



Audiovisual innovation transforms the automotive experience



There's no doubt that public, political, and industry appetite for automotive innovation is increasing.

The EU Commission recently set out its support for the introduction and deployment of connected and automated mobility (CAM) – autonomous/connected vehicles, or self-driving cars – and has committed to work with member countries and industry stakeholders to realise its “ambitious vision for connected and automated mobility across the EU”.

As the industry – and the public – navigates towards the greatest innovation in automotive technology since the invention of the car itself, there is another revolution happening in parallel: the next evolution of immersive in-car entertainment experience. The technology is already here to make it happen.

Dolby, a leader in audiovisual innovation, and Cinemo, a leading global provider of automotive infotainment middleware, have an established partnership that ensures getting from A to B need never be a dull and dreary experience. The partnership has previously worked to bring Dolby Atmos immersive audio into vehicles, giving consumers the same immersive audio experience they enjoy in their homes.



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The in-car entertainment audio experts now have something new for OEMs to see. Dolby and Cinemo have been joined by Dolby partner On Air, which gives artists a platform to deliver the highest-quality live and pre-recorded music events to fans around the world. The trio is set to deliver immersive audiovisual experiences with the power of Dolby Atmos sound and rich, engaging visuals.

The new AV dream team has developed an automotive-grade implementation proof of concept (PoC), showcased for the first time at the AES automotive show in Detroit in Dolby's demo car. OEMs could get a first-hand experience in the demo vehicle and understand how it can add value across their model range.

The road ahead

They say life is the journey and not the destination, and this PoC promises to make the journey all the more entertaining. "We see automotive as the next frontier," says Jakub Krampal, CEO and Co-Founder at On Air.

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On Air's focus on producing musical performances – both live and pre-recorded – means the company takes audio and video quality very seriously. On Air has committed to all of its shows being recorded and distributed in 4K and Dolby Atmos.

Consumers have adopted smart technology and integrated it into their lives. On computers, smartphone, tablets, and other devices, they've come to expect a seamless, connected experience. Modern vehicles have become an extension of smart living, interfacing with those devices to create an interconnected digital environment. Consumers expect vehicles to provide a high-quality experience.

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A crucial feature they demand is that their vehicles allow them to integrate and elevate the entertainment experiences they enjoy in the rest of their lives – bringing a live concert to the road or even creating a new shared concert memory with all the other passengers. For this to be successful, it's important to stay ahead of the curve on operating systems and other new technological developments.

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"If you have a meeting of three high-tech companies, we can make things work quickly because we are all ultimately working with the latest technologies. So there is interoperability between systems," adds Krampel.

Personalising the in-car immersive experience

For more than 50 years, Dolby has been making magic happen in entertainment. In professional production environments, in the cinema, in homes, and in consumer devices, Dolby makes the entertainment experience better. So when it came to introducing Dolby Atmos – its immersive audio offering – into the vehicle, it chose Cinemo.

For OEMs, this means they can incorporate world-class immersive audio into their vehicles seamlessly, relying on Cinemo's advanced embedded playback and streaming solutions. With the global market for in-car entertainment expected to reach \$36.3 billion USD by 2028, this is an important selling point.

Consumers have gotten used to travelling with their own devices and now they can get the most out of them. Dolby Atmos, streamed through its partners via Cinemo's technology stack, enables each passenger to have a perfectly synchronised AV experience no matter where they are sitting. And it's safe, too. "Obviously there are measures in place to ensure the driver is not distracted. They can only see a video if they're parked. Or in autonomous-driving mode, once that is available," says Lippoth. "We've really created this environment where everybody has a great experience, enjoying perfect sound."

"The entertainment media delivery industry is moving so quickly. We believe that in-car entertainment can't travel in the slow lane. Together, we are helping accelerate more advanced experiences for the enjoyment of vehicle users – both drivers and passengers – today. Our PoC demonstrates that."

Making time count

Whether people are stuck in traffic, looking for new ways to entertain the kids, connected to Wi-Fi waiting for an electric car to charge, or relaxing while the car does the driving, the next generation of in-car audiovisual entertainment tackles key pain points for consumers so that they can make the most of every moment. The change in the quality of the viewing and listening experience – not previously available in the market – allows consumers to stream their favourite content in the best way possible. "We've seen how in-car entertainment really plays a major role in influencing buying behaviour, especially with the increased availability of electric vehicles," says Lippoth. "The value proposition is moving from the engine and acceleration to the experience that you have while you are driving or while you are a passenger."

For OEMs, which are constantly on the lookout for ways to upgrade AV hardware to sell elevated entertainment experiences as an add-on, it can often be frustrating when the content itself limits what they can offer their customers. It's not unusual to have a car designed with multiple speakers but being restricted to playing stereo or mono audio. "Even though the capabilities are there, people are not using them. They can't.

There is room for the OEMs to use this as a distinguishing feature," says Krامل. Cinemo's Lippoth agrees, adding, "It's a necessity that OEMs go for that premium infotainment market, because the content is now there, and consumers want it."

Premium in-car entertainment opens a whole new world of revenue streams, artist relationships, and brand sponsorships for OEMs, with exclusive deals and once-in-a-lifetime events available on demand via On Air. "It brings OEMs closer to the artist and gives them a greater stake in culture, building them as a lifestyle brand," says Lippoth.

Within just two months of the project's inception, Dolby, Cinemo, and On Air's PoC is tried, tested, and ready for easy deployment. "We're super excited to bring this to the car industry," says Andreas Ehret, Director Automotive at Dolby Laboratories. "The entertainment media delivery industry is moving so quickly. We believe that in-car entertainment can't travel in the slow lane. Together, we are helping accelerate more advanced experiences for the enjoyment of vehicle users – both drivers and passengers – today. Our PoC demonstrates that."