

Vokaloid

User Manual

reakton

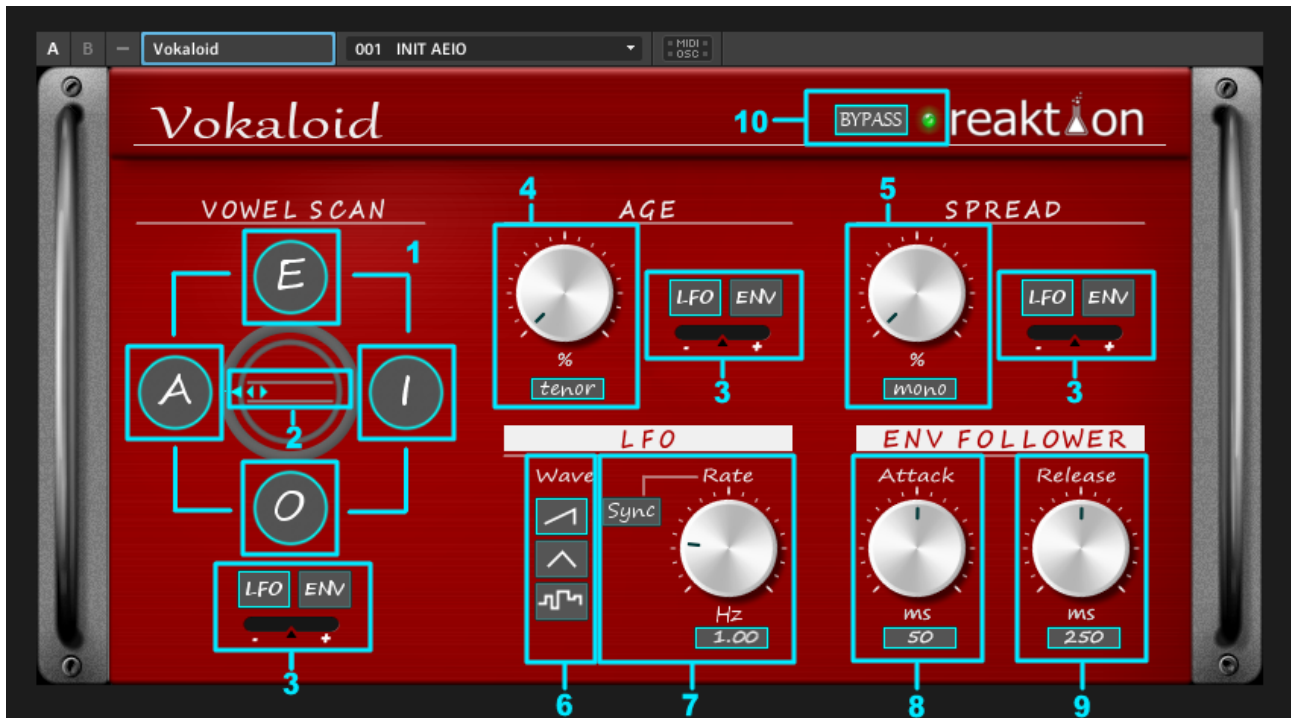
Vokaloïd is basically a “Formant Filter” – a special kind of filter with fixed frequencies in the spectrum (formants) that simulate the sound of vowels of the human vocal tract.

In each circular box you can select a different vowel sound and smoothly scan through them with the *Scan* parameter.

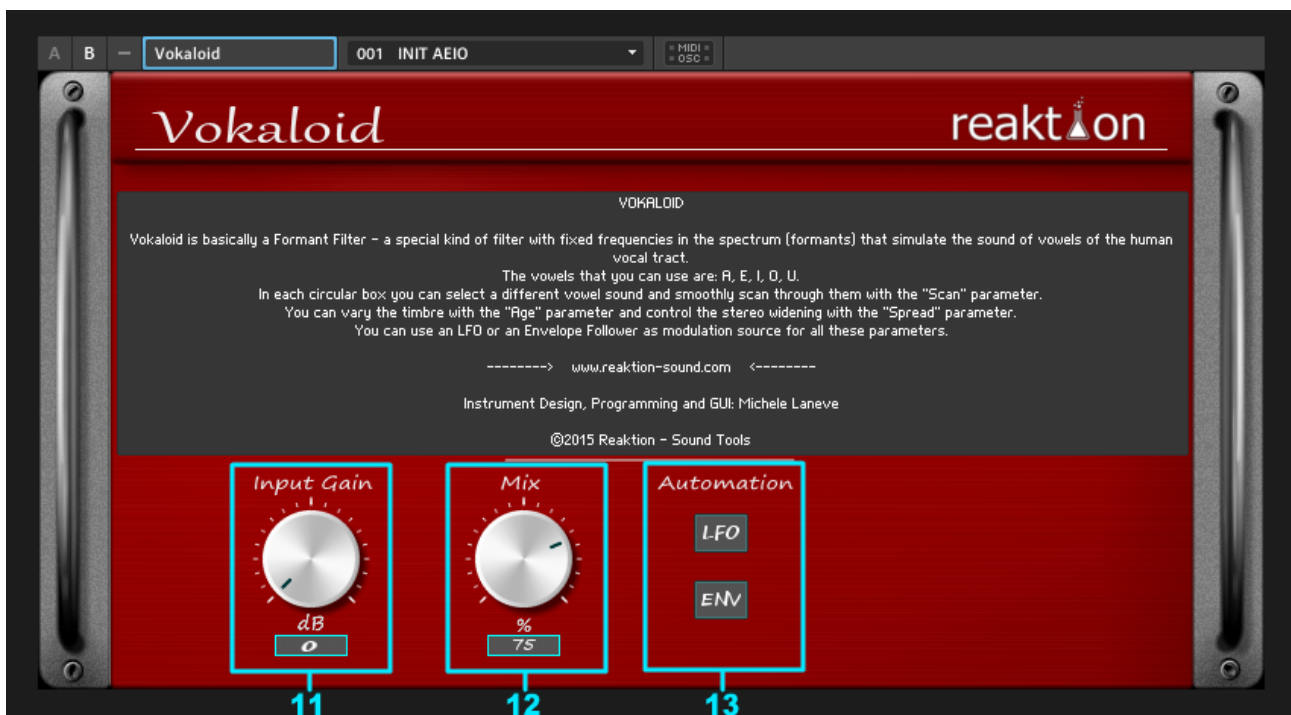
You can vary the timbre with the *Age* parameter and control the stereo widening with the *Spread* parameter.

You can use an *LFO* or an *Envelope Follower* as modulation source for all these parameters.

Panel A view



Panel B view



1 – **Vowel Selector:** each box contains the five vowel sounds that you can select from – A, E, I, O, U. To select a vowel, click&drag vertically inside a box.

2 – **Vowel Scan:** move the fader from left to right to scan manually through the four boxes. The triangle-shaped indicator will show the actual selected sound smoothly faded from one vowel to another.

3 – **Modulation source and amount:** the *Scan*, *Age* and *Spread* parameters can be modulated independently by one of the available modulation sources (Low Frequency Oscillator and Envelope Follower).

Select the modulation source with the source switch and set the modulation amount with bi-polar range by moving the fader from center (no modulation) to the right (positive range) or to the left (negative range). To reset at any moment the modulation amount to zero, right click the fader and select “Set to default” in the menu.

4 – **Age:** the *Age* parameter changes the timbre of the vowels ranging from “tenor” timbre to “kid”-like voice. This parameter can be modulated.

5 – **Spread:** The *Spread* parameter controls the stereo widening of the output signal ranging from mono to stereo to wide (fully opened). Note that you can use both mono and stereo audio signal as inputs and have both mono and stereo outputs as well. This parameter can be modulated.

6 – **LFO Wave:** the *Wave* switch selects the waveform of the LFO (Saw, Triangle or Random).

7 – **LFO Rate:** the *Rate* knob selects the frequency of the LFO in Hertz when the “Sync” is off (Figure 1) or in clock division factor when “Sync” is on (Figure 2).



Figure 1: (Sync Off) set the LFO rate in Hertz from 0.10 to 10 Hz

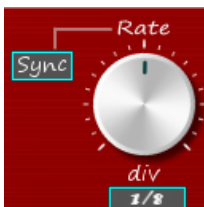


Figure 2: (Sync On) sync the LFO rate with host clock and set a division factor (1/2, 1/4, 1/8, 1/8T, 1/16)

8/9 – **Envelope Follower:** The *Envelope Follower* keeps track of the input signal amplitude and uses this information as a control signal to modulate *Scan*, *Age* and *Spread* parameters.

- **Attack:** this knob controls the attack time of the Env.Follower in milliseconds (from 0 to 100 ms)
- **Release:** this knob controls the release time of the Env.Follower in milliseconds (from 0 to 500 ms)

10 – **Bypass:** this switch sets the *bypass* mode (when active, the input signal is directly sent to the output and no effect will be applied).

The LED colour indicates the *bypass* status:

- green LED (Figure 3): *bypass* mode OFF, the effect is active and you will hear the wet signal
- red LED (Figure 4): *bypass* mode ON, the effect is not active and you will hear the dry signal



Figure 3: *Bypass* mode Off, wet signal

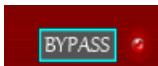


Figure 4: *Bypass* mode On, dry signal

11 – **Input Gain:** this sets the level in decibels (from 0 to 12 dB) of the Input signal that goes into the filter. This is useful to compensate the slight loss of output amplitude when the effect is on.

12 – **Mix:** it controls the mix of Dry/Wet signals

13 – **Automation:** you can turn On/Off the Automation data sending to the Host independently for the LFO and the Env.Follower.

Note: the **Vokaloid** can also act as **Host Automation data generator** with both the LFO and the Envelope Follower as automation sources. This feature is available also when the Vokaloid is in Bypass mode.