

I Sky You

2009 Rhizome Commission Final Report
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Original Project Proposal

Seven clear glass dual-chamber forms containing a solution of Luminol in one chamber and a chemical reagent in the secondary chamber, hang overhead. Drop by drop, the Luminol is released into the reagent chamber causing bursts of brilliant blue light that fill the otherwise dark room. The light triggers an array of photo-sensors which in turn activate a computer program producing a unique dissonant tone based on the particular luminescence of each droplet and lasting only as long as each flare of light. Visitors to the installation experience an imaginary sky blooming with color.

Process

Execute reaction – Capture light data – Route to computer – Synthesize sound

The digital aspects of this project were straightforward and involved only one significant deviation from original plans. Initially, we intended to use analog light sensors to capture data for routing into a microcontroller and subsequently a computer running Max/MSP. After considerable experimentation with a variety of sensors we decided to use video tracking to capture the chemically synthesized light. Video tracking provided a much more sensitive data stream than even the latest analog light sensors.

The chemical reaction itself posed a number of interesting challenges. Extensive research and experimentation was done in the process of chemiluminescence until a custom chemical reaction was achieved to maximize brightness, duration and visual detail in each flare while maintaining the safety of materials. In the end, the reaction used only Luminol, household bleach, distilled water and glycerol, a substance found in many soaps and hair products.

This work could not have been completed without the generous support of Rhizome. The funds and the moral support we received were essential to the process. We are grateful and look forward to showing this work as evidence of the invaluable impact that Rhizome has on the community of emerging digital artists.