Thermobooth

Interactive photography adds a new take on the old photo booth experience.

Describe what you made.

The Thermobooth features a new shutter release system in which skin contact between two people triggers a set of processes that result in a glorious, lo-fi, instant thermal-printed picture. Yes, it takes a picture when you touch each other! We are opening a stage for playfulness and the unexpected.

Briefly describe the process of how this was made. The idea originated over a coffee between Talia Radford and media artist Jonas Bohatsch while they were planning the studio's birthday party. Talia wanted to create a playful environment that continued exploring the studio's ongoing theme into more emotional interactions with electronics, and Jonas wanted to continue experimenting with thermal printing technology. The Thermobooth idea was born and the beta version tried and tested.

The studio cheekily pitched the idea to the lighting tech company Osram, thus introducing an innovation in the use of OLED-mirror technology. The project launched during Vienna Design Week 2013. While Talia and Lena Gold (the design team from taliaYstudio) were figuring out the look, feel, emotion, design, and construction of the machine, Jonas was working on the electronics

→ Initial code prototyping.

→ Jonas Bohatsch arranging the "brain" at the studio.

→ Lena Gold discussing the paintwork with carpenter Reinhard Hermann.

→ The first successful OLED flash at the studio.

and software. There was a constant exchange of information between the two teams, and within two weeks there were about 200 pages of sketches that can be better described as a "visual dialogue" between the design team.

What for you is the most important/key/interesting thing about what you made?

Definitely that the entire package is based on the emotion involved in the interaction. That two people can become a human-size switch, or a living button, and that that triggers the flash and the camera seems to delight visitors. That they get to take something so unusual, like a lo-fi thermal-printed picture, away with them only adds to the memory of the moment. Technically, the innovation here is the use of OLEDs as a flash. This technology has never been used in such an application before.

Was this a collaborative process, and if so, who was involved? This is definitely a collaborative process—not only did taliaYstudio collaborate with media artist Jonas Bohatsch, but the

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Specs

Materials: OLEDs

(from Osram), mirrors, steel, wood

Tools: thermal printer, webcam, Makey-Makey, Arduino, computer processing

Studio name: taliaYstudio in collaboration with Jonas Bohatsch

Thermobooth is also the first of a group of collaborative projects between taliaYstudio and Osram's OLED technology. The project was made possible by departure (the creative agency for the city of Vienna) and the collaboration project "Illuminating Technology" with Osram Opto Semiconductors.

What expertise (skills and competences) did it require? The Thermobooth is simple in its idea and final manifestation; however, the process of making it involved incredible interdisciplinary design skills and knowledge, from product design to interactive programming.

What materials and tools did you use? The Thermobooth is made up of a central "brain" that houses the computer that does the processing, a Makey-Makey kit, an Arduino for the OLEDs, and an Arduino for the thermal printer. The visitor, however, sees a photo-studio setting where a smart carpet is attached to a rectangular box, which has straight steel tubes speckled with round mirrors into which the camera and mirror OLEDs are integrated, as well as a triangular box that acts as the thermal printer house.

Did anything go wrong?

Two days before the launch at this year's Vienna

→ Lena Gold and Talia Radford celebrating first impressions of the finished hardware.

Design Week, the thermal printer started to behave weirdly. It just wouldn't print images anymore, just random characters. It's the jinx of deadlines.

What was the biggest surprise in making this? That we could in fact use OLEDs as a flash was probably the biggest surprise. It was just an idea and calculations showed it was possible, basically setting the tone for the entire material culture of the Thermobooth. Also, we really loved the fact that the OLEDs can glow in a blueish tone when dimmed down really low. You can see it at the end of this video: <https://vimeo.com/74377270>

Was there anything new in the making, process, materials, or something else for you that you can tell us about? Again, the flash component of the OLEDs. Personally, Jonas had never worked with OLEDs (or any high-power LEDs) before but found the process quite easy, especially with the great support from Osram.

How would you improve on this if you were to make it again? Even more exchange between the industrial design team and the electronics/software team. Like any new team setting, we have to find the ropes, comfort zones, and boundaries that need

to be accommodated and pushed on a personal and professional level. This is always the most exciting and most human aspect of working within a team made up of people with complementary talents who are all working toward the same goal.

What will you repeat in another project that you did well in this project? The rhythm, dynamic, and momentum of the teamwork was probably the most enriching thing. And the honest aspect of play behind the entire experience of using the Thermobooth is

definitely something we value and can translate to upcoming projects.

What is the one thing about making this that you would like to share with other makers? Open source is great, but it also means that there's no dedicated support available. You are dependent on the community and that can be an issue, especially when you don't have much time to solve a problem.

🔴 Talia Radford, Jonas Bohatsch, Lena Gold

🌐 <http://taliastudio.com/>

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