# Eurovision’s invisible crew pulls off pit-stop precision in 35-second set changes



The world of Eurovision is as much about spectacle as it is about song, and behind every performance lies a tightly coordinated web of activity that must unfurl in mere seconds. As contestants take their places on stage, an unseen team—the “invisible crew”—steps into action, armed with a meticulous choreography that resembles an intricate ballet, and only 35 seconds to execute a flawless set change.

Richard van Rouwendaal, the stage manager, describes this frenetic moment likening it to a Formula 1 pit stop. “Each person in the crew can only do one thing,” he explains. “You run on stage with one light bulb or prop, and if you go off course, you will hit somebody.” This precision is crucial; every detail is accounted for, from microphone placement to the secure positioning of props, which in recent years have included everything from giant hamster wheels to the lovable failed chandelier from this year's UK entry.

Preparation for these transitions begins long before the live event. The team rehearses for weeks, working with stand-ins to simulate performances and shave seconds off each changeover. The meticulous planning ensures that each act can take the stage without a hitch. This year, preparations were further enhanced by the introduction of Disguise’s digital spikemark feature, which illuminated precise markings on the LED stage floor. This innovative technology allowed the crew to adjust props and set changes on the fly with remarkable efficiency, reducing reliance on traditional tape marks and streamlining the process significantly.

The creative demands of Eurovision have grown increasingly elaborate over the years. Richard recalls the challenges faced in past contests, notably in 2022, where the stage's height posed additional logistical difficulties. “We were pushing heavy stage props up a steep ramp between every act,” he reminisced. But this year's show in Liverpool allowed for greater ease with the addition of a dedicated backstage tent for prop preparation.

The need for cleanliness and consideration for the ever-critical camera angles is equally paramount. The backstage team includes cleaners responsible for ensuring that the stage is spotless after each act, as any sign of disarray can mar the visual feast that the audience watches. “You need a clean stage for the dancers,” Van Rouwendaal notes, underscoring the importance of every role within the team, which also includes specialists for lighting and pyrotechnics.

The backstage environment operates under a set of "smuggling routes" allowing for discreet transitions of props and performers. This orchestrated chaos hinges on the crew's ability to remain unseen while executing tasks that must appear magically seamless on screen. Van Rouwendaal recounts his own role in manipulating certain effects during live performances, a logistical trick often unnoticed by viewers at home.

While the stakes are undeniably high, should something go awry—be it a prop malfunction or a technical glitch—there are built-in contingencies to ensure the show goes on. A pre-recorded feed of the dress rehearsal can be deployed in the event of disruptions, providing a safety net for the seamless experience Eurovision is known for.

Damaris Reist, deputy head of production, emphasizes the depth of preparation that goes into each performance. “There are people who know the regulations by heart, and they have been playing through what could happen and how we would respond,” she states, showcasing the intricate planning that underpins every performance.

This exceptional coordination signifies the heart of Eurovision, where the stakes are high, and the pressure is unrelenting. Behind the flash and glamour lies a story of teamwork and technical expertise, ensuring that, despite the rapid-fire set changes and high expectations, every act gets the chance to shine.

### Reference Map

1. Paragraphs 1, 2, 3, 4
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## Bibliography

1. <https://www.bbc.com/news/articles/c1e679vn6yqo> - Please view link - unable to able to access data
2. <https://www.disguise.one/en/insights/news/disguise-powers-complex-stage-management-for-the-2023-eurovision-song-contest> - This article discusses how Disguise, a company specializing in media servers and stage management software, played a pivotal role in the 2023 Eurovision Song Contest. They provided the technology that powered the event's complex stage management, including the use of digital spikemarks to streamline set changes. The system illuminated precise markings on the LED stage floor, enabling rapid scene transitions and reducing the need for traditional tape marks. This innovation significantly enhanced the efficiency of the stage crew during the live broadcasts.
3. <https://www.svgeurope.org/blog/headlines/live-from-liverpool-disguise-debuts-digital-spikemark-to-speed-eurovision-song-contest-stage-workflow/> - This article highlights the debut of Disguise's digital spikemark feature at the 2023 Eurovision Song Contest in Liverpool. The feature illuminated precise markings on the LED stage floor for each set change, prop placement, and artist positioning, eliminating the need for tape marks. Controlled via an iPad, the system displayed the location of all stage marks per artist, allowing for on-the-fly adjustments. This innovation streamlined the stage management process, enabling rapid scene transitions and enhancing the overall efficiency of the production team.
4. <https://www.avinteractive.com/news/production/disguise-marks-the-spot-on-stage-for-eurovision-contestants-30-05-2023/> - This article details how Disguise's custom-developed digital spikemark feature was utilized during the 2023 Eurovision Song Contest to manage complex stage changes. The system illuminated 1,250 marks on the LED stage floor, guiding the stage crew in precise prop placement and set changes. Controlled wirelessly via an iPad, the feature allowed for quick adjustments based on the delegations' plans. This innovation significantly improved the efficiency of the stage management team, ensuring seamless transitions between performances and enhancing the overall production quality.
5. <https://www.maltadaily.mt/the-40-second-prop-stage-change-between-eurovision-songs/> - This article provides an inside look at the rapid prop stage changes between Eurovision performances. It describes how the crew manages to dismantle and set up props used in various performances within a 40-second window. The process involves a team of 30 people, with 10 preparing the prop or set piece offstage, another 10 placing it onstage, and 10 removing the previous one. The article emphasizes the organized chaos and precision required to execute these quick changes, highlighting the crew's efficiency and coordination.
6. <https://www.livedesignonline.com/news/over-600-robe-moving-lights-help-dazzle-2023-eurovision-sing-contest> - This article discusses the extensive use of Robe moving lights at the 2023 Eurovision Song Contest. It details how over 600 Robe moving lights were employed to create dazzling visual effects during the event. The lighting design involved programming approximately 79,000 lighting cues over the course of the three live broadcast shows. The article highlights the challenges of coordinating such a large number of lighting fixtures and cues, emphasizing the technical expertise and meticulous planning required to achieve the desired visual impact.
7. <https://www.usitt.org/news/unusual-rigging-takes-eurovision-stage> - This article covers the role of Unusual Rigging in providing rigging and automation services for the 2023 Eurovision Song Contest. The company was contracted to supply the rigging and automation for the event, which featured one of the entertainment world's most complex stages. The article discusses the pre-production timeline, the scale of the rigging requirements, and the collaboration between Unusual Rigging and other production teams to ensure the successful execution of the event's technical aspects.