



REFSUITE MANAGED TECHNOLOGY
ECOSYSTEM FOR SPORTS OFFICIATING, COACHING & EVENT MANAGEMENT

RIEDEL REFSUITE

POWERFUL INDIVIDUALLY – UNSTOPPABLE TOGETHER.

Where others offer tools, Riedel delivers a true ecosystem; RefSuite is an integrated, interoperable hard- and software platform specifically engineered for the unique demands of sports officiating, coaching, and live event management. At its core, RefSuite unites five powerful systems – RefCam®, RefBox, RefComms, SidelineComms, and RefCloud – into a single, seamless environment. Each module is powerful on its own, but it's the tight interconnection between them that really sets RefSuite apart – while still allowing customers to rent only those services they truly need.

RefSuite is built to eliminate the friction of fragmented technologies. Rather than managing a patchwork of standalone devices or incompatible systems, leagues and organizations gain a fully integrated solution designed for today's fast-paced sports environments. RefSuite is delivered exclusively through Riedel Managed Technology, Riedel's comprehensive service model that goes far beyond hardware rental or product integration.



REFSUITE BENEFITS

Operational Efficiency

RefSuite simplifies logistics with dramatically reduced setup times, faster onboarding, and fewer technical bottlenecks. Whether on matchday or during training, teams, staff, and broadcasters can focus on performance – not on making technology work.

Improved Decision Quality

By centralizing data access and enabling real-time collaboration between referees, coaches, and production teams, RefSuite enhances the accuracy and consistency of decisions across the board.

Streamlined User Experience

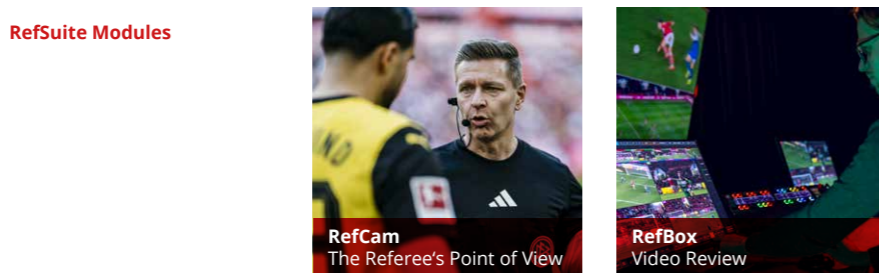
A cohesive workflow ensure that referees, coaching staff, operators, and production teams can all interact with the system intuitively – with less training and fewer errors.

Unified Data Flows

RefSuite connects the dots across all modules, enabling smarter tagging, exporting, and archiving of match footage and metadata for post-match analysis, compliance, and review.

RefSuite brings everything together – for sharper decisions, smoother operations, and a future-ready foundation for your game.

RefSuite Modules



RefSuite Add-Ons



Why RefSuite?

- One provider, built-in synergies, full integration
- Fully interoperable hardware, software, and managed services
- Modular, scalable architecture – choose only the services you need, when you need them
- FIFA-Quality-certified VAR and FIFA-IAAP-listed referee communications solutions
- Products trusted by clubs, federations, and broadcasters worldwide (FIFA, German Bundesliga, Sky & more)

REFCAM

The Referee's Point of View

RefCam® is an ultra-lightweight, head-mounted camera that captures stabilized, wide-angle footage from the referee's perspective. It enriches live broadcasts, post-match analysis, and training with immersive, first-person views that enhance both decision-making and fan engagement.

Riedel RefCam was developed in close cooperation with Bundesliga referees to ensure its design fully meets referees' needs and concerns. Since then, the solution has proven its worth on soccer pitches, in fighting rings, on ski slopes and beyond. The system is available in two models: RefCam Live, a 5G-enabled version that streams high-definition video in real time while recording locally for redundancy, and RefCam Record, a non-streaming version that records locally in high-quality formats.

The camera system also integrates seamlessly with Riedel's Bolero, Easy5G™ and MediorNet systems. Where Bolero and Bolero S provide communication for referees and production professionals with our RUN and TAC headsets, RefCam can be mounted on the same earpiece to provide an all in one Cam and Comms solution. RefCam Live transports its video and audio easily over the Easy5G network and can be delivered into the real-time routing solution of MediorNet, ready to go anywhere it is required.

But RefCam isn't just about convenience for referees and broadcasters – it's about transforming the audience's experience. By putting viewers in the center of the action, it delivers an emotional connection that static cameras and traditional broadcasts simply can't replicate. Whether it's the thrill of a last-minute goal, the tension of a decisive call, or the sheer energy of a live event, RefCam ensures these moments are more than just seen – they're felt.

FEATURES

- Ultra-light camera (14g) with electronic image stabilization and wide-angle lens
- Video output in 1080 / 720i/p in 50Hz / 59.97Hz
- Live video preview for easy set-up
- Live video transmission via Easy5G
- Video recording via SD storage
- Ultra-light headgear (14 grams)
- Integrated microphone (audio can be enabled / disabled)
- Integration with multiple headset types to combine with intercom



- 1 RefCam Camera Head
- 2 Compatible Riedel RUN Headset for RefComms
- 3 Power Button (Grey)
- 4 Record Button (Red)
- 5 Locking Camera Connector
- 6 Refcam Beltpack



REFBOX

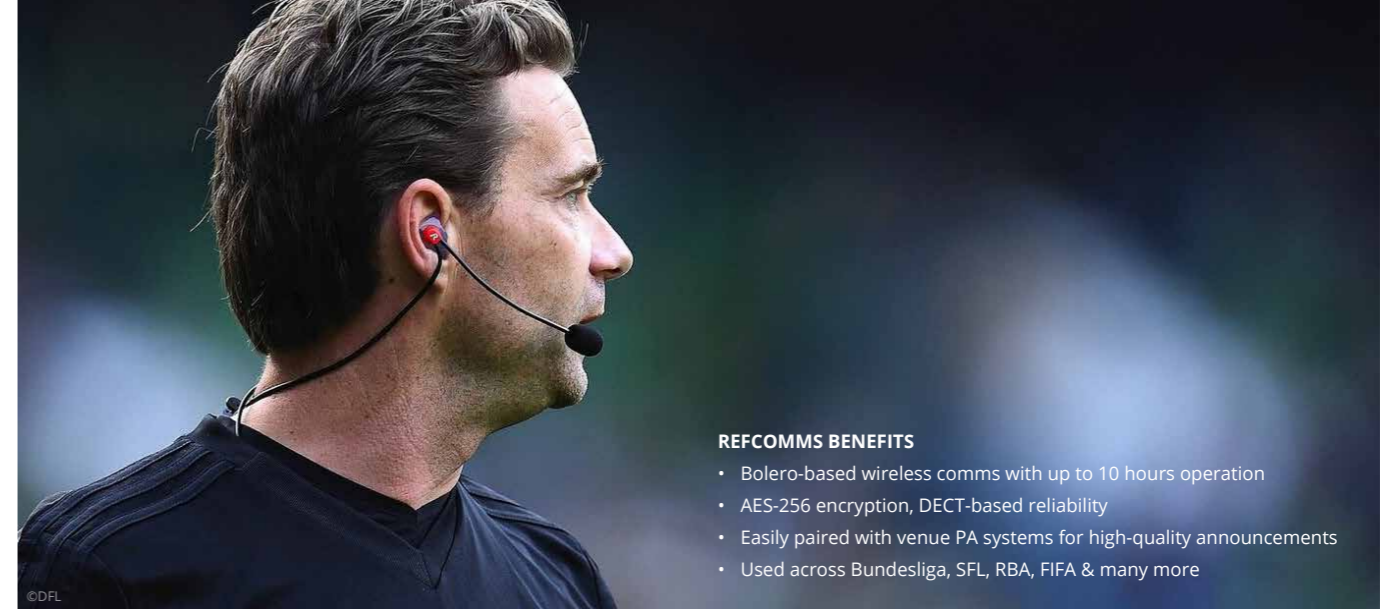
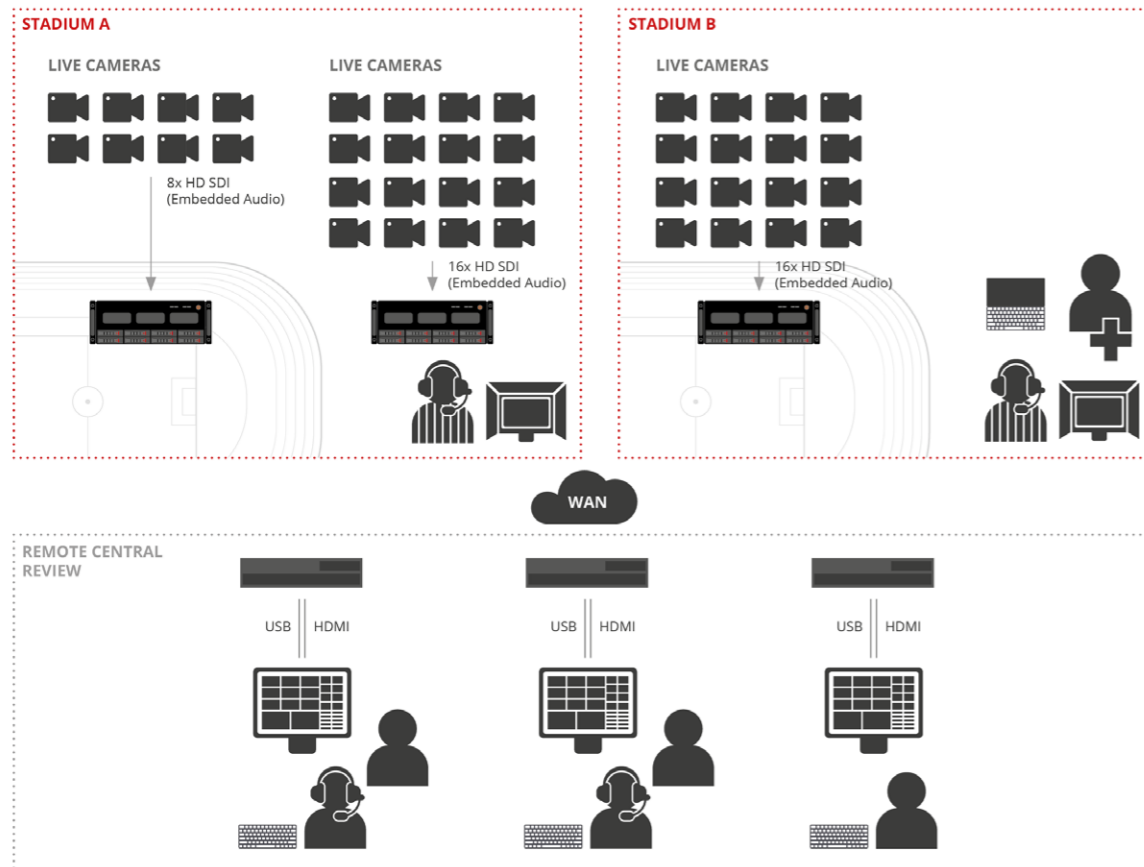
The Referee's Point of View

RefBox is a comprehensive and powerful video review system tailored for officiating and coaching analysis, built on certified VAR technology. The intuitive user interface supports up to 16 synchronized camera feeds within a single layout, along with super slow-motion support and clip export. Serving as the analytical core of the RefSuite ecosystem, it can be integrated with RefComms, enabling officials to create real-time review markers directly via their comms beltacks.

It's easy to swipe through a shot on the touch-screen UI – just touch the screen to select multiple angles to compare, pinch and zoom into the shot. Easily run through the action frame by frame on the screen.

FEATURES

- Super Motion Recording
- Multiple Layouts
- All Angles Pinch & Zoom
- Browse, Search & Play @ Different Speeds
- Remote Workflow Capable
- Multiple Users, flexible User Roles
- Export to Multiple Formats
- PiP Clock Overlay Option
- Keywords/Tagging
- Remote Controller Options



REFCOMMS BENEFITS

- Bolero-based wireless comms with up to 10 hours operation
- AES-256 encryption, DECT-based reliability
- Easily paired with venue PA systems for high-quality announcements
- Used across Bundesliga, SFL, RBA, FIFA & many more

REFCOMMS

Ultra Intuitive and Scalable Live Replay

RefComms is a secure and reliable wireless communication system designed for professional officiating. Built on Riedel's Bolero S, it delivers secure and crystal-clear audio in any environment using proprietary receiver technology and high-end encryption. As a core of RefSuite, it links with RefCam and RefBox for coordinated, real-time decision-making.

Bolero S is an extensively tested and field-proven service, optimized for the specific challenges of communications in a noisy and crowded stadium environment. The headset is tuned to best deal with the ambient noise at any given time, while a custom earmold protects the user's hearing in noisy environments and ensures optimal speech intelligibility.



SIDELINECOMMS

Coach & Staff Communications



SidelineComms provides encrypted, interference-free sideline communication for coaching staff. Built on the same Bolero platform as RefComms, it ensures consistent performance in both daily training and matchday situations.

With unmatched RF performance and audio quality, the system ensures that coaching teams stay connected without distractions – no matter the crowd noise, weather conditions, or venue layout. Its flexibility allows for seamless coordination across coaching zones, analysts, and support staff, while the intuitive user interface enables fast, confident operation even under pressure. Designed to integrate into existing workflows, SidelineComms adapts effortlessly to any team structure, helping coaches react in real time, make informed decisions, and maintain tactical clarity from kickoff to final whistle.

SIDELINECOMMS BENEFITS

- Clear communications for coaches, analysts, trainers, and physiotherapists – from the sidelines to the video analyst locker
- Interception secure through AES256 encryption
- Seamless switch between day-to-day use and matchday configuration
- Trusted by more than 30 world-class teams from all around the globe



REFCLOUD

Cloud-Based Media Management

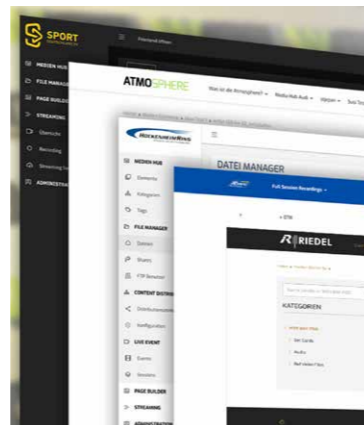
RefCloud is the central media management solution within the RefSuite ecosystem, purpose-built to capture, archive, organize, and securely distribute sports video content. Designed for the specific needs of sports federations, leagues, and referee organizations, it streamlines the entire video workflow - from live streaming to on-demand playback. Whether it's referee camera footage, match reviews, or compliance-related documentation, RefCloud ensures fast, secure, and structured access to critical media assets - accessible anytime, anywhere.

RefCloud is fully optimized for referee camera systems such as RefCam. Livestreamed content can be captured and archived in real time, then enhanced with time-stamped markers and structured chapters. This makes post-match analysis, decision reviews, or internal documentation more efficient and transparent. RefCloud ensures that video content is always securely available - whether shared via direct link or embedded player - with

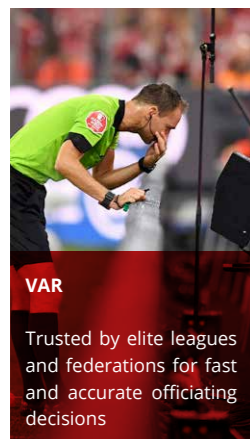
access rights managed at every level. RefCloud helps sports organizations centralize their video asset management, improve team collaboration, and ensure that sensitive content is distributed securely. It reduces operational workload through automation, enhances media transparency, and supports compliance through robust access controls.

FEATURES

- **Live Video Capture & Streaming:** Start livestreams directly from the platform, capture them in real time, and instantly publish them as on-demand video with full access control.
- **Interactive Scene Navigation:** Add video markers, chapters, and annotations to key moments for easier review and content navigation.
- **Secure Access & Flexible Distribution:** Role-based permissions for internal teams, partners, or regulators; share via password-protected links, custom landing pages, or embedded players with CDN delivery.
- **Automated Workflows & Alerts:** Create scheduled tasks and automated notifications to manage video-publishing, archiving, or user actions without manual input.
- **Structured Media Archiving:** Categorize and tag videos into organized collections for easy searchability and long-term archiving of sports media assets.

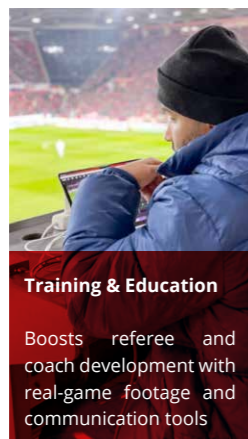


RefSuite Applications



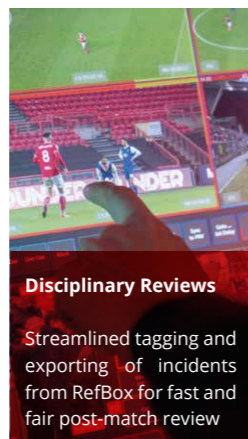
VAR

Trusted by elite leagues and federations for fast and accurate officiating decisions



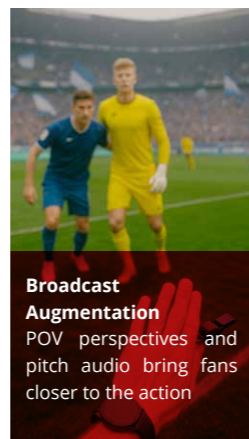
Training & Education

Boosts referee and coach development with real-game footage and communication tools



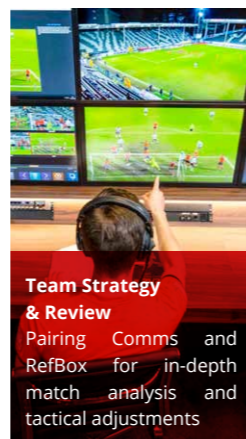
Disciplinary Reviews

Streamlined tagging and exporting of incidents from RefBox for fast and fair post-match review



Broadcast Augmentation

POV perspectives and pitch audio bring fans closer to the action



Team Strategy & Review

Pairing Comms and RefBox for in-depth match analysis and tactical adjustments



ADD-ONS

Get the most out of your RefSuite

Within the Riedel RefSuite ecosystem, we combine best-in-class technology with expert services to create your tailor-made solution. Our complementary products and services help you get the most out of your RefSuite modules - unlocking seamless workflows from wireless 5G connectivity to fully remote operations and support.

EASY5G

Low-Latency Wireless Video Backbone

Live contribution made simple: Easy5G is a Private 5G network that provides carrier-grade reliability with WiFi-like simplicity. Optimized for live events and sports broadcasts, it offers high-speed, secure data transmission with flexible uplink/downlink configurations, making it suitable for applications like full-pitch RefCam video streaming or remote RefBox review workflows.

Unlike public 5G services that often struggle during productions and events with high user density, Easy5G operates on dedicated frequencies to ensure superior reliability and performance. Balancing cost-efficiency and performance, Easy5G is a smart alternative to standard Private 5G solutions while remaining adaptable to evolving 5G standards.

EASY5G FEATURES

- Enables Remote Review setups and cloud workflows
- Simplified setup and rapid deployment, ideal for temporary applications
- Ensures full pitch & player tunnel coverage
- Supports customizable uplink/downlink ratios, network slicing, and scales easily by incorporating more base stations



Check out our Easy5G brochure here



ROC

Remote Operations Center

The ROC is Riedel's 24/7 operations hub for remote monitoring, signal routing, and system control. From video and comms to telemetry, the ROC connects venues to expert support via state-of-the-art infrastructure. Through remote engineering and support, it ensures RefSuite systems stay agile and operational - wherever the game is.

All our remote solutions can build on a high band backbone network (10G and more) powered by Riedel Networks, a global network service provider with more than 40 PoPs worldwide. Your ROC support won't have to depend on vulnerable connections, as every link is hosted by Riedel's Tier 3 Data Center in Wuppertal, ensuring maximum data security and redundancy.

ROC FEATURES

- All RefSuite systems can be remotely accessed and monitored 24/7 from ROCs in Wuppertal, LA and Sydney
- Reduces hospitality and travel costs
- More than 10.000 audio & video ports available
- Secure high-band backbone network (10G and more)



Check out our ROC brochure here



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