# BlueLab precedence



### DESCRIPTION

**Precedence effect (or Haas effect):** "Reflections of a sound happening within 30ms are fused into it and ascribed to the same object".

In other words, if a sound arrives to a listener, followed by the same sound with a small delay, the listener will perceive a single source. Moreover, the listener will perceive a spatial location for the source.

The **Precedence** plugin uses the precedence effect to add spatial information to a sound (location clue), and dubbing effect, by adding an adjustable delay to the left or the right channel.



# **EXAMPLES OF USE**

#### Shift the sound source left or right

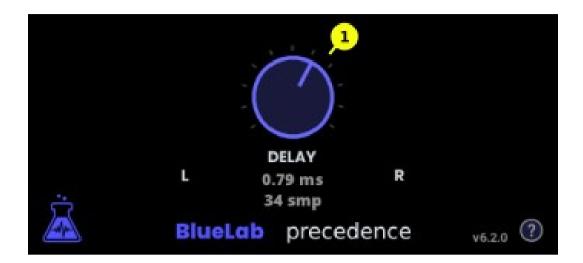
The plugin can be used to shift the perceived incoming direction of a sound. To do so, a delay of a few milliseconds (around 2 or 3ms) will be chosen.

## **Dubbing effect**

The plugin can shift two channels in time from one to the other to get an adjustable dubbing effect. To do so, a delay around 30ms will be chosen.

**Note:** Between 30ms and 50ms, we start to perceive two sounds, like a very short echo effect.

# **USAGE**



The **Precedence** plugin takes a mono or stereo signal in input, and outputs two channels.

If the input signal is mono, the precedence effect is applied strictly speaking. If the input signal is stereo, a delay is applied to one of the channels, and some location information and dubbing effects could be achieved (the result will depend on the stereo sound in input).

The **DELAY (1)** parameter sets the value of the delay to apply. The value is displayed in milliseconds (ms) between 0 and 50ms, and in number of samples (smp) with range depending on the sample rate of the project.

If the knob is turned left by a small value, the listener will perceive the sound as if it came from the left (in this case a delay is applied to the right channel).

If the knob is turned right by a small value, the listener will perceive the sound as if it came from the right (in this case a delay is applied to the left channel).

Around 2 or 3ms, the delay produces an effect of perceived source location.

With bigger values, less than 30ms, the delay produces an effect between source location clue and dubbing.

From 30 to 50ms, we start to perceive very short echos.