

**BROADCAST** GRAPHICS  
CHANNEL **BRANDING**

**VIRTUAL** GRAPHICS  
**SPORT** ENHANCEMENTS  
**NEWSROOM GRAPHICS**



# 1969-2009

## 40 YEARS OF BROADCAST EXCELLENCE

The Hego Group provides the broadcast and sports industry with powerful tools for information management and a complete portfolio of high-end graphics systems for both sports and entertainment.

The offering contains products and services for:

- **Advanced live 3D graphics**
- **Virtual Graphics for sports and entertainment**
- **Election graphics**
- **Channel branding**
- **Sports Analysis**
- **Newsroom graphics**
- **Timing and data services for large events**

With our knowledge and experience we can offer you the solution you need – either as a service or as a turn-key solution.



THE OFFICIAL CO-ORDINATOR FOR TIMING AND DATA SERVICES WITH SEIKO DURING THE WINTER OLYMPICS IN LILLEHAMMER 1995 HEGO IS FOUNDED IN FINLAND

VIRTUAL GRAPHICS - BROADCAST GRAPHICS - SPORTS ANALYSIS TOOLS - PRODUCTION ENHANCEMENT TOOLS -

# WORLD CLASS PRODUCTION SERVICES

Hego has since 1969 traveled the world to help television networks and event organisers to supply the audience with a superior broadcast experience.

The Hego Group today offers a complete suite of production services for broadcast graphics, virtual graphics and information management services.

With production teams all over Europe and in the Americas, the Hego Group can offer production services all over the world.



1969 HEGO IS STARTED BY BENGT HEYMAN AND GÖRAN OTTERSTRÖM 1973 HEGO AND NORWEGIAN NATIONAL BROADCASTER NRK DEVELOPES AN ELECTRONIC

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## BROADCAST GRAPHICS

The Hego Group offers advanced graphics and information management services for sports, entertainment and news. Our systems support all major sports such as football, ice hockey, basketball, handball, tennis and many more. With over 1,000 productions per year within the Hego Group you are guaranteed experience, genuine domain knowledge and the highest quality – every time.

- Over 40 years of experience delivering graphics services
- Our systems support all major sports
- We can offer high quality services all over the world with our skilled production teams



## VIRTUAL GRAPHICS

With our own virtual graphics technology we can support all your needs, ranging from virtual sports enhancements like free kick distances in soccer, virtual lines in athletic jumping and throwing events, distances to beat in Ski jumping to virtual advertising in sports and virtual placements in studios. Virtual graphics is an easy way to enhance the viewing experience of your broadcast.

- Own technology for virtual graphics makes us very flexible in delivering the services you need
- Support for all major sports
- Services portfolio covering both virtual sports enhancements and virtual graphics



## TIMING & DATA SERVICES

When computers were a new invention, television was in black and white and Ingemar Stenmark was a young coming star, Hego was doing Timing and Data Services all over the world. We still are. Hego offers complete timing and data services for athletics, cross country skiing, biathlon, swimming, alpine skiing and many more.

- Turn-key solutions with timing and data services and broadcast graphics
- Flexible organisation that can support both small and big events
- Production teams with many years of invaluable experience



10:39 20.02 1969



CLOCK RUNNING ON-SCREEN ON LIVE TELEVISION 1974 THE SUCCESSFUL HEGO5000 IS USED AS OFFICIAL TIMING AT A FORMULA 1 RACE 1977 INGEMAR STENMARK WINS THE GIANT SLALOM WORLD CUP IN ÅRE. THE TIME IS SUCCESSFULLY MEASURED BY HEGO 1982 HEGO IS FOUNDED IN NORWAY 1994 HEGO NORWAY IS

VIRTUAL PRODUCT PLACEMENT - NEWSROOM GRAPHICS - CHANNEL BRANDING - VIRTUAL GRAPHICS - BROADCAST GRAPHICS - SPORTS ANALYSIS TOOLS - PRODUCTION ENHANCEMENT TOOLS - VIRTUAL PRODUCT PLACEMENT - NEWSRO

# OUR PRODUCT PORTFOLIO



## << AKI GS2

AKI GS2 is a real-time 3D graphics engine. It is used all over the world in a variety of applications, ranging from advanced live productions, fully automated channel branding applications, live 3D ticker solutions to streamlined news workflows, all of them successfully driven by the GS2.

The combination of its extreme reliability, advanced features and the open structure makes the GS2 the perfect match for your automation system, news system or any automated play-out application. GS2 is also the ideal solution for developers who seek a graphics engine because of the open and very easy to use API.



## << AKI PAINT

AKI Paint is a commentator analysis tool. It is very quick and easy to use as well as highly appreciated by 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.

## 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 VIRTUAL FOOTBALL >>

AKI Virtual Football is a powerful, yet easy-to-use, system for virtual graphics on the main camera as well as offside cameras. 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.



## << AKI LIVEBOX

AKI Live Box is a one man studio production system, the presenter controls the entire production process. Using a very easy to use touchscreen interface the AKI LiveBox controls your robotic camera system, runs the prompter, controls over-the-shoulder graphics and it records, edits and exports the finished video clip in the desired format using the codec of your choice – more content easier and faster, with very high cost efficiency.



## << AKI VIRTUAL PLACEMENT

AKI Virtual Placement is a powerful 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.

# CASE STUDIES



## CREATING NEW REVENUE STREAMS WITH VIRTUAL ADVERTISING

By using the AKI Virtual Placement system it is possible for broadcasters to create incremental revenues from virtual advertising or virtual product placement.

The AKI Virtual Placement system is very easy to use – you just plug the video feed into the system and you are then ready to add static images or animations to your broadcast. The image based tracking engine in the system will make sure that they stay in the right place during camera movements.

The Mexican company Publicidad Virtual is a global leader in this field and they are using the AKI Virtual Placement for these purposes for its clients both in the Americas and in Europe.

*"We are very satisfied with the system, it is very robust and easy to use which gives us the opportunity to focus on the client"*

**Teresa Montiel,**  
COO

[www.publicidadvirtual.com](http://www.publicidadvirtual.com)



## COST EFFICIENT AND FLEXIBLE CHANNEL-BRANDING

Using the powerful AKI GS2 graphics engine Hego can offer state-of-the-art channel branding solutions for broadcasters of any kind.

The system integrates with any data source like automation systems, web sites and scheduling systems to provide the viewer with automated information regarding upcoming programs, programs running on other channels in the same network or news ticker information.

When Canal+ Nordic needed a channel-branding solution for their ten different channels they turned to Hego. The implementation today features cross promotion between the channels, detailed scheduling information, sports information and other information automatically received from the internal systems at Canal+.

*"We looked for a very flexible and customisable solution so we could have the output we wanted. The Hego system fulfills all these criterias and is scaleable – when we add a new channel it is very easy to extend the channel branding as well."*

**Maria Andreassen,**  
On-Air Promotion Manager  
[www.canalplus.se](http://www.canalplus.se)



## ENHANCING YOUR SPORTS BROADCAST WITH EXPERT KNOWLEDGE

In today's hard competition you have to provide programming with an edge compared to the competition. In sports that edge is knowledge about the sport itself and the secrets that only the experienced eye can reveal.

By using the AKI Paint you give the experts the possibilities to explain even the most complicated situations on the pitch. The system features many different kinds of objects that can be added to the video such as arrows, zoom spotlight and many more.

The leading company in audiovisual productions on the Italian television market, European Broadcast Development (EBD Group), provide sport analysis using the AKI Paint systems in SD and HD for several clients like Sky Italia, Dahlia, Mediaset and RAI Trade.

*"We like the system a lot, especially the functionality where the internal keyer and tracking engine makes sure that the graphics our expert draws are tied to the pitch through the clip"*

**Marco Velati,**  
Technical Director  
[www.ebdonline.tv](http://www.ebdonline.tv)

MAJOR STAKE IN THE SLOVAKIAN COMPANY TVG S.R.O. 2008 AKI LIVEBOX WAS SELECTED FOR THE BROADCAST ENGINEERING PICK HIT AWARD AT IBC 2008.

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