixing cells in the "immortal" state.
2. Tap a "non-immortal" cell to make it "immortal."
3. Ensure that the cell's state has changed.
4. Tap the cell again to remove this property.
5. Ensure that the cell's state has changed.

How to prohibit "life" in a cell?

1. At the bottom of the "Universe" screen, press the "block" button to activate the mode for blocking cells in the "non-revivable" state.
2. Tap a "non-revivable" cell to set it as "non-revivable."
3. Ensure that the cell's state has changed.
4. Tap the cell again to remove this property.
5. Ensure that the cell's state has changed.

How to enable the "Universe" to return to its initial state?

1. At the bottom of the "Universe" screen, press the "autoreset" button to activate the auto-reset mode.
2. Ensure that the "Universe" contains "live" mutable cells.
3. Press a key on the keyboard or an external MIDI controller.
4. Ensure that "life" in the "Universe" has progressed through one or more generations.
5. Release the key on the keyboard or external MIDI controller.
6. Ensure that the "Universe" returns to the state it was in before the key was pressed.

How to set the rules for the emergence and development of "life" in the "Universe"?

1. On the cellular automata settings panel, use the radial "new" slider to specify a number from 0 to 8 neighbors required for a "dead" cell to "come to life" or a "live" cell to "regenerate" (continue living).
2. Use the radial "keep" slider to specify a number from 0 to 8 neighbors required to sustain "life."
3. Press a key on the keyboard or an external MIDI controller.
4. Ensure that "life" in the "Universe" progresses through one or more generations according to the new rules.

How to speed up or slow down the rate of generation transitions?

1. On the cellular automata settings panel, use the radial "frequency" slider to increase or decrease the generation transition rate.
2. Press a key on the keyboard or an external MIDI controller.
3. Ensure that the generations of "life" in the "Universe" progress at the new frequency.

How to clear the "Universe"?

1. On the cellular automata settings panel, move the "clear/fill" slider fully to the left to clear the "Universe."
2. Ensure that all cells in the "Universe" are cleared.

How to generate "life" in the "Universe"?

1. On the cellular automata settings panel, move the "clear/fill" slider to the right.
2. Ensure that "life" is generated in random cells.

How to link a "Universe" cell to a "Commune"?

1. Activate the "Commune" selection button on the "Universe" screen.
2. Select a cell.
3. Drag the slider for the "Commune" you want to link the cell to.
4. Ensure that the selected "Commune" displays a white dot on the cell.

How to clone a link with a "Commune" to another cell?

1. Activate the "Commune" selection button on the "Universe" screen.
2. Select a cell of the desired commune.
3. Activate the "Commune" clone button on the "Universe" screen.
4. Select a cell where you want to clone the commune link.
5. Ensure that both cells are now linked to the same commune.

How to view a "Commune" signal?

1. Populate the "Universe" with "life."
2. Touch any slider in the "Commune" settings.
3. The cellular automata settings panel will switch to the "Commune" signal indicator.
4. Ensure that the signal is displayed correctly.

How to make a "Commune" signal reach its maximum when at least one cell is populated?

1. Drag the radial mode slider for the selected "Commune."
2. Select the "trigger" mode.
3. Ensure that the signal reaches its maximum when at least one cell is populated.

How to make a "Commune" signal reach its minimum when at least one cell is populated?

1. Drag the radial mode slider for the selected "Commune."
2. Select the "breaker" mode.
3. Ensure that the signal reaches its minimum when at least one cell is populated.

How to make a "Commune" signal proportional to cell occupancy density?

1. Drag the radial mode slider for the selected "Commune."
2. Select the "choir" mode.
3. Ensure that the signal strength matches the occupancy density.

How to make a "Commune" signal weaker relative to maximum occupancy density?

1. Drag the radial mode slider for the selected "Commune."
2. Select the "damper" mode.
3. Ensure that the signal attenuation matches the occupancy density.

How to adjust the attack or release time of a "Commune" signal?

1. Drag the "attack" slider to change the attack time of the "Commune" signal from 0.001 to 2 seconds.
2. Drag the "release" slider to change the release time of the "Commune" signal from 0.001 to 2 seconds.
3. Ensure that the signal has the correct attack and release times on the signal indicator.

Modulator

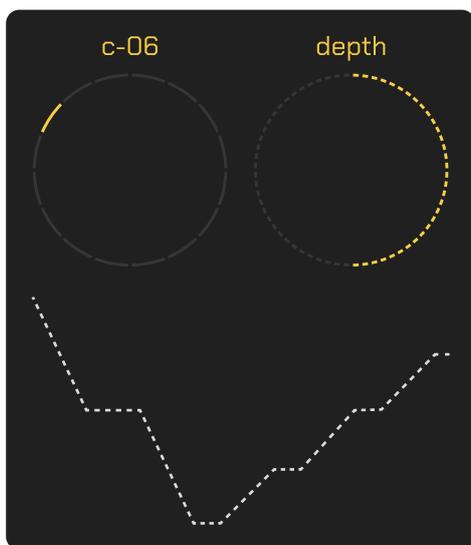
This module manages the assignment of "Commune" signals to modulated parameters in Cellular. Here, you select which parameter will be the target, which signal will act as the source, and set the modulation depth to increase or decrease the value of the target parameter.

REFERENCES

Slider with modulation target selection button example:



Modulator panel:

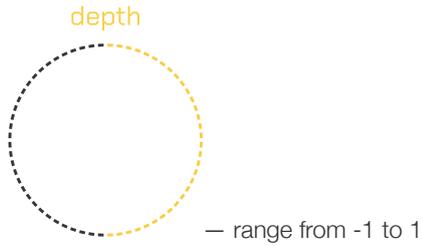


The modulator panel is displayed next to slider panels that support modulation.

Modulation source slider:



Modulation depth slider:



Note: Modulation strength values from 0 to 1 are interpreted as ranging from the parameter's minimum to maximum value, and from 0 to -1 as from maximum to minimum.

Commune signal visualization:



GUIDE

How to use a commune signal to modulate a parameter?

1. Select a preconfigured "commune" on the modulator panel.
2. Choose a parameter as the modulation target by tapping and holding its slider.
3. Drag the "depth" slider to adjust the modulation strength.
4. Press a key on the keyboard or an external MIDI controller.
5. Ensure that the modulator functions as expected.

Oscillators

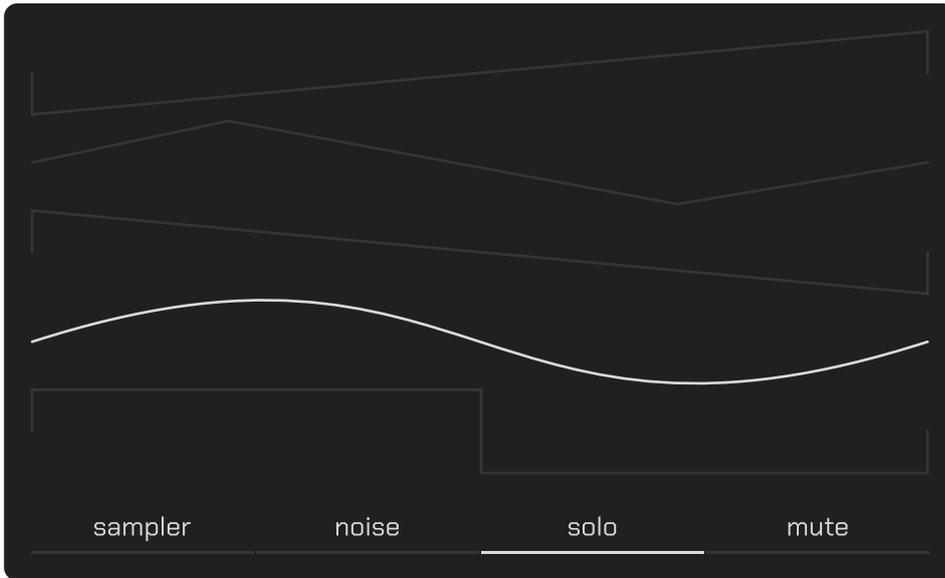
This module manages a set of sound sources for merging into voices: wavetable oscillators, a noise generator, or a loaded audio track.

REFERENCES

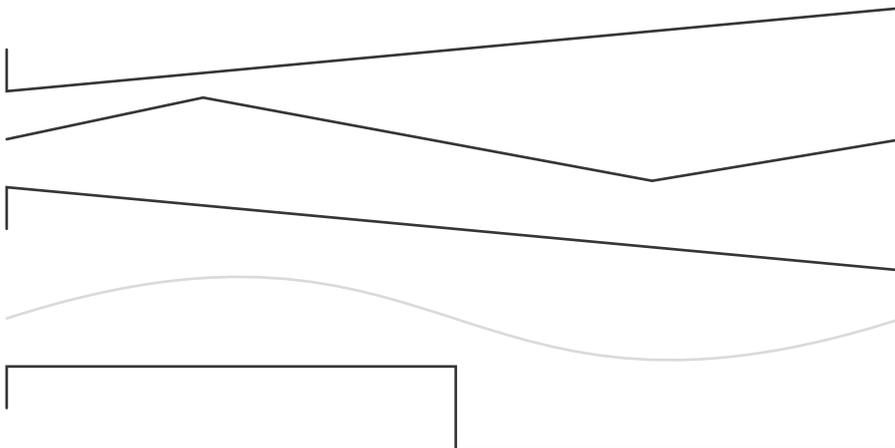
Oscillator module activation button:



Oscillator screen:



Waveform selection:



Note: Dragging left-right controls the starting phase from 0 to 360 degrees, and up-down selects the waveform, with the white curve indicating the current selection.

Noise generator mode button:



Solo button:



Note: Activating solo mode mutes other oscillators, and if another oscillator is in solo mode, this function disables it.

Mute button:

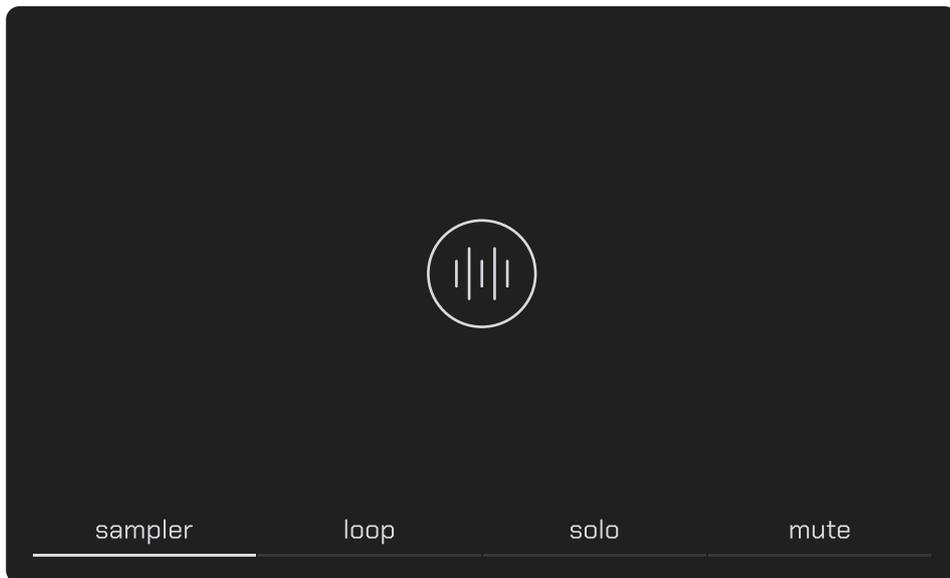


Sampler mode button:



Note: In sampler mode, wavetable oscillators or noise generators are replaced by a sampler, allowing you to select an audio track. The noise generator mode button is replaced with a loop button.

Sampler screen before selecting an audio file:

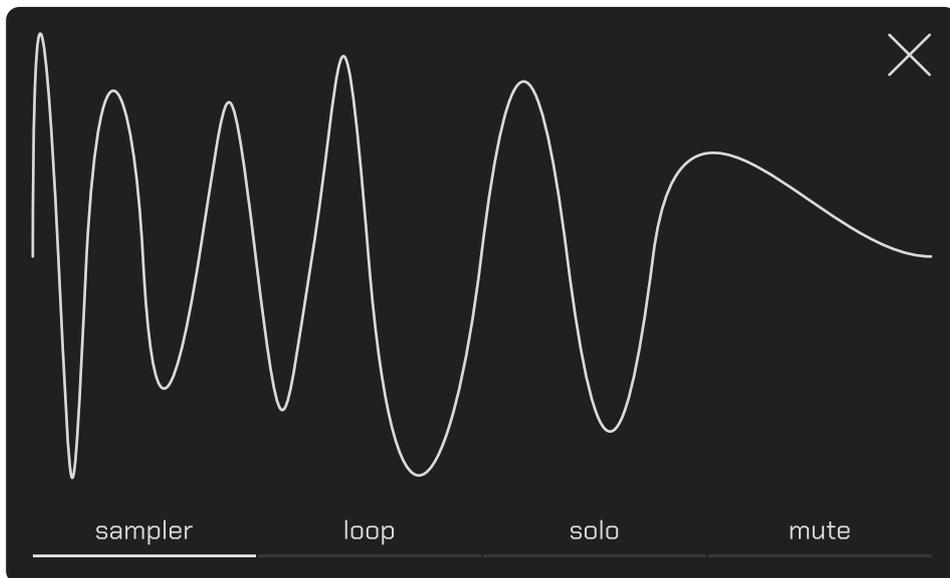


Audio file selector activation button:



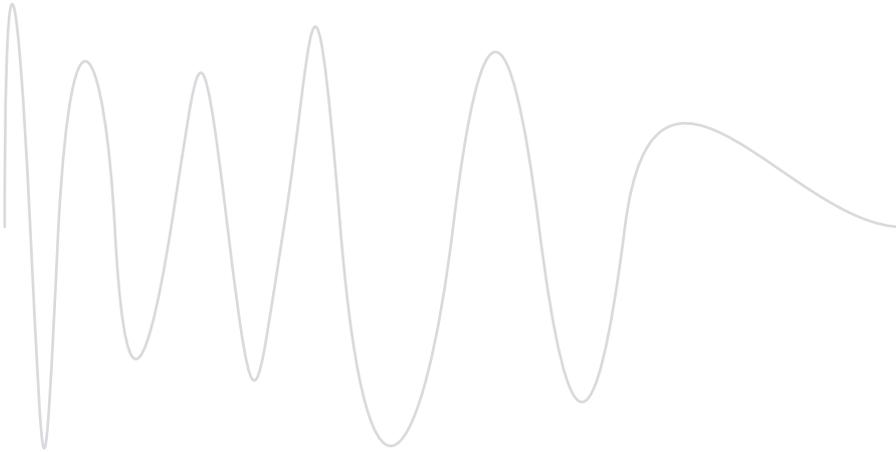
— opens a navigator to find audio tracks in "wav," "mp3," or "aiff" formats on the device

Sampler screen after selecting an audio file:



Horizontal dragging of the screen's left part trims the track's start, while the right part trims its end.

Example of a loaded audio track curve:



Note: The sampler plays only the displayed portion of the signal.

Audio track remove button:



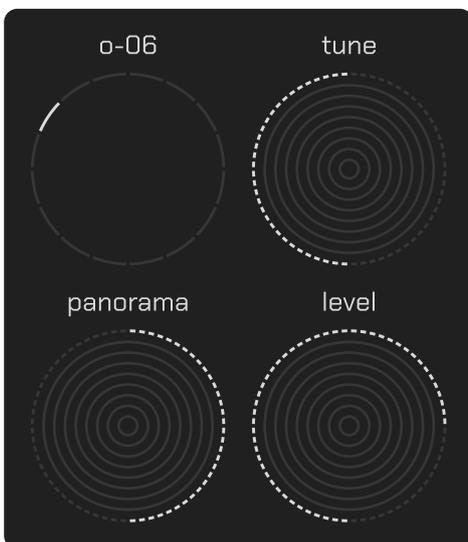
— unloads the audio track and returns to the track selection screen

Loop mode button:

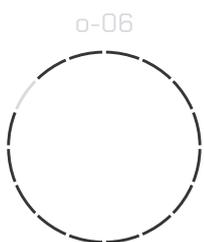


Loop mode repeats playback of the audio track until the voice is finished.

Oscillator settings sliders panel:



Oscillator selection slider:



— range from o-01 to o-08

Note: All other sliders on the panel and controls on the screen link to the selected oscillator.

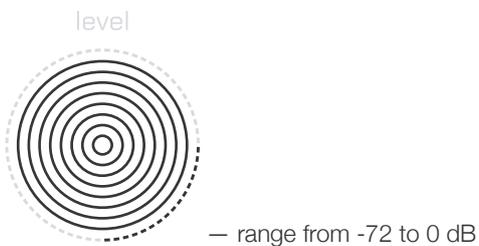
Selected oscillator pitch slider:



Selected oscillator panorama slider:



Selected oscillator volume slider:



GUIDES

How to select a waveform?

1. On the oscillator screen, tap and swipe up or down to select the desired waveform.
2. Ensure that the correct waveform is displayed on the screen.

How to change the initial phase of the wave?

1. On the oscillator screen, tap and swipe left or right to set the initial phase.
2. Ensure that the waveform is rendered starting from the specified degree.
3. Press a key on the keyboard or an external MIDI controller.
4. Ensure that the oscillator's sound matches the expected phase.

How to replace the wavetable with a noise generator?

1. On the oscillator screen, activate the "noise" button.
2. Ensure that the waveform curve is replaced with a random curve.
3. Press a key on the keyboard or an external MIDI controller.
4. Ensure that the oscillator's sound matches the expected noise.

How to turn the oscillator into a sampler?

1. On the oscillator screen, activate the "sampler" button.
2. Press the button in the center of the oscillator screen.
3. Select a file with the "wav," "mp3," or "aiff" extension on your device.
4. Ensure that the oscillator screen displays a waveform representing the audio track.
5. Press a key on the keyboard or an external MIDI controller.

6. Ensure that Cellular plays the loaded file.

Note: Cellular's sampler automatically adjusts the playback speed of audio tracks depending on the played note.

How to trim an audio track?

1. Drag the left edge of the waveform left or right to trim the start.
2. Drag the right edge of the waveform left or right to trim the end.
3. Ensure that the sampler plays only the portion of the track displayed on the screen.

How to add another oscillator?

1. Drag the radial oscillator selection slider.
2. Select the desired oscillator.
3. On the oscillator screen, choose the waveform and initial phase.
4. Press the "mute" button to unmute the oscillator.
5. Press a key on the keyboard or an external MIDI controller.
6. Ensure that Cellular plays all oscillators.

How to mute an oscillator?

1. Drag the radial oscillator selection slider.
2. Select the desired oscillator.
3. Press the "mute" button to mute the oscillator.
4. Press a key on the keyboard or an external MIDI controller.
5. Ensure that Cellular does not play the muted oscillator.

How to solo an oscillator?

1. Drag the radial oscillator selection slider.
2. Select the desired oscillator.
3. Press the "solo" button to make the oscillator solo.
4. Press a key on the keyboard or an external MIDI controller.
5. Ensure that Cellular plays only the solo oscillator.

How to change the tuning of an oscillator?

1. Select the desired oscillator.
2. Drag the radial pitch multiplier slider.
3. Choose the desired pitch.
4. Press a key on the keyboard or an external MIDI controller.
5. Ensure that Cellular plays the oscillator at the adjusted pitch.

How to pan an oscillator?

1. Select the desired oscillator.
2. Move the radial pan slider to the left to make the right channel quieter and the left channel louder.
3. Move the radial pan slider to the right to make the left channel quieter and the right channel louder.
4. Press a key on the keyboard or an external MIDI controller.
5. Ensure that the sound is panned correctly.

How to adjust the volume of an oscillator?

1. Select the desired oscillator.
2. Drag the radial volume slider.
3. Adjust the volume of the selected oscillator from -72 dB to 0 dB.
4. Press a key on the keyboard or an external MIDI controller.
5. Ensure that the selected oscillator's volume has changed accordingly.

Voices

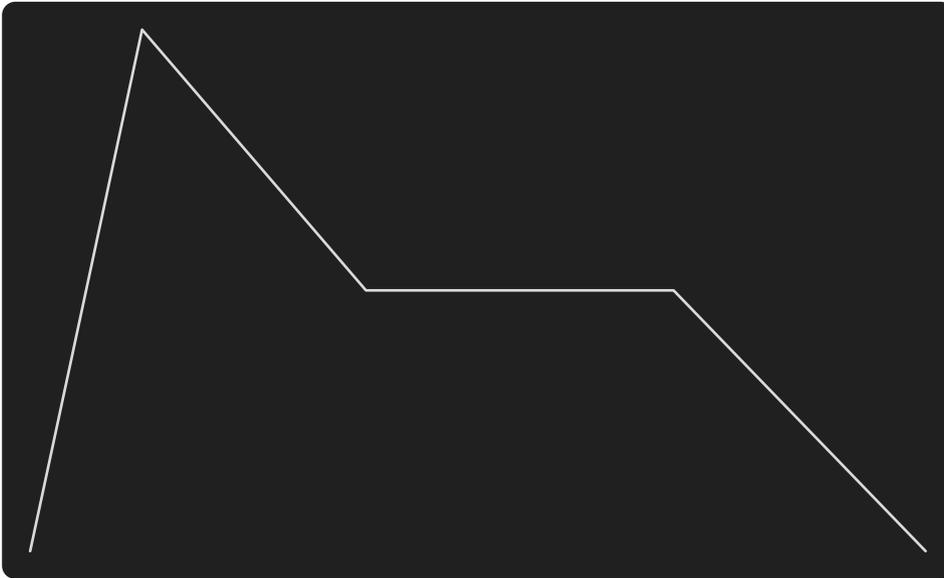
This module combines controls for the envelope, global volume level, and tuning for voices, with parameters for offset and note duration during sequence playback.

REFERENCES

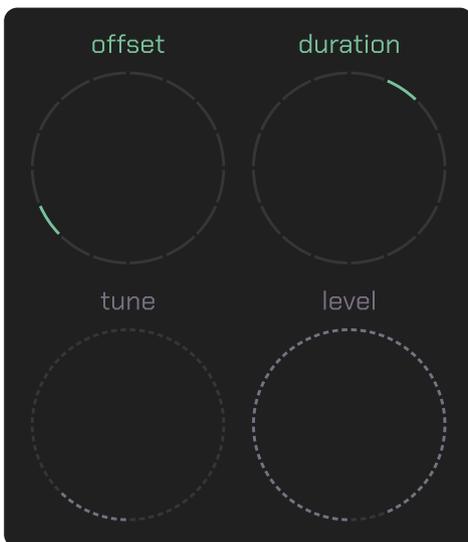
Voice module activation button:



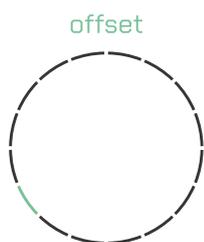
Envelope screen:



Global settings sliders panel:



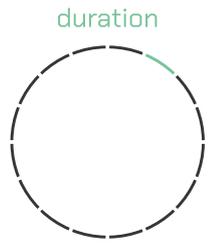
Note start offset slider:



— switches between "auto", "3/4", "1/2", "3/8", "1/3", "5/16", "1/4", "3/16" and some

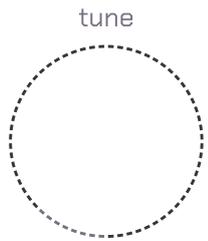
Note: This will be replaced with another parameter in the future.

Note duration slider:



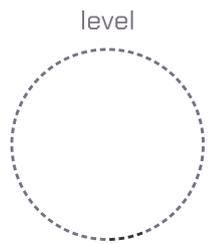
— switches between "auto", "3/4", "1/2", "3/8", "1/3", "5/16", "1/4", "3/16" and some

Global pitch slider:



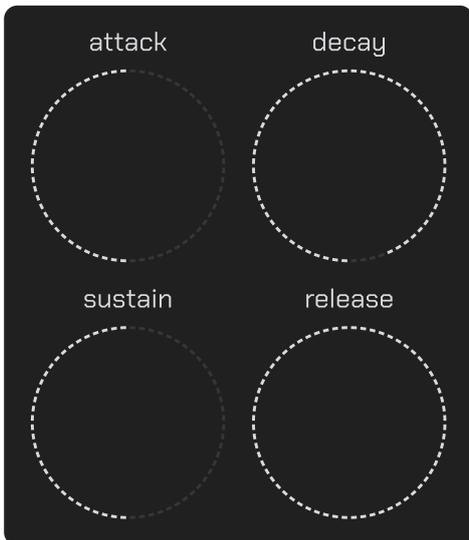
— range from 0 to 64 semitones

Global volume slider:

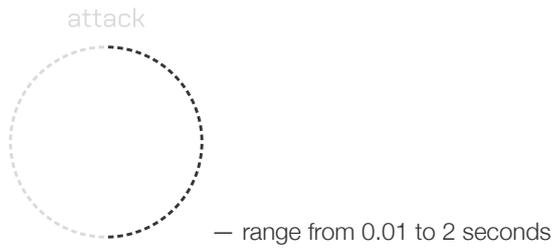


— range from -72 to 0 dB

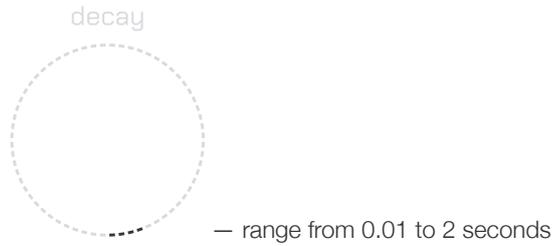
Envelope sliders panel:



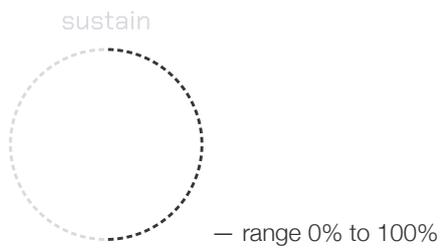
Attack time slider:



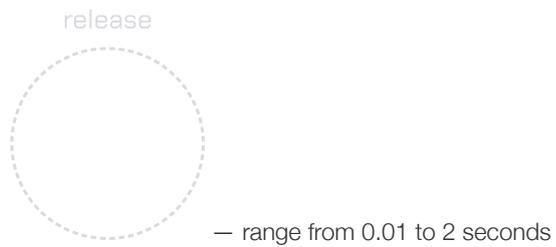
Decay time slider:



Sustain level slider:



Release time slider:



GUIDES

How to change the pitch for all voices?

1. Drag the "tune" slider.
2. Select the desired pitch for all voices.
3. Ensure that the pitch has changed.

How to adjust the overall volume for all voices?

1. Drag the "level" slider.
2. Select the desired volume.
3. Ensure that the volume has changed for all voices.

How to configure the envelope for voices?

1. Drag the "attack" slider to adjust the attack.
2. Drag the "decay" slider to adjust the decay period after the attack.

3. Drag the "sustain" slider to adjust the sustain level after decay.
4. Drag the "release" slider to adjust the release.

Saturator

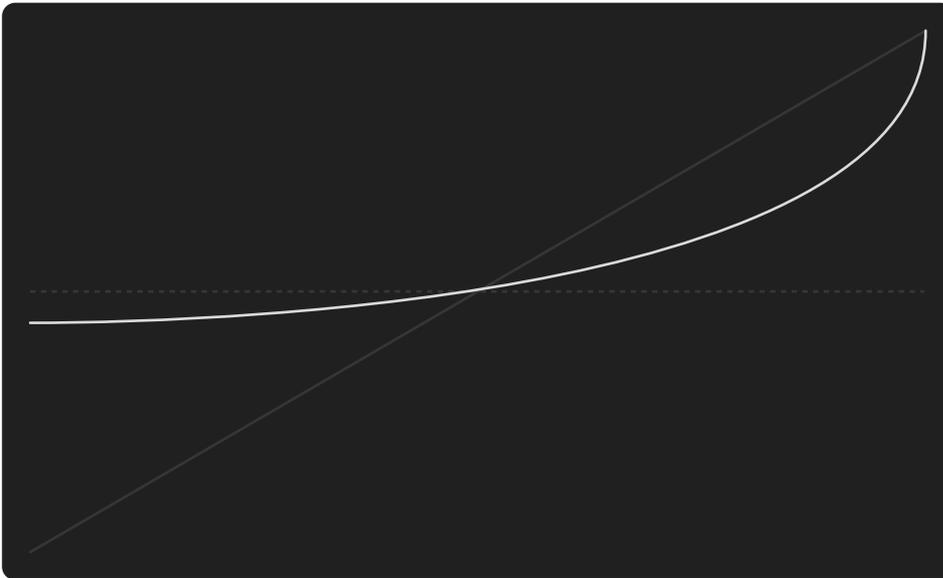
This module algorithmically simulates the effect of warm diode clipping saturation.

REFERENCES

Saturator module activation button:

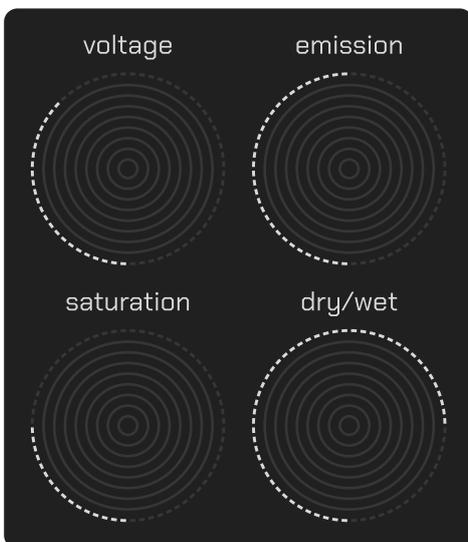


Original vs. processed signal representation screen:



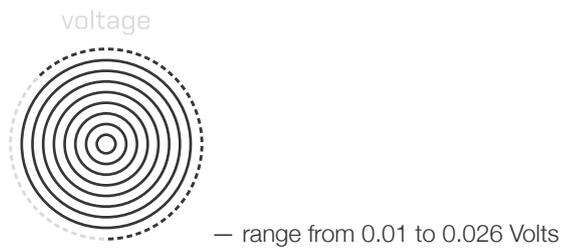
Grey line representing the original signal and the white line representing the processed signal. Dragging up-down adjusts the saturation current level, and left-right adjusts terminal voltage and emission coefficient parameters.

Saturation effect settings sliders panel:

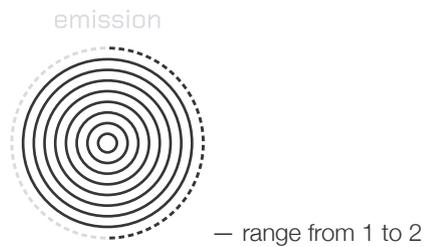


Note: The effect algorithmically mimics a diode limiter.

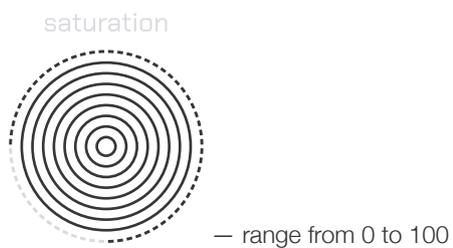
Terminal voltage level:



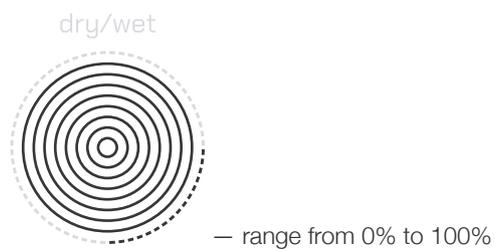
Emission coefficient slider:



Saturation current level slider:



Dry-wet signal ratio slider:



GUIDE

How to adjust the Saturator parameters?

1. Drag "dry/wet" slider to control the effect's intensity on the signal.
2. Drag up or down by screen to adjust the current level.
3. Drag left or right by screen to adjust the terminal voltage level and emission coefficient.
4. Manually fine-tune each parameter using the sliders: "voltage," "emission" and "saturation."

Filter

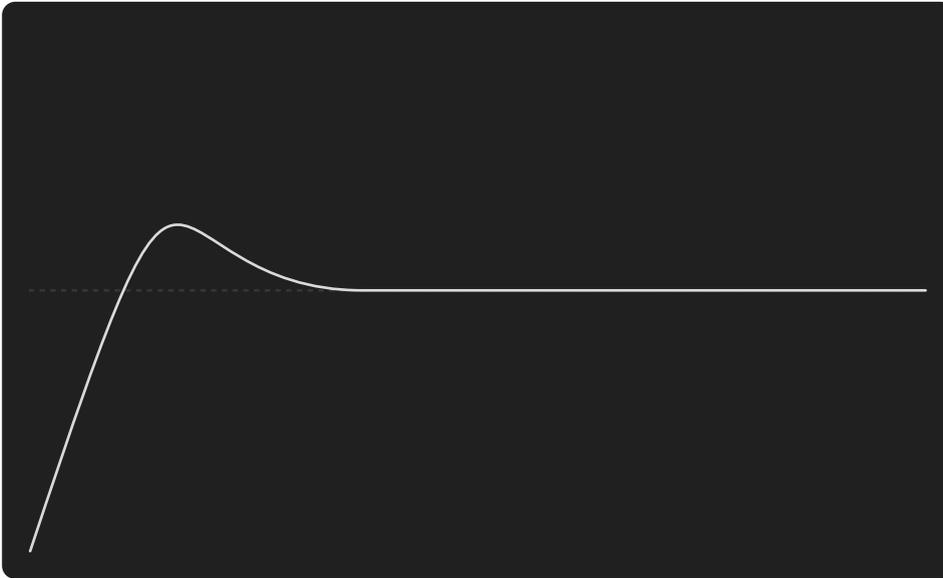
This module controls the filtering effect, modifying the frequency response by boosting or cutting specific frequencies.

REFERENCES

Filter module activation button:

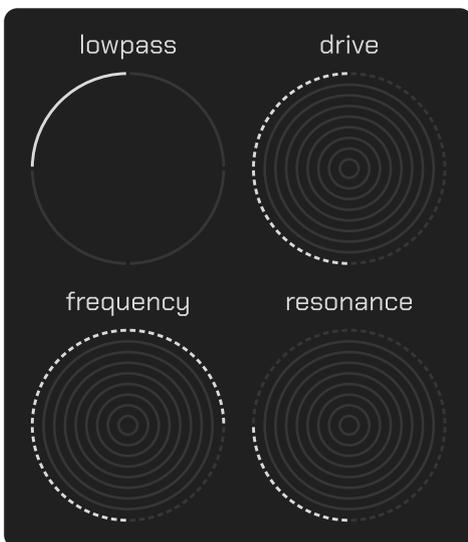


Frequency response representation screen:

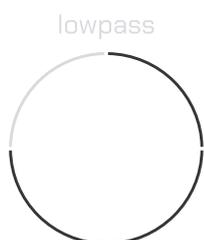


White line enclosing the passband frequencies. Dragging up-down adjusts resonance, and left-right adjusts cutoff frequency.

Filter settings sliders panel:

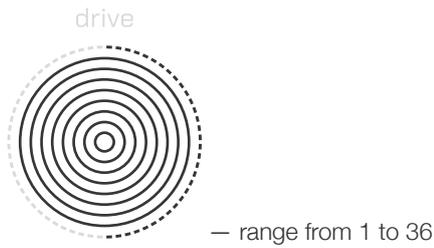


Mode selection slider:

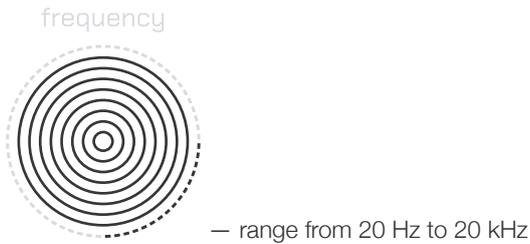


— options: "bypassed," "lowpass," "bandpass," and "highpass"

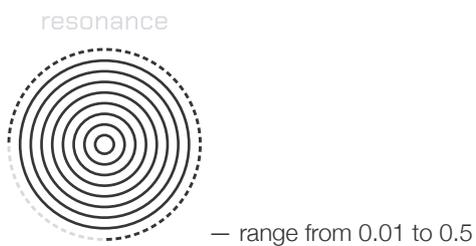
Drive slider:



Cutoff frequency slider:



Resonance slider:



GUIDE

How to adjust the filter parameters?

1. Switch the filter mode by dragging the "mode" slider from "bypassed" to "lowpass," "bandpass," or "highpass."
2. Drag up or down by screen to adjust the resonance.
3. Drag left or right by screen to adjust the cutoff frequency.
4. Fine-tune each parameter manually using the sliders for "drive," "frequency," and "resonance."

Echo

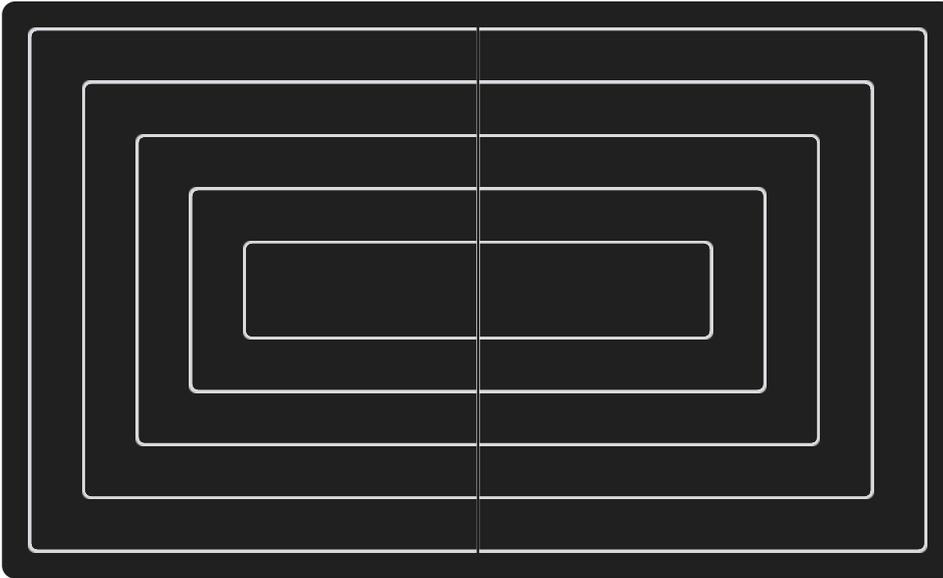
This module controls the delay effect, repeating the original signal after a set interval to emulate an echo.

REFERENCES

Echo module activation button:

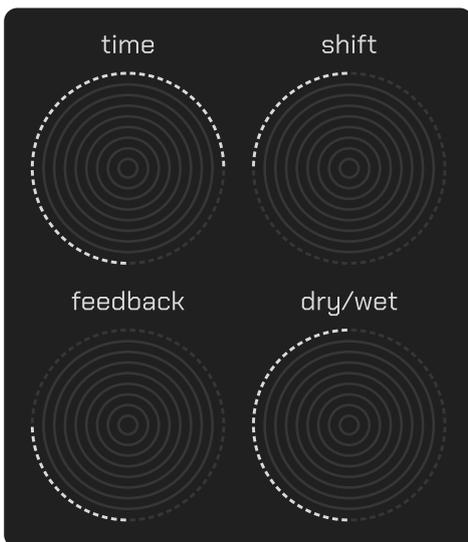


Echo effect representation screen:

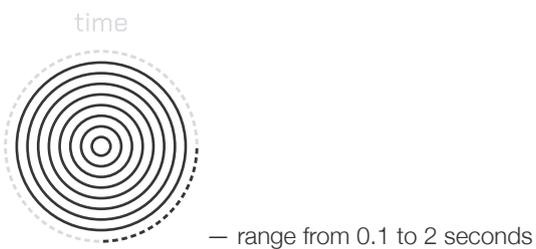


Note: Dragging up-down adjusts delay, and left-right adjusts delay offset for each channel.

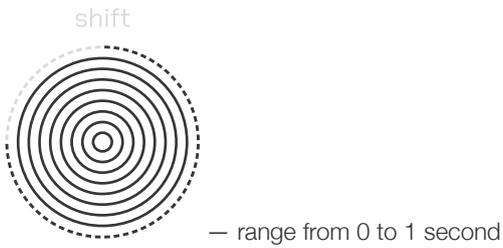
Echo effect settings sliders panel:



Delay time slider:



Channel additional delay time slider:

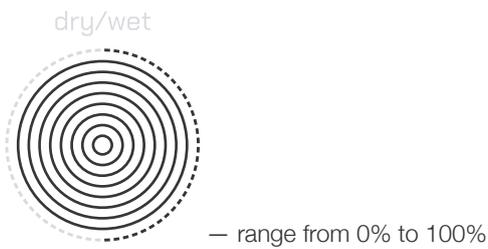


Note: Dragging left adjusts the left channel, and right adjusts the right channel.

Feedback control slider:



Dry-wet signal ratio slider:



GUIDE

How to adjust the Echo parameters?

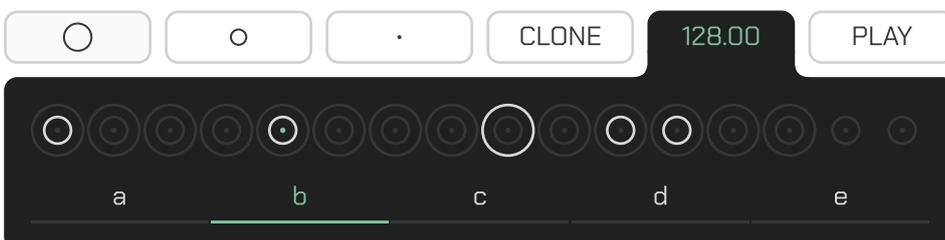
1. Drag "dry/wet" slider to control the effect's intensity on the signal.
2. Drag up or down by screen to adjust the delay time.
3. Drag left or right by screen to adjust the offset.
4. Manually fine-tune each parameter using the sliders: "time," "shift" and "feedback."

Sequencer

Module for recording, editing, and playing note sequences.

REFERENCES

The sequencer consists of 5 segments, each with 16 elements.



Adding or removing mode activation button:



In this mode, touching an excluded element adds it to the sequence, while touching an included element removes it. Pressing "a," "b," "c," "d," or "e" toggles the state of the corresponding segment.

Muting or unmuting mode activation button:



In this mode, touching a muted element unmutes it, while touching an unmuted element mutes it. Pressing "a," "b," "c," "d," or "e" toggles the state of the corresponding segment.

Selecting mode activation button:



In this mode, touching an element or pressing a segment button selects the corresponding one.

Cloning mode activation button:



In this mode, touching an element copies notes and exclusion/muting states from the last selected element, while pressing a segment button clones notes and states from the elements of the last selected segment.

Tempo slider:



Dragging up increases the tempo, and down decreases it. A left-right gesture activates the external MIDI clock listening mode. Rhythmic tapping sets the tempo based on intervals between the last two taps.

Play button:



Note: Pressing and dragging outside the button toggles between play and record modes.

Record button:



During simultaneous recording and playback, the sequencer deletes notes from the currently playing element and adds those played at the same time on the keyboard or external controller.

Element states are displayed as circles above the segment buttons.

Element button:

-  — included in sequence
-  — currently playing
-  — unmuted

- — muted
- — contains notes
- — selected for editing

Note: Unincluded elements cannot become the currently playing element, but muted ones can.

Segments are switched using buttons "a," "b," "c," "d," and "e." The selected segment is underlined with a green line. The segment containing the currently playing element flashes in sync with the metronome.

Segment buttons:



In element edit mode, each key press adds the corresponding note. The vertical touch point determines the voice's volume —the higher the touch, the louder. Dragging up or down on the key adjusts key pressure, controlling the corresponding voice's volume. Subsequent touches on the added note remove it. Each element holds up to four notes. Attempting to add a fifth note removes the closest one before adding the new note. Editing the key range works similarly to play mode.

GUIDES

How to add or remove an element or segment?

1. Activate the add/remove elements button.
2. Select the desired elements to add to the sequence.
3. To add or remove an entire segment, ensure the button is active and navigate to the desired segment.
4. Ensure the state has changed to the opposite.

How to mute or unmute an element or segment?

1. Activate the mute/unmute elements button.
2. Select the desired elements to modify.
3. To mute or unmute an entire segment, ensure the button is active and navigate to the desired segment.
4. Ensure the state has changed to the opposite.

How to select an element for modification?

1. Activate the element selection button.
2. Choose the desired element for modification.
3. Make the changes.
4. Ensure the notes are recorded in the selected element.

How to clone elements or segments?

1. Select the element or segment you want to clone.
2. Activate the clone elements and segments button.
3. Select the element or segment where you want to clone it.
4. Ensure everything is cloned into the correct element or segment.

How to add notes to the selected element?

1. Select the element for modifications.
2. Press the desired notes on the keyboard.
3. Adjust the volume of each note by tapping and moving vertically.
4. Ensure the notes are added in the correct element.

How to change the tempo?

1. Drag the slider up to increase or down to decrease the tempo.
2. Tap the slider twice, and it will determine the speed based on the last two taps.

How to enable recording?

1. Drag the "PLAY" button in any direction beyond its boundaries.
2. Ensure the "PLAY" button switches to "REC"

How to shift the start of notes relative to playable sequencer elements?

1. Select the "Voice" module.
2. Drag the "offset" slider.
3. Select the desired offset.
4. Ensure that the note start has shifted.

Note: This feature is useful for synchronization with other devices via MIDI clock.

How to adjust the note duration in sequencer elements?

1. Select the "Voice" module.
2. Drag the "duration" slider.
3. Select the desired duration.
4. Ensure that the notes have changed their duration.

Keyboard

This module is designed for playing notes or editing them in selected elements of the sequencer.



REFERENCES

Left slider:



— dragging up shifts the key range start to the right, and down shifts it to the left.

Right slider:



— dragging up shifts the key range end to the right, and down shifts it to the left.

Note: Double-tapping the side sliders resets the range boundaries to default values: key 1 for the left boundary and key 24 for the right.

Keys between the sliders are displayed according to the range set by the side sliders, showing a minimum of 4 and a maximum of 64 keys simultaneously.

Keys:



Each key press activates the corresponding note. The vertical touch point determines the key's pressure and thus the voice's volume—the higher the touch, the louder.

Dragging up or down on the key adjusts key pressure, controlling the corresponding voice's volume—the higher, the louder.

The keyboard supports holding up to 4 voices simultaneously.

Attempting to play a 5th voice turns off the nearest key before activating the new voice.

GUIDE

How to enlarge or shrink the keyboard?

1. Drag the left keyboard slider vertically to adjust the starting key range.
2. Drag the right keyboard slider vertically to adjust the ending key range.
3. Double-tap either slider to reset the keyboard to its default settings.

MIDI-mapper

Module that maps Cellular application interface elements to the position of the currently selected target button and assigns them to the most recently modified MIDI controller — a pressed key, button, or moved slider.

REFERENCES

Mapper mode activation button:



The Mapper interface includes two types of purple elements: for selecting program change targets and continuous controller targets.

Program change target selection buttons:



Continuous controller target selection buttons:



Clicking a target selection button assigns a position for mapping to a MIDI controller. Clicking another target selection button first cancels the previous selection, then selects a new position.

The tempo slider area displays the channel and controller numbers mapped to the selected target or "..." if no mapping exists.

Channel and controller numbers mapped to the target:



GUIDES

How to map a button to a MIDI controller?

1. Connect the MIDI controller to your device.
2. Press the "Mapper mode activation" button to enter "Mapper" module.
3. Press any "program change target selection" button.
4. Ensure it turns white.
5. Press the button on the MIDI controller you want to map.
6. Verify that the tempo slider area displays the channel and controller numbers.
7. Press the "Mapper mode activation" button again to exit "Mapper" module.
8. Press the button on the MIDI controller to confirm it controls the target button.

How to map a slider to a MIDI controller?

1. Connect the MIDI controller to your device.
2. Press the "Mapper mode activation" button to enter "Mapper" module.
3. Press the "continuous controller target selection" button.
4. Ensure it turns white.
5. Move the slider or turn the potentiometer on the MIDI controller you want to map.
6. Verify that the tempo slider area displays the channel and controller numbers.
7. Press the "Mapper mode activation" button again to exit "Mapper" module.
8. Move the slider or turn the potentiometer on the MIDI controller to confirm it controls the target slider.

Presets

This module provides a set of saved Cellular parameters that can be loaded, saved, or overwritten.

REFERENCES

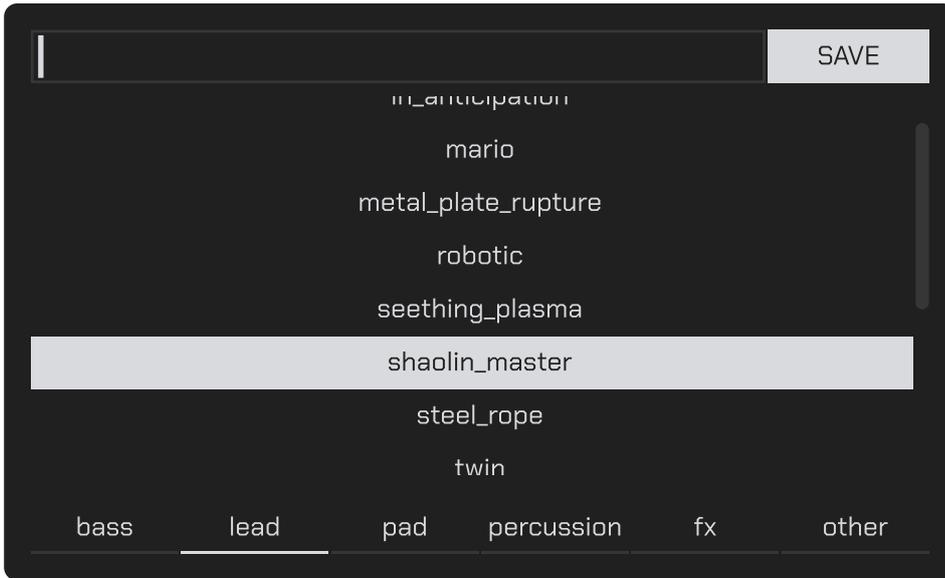
Previous and next preset selection buttons:



Preset menu activation button:



Preset menu:



Preset name input field and save button:



The "SAVE" button saves the preset in the selected category if the name is not empty and does not match the name of built-in presets. If a custom preset name is entered and "SAVE" is pressed, the preset will be overwritten.

Category selection buttons:



Selected category presets list:



A light line highlights the last loaded preset. Clicking on the preset name loads it.

GUIDES

How to switch to the previous or next preset?

1. Press the button to select the previous or next preset.
2. Ensure that Cellular's settings have changed.

How to select a specific preset?

1. Press the preset menu activation button to open the menu.

2. Choose a category using the corresponding button.
3. Scroll down to view the full list of presets.
4. Select the name of the preset you want to load from the list.
5. Press the preset menu activation button again to close the menu.
6. Ensure that Cellular's settings have changed.

How to save your settings?

1. Press the preset menu activation button to open the menu.
2. Choose a category using the corresponding button.
3. At the top of the menu, enter the desired name for your preset in the corresponding field.
4. Ensure that the name does not match the name of a built-in preset.
5. Press the "SAVE" button.
6. Press the preset menu activation button again to reopen the menu.
7. Ensure that your preset name appears in the list of the selected category.

Undo and Redo

Undo and redo buttons revert the last change to a saved parameter or reapply an undone action.

REFERENCES

Undo and redo buttons:



Note: Logic does not yet extend to the "Universe" field.

GUIDE

How to undo or redo an action?

1. Make a change to any Cellular parameter.
2. Press the undo button.
3. Ensure that the parameter you changed reverts to its state before the last modification.
4. Press the redo button.
5. Ensure that the parameter you undid returns to its state before the undo action.

Contacts

For the latest news and updates:

- Visit our [Website](#)
- Follow us on [Instagram](#)
- Join our [Telegram Group](#)

Stay tuned for more!