



## *HoloVis develops ultra-high realism vehicle simulators*

In partnership with the world famous 888 Racing Team, the British Touring Car Champions (BTCC), HoloVis have used their high-end display-solutions experience to develop a range of driving simulators and training systems for racing, commercial and military markets.

Using over 10 years experience in advanced display solutions and specifically the integration of large-scale ultra-high-resolution and photo-realistic projection setups, HoloVis have taken driving simulation to a new level.

Each system is custom designed to the client's exact technical requirements/budget and is driven with either single or multiple 2K or 4K resolution projectors for the ultimate in photorealism. By wrapping the physical vehicle with full-scale rear-projection screens, with options from a single screen in front of the vehicle to side screen setups to complete 360° screens and fully immersive dome setups, the level of immersion and realism is like no other.

Rather than developing large-scale and highly costly full motion platform systems, HoloVis has created a G-seat-type setup giving exceptional 3 degrees-of-freedom force-feedback into the driver's seat, through high-powered actuators, ensuring sufficient motion and simulated G-effect to cater for almost all simulation and training scenarios.

The driving simulator hardware uses specialist professional force feedback steering systems, from our manufacturers in Japan, capable of creating the same forces found in a real race vehicle and uses ultra high-tech pedal box setups with realistic break, clutch and accelerator feedback, including ABS 'kick' and real-world clutch/gear-box simulation.

To bring the whole system 'to life' HoloVis use their own custom-built high-end PC workstations, to drive the specialist displays and vehicle hardware, and both industry standard and custom-written software packages and databases. Each setup is specifically designed to each client's exact simulation and training requirements from race track solutions, to urban driving and simulation, to covert driver training and situational-awareness simulation.

To further enhance the simulation capability, using their experience of fully-immersive 3D and interactive technology, HoloVis are now developing driving simulators and trainers with stereo-3D projection setups, head-tracking for natural real-world interaction and using the G-Seat technology in their fully-immersive virtual reality CAVE and Dome systems.

For this area of development, HoloVis programmers are creating their own software applications using advanced VR toolkits and programming environments to develop these next-generation simulators and training solutions.

