New OB Trailer

MEDIALAAN, Belgium

MEDIALAAN

“opticalCON MTP proved to be a great product and is easy to use so we dediced to install also fixed MTP cabling from outside our building to our indoor studios. Doing this we can easily connect the OB trailer with our production floors without having to use extra fibre cabling.”

Chris Verhoeven, Head of TV Production Facilities, MEDIALAAN

Customer	MEDIALAAN, Vilvoorde, Belgium, www.medialaan.be
Project	New OB Trailer
Neutrik components	opticalCON MTP 2x NKOX12SAA5-30 1x NKO12SAA0-250 1x NKOX12SAA0-400 with Schill PL600 integrated in flight case

Jeff Mace and Cameron Whitehorne, Metropolitan Opera

Starting Point

The plan was to build a small OB TRAILER where upto 6 cameras could be deployed in the field in the shortest time possible with the least human effort.

Challenge

Goal was to tow the trailer with a standard van (no special truck driving licence needed, absolute limit to maximum weight of the combination). MEDIALAAN decided to go for a „fibre only“ connection between the trailer and the set. As a lot of different signals (camera’s, video, audio, intercom, IT-network, …) had to pass to and from, Neutrik opticalCON MTP was chosen as interface. So only one single lightweight robust cable was needed.
The second challenge was the available building time. The order for the trailer was given in February 2016 and it went in production end of June 2016.

Customer benefit

Limited preparation time of a production and number of operational people involved. A very lightweight and robust single cable connection between trailer and set.

Met Facility Upgrade

Metropolitan Opera, New York

The Met ropolitan Opera

"We have hundreds of etherCON and many opticalCON connectors deployed that we use for patching multiple times a day. Whenever there is an issue, we know that we never have to worry about it being a Neutrik connector."

Cameron Whitehorne, Automation Control Supervisor, Metropolitan Opera

Customer	Metropolitan Opera, New York City, USA, www.metopera.org
Project	Facility upgrade from analog to digital control
Neutrik components	Neutrik etherCON and opticalCON QUAD

Jeff Mace and Cameron Whitehorne, Metropolitan Opera

Starting Point

The Metropolitan Opera House is presently undergoing an extensive facility upgrade to its various automation systems – making the transition from an analog to a digital control environment.

Challenge

All automation racks have rack mounted connector panels with at least sixteen Neutrik etherCON receptacles and the Woodward DSS-2 digital speed switches for any of the POE connectors. They also implement two Neutrik opticalCON QUAD chassis connectors for switch to switch communication. The mobile racks are really the workhorse of production automation and they are commonly moved all over the building and sometimes even get built into a production's scenery.

Customer benefit

With a project of this magnitude and complexity, customer support services are crucial. In this regard, C. Whitehorne, Automation Control Supervisor MET, gives Neutrik an enthusiastic 'thumbs up.' "Throughout the course of this project, we've been in regular contact with Neutrik USA and they have been very responsive and great to deal with. But the bottom line is that we simply haven't had any issues with the Neutrik products. The company builds bullet proof connectors."

Galvanic isolation

Seitz Instruments AG

© Seitz Instruments AG

“Neutrik’s robust fiber optic cables provide a galvanic isolation from the high voltage measuring system. Thus, interferences (EMC) are effectively prevented. “

Seitz Instruments AG

Customer	Seitz Instruments AG, Switzerland, www.seitz-instruments.ch
Project	OWTS® Oscillating Wave Test System
Neutrik components	opticalCON DUO


© Seitz Instruments AG

Starting Point

Seitz Instruments AG researches, engineers and manufactures high voltage testing and measuring systems. To connect the DAQ-Unit (HV dividing and analysis) with the control computer a fiber optic connection was needed.

Challenge

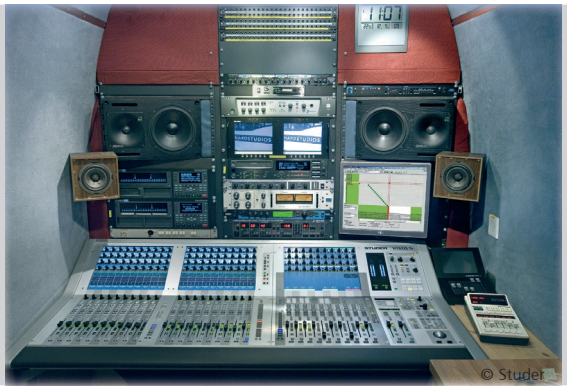
As the Seitz systems are in mobile use, quick set-up and dismantling as well as reliable and durable connections were the most important features of the sought after solution.

Customer benefit

Neutrik’s robust fiber cables with the spring loaded push-pull locking mechanism and the unique sealing cover were the solution of choice for Seitz. opticalCON further provides a galvanic isolation from the high voltage measuring system. Thus, interferences (EMC) are effectively prevented.

opitcalCON in mobile use

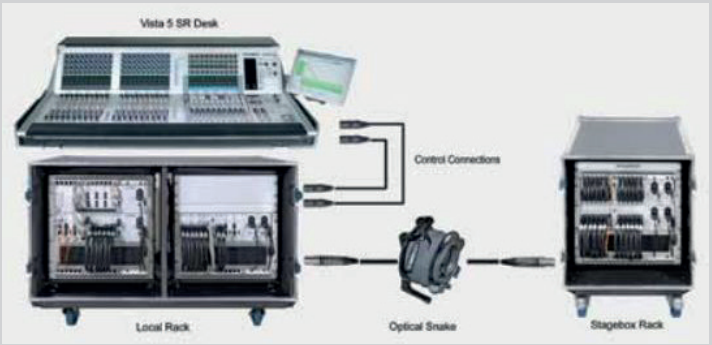
Studer Vista mixers



“The opticalCON system is very robust, offers lossless signal transmission as well as fast and effortless laying of the lightweight and thin cables.”

Soundcraft Studer Harman International Industries Ltd

Customer	Soundcraft Studer Harman International Industries Ltd, UK, www.studer.ch
Project	Studer Vista mixers
Neutrik components	opticalCON DUO



© Studer

Starting Point

Studer Vista digital mixers are often used at open-air festivals in OB trucks. The sound is transmitted from the stage to the mixer in the truck via multimode fiber cables. With fiber cables distances up to 400 m can be covered.

Challenge

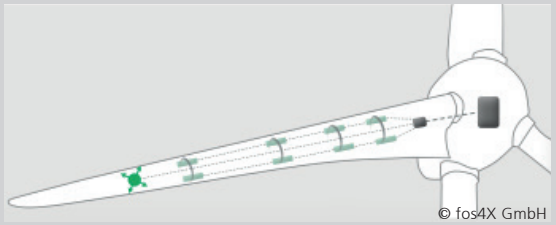
For outdoor applications a robust connection is essential. The connectors must be protected from dirt and a proper functioning must still be guaranteed after several thousand mating cycles.

Customer benefit

For years Studer sells opticalCON cables and connectors with their mixers. The opticalCON system is very robust, offers lossless signal transmission as well as fast and effortless laying of the lightweight and thin cables.

Monitoring lightweight structures

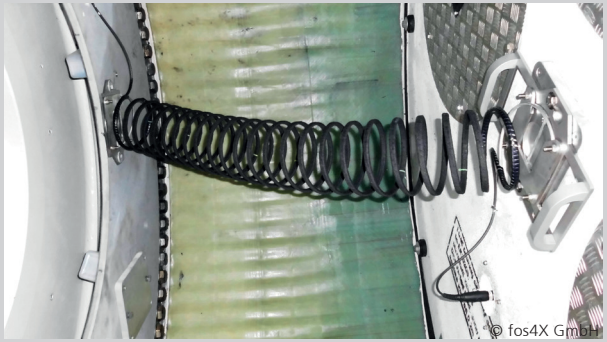
fos4X



"The very robust opticalCON QUAD cable offers us some advantages over less expensive solutions, especially with respect to HSE standards. Therefore we integrate the cable in our heavy duty blade hub connection."

Stefan Eichhorn, fos4X GmbH

Customer	fos4X GmbH, Munich, Germany www.fos4x.de
Project	Active load reduction at rotor blades of wind turbines
Neutrik components	opticalCON QUAD



Starting Point

The idea was to measure the wind load and bending at each blade of a wind mill. Resulting from the measurements the blade angle can be adjusted and thus the energy efficiency significantly increased. For this a robust and HSE conform fiber optic connection between rotor blade and hub was needed.

Challenge

The sought after connection has to last for 20 years and has to meet the requirements of wind turbine industry regarding mechanical robustness and easy implementation. Therefore only a few fiber optic connectors came into consideration and Neutrik's opticalCON system convinced by its performance, reliability and low maintenance.

Customer benefit

The connection will withstand all maintenance work, dust and oil spill.

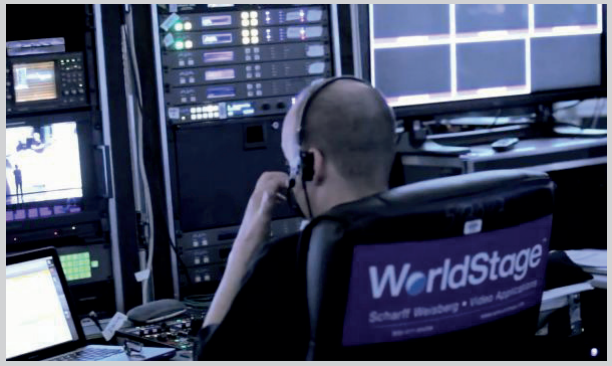
Fiber cabling for YouTube Brandcast

WorldStage, USA

"WorldStage has acquired over 100 reels of Neutrik opticalCON. Based on our experience with Neutrik opticalCON DUO and QUAD, we were confident the opticalCON MTP cable system would work well — and it has for the first shows we've used it on. As we head into the busy fall season, we expect Neutrik's opticalCON MTP to streamline our systems, since the cabling requirements will be reduced by 25 – 75 percent."

Barry Grossman, Chief Engineer, WorldStage

Customer	WorldStage, NY, USA, www.worldstage.com
Project	YouTube Brandcast
Neutrik components	opticalCON MTP



Starting Point

WorldStage had been contracted to design, provide, and operate the AV for YouTube's Brandcast upfront presentation for advertisers.

Challenge

For these types of projects, it is necessary to set up a "tech table" (a table for the programmer and designer to work from during rehearsals). It is not uncommon to require 6 – 12 strands of fiber for this position. By switching to Neutrik's opticalCON MTP, WorldStage only requires a single connection — not the current 3 to 12 connections typically used.

Customer benefit

Neutrik's opticalCON MTP facilitates greater cable distance and cleaner signal. Equally important, it provides more signals in smaller diameter cable. Whereas DVI copper spec cable supports HD video for about 16 feet, some hardware will extend that to between 164 and 196 feet. By contrast, optical connections can extend that distance to a range of anywhere from roughly half a mile upwards of 6 miles — depending upon the hardware and how everything is cabled. Similarly, data transport benefits from equally impressive numbers.

Mobile base-stations

Swiss Federal Railways

SBB CFF FFS

"Thanks to the opticalCON connection system, the mobile base-stations can be fast and reliably deployed on different operation sites throughout Switzerland."

Hanspeter Vetsch, Measurement and Special Products, Telecom SBB

Customer	Swiss Federal Railways (SBB), Telecom, Switzerland, www.sbb.ch
Product	Mobile base-stations
Neutrik components	> 1,1 km opticalCON QUAD X-TREME cable, opticalCON QUAD chassis connectors, opticalCON QUAD couplers

Starting Point

The GSM-R (railway) radio network is nowadays mission-critical for railway operation. The telecom department of Swiss Federal Railways operates two mobile base-stations that are deployed in the life network in case of an emergency situation or set up as stand-alone sites for network optimization field trials.

Challenge

Moved to the site of operation the mobile base-stations are connected as temporary nodes in the radio network via a fiber optic link. The cable and connections need to be robust, reliable, easy maintained and resistant to environmental conditions.

Customer benefit

Thanks to the opticalCON connection system, the mobile base-stations can be fast and reliably deployed on different mission sites throughout Switzerland and integrated in the life network.

Digital Operating Room

proVISION by Prodata Healthcare

“We’ve been using opticalCON since 2011 and haven’t had any broken cables or connectors.”

Ann De Pauw, Prodata Healthcare

Customer	Prodata Healthcare, Zaventem, Belgium, www.prodata-healthcare.be
Project	Digital ORs at AZ Sint Jan Brugge, ASZ Campus Aalst and AZ Oudenaarde
Neutrik components	opticalCON DUO: NO2-4FDW-A NKO2M-A-0-7-H NKO2M-H1-A-0-7-H

Starting Point

Building a reliable hygienic state of the art infrastructure for the digital operating room of tomorrow: The proVISION solution (based upon the Barco – Nexxis products) allows surgeons to connect any modality on any connection point in the OR and visualise these images without distortion or delay on any screen within the OR. The system also allows to make pictures or full HD movies which are stored as DICOM objects and MPEG4 files linked to the Hospital Information System.

Challenge

The solution is based on a 10Gb Fiber network, the connections in the OR had to be hygienic, easy and robust. After numerous tests with customers, the opticalCON connectivity was withheld as optimal solution. The small connector and the toughness of the cable are a big plus.

Customer benefit

Ease of use and robustness. Before the optical connectivity, the typical connectivity were video cables (DVI – S-video – Composite and RJ-45) This type of connectivity was never intended to be plugged and unplugged a lot, with connector failure as a consequence. We’ve been using opticalCON since 2011 and haven’t had any broken cables or connectors.

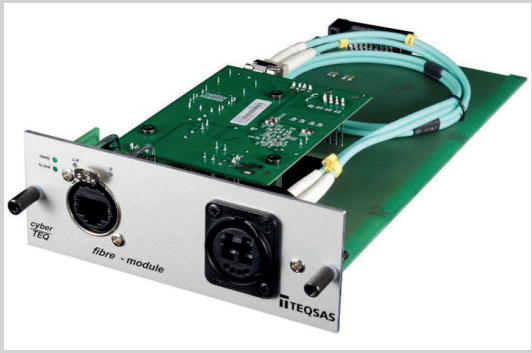
Cabling system

TEQSAS GmbH, Germany

“Neutrik products are robust and reliable. They offer all you need in a harsh and demanding environment.”

Rainer Laschet, Teqsas

Manufacturer	TEQSAS GmbH, Hürth, Germany, www.teqsas.de
Product	cyberTEQ
Neutrik components	opticalCON, etherCON, powerCON, speakON, HDMI, XLR



Starting Point

Development of a cabling system based on Ethernet for all kinds of signals (Dante®, Ether-Sound®, DMX512, Intercom, serial data, HDMI, Midi,…) with a fiber optic link to transmit data over great distances.

Challenge

The challenge was to pack electronics, module slots and all connectors into a 19“ 1RU housing and to ensure still a rugged device for mobile applications.

Customer benefit

Neutrik connectors offer all you need in a harsh and demanding environment. When it comes to fiber optics, this is even more important: The automatic sealing cover of the opticalCON DUO chassis connector protects the fibers against dust and dirt and its LC compatibility make an integration into existing infrastructure very easy.

Fiber optic for new broadcast studio

Shanghai Media & Entertainment Technology Group, China

“After attending the opticalCON road show, Mr. Shen from SMG was very interested and convinced by Neutriks opticalCON products.“

Ryan Lim, Sales Manager, Neutrik Hong Kong Ltd.

Customer	Shanghai Media & Entertainment Technology Group, BesTV Building, Shanghai, P.R.China, www.smeg-td.com
Project	New Studio for Shanghai Meteorological Bureau
Neutrik components	> 110 m opticalCON QUAD cable, opticalCON QUAD chassis connectors, opticalCON QUAD couplers, opticalCON powerMONITORs

Starting Point

The SMG (Shanghai Media & Entertainment Technology Group) participated in a tender announce by the Shanghai Meteorological Bureau to build a new studio.

Challenge

In this bidding project, other local S.I. companies tendered fiber optic solutions of Neutrik competitors. As Neutrik’s opticalCoN system includes the powerMONITOR measurement device, the customer dicided in favor of the SMG solution.

Customer benefit

The most important benefit for the customer is that the Neutrik opticalCON powerMONITOR provides clear status information, delivers early warning for potential problems, and assists in maintenance scheduling. Further the end customer can clean the Neutrik fiber optic cables by himself.

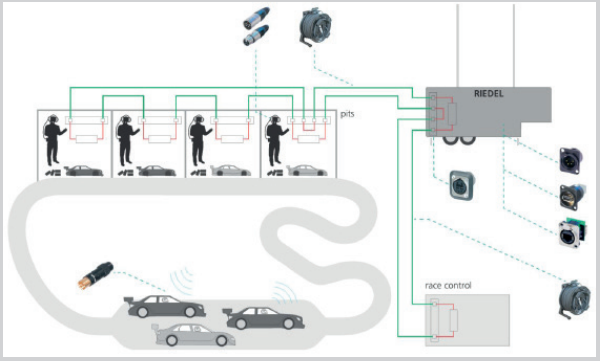
Mobile communication system

Riedel Communications Gmbh & Co KG, Germany

“Thanks to fiber cabling, the installation efforts are reduced to a minimum. And also the transport proves to be much easier due to the lower weight and lower mass.”

Christian Michaelis, Riedel Communications GmbH & Co KG
www.riedel.net

Manufacturer	Riedel Communications GmbH & Co KG, Wuppertal, Germany
Product / Application	DTM (German Touring Car Masters)
Neutrik components	1,800 m opticalCON DUO cable



Starting Point

Riedel Communications takes care of the communication between team bosses, drivers, engineers and the race management, thus ensuring the smooth running of the race.

Challenge

The start of the tenth season of the DTM was the baptism of fire of Riedel’s new 18-meter truck. Heart of the new mobile communication system is a Riedel Artist 128 mainframe. 30 Riedel RiFaces link the radio links to the digital intercom matrix. They have a transmission power of up to 30x25 watts. For the wiring, a total of 1,800 meters fiber optic cables are used.

Customer benefit

The first races went smoothly. Thanks to fiber cabling, the installation efforts are reduced to a minimum. And also the transport proves to be much easier due to the lower weight and lower mass.