

project: syntropy (Germany / KSA / Sweden / Singapore)
 creates AV technologies and solutions for professional simulation- and training environments, XR-CAVEs, XR-Spaces, interactive immersive media based attractions, xD dome theatres and planetariums. 25 years of experience and over 250 projects world-wide have resulted in highly scalable and reliable multitouch solutions.

Project
Multitouch Globe for travelling exhibition
INNOspaceExpo by German Aerospace Center

Customer
 Space Administration within the German Aerospace Center (DLR e.V.) on behalf of CD Werbeagentur GmbH.

Project
 Design, Construction, Multitouch- and Multimedia-Application programming of a digital multitouch globe for the travelling exhibition INNOspaceExpo "ALL.täglich!" of the DLR e.V.



THE MULTITOUCH GLOBE
 The advertising agency CD Werbeagentur GmbH commissioned us to develop an unique multitouch globe with several multi-user multitouch games for the travelling exhibition INNOspaceExpo "ALL.täglich!". Originally planned as a purely analogue exhibit, we were able to convince the client that our reliable hardware and software tools combined with our extensive experience in the field of customized constructions of interactive exhibits and industrial image processing would enable us to produce an interactive exhibit within a very short time and on a tight budget that is one-of-a-kind worldwide.
 The 0.75m hemisphere includes complex IR camera-based multitouch detection enabling theoretically unlimited touch points, warp&blend software for seamless high-resolution 2-channel projection and a semi-automated calibration system for multitouch. One of the challenges was to design the system for the travelling exhibition to be extremely reliable and maintenance-free.
 In principle, the multitouch globe can be manufactured in all possible custom sizes.



Leading Provider of tailor-made Multitouch Hard- and Software Solutions

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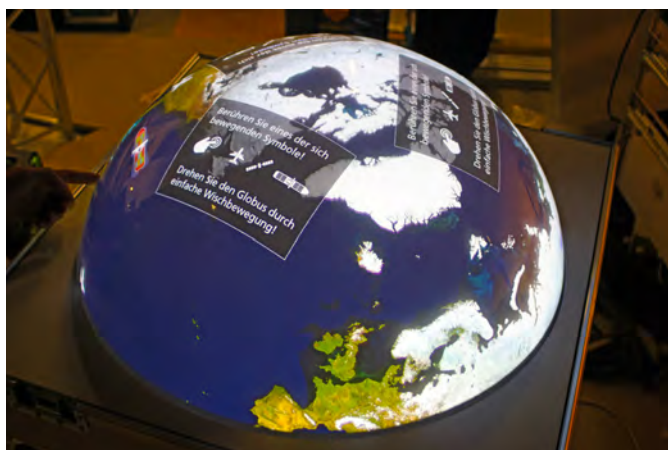


For the exhibition INNOspaceExpo “ALL.täglich!” we programmed three interactive multitouch learning games by design of DLR e.V. within only two months: a. a satellite-controlled ship guidance game, in which the player plays against the computer and has to avoid obstacles, b. a satellite-controlled aircraft guidance game, in which the player plays against the computer and has to avoid obstacles, and c. search for methane sources, in which methane sources must be discovered on earth using available satellites and their fixed orbits.

About the exhibition INNOspaceEXPO

The travelling exhibition INNOspaceExpo “ALL.täglich!” was conceived as part of the INNOspace initiative by DLR Space Administration on behalf of the German Federal Ministry of Economics and Energy. The travelling exhibition “ALL.täglich!” shows with many examples - informative and interactive - where space travel leaves its mark in such different areas of life as living, health, travel and leisure. For example, what does earth observation have to do with the robot vacuum cleaners in households? Or the search for planets with the timely diagnosis of skin cancer? How can a fitness device that astronauts use to train their muscles in weightlessness bring patients back on their feet during the cure?

As a mobile exhibition, it has toured with great success at various locations throughout Germany, e.g. Technikmuseum (Museum of Technology) Berlin, German Museum Munich, Flugwerft Schleißheim, DLR Oberpfaffenhofen and many more, since its opening at the German government’s Open Day in August 2015.



Turnkey Display Solutions for Simulation, Training, Immersive XR-Spaces, XR-CAVES, Media Based Attractions

project: syntropy offers turnkey projection / dvLED-based display solutions, tailor-made AV systems and full-service throughout the entire project:

■ PROJECTION- OR dvLED-BASED SYSTEMS

- DEVELOPMENT
- ENGINEERING
- CONSTRUCTION AND INSTALLATION
- AFTER SALES SERVICE
 - Training
 - Maintenance and Support
 - tailored Service-Level-Agreements (SLA)
 - Spare Parts Supply

■ VISUAL SOLUTIONS FOR SIMULATION & TRAINING

FMS FULL-MISSION-SIMULATORS - FFS FULL-FLIGHT-SIMULATORS - CT COCKPIT SIMULATORS - HELICOPTER SIMULATORS - COMBAT SIMULATION - JFST ACTION TRAINERS - JTAC TRAINERS - ATM TOWER SIMULATORS - DRIVING SIMULATORS - SHIPS BRIDGE SIMULATORS - INDUSTRIAL SIMULATORS - RESEARCH SIMULATORS

■ MEDIA BASED ATTRACTIONS

XD FLYING THEATRES - XD 360° & 720° ATTRACTION DOMES, CINEMAS & GLOBES - INTERACTIVE VISITOR ATTRACTIONS - MOTION THEATRES - DARK RIDES - MEDIA FACADES - IMMERSIVE TUNNELS & IMMERSIVE ENVIRONMENTS - PLANETARIUMS - PROJECTION MAPPING

■ DIGITAL TWIN XR-SPACES (e.g. UDT Urban Digital Twins)

■ XR-CAVE - XR VOLUMES

■ SYNTOUCH MULTIUSER RADAR TOUCH

■ MIXED REALITY ENVIRONMENTS & TRACKING TECHNOLOGY DEVELOPMENT

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