

project: syntropy (Germany / Sweden / Shanghai-Singapore-Taiwan) creates AV technologies and solutions for professional simulation- and training environments, interactive, immersive media based attractions, xD dome theatres, planetariums as well as multimedia experiences. Many years of development and over one 150 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

project: syntropy GmbH
 D-39112 Magdeburg/Germany, Klausenerstrasse 47
 T: +49 (0) 391 63 60 66-44 | Fax: +49 (0) 391 63 60 66-45
 M: syntropians@project-syntropy.de <http://www.project-syntropy.de>



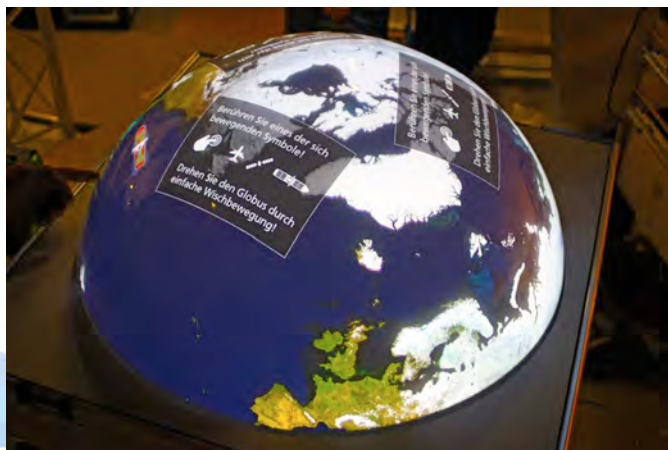


For the exhibition INNOspaceExpo "ALL.täglich!" we programmed three interactive multitouch learning games by design of DLR e.V. within only two months: a. a satellite-controlled ship guidance game, in which the player plays against the computer and has to avoid obstacles, b. a satellite-controlled aircraft 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 Visual Solutions for Simulation, Training and Media Based Attractions

project: syntropy offers turnkey projection solutions, tailor-made systems and full-service throughout the entire project.

- CONSULTING
- CONCEPT AND DESIGN
 - creative
 - interactive
 - media
 - engineering
 - application
- DEVELOPMENT
- ENGINEERING
- CONSTRUCTION AND INSTALLATION
- AFTER SALES SERVICES
 - training
 - maintenance and support
 - tailored service-level-agreements (SLA)
 - spareparts supply

■ MEDIA BASED ATTRACTIONS

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

■ SYNTOUCH MULTITOUCH MULTIUSER & RADAR

■ MIXED REALITY ENVIRONMENTS & TRACKING TECHNOLOGY DEVELOPMENT

■ VISUAL SOLUTIONS FOR SIMULATION & TRAINING

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

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