

## CASE STUDY | Industry : Motorsport

The client: Renault, F1 Team, Computational Fluid Dynamics Centre, Oxfordshire



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## The project:

When Renault approached Bose to provide a sophisticated audio system for their state-of-the-art F1 Computational Fluid Dynamics Centre in Oxfordshire, TMC Ltd. was the first choice as pro partners to manage the design, specification and installation of a fully integrated sound and visual experience.

Central to Renault's Computational Fluid Dynamics Centre at Enstone in Oxfordshire, is an auditorium space where high impact 3D visuals of the latest F1 technologies can be viewed and interpreted by the team's dynamics experts on a large, 7-metre screen. The Centre is also available for corporate events, from presentations to product launches, and TMC needed to take this into account in the overall design and product specification.

As the Centre is to be used for both in-house and external purposes, creating a user-friendly, highly controllable and versatile system was a top priority, along with ensuring a 'high performance' environment throughout that visitors would expect of the Renault F1 team.

With a track record of over 20 years as specialists in project management and installations of this kind, TMC would play a pivotal role in delivering the complex and sophisticated presentation systems required, on time and with minimum disruption to the day-to-day operations of the development centre.



Renault F1 Team Principle Flavio Briatore, 2 time World champion Fernando Alonso with the Bose and TMC team

## The specifics:

The main challenge was to combine the various technologies in a single control system, to provide the simple, flexible and intuitive functionality needed by the CFD Centre technicians but also the marketing and management departments, private corporate clients and Renault partners. As such, TMC developed a Crestron room control interface that would allow the client or their corporate guests to manipulate the audio, video and lighting with ease from a single, touch screen panel, embedded in the auditorium lectern and with a second panel in the exhibition space.

Another key prerequisite in the technical brief for the auditorium was for an audio system that could accurately re-create the roar of a racing car going through the tunnel at Monaco. To achieve this, TMC selected high spec products from the Bose Panaray and Freespace ranges which could deliver the desired effect right through the frequency spectrum and capable of 5:1 surround sound. The whole area was also 'modelled' by TMC to ensure the correct coverage and sound pressure levels were achieved throughout.

Offering Renault the added value of years of experience, TMC were also able to advise on the requirements for assisted hearing systems under DDA regulations and provided an Infrared system to fulfil this obligation.

In addition to the audio element, TMC incorporated 3 Barco projectors into the design to create the highest quality 3D visuals on the 7-metre screen. Being 'soft-edge blended', the 3 Barco projectors formed one seamless image on the screen.

## Conclusion:

Renault's F1 CFD Centre is a compelling example of how TMC offer the breadth and depth of expertise to provide a fully integrated approach, so critical in achieving the most impressive audio visual results, when performance is paramount. Only through the tailored design, specification and installation services TMC provided could the sophisticated system of diverse technologies be achieved with such unified and simple functionality.

## Equipment Used:

- Bose
- Barco Systems Europe
- Crestron
- Kramer
- Sennheiser
- Daxten, Shure
- Marantz
- Denon



TMC has been at the cutting edge of audio and visual technology for more than 20 years. We specialise in creating tailored solutions for our clients in a number of environments including theatres, schools, leisure, retail and places of worship.

Constantly striving to provide a level of service that equals the quality of our installations, we draw on our experience and desire to produce outstanding results for our clients, every time.

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