

Reinventing the broadcast experience



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AKI Wide Vision



AKI Wide Vision is a new way to record sport events. At the heart of the system is CogEye™ technology for creating a high resolution video feed of the entire pitch. The streams from four high-definition cameras are in real-time combined into one panoramic video feed with astonishing resolution and quality.

With AKI Wide Vision nothing is ever missed. As an example commentators can for half-time or post-game analysis highlight tactical issues including the positioning and movement of players who are far from the ball and not caught by the regular broadcast cameras. Off-the-ball situations are always caught on camera.

The system can also be used as an easy way to produce an automated main camera from a sport event. The system finds the action in the panoramic video feed using image processing and delivers a main camera feed.

AKI WideVision comes with an easy-to-use interface for the commentator, containing drawing tools and functionality to select events, field of view and playback control. The system is fully mobile with camera hardware which is quick and easy to install and operate.

KEY FEATURES OF AKI WIDE VISION

- ▶ Panoramic video feed that covers the whole pitch
- ▶ No action is ever missed
- ▶ Simple interface for controlling play back and field-of-view
- ▶ Easy-to-use drawing functionality
- ▶ Mobile system with simple and fast set up and calibration



AKI Paint



AKI Paint is a commentator analysis tool. It is very quick and easy to use as well as highly appreciated by football experts and commentators from several countries and broadcast companies all over the world.

The AKI Paint comes with a comprehensive set of tools for visualizing different parts of the play or highlighting individual player performance. The tools feature freehand drawing as well as clarifying highlights, zooming and marking tools.

Chroma Keyed Graphics and tracking engine. This function enables the graphics to appear on the pitch, not covering lines, the ball or the players. The AKI Paint also features an internal image based real-time image based tracking engine. Your graphics stays on the position where you put it!



The look and feel of all objects can be customized using standard image editing software and the built-in tool set editor to make the AKI Paint analyses aligned with the overall graphic concept of your broadcast.

The AKI Paint also features a built-in disc recorder for easy ingest of sequences to analyse. Start, stop and jog are then under control of the AKI Paint user for a convenient play-out. Furthermore the disc recorder can be exchanged for, or complemented by, an EVS control interface. Let the EVS operator prepare the sequences for analysis and let the commentator control the play out. No more “roll the clip, please...”.

KEY FEATURES OF AKI PAINT

- ▶ Easy-to-use telestrator
- ▶ Comprehensive tool kit for sports analysis
- ▶ Built-in chroma keyer and tracking engine for tied-to-the-pitch graphics
- ▶ Easily customised look and feel
- ▶ Built-in disc recorder with uncompressed video and optional EVS-integration

AKI Offside



AKI Offside is a vision based off-side line system for football broadcasting. The system can instantly show a virtual offside line during live broadcasting or in postproduction. It is an easy-to-use combined slow motion and virtual graphics device.

The AKI Offside has a dual channel built-in clip server capable of continuously recording two offside cameras. Once an offside situation occurs, the operator sets a cue point at the frame of the offside. The slow motion sequence will auto cue back a preset number of seconds and is instantly ready for play out.

At start command on the control handle the slow motion sequence will play to stop at the cue point frame and the user can, by clicking on the last defender in the image, try the display of the virtual offside line graphics.

AKI Offside uses the very powerful internal chroma keyer from AKI Virtual Easy as well as some of its image processing capabilities to enable the offside graphics to blend in to the pitch under the players in the right perspective.

It has also a built in graphics editor for enabling the offside graphics to align with the overall graphics concept of the broadcast.

KEY FEATURES OF AKI OFFSIDE

- ▶ Features both virtual offside line and slow motion replay
- ▶ Tracking based on image processing
- ▶ Easy to set up and use
- ▶ Dual-channel disc recorder with uncompressed video
- ▶ Built-in chroma keyer



AKI Virtual Football



AKI Virtual Football is a powerful, yet easy-to-use, system for virtual graphics. It is totally based on image processing, working completely without camera sensors and special camera head. It also has a built-in keyer, designed especially for various sports environments, successfully dealing with circumstances like shadows and bright sunlight in the video material.

When using AKI Virtual Football you will be amazed by the easiness and speed of the setup. Just connect the video in and out of the system, start the application and you are ready to go. The system automatically takes care of the calibration using the pixel information within the image itself.

AKI Virtual Football comes with an easy to use set of tools for live football productions. The tools include team or commercial logos on the pitch, distance to goals and defenders in a free kick situation, offside lines and of course the possibility to add your own graphics into the field or stadium. The system is designed with live OB production in mind, to be used by one single operator. Easy to use and setup are some of the key features of the system.

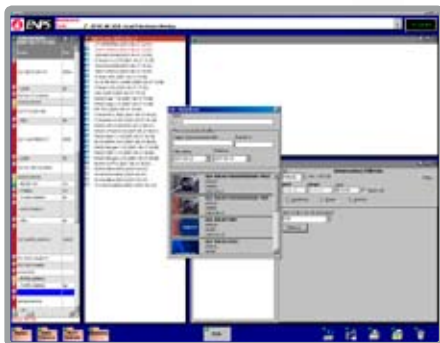
The system is available in different hardware setups to fit your production needs.

KEY FEATURES OF AKI VIRTUAL FOOTBALL

- ▶ Completely based on image processing
- ▶ Built for a live environment
- ▶ Easy to setup and use
- ▶ Comes with tools for most common virtual graphics
- ▶ One box system



AKI News



AKI News is a complete system for template based graphics featuring full ENPS integration. The system consists of a template server with full preview of all graphics through a browser interface through an Active X module, which integrates fully to the ENPS news system and the play out module with highly customisable connectivity to all common automation systems.

AKI News is based on the highly appreciated AKI Graphics platform. The AKI News Graphics system also features the following components, together making it a complete solution for a streamlined template based graphics workflow.

HTM Template Server. All graphics and templates are stored in a central server system. HTM also features a preview server,



enabling full previews distributed all over the AKI News Graphics system.

Graphics Desktop. The MOS-compatible Active X module which easily interfaces to news systems like ENPS.

Graphics Web Desktop. The graphics module is also available in a web based standalone version, giving all users advanced graphics possibilities in a browser environment.

Graphics Play out. The play out module is where the live action is. The Play out module combines fully automatic graphics run by an automation system with manually triggered graphics. The Graphics Play out also features full preview of all graphics. The highly customisable connectivity of the Graphics Play out makes it easy to interface all common automation systems.

In line with a file based, non live production workflow, AKI News Graphics also enables graphics to be rendered on MXF files, faster than real time.

KEY FEATURES OF AKI NEWS

- ▶ Template based graphics server
- ▶ Full preview of all graphics through out the system
- ▶ ENPS integration
- ▶ Intelligent play out module
- ▶ Off line file based graphics



AKI LiveBox



AKI LiveBox streamlines your content creation process. As a part of an ENPS/MOS based workflow, or standalone, it gives you the possibility to produce more content easier and faster with very high cost efficiency.

Create your rundown – Either you use ENPS/MOS or the web based, easy to use rundown manager that comes with AKI LiveBox.

Produce your content – Open your rundown. AKI LiveBox is now ready to control your robotics camera systems, generate “over the shoulder”-graphics, it will control the integrated prompter software, play animated graphics like opening sequences, record, trim in and out points, and export your video. Using an extremely easy to use interface, the presenter her/himself runs everything using a touch screen and a jog/shuttle control.



Export your content – AKI LiveBox will encode the video using the video format of your choice. Export formats include uncompressed video, DV25/50, H.264/AVC, JPEG2000, all with MXF wrapping if preferred. Your content is now ready for instant play-out, and/or can be published on the web.

The AKI LiveBox minimizes your need for technical personnel and technical investments, giving broadcasters the possibility to produce more content, faster and easier with very high cost efficiency.

The AKI LiveBox is based on the technology behind the popular AKI Graphics platform. It features an internal disc recorder, integrated prompter software, two channels of graphics and the possibility to encode the produced video clip to the file format of choice.

KEY FEATURES OF AKI LIVEBOX

- ▶ Easy to use user interface
- ▶ Decreasing the need for technical personnel
- ▶ Integrates fully to an ENPS based workflow
- ▶ Advanced graphics capabilities
- ▶ Flexible export formats



AKI Virtual Placement



AKI Virtual Placement is a powerful, yet easy-to-use, system for virtual product placement in live broadcasts. It is totally based on image processing, working completely without camera sensors and special camera head.

When using AKI Virtual Placement you will be amazed by the easiness and speed of the setup. Just connect the video in and out of



the system, start the application and you are ready to go. The system automatically takes care of the calibration using the pixel information within the image itself.

AKI Virtual Placement is extremely easy to use and is based on open file formats, making it easy to implement graphics and pre-rendered animations. The system is highly appreciated by broadcasters, creating new possible revenue streams.

The system is available in different hardware setups, SD or HD, to fit your production needs.

KEY FEATURES OF AKI VIRTUAL PLACEMENT

- ▶ Completely based on image processing
- ▶ Built for a live environment
- ▶ Easy to setup and use
- ▶ Open to all common file formats for easy implementation of your graphics
- ▶ One box system

AKI Virtual Placement – adding commercial possibilities

The Hego Group provides the broadcast and sports industry with powerful tools for information management and production of live television. The offering contains products and services for real-time 3D graphics, virtual graphics, newsroom automation, sports analysis and information management. The company also provide all creative support services such as design of TV graphics, video editing and production of music. www.hegogroup.com

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