

# RT Software tOG Sports

A family of easy to use real-time sports analysis and enhancement graphics products.



## The sports graphics challenge

Sports inspires passion, excitement and emotion and as such, Sports Broadcasting can provide a major revenue generating business. Enhancing sports coverage with graphics builds customer loyalty and attracts sponsors. Increasing the branding and entertainment value is the goal and great graphics is an increasingly important part of this.

Early graphics were simply scores and clocks. Then came team line-ups, formations and the delivery of sports statistic databases. Now there's more... Virtual reality such as off side lines, in-game geometries and telemetries to show angles, distances and speeds... Video based camera tracking technology to apply logos and other information to playing surfaces and examining the play from any angle during an analysis.

There is also the desire to progress from operator prepared clips to live, engaging analysis by the presenter in the studio. Giant touchscreens are increasingly becoming a de-facto standard for the studio shows.

The inherent live nature of sports broadcasting means a good system needs to be flexible in its deployment, fit smoothly into existing work flows and most important of all - be live or very near to live in its use.

**The challenge is to find the solution that delivers the graphics you need now, and the flexibility to deliver bespoke graphics and meet your sports graphics requirements in the future.**

## The answer... tOG Sports

Our customers include the big names in the business who accept only the best. Leading broadcasters such as SkySports, IMG / English Premier League, BBC, Setanta, Fox, TG4, BT Vision and many more have found a cost-effective solution for sports analysis and enhancement graphics from RT Software.

This is in the form of tOG Sports, a family of products for enhancing sports content. The philosophy behind the product range is to provide the very best in sports analysis graphics that are quick and easy to use for the fast turnarounds required for live coverage.

In addition, the products are modular, with the entry level product being at a comparable price to regular telestrators but with superior functionality and a unique and cost effective upgrade path. The top end product features video based camera tracking technologies allowing tied-to-pitch graphics and seamless moves between camera and virtual views.

The tOG Sports family of products (Lite, Live and Pro) offers a scalable and flexible real-time 3d sports graphics solution that will have your viewers fixed to the screen, your channel branding enhanced and help create significantly more opportunities to generate advertising revenue. No other solution offers so much in its standard package, or the flexibility to expand.

To avoid confusion, tOG Sports does not provide the functionality needed for tradition sports overlays such as clocks, scores, straps and tables. For that you need tOG-3D or tOG-Lite.

## tOG Sports applications

### *In-Studio Sports 2D and 3D analysis Graphics*

Exciting analysis and coverage with head to head pundits using touch screens to highlight the action.

### *OB vehicle real-time 3D graphics*

Compact 3d graphics solution for use at the event for on-pitch branding, clocks, scores and analysis.

### *Live Feed and Archive Content Repackaging*

Add sponsors logos and other on-pitch 3D graphics remotely using advanced line tracking technology.

## What does tOG Sports offer you

You can take all the old clichés for granted: It is excellent value for money, easy to set up, delivers engaging channel content and provides high quality SD and HD output.

Some more specific benefits true of all the product family include:

- Two modes of operation:

*Analysis clips* through the more complex and powerful operator interface.

*Live analysis* through the touchscreen interface.

- Ships with a comprehensive set of customisable analysis tools.

- Incorporate channel and sponsor branding into the product and the graphics.

- Add new graphics for Newsrooms etc.

- Integrates with video devices such as EVS and Grass Valley (and many more).

- Can play out fully customisable graphics created on our tOG Edit system (available separately)

- Suitable for studio or OB truck installations

- Full documentation and video tutorials

- PC based SD and HD with low cost perpetual licences

The system is easy to configure as operator only, touchscreen only or both. This means that on a single system an operator can create complex analysis clips – perhaps involving keyframing or other techniques – which can then be made available for the presenter to use on air later.

For a detailed look at the products in the family see overleaf...

## Business benefits

### *Increased Audience Experience*

Improve your channel branding and sports analysis presentation with the best 3d graphics on the market.

### *Increased Advertising Revenue*

Use line tracking technology to add sponsors logos direct on the pitch with both live and archive material.

# tOG Sports family overview



The tOG Sports family of products has been developed with input from some of the industries leading and most innovative sports broadcasters and services companies including Alston Elliot, WT Vision and Namadgi Systems. The rule book for live sports graphics has been re-written. Whether you want 2-D telestration or full camera tracking to paint 3d graphics on the field of play there's a tOG Sports product for you.



## tOG Sports Lite

Welcome to the low-cost entry point to the tOG-Sports family...

**2D telestration** with options for an operator screen and / or a presenter touchscreen. Includes all you would expect from a traditional screen writer and much, much more.

**3D Virtual Stadium** seamlessly move from video coverage to various angle virtual stadium views to display team sheets and to analyse play.

**Head to head analysis** - Each system supports up to 3 presenters, each with their own analysis touch screen.

**Scene Saver** - Saves key elements of the set up such as preferred screen layouts, home and away colours for quick recall later.

**Database** - Have team data ready at hand whilst on air.

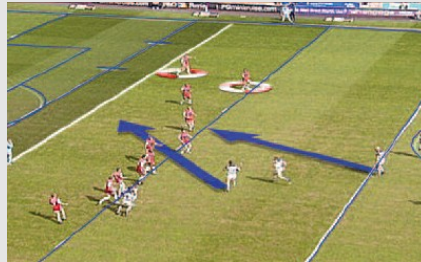
**Keyframing support** - use with the magnifier, naming and highlight tools to create the illusion of object tracking.

**Sony 9 pin DDR integration** - Including EVS, Grass Valley, DoRaMi, BLT and more.

**Add the Chromakeyer Module \***

To allow pseudo 3D graphics on freeze frames

**Add the Custom Interface Module \*** Create your own presenter touchscreen layouts and integrate more closely with internal and DDRs using Odetics control.



## tOG Sports Live

Works with tracking data from encoded pan tilt zoom heads, and is consequentially a solution for use at the venue.

It includes all the capability of tOG Sports Lite and the Chromakeyer module.

**Guaranteed graphics** - encoded ptz heads are an absolute technology, meaning delivery of graphics such as tied to pitch logos can be assured.

**Live / near live quick replay graphics** - Including off-sides, metrics based graphics such as speed, distance and 10m circles - all ready for the first replay.

**Software keys** - the included chroma and segment keyers give good results under nearly all circumstances.

**Small hardware footprint** - Depending on your choice of supported PC it's a 3u to 5u solution, that's SD or HD video in and out and the keyers.

**Dual video ingest option \*** - allows the insertion of video clips into virtual jumbotrons for replays, man of the match etc.

\* Additional hardware charges apply



## tOG Sports Pro

On pitch player trails, having graphics on the pitch while the camera moves, virtual views such as the linesmans' views of offsides, graphics with metrics such as distances and speeds, and much more are possible with the top end product.

It includes all the functionality of tOG Sports Lite with its optional modules and adds even more with the use of line based camera tracking technology.

**Line tracking technology** allows insertion of 3D graphics that stay tied to the pitch even while the camera moves. No need for heads, no need to be at the game - and it even works on archives.

**Object tracking style graphics** - The capabilities of this product combine to give the most realistic illusion of player and ball tracking.

**Create & lay off Highlight Packages** ideal for half time, full time and highlight shows.

**Linesmans Views** - take the images of the player into the virtual stadium view and with 2 mouse clicks select the view you want. So simple, quick and easy you can do it live!

**3D player drag** - Simple pause the VT, click on a player and move it around. No need to create a mask.

## Business benefits

-  Provides real-time 3D graphics solutions for all on air requirements including VR studios, sports news, elections, entertainment and academia.
-  Founded in 2004  
And privately funded, its award winning founders had spent many years working for the Computer Graphics department at the BBC.
-  Based in London  
The company operates globally through a network of trained value added resellers.

## About RT Software

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