



Automated Follow-System

**zactrack®** is an automated follow-system.

People and objects in motion are tracked with high accuracy and represented in a 3D-model.

High precision mathematics automatically control moving lights, cameras, video, and sound devices.

Unlimited data sources can be used for position tracking, e.g.:

- RADIO TRACKING
- CAMERA TRACKING
- INERTIAL TRACKING
- STAGE MACHINERY DATA

Positional data is processed within the **zactrack CORE** which generates control commands for a variety of devices.

- **zactrack LIGHT CONTROL**
- **zactrack VIDEO CONTROL**
- **zactrack SOUND CONTROL**
- **zactrack CAMERA CONTROL**

Innovative **zactrack** technology enables a wide range of applications for various locations:

- Theatres and stages
- Events, trade fairs and exhibitions
- Film and television
- Monitoring and documentation applications
- Sports and competitive events
- Recreation and theme parks

#### zactrack CORE

**zactrack CORE** is the heart of the automated follow-system. As the central hub, it receives all data from input sources and processes it to send out commands to different effect-devices, cameras and video servers.

**zactrack** uses a mathematical prediction model to cope with system and fixture latency and guarantees flawless pinpoint tracing of actors, athletes, show cars or other fast moving objects on stage, in the sports arena and on the race track.

Our unique **zactrack** "Alignment Algorithm" calibrates your lights, without pre-knowledge of stage geometry, in 3D-CAD. Just place the **zactrack** "sensor-puck" on the stage and let the software work.

#### zactrack RADIO TRACKING

**zactrack RADIO TRACKING** stands for Ultra-Wide-Band realtime location system. People and objects are equipped with tiny emitters (tags) and their positions are captured with a network of receivers (anchors) surrounding the action area. This works in aerial (2D) and spacial (3D) configurations. A minimum of six anchors is needed. More than 50 tags can be tracked simultaneously.

The whole system is set up within 1 hour!

Mount your anchors around the stage and measure the positions with a laser disto or a tape measure. Enter the positions into the application or let the wireless connection from the laser disto do the job. Prior knowledge of the stage geometry is not required.

#### zactrack LIGHT CONTROL

**zactrack LIGHT CONTROL** turns any moving light into an automated follow spot, by controlling pan/tilt movements. Additionally, **zactrack LIGHT CONTROL** offers dynamic "auto functions" triggered by the position of an actor (e.g. relative iris, focus, zoom and dimmer).

All **zactrack** functions can be controlled by any lighting console via standardised protocols (e.g. DMX, ARTNet, sACN). The number of fixtures used in one system is unlimited.

#### zactrack VIDEO CONTROL

**zactrack VIDEO CONTROL** for media servers delivers tracking for video projections and LED wall panels. Motion dependent video effects follow the movements of every actor and are programmed into stunning dynamic video effects.

In combination with our game engine interface, we deliver interactive games customised for specific needs. Creative design possibilities are unlimited. Interactive large scale video projections open up new opportunities for audience participation and sponsor ad-placements at arena sport events.

#### zactrack SOUND CONTROL

Sound panning systems require the real positions of interpreters on stage. **zactrack SOUND CONTROL** provides those positions for the use with matrix mixers and loudspeaker arrays. The sound source is shifted automatically as the interpreter moves. The standardised OSC protocol is used as a link to wave field synthesis sound panning systems.

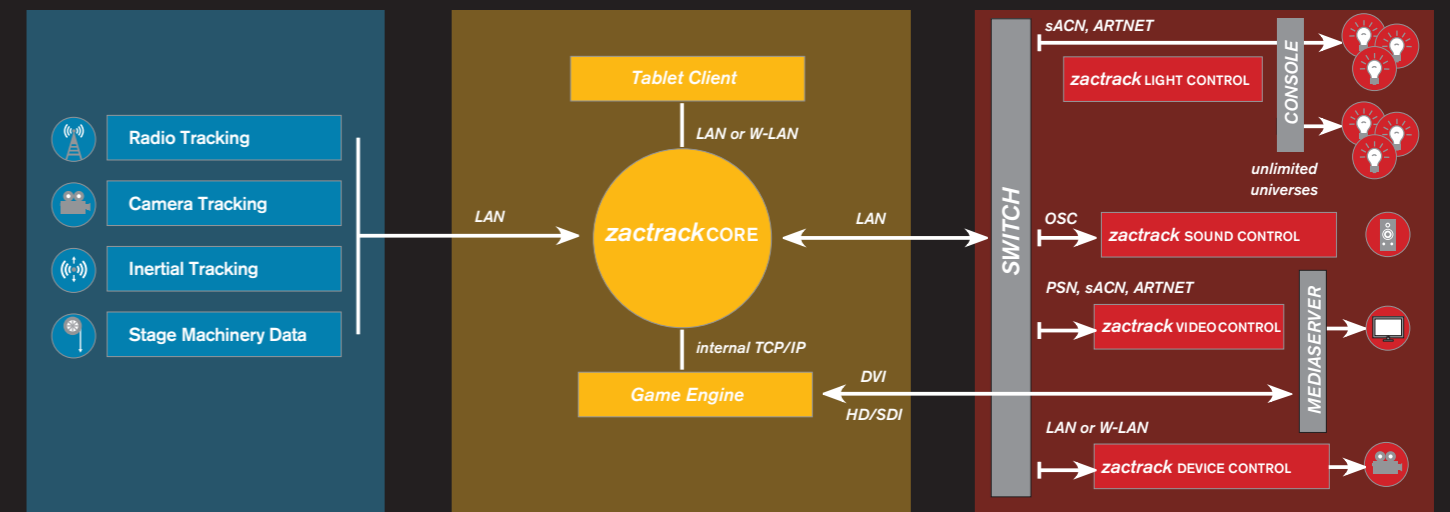
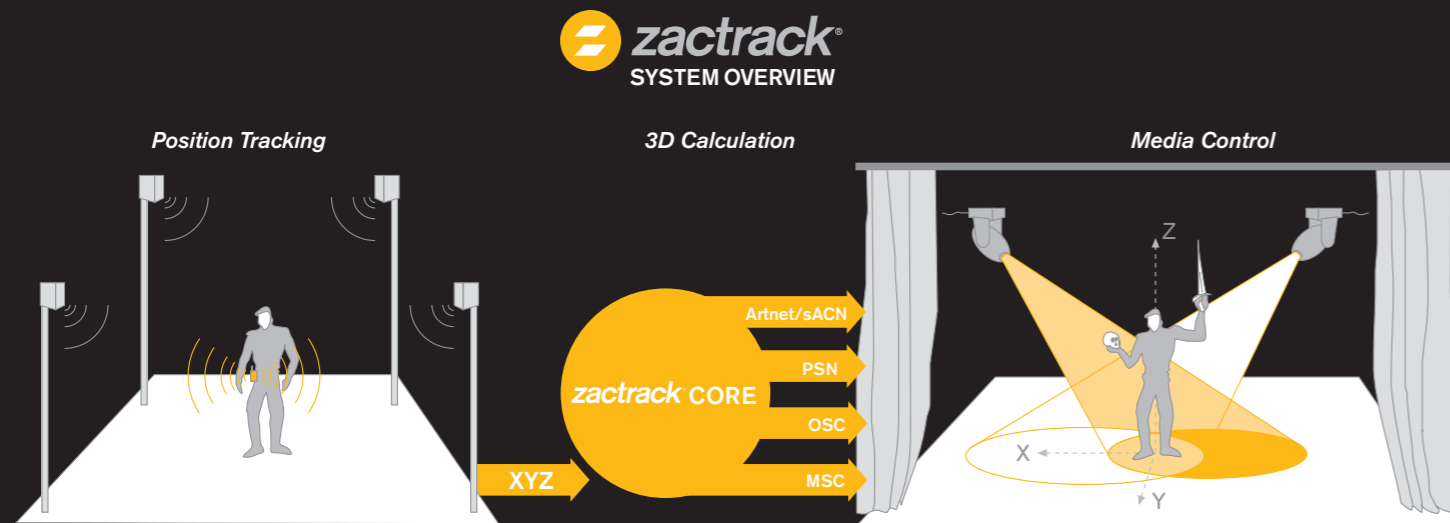
#### zactrack CAMERA CONTROL

Using professional broadcast cameras on remote heads is common in TV productions, filmmaking and sport events. **zactrack** controls pan and tilt motion of cameras and adjusts zoom and focus automatically.

In combination with smaller Pan/Tilt/Zoom cameras, **zactrack CAMERA CONTROL** is capable of delivering a multitude of new camera angles, without ever losing focus of the tracked actor. This allows totally new ways of storytelling in film and TV.



zactrack UWB radio tracking anchors and tags; zactrack sensor-puck



## **zactrack® UNIQUE FEATURES**

- *Full 3D Ultra-Wide-Band radio tracking*
- *From small indoor venues to large outdoor stadiums*
- *Works in all weather conditions, from sunshine to rain*
  
- *Hide antennas behind decorations*
- *Cover zactags with costumes*
- *More than 50 active actors simultaneously*
  
- *Unlimited amount of fixtures*
- *Integrable with any lighting console*
- *Control video projection, 3D-Sound and PTZ cameras*
  
- *All network protocols (Artnet, sACN, PSN, OSC, MSC)*
- *Reliable 24/7 operation, rugged enough for touring shows*
- *Setup within an hour!*

### **IMPRINT/CONTACT**

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