Insert full motion virtual advertisement on any kind of sport, from the venue or from the studio, without camera sensors

Virtual advertising has never been so simple

ADVision turns sport events into advertising media platforms able to generate new revenue streams for rights holders, broadcasters and program producers.

Based on revolutionary patent-pending image analysis camera tracking technology, ADVision allows real-time insertion of virtual advertisement in any type of sport event, eliminating the need for camera sensors. With the embedded clip player option, broadcasters can also play tied to the field full motion videos and animation clips.

ADVision can be implemented by broadcasters either on the uplink or downlink signals for such sports disciplines as soccer, basketball, American football, golf, rugby, extreme sports, athletics, winter sports, or any other type of sport event. The inserted virtual ad remains tied to its field position regardless of camera motion.

ADVision implements an extremely easy to use and intuitive user interface. With its advanced image processing, no camera modifications are required and integration can be done in minutes, saving substantially on operation costs. The entire operation is done using a dedicated keyboard and the system set-up time does not exceed 5 minutes.

ADVision's enables production teams and broadcasters to utilize the system in any sports event. Live productions, delayed broadcasts, highlight shows - ADVision does it all. And switching to a different sport is just one click away.

Auto catching

The auto catching algorithm detects camera cuts by analyzing each frame and comparing it to the setup images, enabling the virtual ad to be placed on the first frame of the cut.
With the new auto catching algorithm, the amount of exposure from any given production can be significantly increased as tracking is instantaneous, thereby simplifying the already simple workflow.

Create your own still image and full motion clip sign programs

Once having chosen the predefined sport event, ADVision loads the desired graphics into position. ADVision can support static TIF files for logo branding as well as full motion video clips. The full motion video clips can be laid over the field or standing out from the turf. The clips can be set with a Chromakey or as linear key, and can mix and export audio on the embedded digital output. Once graphics are loaded, the system is ready for the next event to be chosen and loaded.

ADVision's Mask Generator provides a real-time preview of the graphics and within 2 or 3 color picks on the field. ADVision is equipped with an embedded HD/SD chroma keyer which generates high quality anti-aliased keying of the virtual advertisement on the playing field. This advanced chroma key can cope with changing lighting conditions.

In addition to the more standard horizontal advertisements, ADVision enables the advertisements to be vertical as well. Its pixel based tracking enables ADVision to work on any type of sport and under any weather condition.

Within ADVision's controls are tools for scaling the sign, changing its position, and setting the sign angle anywhere between the horizontal and vertical position. In addition, the user can set a different opacity level for each individual sign. Once the opacity level is set the user can use either a linear key or a chroma key for that particular sign.

Any kind of sport

Football from the UK at 9PM, Rugby from Australia at 10PM, and baskeball highlights on the 11PM news update, can all be seamlessly switched to, allowing sport channels to generate new revenue streams with this multipurpose virtual advertisement solution.

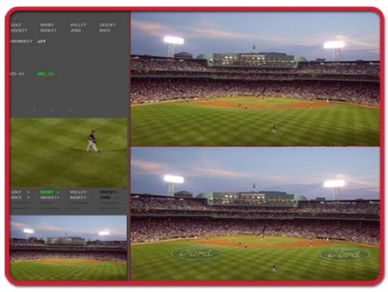
ADVision is an HD/SD switchable system and like all of Orad's products is based on Orad's HDVG video rendering platform. ADVision which consists of a one rack mount 3U unit and requires only one operator fits easily into an OB van and is completely mobile.

About Orad Hi-Tec Systems

Orad Hi-Tec Systems is a world leading provider of real time 3D broadcast graphics solutions, including; news, channel branding, sports production and enhancement, special events and elections, virtual studios, and virtual advertisement. Orad's compelling solutions streamline production workflow, enhance viewer experience and improve production value. Founded in 1993, Orad is a public company listed on the Frankfurt Stock Exchange (OHT). For more information, visit www.orad.tv

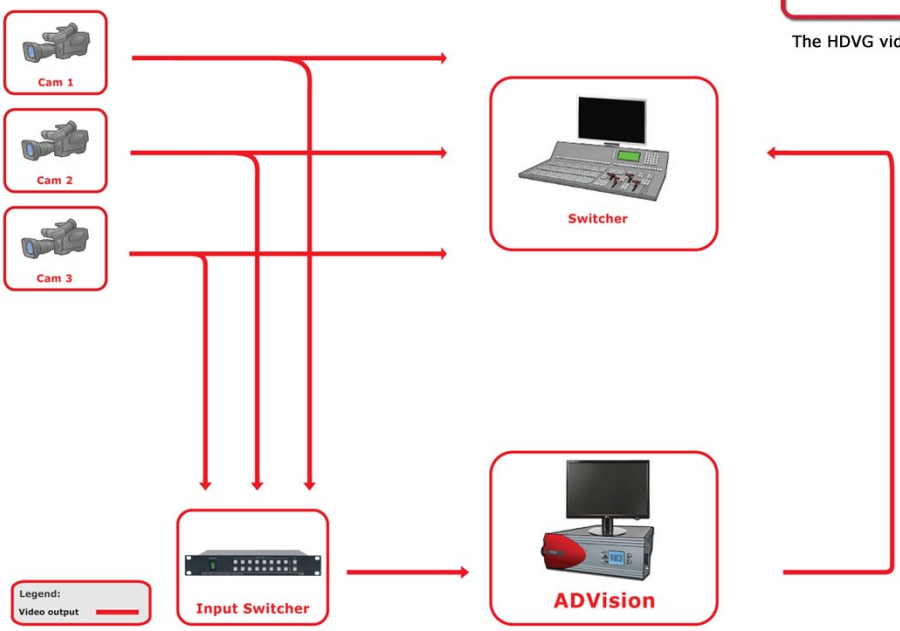
ADVision Key Features

- Tied to the field virtual advertisements from OB Van or studio
- Supports full motion video or animated clips with alpha channel
- New auto catching algorithm for on cut insertion
- Can be utilized in almost any kind of sport event
- Switches seamlessly between sports
- Eliminates the need for field lines or camera sensors
- Simple and compact - one rack mount 3U unit and one operator
- Minimal set up time - 30 seconds per camera
- Multi camera support with up to 16 different cameras
- Up to 8 different sports can be loaded at the same time
- Up the 64 different advertising maps with multiple ads in each map
- HD - SD switchable
- Linux based with dual power supply for redundancy

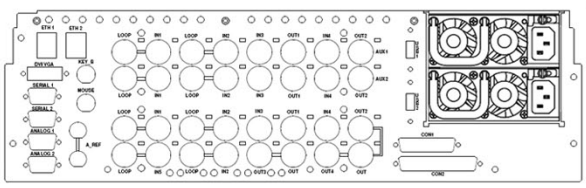


The HDVG video graphics rendering platform

Diagram



HDVG Details



Turnkey System Specifications (constant):
- 2.33 GHz Intel Quad Core Xeon
- Operating system: Linux
- RAM: 2 GB (up to 4 GB optional)
- Internal storage: 80 GB system disk optional RAID1 with additional HDD
- Storage: DVD
- Ethernet: 2X 1000 BASE-T (RJ-45)
- Ports: 2 serial RS-232 (DB9); 4 USB 2.0 (2 front 2 rear)
- Control interfaces: PS2 keyboard, PS2 mouse, VGA

Physical Dimension:
- Height: 130 mm
- Width: 443 mm
- Depth: 631 mm
- Weight: 22 kg (approximately)

Redundant Power Supply:
- 100-240 V
- 47-63 Hz
- 2X 460W (max)

Supported Video Standards:
- HD: SMPTE 260, SMPTE 295, SMPTE 274, SMPTE 296
- SD: SMPTE 259 ITV-R BT.601

Video Reference:
- Bi/Tri level Sync with passive loop all cross formats are supported in the same frame rate
- SDI from disk input

Audio Processing:
- Embedded audio 20-bit/48 KHz in SD and 24-bit/48 KHz in HD
- Support for additional audio playback and mix from .wav files, clip sources, and video insertions

ANC Data:
- Preservation of all VBI data though downstream keyer
- Preservation of Dolby E, 32 KHz and 44.1 KHz PCM embedded audio through downstream keyer

Clip Options:
- Video to texture mapping of AVI, Quick Time, DV, DVC25 and MPEG files

For more information about Orad's solutions, please contact us at: info@orad.tv