

U LTRA CHOP II

is a simple yet complex audio sculpting device that modulates amplitudes. Utilising high-resolution wavetables, it precisely cuts or modulates the amplitude of any audio source. Built on the robust MaxMSP's `gen~` framework, UCII guarantees each pulse is delivered with precision and clarity.

This device introduces special high-frequency "impulsive" wavetables. These wavetables are specifically designed to significantly impact or enhance the harmonic components of your audio, allowing for a rich exploration of timbral possibilities. Additionally, users have the freedom to import their custom wavetables or delve into experiments with their samples.

UCII also introduces a distinctive distortion effect. Unlike conventional designs, this distortion is applied directly to the modulating wavetable, not the main output. The result is a more intense, brutal stuttering effect that adds a raw, edgy character to your audio.

Whether you aim to dissect beats, forge evolving textures, or dynamically manipulate audio streams, UCII serves as your portal to undiscovered sonic landscapes. The device is adept at generating sequences from virtually any sound source, offering a palette for experimentation and innovation.

New Features

Compared to its free predecessor, some of the new features include:

- An upgraded audio engine in Gen, offering more audio clarity and additional headroom.
- A new sequencer with 16 steps and clock division modulation for each step, including a randomizer.
- Phase controls that allow you to widen the sound image by splitting the chopping wavetable into two channels and delaying them, like a pseudo-HASS effect.
- A drag-and-drop window where you can drop your samples to be used as chopping wavetables.
- Smooth controls to eliminate clicks from the wavetables and to reduce the wavetables' duty cycle.
- Enhanced visualizers for LR channels and the chopping wavetable.

QuickStart

This device is an audio effect. To use it quickly:

- Drop the device onto an audio or MIDI track.
- Click on the (SEQ) button to open the sequencer, select a few steps, or activate the SELF mode.
- Select a chopping wavetable and press play.

When the sequencer has steps activated, the main clock parameters will be governed by the sequencer's clock values. The SELF mode randomizes the STEP values at the start of each clock, creating continuous stochastic modulation.

All parameters are available for automation. You can also automate the SMOOTH button to achieve unique results. Remember to undo the smoothing at some point, as it cannot be applied more than 4-5 times.

UCII & Sequencer GUI

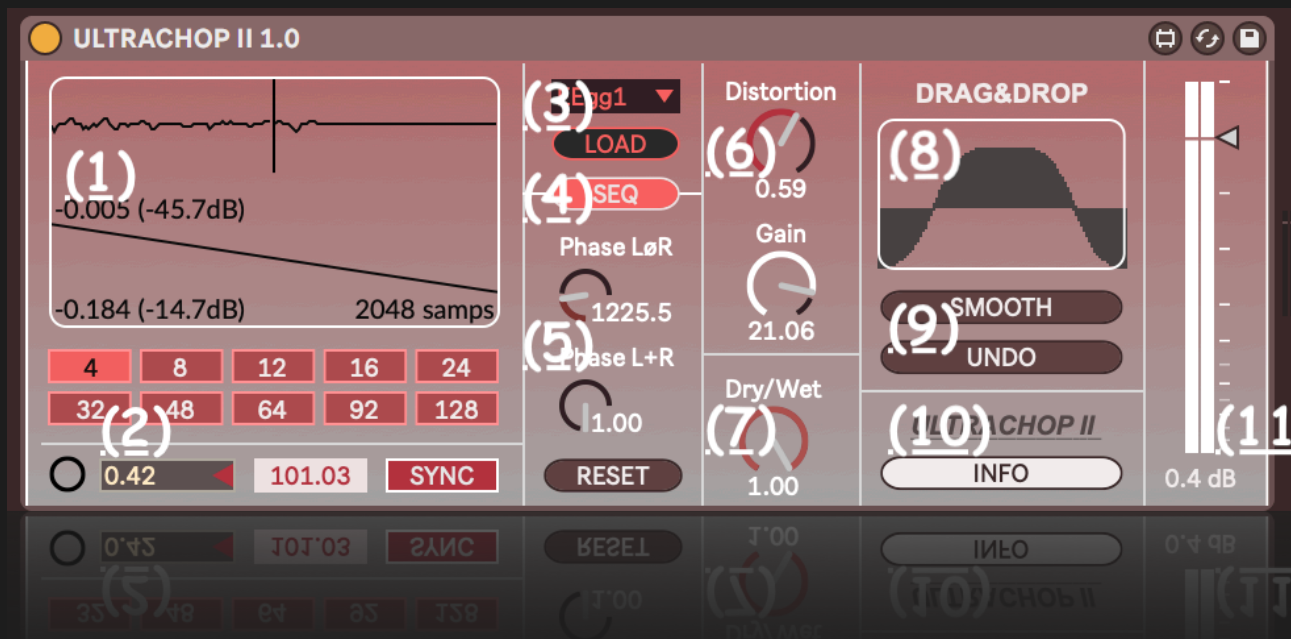
The sequencer will pop-up on a separate window.



You can close it by clicking [SEQ] a second time. This also applies to the [INFO] window.

In the next section, we'll use [] brackets for buttons, () brackets for faders, and {} brackets for sub-windows or visualizers.

UCII Main Parameters



(1) {Wavetable} and {LR Output} Signal Display:

Visualizers for LR signals (output) and the Chopping wavetable.

(2) (Clock Division), [Frequency] & (Sync)

Set the chopping rate with the clock division [Buttons (4, 8, 12, etc.)]. Use the [SYNC] button to toggle synchronisation with the host tempo. Note that the frequency number box/slider will be locked if synchronisation is on.

(3) (Wavetable Selection) & [Loading]

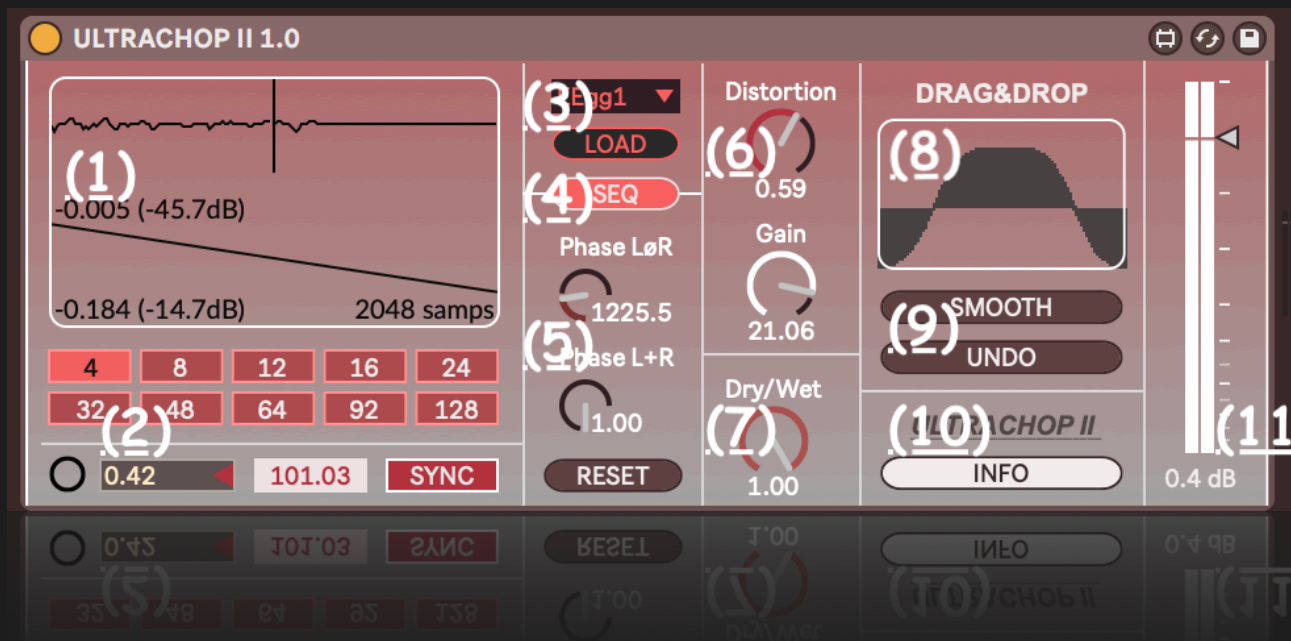
Choose a wavetable for chopping by selecting from the [EEgg1 Dropdown] menu. Load custom wavetables or samples for chopping by clicking the [LOAD] button.

(4) Open (Sequencer) Window

Open the 16-step sequencer UI by pressing the [SEQ] button. Press again to close the sequencer window.

(5) [Phase Adjustments]

Modify the stereo phase of the chopping wavetable using the [Phase LøR] and [Phase L+R] parameters to create a wider stereo image (ø) or to delay the Wavetable's phase for both channels (+). The [RESET] button initialises the parameters to their initial value.



(6) Distortion Controls

Control the amount of distortion with the [Distortion Knob] and adjust its gain using the [Gain Knob]. The distortion is applied to the chopping wavetable, not the main output.

(7) [Dry/Wet] Balance

Adjust the balance between the processed (wet) and original (dry) signal with the [Dry/Wet] parameter.

(8) Sample {Drag & Drop}

Drag and drop your samples into the designated {Drag & Drop} Window to use them as chopping wavetables.

(9) [Smooth] & [Undo]

Use the [SMOOTH] button to soften the wavetable edges, reducing clicks, by applying a Hamming windowing function to the buffer. The [UNDO] button reverts all the smoothing actions.

(10) [INFO]

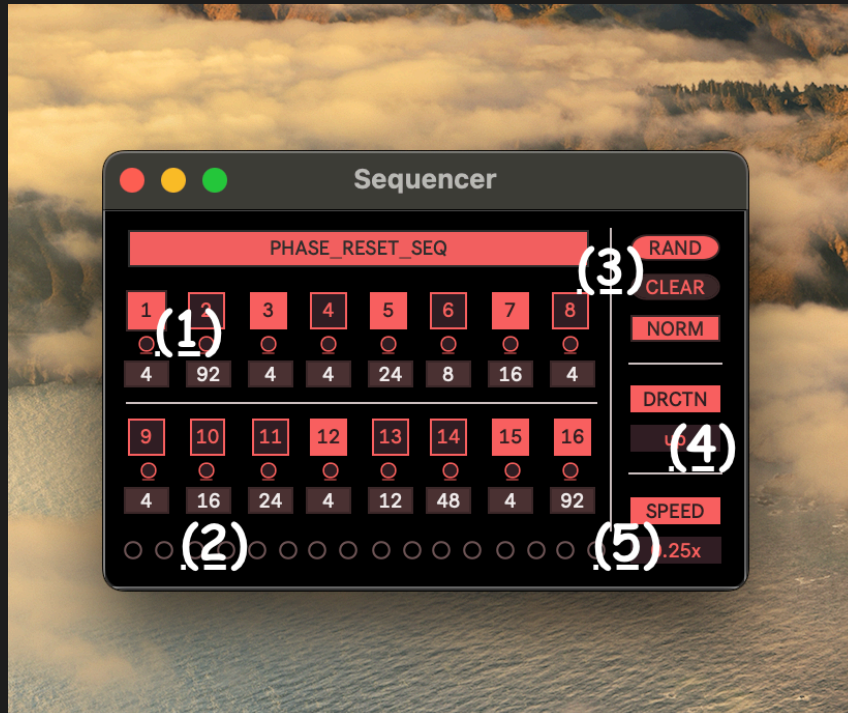
Click the [INFO] button to view additional details and instructions about ULTRACHOP II.

(11) Output Level

Manage the final output level of the device with the (Output Level) fader.

Sequencer Parameters

By pressing the [SEQ] button on the main UI, the Sequencer window will pop up. This is a host synced sequencer that lets you re-trigger the wave phase to create rhythmic and texture variations.



(1) [Step] Activation switches and (Clock) Values

Set the trigger events for each step, from 1 to 16. Each event has a (Clock Division) parameter that changes the clock division tempo until a different value is triggered in a subsequent step. Note that you must clear all steps first if you do not intend to use the sequencer.

(2) Status LEDs

A visualizer for the sequencer's state.

(3) (Random), (Clear), (Norm/Self) buttons

Pressing (RAND) randomizes all the step switches. Pressing (CLEAR) sets all switches off. The (NORM/SELF) toggle allows you

to switch from Normal Mode to Self Mode, where all trigger values are automatically reset at the start of each sequencer's clock. The (NORM/SELF) toggle lets you switch from Normal Mode to Self Mode, where all the trigger values will be reset automatically at the start of each sequencer's clock.

(4) [DRCTN] Fader

Alters the sequencer's direction. 'updown' means the sequencer will go back and forth.

(5) [SPEED] Fader

Adjusts the Sequencer clock using subdivisions.

To generate 4096 sized wavetables out of your own samples (and retain sync and phase values) use this free tool, works inside Ableton:

<https://maxforlive.com/library/device/9609/4096-sampletowavetable-converter>

Notes:

Ultra Chop II Developed by Weightausend.

To generate 4096 sized wavetables out of your samples (to retain sync) use this free tool:

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