WORLD CLASS IMMERSIVE, INTERACTIVE & TRANSFORMATIONAL SOLUTIONS
Holovis International is a world leading innovator and solution provider of sensory experiences working across a diverse range of market sectors. Specialising in creating immersive solutions, the Holovis capability includes highly specialised multi-channel displays, 2D and 3D theatres, portable and permanent installed Domes and Planetarium Theatres and fully immersive 3D virtual reality solutions and interactive experiences.

Holovis is unique in being able to offer a one-stop-shop approach to the design, build, fabrication, testing, installation and support of its highly specialised solutions on a global scale with its head office and manufacturing in the UK, offices in LA, Canada, USA, Italy, China & Dubai.

Holovis is also unique in having extensive R&D and Demonstration facilities at its headquarters in the UK and LA offices, with planned facilities in the Chinese office coming soon. These facilities are not equalled by any other similar company worldwide and allow 1:1 scale real-time design and experience simulation and review and low cost value engineering/modelling and rapid prototyping. Holovis can deliver finished solutions faster and more cost effectively, including media or game analysis and testing in its demo Dome theatres, VR CAVE, 4D Theatres & Dark Ride test cells.

Holovis create complete turn-key solutions to meet their client’s exact requirements from the design, build and integration of the displays, audio and special effects systems to the motion and ride systems, specialist computers, vis-clusters and gaming systems, control systems, content management, media server technology, human interaction devices and the final theming to complete the experience.

Holovis also specialises in software development, application and game creation for industrial and entertainment sectors as well as offering media storyboarding from their creative partners with CGI content and film creation being specifically tailored to Holovis’s unique immersive experiences.

For more information please visit:
www.holovis.com

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TURN-KEY IMMERSIVE SOLUTIONS

ENTERTAINMENT VENUES
VISITOR ATTRACTIONS
CORPORATE VENUES
SCIENCE CENTRES
THEME PARKS
MUSEUMS
RETAIL
MILITARY
RESEARCH
EDUCATION
SIMULATION
VIRTUAL REALITY
DESIGN STUDIOS
INTERACTIVE EXHIBITS…
“When we decided to bring India’s first Full Dome to the country we collaborated with Holovis to give our experience the technical stamp”

Manmohan Shetty
Chairman
Adlabs Entertainment Limited

Our creative team of experts turn your dreams into reality.
An inverted Dome Theatre experience taking visitors on a journey through time from the Big Bang. This theatre was designed using a multi-channel projection setup and the latest LED projection technology to keep running and maintenance costs to a minimum.

Example Clients
- Coca-Cola, USA
- Adlabs Imagica, India
- Trans Studios, Indonesia
- Jaguar/LandRover, UK
- CineCitta World, Italy
- Balfour Beatty, UK
- Schindler Elevators, Switzerland
- American Museum of Natural History, USA
- LinkÖping University, Sweden
- Saudi Aramco, Saudi Arabia
- Optis, China
- SAIC, China
- JCB, UK
- Manufacturing Technology Centre, UK

The Big Bang
American Museum of Natural History, USA
An inverted Dome Theatre experience taking visitors on a journey through time from the Big Bang. This theatre was designed using a multi-channel projection setup and the latest LED projection technology to keep running and maintenance costs to a minimum.

Super Heroes 4D
Trans Studios, Jakarta
An ultra-large-format 3D theatre using a multi-channel projection solution onto a 9m high, 12m radius curved screen with multiple motion-bases. 4D special effects are seamlessly controlled along with the CGI media for the ultimate immersive ride experience.

4K-Resolution CAVE
Jaguar/ LandRover Design Studios, UK
One of the world's highest resolution fully immersive multi-sided 3D virtual reality CAVE solutions for automotive design, simulation and testing. A unique solution delivered along with multiple smaller VR systems to assist in the entire vehicle development programme.
CREATIVE DESIGN & TECHNICAL SERVICES

Holovis, in collaboration with their strategic partners, offer something truly unique to their clients in the way they approach the solution to their experiential requirements, drawing on over 20 years extensive experience in a diverse range of industries and market sectors.

It is through this diverse experience and ability to design, deliver and support highly complex solutions that Holovis can offer unique value-add services and the ability to support their clients with creative design, planning and technical consultancy to help take their experiential ideas from concepts through to reality.

Holovis offer the following unique services:

- Creative & Technical Design Services
- Master-planning & Consultancy Services
- Access to R&D/Demonstration facilities in the UK, LA & China
- Ability for clients to review/simulate/test their ride/park/design in the Holovis 1:1 scale immersive real-time/interactive systems
- Media and Game testing/analysis in demo systems similar to their clients solutions while they are being built
- Portable Theatres, VR Walls, CAVE’s & Domes for client on-site design reviews and support
- Low cost value engineering/modelling and rapid prototyping
The partnership between Holovis and Threshold means that we can offer solutions in a completely unique way, from beginning to end. We work as one team for our clients, offering unique creative design services and unparalleled access to VR design, simulation and testing theatres, domes and other facilities. Together, we deliver turnkey solutions that offer world class media-based attractions that showcase our Hollywood quality films.

Larry Kasanoff
Chairman & CEO
Threshold Entertainment Group
Los Angeles

Holovis has developed carefully chosen strategic partnerships to be able to offer their clients a truly turn-key approach to the solution design - from the concept phase through to the design, manufacturing and delivery of the experience, to the dedicated support of the solution by their team of engineers 24/7, 365 days a year.

These partnerships allow Holovis to create unique sensory experiences that include everything from the immersive, interactive and sensory systems, to their own single and multi-person motion systems technology. Multi-person and large scale motion systems from Holovis’s precision engineering partners and the specialist creative, storyboarding, media, CGI and film content from Holovis’s media partners are seamlessly integrated to bring the whole experience to life.

Only via this complete turn-key approach can Holovis offer their clients the peace of mind that not only do they have the creative ability and extensive experience to design and deliver truly unique experiences, but also the responsibility and accountability as the single point of contact to ensure everything works seamlessly and to our quality standards, not just on opening day – but every day thereafter...
Head Office
UK
- 4-Sided VR CAVE
- 4K-resolution 3D (Infitec) VR Wall
- Portable 4K-Resolution 3D VR Walls
- 10m Flying Dome Theatre
- 11m Ground Dome Theatre
- 3.6m MotionDome Solution
- 2.3m Mini-Dome System
- Interactive Dark Ride Test Cell
- Immersive Tunnel Test Cell

Los Angeles Office
USA
- 3D (Infitec) VR Wall
- 3.6m MotionDome Solution
- Portable 4-Sided VR CAVE (2014)
- Interactive Dark Ride Test Cell (2014)
- 12m Dome Theatre (2014)

China Office
(In Development)
- 3D (Infitec) VR Wall (2014)
- Interactive Dark Ride Test Cell (2014)
- 3.6m MotionDome Solution (2014)
From its inception Holovis has had a vision to create a world leading organisation that puts innovative solutions and excellent customer service at the heart of everything it does. This passion for pushing boundaries is delivering some of the most uniquely exciting and complex immersive experiences currently available in the market today.

Right from the start the founders expertise in design, simulation and training, gained in the automotive, military and educational market sectors, has been deepened and extended by developing their own highly talented team of specialist designers, engineers and technicians.

Holovis has believed from day one that employees and clients need to engage with the actual solution in both virtual and physical forms which is why they have built the most extensive R&D and demonstration facility in the world. One where clients are constantly engaged in refining and improving their solutions in real-time at a 1:1 scale. This innovative service is all part of the Holovis solution.

- Education & training in new technologies, products and solutions design
- Demonstrating Holovis proprietary technology & solutions to their clients, suppliers and partners
- Innovating & developing new solutions in partnership with clients
- Running consultancy projects that add-value to client’s own innovation pipelines
- Operating a ‘test, break, repair & test-again’ approach to solution design and improvement
- Allowing media, film and game testing to be carried out on each different immersive design
- Supporting strategic partners in joint development and testing
- Supporting clients in systems education, training and maintenance best-practices
- Supporting clients with media/game testing while their solutions are being delivered
- Clients showcase their solutions in a confidential environment to internal customers and stakeholders
FEATURED WORK

The following images show a small section of the diverse range of immersive sensory experiences and solutions Holovis have created recently for their clients…

For more examples of our work please visit: www.holovis.com
VR SYSTEMS ~ CAVES & WALLS

Holovis are world leaders in the design and manufacture of large-scale virtual reality solutions ranging from multi-surface CAVE systems to design review walls and curved screen theatres. This immersive visualisation technology allows clients the ability to perform real time design reviews and empowers their design teams and project stakeholders to be able to make collaborative decisions faster and with greater accuracy, saving extensively on time and associated prototype costs while helping de-risk their projects.

Holovis’s VR systems allow their clients to rapidly and simply immerse themselves and their design teams in a completely volumetric 3D world where they can view their datasets, models, latest designs, facilities, environments and products in a 1:1 scale with real-time review and interaction.

Using multi-projector & screen setups with specialist auto-alignment technology Holovis create ultra-high resolution systems where the synthetic environment is practically photorealistic. Holovis clients then interact with their datasets using natural human interactions and gestures captured using specialist motion tracking and camera technology along with navigation and input devices to allow them to seamlessly ‘touch’ and manipulate the virtual assets.

“We’VE PARTNERED WITH HOLOVIS FOR THE PAST SIX YEARS IN DESIGNING & DELIVERING OUR VERY HIGH-END VR SOLUTIONS. THEY HAVE ALWAYS PROVIDED AN EXCEPTIONAL SERVICE EXCEEDING OUR EXPECTATIONS”

BRIAN WATERFIELD
MANAGER VIRTUAL INNOVATION CENTRE
JAGUAR/LANDROVER
IMMERSIVE 3D
MOTION TRACKED
1:1 SCALE DESIGN REVIEWS
NATURAL INTERACTION
REAL-TIME
COLLABORATIVE
TIME & COST SAVING
INTERACTIVE EXHIBITS

Holovis’s extensive experience in designing 2D and 3D display solutions, combined with their knowledge of interactive technologies and development of real-time software applications, allows the creation of highly compelling interactive displays tailored to their client’s specific experiential visitor requirements.

Holovis’s interactive exhibits and exploratory experiences are designed to engage the users, visitors, players and riders with specific content and media in a natural and compelling way playing to the human desire to touch, feel and interact with the surroundings and to explore and understand them. Holovis solutions range from multi-touch surfaces, tables and walls, to ultra-large format immersive 3D systems where the visitors can be transported into alternate realities to interact in a way they never could in the real world!

Using Holovis’s latest real-time interactive 2D and 3D software (In-Mo™) real-time experiences are created catering for different levels of immersion and interaction and for all age groups and environments.

“THE HOLOVIS IN-MO REAL-TIME AND GAME DESIGN SOFTWARE COUPLED WITH THEIR INTERACTIVE 2D & 3D SOLUTIONS HAS DELIVERED COMPLETELY NEW & COMPelling EXPERIENCES FOR OUR VISITORS”
INTERACTIVE MUSEUM EXHIBITS
THEME PARK QUEUING GAMES
SCIENCE CENTRES - EXPLORATION
REAL-TIME DOME CONTENT & INTERACTION
INTERACTIVE 3D SOLUTIONS
COLLABORATIVE EXPLORATION
SIMPLE & INTUITIVE DESIGN
Holovis has brought together one of the most experienced dome solution teams in the world with expertise in the design and delivery of complex dome systems and a passion for innovation and development of next-generation solutions.

Dating back to the world’s first digital planetarium delivered to the American Museum of Natural History, New York in 1999/2000, this dome was worked on by several of the key staff at Holovis including Holovis’s Technical Director who project managed this prestigious solution.

From this historical beginning, the dome team at Holovis have worked on similar high-profile installations including the world’s highest resolution dome in Chicago, to the planetarium at The California Academy of Sciences, to Europe’s most advanced 3D dome at the Norrköping Visualisation Centre in Sweden.

Holovis has the knowledge and expertise to create dome theatres and planetariums from the complex projector layout requirements, to the immersive and technically challenging audio technology, to working with their creative partners to design and deliver specialist media that requires careful storyboarding and technical know-how to ensure the audience is truly immersed correctly within the experience.

Through their knowledge in catering for all senses within these solutions, Holovis design into their dome theatres the required special effects, lighting and interactive technologies and ensure these are integrated seamlessly within the setup so as to enhance the overall experience while being transparent to the audience.

- STANDARD PLANETARIUM & DOME THEATRES
- INFINITIDOME™
- MOTIONDOME™
- COASTERDOME™
- SIMDESIC™
- IN-MO™ (REAL-TIME & GAMING FOR DOMES)
- MEDIA CREATION SERVICES (FULL-DOME CGI & FILM)
- DOME HIRE FOR MEDIA/GAME TESTING
**INFINITI DOME™**

The Holovis InfinitiDome™ range of immersive theatres utilise specialist dome and projector layout designs to allow the audience to be completely immersed in the experience with the projection surface wrapping them all the way to the floor level and around them on all viewable sides.

This unique approach to complete immersion is created without the audience shadowing the projected imagery and avoids the detrimental effect of projectors being visible in the dome surface through cut-outs and in locations where certain visitors can actually look directly into the projection light path as seen in similar attempts at this setup.

InfinitiDome™ solutions are designed around seated or standing audiences and with the domes in flat, tilted or on-end configurations.

For immersive motion rides including Holovis’s ride vehicle systems, motion bases and flying theatre setups the InfinitiDome™ solution is designed specifically around each physical motion system to ensure the ultimate level of immersion regardless of the motion envelope.

“The Holovis InfinitiDome™ solutions are the world’s most immersive domes completely encompassing the viewers & any ride vehicle or motion system without compromising the experience.”
The Holovis MotionDome™ range of solutions seamlessly interfaces fully immersive 360 degree media and real-time gaming technology with perfectly synchronised motion systems integrated into the dome theatre design.

Holovis, through their experience in standard and fully immersive dome theatre design (InfinitiDome™) and working in partnership with precision engineering and theming partners, have created a range of next-generation fully immersive motion ride experiences that are completely scalable in capacity from single-person attractions to large-format dome theatres with multi-motion-base systems delivering very high capacities and guest throughput.

Through the development of Holovis's perfect synchronisation and control systems technology and from their simulation and testing facilities and specialist media development partners they create ride experiences that take the visitor to a completely new level of immersion.

For attractions that required complete immersion with real-time interaction and gaming, the Holovis MotionDome™ solutions deliver the most compelling experiences. Options range from single person gaming and motion-seats in mini-domes, to multiple-person motion-bases and large-scale user interaction systems driven using the Holovis In-Mo™ gaming, interactive devices and game control systems within large-format ultra-high-resolution dome systems.
CoasterDome™ technology is the next generation approach to creating highly immersive media-coaster solutions and a unique way to enhance the coaster and storytelling experience.

Using Holovis domes, immersive screens and specialist audio, SFX and control system technologies, controllable coaster systems can have specific sections of the ride system immersed in media to create a compelling storyline and enhance the overall ride experience.

Controllable coaster systems can now be designed to take the riders through a journey of physical dynamic motion into show-set and theming and then on into a virtual world through the use of Holovis’s immersive dome systems that wrap the entire ride vehicle at specific points on the track and enhance motion sections prior to track-switches, backward and sideways drops.

By first simulating the entire coaster and media-sections with the Holovis VR simulation systems, unique media-coaster designs can be tested and verified very quickly to ensure that all aspects of the ride from the launch, controlled speed, inversion points and dynamic sections seamlessly integrate with the controlled motion into the media-based sections of the ride, creating the ultimate synergy between a traditional coaster solution and dark ride technology.

“CoasterDome™ solutions from Holovis provide a unique way of immersing the riders on controllable coasters with immersive media & unique storytelling”
For clients that require portable and cost-effective dome systems Holovis has a range of dome projection solutions that can be rapidly deployed for shows, expos and marketing events. These dome systems maintain the high levels of immersive quality that their permanent dome theatres provide, but with the benefits of being completely mobile and scalable in size from 7m up to 30m diameters.

Within the Simdesic™ range Holovis has both standard geodesic dome structures, including flying dome systems for stage and events rigging, as well as high-pressure inflatable dome systems with seamless internal projection liners for the ultimate in speed of deployment.

All Simdesic™ systems come in a range of sizes and with multiple options including 2D & 3D projection technology, media, film, interaction and gaming options, as well as motion-seat and motion-base options as part of the portable MotionDome™ range of systems.
The Holovis Immersive Tunnel & Dome ride solutions are a range of highly compelling 3D attractions, scalable in their design and seamlessly integrated with large-format 3D projection, motion vehicles and special effects systems.

Applying knowledge in designing complex immersive and multi-channel 3D systems, integrated with precision motion bases and specialist surround sound, SFX systems and associated theming, Holovis creates attractions that carefully take into account the challenges around audience multi-viewing points and long off-set viewing angles when trying to immerse everyone in the same 3D content. These specialist tunnel and dome setups also take into account the challenges for Holovis’s media partners in creating specialist 3D content for these attractions and ensuring the experience has no detrimental effects on the riders.

Holovis’s design team develops unique attractions utilising the correct immersive screen technology to create the desired level of immersion and experience. Standard wrap-around screens provide a highly immersive experience for motion vehicles with roof canopies, whereas the InfinitiDome™ systems create the ultimate immersion around the motion vehicles and riders and removes requirements for roof canopies & sight-blocks on the vehicles giving the creative team greater freedom in the attraction design.

The Holovis Immersive Tunnel & Dome solutions use specialist motion bases from their precision engineering partners and draw on a combined expertise to develop attractions that have subtle motion correctly synchronised with the media, audio and special effects. This approach avoids excessive dynamic motion often seen in similar systems that is detrimental to this type of ride and problematic for ride operators due to excessive wear and maintenance requirements.
FULLY IMMERSIVE 3D RIDE

MULTIPLE MOTION BASES

THEMING OPTIONS

LARGE CAPACITY

SCALABLE DESIGN

SPECIALIST MEDIA CREATION

TUNNEL & DOME-SCREEN OPTIONS

INTEGRATED SPECIAL EFFECTS
Interactive Dark Ride & Immersive Experiences

Holovis, in collaboration with strategic ride vehicle OEM’s, offers complete interactive and gaming solutions for dark rides and immersive experiences.

Drawing on many years experience in motion tracking technologies and large-scale volumetric 3D display systems, Holovis’s development of interactive dark ride and immersive experiences has focused on the creation of a complete end-to-end robust hardware/software solution like no other.

The interactive solutions include the custom themed user devices or ‘guns’ integrated with the real-time immersive and truly volumetric 3D gaming software (In-Mo™) that allows control over the gaming systems in each player ‘zone’ within the ride. The system also provides control over the auto-calibration and ‘zone’ setup for ride vehicle positioning, a critical requirement for ensuring the 3D effect of the projectile coming ‘from’ the end of the players device or ‘gun’ is accurate for both players in a fully immersive 3D dark ride setup.

Along with the 3D volumetric interactive technology for dual-person dark rides, Holovis also provides standard IR-based camera tracking systems for multi-person standard 3D and 2D media interactive dark rides and gaming systems.

The Holovis turn-key interactive dark ride systems include:

- Physical Interactive devices (2D, 3D & Volumetric 3D Gaming)
- Encoder tracking technology for volumetric 3D setups
- Custom theming of player devices to client thematic requirements
- In-Mo™ Game-engine software & Game Level Creation Services
- Distributed In-Mo™ Gaming Server technology for each Interactive Zone
- 2D and Immersive 3D projection, audio & SFX systems
- Complete integrated Control System with custom operator GUI
- Ride Interface System (Interfaces to standard OEM ride vehicles)
CUSTOM INTERACTIVE DEVICES
IMMERSIVE 2D & 3D GAMING
IMMERSIVE AV
SFX SYSTEMS
TURN-KEY SETUP
COLLABORATIVE GAMING
INTERFACES TO OEM RIDE VEHICLES
SOFTWARE & GAMING SOLUTIONS
The Holovis software development team has created a range of specialist applications, tool-kits and middleware, integrated with their immersive sensory solutions and experiences specifically designed to meet the clients operational, educational and experiential requirements.

Along with the Holovis core programming team, a Game-Development group has been created, consisting of industry experts with extensive experience in main-stream game development. This rapidly growing team is dedicated to the creation of specific gaming and interactive experiences utilised in many of Holovis’s real-time immersive solutions.
Holovis®
Transforming Sensory Experiences