project: syntropy (Germany/Sweden/Shanghai-Singapore-Taiwan) creates technologies and solutions for professional simulation- and training environments, interactive immersive media based attractions, xD theatres, planetariums and multimedia experiences.

Project

Virtual Reality Lab for DLR Institute of Transportation Systems - Driving Simulator

Customer

DLR Institute of Transportation Systems, Braunschweig/Germany.

Project

Turnkey projection system for the new Virtual Reality Laboratory (VR-Lab) – a 360° cylindrical projection screen having a diameter of 5.5 meter, 12 high-resolution projection channels and domeprojection.com ProjectionTools auto-calibration. After eight years we upgraded the visual system to twelve WUXGA-laser phosphor 3d stereo projectors.

Project Details

In the new Virtual Reality Laboratory (VR-Lab) of the DLR Institute of Transportation Systems in Braunschweig new driver assistance systems and functions are evaluated regarding their usability and acceptance.

project syntropy has won the tender to deliver the complete projection system consisting of 12 WUXGA LED projection channels to achieve a high resolution 360° cylindrical projection having a diameter of 5.5 meter and the domeprojection.com auto-calibration system. Research vehicles and cockpits can easily and flexibly be exchanged by using a dedicated platform and ramp construction provided by us.

After eight years of intensive usage we have been commissioned with the upgrade to 12-channel Laser Phosphor WQXGA 3d stereo projection. The horizontal resolution was thus enhanced to 16,000 pixels. Together with the newest version of domeprojection.com ProjectionTools we have reduced the maintenance cost of the whole visual system to a negligible level.

The new 360° VR-Lab allows now for a higher immersion when early and economic evaluations of new assistance systems are to be performed – which lowers the risk of minus developments in early stages of concept development.
About the Institute of Transportation Systems, DLR

DLR is Germany’s national research center for aeronautics and space. Its extensive research and development work in aeronautics, space, transportation and energy is integrated into national and international cooperative ventures.

The Institute of Transportation Systems in Braunschweig and Berlin designs, develops and evaluates solutions for human-centered driver assistance systems, traffic surveillance and management as well as for automation, disposition and train control in rail traffic.

**Videolink:** https://youtu.be/zjHb9UgkX3c

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**Project:** syntropy’s visual display solutions for

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

**Full-service for S&T visual display solutions**

Project: syntropy offers turnkey solutions and full-service throughout your entire project:

- CONSULTING
- CONCEPT AND DESIGN
- APPLICATION DEVELOPMENT
- CONSTRUCTION AND INSTALLATION
- ADVANCED SOLUTIONS FOR NVG STIMULATION
- FULLDOME SYSTEMS
- TURNKEY DIGITAL CINEMA
- AFTER SALES SERVICES
  - training
  - maintenance and support
  - tailored service-level-agreements (SLA)
  - spareparts supply

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**Leading Provider of Next Generation Visual Display Systems**

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