

## Idea

One wax pen is a waxel.

## Title

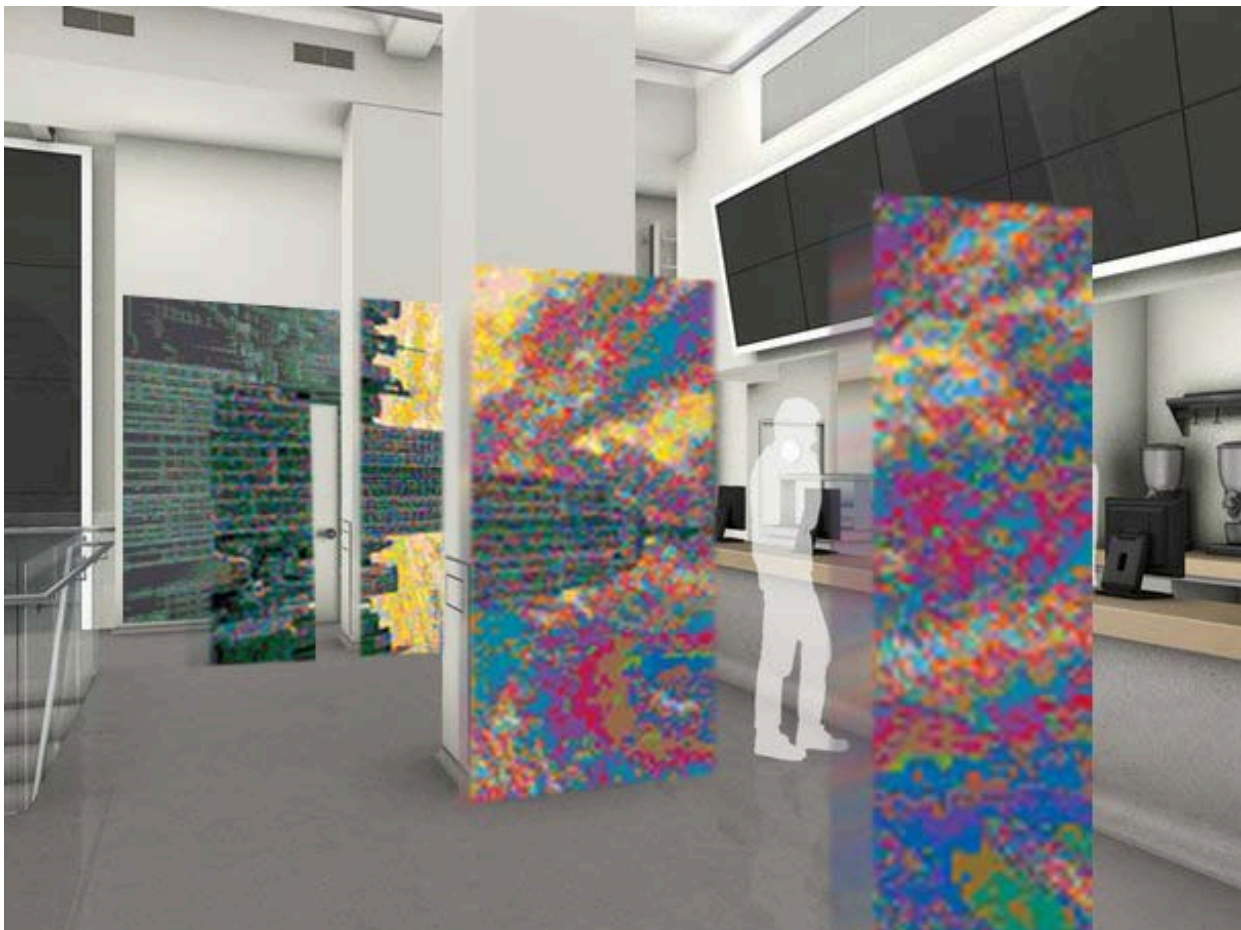
# Get U'r color / OneColorATime



## From Pigments to Pixel

### Storyboard:

Visitors purchase one or multiple waxels. They can select a color out of a given small number of momentarily available colors at the WAXWALL (top-bottom reading), which is erected from wax pens. The stacking order of the wax pen's color value results in showing a motive, which will be transferred to the large digital screen during the time of the installation. .



These wax pens come around i.e. \$1 each, or are part of the meal goodies. Visitors can also purchase one or multiple color code's for their cell, iPad etc = \$0.99. Afterwards, they might hit for Central Park to re-assemble or new arrange their cell phones, iPads etc color fields.

When these purchases are going over the counter, the large digital screen fills in these sold colors of pixel/waxel's. Every hour for 2 min all sold pixels are displayed as pixel on the wall as indicator of the progress. This demonstration may be connected to the mood of the audience, hence display time may vary. Once all wax pens (and with that the WAXWALL) are gone, the image will stay.

## **Discretism**

The work of **stepDre+longW** explores the boundaries of discret information in human artefacts and expressions. They decided to call it discretism, which succeeds digitalism and networkism, since those have become socially absorbed.

There is no permission for interim values in digital media. That is why the dual system only maps Zero and One. According to the underlying system only whole numbers are used. These are discrete numbers. No values or data points are represented in between these numbers. **stepDre+longW** give credit to pre-Socratic philosophers, who weighted their main questions of the existence of objects (loosely based on one of Zeno's paradox, whether an arrow exists between two discrete points). Nowadays discretism is part of Information Technologies and Mathematics, as Discrete Mathematic. **stepDre +longW** work on their formulation of discrete Art.

### ***The problem of order***

The discontinuity of elements requests neatly composed values. The sum of elements establishing a particular information needs an aspect of a higher order. Examples are lines for writing, grids for displaying digital images or the time-line in movies. Once the order is gone, the information is lost, even if all elements are still there. Only the higher order allows the storage and distribution of informations in ways other than as direct contacts, like e.g. a footprint. Art has a chance to achieve high order in its expressions.

### ***discretism in arts***

The discretism in art questions the order of elements. To achieve conscious reflections elements are released from their formation and from the collapse resulting information fragments are carried along with those elements.

In raster graphics are e.g. the position of a pixels, which sticks to it as numeric value once released, or the color code as values. The order of elements is broken, but thoughtful beings still could resemble the information packages, or evaluate them in their new context.

### ***Options***

Each wax pen pigment can be moved, GPS-controlled and therefore light up the NYC evening sky in its color upon request. Let's work on that :-)

Each visitor has an iPhone with the app. The app gets the information about the color on demand according to the user's information connected to the phone's ID, and a huge digital image display shows the assembled, contributed color values.

Everybody gets a wax pen and a link to a web-space displaying the color matching the user's wax pen.

In another world without electronic gadgets the wax pens simply gets pocketed by the users. The rest is done in our imagination and as graffiti.

## **Artistic concept fact-sheet**

Size does matter:

The screen (from the 4food screen specs):

-3520 mm x 6160 mm (roughly 11.5 ft x 20.2 ft, or 220 sq. ft)

-Resolution: 160 pixels x 280 pixels

$6160\text{mm}/280 = 22\text{mm}$ , about an inch (1.15 dpi)

$3520\text{mm}/160 = 22\text{mm}$ , about an inch (1.15 dpi)

## **Evaluation of some wax pens**

jaxell (10mm square)

overall size: 1600 mm x 2800 mm, roughly 5.25 ft x 9.2 ft, or 48.2 sq.ft

no color palette available.

Faber-Castell Goldfaber Studio Soft Pastels  $1\frac{1}{4}'' \times \frac{1}{4}''$  (6.35 mm square)

overall size: 1016 mm x 1778 mm,  $3\frac{1}{3}$  ft x  $5\frac{5}{6}$  ft, or 17.5 sq.ft

color palette available, 112 colors, good pigments

Size is reasonable

Prang Artist Chalk Blocks 1" x 3" square (25.4 mm square)

overall size: 4064 mm x 7112 mm,  $13\frac{1}{3}$  ft x  $23\frac{1}{3}$  ft, or 311.11 sq.ft

very large waxels, larger than the big screen

no color palette available, only few colors

## **Decision is for Polychromos of Faber-Castell**

The plural digital event canvas is the big electronic screen:

160 px x 280 = 44800 px; 3520 mm x 6160 mm with 22 mm x 22 mm each pixel

The singular event canvas is the wax wall:

160 wx x 280 = 44800 wx; 1016 mm x 1778 mm with 6.35 mm x 6.35 mm each waxel

The 44800 pixel resp. the 44800 waxel on each canvas are identical, matching the color from the given palette. Obvious difference are the device dependent size of both canvases and the difference through lighting, as emitted or reflected colors.

Test example: An imagery like this



figure 1 (source, Large Screen)

converts to



figure 2 (color coded, WAXWALL)

on both screens, the big screen, and the wax wall equivalent.

Once the colors are mapped, the image is build up with square color sticks made from wax or chalk. These wax pens will be deployed to the gallery, the image will be erected there as a wax wall from waxels and will stay there until the grand opening.

During the opening every visitor will get a waxel, a wax pen from the image. The color will get noticed and the whole screen will assume that color at that moment. In addition all visitors and staff members, everyone with a capable device, will display that color full-screen on there own individual devices. until the next waxel is called, or maybe a timeout kicks in.

One waxel, a wax pen as pixel on the wall, turns into a screen pixel with each visit, or maybe each purchase of a wax pen until the total of 44800 wax pens is sold or simply gone.

**Thus the image made from waxes erodes and will vanish over time, while the electronic art on the big screens consumes the pixels and builds up.**

## **Choice of the image**

The image matters, for both its content and technically its histogram. As we depend on, besides issues like ownership of the image, technical constraints, the image should have some natural weighted histogram with preferably full colors. If otherwise a quarter of the waxels are black as the result. We are currently experimenting with algorithms that are able to create image motives via algorithms for our input source image.

We will, if our proposal is selected, show a short list of images with statistics for evaluation.

An example with color table below (different image source):

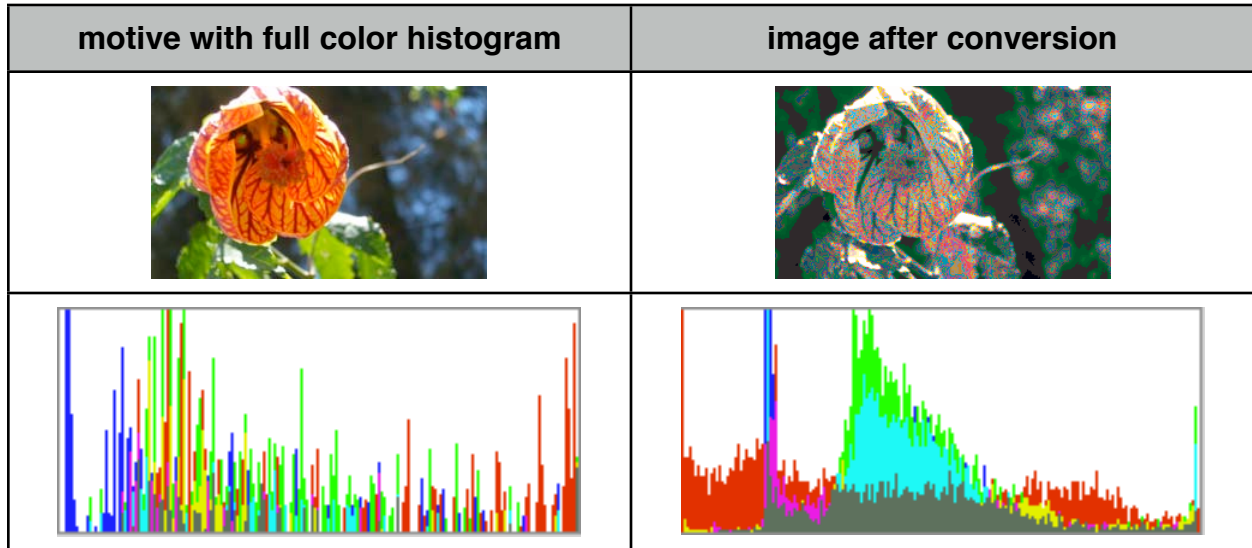


figure 3

Color Amount (how many pixel for each color)	Color Value As Waxel ( Faber Color Table)	Color Value As Pixel (HEX)
6	Warm Grey II\	(c1bcb6)
6	Light Chrome Yellow\	(fff450)
7	Sky Blue\	(92c5eb)
7	Light Violet\	(b0abd5)
9	Cold Grey I\	(d0d1d3)
9	Cadmium Yellow Lemon\	(ece956)
10	Ivory\	(37fcd5)
16	Light Purple Pink\	(f173a4)
16	Pink Fluorescent\	(f499b8)
17	Light Blue\	(6dcff6)
17	Medium Flesh\	(f9aa8f)
17	Earth Green Yellowish\	-759832
19	Light Green\	(b7da9b)

Color Amount (how many pixel for each color)	Color Value As Waxel (Faber Color Table)	Color Value As Pixel (HEX)
23	Warm Grey IV\	(86837f)
25	Cinnamon\	(e19a7d)
25	Light Cobalt Turquoise\	(83d2e2)
26	Madder\	(e0314f)
28	Cadmium Yellow\	(ffe600)
28	Middle Cadmium Red\	(d42f40)
32	Dark Cadmium Yellow\	(ffd00)
34	Silver\	(b1b3b4)
36	Light Yellow Glaze\	(f7ef70)
45	Cadmium Orange\	(ffc222)
47	Rose Fluorescent\	(f9b5b2)
48	Light Magenta\	(d189bb)
50	Dark Naples Ochre\	(f0b41d)
50	Van Dyck Brown\	(765f3d)
52	Emerald Green\	(00a869)
56	Rose Carmine\	(f48587)
58	Leaf Green\	(39b54a)
61	Dark Chrome Yellow\	(ffc05)
62	Light Cadmium Yellow\	(fff200)
63	Pink Madder Lake\	(f6a2b6)
64	Cold Grey II\	(b1b5b9)
67	Warm Grey I\	(d8d2cd)
67	Pompeian Red\	(d56d56)
72	Bluish Turquoise\	(0072a1)
82	Naples Yellow\	(ffd400)



<b>Color Amount (how many pixel for each color)</b>	<b>Color Value As Waxel (Faber Color Table)</b>	<b>Color Value As Pixel (HEX)</b>
83	Burnt Carmine\	(97313d)
83	Prussian Blue\	(0072a0)
85	Dark Flesh\	(f58f92)
85	Helio Turquoise\	(00717f)
85	Pale Geranium Lake\	(f04e3e)
87	Orange Glaze\	(faa634)
88	Walnut Brown\	(5d5134)
91	Helioblu Reddish\	(00529c)
93	Burnt Siena\	(7c4529)
93	Dark Red\	(c21b3c)
94	Deep Scarlet Red\	(ed1c29)
96	Grass Green\	(79c47a)
96	Warm Grey V\	-666360
97	Cobalt Blue\	(0064a8)
108	Purple Violet\	(6d4099)
109	Phthalo Blue\	(0077c0)
116	Scarlet Red\	(e4422b)
118	Indian Red\	(9f5648)
119	Pink Carmine\	(db4d64)
128	Light Yellow Ochre\	(ce9120)
128	Caput Mortuum Violet\	(8a635c)
132	Fuchsia\	(e34c8e)
146	Light Phthalo Green\	(60c3ad)
148	Earth Green	(84ab93)
9	Cadmium Yellow Lemon\	(ece956)

<b>Color Amount (how many pixel for each color)</b>	<b>Color Value As Waxel (Faber Color Table)</b>	<b>Color Value As Pixel (HEX)</b>
10	Ivory\	(37fcd5)
16	Light Purple Pink\	(f173a4)
16	Pink Fluorescent\	(f499b8)
17	Light Blue\	(6dcff6)
17	Medium Flesh\	(f9aa8f)
17	Earth Green Yellowish\	-759832
19	Light Green\	(b7da9b)
23	Warm Grey IV\	(86837f)
25	Cinnamon\	(e19a7d)
25	Light Cobalt Turquoise\	(83d2e2)
26	Madder\	(e0314f)
28	Cadmium Yellow\	(ffe600)
28	Middle Cadmium Red\	(d42f40)
32	Dark Cadmium Yellow\	(ffd00)
34	Silver\	(b1b3b4)
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45	Cadmium Orange\	(ffc222)
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61	Dark Chrome Yellow\	(ffc05)

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62	Light Cadmium Yellow\	(fff200)
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64	Cold Grey II\	(b1b5b9)
67	Warm Grey I\	(d8d2cd)
67	Pompeian Red\	(d56d56)
72	Bluish Turquoise\	(0072a1)
82	Naples Yellow\	(ffd400)
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83	Prussian Blue\	(0072a0)
85	Dark Flesh\	(f58f92)
85	Helio Turquoise\	(00717f)
85	Pale Geranium Lake\	(f04e3e)
87	Orange Glaze\	(faa634)
88	Walnut Brown\	(5d5134)
91	Helioblu Reddish\	(00529c)
93	Burnt Siena\	(7c4529)
93	Dark Red\	(c21b3c)
94	Deep Scarlet Red\	(ed1c29)
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97	Cobalt Blue\	(0064a8)
108	Purple Violet\	(6d4099)
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<b>Color Amount (how many pixel for each color)</b>	<b>Color Value As Waxel (Faber Color Table)</b>	<b>Color Value As Pixel (HEX)</b>
119	Pink Carmine\	(db4d64)
128	Light Yellow Ochre\	(ce9120)
128	Caput Mortuum Violet\	(8a635c)
132	Fuchsia\	(e34c8e)
146	Light Phthalo Green\	(60c3ad)
148	Earth Green	(84ab93)

figure 4 (rgb-conversion and statistics)

## Materials

### 1. Waxel:

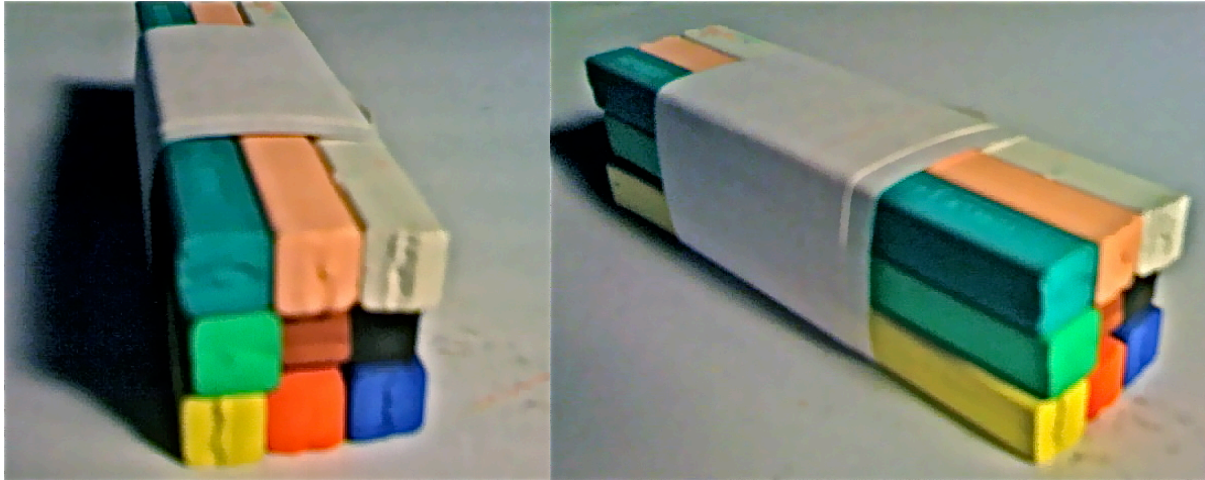


figure 5 (cluster of wax pens as waxels)



figure 6 (round wax pieces)

### 2. Pixel:



figure 7 (original size of a single Pixel on the large screen)

## Realization and preliminary timeline

To make the installation a real world event the two branches of the project, programing the software for waxels and screen and building the wax wall need separate attention.

## Software programing

**All software related work will be done by the artists themselves.**

1. Client 1, 4food guest/visitor.
  - a. A display that can show a single monochrome color.
  - b. The color code of this color can be shared (twitter), though the location information connected to the color will make it unique for the context from which it has been once isolated.
  - c. On paired bluetooth devices the software will check if the same location exists already in a 10 m range of its neighborhood.
  - d. Platforms supported: all iPhoneOS, Android based.
  
2. Client 2, 4food restaurant for the cashier and staff during the installation.
  - a. A single or multiple iPad running the pixel managing, accounting software.
  - b. It also generates the required wax pen amounts and their color values as Faber color codes.
  - c. Furthermore it will generate every time a pixel or its corresponding waxel had been sold a new image that includes all sold color values on their x,y grid location in the image.
  - d. Following this new image is uploaded to the large screen display system, (see possible solution, open question in the appendix).

Image processing especially color slotting is done (tested on iPhoneOS).

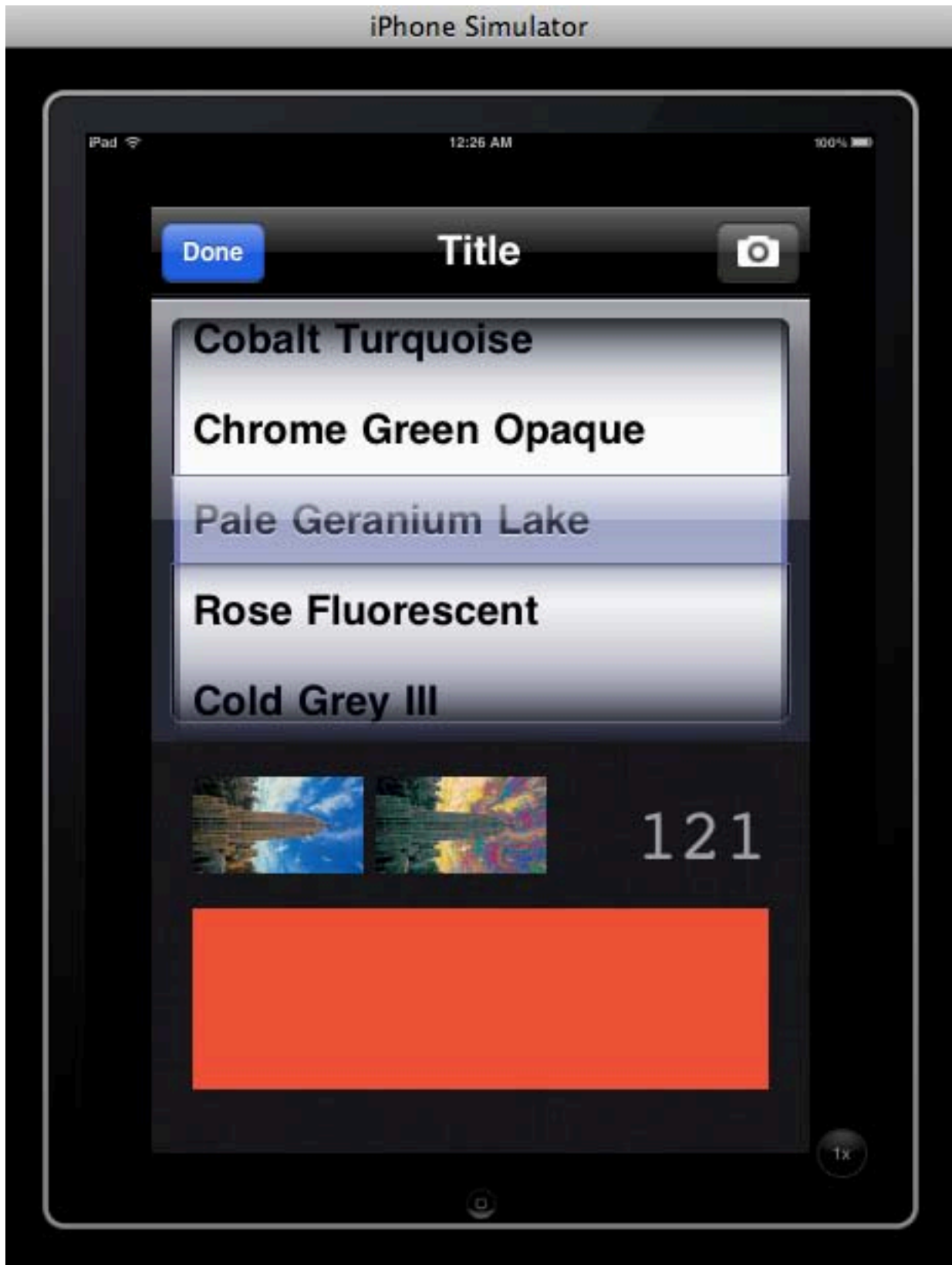


figure 8 (iPhoneOS App prototype, generates image, and statistics)

Remaining development time: 3 -4 weeks  
Training of staff, 10 min max.

### **Construction, layout of the wax-wall(s)**

Ordering the wax pens and checking them will take at least 1 week, but this can take significant more time, shipping, handling, missing colors, customs, whatever worse might happen.

Ordering should be done as early as possible, deadline for the colors about 2 weeks before lifting the curtain.

When using wax pens with a 10mmx10mm section the resulting wax wall will measure 2.80 m x 1.6 m approx. 9ft x 5ft. Segments are thinkable. The pens are supported by a frame(s). (placement in window niches?)

Assumption: 500 wax sticks per person per hour (7.2 seconds per stick)  
 $44800/500 = 90$  h.

for example:

4 workers in 3 days at 8 hours +> 96 hours worth of labour.

This is optimistic, therefore there should be a buffer day, 3 days of work with 4 workers and one day final arrangement.

### **Run**

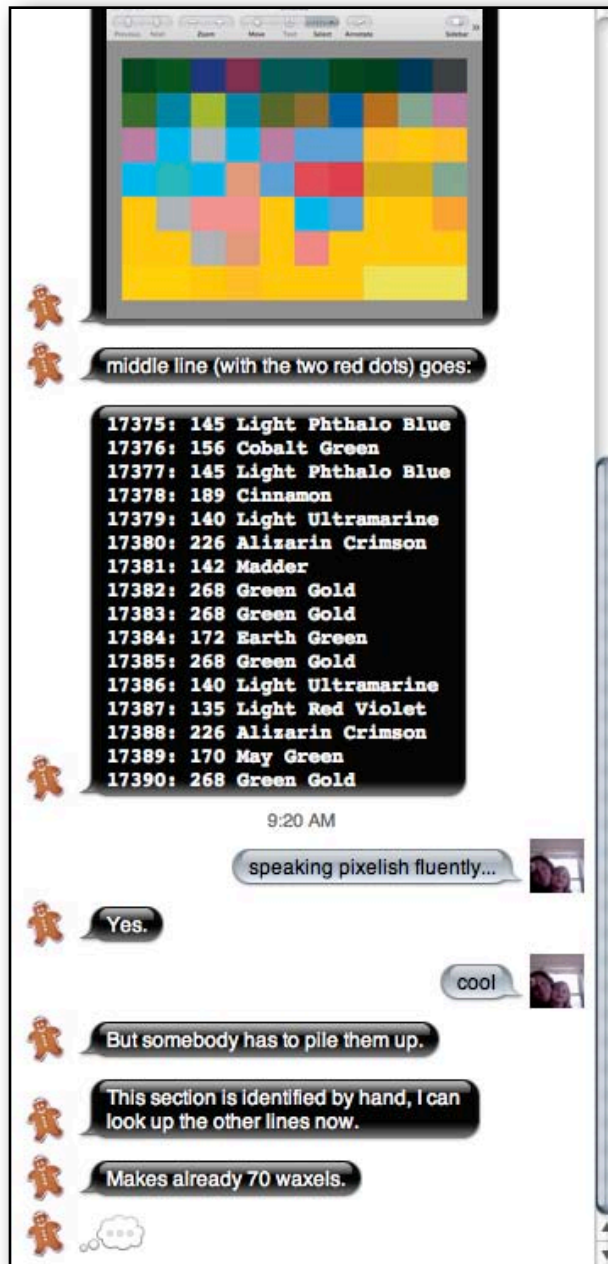
We have to ensure that the actual 4food workforce can intuitively grasp the pixel-registry interface. We have to support them as much as possible.

1. Physically the waxel need to be sufficient labelled. Their color must be identifiable under all conditions. Barcode labels are an option, but labels would add an additional amount of work going into the wall.
  2. Support by software. The software may provide means to identify and correct mistake during the decomposition of the wall. The cashier would have to execute 2 touch commands with the software/device for each sold pixel.
  3. Optical devices may watch the waxes on the wall and the selling of the waxels.
  4. The software supports multi-user mode that will allow 2 or more staff members operate simultaneously on 2 or more devices.
- 
1. The 4food guest can choose between waxel or digital pixel or both. There is one charge that includes both items of approx. \$1. If the guest doesn't wish the waxel, then it becomes a give away, since it is paid for via its digital equivalent.
  2. If the guest purchases a single or multiple colors an array of hex-color (6 digits) values with their location on the image needs to be transmitted to the guests OneColorATime.app. Therefore, the guest must download the free app from the net as for instance via Apple's App store. (At 4food location a URL is displayed, where to go for this).



## Appendix A

**Artists/Engineers** stepDre+longW rejoined in 2009 and founded CoSIRP, the Center of Small Impact Research Projects. Both demonstrate their ideas as impacts on mobile devices and urban space but refuse any HTML web presence, anymore. Though some impactites are traces scattered on the web. Installations are planned with the ACC-Weimar, Germany, namely the Hornstein-Impact, and discretism, an exhibition displaying



the discrete nature of digital images.

## Appendix B

The complete Faber Polychromos color palette of 112 colors, Index number, colorname, color as RGB, color as HEX, hue of color:

```
283: Burnt Siena, 124, 69, 41 7c4529; hue: 20.240963
280: Burnt Umber, 103, 78, 38 674e26; hue: 36.923077
278: Chrome Oxide Green, 2, 76, 33 024c21; hue: 145.135132
276: Chrome Oxide Green Fiery, 0, 138, 115 008a73; hue: 170.000000
275: Warm Grey VI, 70, 68, 66 464442; hue: 30.000000
274: Warm Grey V, 102, 99, 96 666360; hue: 30.000000
273: Warm Grey IV, 134, 131, 127 86837f; hue: 34.285717
272: Warm Grey III, 162, 157, 151 a29d97; hue: 32.727272
271: Warm Grey II, 193, 188, 182 c1bcb6; hue: 32.727272
270: Warm Grey I, 216, 210, 205 d8d2cd; hue: 27.272728
268: Green Gold, 210, 177, 27 d2b11b; hue: 49.180328
267: Pine Green, 0, 68, 31 00441f; hue: 147.352936
266: Permanent Green, 10, 162, 69 0aa245; hue: 143.289474
264: Dark Phthalo Green, 0, 127, 98 007f62; hue: 166.299225
263: Caput Mortuum Violet, 138, 99, 92 8a635c; hue: 9.130434
255: Orange Fluorescent, 255, 217, 143 ffd98f; hue: 39.642857
254: Pink Fluorescent, 244, 153, 184 f499b8; hue: 339.560455
253: Rose Fluorescent, 249, 181, 178 f9b5b2; hue: 2.535211
252: Copper, 151, 106, 78 976a4e; hue: 23.013699
251: Silver, 177, 179, 180 b1b3b4; hue: 200.000000
250: Gold, 196, 170, 112 c4aa70; hue: 41.428570
249: Mauve, 72, 48, 136 483088; hue: 256.363647
247: Indanthrene Blue, 0, 75, 126 004b7e; hue: 204.285706
246: Prussian Blue, 0, 114, 160 0072a0; hue: 197.250000
235: Cold Grey VI, 63, 65, 68 3f4144; hue: 216.000000
234: Cold Grey V, 98, 101, 104 626568; hue: 210.000000
233: Cold Grey IV, 123, 127, 130 7b7f82; hue: 205.714294
232: Cold Grey III, 150, 154, 159 969a9f; hue: 213.333328
231: Cold Grey II, 177, 181, 185 b1b5b9; hue: 210.000000
230: Cold Grey I, 208, 209, 211 d0d1d3; hue: 220.000000
226: Alizarin Crimson, 228, 65, 87 e44157; hue: 351.901855
225: Dark Red, 194, 27, 60 c21b3c; hue: 348.143707
223: Deep Red, 238, 49, 60 ee313c; hue: 356.507935
219: Deep Scarlet Red, 237, 28, 41 ed1c29; hue: 356.267944
217: Middle Cadmium Red, 212, 47, 64 d42f40; hue: 353.818176
205: Cadmium Yellow Lemon, 236, 233, 86 ece956; hue: 58.800003
199: Black, 0, 0, 14 00000e; hue: 240.000000
194: Red Violet, 128, 39, 80 802750; hue: 332.359558
193: Burnt Carmine, 151, 49, 61 97313d; hue: 352.941162
192: Indian Red, 159, 86, 72 9f5648; hue: 9.655172
191: Pompeian Red, 213, 109, 86 d56d56; hue: 10.866142
190: Venetian Red, 194, 106, 73 c26a49; hue: 16.363636
189: Cinnamon, 225, 154, 125 e19a7d; hue: 17.400000
188: Sanguine, 224, 126, 55 e07e37; hue: 25.207100
187: Burnt Ochre, 186, 112, 29 ba701d; hue: 31.719746
186: Terracotta, 203, 123, 50 cb7b32; hue: 28.627451
185: Naples Yellow, 255, 212, 0 ffd400; hue: 49.882355
```

184: Dark Naples Ochre, 240, 180, 29 f0b41d; hue: 42.938389  
183: Light Yellow Ochre, 206, 145, 32 ce9120; hue: 38.965515  
182: Brown Ochre, 177, 128, 53 b18035; hue: 36.290325  
181: Paynes Grey, 58, 58, 60 3a3a3c; hue: 240.000000  
180: Raw Umbre, 143, 111, 49 8f6f31; hue: 39.574467  
179: Bistre, 131, 89, 42 83592a; hue: 31.685392  
178: Nougat, 128, 99, 58 80633a; hue: 35.142857  
177: Walnut Brown, 93, 81, 52 5d5134; hue: 42.439022  
176: Van Dyck Brown, 118, 95, 61 765f3d; hue: 35.789474  
175: Dark Sepia, 66, 64, 41 424029; hue: 55.200001  
174: Chrome Green Opaque, 95, 119, 59 5f773b; hue: 84.000000  
173: Olive Green Yellowish, 91, 108, 44 5b6c2c; hue: 75.937500  
172: Earth Green, 132, 171, 147 84ab93; hue: 143.076920  
171: Light Green, 183, 218, 155 b7da9b; hue: 93.333336  
170: May Green, 162, 191, 47 a2bf2f; hue: 72.083328  
169: Caput Mortuum, 135, 76, 67 874c43; hue: 7.941177  
168: Earth Green Yellowish, 117, 152, 50 759832; hue: 80.588234  
167: Permanent Green Olive, 52, 115, 44 34732c; hue: 113.239441  
166: Grass Green, 121, 196, 122 79c47a; hue: 120.800003  
165: Juniper Green, 4, 89, 35 045923; hue: 141.882355  
163: Emerald Green, 0, 168, 105 00a869; hue: 157.500000  
162: Light Phthalo Green, 96, 195, 173 60c3ad; hue: 166.666656  
161: Phthalo Green, 0, 171, 149 00ab95; hue: 172.280701  
160: Manganese Violet, 127, 73, 144 7f4990; hue: 285.633789  
159: Hookers Green, 0, 109, 81 006d51; hue: 164.587158  
158: Deep Cobalt Green, 0, 91, 87 005b57; hue: 177.362640  
157: Dark Indigo, 0, 57, 88 003958; hue: 201.136368  
156: Cobalt Green, 41, 189, 190 29bdbe; hue: 180.402695  
155: Helio Turquoise, 0, 113, 127 00717f; hue: 186.614166  
154: Light Cobalt Turquoise, 131, 210, 226 83d2e2; hue: 190.105255  
153: Cobalt Turquoise, 0, 134, 164 0086a4; hue: 190.975616  
152: Middle Phthalo Blue, 0, 155, 219 009bdb; hue: 197.534256  
151: Helioblue Reddish, 0, 82, 156 00529c; hue: 208.461548  
149: Bluish Turquoise, 0, 114, 161 0072a1; hue: 197.515533  
147: Light Blue, 109, 207, 246 6dcff6; hue: 197.080292  
146: Sky Blue, 146, 197, 235 92c5eb; hue: 205.617966  
145: Light Phthalo Blue, 0, 184, 236 00b8ec; hue: 193.220337  
144: Cobalt Blue Greenish, 0, 94, 163 005ea3; hue: 205.398773  
143: Cobalt Blue, 0, 100, 168 0064a8; hue: 204.285706  
142: Madder, 224, 49, 79 e0314f; hue: 349.714294  
141: Delft Blue, 41, 50, 129 293281; hue: 233.863632  
140: Light Ultramarine, 98, 161, 215 62ald7; hue: 207.692291  
139: Light Violet, 176, 171, 213 b0abd5; hue: 247.142853  
138: Violet, 133, 99, 160 8563a0; hue: 273.442627

1137: Blue Violet, 85, 71, 157 55479d; hue: 249.767441  
136: Purple Violet, 109, 64, 153 6d4099; hue: 270.337097  
135: Light Red Violet, 190, 123, 166 be7ba6; hue: 321.492554  
134: Crimson, 179, 74, 155 b34a9b; hue: 313.714294  
133: Magenta, 165, 38, 113 a52671; hue: 324.566925  
132: Light Flesh, 252, 206, 183 fcceb7; hue: 20.000000  
131: Medium Flesh, 249, 170, 143 f9aa8f; hue: 15.283020  
130: Dark Flesh, 245, 143, 146 f58f92; hue: 358.235291  
129: Pink Madder Lake, 246, 162, 182 f6a2b6; hue: 345.714294  
128: Light Purple Pink, 241, 115, 164 f173a4; hue: 336.666656  
127: Pink Carmine, 219, 77, 100 db4d64; hue: 350.281677  
126: Permanent Carmine, 228, 65, 76 e4414c; hue: 355.950897  
125: Middle Purple Pink, 190, 47, 134 be2f86; hue: 323.496490  
124: Rose Carmine, 244, 133, 135 f48587; hue: 358.918915  
123: Fuchsia, 227, 76, 142 e34c8e; hue: 333.774841  
121: Pale Geranium Lake, 240, 78, 62 f04e3e; hue: 5.393259  
120: Ultramarine, 68, 127, 193 447fc1; hue: 211.679993  
119: Light Magenta, 209, 137, 187 d189bb; hue: 318.333313  
118: Scarlet Red, 228, 66, 43 e4422b; hue: 7.459459  
117: Light Cadmium Red, 241, 90, 34 f15a22; hue: 16.231884  
115: Dark Cadmium Orange, 244, 121, 32 f47920; hue: 25.188679  
113: Orange Glaze, 250, 166, 52 faa634; hue: 34.545452  
112: Leaf Green, 57, 181, 74 39b54a; hue: 128.225815  
111: Cadmium Orange, 255, 194, 34 ffc222; hue: 43.438915  
110: Phthalo Blue, 0, 119, 192 0077c0; hue: 202.812500  
109: Dark Chrome Yellow, 255, 203, 5 ffcb05; hue: 47.520000  
108: Dark Cadmium Yellow, 255, 221, 0 ffdd00; hue: 52.000000  
107: Cadmium Yellow, 255, 230, 0 ffe600; hue: 54.117649  
106: Light Chrome Yellow, 255, 244, 80 fff450; hue: 56.228569  
105: Light Cadmium Yellow, 255, 242, 0 fff200; hue: 56.941177  
104: Light Yellow Glaze, 247, 239, 112 f7ef70; hue: 56.444447  
103: Ivory, 55, 252, 213 37fcd5; hue: 168.121826  
102: Cream, 255, 249, 174 fff9ae; hue: 55.555553  
101: White, 254, 252, 252 fefcfc; hue: 360.000000  
99: Soft Black, 35, 31, 32 231f20; hue: 345.000000

## Appendix C

Connectivity between Client 2 (4 food staff) and large screen display system  
This installation needs to be done once.

1. Go to the task's setting page either by checking the checkbox at the end of the last step, or by double-clicking on the task.
2. In the **Run** box, after the text that is there now (for example, `C:\PROGRAMS\MOZILLA\FIREFOX\FIREFOX.EXE`), enter a space and then type the address to your website's cron.php page in double quotations (for example, `C:\PROGRAMS\MOZILLA\FIREFOX.EXE "http://www.4food.com/cronjob.php"`)
3. To set a frequency more often than Daily (for example, hourly), click the **Schedule** tab, then click **Advanced**. Here you can set options such as **Repeat** task, every **1 hour** for **23 hours**. Click **Ok** when finished.
4. Change the **start time** on the task to **one minute from the current time**. This will allow you to test the task and make sure that it is working.
5. When all settings have been configured to your liking, click **Apply** and **OK** (note: you may be prompted for your password)

### Command-line version

Another way to perform the above commands is by using the **schtasks** (or **at** in Windows 2000) command from the command line.

**Start > Programs > Accessories > Command Prompt** and enter:

```
schtasks /create /tn "OneColorATime" /tr "C:\PROGRAMS\MOZILLA\FIREFOX\FIREFOX.EXE "http://www.4food.com/cronjob.php" /sc hourly
```

This will:

copy the image resource over from the remote location to the local disk for an general purpose image viewer (other than firefox) to show the image on the screen

```
schtasks /create /tn "OneColorATime" /tr "C:\PROGRAMS\MOZILLA\FIREFOX\FIREFOX.EXE "http://4food.me.com/OneColorATime.png" /sc hourly
```

This will using firefox web browser viewer to show the image on the Big Screen from the shared remote location.

## Appendix D

Response to:

### CALL TO ARTISTS

Blue Box Gallery is currently seeking submissions for a multi-work digital art installation, which will occur in late June. The installation is intended for a one-night-only event that will take place at [4food](#) (East Midtown, Manhattan), a brand new restaurant company with a focus on healthful fast food and an eco-conscious lifestyle.

The event will be one of several “themed” private events taking place during the restaurant’s “soft opening” period in late May/early June. These events—celebrations of 4food’s progressive new approach to “counter culture”—will attract a wide array of media outlets, local businesses, creatives and local tastemakers.

Website: [www.blueboxgallery.com](http://www.blueboxgallery.com)

### Artwork Specs:

We are seeking digital artworks for display on a massive 11.5 ft x 20.2 ft (220 sq ft) LED screen, the centerpiece of the restaurant space ([see digital renderings here](#)). We are accepting all manner of digital art submissions (up to 4 works/person), ranging from software to video-based artwork and anything else relevant and appropriate for LED display. We will be selecting 8-10 works to feature during the two hour-long event.

### Screen specs:

3520 mm x 6160 mm (roughly 11.5 ft x 20.2 ft, or 220 sq. ft)

Single face, full-color indoor virtual LED display

Resolution: 160 pixels x 280 pixels

Brightness: approx. 4000cd.

Scanning frequency: 1185 Hz.

Color processing: 15 bits

Software: LED managing software

System: Windows 2000, Windows XP

### Materials for Submission:

Artist CV

Link to Website (if applicable)

Video(s) and screenshots/image stills (if applicable) of work

150-word (minimum) abstract about your piece(s)

Comprehensive list of any/all tech and installation requirements

## Notes