IDEIN
Optical Gate and Trigger Source

8hp, 3u
32mm deep, w/ power header
15mA at +12V, 1mA at -12V

IDEIN

Glass Eye /
RGB/IR Sensor

Light sensor LEDS

r   g   b   ir

Red Gate / Trigger

Green Gate / Trigger

Blue Gate / Trigger

Infrared Gate / Trigger

fKMG

Features

- 2mm aluminum front panel
- Reverse polarity protection
- RGB IR Light Sensor
- 4 gate outs (+5V)
- 4 trigger outs (+5V, ~9ms)
- Glass dome lens
- Expander capabilities with KIEL

Operation:

Following in the same spirit as its predecessor Klima, IDEIN invites yet another aspect of the environment into your patching process. It's bulging eye not only looks back at you but behind you and around you, surveying you and the space you're in. It knows if you're patching in the light of day or in the dark of night, how and where your shadows fall and what's radiating out from your many screens. The eye of IDEIN is sensitive to colors, those you can see and those you cannot. However, IDEIN is not a passive observer. It lets you know what it sees by spitting out gates and triggers that correspond to all the visual information it takes in. Expand IDEIN with the Kiel module to turn your gates into random stepped CV.

How it works:

IDEIN is an entirely autonomous module that requires no user-input aside from light. With an All-Light Sensor monitoring levels of the Red Green Blue (RGB) and Infrared (IR) spectrums, IDEIN detects changes in light-color and compares this information to the threshold set by the light sensitivity knobs. When a threshold is passed, a gate is opened, and a corresponding trigger is sent. Simply put, IDEIN is a series of comparators that produce quasi-random gates and triggers based on the color light spectrum of the surrounding environment. The big eye translates light to sonic form. Let your movement, the fluctuations in the color spectrum and the presence of infrared light dictate where you go next. Use it to trigger events based on visual information (e.g., video art projected behind you), dance in front of the eye and see how it responds, or simply let the hitherto unthought and seemingly passive movements of your patching become another active trigger source for musical (and not so musical) events.

Like its sister Kilma, the atmospheric logic module that precedes it, the idea behind IDEIN is to chip away at the boundary between environment and music-making, as well as to lean into what makes modular synthesis so exciting: randomness, spontaneity and (often) the impossibility of reproducibility. The visual and atmospheric information in which IDEIN and Klima are rooted bring the abstractions of thought back down to earth. It senses where you are and reminds you of that location.

First Patch: IDEIN's simplicity allows it to be patched immediately in almost any context. You can, of course, use it to ping filters, trigger samples or analog switches by making use of the readily available gates and triggers. For ambient and generative patches, I've found that the module can add loads of color by using its outputs to trigger envelopes with long attack and delay times that then modulate the corner frequencies of filters. This effectively translates your movements as you patch into quasi-random filter sweeps. With eight outputs, this can add quite a bit of dynamics to your patch. This is also a particularly useful feature if you use IDEIN for an installation in which you're looking for reactive sound. Happy patching!

IDEIN Quick Start Patch: Water Droplets (Filter pinging)

Below is a quick patch that uses only a couple of standard functions to create a random water droplet effect, very similar to Buchla-style LPG percussive sounds. The KIEL modules is optional here - you can run any random/sequenced voltage into the Fllter's 1V/Oct input. Try adjusting the attack and release slopes of the envelopes modulating the filter parameters to get more exaggerated results.