

:update

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R||RIEDEL BOLERO



1200 SERIES SMARTPANEL
RSP-1232HL

The smartest
SMARTPANEL™
 ever

The brand-new 1200 series SmartPanel RSP-1232HL (Hybrid Lever) opens new perspectives into the world of multifunctional user interfaces and represents the most powerful member of Riedel's SmartPanel family. The SmartPanel philosophy of common hardware that is software-defined through the use of apps enables users to buy just the functionality that they need and offers easy scalability when those needs increase.

Completely new from the ground up, the RSP-1232HL is Riedel's smartest SmartPanel yet! In addition to full-color touchscreens and support for multiple workflows, each of the 32 hybrid-lever keys features an innovative integrated rotary encoder that provides control over variable parameters in the same location as the key itself. The levers have been carefully designed to redefine the way a user interface should feel. Each key also has an LED ring that allows easy grouping of keys based on colors. Key Banks, a new take on shift pages, are user-definable (name and color) layers of keys that are accessed by simply pressing the button on the screen.

High-resolution, sunlight-readable multi-touch screens provide an 8-character main label plus a 16-character sub-label. Users can choose the amount of information displayed. The interface also supports user-defined icons and icon-based signaling mechanisms to indicate the state of each key. The intuitive info display provides access to several other unique functions and helps the panel to support multiple workflows.

Connectivity includes traditional AES3 on coax and RJ45 as well as AES67 via two fiber SFPs and two RJ45 connections. With these options, the user can use a variety of daisy-chaining and redundancy options to realize extraordinary cabling flexibility.

Rounding off the list of features are stereo, phase-coherent speakers, USB, Bluetooth and NFC connectivity, GPIO and 4-wire ports, and even a light sensor for auto-calibration of screen brightness in changing light environments.

The new 1200 series SmartPanel RSP-1232HL is bursting at the seams with innovative features that deliver substantial operational and business benefits.

WE NEED TO TALK

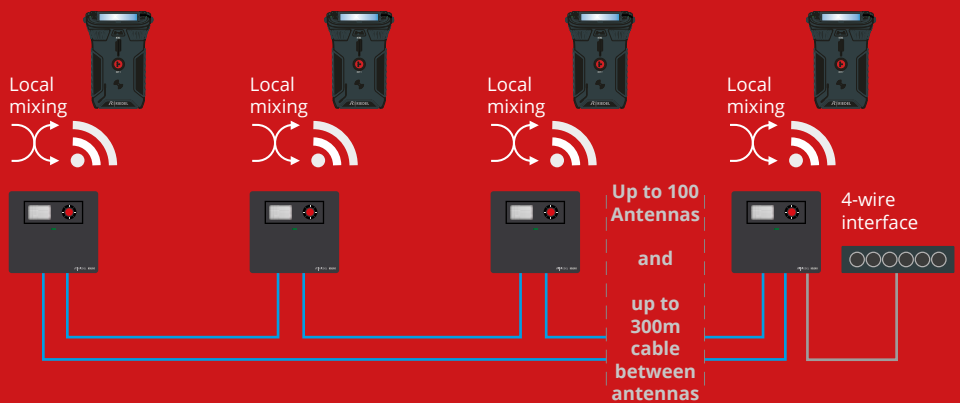
about the future of signal transport and communications.

Visit us **#10.A31**



STAND-ALONE AND MORE

BOLERO WIRELESS INTERCOM



Over that past year, Bolero has set the standard for what modern wireless intercoms should be. Its performance speaks for itself and clients around the globe continue to be blown away by its range, sound quality, and belt-pack density.

Of course, it is always possible to make improvements and so, armed with our product roadmap and valuable input from users, we are able to introduce the Bolero Stand-Alone Application at the IBC Show.

We've provided new capabilities with this first update including individual Rotary programming and Bluetooth headset support. We have also added a belt-pack QuickMute feature that allows users to quickly and easily mute all channels.

But the biggest change is that Bolero can now be operated in stand-alone mode and interfaced with other intercom systems. With the Bolero Stand-Alone Application, antennas are simply daisy-chained to each other in a redundant ring via a low-latency synchronized TDM network. There is no IP configuration necessary – it's all plug and play!

A new external power supply can power up to 5 antennas, so power and data redundancies are easily achieved. A new external interface box, with six analog 4-wires and three GPIOs, can then be patched to other intercom systems. No AES67 switch or base station is required.

Now rental houses, smaller installations where Bolero alone can handle the entire intercom requirement, or users of other intercom systems can enjoy the power and elegance that only comes with Bolero from Riedel.

THE NEW NSA

Network Stream Adapters



NSA-001D

Leverage existing IP infrastructures for your 1000- and 1100-series intercom panels with this small and convenient interface.

Riedel's NSA-001D Network Stream Adapter handles all bi-directional signal conversion between AES3 and AES67. The NSA-001 is a plug-and-play device

that has multiple mounting options and connects between an AES67-capable switch and a legacy Riedel intercom panel of the 1000- and 1100-series.

Power is provided externally or via PoE and convenient LEDs indicate system status. Extend the service life of your panels and simplify cabling in your Artist system!



NSA-002A

Riedel's NSA-002A Network Stream Adapter handles all bi-directional signal conversion between analog signals and AES67. The NSA-002A is a plug-and-play device with multiple mounting options and connects

between a Bolero wireless intercom system and any analog 4-wire.

Power is provided internally or via PoE and convenient LEDs indicate system status.





■ A new office in China's capital marks Riedel's fourth sales hub in the APAC region following the successful launch of its Australian, Japanese, and Singaporean branches.

The Beijing office represents a major first step in establishing a local infrastructure for supporting a growing Chinese client base and will allow Riedel to provide tailored customer services, system designs, business developments, and sales functions.

"The Chinese broadcast, production, and event markets continue to expand and it was obvious that we needed to have an established presence in China. We're very excited to open an office in Beijing and staff it with a great team of professionals. Our award-winning technologies are designed specifically to meet the production challenges of today and tomorrow, so adding local resources and support to better service the need for high quality broadcast and AV solutions in this important market is just the beginning of Riedel's long-term commitment to China," commented Cameron O'Neill, Director Asia Pacific at Riedel.

Riedel's Beijing office is located in Chaoyang District and will be led by Ms. Gao Jian, who will be the Regional Sales Manager China.

■ Riedel is pleased to welcome Marco Kraft as the new Head of Sales in Germany managing the sales and rental businesses the German broadcast and AV markets. Kraft reports directly to Jens Miedek, Sales Director of the DACH region at Riedel.

Miedek commented, "Marco is an outstanding addition to our sales organization. He has shaped established companies in the industry, both operationally and strategically, and his deep experience and leadership skills are a powerful asset. Plus, Marco knows the requirements of the ever-changing broadcast and AV world very well. With his proven expertise he will continue to drive opportunities in the German market and take our business to new levels."

Kraft holds an engineering degree and brings many years of professional sales management experience to Riedel, together with specialized market knowledge from the broadcast and AV industries. Kraft previously spent several years as Sales Manager for DACH and Southern and Eastern Europe at Salzbrenner Stagetec Mediagroup, where he was responsible for the audio solutions and systems business. Other previous leadership positions include Sales Manager, DACH, for network management systems at Dimetis, a software development company for broadcast solutions, and General Sales Manager for Central and Eastern Europe at JVC Professional.

Kraft noted, "Riedel's combination of manufacturing and rental businesses is unique, and it means the pace of innovation is high. Along with our strong German sales team, I'm looking forward to developing momentum for our customers and partners while continuing to expand and strengthen Riedel's market presence."



MARCO
KRAFT

Head Riedel Sales in Germany



HOUSE OF DANCING WATER

Bolero Wireless Intercom Joins Artist to Provide
Comprehensive Comms Infrastructure for Macau
City's Dazzling 'House of Dancing Water'

■ The House of Dancing Water, a breathtaking in-the-round water show anchoring Macau's City of Dreams entertainment complex, needs to be experienced to be appreciated. A production of the Franco Dragone Entertainment Group, the show centers on an epic love story and spectacular journey through time, showcasing dazzling costumes and special effects. The state-of-the-art Dancing Water Theatre, designed by Pei Partnership Architects, includes a stage pool that holds a record-breaking 3.7 million gallons of water, equivalent to five Olympic-sized swimming pools. The arena also boasts a 40-meter-high steel-trussed space that provides the generous heights required for the show's diving and acrobatic elements.

A show this complex would simply not be possible without reliable, stable, and flexible communications between and among cast and crew members. That's why The House of Dancing Water extended its in-house communications capabilities with Riedel's Bolero wireless intercom. Bolero is now providing comprehensive, reliable, and integrated wireless comms that leverage the facility's existing Riedel Artist digital matrix intercom system in operation since 2014.



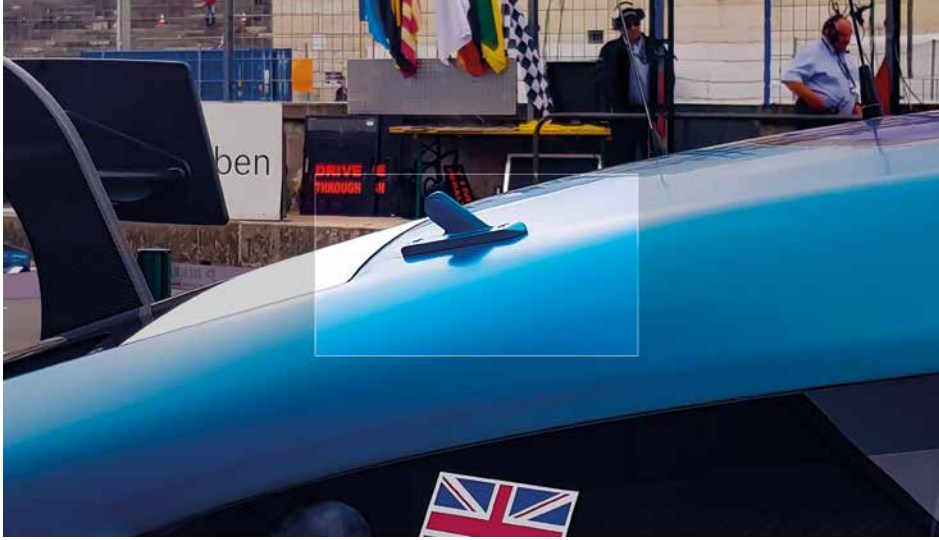
The Riedel-based communications infrastructure is the result of a collaborative effort between Nicolas Hammond, Dragone Macau Limited Head of Sound, and David Sharrock, Assistant Head of Sound, with the support of The House of Dancing Water sound team. The new Bolero system extends the existing Riedel infrastructure, which currently includes two Artist 64 and two Artist 32 frames, to enable clear and reliable communications for all cast members and crew throughout the Dancing Water Theatre. Motocross stunt riders and acrobatic performers, along with the technical teams, use the intercom system for continual communication during the show, which features visual, water, and atmospheric effects. Even in the aquatics area, the Bolero/Artist combination supports communications with performers and underwater handlers in the pool via underwater speakers, in-mask communications systems, and buddy phones. Programming flexibility is another extremely important requirement for the production, and the House of Dancing Water team is able to customize Bolero to meet the needs of individuals and departments. Riedel's Director software enables intuitive management and configuration of the system while also facilitating real-time system monitoring by the sound department.

Hammond commented, "We can't speak highly enough about the fantastic service we've received from Riedel. The personal connections we've built with the Riedel team and their outgoing and professional manner have made working with them a pleasure!"

IMPRINT

Published by RIEDEL Communications GmbH & Co. KG
 Uellendahler Str. 353
 42109 Wuppertal
 Germany
 www.riedel.net
 Editorial Director: Serkan Güner
 Contact: update@riedel.net

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DEUTSCHE TOURENWAGEN MASTERS FEATURES COLLABORATIVE BROADBAND SOLUTION FROM RIEDEL AND PIDSO

■ Last year, Riedel gained a powerful new center of expertise when it forged a partnership with PIDSO, a leading manufacturer of innovative lightweight antennas and antenna systems. The goal was to accelerate development of solutions that leverage PIDSO antennas with Riedel's industry-leading product families. Now, Riedel and PIDSO have rolled out their first joint project — a comprehensive wireless communications system for the Deutsche Tourenwagen Masters (DTM, German Touring Car Masters).

For the current DTM season, Riedel's MediorNet is providing an extensive real-time signal distribution backbone for all TV production units, race control, car manufacturers' hospitality areas, and race track video walls as well as providing the entire production IT infrastructure. A centerpiece of the installation is a unique broadband audio communications system with rugged, aerodynamic, and lightweight monopole blade antennas designed and developed by Riedel and PIDSO. These antennas are distributed throughout the facility via the MediorNet backbone.

Based on specialized IP radio technology, the broadband audio system enables radio communications from all drivers with outstanding voice quality. The solution uses an integrated wireless data transmission system, developed by Riedel, and requires the specialized antennas for optimal radio transmission and reception. Riedel and PIDSO conducted extensive preliminary research and vehicle simulations to determine the ideal positioning of the blade antennas, enabling them to coexist with all other existing race systems such as GPS, video, and garage radio.

Christoph Kienmayer, Founder and Managing Director of PIDSO, noted, "It's great to see this first outstanding result of our partnership with Riedel. The ability to hear drivers' comments clearly brings even greater excitement to television viewers."

Other Riedel solutions at DTM include HD mini cameras; wireless video, audio, and data transmission from the race cars; and radio communications and intercom for seamless communications among race control, racing teams and drivers, and timekeeping.

As one of Riedel's longest-running customers, DTM has been leveraging Riedel communications solutions since its inaugural season in 2000. Now, along with PIDSO, Riedel is able to apply technologies that are usually found in industries like automotive and aircraft construction. It's a win-win for Riedel-PIDSO customers worldwide!



VIÑA DEL MAR SONG FESTIVAL

World-Renowned Viña del Mar Song Festival in Chile Turns Once Again to Riedel for Seamless and Reliable Signal Transport and Communications



■ In its 59th year, Chile's Viña del Mar International Song Festival is the largest and best-known music festival in Latin America — with more than 15,000 local spectators and an estimated global audience of 200 million. This year's festival, held Feb. 20-25 from the Quinta Vergara Amphitheater, outdid itself with an exciting lineup of talents, dazzling production elements, and eye-popping staging. And once again, the Viña del Mar International Song Festival turned to Riedel to provide a fail-safe and comprehensive communications and signal distribution infrastructure.

For the entire festival, which included 19 music programs, Chilevision produced the broadcast with feeds supplied by partners Chilefilms and Intervideo and transported over Riedel's MediorNet fiber-based signal backbone. MediorNet provided redundant and decentralized signal routing and transport for the entire production while Riedel's Bolero wireless intercom solution and Artist digital matrix intercom system provided all on-site communications.

The Riedel backbone consisted of three MediorNet modular frames and an Artist digital matrix frame with 27 panels in a decentralized configuration that provided fully redundant distribution of all intercom and video signals throughout the festival venue. In a facility as large and complex as the Quinta Vergara Amphitheater, wireless communications can be challenging, but Bolero's Advanced DECT Receiver (ADR) technology provided crystal-clear communications for the 27 beltpacks used throughout the arena. Nine Riedel RiFace radio interfaces and 36 Performer C3 Partyline beltpacks provided additional connectivity for walkie-talkie and wired users, allowing them to communicate with the Bolero users through a seamless integration with Artist.

Cristián Mena Foncea, the festival's technical coordinator, noted, "For the communications and signal-distribution infrastructure, we needed a partner that could handle the complexities and deliver a 100-percent reliable solution. Riedel has an outstanding reputation for providing fail-safe communications for some of the world's biggest and most high-profile events, and its solutions are world-renowned for their reliability and technical excellence. We knew we could depend on Riedel to provide a comprehensive solution that would meet all of our requirements."

It's no wonder that the Viña del Mar International Song Festival is one of Latin America's oldest and most popular musical events, and every year the production grows more dazzling and sophisticated. The Riedel team looks forward to supporting the festival for years to come.

MEDIORNET PROVIDES COMPREHENSIVE SIGNAL/COMMUNICATIONS BACKBONE FOR FRENCH NATIONAL ASSEMBLY

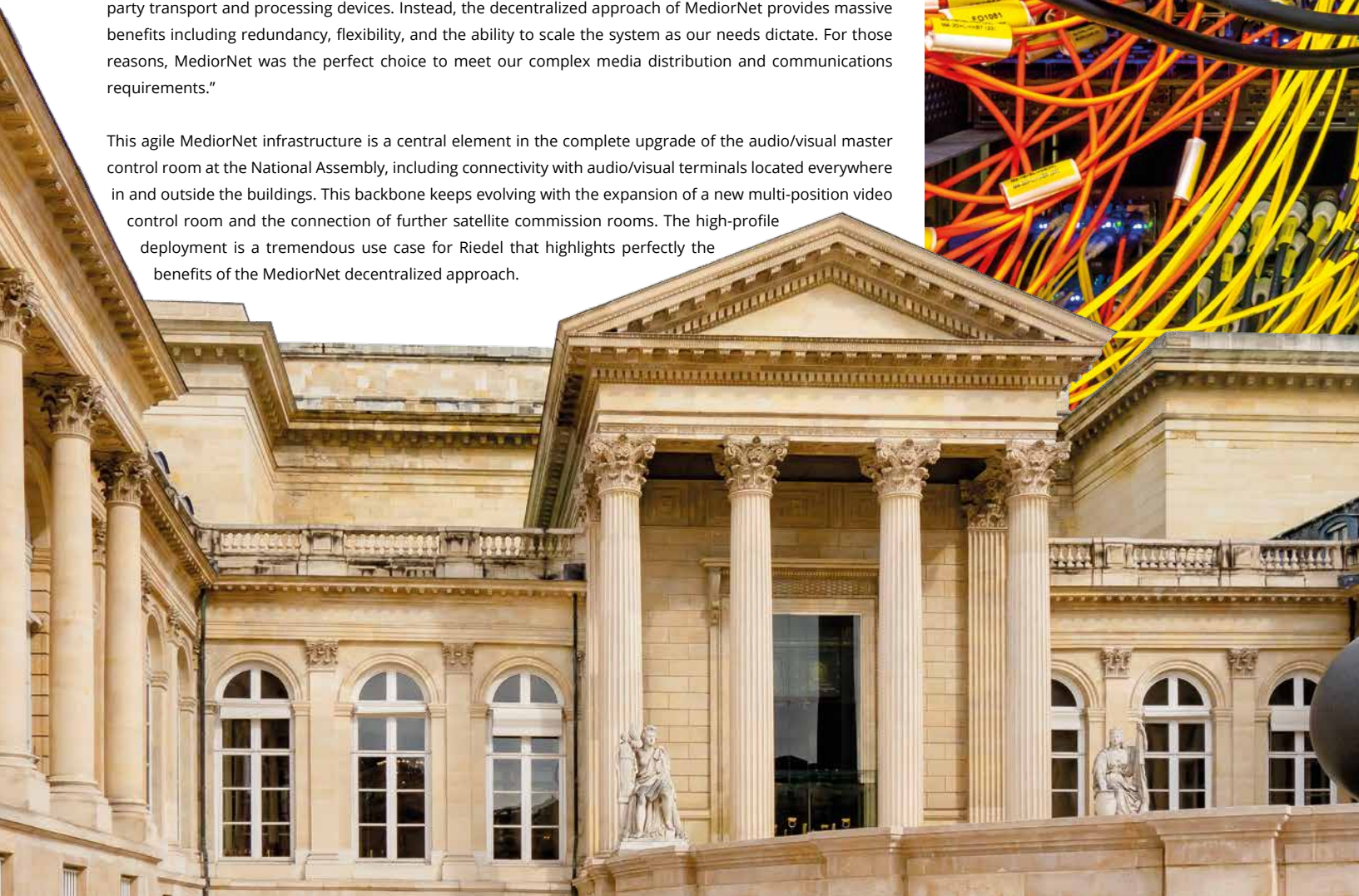
■ In France, the National Assembly is at the heart of the country's democracy, representing the people, making laws, and controlling government actions. And now Riedel solutions are providing an all-fiber signal distribution and communications backbone for all of the French National Assembly's signal transport, routing, processing, and communications requirements.

Riedel's MediorNet real-time media network provides redundant and decentralized signal routing and transport throughout the National Assembly's Paris facilities. Tightly integrated in MediorNet, Riedel's Artist digital matrix intercom system and Bolero wireless intercom provide crystal-clear and reliable communications for the National Assembly staff.

The French Assembly's MediorNet backbone consists of four MetroN core routers, more than 30 MicroN high-density media distribution network devices, 25 MediorNet Compact stageboxes, and three MediorNet Modular frames. Deployed in a decentralized configuration, the MediorNet components ensure fully redundant distribution of all audio/video and communications signals throughout the buildings. The robust intercom system consists of an Artist 128 mainframe with control provided by Riedel RSP-2318 SmartPanel multifunctional user interfaces. The Artist mainframe also provides integration for all Bolero wireless belt packs.

Christian Castelli, Audiovisual System Engineer at the National Assembly, commented, "MediorNet is a radical departure from the traditional approach to signal transport, which is built around a central router and third-party transport and processing devices. Instead, the decentralized approach of MediorNet provides massive benefits including redundancy, flexibility, and the ability to scale the system as our needs dictate. For those reasons, MediorNet was the perfect choice to meet our complex media distribution and communications requirements."

This agile MediorNet infrastructure is a central element in the complete upgrade of the audio/visual master control room at the National Assembly, including connectivity with audio/visual terminals located everywhere in and outside the buildings. This backbone keeps evolving with the expansion of a new multi-position video control room and the connection of further satellite commission rooms. The high-profile deployment is a tremendous use case for Riedel that highlights perfectly the benefits of the MediorNet decentralized approach.





RIEDEL MEDIORNET DELIVERS SIGNAL CONNECTIVITY IN STATE-OF-THE-ART BALLROOM AT RESORTS WORLD SENTOSA

■ Riedel's MediorNet is powering real-time signal transport and networking for one of the world's largest — if not the largest — 360-degree permanent projection systems, installed in a ballroom at the Resorts World Sentosa complex in Singapore. AIMS Productions, a Singapore-based visual production company specialized in multimedia for live events, chose Riedel's MediorNet MicroN high-density media distribution network devices to deliver flexible signal connectivity in this state-of-the-art ballroom.

Resorts World Sentosa is a resort community on the island of Sentosa, off the South Coast of Singapore. Developed by Genting Singapore, Resorts World Sentosa occupies more than 49 hectares and is the third most-expensive building ever constructed. The massive ballroom project is MediorNet's first large-scale deployment in Singapore and Riedel's first partnership with AIMS Productions, renowned for its high-profile multimedia installations that inspire and challenge the imagination.

"To address signal connectivity for the entire projection ecosystem, we turned to Riedel Communications. Riedel has proven itself time and time again as the leader in the field of fiber-based, real-time media network technology," said Choong Yip Weng, General Manager, Aims Productions (SG) Pte Ltd. "The MediorNet MicroN devices give our customer unlimited flexibility in moving, processing, and distributing signals. Each MicroN offers a highly versatile, high-density signal interface with built-in signal processing features that eliminate the need for many external devices. We are elated to partner with Riedel for this project, and the after-sales service and support have been second to none."

The ballroom project is an outstanding debut for the MediorNet family of products, especially with such an esteemed customer as Resorts World Sentosa. Riedel's system consulting team played a proactive role in the design of the system, working hand in hand with AIMS to construct an efficient solution. This cooperation, coupled with the comprehensive feature set that MicroN is known for, resulted in a winning solution for Resorts World Sentosa.



AN EXPERIENTIAL MULTIMEDIA COMPANY



MANAGED SPORTS SERVICES



■ As a technology company, Riedel embraces the development and the evolving expectations of sports productions.

Whereas ordinary events make use of readily available equipment in order to realise the signal distribution from video and audio to communications, today's sports productions require more and more sophisticated infrastructures and sometimes even customised products. Well aware of the new media landscape, event producers and sportscasters adapt their entertainment concepts, demanding technology that is able to keep pace with their changing requirements. Nearly every sport bears its own unique opportunities to present itself as more exciting and more tangible. This is the quest Riedel accepts, and we strive to become part of our customers' success stories by developing new, innovative infrastructures and products; which we call "Managed Sports Services".

■ Often times the size, weight or functions of existing product and technologies do not match the conditions presented by these challenging environments. For this reason our Managed Sports Services include the development of tailor-made products suitable to the specific application.

Ranging from motorsports (incl. F1 and DTM) or air races (RedBull) to mission critical projects like the Stratos jump, our experience has now been expanded with the introduction of our services in the field of referee communications since 2018. Managed Sports Services not only consist of the development of extra hard- and software dedicated to sports productions, but also involves Riedel's engineers ensuring the smooth implementation of our innovations; on site or remotely.



Our innovations as well as our teams of experts are an integral part of leading sports series, with our technology enabling and even driving the evolution of sports entertainment concepts.





RIEDEL HOME OF IP TRANSITION AND INTEROPERABILITY

■ Learning about the technical and creative benefits of IP has never been so easy.

From 20-24 August, Riedel welcomed over 100 professionals from 70 companies for the IBC Prestaging Event at their headquarters in Wuppertal. This JT-NM (Joint Taskforce of Networked Media) event brought together companies from around the world and across the broadcast, IT, and media industries. The goal was to prepare for the IP Showcase at this year's IBC by getting all of the various gear into racks and working over an IP network. Once built and tested, the racks will be transported directly to Amsterdam to demonstrate how standards-based IP solutions can boost interoperability to create flexible and efficient IP broadcast workflows. The IP Showcase is dedicated to educating show attendees on both the business and creative potential of IP media solutions.

This event is the perfect stage for companies just getting started on their IP journeys as well as the veterans who have been shepherding IP workflows for years now. The growing number of real-world IP deployments from broadcasters and media providers is sending a strong message that the market is ready to adopt IP workflows. At the same time, this technological get-together and collaboration fits perfectly into Riedel's philosophy of looking at technology from the perspective of usability. The company's goal is to make life as easy as possible for customers and partners on their transition to IP and they see the AMWA NMOS IS-04 registration and discovery and IS-05 connection management, both being demonstrated, as key factors in the overall adoption and success of IP workflows.

The Joint Task Force on Networked Media led by the AMWA, EBU, SMPTE and VSF promotes the exchange of professional media, including file-based and live content, across a network taking advantage of the benefits of IT-based technologies, all at an affordable price.





BOLERO BRINGS F1 HOME FOR BBC RADIO

■ The F1 racing season covers a significant part of the calendar and moves back and forth over the globe between the start in Australia and the finish in Abu Dhabi. Dispatching a technical crew to cover all of the events would present a daunting cost to even large radio broadcasters such as the BBC. But, through the use of some clever engineering and Riedel's Bolero wireless intercom system, each race is delivered to viewers with a minimum of technical and production staff and without any sacrifice in audio quality.

When the engines roar in Europe, USP Content sends its presenters for BBC Radio to the track – where a Riedel Artist 64 matrix intercom frame provides typical commentary boxes and supports Bolero for remote interviews on pit row and elsewhere around the circuit. The trackside Artist 64 frame connects Bolero and commentator boxes to another Artist frame in London via managed MPLS circuits to Frankfurt and then VPN on to London.

When F1 ventures of the continent, the presenters stay at home in London while only the Bolero bits and a few staff make the longer journeys.

The Bolero setup has been a huge improvement for F1 field producer Chessie Bent and presenter Jenny Gow. Their previous approach was a high-powered RF wireless system that was comprised of, among other things, a very cumbersome antenna that had to be physically carried around along with the other gear. Since one Bolero antenna can cover the entire pit and backstage area, Bent and Gow are free to roam around and grab interviews with drivers and celebrities at will.

"We have been using Riedel's Bolero system since the beginning of this season, and it has completely changed the way we work," said Bent. "When we were using equipment from several vendors and sources, trying to make everything work was very challenging. Now, with this setup, all of our headaches are completely gone! We don't have to worry about complex cabling, buying licenses, carrying antennas, or painful frequency coordination. Life is so simple now!"

"It's easier than plug-and-play," said Gow. At each race, she dons her Bolero backpack and MAX headset, and she's immediately ready to go to work by just pressing the ON button. The Bolero backpack is fitted with a "y-cord" arrangement that permits the use of an interview mic. At the same time, Gow uses her noise-isolating MAX headset to take instruction from Bent and to converse with her "off-air" when needed. The amazing sound quality of the Bolero system ensures clear, broadcast quality audio at all times.

Bolero's ease of use, simplicity of setup, and light weight make it a game-changer for USP Content's reporting for BBC Radio. The production crew are now far more agile and can get more done, and they're now developing entirely new workflows with their newfound freedom.



Your Road to IP starts HERE!

Riedel has been very active in IP for several years, including membership in the standards organizations, participation in interoperability events and plugfests, and innovation with several of our products. We hope to share our experiences with you so that your transition is as smooth as possible.

The Essential Guide to Broadcast Infrastructures has been created to help engineers understand the challenges of moving from our baseband workflows of today to the IP workflows of tomorrow. With the ratification of the SMPTE ST2110 suite of IP standards, the stage is now set. Yet there's still a lot of misinformation out there.

The Guide is being written by industry expert Tony Orme and is comprised of three sections that can be downloaded from the Broadcast Bridge website; AoIP, VoIP, and a discussion of some of the current challenges and security concerns. Each section comes in four parts with three being totally instructional and a fourth, written by Riedel, containing real-world examples or insights into other IP topics.

By the end of the series, sometime in late autumn, the three downloads will provide a comprehensive look at IP and arm engineers and users alike with a working toolkit with which to take their IP journeys forward, with confidence.



BROADCAST THE BRIDGE

„Operating IP networks is much more than just about saving money on infrastructure costs.“

- Tony Orme -



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ESSENTIAL GUIDE

■ **The University of Notre Dame in South Bend, Indiana, recently completed their Campus Crossroads Project: the most ambitious building campaign in Notre Dame's 175-year old history. Adjacent to the university's iconic Notre Dame Stadium, the project is designed to create a year-round center of student activity and support a broad range of academic and faith-based programs in addition to athletics.**

One piece of the Campus Crossroads Project is the new, 18,000-square-foot Rex and Alice A. Martin Media Center, home of Notre Dame Studios. Supporting the academic, faith, and athletic missions of the university, Notre Dame Studios works with departments and groups ranging from university relations and campus ministry to digital learning, academic innovation, and athletics.

Notre Dame Studios turned to BeckTV for systems integration and design consulting on the IP infrastructure. There were a lot of open and honest conversations about whether to play it safe with baseband or take a chance on whether IP had reached enough of a tipping point to invest in it for the future. A big deciding factor was where the vendors were spending their R&D budgets. Since IP is where companies such as Riedel are spending those dollars now, it made sense to take advantage of their next-generation products.

The deeper the discussion got, the more Notre Dame realized that IP would be the right fit for the long-term project goals, as its expandability and flexibility would allow them to get maximum use out of their facilities throughout the year. For instance, they could use a studio for an academic event in the afternoon and then quickly turn it around for a sports event in the evening. IP also offers a foundation to bring more advanced technologies into the classroom, such as virtual and augmented reality.

At the core of Notre Dame's new IP-based communications infrastructure is Riedel's Artist digital matrix intercom system, Bolero wireless, and SmartPanel app-driven user interfaces. Intercom systems offer a great use case for demonstrating professional broadcast IP implementations, since modern solutions like Artist support AoIP through common interfaces including AES67, Dante, VoIP, and AVB.

Riedel is all about embracing standards, and their Artist ecosystem has supported AVB and AES67 for years. With AES67 client cards in the Artist, the 7KHz, full-bandwidth SmartPanels are the only SMPTE 2110-30-compliant intercom panels available today. The antennas for their Bolero wireless system leverage the same AES67 network.

One issue, where switches were not passing timing information correctly, offered a valuable lesson for both engineering and IT teams and emphasized the necessity for close communication and cooperation. Originally, the agreed upon solution was one in which PTP data would be delivered first, media data second, and all other data third, but this didn't eliminate excessive PTP clock jitter. It was only after the switches were upgraded that PTP came within spec and problems disappeared.

"The industry is a long way from plug-and-play gear for IP networks," said Scott Rinehart, Director of Broadcast Technology at the University of Notre Dame. "We also learned the importance of getting engineering staff up to speed on the knowledge sets they'll need for the new IP paradigm, as well as making sure the IT team truly understands our objectives. The support we've received from all our partners has been fantastic."



NOTRE DAME BLAZING THE TRAIL TOWARDS IP BROADCAST INFRASTRUCTURES



SIGHT & SOUND THEATRES' EPIC BIBLICAL PRODUCTIONS TRUST RIEDEL'S BOLERO AND ARTIST FOR SEAMLESS AND RELIABLE COMMS



■ Billed as a place “where the Bible comes to life on stage,” Sight & Sound Theatres has been captivating audiences with its spectacular live shows since the 1960s. The productions retell familiar Bible stories with astounding realism through dramatic performances, four-story-tall set pieces, and live animals. And now, Sight & Sound has adopted Riedel’s Bolero to provide two-way wireless communications at its 2,000-seat auditorium in Branson, Missouri. Bolero leverages an existing Riedel Artist digital matrix intercom system to deliver comprehensive, integrated, and crystal-clear communications for the entire production team.

The Sight & Sound installation is just the latest example of how the teaming of Bolero and Artist can deliver the industry’s most reliable communications in highly complex live-production environments. The Branson auditorium features a massive 20,000-square-foot stage that surrounds the audience on three sides. With six full-duplex channels, crew can use Bolero’s seamless handover to effortlessly move throughout the 330,000 square-foot facility without worry of dropouts. A total of 56 belt packs covers an equipment room, a large area under the stage, the catwalks, the animal holding area, and the dressing rooms. With Bolero’s ability to handle up to 10 belt packs per antenna, 50 belt packs are able to operate simultaneously on the stage.

Bolero also provides the flexibility for the Sight & Sound crew to manage belt packs remotely and change settings on the fly, even during a live show. With the addition of a stage lift next year, the addition of just one more antenna will provide coverage for the entire basement area.

Luke Bates, ESFX Supervisor, Sight & Sound Theatres, describes the advantages that Bolero brings to the production. “Our current show, ‘Samson,’ uses a significant amount of automation that requires more comms channels and a wireless intercom that can deliver outstanding voice quality anywhere in the auditorium. And from a safety standpoint, it is absolutely essential that the system is rock solid for those working with and around the animals.”

Bates adds, “We’re glad to continue our collaboration with Riedel. Not only are their technologies extremely reliable, but the Riedel support staff can be counted on to answer any questions and walk us through any configuration changes we might need.”



RIEDEL project pictures

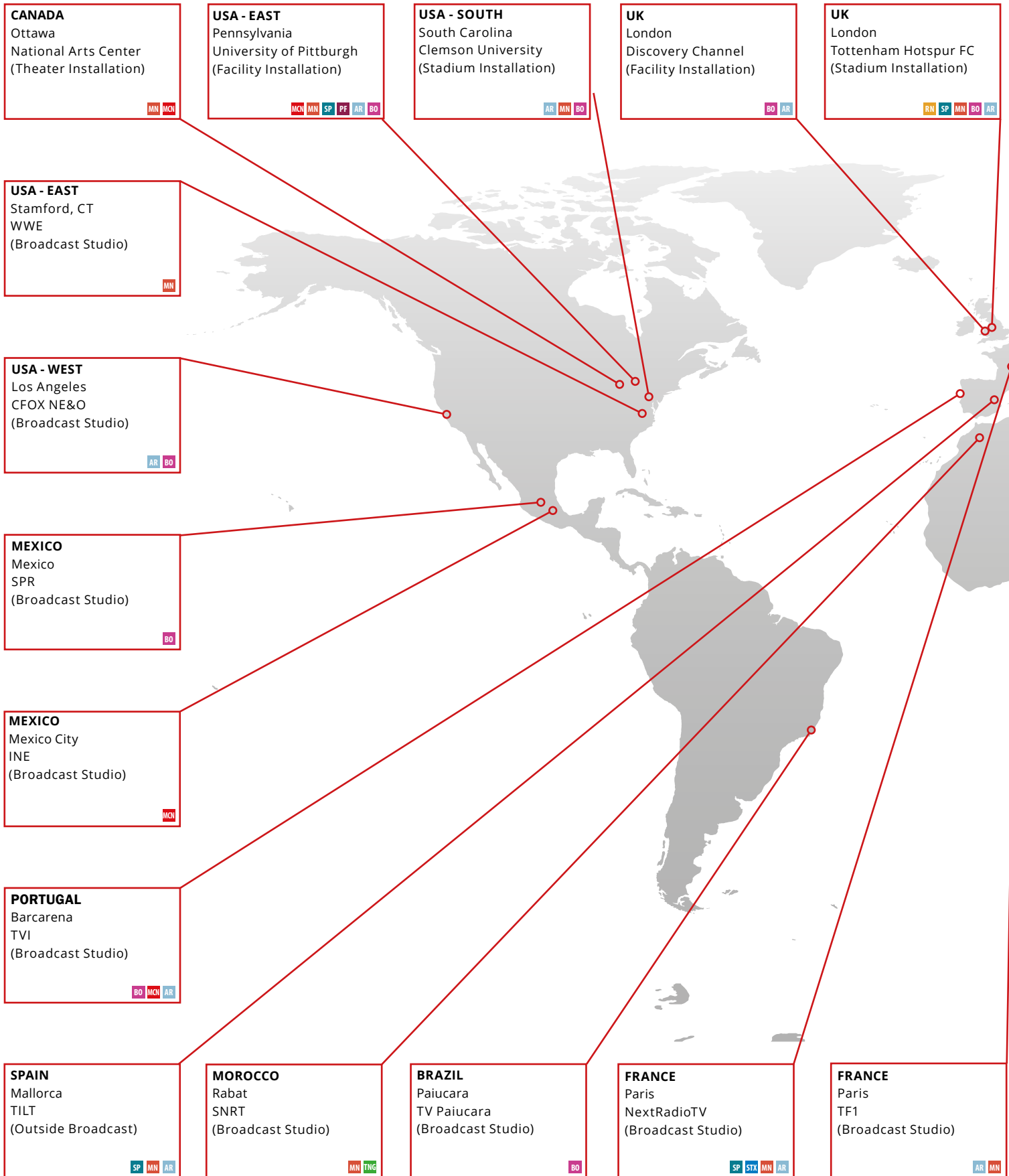


Your daily update

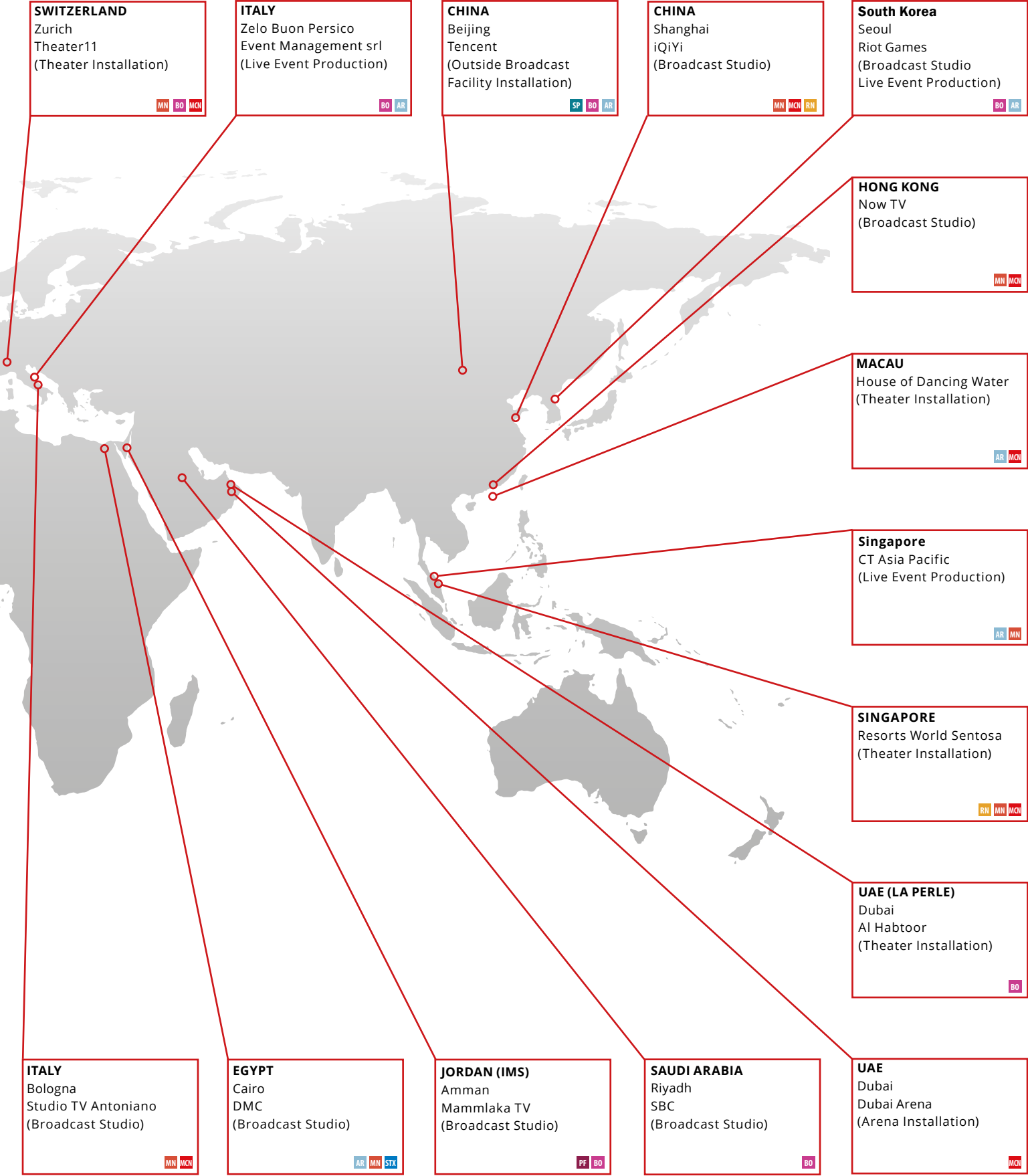


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