RIEDEL

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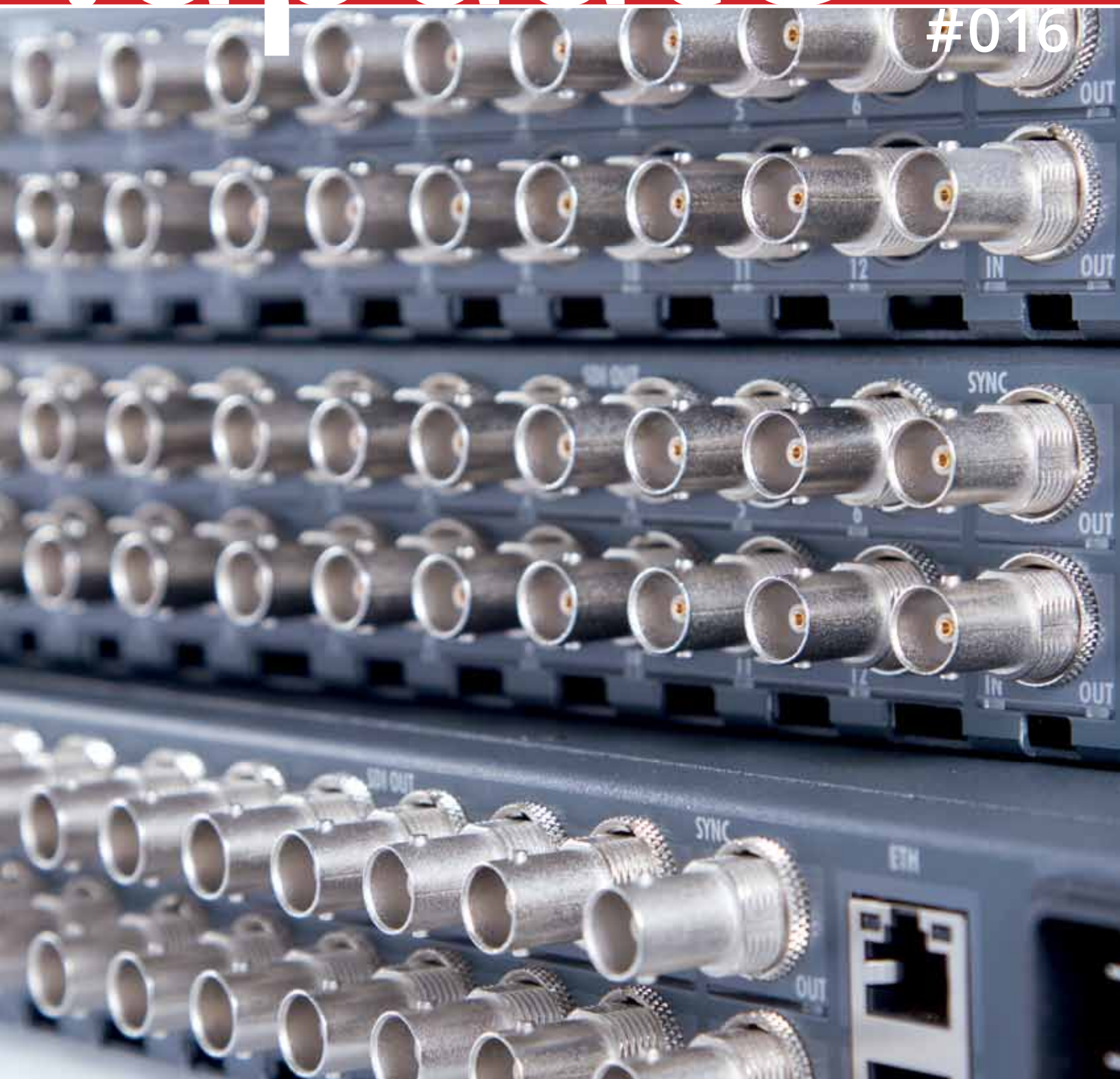


MEDIORNET

MICRON

RIEDEL introduces MicroN 80G media distribution network

RIEDEL's newest MediorNet device provides a versatile, high-density signal interface for productions of all sizes

Working seamlessly with the MediorNet MetroN core fiber router, MicroN is a high-density signal interface with a complete array of audio, video, and data inputs and outputs including 24 SD/HD/3G-SDI I/Os, two MADI optical digital audio ports, a Gigabit Ethernet port, two sync reference I/Os, and eight 10G SFP+ high-speed ports. MicroN is available as a fully networked MediorNet device, but also in a point-to-point version at a very competitive price point.

"In just a single rack unit, the MicroN offers a highly versatile signal interface that can be used in productions of every size and complexity," said Lars Höhmann, Skype & MediorNet product manager at RIEDEL Communications. "For the largest media networks built on our MediorNet transport devices, MicroN can serve as a breakout box for a MetroN router and extend connectivity beyond the fiber I/Os to any type of video and audio I/O required. Or, MicroN can simply work with a MetroN router, with other MicroN units, or in a standalone point-to-point configuration to provide an economical solution for small- to medium-sized productions. And, like the other members of the MediorNet family, MicroN has powerful built-in signal processing features that eliminate the need for many external devices."

In a compact 1RU form factor for rackmount applications, the MicroN offers full support for 10G high-speed video, 3G-SDI video, MADI audio, and Gigabit Ethernet. The system includes an integrated video, audio, and data router and sync reference I/Os, including black burst, tri-level, and word clock. Built-in video and audio processing capabilities include automatic format detection, a frame synchronizer and framestore on all video outputs, a 16-channel audio embedder/de-embedder, a test pattern generator, on-screen and system VITC displays, an integrated sample-rate converter, and audio/video delay lines. The MicroN is powered by a redundant, wide-range AC power supply and also features temperature monitoring and adaptive fan control.

Interconnecting MicroN nodes in a meshed fashion leads to a very scalable decentralized video routing application. This approach can be used as a replacement for small to medium size routers and offers a very flexible system design, allowing users to extend the router capacity in both signal capacity and distributed system locations by adding MicroN nodes to the network. Operating in standalone mode, the MicroN can act as a 12x12 router and audio embedder/de-embedder with MADI SRC and delay, and also provide video frame sync and delay. In a point-to-point deployment, multiple paired MicroN units can provide all of these capabilities plus support for up to 12 bi-directional SDI I/Os, two MADI I/Os, and a Gigabit Ethernet link. Multiple MicroNs can be integrated as a central video router for redundant processing of up to 192x192 HD-SDI signals, and they can also be deployed in a distributed fashion as a decentralized video router.

RIEDEL's SMARTPANEL now available with choice of INTERCOM APPS

RSP-2318

SMARTPANEL

The RSP-2318 Smartpanel is now available with a choice of three intercom apps, each with a range of connectivity options to meet specific user requirements. As the world's first Smartpanel designed to serve as a powerful multifunctional user interface, the RSP-2318 offers features and capabilities that enrich the user experience and change the way broadcasters and AV professionals communicate.

The RSP-2318 Smartpanel itself includes three high-resolution, multitouch color displays; premium-quality stereo audio; a multilingual character set; and standard matrix connectivity via RAVENNA/AES67 or AVB in just 1 RU. Of course, the units are easily software upgradable should requirements change. These features make the Smartpanel a powerful user interface that can be further expanded through the use of apps.

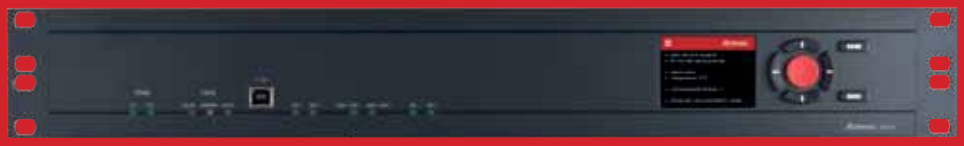
"Early customer feedback indicated that we needed to provide apps that would have different connectivity options to meet the needs of different users," said Christian Diehl, product manager Matrix Intercom at RIEDEL Communications. "With three editions of the intercom app for our Smartpanel, we can now provide exactly what our customers need and keep the costs low. With the new app concept, we don't expect customers to pay for features that they do not need. I am very excited about this new approach and the future apps we will provide for the Smartpanel."

With the "BASIC" app, users have 12 intercom keys and connectivity to RAVENNA/AES67 or AVB. The "PLUS" app also has 12 intercom keys and adds an analog audio port for 4-wire integration and three GPI/O's. The "PRO" app has 18 intercom keys and two analog audio ports for 4-wire integration, three GPI/O's, and the ability to connect an independent second headset. All three units are ready for add-ons as well as additional intercom and non-intercom apps. RIEDEL's intercom app can be quickly and easily upgraded to the desired edition, without changing any hardware components.

The RSP-2318 Smartpanel can be integrated into any existing RIEDEL installation. Support for new and legacy systems ensures smooth interoperability among all RIEDEL intercom systems, including the Artist, Tango, and Performer products.

RIEDEL
OPENS NEW PERSPECTIVES
www.riedel.net

RIEDEL's networked communications platform for small to mid-size installations



TNG-200

TANGO

RIEDEL's Tango TNG-200 is now shipping. Based on the RAVENNA/AES67 and AVB standards, and with its own dedicated intercom application, the platform can easily be turned into a flexible, cost-efficient, and cutting-edge solution for a variety of communications scenarios.

"We introduced Tango at IBC2014 and the response was nothing short of amazing," said Jake Dodson, director product management at RIEDEL Communications. "Almost immediately, customers wanted to know when it would be available — and now that day has arrived. With Tango, we're extending our intercom product line with a comms platform that is suited for small to mid-size installations at a price/performance ratio unheard of in the industry. Tango allows our clients to use the network technology of their choice. Moving from hardware- to software-based solutions gives them this flexibility."

RIEDEL's Tango TNG-200, together with the "My First RIEDEL" application, is an asymmetric 40x80 matrix that is configured via RIEDEL's new Pulse software. The device uses AVB or RAVENNA/AES67 as the main transport protocol for interfacing with Intercom panels and 3rd party devices. Tango also features two integrated RIEDEL Digital Partylines, two AES67 and AVB-compatible ports, two Ethernet ports, an option slot, and redundant power supplies. It is fully compatible with all of RIEDEL's current and legacy intercom panels, including the company's new RSP-2318 Smartpanel. Tango is equipped with a high-resolution, full-color thin-film-transistor display that ensures perfect readability at all times. The unit's intuitive front-panel controls simplify the recall of presets and adjustment of audio levels. Powerful hardware allows the system to grow with its users needs through future applications.

RIEDEL's STX-200 professional Skype interface now with new applications, extended software features, and AES 67 interfacing

RIEDEL's STX-200 broadcast-grade professional Skype interface brings any Skype user worldwide into professional broadcast workflows. The reliable, 1 RU, single-box solution allows broadcasters to engage with both reporters and viewers in live programming and now comes with improved and easy-to-use management and control software as well as AES67 interfacing.

The updated Skype TX Control software provides customers with the ability to manage multiple Skype TX channels from a single user interface. Other parameters that the software manages include stream resolution, aspect ratios, FPS, logo overlays, and various audio options. RIEDEL's STX-200 also offers unique device monitoring functions, such as temperature measurement and system status, that can be monitored by means of Simple Network Management Protocol (SNMP).

"We have only scratched the surface of how this amazing device will be used to create new workflows for broadcasters and build community for organizations from small businesses to major sports leagues," said Lars Höhmann, Skype & MediorNet product manager at RIEDEL Communications. "Just last month, Real Madrid used a RIEDEL-supplied STX-200 solution, including a MediorNet signal transport backbone and Artist intercoms, to facilitate a live two-way exchange between players and their fans from around the world."

Licensed by Microsoft, the STX-200 offers broadcast-quality HD-SDI and balanced XLR audio I/Os. Previously, users relied on consumer PCs running common Skype clients that then needed to be integrated with scan and HDMI-to-SDI converters to produce content suitable for air. Further, audio dropouts and menu pop-ups on the live feed are avoided with this dedicated solution. Broadcast-grade audio interfaces include a two-channel balanced analog audio XLR input and output, as well as SDI embedded audio. Other features include a Gigabit Ethernet connection, a user-interface connection via DisplayPort, USB ports for accessories, and GPI/O's.

BBC relies on Artist for its scottish referendum broadcast

Artist system at Pacific Quay Broadcast Center augmented to facilitate cost-effective communications among OB sites across the United Kingdom

BBC Scotland used a RIEDEL Artist digital matrix intercom system, along with the broadcaster's most extensive IP deployment to date, to support communications for its Scottish Referendum broadcast. By augmenting and expanding the building-wide RIEDEL system used for day-to-day business at its Pacific Quay facilities in Glasgow, the broadcaster was able to establish effective VOIP communications among outside broadcast venues across the United Kingdom.

The RIEDEL Artist deployment allowed BBC Scotland to employ VOIP panels from London to Shetland, all connected to its Glasgow facilities, in a versatile alternative to using ISDN lines. A preassembled and pretested integrated kit provided straightforward plug-and-play operation at each OB site. This reduced the time and complexity of on-site set up and configuration. This approach provided much greater functionality at each OB location, where the dual-channel panel made it easy for users to speak to key technical staff back at Pacific Quay.

The Artist system included 32 RIEDEL Artist panels for VOIP communications to OB locations in Scotland and another eight connecting a remote switching hub in London; a pair of four-wires converted to IP for a VOIP connection to an OB at Holyrood, home to the Scottish Parliament; nine commentator panels for radio reports; and two virtual panels for communications with the IT support team. With support from RIEDEL engineers, the BBC was able to integrate extra panels and cards and perform the necessary programming to increase the capacity and functionality of the Pacific Quay Artist system without disrupting its ongoing broadcast operations. The fully integrated kits used at each OB site featured a modem, router, RIEDEL Connect IPx audio-over-IP interface, desktop panel, headset, and input and output leads, all packaged in a flight case optimized for field deployment.

"The BBC has relied on our Artist system for daily operations for quite some time now, and we worked closely with the Pacific Quay IT and technology team to ensure a smooth extension of this system to accommodate comprehensive coverage of the Scottish Referendum," said Paul Rivens, U.K. general manager at RIEDEL. "The resulting communications system supported a rich and dynamic broadcast program for this historic event."

They just want to play – RIEDEL gear supports live productions from Red Bull eSports studio for streaming to millions

RIEDEL Communications has provided communications and signal transport solutions for a variety of Red Bull events held around the world. To enable Red Bull to produce and stream live gaming competition and events from the Red Bull eSports Gaming Studio at the Red Bull Media headquarters in Santa Monica, California, RIEDEL installed an innovative fiber-based real-time video, audio, data, and communications network.

The RIEDEL gear includes a MediorNet real-time network, RockNet audio system, and Artist digital matrix intercom system, enabling the production of events, as well as the live streams watched by millions of fans.

"RIEDEL products have continually provided Red Bull Media House with the flexibility, performance, and audio and video quality we require for the production of premium sports events and live broadcasts, and they have proved to be a perfect fit for Red Bull eSports studio," said Scott Gillies, director of production & technology, at Red Bull Media House North America. "The robust functionality of both the MediorNet and Artist systems actually simplifies production while enabling us to put on a sophisticated and exciting show for the millions of fans tuning in from all around the world."

For example, one eSports broadcast format that's produced out of the Red Bull eSports studio pits two video gaming teams of five players against one another. As they play, MediorNet Modular frames take in a total of 20 HDMI POV video signals from the gaming consoles, convert them into HD-SDI, and carry them to the control room. The POV cameras focus on the faces and hands of all 10 players, with additional HD-SDI cameras positioned on the game commentators. These inputs are combined with the primary gameplay feeds to produce a complete eSports broadcast. An additional MediorNet Compact Frame is used for complementary shots from other parts of the competition.

Additionally, each player in this example wears a headset that provides game audio and a link to other team members. The Artist system supports these communications, as well as the intercom and on-air audio signals of the commentators. Because the Artist system works with 48-kHz digital audio, it is also being used to create a downmix of game audio for each team, as well as for the audio mixing console. Combining individual game audio with the team communications, the Artist creates 10 individual mixes for each of the 10 players. A single four-core fiber cable, equipped with OpticalCON QUAD connectors, handles all signals.

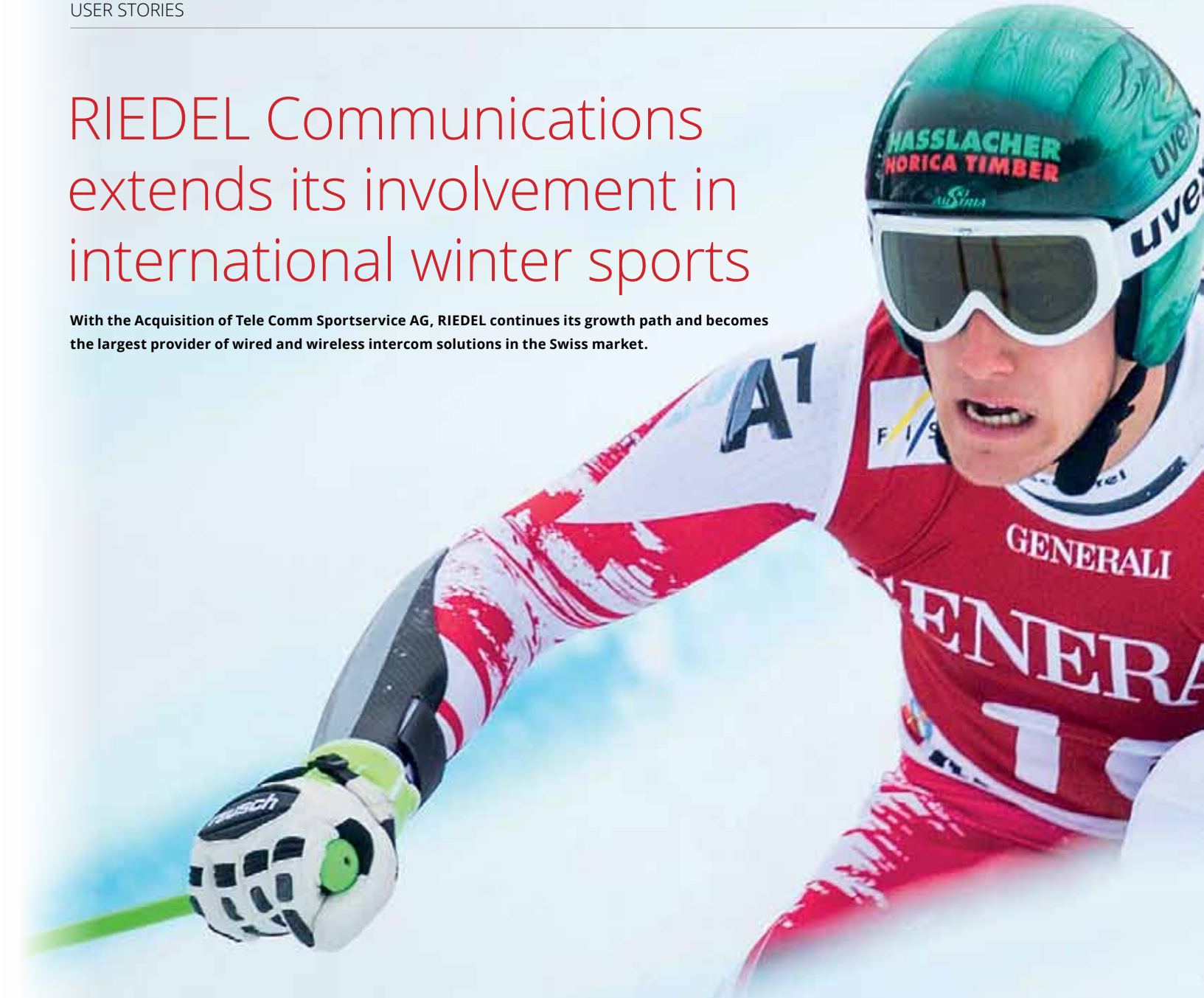
Within the control room, the MediorNet system acts as a pre-switcher, dynamically feeding eight signals to the video switcher, and also provides feeds to the edit bay, two SSD recording units, and to a monitor wall comprising two displays with 16-window split views. The MediorNet also serves as an audio de-embedder, in turn feeding audio to the audio mixing desk. The resulting audio and video mix is sent to two encoders for streaming via the Internet.

"Once again, Red Bull turned to RIEDEL to help further their innovation in the field of eSports, and we're proud to continue to play a role in this space," said Sascha Kneider, head of technical services, North America, for RIEDEL. "This installation is a textbook example of a system that integrates the three main product lines from RIEDEL. By using MediorNet as the backbone for video, RockNet for audio, and Artist intercom for communications, we can create a lot of synergies. The benefits of this approach are obvious: the customer does not have to buy three different systems that may or may not work well together, every signal is available at every node in the system, and changes are just a matter of a mouse click."

RIEDEL's approach to the Red Bull eSports Studio project delivered an elegant solution with the exceptional flexibility required to accommodate future changes or expansions of the gaming format. In physical terms, the resulting installation comprises a mere handful of boxes, connected by a minimum of fiber cabling. The actual infrastructure — including all video, audio, and intercom — is virtual. The routing of signals can be changed at any time, if required. The Red Bull staff can virtually change the infrastructure instantly with just a few mouse clicks.

RIEDEL Communications extends its involvement in international winter sports

With the Acquisition of Tele Comm Sportservice AG, RIEDEL continues its growth path and becomes the largest provider of wired and wireless intercom solutions in the Swiss market.



For more than two decades, Tele Comm Sportservice AG has been a world-leading provider of communications solutions for temporary and permanent installations at live events. As an official International Ski Federation partner, the company specializes in supporting international ski competitions and other winter sports events.

"Tele Comm Sportservice is an ideal fit for our portfolio," said Roger Hess, general manager of RIEDEL Communications Switzerland AG, headquartered in Zurich. "The regional strengths and core competencies of this established company in radio and communications, especially with regard to alpine skiing, offer us a perfect vehicle for driving continued growth."

RIEDEL Communications now holds 100 percent of Tele Comm Sportservice AG shares. With this key acquisition, RIEDEL Communications continues its growth path and becomes the largest provider of wired and wireless intercom solutions in the Swiss market. At the same time, the deal will enable RIEDEL Communications to extend its involvement in international winter sports.

"We are pleased to partner with RIEDEL Communications," said Kurt Waldmeier, CEO of Tele Comm Sportservice AG. "To continue to grow, we have chosen a strong partner that can support our core portfolio and enable us to future-proof our business plan. RIEDEL Communications, with its global network, provides us with the framework to develop our business across new markets and varying economic conditions."

RIEDEL teams with _wige SOLUTIONS to build massive communications network at Sochi Autodrom for Russia's first F1 Grand Prix race

Over 15,000 meters of RIEDEL fiber optic cables were laid and there was plenty of excitement transmitted over them at the new Sochi Autodrom, one of the world's most modern circuits, which hosted Russia's inaugural Formula One Grand Prix race on Oct. 12, 2014. RIEDEL was heavily involved in creating the specifications for the television production requirements and provided the infrastructure for the transmission of video, audio and intercom signals for the circuit.

"The circuit in Sochi is one of the most modern in the world, equipped with state-of-the-art broadcast and racing technology," said Thomas Hellemann, vice president at _wige SOLUTIONS. For this prestigious project we partnered with RIEDEL for their specific know-how and more than two decades of experience in motorsports."

During the Sochi Autodrom project, RIEDEL worked independently and in concert with general contractor _wige SOLUTIONS, a Nürburgring, Germany-based company that specializes in media technology (lighting, sound, and video), graphics and results services, and race services. _wige SOLUTIONS was responsible for track surveillance and monitoring, time keeping, race control, marshalling, and overall technical design. In order to establish a secure communications infrastructure, _wige SOLUTIONS opted for RIEDEL's proven Artist digital matrix intercom system for race control, marshalling communications, and the dispatcher system, where a Motorola TETRA solution was directly integrated into the Artist.

As with all of the other F1 races, RIEDEL also supplied its communications and signal transmission solutions including special headsets for radio and intercom systems, the IT infrastructure, and access management This included more than 500 Artist keypanels and 1500 TETRA radios used by Formula One Management, Formula One Administration, the Fédération Internationale de l'Automobile, and the Formula One race teams.

"Following a successful Winter Games, our return to Sochi to work on the F1 course was like a homecoming, and it gave us a distinctive home field advantage in completing the Sochi Autodrom project," said Kai Olaf Houben, director of international projects at RIEDEL. "The smooth interaction and absolute reliability of our communications systems, and a qualified team with experience, are essential in Formula 1, especially with regard to safety. We always have one thing in mind: an absolute zero tolerance for errors in the communications. At the first GP of Russia, we have again successfully demonstrated the quality and reliability of our solutions and also showed that we are the right partner for permanent racing and broadcast infrastructures. "

RIEDEL takes its networked approach to the high seas

Newest Royal Caribbean cruise ship uses RIEDEL gear to create a rich multimedia experience for guests and reliable communications for cast and crew.

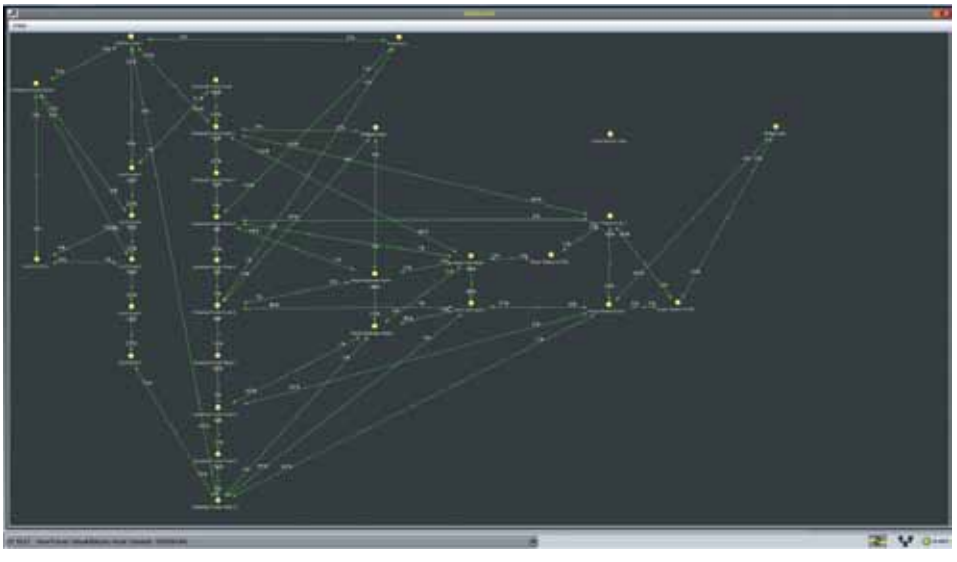
Quantum of the Seas®, the newest ship in the Royal Caribbean International fleet, is using a RIEDEL Communications MediorNet real-time media network along with the company's Artist digital matrix intercom and Acrobat digital wireless intercom systems to support signal distribution for the ship's sophisticated ship-wide multimedia and entertainment system, as well as staff communications across the ship's two main theaters. The RIEDEL systems enable easy and flexible management of HD video throughout the ship and facilitate seamless communications across its entertainment venues.

"Quantum of the Seas is the most technologically advanced ship ever to sail, and the extensive complement of RIEDEL equipment on board allows us to enrich the guest experience with real-time audio and video captured throughout the ship," said Christopher Vlassopulos, Superintendent SLVR & Architectural Lighting at Royal Caribbean International & Celebrity Cruises. "The versatility and reliability of the RIEDEL systems combine with excellent audio and video quality to guarantee the exceptional performance that our operations require."

MediorNet frames are distributed throughout ship so that audio and video signals can be acquired and distributed from diverse areas. Signals from external cameras and from cameras within the ship's theaters are fed into the IPTV entertainment system and made available in guest cabins via more than a dozen free on-demand HD channels. The system can generate up to 10 independent quad-splits from any video signals within the MediorNet network and then distribute those signals to any point on the network. Another 10 signals can be up/down/crossconverted into other formats for other purposes. A Virtual Studio Manager (VSM) system from LSB takes advantage of the Ember+ protocol (standard on MediorNet) to enable remote control of the entire MediorNet system.

At the heart of the intercom system is an Artist 128 equipped with MADI cards. Each intercom port can support keypanels, digital party lines, and wireless Acrobat beltpacks, with ship-wide distribution handled by MediorNet. While RIEDEL's Director software facilitates rapid modifications and real-time monitoring to the Intercom system, the company's MediorWorks configuration, control, and monitoring software permits fast and flexible changes or reallocations to the underlying MediorNet network. Antennas supporting the wireless communications are distributed across the ship via MediorNet to ensure that beltpack users working in the ship's different entertainment areas can communicate clearly and move freely with no breaks in communication.

"The versatility of our MediorNet network and our Artist and Acrobat systems is critical to the creation of engaging multimedia experiences, and Quantum of the Seas takes full advantage of our solutions to deliver a visually rich environment for its guests," said Rik Hoeree, director of international sales at RIEDEL.



RIEDEL systems strengthen the Union

'Cult' football might not be a term many people are familiar with in the UK, but in Germany the reality is something different. Teams like FC St Pauli in Hamburg and FC Union in Berlin seem to attract support and affection, both locally and internationally, as a result of the camaraderie and positivity of both club and fans - sometimes more so than the playing of football itself.

RIEDEL was employed in 2013 by FC Union to fit out the club's 21,000 + stadium with some of its newest solutions to connect and streamline the entire broadcast system workflow. The venue is the largest, single-purpose football stadium in the nation's capital and rightly required a solution that would ensure seamless connectivity and integration to manage the day-to-day runnings of a venue of this size; for press conferences, controlling the venue's TV screens, live action replays and many of the other features required of any large stadium in the digital age.

What is clearly noticeable to visitors to FC Union is the sense of community among staff, fans and players alike; from catering to security, high-level management to those overseeing the production and playout of live games from within the stadium's own studio.

Rather than simply a football club, the 'Iron Union' might best be described as a family of fans. Consequently, it makes sense that the team would select a local company to supply an all-in-one solution and link up the entire system.

The setup was installed in June 2013, with RIEDEL selecting its MediorNet Compact and RockNet solutions to link various points around the stadium, opening communication and facilitating the efficient running of the venue. A single fibre provides the transmission backbone that powers the connectivity, while just two RIEDEL representatives and four technical operators within the club were required to put the system into place. Operational simplicity seems to be a key to much of what RIEDEL does.

The entire system is overseen by a small team from the comfort of just one room, locating control of fire alarms, stadium TVs, IT infrastructure, security, lights, loudness etc. all from a central location. Each match is recorded to be replayed during the press conference after the game, while a real-time stream is made available in the stadium's VIP rooms, with fans able to pause, rewind etc. at their leisure.

There are six important points of communication within the venue – house management, stadium management, the media and press centre, the press conference room, OB truck and the stadium PA – and all are connected via an integrated RockNet and MediorNet setup.

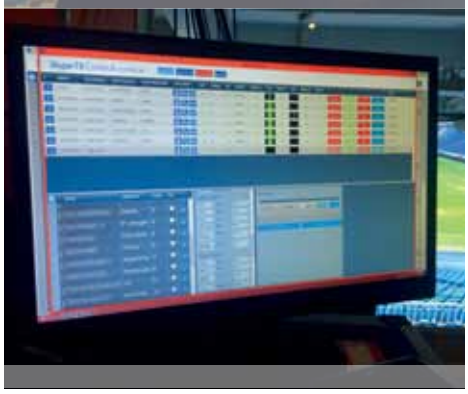
MediorNet Compact is a fibre-based network that features integrated signal processing and a network bandwidth of 50 Gbit/s. As well as integration with RockNet, MediorNet Compact provides the signal backbone upon which signals are distributed throughout the facility.

RockNet is RIEDEL's audio distribution network tailored specifically for tour and installed sound applications. It conveys 160 24bit/48kHz audio channels, counter-rotating on a single CAT5 or fiber. As a result of its intended use on the road, the solution comes packaged in a steel enclosure. RockNet 300 features 160 channels and RockNet 100, 80 channels. It can integrate up to 99 devices in one network and features a redundant network interface.

RIEDEL also supplied 130 MOTOTRBO handheld radio units from Motorola, providing the system set-up with further secure and high-end digital audio quality and also fully integrated through the MediorNet backbone. An interesting point to note is that the stadium had previously relied on a license-free PMR system, which had a habit of picking up unwanted interference from a nearby supermarket. Now, with MOTOTRBO at the core of the stadium's communications, such issues no longer persist. What's more, the entire setup could conceivably be controlled in a single room as far away as RIEDEL's Berlin HQ, some 2.5 km from the home stadium. Further to this, no precautions need to be taken with regard to interfering with police signals or the security operations that occur before, during and after a game, leaving the studio team to concentrate on the job at hand.

From the point of view of integration and workflow, the key, beyond security and reliability, is the homogenisation of both control and communication across all areas, but also the fact that the simplicity of the system enables quick switching between points; be they the lights in the disabled toilets, providing journalists with up-to-date information and video in the conference room, or streaming live video pitch-side and to the stadium's enviable VIP rooms. RIEDEL's FC Union setup, in other words, is an example of how simple and reliable these systems can truly be, given the right combination of digital infrastructure and efficient engineering.

This time it's for Real!



RIEDEL's STX-200 professional Skype interface helps connect fans to Real Madrid

During a one-of-a-kind "digital sticker" initiative created to bring fans worldwide closer to their favorite team, Microsoft and Real Madrid used the RIEDEL Communications STX-200 professional Skype interface to facilitate a real-time Q&A between Real Madrid fans and players. Licensed by Microsoft, the STX-200 is a stand-alone, broadcast-grade solution that leverages Skype to bring live content from remote participants directly to the on-air production.

"The live Q&A session between Real Madrid fans and players during the 'Fan Sticker Album' event is a perfect example of using the power of Skype to create community," said Lars Höhmann, product manager MediorNet & Skype at RIEDEL Communications. "I think we will see many more unique uses of this amazing technology."

In contributing to "The Fan Sticker Album," thousands of participants from 118 countries — from Afghanistan to Zimbabwe — shared their passion for "the Whites" of Real Madrid through the medium of photography. Within this digital photo album created by Microsoft, each of thousands of "stickers" features a fan's photo, name, country, and length of time as a Real Madrid fan.

The 12 fans judged to have submitted the best images for this digital sticker album were given the chance to participate in a Q&A with the players during a ceremony held March 12 at Santiago Bernabéu Stadium in Madrid. Following the presentation of the album to the team, players including Sergio Ramos, Bale, Marcelo, and Chicharito took part in the Skype conversation. Fans made their Skype calls from their home countries of China, Mexico, Australia, the United States, the United Kingdom, Venezuela, Colombia, Portugal, and Spain.

Packaged with professional Microsoft Skype TX software, the RIEDEL STX-200 unit offers broadcast-quality HD-SDI and balanced XLR audio I/Os, along with a broad feature set that includes remote management and monitoring of Skype calls.

For the real time Q&A production that was streamed live, six STX-200's were connected to a WAN with their HD video outputs (audio embedded) then distributed via a MediorNet signal transport backbone. Communications, including beltpacks and numerous keypanels, were facilitated with an Artist digital matrix.

RIEDEL supports WACKEN Open Air

> **"The world rocks with Wacken, and Wacken rocks with RIEDEL"**
>
> *Holger Hübner*

Each summer in early August, tens of thousands of heavy metal fans descend upon the small town of Wacken in Schleswig-Holstein, Germany for Europe's largest heavy metal event, the Wacken Open Air. Transforming Wacken from small town to festival venue is an enormous undertaking that involves multiple fields for campers, nine stages, and the infrastructure required to handle all of the people. Along with that comes the responsibility of ensuring the safety of each and every guest. Since 2000, festival organizers have relied on RIEDEL communications solutions for a number of technical services including security cameras, radio communications, and signal transport.

Each of the nine stages has a large video wall in addition to five free-standing video walls throughout the grounds. Video from each stage is sent back to the main OB van via MediorNet so that any video can then be displayed on any screen as "info-tainment" for the guests; a typical example is a reminder to keep drinking water to avoid dehydration. Each stage also has a RIEDEL Artist panel and line level audio, enabling security to talk directly to each PA mixer to instruct the band to stop playing for an emergency announcement. One example is a weather warning asking guests to take cover from an approaching storm. Voice announcements can then be routed through the PA systems and any other information displayed on the screens.

In terms of security surveillance, 30 remotely controlled IP-based cameras are installed throughout the grounds. The data to and from these cameras is delivered to the Wacken Open Air Security Center through the RIEDEL MediorNet fiber backbone. In addition to the video operations, nearly 600 Tetra trunked radios were distributed to security staff and stewards to ensure clear communications throughout the festival grounds, including in the town of Wacken. The radios are GPS-enabled so that the user's location can be immediately determined in the event of a problem or emergency. The radios are directly interfaced with the Artist system to ensure comprehensive communications.

NBCUniversal takes delivery of RIEDEL's 4,000th Artist Intercom System

"The world rocks with Wacken, and Wacken rocks with RIEDEL," said Holger Hübner of the Wacken organizing committee. "The signal network backbone that RIEDEL has provided for the 25th-anniversary Wacken Open Air festival ensured a safe and unforgettable experience for 75,000 metalheads enjoying the show. We're well-satisfied with RIEDEL's state-of-the-art equipment and highly competent crew, and we look forward to rocking on together with RIEDEL into the future."

While in the process of rebuilding two studios in Universal City, California, NBCUniversal chose to entertain a bid from RIEDEL for new wired and wireless intercoms serving both control rooms and studios. The network selected Riedel's Artist digital matrix intercom, Acrobat digital wireless intercom, and Performer digital party line systems to provide complete intercom support for communications across these areas. The resulting 500 port installation includes multiple Artist 128 units — including the 4,000th unit ever deployed.

The Riedel Trunk Navigator intelligent trunking interface allows the RIEDEL systems to integrate smoothly with the legacy intercom system used in the rest of the NBCUniversal facility. The Artist system is also natively connected to the facility's PBX phone system over SIP, effectively making the existing analog phone lines obsolete.

"The really cool thing about this project was that the customer installed a cutting edge system without having to change the intercom system in the rest of the facility, while still keeping a high level of functionality between both systems" said Christopher Street, general manager North America for Riedel. "This project clearly shows how the customer can transition to another technology/supplier without the need for a one time facility overhaul, thus maximizing CAPEX dollars.

Once the option for Riedel was made, the delivery schedule was very aggressive, but Riedel delivered the system within 30 days of receiving the order. The 4,000th Artist unit was delivered with a commemorative golden frame.

IMPRINT

Published by RIEDEL Communications GmbH & Co. KG
Uellendahler Str. 353
42109 Wuppertal
Germany
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Rec4Box OB factory equips three compact, versatile OB units with RIEDEL

RIEDEL Gear brings additional flexibility to cost-effective and highly adaptable mobile production units

RIEDEL's Artist digital matrix intercom system and RockNet real-time audio network have been built into all three of the unique OB units completed by Montreal-based Rec4Box OB Factory. Equipped with state-of-the-art technology, these mobile units offer the broadcast market a flexible production system that scales cost-effectively to meet the needs of live event productions.

"In working with RIEDEL's Artist and RockNet systems, our customers all say they enjoy three things: the ease of use of both systems; their flexibility, which enables quick handling of various production needs and demands; and their outstanding audio quality," said Joel Fortin, senior vice president of operations at Rec4Box OB Factory. "All of these qualities are essential in a modern OB unit, and they are part of the reason that our OB units are gaining so much interest. The reliability of RIEDEL equipment and the powerful perks it provides in the mobile environment help to reduce the stress of fast-paced production projects."

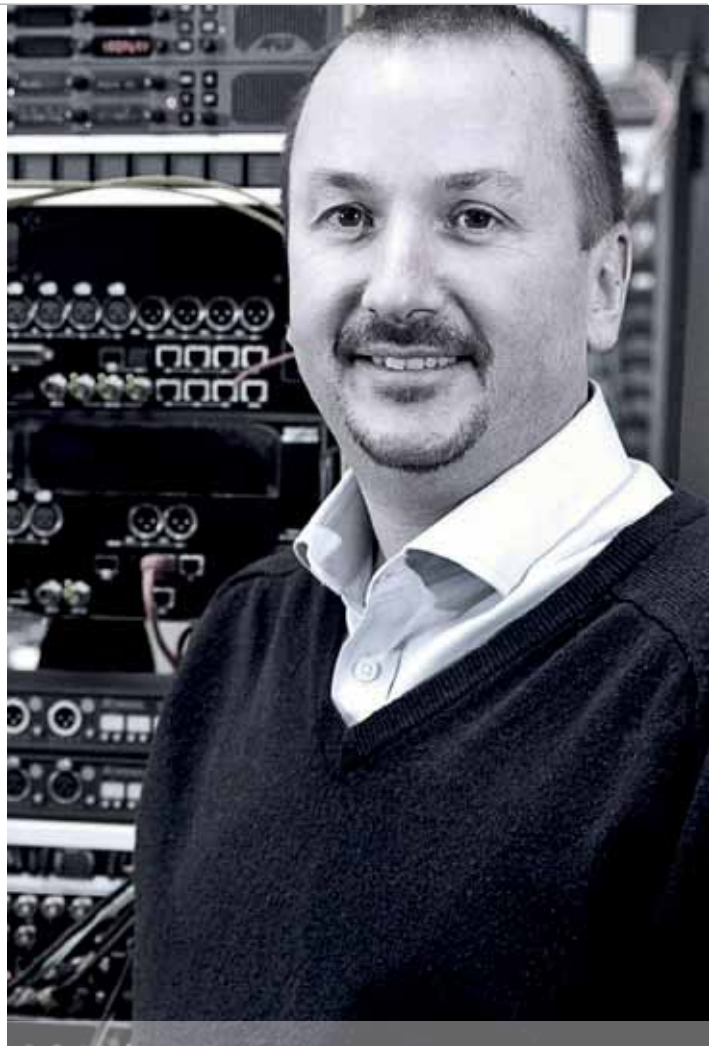
Rec4Box has developed a modern OB unit that exceeds the creative demands of production teams while addressing the realities of tighter budgets and production timelines. The unit was created to offer a compelling solution not only for broadcasters and the rental companies, but also for production houses, educational and training institutions, college and professional sports programs, reality TV productions, government institutions, entertainment productions, and any other users requiring daily use of a mobile production vehicle for a series or event.

Designed in collaboration with directors, producers, and technicians, Rec4Box OB units offer a transformative working environment with modular and highly adaptable details, workstation ergonomics that promote outstanding comfort, and trendy interior designs. The units' fiber optic connectivity allows users to deploy the trailer and prepare for a four- or five-camera production in less than two hours. They also minimize the complexity of wiring by letting crews mix all on-site communications and audio signals on one system. During a show, users can respond quickly to virtually any communications demand with the press of a button.

RIEDEL's Artist system is a powerful distributed matrix platform (masterless and nonblocking) for intercoms and the distribution of digital audio, analog audio, control data, and VoIP signals. The fiber-based network backbone provides a decentralized infrastructure for live audio and intercom applications, and this backbone pairs with intuitive setup and operation to facilitate fast, flexible configuration of the system with minimal cost and effort.

"Rec4Box has broken the mold with its clever OB unit design, and buzz surrounding the company's trucks is spreading across North America," said Christopher Street, general manager, North and Central America, at RIEDEL Communications. "Our Artist and RockNet solutions are ideal for many types of installations, including this one, and it's exciting to see our technology incorporated into units that make high quality and high performance available to a much broader range of users for a wide array of applications."

How would you explain RIEDEL to your grandma?



...a question for Jake Dodson

RIEDEL's director of product management

Jake: Imagine the most amazing show you have ever seen: full of drama, excitement and creativity, or your favourite tv show such as the news. RIEDEL makes products that enable such productions to be imagined helping the creative teams to communicate and run the production.

2. If you could describe the new RIEDEL solutions as people, how would you describe them?

Jake: The Smartpanel is like a post graduate student just starting on their career ladder. It has a solid foundation, is full of the latest youthful thinking and full of promise and personal growth potential. Tango is like a Masters student. Mature, full of capability but a little understated. You won't see it making a big song and dance about its capabilities but you know it will deliver when you need it. MicroN is like a Civil Engineer, helping build foundational bridges in video point-to-point but able to expand and grow its structure to suit its surroundings.

3. What is the main thing that gets you out of bed each morning?

Jake: Knowing that every day a new challenge or an interesting problem is waiting to be solved and that I am empowered to add to an exciting product future.

4. How would people communicate in a perfect world?

Jake: I see email as a low (although necessary) form of communication so, for me, perfection lies in human-to-human, face-to-face interactions wherever and whenever geography allows. These interactions are way more powerful when you can look someone in the eye and bounce ideas around dynamically.

> **"In the end, it's about creating something genuinely new, something that makes a real difference."**

5. What makes you happy about work on a Friday evening?

Jake: I always leave work feeling tired but with a sense that we moved forward. The to do list is never ending but when you feel you are progressing it is a very satisfying way to end the week.

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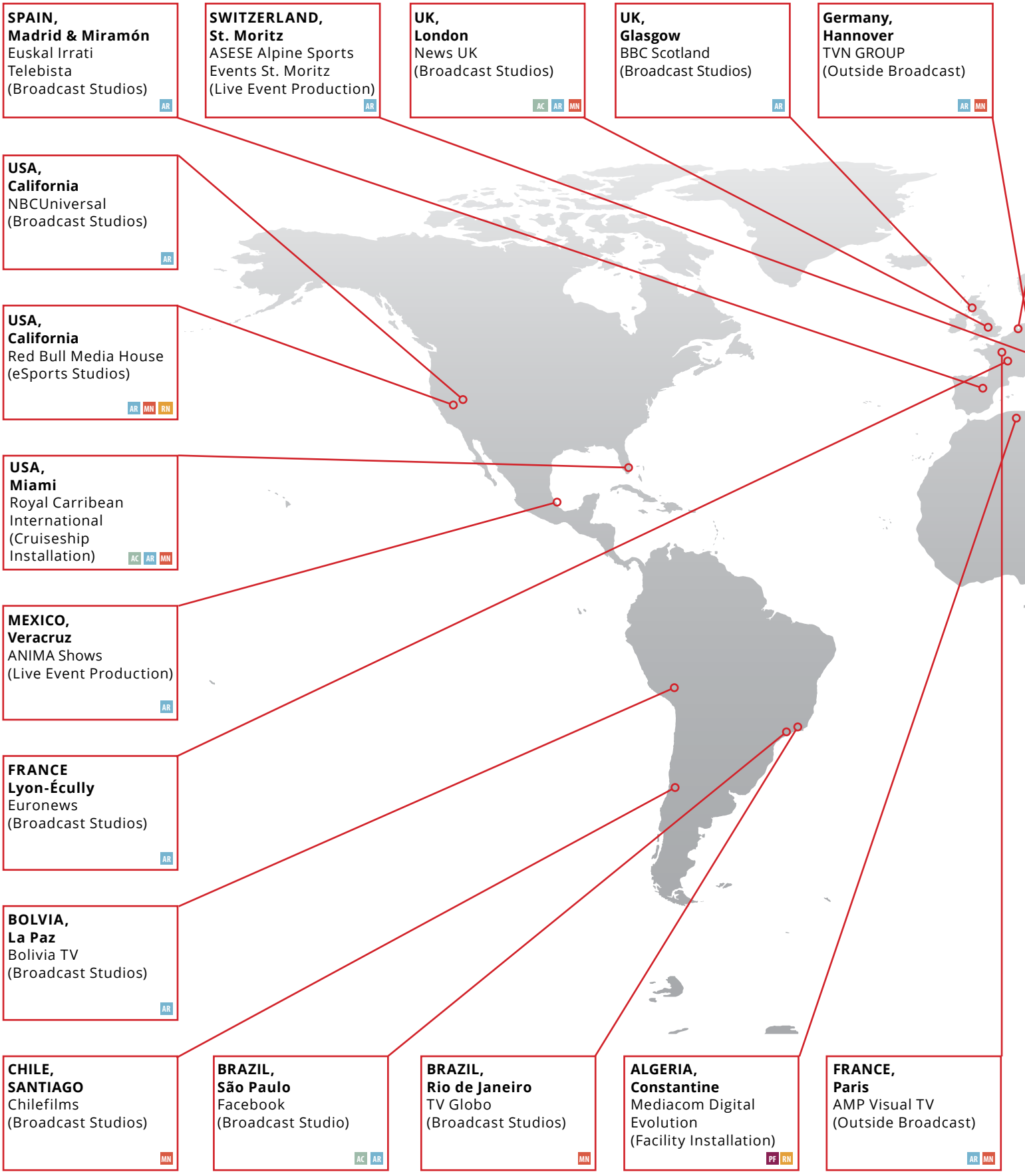

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Telebista
(Broadcast Studios)
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BBC Scotland
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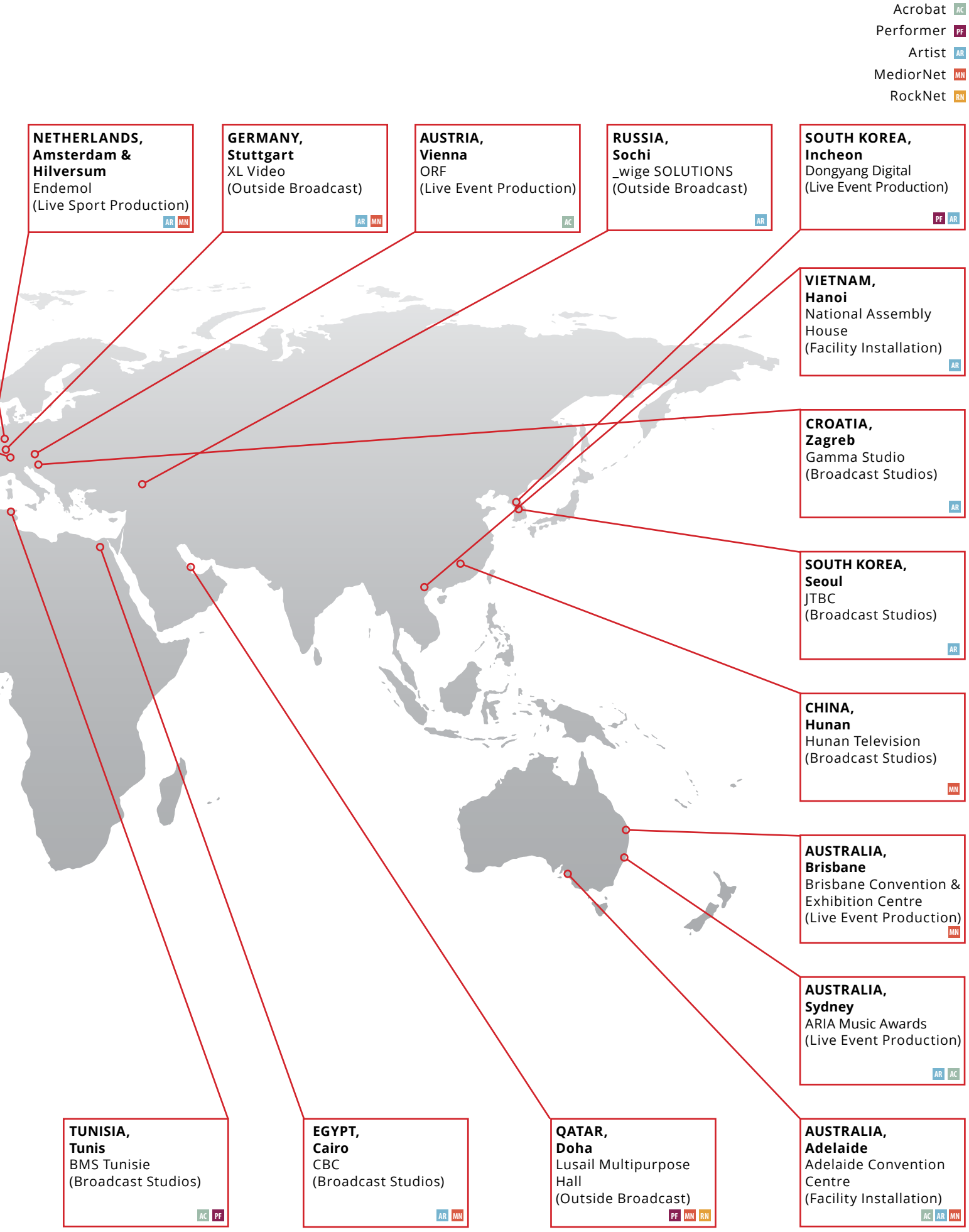
Acrobat AC
Performer PF
Artist AR
MediorNet MN
RockNet RN
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AR MN
GERMANY,
Stuttgart
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RUSSIA,
Sochi
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AR
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Incheon
Dongyang Digital
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BMS Tunisie
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Centre
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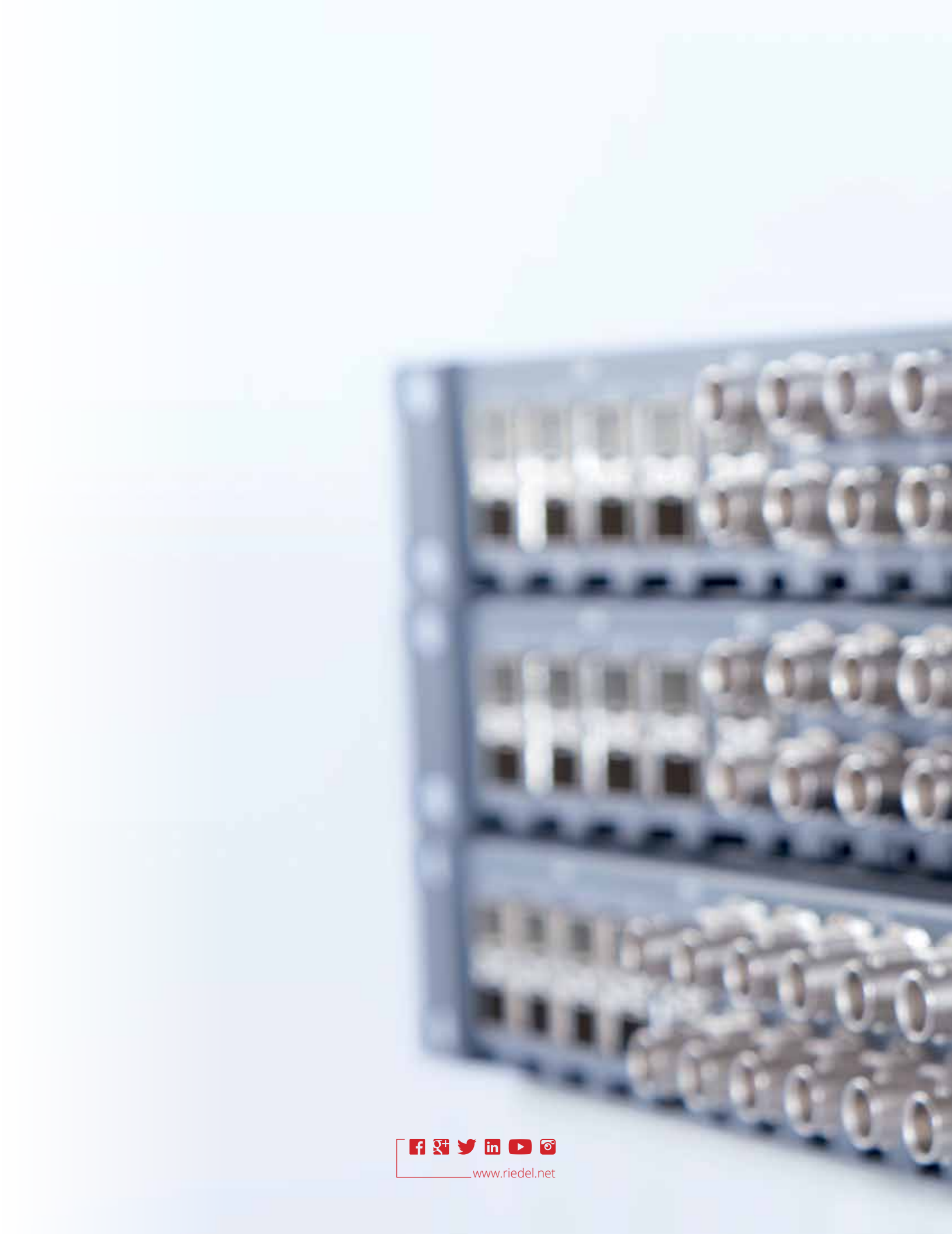

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