

CASE STUDY

Video mapping pioneers Glowing Bulbs embrace Disguise's Mapping Matter solution



Summary

Since its inception in 1998, Budapest's leading visual arts studio, Glowing Bulbs, has been delivering groundbreaking projects. Born from the city's vibrant underground art scene, the group's ambitions often outreached the capabilities of the technology that was available to them - urging the team to improvise. Initially working with still images and S8/16mm film projectors, the collective found clever hacks and tricks that allowed them to deliver their innovative work, upgrading as technologies became more affordable, and their success brought bigger budgets.

But still, their ambitions stretched beyond current capabilities, and Glowing Bulbs found their own way of delivering projects that ranged from underground raves to experimental art installations. They were pioneers, using their own approaches to image distortion technologies, long before mapping became a commonly used tool.

Eventually, technology caught up with Glowing Bulbs' bold vision, and the collective's experimental tendencies saw them testing out the practical applications of new mapping tools like **Disguise's Mapping Matter** solution. When Veszprém came calling with an ambitious project that would celebrate their role as a European Capital of Culture, Glowing Bulbs knew they had the best way to deliver an entrancing show.



The Challenge

Where many cities benefit from large open spaces that can host central events, Veszprém's relatively small layout presented a distinct challenge. The expected audience would need to be scattered amongst a number of smaller stages in different areas of the city.

The team settled on five locations that would each host different performances and feature different stage designs, all running simultaneously.

“We decided on an open-air immersive experience for the spectators,” says Tamas Zador, founder member of Glowing Bulbs and director of the Budapest studio. Incorporating music, dance, live performance art and video projection, the experience would see Zador's team working to project stunning visuals onto a broad range of structures across the city.

Delivering this ambitious programme represented a big technical challenge that would include scanning most of the streets of Veszprém's centre while deploying more than sixty projectors across the route.

“The surfaces were also diverse and challenging,” says Zador. “A 1000-year-old cathedral, a 300 metre-long street with sixteen different facades, and a twenty-storey house from the socialist era were just a few of the challenges we had to deal with.”



The Solution

The team set about preparing for the project, which would see them create an hour-long video production to play out across a sprawling canvas at 14x4k total resolution. Zador saw the work as a great honor, and the fulfilment of a long-time dream, and so made the most of a ten-month pre-production period that left plenty of time for template setup, concept and mood preparation, research and experimentation.

Nevertheless, the project's sheer scale led the team to fully rethink their workflow and operating standards.

Disguise's workflow proved key, enabling the team to use patches to adapt to last-minute changes, inserting them into the show automatically with frame precision. "We saved tons of time and sweat not having to re-render complete scenes," Zador adds. "As content creator and director, it was the most important feature both before and during the event."

Disguise Cloud's Mapping Matter and its precise details also helped the Glowing Bulbs team greatly reduce their lensing inventory, enabling them to understand their exact needs. "Having back-up lenses for sixty projectors would have made the project we envisioned cost prohibitive," says Zador. "We would have had to cut down on projection surfaces."



“Mapping Matter was a great help, allowing us to be dynamic and work closely together with the ever-changing parameters of the event. The ability to understand every inch of the structures played a key role as the organisers changed stages and moved locations.”

Tamas Zador

Founder of Glowing Bulbs

Director of the Budapest studio



Results

Though Glowing Bulbs are no strangers to ambitious approaches and big projects, they had known from the start that Disguise's tools would be the key to success for the European Capital of Culture project in Veszprém. Streamlining complex workflows and planning every aspect of the project down to the smallest detail, Disguise simplified what could have been an exhausting process.

“The biggest success was that, despite the increasingly intensive process, we were able to maintain the focus and quality of the production,” says Zador. “The projection itself was a great success. The projector view export streamlined setup, helping the team pre-map and pre-align all the projectors before the servers were even in place.” This meant that by the time the servers came online, all forty-four of the staging areas were ready to go without the need for any physical adjustments.

This is the reliability the team came to trust. With the minutiae of setup made easy, there was more room to focus on delivering the visuals that would blow audiences away.

For Zador, the project was an unqualified success. “We were able to pull it off exactly as we intended to,” he says. “We had no hiccups at all thanks to the rigorous planning, our professional and dedicated crew and, of course, the high-quality AV gear we chose.”

5

locations for performances

60-80k

audience members

14k x 4k

canvas

1.5Kkm

of programmed shows



Disguise equipment used



4x4pro

Designed for large video surfaces, the 4x4pro is capable of driving up to 16 HD projectors or LED processors from a single server unit.

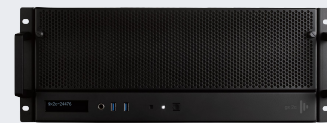
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MAPPING MATTER

Effortlessly plan and simulate large scale video projection layouts. Import high-resolution Meshes & Textures to create beautiful scenes without having to know complex 3D softwares.

Find out more →



GX 2

Built with the power to respond, the GX 2 media server delivers richer scenes at higher resolutions, and smoother frame-rates than ever before.

Find out more →

In Partnership with

Farkas Fülöp: General technical lead designer, pre production and template designer, and on site technical production lead

Ferenc Sárkány: Projection technical manager

Viktor Drimmer: Lead Projectionist

Andor Zekany: System Engineer

Peter Perjesi, Tibor Fulemile, Majo Tamas: Project Manager

Libor Zsolt, Gwilym Huws, Marek Jankowski, Henrik Nagy: D3 operator

Zoltan Nagy, Peter Kaloz: Mbox operator

Gyorgy Karaffa, Laszlo Perjesi, Tamas Kovacs, Gabor Marton, Norbert

Kozma, Istvan Fazekas: Projector technician

Tams Dunajcsik, Marton Naszvadi: Network technician

Andras Lerner: Electrician

Soso, Andras Megyeri: Pani Technician

Balazs Varga: Lighting Designer

'Pite': Staging Lead Engineer

Zsolt Szicso: Stage Manager

Brigitta Major: Assistant Stage Manager

Tamás Zádor: Content and Stage Design by Glowing Bulbs

Art Director and Production Manager

Márton Noll, Tamás Zádor: Stage Design

Marcell Andristyak, Istvan Rittgasszer, Zsolt Csajagi, Balazs Szócs, Eszter Szabó, Eszter Papp, Pablo Campos, Gábor Kitzinger, Fanni Bajer, Soma

Sárffi, Péter Reichardt, Tamás Zádor: Animation

Péter Zabó, Gábor Farkas Varga: Graphic Designer

Krisztina Heckler: Production Assistant

Attila Pacsay: Music and Sound Design

Projection Setup by **VisualHumans**

Projector Equipment provided by **LANG**

LED equipment provided by **VEG**

Staging and Scaffolding provided by **VEG**

Can Togay: Event Creative Director

Adorján Tóth: Event Lead



DISGUISE

**GLWING
BULBS**

Get in touch

**Curious to know more about us?
Want to master our production toolkit?
Need support on your project?**

Our team will be happy to speak to you,
whatever your query.

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Get Started