



France Télévisions brings the Paris 2024 Olympic Games to life with Dolby Atmos.

For the first time with the Paris 2024 Olympic Games, a must-see global sporting event was broadcast in its entirety by France Télévisions in Dolby Atmos multidimensional sound. Viewers were able to enjoy a totally immersive sound experience, plunging them right into the heart of the sport.



“For us, the best meant not only the image, in 4K HDR, but also the sound”

Jacques Donat-Bouillud, Director of Technical Distribution at France Télévisions

Bring out the best

“We wanted to bring our very best to the Olympic Games,” explains Jacques Donat-Bouillud, Director of Technical Distribution at France Télévisions. France Télévisions had been testing UHD HDR and Dolby Atmos broadcasts for several years, for example with Roland-Garros. The standard was ripe, and an event like the Paris 2024 Olympic Games was an opportunity to build a perennial channel with these standards. “For us, the best meant not only the image, in 4K HDR, but also the sound,” continues Jacques Donat-Bouillud. “It was important not to forget this dimension, because the progress made by Dolby Atmos in terms of quality and comfort for viewers is considerable. It’s a major component that will provide far greater immersion.”

Convey the Atmos(phere) of the Olympic Games

Dolby Atmos revolutionizes the way viewers experience live sporting events, thanks to its ability to create a three-dimensional sound environment. Listeners are right in the middle of the action, whether it’s the crowd cheering, the sounds of the pitch or commentary. Sound details are reproduced all around and above the spectators to create immersive, clear and deep sound for a more realistic experience. But that’s not the only advantage. “Dolby Atmos also makes it possible to implement improved accessibility, such as dialogue enhancement. This is an essential criterion for us,” stresses Bastien Thiébaud-George, broadcast and distribution project coordinator at France Télévisions. These new services are made possible using the AC-4 codec and metadata in S-ADM format.



Dolby
ATMOS

A long preparation

France Télévisions is no stranger to innovation. The channel has long been at the forefront of innovation for image and sound; the Roland-Garros clay-court tennis tournament, in particular, is one of their favorite testing grounds, and this year's edition served as a dress rehearsal for the Paris 2024 Olympic Games. To get everything ready in time, France Télévisions began work as early as June 2022. "We started by doing studies to find out how to set up the workflow we envisaged, working with our partners, the aim being to natively produce Dolby Atmos 5.1.4," explains François-Xavier Ballon, sound engineer and mixer at France Télévisions. Indeed, no 'packaged' product yet existed that implemented all the required functions.

What's more, it wasn't enough just to produce the sound: it also had to be broadcast, and viewers had to be able to enjoy it. "There had to be no faulty elements in the system," stresses Yannick Olivier, technical architect for France Télévisions. "We really worked with all our partners to ensure this. This also included training the various technicians in the new equipment and workflow.

On a large scale

"So we had to talk to developers, invest in specific developments, and make sure everything worked for Roland-Garros, while improving it for the Olympic Games," explains Yannick Olivier. Especially as the Paris 2024 Olympic Games far exceeded, in scale, anything that had gone before.



The figures speak for themselves: over 60 production sites - all of which had to be equipped to generate 360° sound for the immersive Dolby Atmos format - 55 ultra-high-definition streams, over 600 gigabits of bandwidth. What's more, to ensure the best quality for the show, there was constant back and forth between control rooms such as the UM1 bus, where François-Xavier Ballon worked, and the CDE (Centre de Diffusion et d'Échange, the final control room), to ensure the best mix. "The first few days saw constant back and forth, almost every minute, to adjust the sound recording, the mixing..." explains François-Xavier Ballon.



“In the end, we have a global show that is extremely immersive, unique and even exceptional”

Bastien Thiébaud-George, broadcast and distribution project coordinator at France Télévisions

A conquered public

It was a mammoth task, and one that paid off right from the start. “The production and post-production of all the elements of the Opening Ceremony brought a coherence and an immersive effect that was totally unprecedented, especially for a live production,” emphasizes François-Xavier Ballon. And it was a resounding success, as evidenced by the audience figures for France 2’s brand-new UHD channel, which is not necessarily the easiest to find on channel 52: “In the end, we have a global show that is extremely immersive, unique and even exceptional,” says Bastien Thiébaud-George. “And it has found its audience, since we had nearly a million viewers on our UHD channels for the opening ceremony.”

Audiences for the rest of the fortnight were “on a par”, Jacques Donat-Bouillud points out, “with peaks when French athletes were on screen, such as Léon Marchand or Teddy Riner.” Proof that Dolby Atmos UHD was well received: France Télévisions received no negative feedback, and viewers - not just professionals - came forward on social networks to express their satisfaction with the quality of the show. “The fact that we’ve had nothing but positive feedback is a real compliment,” continues Jacques Donat-Bouillud.



Project galore

Given this success, France Télévisions has only one wish: to continue along the same path. The new UHD channel is here to stay! And the possibilities offered by Dolby Atmos spatial sound are numerous. "In production, we're already thinking about other types of content and programs that would benefit from Dolby Atmos," explains François-Xavier Ballon. "Particularly with regard to live performance and object mix."

And there's no shortage of ideas. "The next event scheduled to be produced in UHD and Dolby Atmos will be the inauguration of Notre-Dame de Paris in December," says Jacques Donat-Bouillud.

"But we have many other projects in the pipeline, particularly in the sports sector: the 6 Nations Tournament, Roland-Garros of course, the Heineken Cup...". Imagine a soccer match, for example, where the viewer can choose the sound ambiance between the supporters of each team.