



**EUROVISION**  
SONG CONTEST  
UNITED KINGDOM  
LIVERPOOL 2023

## Customer

2023 Eurovision Song Contest

## Country

United Kingdom

## Inside The Mixbus: Headliners of Tomorrow

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See: **Eurovision 2023: Behind the scenes of the biggest music spectacle on earth.**

The final of the 2023 Eurovision Song Contest took place in Liverpool, UK, and attracted a worldwide television audience of over 160 million people. Throughout the week-long extravaganza, music for all of the televised live shows and rehearsals was mixed on the Mixbus, a music and audio outside broadcast facility that now incorporates an Evertz Studer Vista X console.

Owned by BAFTA winner Conrad Fletcher's SounDesign company, the Mixbus was chosen for Eurovision because it is kitted out with a plethora of high-end equipment, including an Evertz Studer Vista X console that has the ability to handle complex and technically challenging live music shows.

"The Vista 8 had always done a sterling job, but I'd been wanting to upgrade to a Vista X for some time in order to carry my business forward for the next 10 years," he explains. "Winning the Eurovision project vindicated my decision to invest. The type of projects we do, especially live to cinema that makes up 50% of our workload, are complex and I honestly believe Evertz Studer is the only console manufacturer that can handle them. Nothing else comes close."

BAFTA-winning Andy Tapley (of BBC Studioworks and known for his work on Strictly Come Dancing and RuPaul's Drag Race) was the sound supervisor on the Mixbus for the Eurovision song contest, handling all mixing for the live shows and rehearsals, as well as being responsible for the console programming.

## Challenge at a Glance

- A week-long music extravaganza attracted a worldwide television audience of over 160 million people.
- The televised live shows and rehearsals was mixed on the Mixbus, a music and audio outside broadcast facility that now incorporates an Evertz Studer Vista X console.
- The expectation for Eurovision is that nothing can go wrong. There is no room for error whatsoever.
- The Vista X performed flawlessly and contributed largely to an exceptional televisual event.



**"WHAT CONRAD HAS DONE WITH THE MIXBUS IS BUILD SOMETHING TECHNICALLY SUPERB."**



A long time Studer user, Fletcher ordered his new console just three months before the event as a replacement for his old Studer Vista 8 console. Cooperation between Fletcher and Evertz, which had recently moved all Studer manufacturing to its factory in Canada, was key to ensuring the console was built and installed in time for the contest.

Fletcher has a long background in mixing music for live events and also does a lot of live to cinema work, and recently won a BAFTA for his involvement with the coverage of the Queen's funeral, so he's used to high profile live events on this scale.

"The expectation for Eurovision is that nothing can go wrong," Fletcher notes. "There is no room for error whatsoever. This is why I bought the Vista X console. I'd been looking at it for a while, as it's the most important piece of technical equipment we have. What makes it unique is the quality of the mic amps – they're very transparent. So if you need to backup (as we did), we had two MADI feeds and an analogue feed from everything, so the console is very good for that kind of thing, and they sound great.

"The snapshots and the automation are incredibly quick to achieve so Andy, who was mixing, was able to do a rehearsal and then within five seconds we could flip to an off-tape rehearsal. In that time he was able to update all the automation on the desk very quickly. Pretty much every function is only one button push away to be able to do quite sophisticated things.

"After the semi finals, there are two semi final runs and they are singing live to track, but the playback comes from the arena from a Pro Tools system," Tapley explains. "That whole system is built with redundancy, because failure isn't an option. There are actually three Pro Tools systems running together.

"The whole thing is very, very organized, time-wise – you've got 39 countries to get through," he points out. "You can't give one country three quarters of an hour and another only 14 minutes, so everything has to be completely organized and regimented. They will come on, they will be fitted up with their items and they'll be given the allocated mics. Everything's planned down to the absolute nth degree so that we know exactly who's going to be on which microphone."



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The team gets to rehearse with each act the first time, from which they'll get a mix together.

"They'll give me copious notes about what effects they want on their vocals and then on their BVs, so I pre-programme as much of that as possible," explains Tapley. "They listen to the mix that I've done and they can look at the video as well as their performance and that's when you get feedback from them about adjustments that they want made. They are so focused and obviously this is a massive thing for them, so we want to give them the best that we possibly can. We work very hard to give them exactly what they want. In the end, we got there and we were very pleased with the result."

"I think that this is probably one of the best organized and best planned shows I've ever done," agrees Conrad. "I really appreciated the attention to detail in the whole planning stage and the fact that we had the time to be able to make it sound good."

"Our build team was aware that this console was destined for Eurovision, so they knew delivery wasn't a moveable date," adds Mark Hosking, director of international sales, Studer-Evertz Audio Solutions.

"Conrad had been using a Vista 8 console previously in the Mixbus so the upgrade to the Vista X was a logical step for him to take. The Vista X provides the indispensable Vistonics-based control surface Conrad has become intimately familiar with and is an essential part of the workflow for these large entertainment shows," he tells Headliner.

"Providing the familiarity and flexibility Conrad wanted, the Vista X also provided both Quad Star control surface redundancy and 100% sample accurate Infinity Core redundancy giving him the peace of mind needed for this level of show."

The Mixbus handled the main music mix going out to transmission, with the Vista X mixing anything music-related coming through the Mixbus.

"The Vista X has a number of key features that make it a fantastic console for live entertainment shows," says Hosking of the console's suitability for such a high profile large-scale live event.

"The sonic quality of the mic pres was a very important point as was the ability to use the extensive Cue List and Snapshot features to manage the rapid changes between acts, firing off MIDI changes to recall external effects settings and completely resetting the console from act to act at a touch of a button. The audio design meant that Mixbus was pretty much its own baseband triplicate ecosystem audio-wise, providing resilience from any wider network issues.

"The Mixbus team did an awesome job," he enthuses. "The Vista X performed flawlessly through the entire time on site and I think it's fair to say contributed largely to an exceptional televisual event."



Fletcher's Vista X has 52 faders and a control surface that weighs 150 kilos. It is also 7cm higher than his old Vista 8, which meant the back end of The Mixbus had to be rebuilt to raise the speakers and video monitors above the meter bridge.

Like its predecessor, the console retains Studer's patented Vistonics user interface and added FaderGlow, along with a new Infinity Core, that provides control of 1,000 or more audio DSP channels with superb sonic quality and more than 5,000 inputs and outputs. To ensure system redundancy that is so vital for live events, Vista X has four processor Quad Star technology and CPU-based DSP that allows two completely independent DSP cores to run in parallel with 'instant' change over.

"While it is operationally very similar to the Vista 8, this new desk has some clear advantages," Fletcher explains. "I really like FaderGlow because each audio fader type can be associated with a chosen colour, plus it has assignable channel meters with a history function so you can instantly see which microphone is faulty, even in a show with hundreds of them; or spot problems with assignments, which is invaluable in a live situation. This gives you an instant overview of the console's status."

Fletcher adds that the console's configuration system is also much quicker to work because it runs natively on modern x86 CPU processors that are found across Evertz live media production product lines. It also has exceptional system reliability with four independent processors providing the necessary backup for shows as complex as Eurovision.

Organized by the European Broadcasting Union (EBU), Eurovision is usually hosted by the previous year's winning country, which in 2022 was Ukraine with the song Stepmania by the Kalush Orchestra. But, because of Russia's invasion of their country, Ukraine was unable to hold this year's contest, so instead – for the first time in 25 years – it took place in the UK at the M&S Bank Arena in Liverpool, where it was hosted by the British Broadcasting Corporation (BBC) on behalf of the Public Broadcasting Company of Ukraine.

**“THE VISTA X PERFORMED FLAWLESSLY AND CONTRIBUTED LARGELY TO AN EXCEPTIONAL TELEVISUAL EVENT.”**





Costing more than £16 million to stage, Eurovision 2023 involved 37 participating countries and nine television shows including two live semi-finals and a live final, which was ultimately won by Sweden's Loreen with the song Tattoo.

Throughout Eurovision week, the Mixbus team were responsible for mixing 45 songs live to air, including guest artists such as Sam Ryder, Rita Ora and Rebecca Ferguson and contestants.

Once the stereo mixes were completed, they were handed over to another BAFTA winner, sound supervisor Richard Sillitto, who added presentation and audience on board NEP's UHD1 scanner. He also provided the 5.1 surround mix.

Graham Norton's presentation was added separately, and an international feed was provided to each country so that they could add their own commentary. Meanwhile the head of sound for the event, Robert Edwards was sitting in a separate scanner monitoring all feeds so he could take over in the event of a major problem anywhere in the system.

"Considering the complexity of the final show – and indeed all the live shows and rehearsals – it is testament to a great team effort that everything went so smoothly," says Tapley. "The Vista X took all the vocal mics and the Pro Tools tracks and produced a stereo mix, which is a sub mix fed into an NEP truck, where presentation and audience is added, and that's what provides the world feed. So that goes to every country that receives Eurovision and then they in turn add their own commentary to it.

"The Vista X was absolutely the right choice for this event. Its ability to completely reconfigure every parameter on the fly at a touch of a button meant it was the perfect choice. It is simply the best console for entertainment and music mixing."

"We are told that the EBU was extremely happy with the quality of the output from the Mixbus, and this is both gratifying and a relief," adds Fletcher. "Some colleagues questioned the wisdom of putting a new desk in just before one of the biggest shows we have ever undertaken. All I can say is the Evertz Studer Vista X console gave us complete and total reliability, from first delivery to completion of a four-hour epic broadcast, and everything in between."



Tapley is so satisfied with the new console, he wouldn't use anything other than a Studer Vista X for this type of work from now on:

"I use this console because for entertainment and music shows, there's nothing that comes close to the ergonomics and the operability of the Vista X. It gives you such incredible functionality and it's so transparent in the way that it's so easy to operate. And the visual feedback is just fantastic. When we're doing Eurovision, we've got music after music act and very little time in between them.

"In fact, from one finishing to the next one being on stage was between a minute and 90 seconds, so you have to have everything ready to go. You can't be waiting for files to load, it has to be pretty much instantaneous. That is a unique selling point of the Vista X; it is ideal for this sort of situation."

For Fletcher, all the hard work paid off and resulted in the best possible final show:

"It's relentless! It's four hours long, the final, and we do it four times: we do it for the audience, we do it for the judges, we do a dress run, and that's 16 hours of live broadcasting in which to maintain focus and concentration and do an amazing job. That's the final stint of a week of very intense broadcasting, so it's really impressive what Andy achieved. It was the best possible outcome that we could get."

"The console was faultless and the truck is fabulous," agrees Tapley. "What Conrad has done with the Mixbus is build something which not only is technically superb, but it's an aesthetically amazing place to work in as well. It is the attention to detail that sets it apart from anything else – it was such a comfortable, great experience working in it."

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