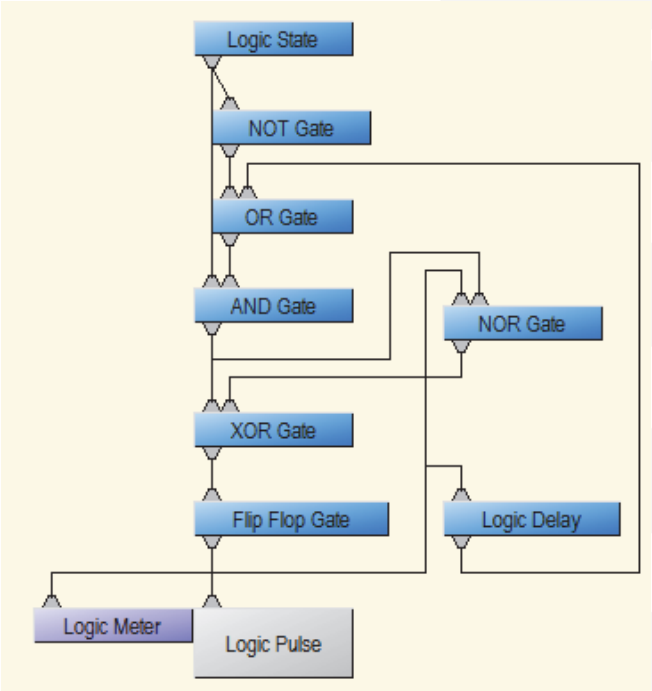
Mainline Marketing, Inc.

Application - Biamp Systems – Tips & Tricks: Generating a Logic Pulse.

We have received several requests for ways to generate a logic pulse. In most cases this is needed to control an LED connected to a Logic Box so it flashes when something happens. The best way to achieve this is to build a "clock" circuit that generates a pulse signal and then add it to a steady logic signal with an AND gate to obtain the desired result. Here you have two ways of generating a Logic Pulse

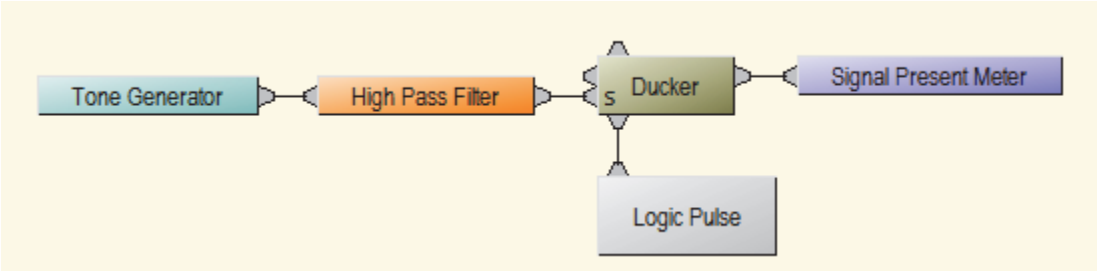


Option 1: Build the logic circuit as shown. When the Logic State is turned on, the Flip-Flop gate at the bottom will give you a pulsing signal. The speed of the logic pulse is controlled by the Logic Delay.

Pros: This circuit uses only Logic so there's no DSP load. Also, the Logic Delay allows controlling both the ON and Off times independently so we can have a short pulse followed by a long pause.

Cons: Depending on the complexity of the file, logic and control, the timing might not be precise. This is because the systems priority is to process audio.

Option 2: Build the following circuit in your configuration. Set the Tone Generator to Sweep with a start frequency of 1000Hz and a stop frequency of 2000Hz. Set the Frequency Increment to 1 octave and the increment time to the desired pulse speed. Set the High Pass Filter to BW24 at 1500Hz. Finally, enable the Logic output in the ducker.



Pros: Being generated by an audio signal this version is very stable

Cons: It uses some DSP that might not be available.

About Biamp Systems

Biamp Systems is a leading provider of innovative, networked media systems that power the world's most sophisticated audio/video installations. The company is recognized worldwide for delivering high-quality products and backing each product with a commitment to exceptional customer service.

Founded in 1976, Biamp is headquartered in Beaverton, Oregon, USA, with additional engineering operations in Brisbane, Australia. For more information on Biamp, please visit www.biamp.com.