

# automated following spot system



*zactrack* is an automated "Following Spot System" designed for open-air events, theatre stages and studios. Any number of performers can be registered in a 3D computer model.

*zactrack* controls and precisely aligns moving lights and special effects equipment controlled by the DMX 512 standard protocol.

#### POSITION MANAGEMENT

The surveillance area is equipped with 8 to 12 base stations. The precise dimensions of the area are measured once to locate the best positions for the stations. Every performer wears a transponder no bigger than a mobile phone. The base stations pick up signals from the transponder. A central computer calculates the exact position of the performer within the surveillance area. The system has a maximum range of 3/4 mile x 3/4 mile. For even larger areas multiple systems can be used in concord. Within the surveillance range as many performers as desired can be monitored simultaneously to an accuracy of +/- 2 inches.

#### SPOTLIGHT ALIGNMENT

*zactrack* is designed for use with all existing moving heads, scanners and effects equipment on the market. All fixtures controlled by the DMX 512 standard protocol can be moved automatically.

*zactrack* can be used as a stand alone solution or in combination with an existing light console. All fixtures can be adjusted simultaneously. The equipment is grouped and directed towards the individual performers. The moving lights can be allocated to different performers during the performance as the scenes change.





Surveillance area geometry

The area only needs to be measured once during the installation. All positions are registered in a 3D coordination system.



Local position measurement Performers are equipped with a transponder. The position is calculated to within +/- 2 inches accuracy.

#### EFFECTS PRODUCTION

The innovative *zactrack* technology revolutionises interactive lighting productions. *zactrack* offers a complex mobile lighting concept, which can be adjusted to each individual performer. A number of colored moving lights can be set to follow individual performers through all their movements in the surveillance area. Lighting can be programmed to each performer and changed as the performer moves to another zone. Beams can follow the performer for special dynamic effects, e.g. like planets that circle the sun.

#### SYSTEM COMPONENTS

zactrack DMX control unit

- LINUX PC + software
- DMX In (512 channels, expandable)
- DMX Out (512 channels, expandable)
- Ethernet (100BT)
- 19" LCD monitor
- Keyboard with trackball

Realtime local position measurement

- LINUX PC + software
- 4-8 base stations
- 1 reference transponder
- Fiber optic network
- Multiple transponders
- Docking station for transponders

#### SCALABILITY

# 😑 zactrackpro

A system for larger areas, open air events and festivals with any number of combinations of performers and effects fixtures.

## <mark>🖯 zactrack</mark>ыднт

A system for smaller stages and congress centers for combinations of a maximum of 8 performers and 32 effects fixtures.

# *E zactrackkaraoke*

A system for performers' self-installation for up to 8 effects fixtures. Ideal for small clubs, karaoke bars or lecture rooms.



#### Spotlighting performers

Any number of performers can be registered simultaneously. The moving light arrangement can be changed from one scene to the next.



### Dynamic effects with moving elements

Spotlights can follow a performer's movements with dynamic effects e.g. planets circulating a central sun.



#### SPORTING EVENTS

The system's large surveillance range makes *zactrack* an ideal choice for sports events. A solo system can capture entire race tracks, football grounds, ski jumps and ice rinks.

Athletes can move with complete freedom while constantly remaining in the spotlight. The accuracy of the radar equipment is sufficient for the surveillance high speed motion of any kind of racing competion.



#### THEATRES AND STUDIOS

The dynamic lighting concept of *zactrack* enables the designer to define an individual lighting choreography for every actor. Spotlighting of each performer is achieved with faithful precision, independent of the sequence of movements.

Lighting moods in TV-Studios can be automatically triggered by the moments of TV presenters and cameras while the undesired lens flare effect is securely avoided.



#### LECTURES AND CONGRESSES

No matter if it is a scientific congress or an annual shareholders' meeting - speakers rarely stick to their scripts. Using *zactrack* the lecturer will always be in the spotlight, even if he walks through the lines of the auditorium.

When combining the tracking mechanism with a radio microphone every questioner to the plenum will be automatically focused with a spotlight thus concentrating all attention on the matter.



# Zactrack<sup>®</sup> "freedom to move"

#### IMPRESSUM/CONTACT

*zactrack* is specialized in the development and marketing of computer controlled lighting effects for open-air events, theatre stages and studios. Applications are focused on the automation of light-fixture and camera movement.

The enterprise unites the sophisticated computer development know-how of the company **zkoor** software technologies GmbH and the engeneering competence and world wide service network of **EAE** Ewert Ahrensburg Elektronik GmbH.

zactrack GmbH

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#### SHAREHOLDERS

**zkoor** (Vienna, Austria) develops software and computer systems for stage, studio and lighting professionals. Realtime 3D application are focused for computer graphics in television and the Internet.

www.zkoor.at



**EAE** Ewert Ahrensburg Electronic GmbH (Hamburg, Germany) offers a wide range of services in different branches. The business segment "stage technology" is known as a complete provider for all requirements in upperstage and understage machinery with a focus on high security control solutions and intuitive visualization sytsems.

www.eae.com



#### **TECHNOLOGY PARTNER**

*zactrack* relies on the know-how of ABA-TEC Electronic AG and their LPM (Local Position Measurement), an unique and patented radio tracking system for real time local position measurement of fast moving objects.

www.abatec-ag.com

