



# Bring Striking Virtual Graphics into Any Live Broadcast

Built on cutting-edge real-time image-processing algorithms, Chyron's Virtual Placement is the market's most sophisticated tool for delivering striking virtual graphics into any live broadcast.

Virtual Placement is a simple-to-use visual storytelling tool that does away with the need for specialized operators, expensive camera sensors, and lengthy calibration processes. Unlock new presentation and sponsorship opportunities with virtual product placement and advertising, scores and statistics, sponsor logos, and sponsor messages that animate directly on the field of play.

A mainstay of Chyron's live sports production ecosystem, Virtual Placement is the umbrella label for a complete suite of real-time data visualization products for sports

operators, which includes sport-specialized applications such as Virtual 1st and Virtual Football.

Via unique integration to TRACAB®, the Emmy® Award-winning camera-based player tracking system, Virtual Placement allows broadcasters to leverage real-time data for highly advanced gameplay analysis features (e.g., live player markers, statistics and tracking graphics)

Working in tandem with the PRIME Platform, Virtual Placement harnesses PRIME's rich CG capabilities for enhanced fan engagement - with data-driven 3D graphics, virtual advertising, and sponsorship elements.



## TAILOR VIRTUAL ELEMENTS TO YOUR SPORT BROADCAST

Virtual Placement is the umbrella label for our real-time data visualization products that address the full spectrum of sports production. While the core Virtual Placement toolset is ideal for covering a variety of sports, there are also specialized applications for fulfilling the unique demands of sports such as soccer and American football.



#### **VIRTUAL PLACEMENT**

Deliver striking virtual graphics in three-dimensional space directly onto the field of play - such as player stats, up-next promos, and sponsorship elements. The modular structure of Virtual Placement is ideal for covering: Football (Soccer), American Football, Basketball, Tennis, and Rugby.



#### **VIRTUAL 1**ST

Built for American Football, Virtual 1st provides tools for illustrating the key milestones of each and every down. Insert and highlight virtual lines of scrimmage and illustrate first down markers, and put your premier sponsor's advertisements right in the red zone.



#### **VIRTUAL FOOTBALL**

Illustrate what's happening on the pitch with Virtual Football's tools for the world's most popular sport. Insert FIFA®-certified virtual offside lines (VOL), measure the distance-to-goal from player positions, and insert carpet goal ads directly on the soccer pitch and over the stadium stands.

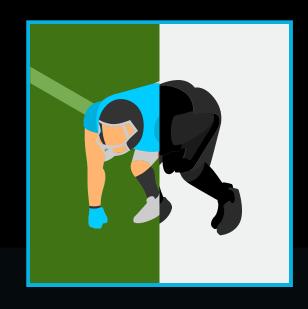


## **KEY FEATURES**



#### **EASY TRACKING CALIBRATION**

Virtual Placement can implement optical tracking on inputs without the need for specialized camera encoder hardware. Through internal scene tracking tools, Virtual Placement gathers metrics without using pitch lines or sensors to create a panoramic image and 3D point cloud for the system to reference for on field visualization.



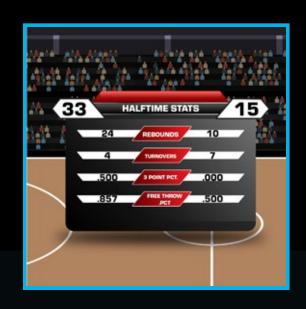
#### **AUTOMATIC CHROMA KEYER**

An internal automatic chroma keyer removes the need for rekeying and simplifies the keyed graphics workflow, especially when dealing with changing conditions like shadows on parts of the pitch. Accurate chroma keying ensures that players and key elements of the play will take precedence over virtual graphics within your broadcast output.



#### **RICH ANALYSIS TOOLS**

In addition to dynamic virtual graphics, Virtual Placement provides tools that simplify game analysis. A straightforward trajectory tool creates 2D ball trajectories for interactive gameplay analysis scenarios. Meanwhile, cue points in the editor make it easy for operators to jump back in the timeline for quick references to prior plays.



#### **PRIME CG GRAPHICS**

Working in tandem with the PRIME Platform, Virtual Placement feeds optical tracking and chroma key data to PRIME for smooth implementation of stunning 3D virtual graphics into your play. PRIME's smooth handling of data sources and template-based elements enables ultra-fast playout of different sponsor graphics and stats-powered boards.





#### **SPORTS DATA VISUALIZATION**

Via unique integration to TRACAB®, our Emmy® Awardwinning camera-based player tracking system, Virtual Placement can leverage real-time data on player performance for visualization in your live broadcast. Unlock highly advanced gameplay analysis features, such as live player markers, player performance statistics, and tracking graphics.



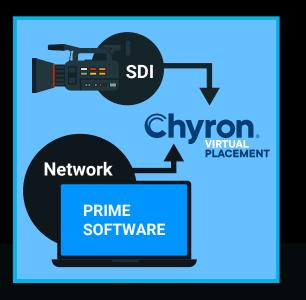
#### **MULTI-OUTPUT MODE**

With Multi-Output Mode, operators can generate multiple output feeds with unique virtual sponsorship elements from a single output source. This powerful feature is perfect for localizing content to different regions, maximizing ROI through game-day sponsorships, and empowering linear and OTT content rights holders to optimize advertising strategies.



#### **SMART REMOTE WORKFLOW**

Virtual Placement is optimized for REMI graphics and replay production, supporting a variety of downstream workflows (Audio GPI, VANC, Audio Only). The server can live remotely from your production truck or stadium, making it ideal for regional sports broadcasters, rental houses, and college/university sports production teams.



#### **MODERN PRODUCTION ENGINE**

Virtual Placement offers flexible support of modern video formats and signal standards. Bring cameras into the system via SDI, while transferring graphic elements over your network via H.264 protocols. A single Virtual placement system can output video in HD or 4K-UHD formats, providing greater flexibility to do more with less.



## TECHNICAL SPECIFICATIONS

| GENERAL                                 |  |
|---|--|
| Supported Video Standards and Protocols | SDI, H.264   |
| Number Of Inputs/Outputs                | Up to 3 IN   5 OUT in HD, or 3 IN   1 OUT in 4K-UHD  |
| Embedded Storage                        | OS - 2 x 200 GB SSD (RAID 1) / Media Drive 3X 3TB or 4X 3TB (with added storage option).<br>Usable Storage: 8490.92GB  |
| Genlock                                 | Genlock: Bi-level & Tri-level Analogue Genlock,3G-SDI, HD-SDI, SD-SDI on a 75 Ω BNC Connector.   |
| Serial Connections                      | 1X DB9 RS232 Serial Port   |
| <b>Ethernet Ports</b>                   | 2X 10GbE   |
| Internal Replay Server Channels         | Record 3 HD-SDI channels   |
| Replay Server Integrations              | File export to EVS, Grass Valley, Evertz replay servers  |
| Supported Codecs                        | MJPEG; DNxHD; H.264 / MPEG-4 AVC / MPEG-4 part 10  |
| System Dimensions                       | <ul> <li>• 3RU Chassis</li> <li>• Height: 5.2" (132 mm)</li> <li>• Width: 17.2" (437 mm)</li> <li>• Depth: 25.5" (647 mm)</li> <li>• Gross Weight: 75 lbs (34.02 kg)</li> </ul>                                    |
| Power Requirements                      | AC Input / 100-240V, 60-50Hz, 9 Amp Max / 3.2 Amps @ 120VAC Typical Total Output Power and Input:<br>800W with Input 100 - 127Vac<br>1000W with Input 200 - 240Vac<br>1000W with Input 200 - 240Vdc                |
| Minimum Operating System Requirements   | <ul> <li>Microsoft® Windows® 10</li> <li>Ultimate 64-bit O/S</li> <li>Intel W-2265</li> <li>64GB DDR4-2933</li> <li>Series Graphics Accelerator</li> <li>SSD System Storage</li> <li>Keyboard and mouse</li> </ul> |
| GPU / CPU / Memory                      | GPÚ - RTX5000, CPU - Intel W2265, Memory - 64 GB DDR4 - 2933   |
|   |  |

Chyron

### **OUR SERVICES**

Chyron is known for its end-to-end customer service. We partner with our customers from the initial project design, to project management, training, on-air launch support and postlaunch follow-up.

#### PROJECT MANAGEMENT AND COMMISSIONING

Project Management and Commissioning are part of the turn-key services that we offer. This ensures your investment is properly installed from Day One by a certified Chyron representative.

#### **EXTENDED WARRANTIES**

Finally, all Chyron products come with a One (1) year factory-backed warranty (parts, labor & software upgrades). Extended Warranties on all your purchases can be added at any time for an annual fee. Please contact our sales professionals.

#### **DESIGN AND OPERATION TRAINING**

We offer Design and Operation training, either in your facility or via our on-line web portal. Our expert trainers can teach your staff the most efficient way to create and deliver stunning content for your productions.

### **ABOUT US**

Chyron is ushering in the next generation of storytelling in the digital age. Founded in 1966, the company pioneered broadcast titling and graphics systems. With a strong foundation built on over 50 years of innovation and efficiency, the name Chyron is synonymous with broadcast graphics. Chyron continues that legacy as a global leader focused on customer-centric broadcast solutions. Today, the company offers production professionals the industry's most comprehensive software portfolio for designing, sharing, and playing live graphics to air with ease. Chyron products are increasingly deployed to empower OTA & OTT workflows and deliver richer, more immersive experiences for audiences and sports fans in the arena, at home, or on the go.

## **CONTACT SALES**

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