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COLORIZE
YOUR
SOUND



ALTER ECHO

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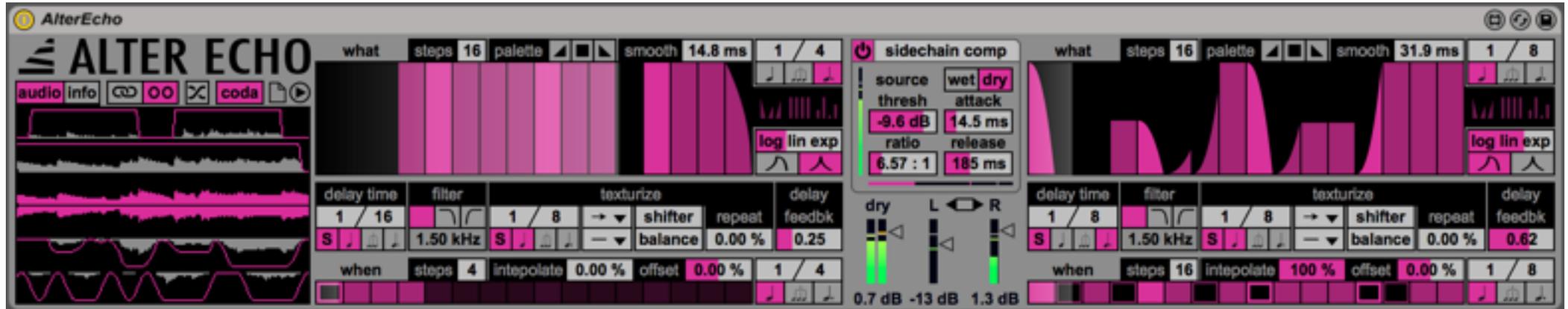
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1. THIS IS ALTER ECHO

Thank you for choosing Alter Echo!

Alter Echo is a Max For Live audio effect, a delay on steroids, with special envelope sequencers, a "texturize" section for applying advanced manipulation to delayed signals, and a "dry to wet" or "wet to dry" side-chain compressor.



This document will guide you through a complete overview of the product. After reading it, you should be able to use it on perfect, so we recommend that you take the time to read this guide in its entirety.

Ableton Live 9 and the Max For Live add-on are required (refer to our website to know which are the Live version supported for every released version): Alter Echo is a Max For Live device and works both on Mac OS® X and Windows®.

Alter Echo is currently available as single product.

Thanks to the Max For Live total integration, each Alter Echo parameter is described in the Live Info View.

We suggest to follow K-Devices via [Facebook](#), [Twitter](#) or sign up our [Newsletter](#), in order to stay updated with K-Devices news and future Alter Echo updates.

1. VIDEO TUTORIALS

Alter Echo also features a series of training videos made in collaboration with Brian Smith.

Brian is a [Certified Ableton Trainer](#), owner of [big brain audio](#), a Berlin-based training center for audio production.

The Alter Echo videos are available at this [link](#): we'll add more as times passes by, so be sure to subscribe to our [Youtube channel](#).

2. INSTALLATION

To install the device double click on the .alp file contained in the downloaded package. The device, presets, Live sets and Ableton Live Lesson will be automatically installed.

The Alter Echo device will be installed in the Ableton Live Library: you can find it in the “packs” tab of the Live 9 browser.

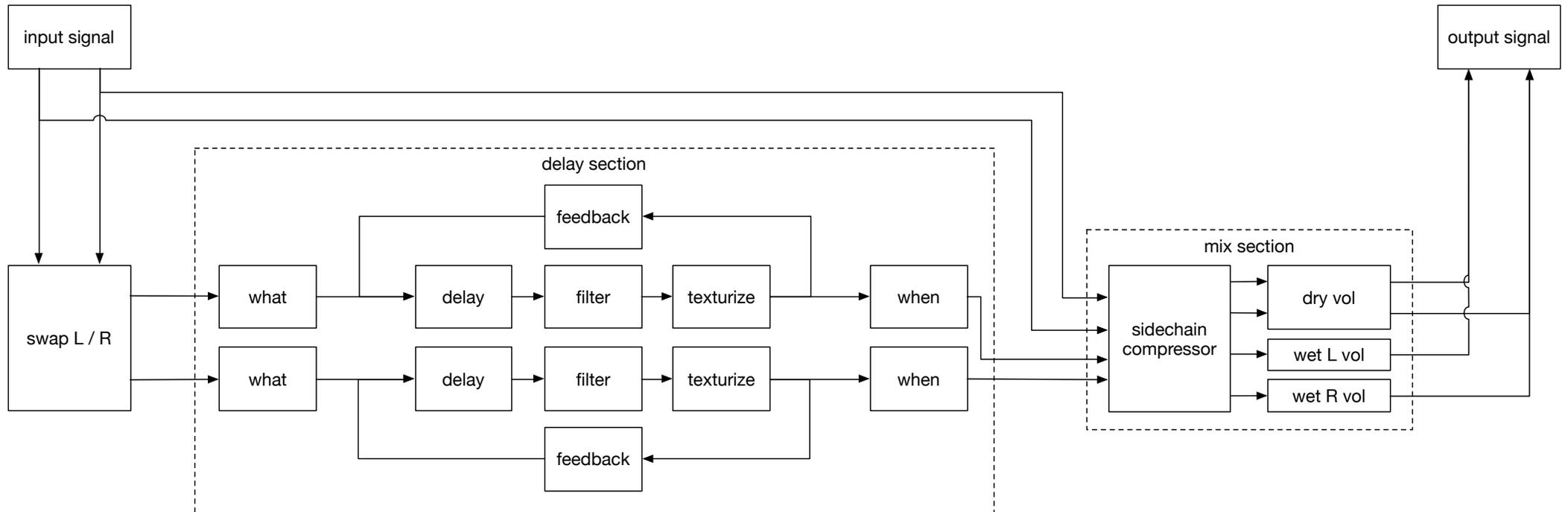
3. PACK CONTENTS

In addition to the Max For Live device, Alter Echo contains:

- 71 presets;
- 5 audio effect racks;
- 10 Live Sets;
- 67.1 Mb of samples.

4. HOW ALTER ECHO WORKS

Alter Echo is a delay that features a smarter approach than classic delays: its signal flow, as you can see below, features a first delay section, and a final mix stage.



5. THE DELAY SECTION

Alter Echo's approach to delay is based on the "what" and "when" concepts. With Alter Echo, you can set exactly what content should be delayed, with which settings, and when it should be reproduced.

2. THE "WHAT" SEQUENCER

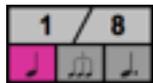
This sequencer modifies the amplitude of the incoming audio signal: in this way you can feed the delay section with only the audio you need, quickly and easily.



With the sequencer you can define the amplitude and shape of each step. It behaves as a normal step sequencer, but you can even adjust the shape of each step with a precise graphical feedback: you hear what you see.



To change the shape of a step just click on the desired shape on the palette, and then click back on the sequencer step that you want to modify: the step then changes its shape to the new one you choose (between fade-in, flat or fade-out). You can even modify multiple steps at the same time using click and drag.



You can change the step sequencer's resolution with these parameters. You can define both numerator and denominator, in order to achieve more complex time resolution. Furthermore, you can choose between normal, triplets, and dotted notes.



Use this parameter to change the number of steps in the step sequencer.



When you are using the fade-in and fade-out shapes, you can adjust their behavior with these functions, morphing between logarithmic, linear, and exponential curves. With the switch in the bottom you can even have a different behavior for fade-in and fade-out: in this way you can design exactly the envelope you need.




Since this step sequencer works directly on the amplitude of the input signal, you can use the smooth parameter to reduce any edge of the designed envelopes.

With these three buttons, you can randomize or set to default all the steps of the sequencer: the first on the left randomizes both shapes and amplitudes, the one in the middle brings all the shapes to flat position and all the amplitude values to the maximum level, while the button on the right randomizes only the amplitude values.

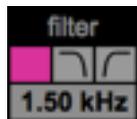
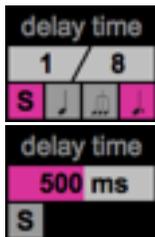
3. DELAY AND TEXTURIZE YOUR SOUND

As said, Alter Echo is basically a delay. But at the same time, it is more than a delay: it is a "parallel" sound processor that lets you manipulate delayed and meticulously shaped audio inputs.

You'll find in this device unique features to delay and twist your sounds!

1. DELAY

The delay section offers classic, yet powerful tools for standard delaying operations.



The delay time can be synced to Live's transport, or unsynced (expressed in milliseconds).

When it is synced you can define both numerator and denominator, in order to achieve more complex delay resolutions. Furthermore, you can choose between normal, triplets, and dotted notes.

The filter is applied right after the delay itself. It may be used as a low-pass or high-pass biquadratic filter. With the slider below you can define its cutoff frequency.

If you do not need any filter in your delay chain strip, just bypass it by setting it to the first position on the left.



After the texturize section (which will be explained in detail below), you can define the amount of signal that will be sent back to the delay with the feedback parameter.

2. TEXTURIZE

The texturize section is where the exclusive manipulation process of Alter Echo takes place.

The first parameter, called texturize length, is the core of this section: all parameters depend on that value.

Texturize acts as a nested delay: if you think of a delay effect in terms of tape, then the texturize section is a segment of this tape. On this segment you can apply advanced manipulation processing to the delayed signal.

The introduction of a second duration value, different from delay time, lets Alter Echo offer exclusive manipulations, reading options, and accents configuration, which makes it unique among all other delay effects!



The texturize length can be set in relative or absolute values (expressed in milliseconds).

When it is synced you can define both numerator and denominator, in order to achieve any length you may need. Furthermore, you can choose between normal, triplets and dotted notes.

You can set the playhead direction for the texturize segment: forward, backward, and forward and backward.



You can apply an amplitude envelope function to the texturize segment: flat (no envelopes), sine, and powered function. Selecting a non-flat function with short texturize lengths gives interesting semi-phasing effects.



The shifter is one of most creative parameters in Alter Echo. In a nutshell, the texturize segment is read not by one, but by two playheads. This parameter lets you set an offset for the second playhead. The maximum shifter value is equal to the texturize length value.

balance

The balance sets the amplitude for both playheads. Minimum (0%) means that the first playhead gets 100% of amplitude; maximum (100%) means that the second playhead gets 100% of amplitude; 50% provides equal amplitude values for both playheads.

repeat
0.00 %

You can set the probability that the texturize segment is repeated. Repeat equal to 100% makes Alter Echo freeze the texturize segment. This can be useful to introduce some variations on the fly, or, with short texturize lengths, to push Alter Echo in extreme glitch and cuts territories.

4. THE "WHEN" SEQUENCER

This toggle sequencer modifies the amplitude of the outgoing audio signal: in this way you can choose when the delay signal is going to be passed to the mix section.



With the toggle sequencer you can define the amplitude and shape for each step. It behaves as a normal step sequencer, but without having to define the amount per each step: you just have to choose which step is ON, and which step is OFF.

1 / 8

You can change the sequencer's resolution with these parameters. You can define both numerator and denominator, in order to achieve more complex time resolution. Furthermore, you can choose between normal, triplets, and dotted notes.

steps 4

Use this parameter to change the number of steps in the sequencer.

intepolate 0.00 %

Since this sequencer works directly on the amplitude of the input signal, you can use the smooth parameter to reduce any edge of the envelope. As much as you increase this value, as much as the transitions OFF/ON and ON/OFF will be interpolated as a sine.

offset 0.00 %

You can even offset the envelope from -50% up to +50% of the time resolution.

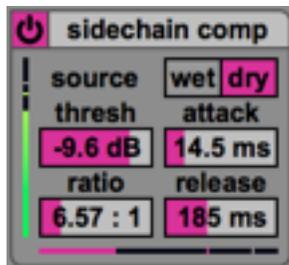
6. THE MIX SECTION

In this section, you control the signal sent through Live.

The sidechain compressor - a well known dynamic tool - is used here as a creative amplitude manager.

Exclusive faders for dry and wet signals has been preferred to a classic dry/wet dial: this configuration offers independent control on delayed channels, since they are exclusively editable, and lets you set dry/wet amplitude relationships more precisely.

1. SIDECCHAIN COMPRESSION



With the sidechain compressor, you can do exactly what you imagine: analyze a signal to create a compression signal, and apply that compression to the other.

Setting wet as source, you can analyze the wet and compress the dry. Setting dry as source, you'll do the opposite.

The compressor uses standard parameters: with threshold you set at which amplitude level the compressor becomes active. With ratio, you can set the amount of compression, and with attack and release you can set the time it takes the compressor to activate and deactivate.

The vertical VU-meter in the left shows the incoming signal set as source, while the pink horizontal slider is the compression meter.

2. BALANCE DRY AND WET



With these faders you can set the volume of the dry and wet signals. Please note that when the switch in the top between L and R is activated (pink) the faders are linked, while when the switch is off (gray) they are independent.

7. OTHER

1. FULL VIEW VS COMPACT VIEW



Alter Echo can be packed in a very small interface using the circled triangle in the bottom right of the Title.

You can select between two different visualizations: "audio" is a stereo evolving preview of the incoming audio (see the signal in the center in the left image), of the what and when envelopes, and the delayed/manipulated audio signals.

Otherwise you can choose the "info" visualization: it is basically a simple infographic static display that shows the current setup of the delay and texturize section.



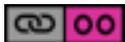
2. OTHER CONTROLS



Swap channel L and R to R and L, prior to apply send the dry signal to the what section.



When activated, Coda keeps the wet signal on, even after when the transport is turned off.



Link/Unlink mode, to edit Left and Right channels with different values.



Reset all parameters to default settings.

8. CREATIVE TIPS

Here's a quick list with usage suggestions and settings to get different results with Alter Echo (all in link mode).

Accents	Set time delay to 1/16, texturize length to 1/8, then try these configurations of shifter and balance: 0.5 50% - 1. 50% - 1. 10% - 1. 90%
On the fly re-arranger	Set texturize length to medium/high values, and repeat > 50%
Glitch and cuts	Set texturize length to short values, and repeat approximately to 40%
Odd phasing stuff	Set texturize length to short values, and envelope to sine or powered functions
Sutter variations	Set texturize length to short/medium values, and repeat > 50%
Alter tremolo 1	Set texturize length to medium values, and envelope to sine or powered functions
Alter tremolo 2	Set delay time to short values, feedback to high values, and when sequencer to fast on/off alternation (edit interpolation for different results)
Short-delayed long pendulum	Set texturize length to high values, direction to forward and backward, and delay time to a short value

9. PUSH IMPLEMENTATION

1st page	1	2	3	4	5	6	7	8
	Link mode	Swap Chan	Minimize	Coda	L	Wet Link	R	dry
2nd page	9	10	11	12	13	14	15	16
	1 What Res Num	1 What Res Den	1 What Res Kind	1 What Steps	2 What Steps	2 What Res Kind	2 What Res Den	2 What Res Num
3rd page	17	18	19	20	21	22	23	24
	1 What Rand All	1 What Def All	1 What Rand Amp		2 What Rand Amp	2 What Def All	2 What Rand All	
4th page	25	26	27	28	29	30	31	32
	1 Del Sync	1 What Smooth	1 What Curve	1 What Curve Mode	2 What Curve Mode	2 What Curve	2 What Smooth	2 Del Sync
5th page	33	34	35	36	37	38	39	40
	1 Del Time	1 Del Res Num	1 Del Res Den	1 Del Res Kind	2 Del Res Kind	2 Del Res Den	2 Del Res Num	2 Del Time
6th page	41	42	43	44	45	46	47	48
	1 Txt Sync	1 Filt Freq	1 Filt Kind	1 Del Fdbk	2 Del Fdbk	2 Filt Kind	2 Filt Freq	2 Txt Sync
7th page	49	50	51	52	53	54	55	56
	1 Txt Lenght	1 Txt Res Num	1 Txt Res Den	1 Txt Res Kind	2 Txt Res Kind	2 Txt Res Den	2 Txt Res Num	2 Txt Lenght
8th page	57	58	59	60	61	62	63	64
	1 Txt Dir	1 Txt Interp	1 Txt Shift	1 Txt Bal	2 Txt Bal	2 Txt Shift	2 Txt Interp	2 Txt Dir
9th page	65	66	67	68	69	70	71	72
	1 When Res Num	1 When Res Den	1 When Res Kind	1 When Steps	2 When Steps	2 When Res Kind	2 When Res Den	2 When Res Num
10th page	73	74	75	76	77	78	79	80
	1 When Interp	1 Txt Repeat	1 When Offset		2 When Offset	2 Txt Repeat	2 When Interp	
11th page	81	82	83	84	85	86	87	88
	Compress	Comp Source		Comp Thres	Comp Ratio		Comp Att	Comp Rel