Interalia Magazine

An online magazine dedicated to the interactions between the arts, sciences and consciousness.

Expressing to the Unconscious

Jim Campbell is an artist who creates LED light sculptures that are unique in that his media and message are inseparable. He uses technologies developed for information transfer and storage to explore human perception and memory. He studied Mathematics and Engineering at MIT in the late 1970s and has since worked in filmmaking, interactive video and LED light technology. His background in electrical engineering, mathematics, photography and filmmaking enables him to make immersive works that explore the space between the representative and the abstract.

In this exclusive interview he discusses his work and the importance of low resolution moving images that express to the unconscious.

- Jim Campbell (https://www.interaliamag.org/author/jimcampbell/)
- July 2017
- in Interviews (https://www.interaliamag.org/category/interviews/)
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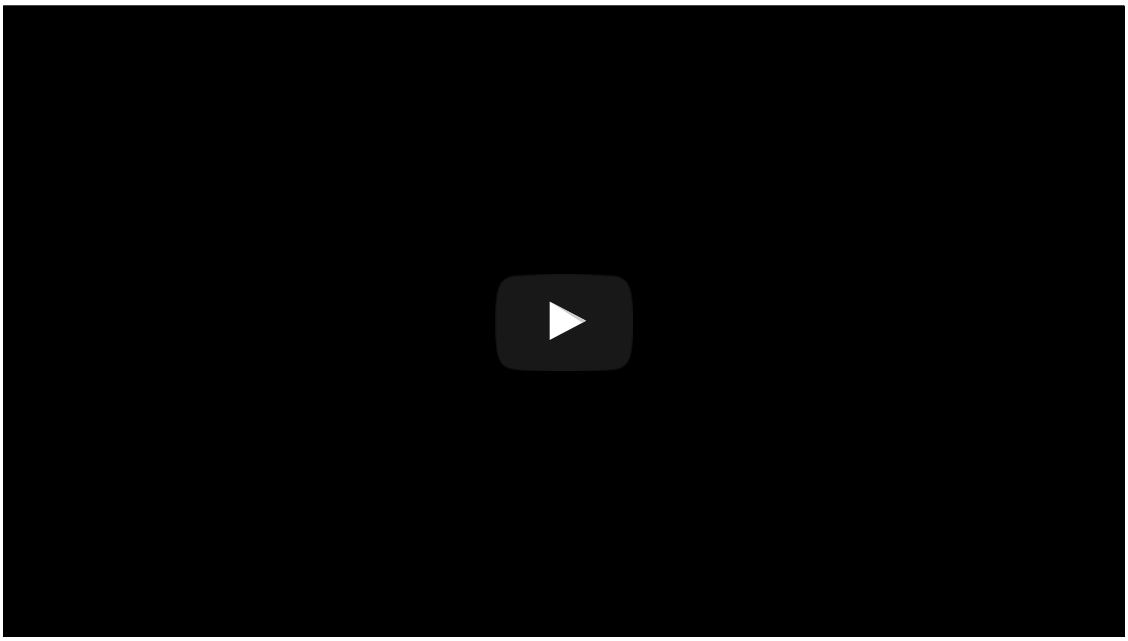
Blur One, 2014
18 x 22-1/4 x 6 inches
Custom electronics, 300 LEDs, cast resin screen
Edition of three
Photography credit: Courtesy of the artist

Richard Bright: Can we begin by you saying something about your background and the reasons you became an artist?

Jim Campbell: I went to college to get an engineering degree and while there it was clear to me that engineering by itself was not going to do it for me. So, I started taking classes in photography and experimental film. After college, I moved to Silicon Valley and started working as an electrical engineer and gradually over the next 25 years I did less and less engineering and more and more art until about 10 years ago when I gave up engineering completely to do art. I made my first electronic artworks in 1988 and from the beginning I saw electronic art as way of merging my engineering skills with my background in in film and photography.



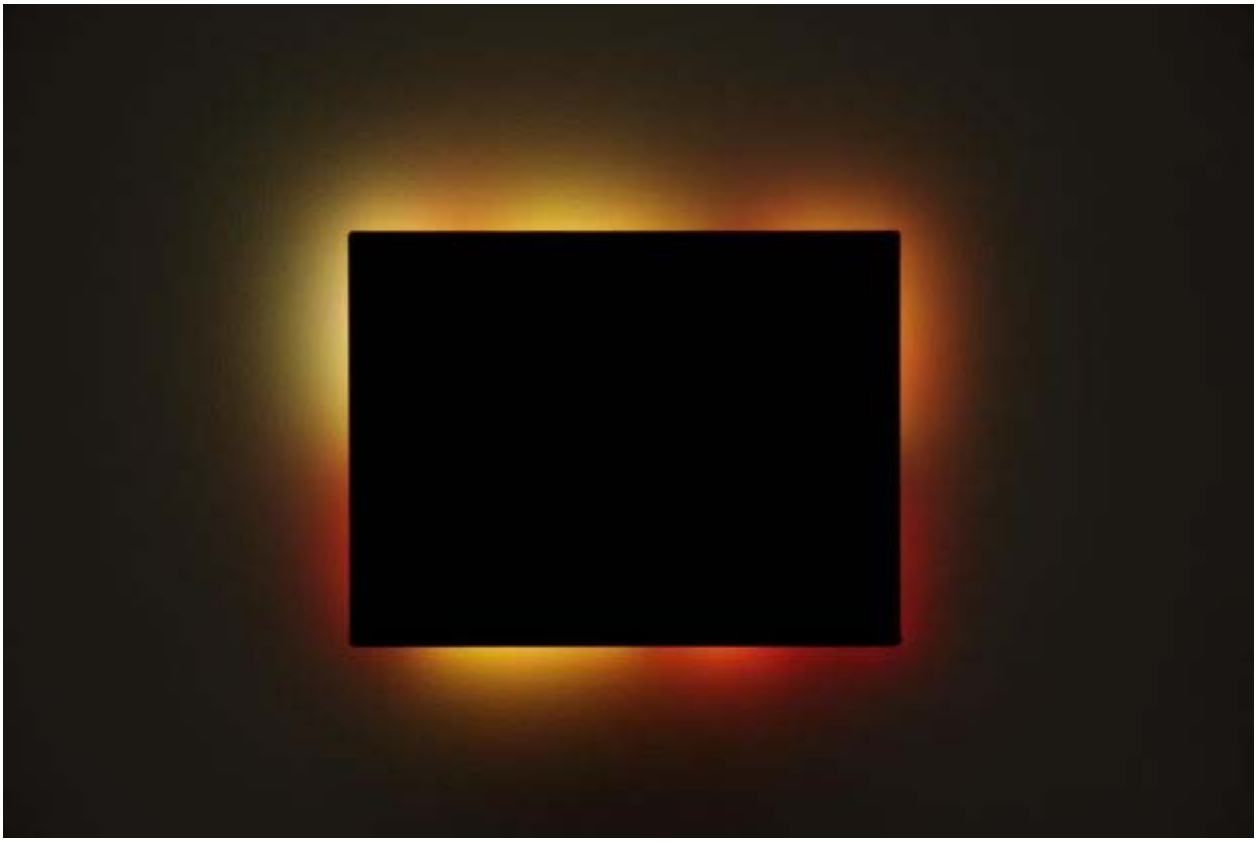
RB: Your work is rooted in both technology and the creation of an image. In your process of creating works, what takes priority?

JC: In the beginning of a new "experiment" in technology (and perception), the technology is the most important part of the work. Often it is not until the 3rd or 4th work in a particular series that the imagery and its relationship to its presentation display device come together as one. Sometimes I develop a technology for an artwork that I have in mind, for example, the work titled *Last Day in the Beginning of March* from 2003. For this work, I had in mind to create a poem or symphony in light about the very emotional subject of the last day of my brother's life. It was a technical / artistic self challenge of creating a work that expressed a highly emotional narrative with only a couple dozen flickering spotlights (and a few sentences worth of text). For this work, and others, there was no separation between the development of the work and the development of the technology.

Last Day in the Beginning of March, 2003 Twenty-six light bulbs, custom electronics, speakers, sound Dimensions variable Installation view, Museum of Contemporary Art Australia, Sydney, Australia, 2012 Photography credit: Alex Davies

RB: How do you pick your imagery?

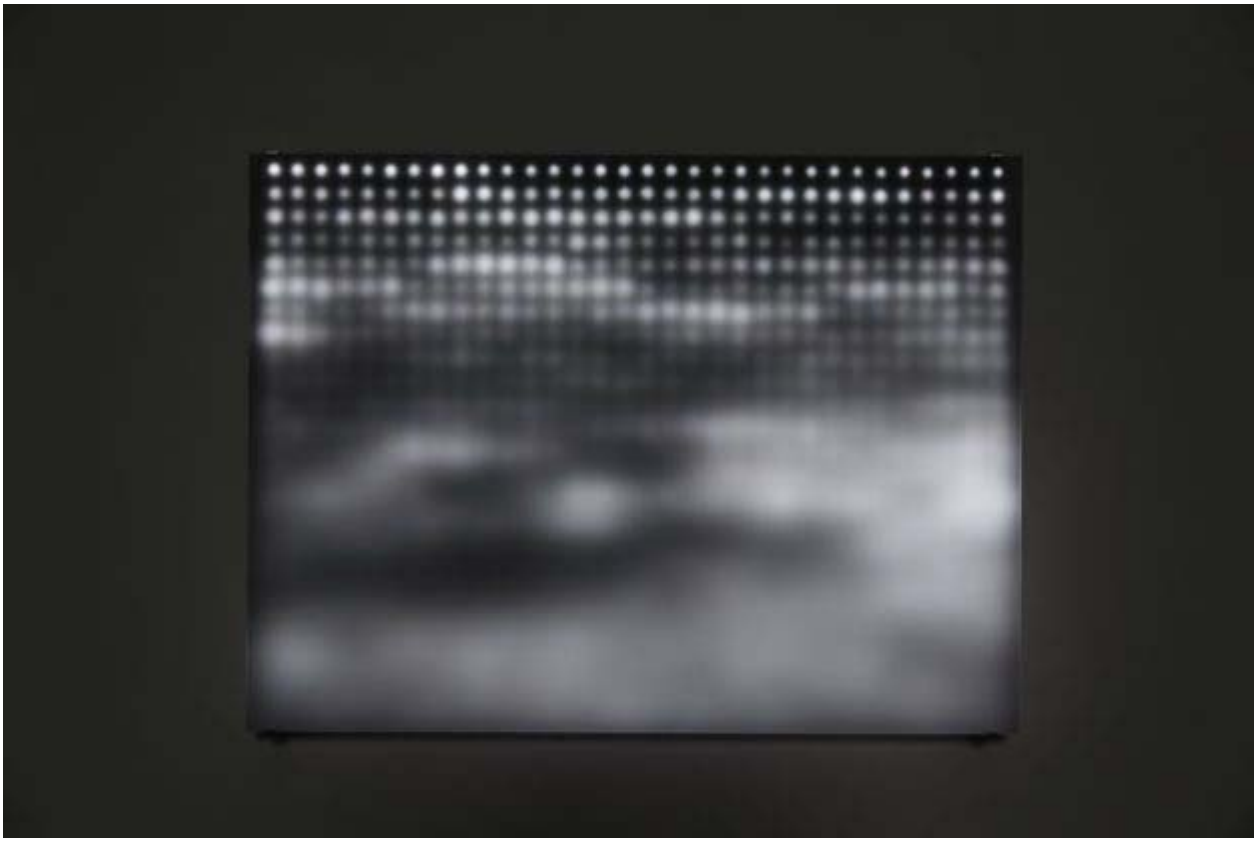
JC: Low resolution moving images need to be very simple to be recognizable. Complicated backgrounds, subjects that are small relative to the image size or subjects that are stationary or moving very slowly are all characteristics that make a low resolution image very hard to read and limit what is possible to represent. Moving figures are very recognizable and as such pedestrians have been the subject of many of my low-resolution works. I work with many different forms of custom display devices and the more abstract the display device is, the less important the subject matter is….it is the perceptual experience that defines the artwork when the displayed information is extremely abstract.



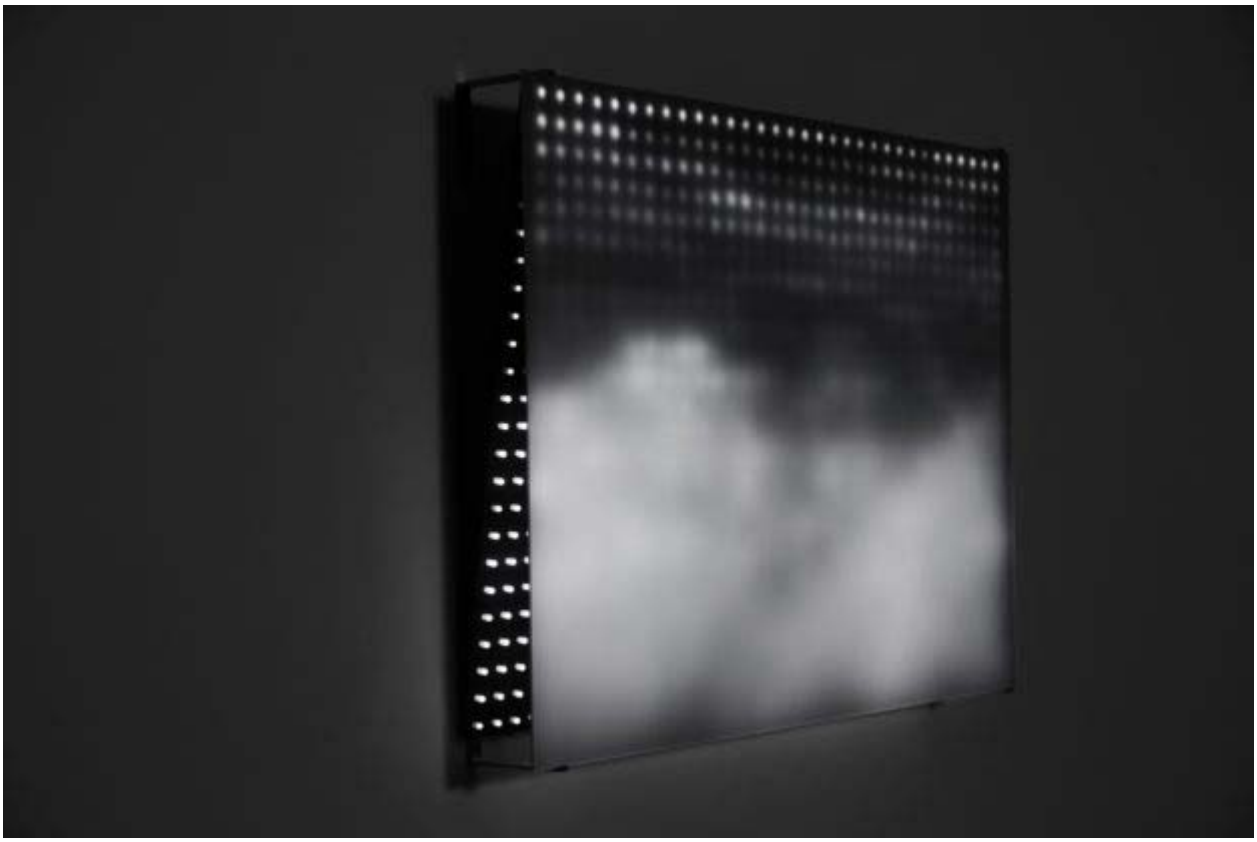
A fire, a freeway and a walk, 1999-2000
Custom electronics, 42 LEDs, velvet
15 x 11 x 1-5/8 inches
Photography credit: Sarah Christianson

RB: How important is experiment in your creative process?

JC: Many of my works start out as perceptual experiments or questions. I have an idea for a mediated digital display and don't know what the end result will be and that becomes the reason to make the work. The more unpredictable a finished work is, the more driven I am to finish it. Almost as important to the end result of a new experimental display is the preservation and development of mistakes. During the process of creating the technology many mistakes are made and I often run with these mistakes as they lead to a work that feels freer than a work that stuck to the preconceived notions that I started with.



Divide, 2005
Custom electronics, 768 LEDs, treated plexiglas
29-1/2 x 22-1/4 x 3-7/8 inches
Edition of three
Photography credit: Sarah Christianson



Divide, 2005
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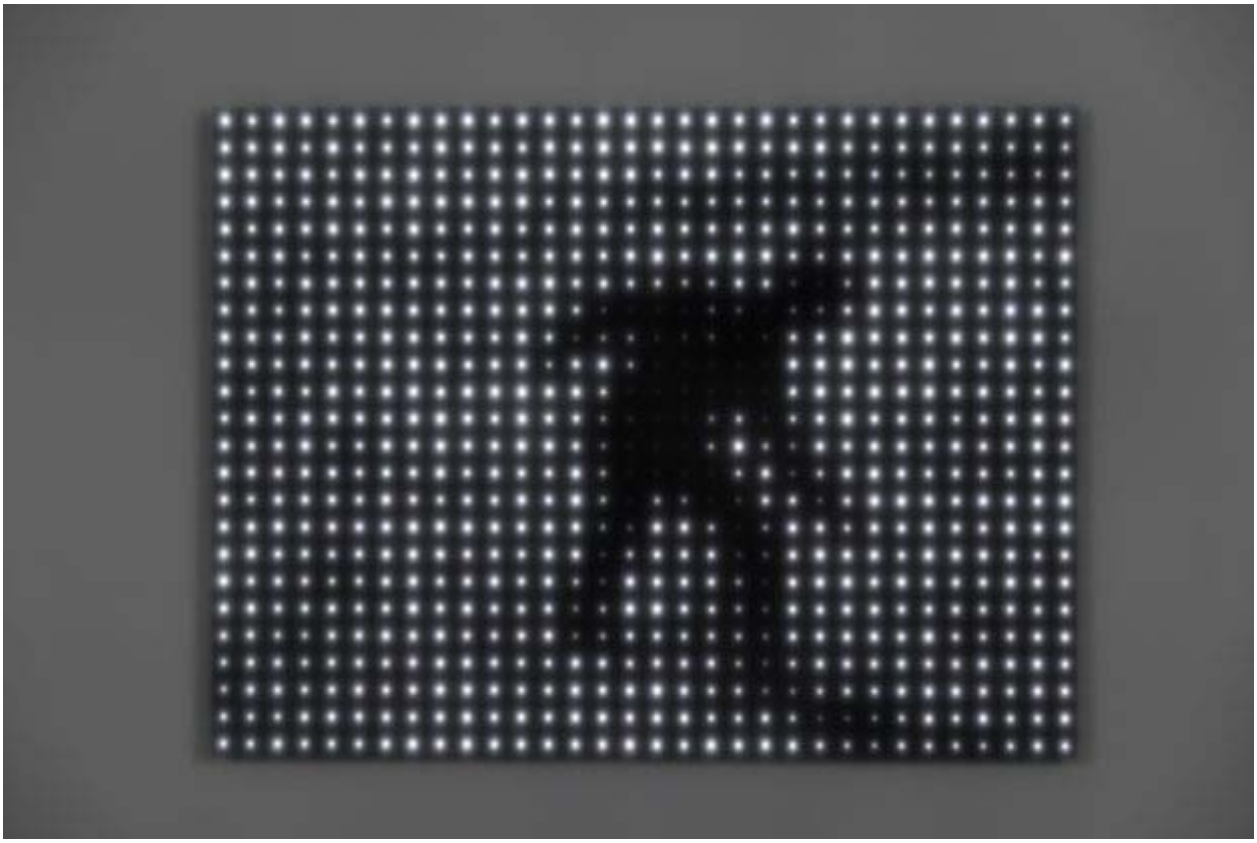
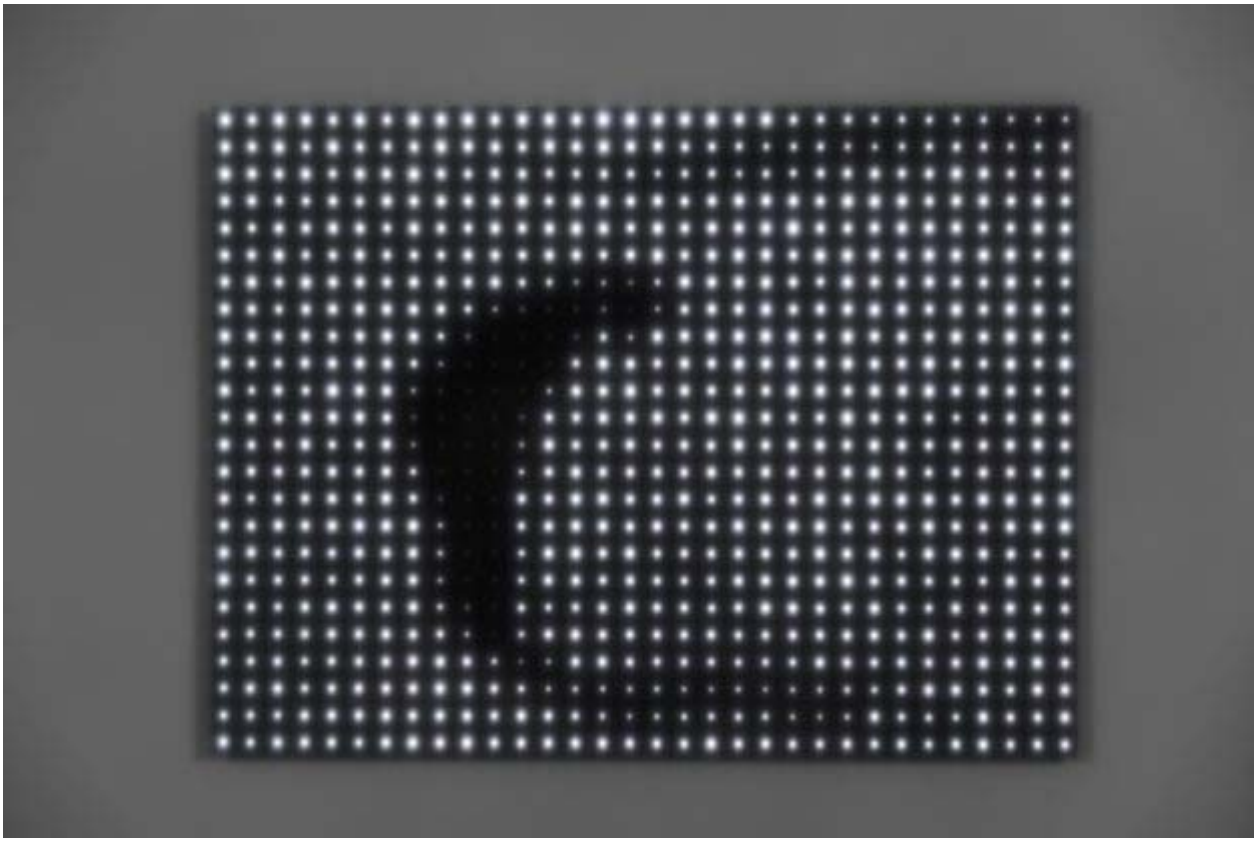


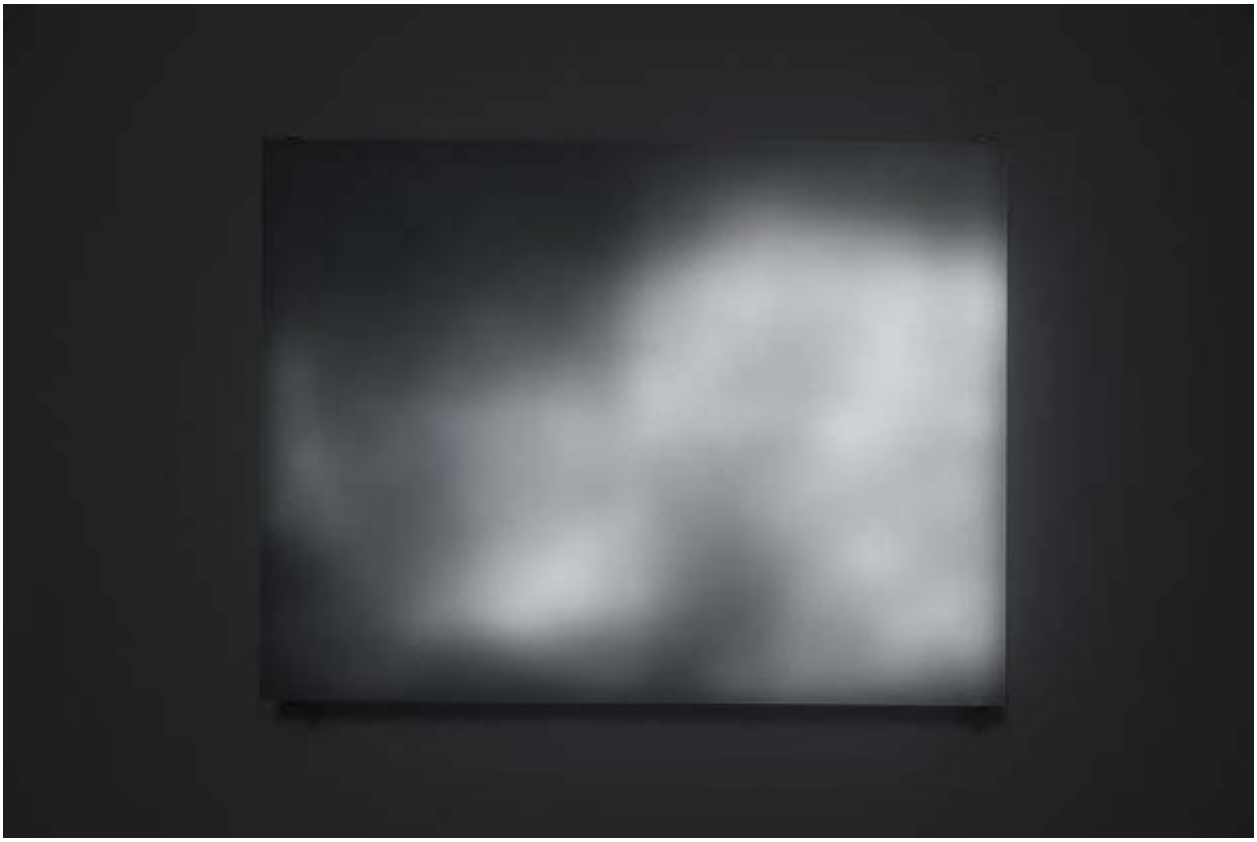
Motion and Rest #2, 2002
Custom electronics, 768 LEDs
29 x 22 inches
Edition of three
Photography credit: Sarah Christianson



Motion and Rest #2, 2002
Custom electronics, 768 LEDs
29 x 22 inches
Edition of three
Photography credit: Sarah Christianson

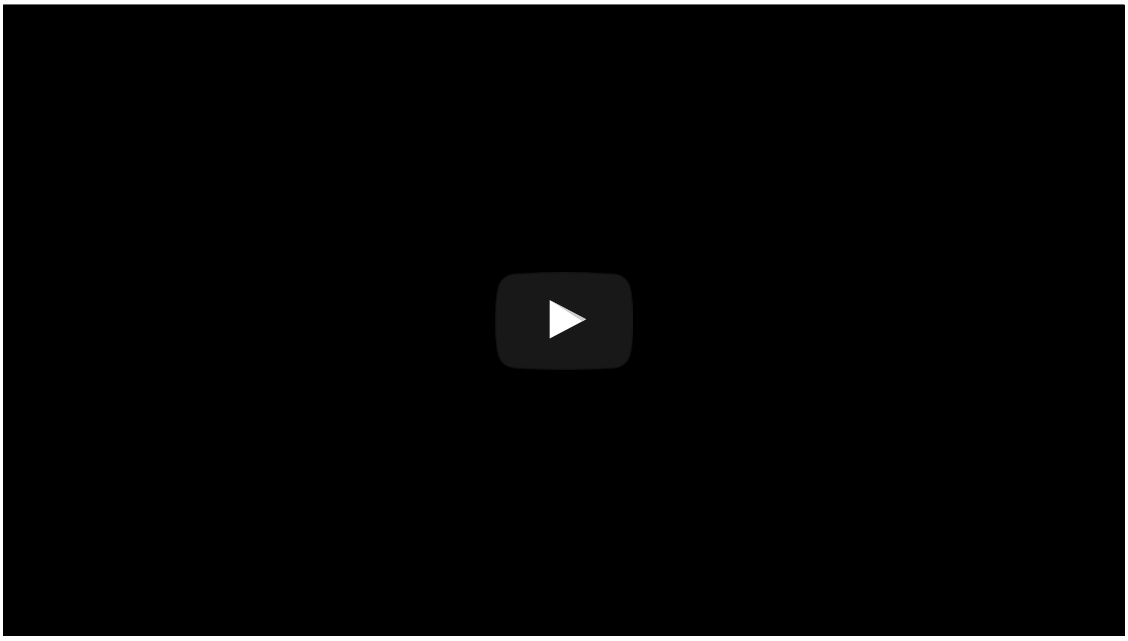
RB: How do you work with the interplay between movement and still image, or an image in space, and can you say something about the relationship between perception, abstraction and movement in your work?

JC: From the very beginning in 2000 when I tried to photograph a 200 pixel work and 99 out of 100 pictures were unrecognizable, I realized how important movement was for the recognition of low resolution images. This realization led to several works. *Wave Modulation* consists of a 768 pixel image of ocean waves that starts out in real time and gradually slows down and stops over a 10 minute period. Through this progression the image goes from recognizable to completely abstract.

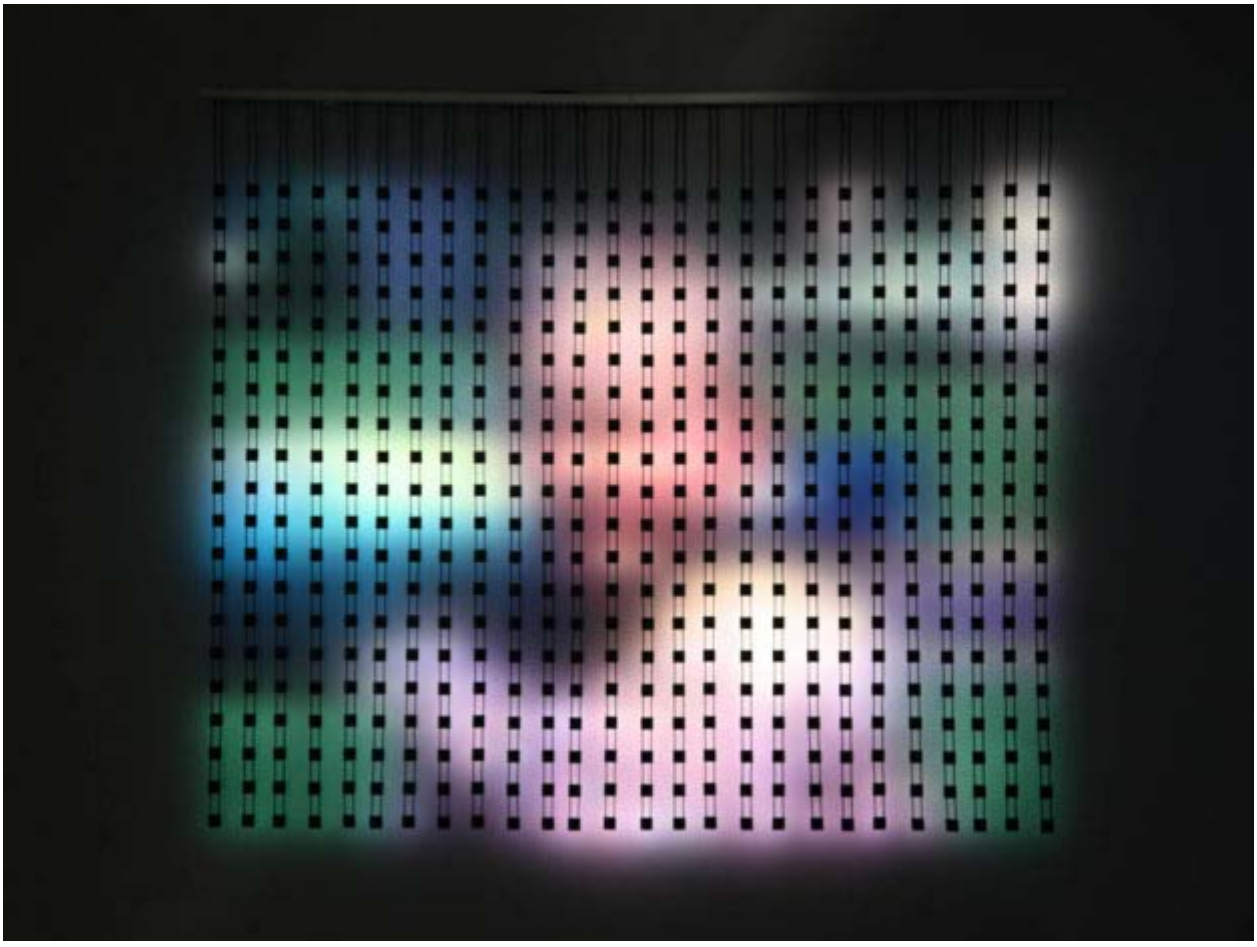


Wave Modulation, 2003
Custom electronics, 768 LEDs, treated plexiglas
29-1/2 x 22-1/4 x 2-1/2 inches
Edition of three
Photography credit: Sarah Christianson

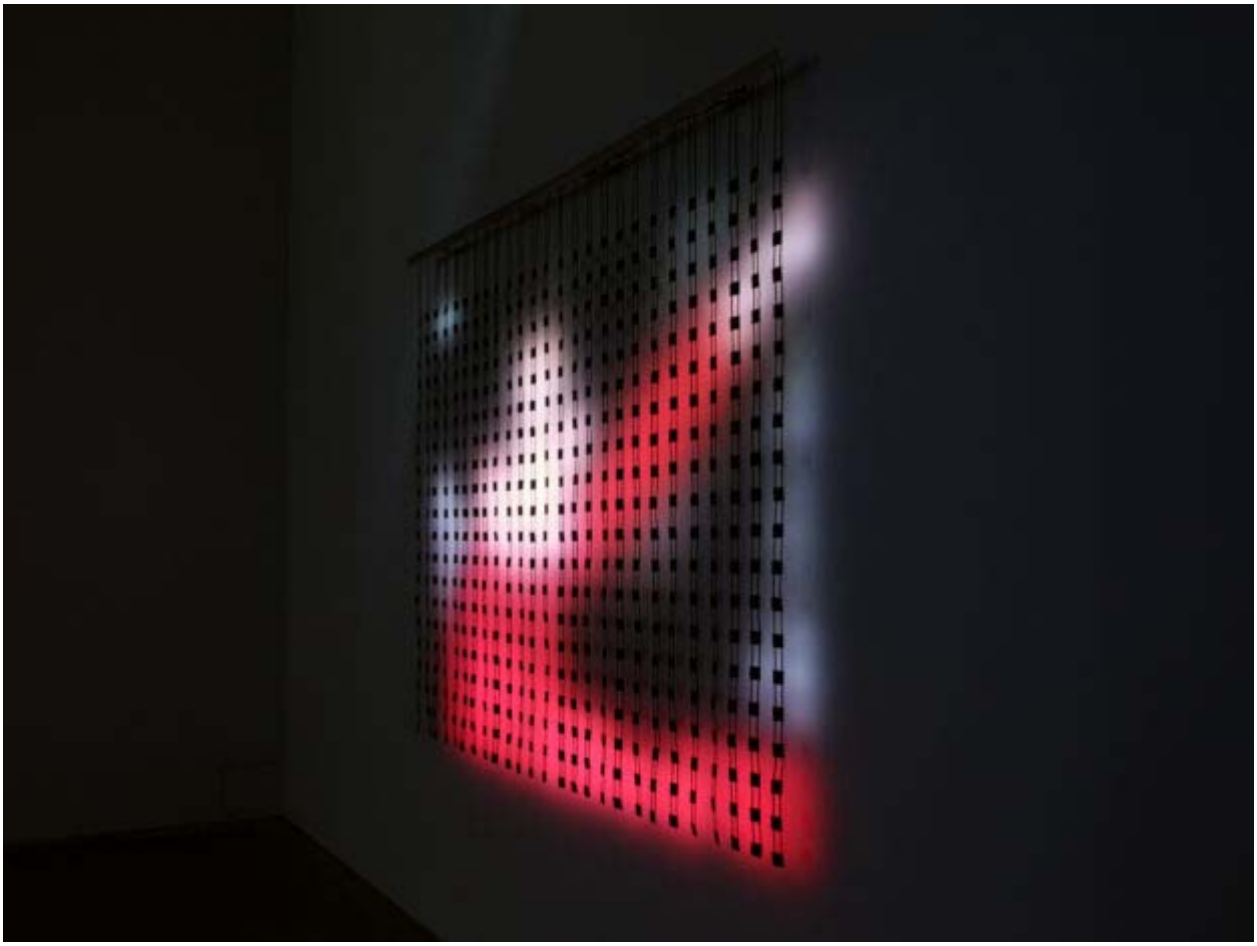
Wave Modulation, 2003
Custom electronics, 768 LEDs, treated plexiglas
29-1/2 x 22-1/4 x 2-1/2 inches
Edition of three
Photography credit: Sarah Christianson



Another work *Home Movies David* presents an image playing back in real time and after a random amount of time the image pauses for several seconds creating an after image of recognition that fades into abstraction before the images starts to play again. In some ways, low resolution moving images are analogous to sound. Sound is defined by movement and as such, the more a sound is slowed down, the more abstract it becomes.



Home Movies David, 2014
Video installation: custom electronics, 520 LEDs, 72 x 84 x 3 inches
Photography credit: Courtesy of the artist



Home Movies David, 2014
Video installation: custom electronics, 520 LEDs, 72 x 84 x 3 inches
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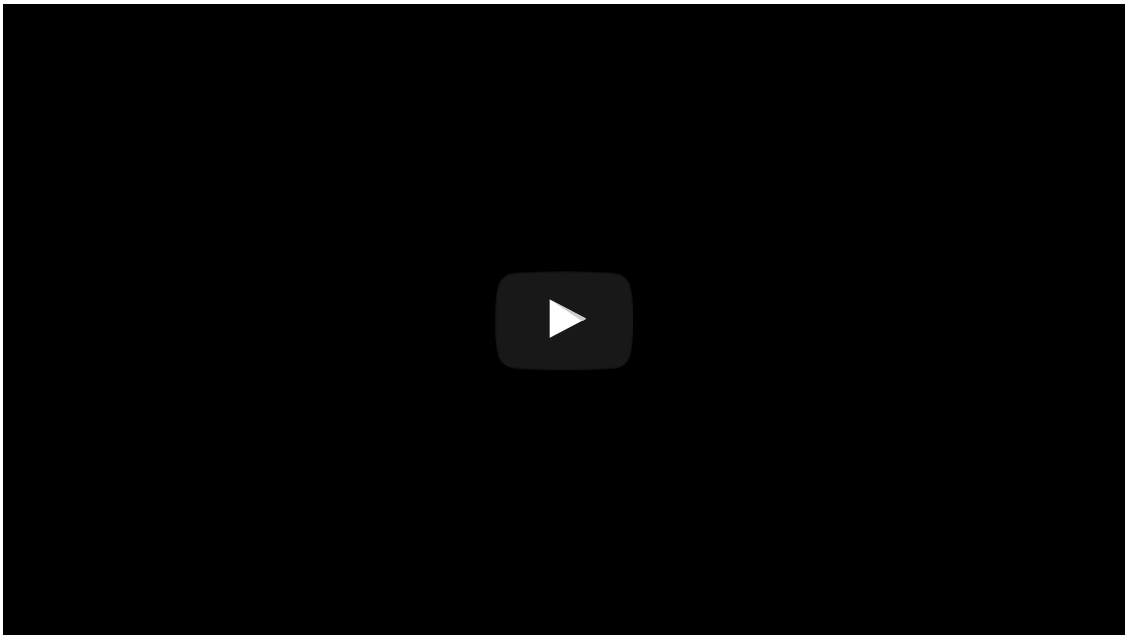
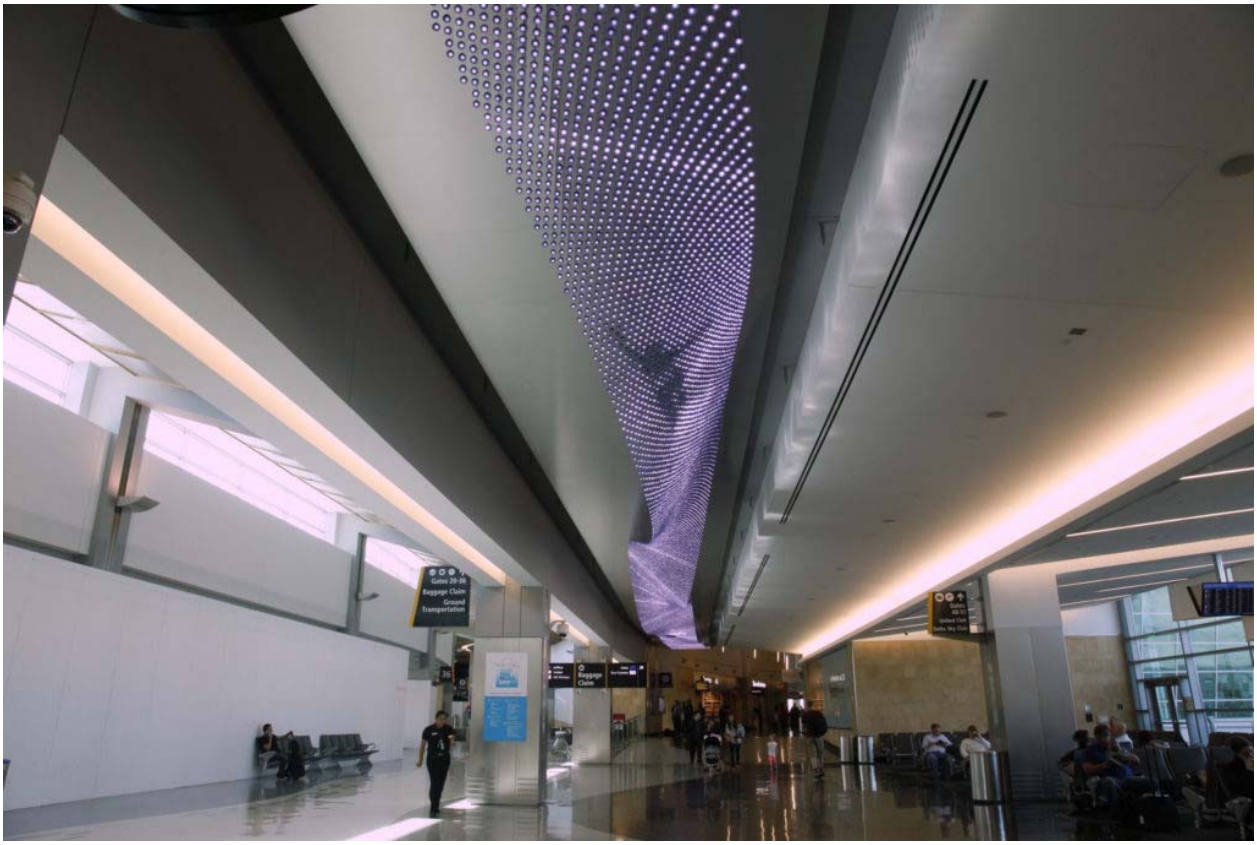


RB: I find there is a sublime reduction of vision into rhythm in your work, where the detail of the image is reduced and it rests somewhere in the space between object and illusion. Is this why you use low-resolution technology?

JC: Drastically reducing the details of a moving image allows the viewer to experience a simpler form of perception. In the more successful works this process bypasses the more analytical parts of the brain leaving room for a more "primal" perception of an image that is more felt than seen. This has really been what is at the core of my work for many years now. Abstract Expressionists were interested in expressing their unconscious. Low resolution moving images do the opposite. They express to the unconscious. This is most extreme in the work mentioned above *Last Day in the Beginning of March* where 25 lights rhythmically flicker, each representing the time of an event without any spatial references to the event. The rhythm of each light creates an emotional encounter with the overall experience being felt not seen. Peripheral vision, which is inherently and evolutionarily more about movement than detail, plays an important role in the more rhythmic of my works.



Journey, 2013, Custom electronics, 38,000 LEDs, 8 x 10 x 700 feet, Installation View, San Diego International Airport, Photography credit: Courtesy of the artist

RB: Your large installation at San Diego International Airport uses swimmers as its imagery. Is there any particular meaning in using the movement of swimmers in an airport?

JC: *Journey*, in the concourse of terminal 2 of San Diego Airport, is a virtual surface or ribbon that floats above the travellers, over a 240 meter span, as they walking to or from their gate. Not many types of moving images work on horizontal displays and I quickly came to the notion of using swimmers for this work. San Diego's identity more than most West Coast cities is tied to the ocean and so swimmers also work well from that perspective. The ribbon, at times, has also displayed birds instead of swimmers.

RB: Can you say something about your recent installation for the top of the Salesforce Tower in San Francisco?

JC: The Salesforce Tower artwork is still under construction, but it has been, by far, the most complex public art project that I've undertaken. There is little or no precedent for adding a moving image to the skyline of a city. No one really knows what that means or could mean. Commissioned public art typically takes into consideration the context and history and neighbourhood occupants of its location. These are irrelevant to this artwork because it is so high that it cannot even be seen from its neighbourhood. The context of the work is the building and its visual relationship to the city. The work is a giant experiment in urban design and half a million people will see it every day whether they want to or not. The 3 metaphors that we have been using for the work are a clock tower, a beacon and a pulse of the city.

Rendering of Day for Night
Installation at Salesforce Tower, San Francisco, CA
Projected Completion, Fall 2017
Image credit: Courtesy of the artist.

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Projected Completion, Fall 2017
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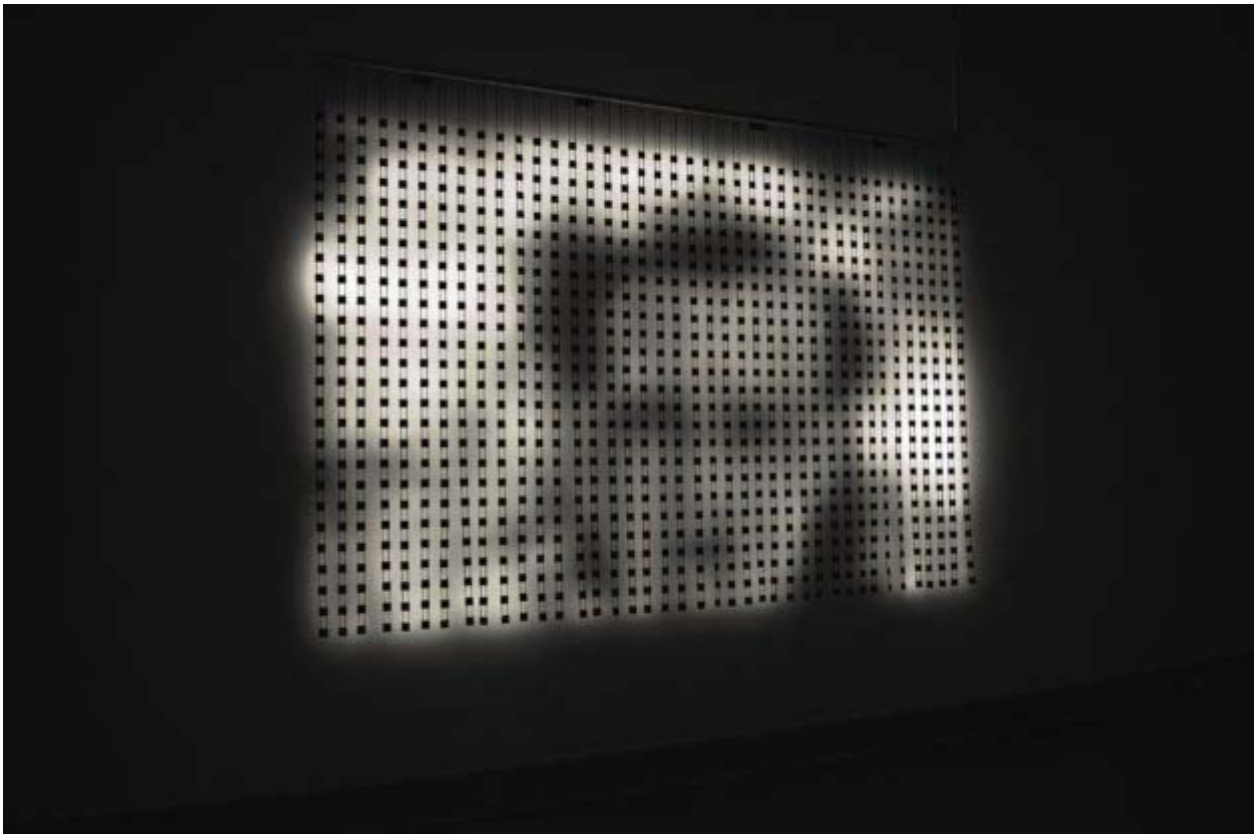
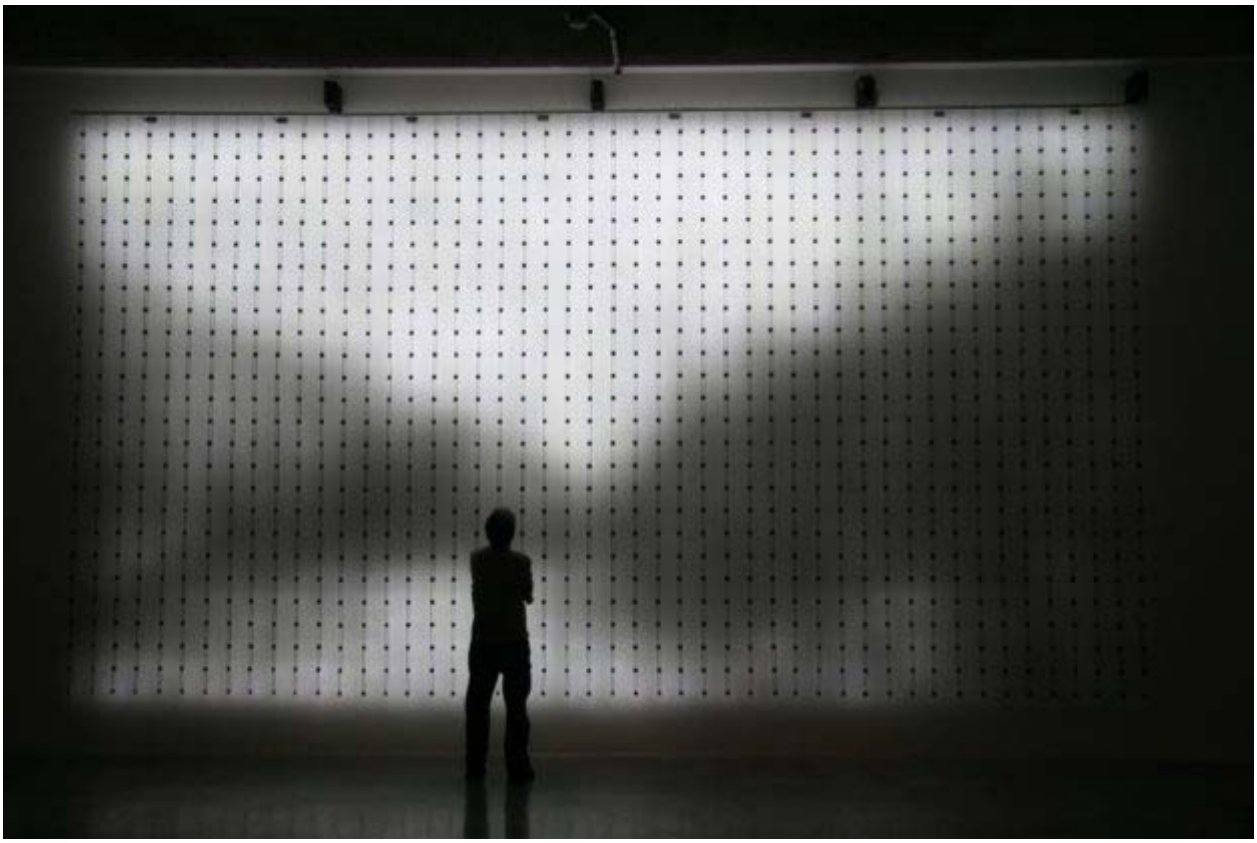
RB: Finally, are there any technologies currently being developed that you envisage may help or inspire your work, or are there any that you would like to see developed in the future?

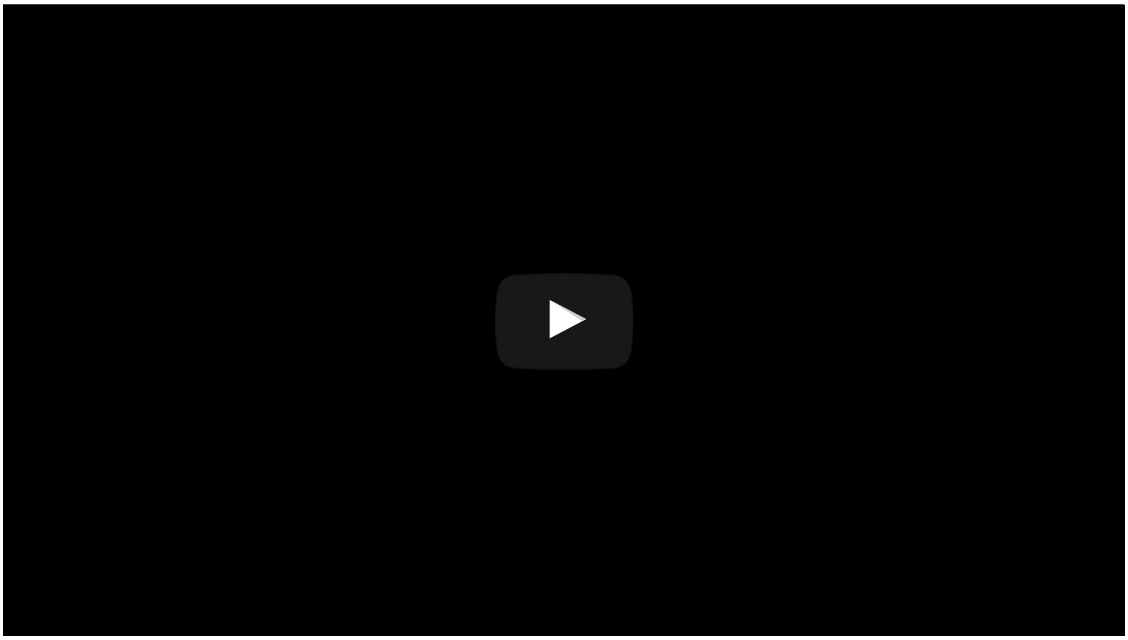
JC: Not really. There is enough technology out there to keep me engaged and being an engineer, I tend to try to figure out how to make something if it doesn't already exist.



Home Movies 1040, 2008
Video installation: custom electronics, 1,040 LEDs
120 x 84 x 3 inches
Installation view, Eleanor D. Wilson Museum, Hollins University, Roanoke, VA, 2010
Photography credit: Olivia Body



Home Movies 1248, 2008
Video installation: custom electronics, 1,248 LEDs
288 x 156 x 7 inches
Installation view, Berkeley Art Museum, University of California Berkeley, Berkeley, CA, 2008
Photography credit: Berkeley Art Museum



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www.jimcampbell.tv (http://www.jimcampbell.tv/)

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About Jim Campbell

Jim Campbell (b. 1956). Campbell's work has been exhibited internationally and throughout North America in institutions such as the Whitney Museum of American Art, New York; the San Francisco Museum of Modern Art; The International Center for Photography, New York; The J. Paul Getty Museum, Los Angeles and the Museum of Contemporary Art, Sydney, Australia. His electronic art work is included in the permanent collections of the Museum of Modern Art, New York; the Smithsonian American Art Museum, Washington, DC; the Whitney Museum of American Art; the Metropolitan Museum of Art, New York; the San Francisco Museum of Modern Art; the de Young Museum, San Francisco and the Berkeley Art Museum. In 2012, he was the recipient of the San Francisco Museum of Modern Art's 13th Annual Bay Area Treasure Award. Previous honors include a Rockefeller Foundation Fellowship Award in Multimedia, three Langlois Foundation Grants and a Guggenheim Fellowship Award. He has two Bachelor of Science Degrees in Mathematics and Engineering from MIT and as an engineer holds nearly twenty patents in the field of video image processing. A monograph of his work,

'Material Ligh't, was published by Hatje Cantz in 2010. View all posts with Jim Campbell → (https://www.interaliamag.org/author/jimcampbell/)
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