### **PRODUCTS . RENTAL . SYSTEMS**

# sonovts

State-of-the-art displays & software From single items to large scale projects From flight pack to master control

# HIGH END BROADCASTING

### **PRODUCTS . RENTAL . SYSTEMS**

Once the final whistle has been blown and the producer draws the event to a close, there should only be one last comment: "The production was a complete success!"

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# COMPANY

### Sophisticated results delivered with conviction

Founded in 1985, SONOVTS Media, a German company, has gathered more than 30 years of experience in all areas of the broadcasting market. SONOVTS Media offers products, rental and systems. Our products includes our HD2LINE & HDQLINE self-manufactured broadcast displays.

We are headquartered in Munich, Germany, with an office in Cologne that include production facilities with more than 60 employees, ensuring we have the resources to meet all of our clients' needs and projects. With our international offices in the USA and Austria, we have become a recognised leader in the global broadcast industry.

Our departments include in-house product manufacturing and project manufacturing

with expertise in electronics, mechanics, carpentry and cable technology. These departments work together to successfully build and realize our customers' projects to the highest possible standards.

### "Our company stands for sustainability... it is the guiding principle in everything we do."

Broadcast, video, audio, intercom and IT

SONOVTS Media provides you with complete application-specific packages. Whether it's designing and integrating OB trucks, broadcast studios, live events, fixed installations or mobile appli- cations, we will deliver your project without having to make compromises.

In partnership with SONOVTS Media it is always possible to envision the future!

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# ENVISION THE FUTURE

Not only do we deliver your projects on time, we deliver an all-in-one package. We possess the know-how gained from enhancing workflows around the world and can therefore guarantee that your project will be completed to the highest standards.

As one of the leading companies in the broadcast and media industry, SONOVTS Media offers innovative audio, video and IT solutions. We run strategic business divisions that include products, rental, systems – yielding an all-in-one package that no other competitor can deliver to you.

SONOVTS Media has the requisite know-how by staying up to date with the latest trends and technologies. We constantly monitor developments in the technology market and analyze the various workflows all over the world. We then work in close collaboration with the customer to create and finalize projects to meet the customer's exact vision and desire.





#### PROJECT MANAGEMENT

WORKFLOW DESIGN

RISK MANAGEMENT

SYSTEM ARCHITECTURE

REQUIREMENTS GATHERING AND ANALYZING

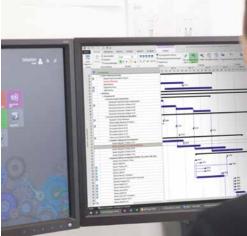
#### COMMISSIONING

DESIGN AND PLANNING

SYSTEM DESIGN

PROCESS ANALYSIS







#### MAINTENANCE

#### SYSTEM MIGRATION

#### **IT-CONSOLIDATION**

#### CONTROLLING

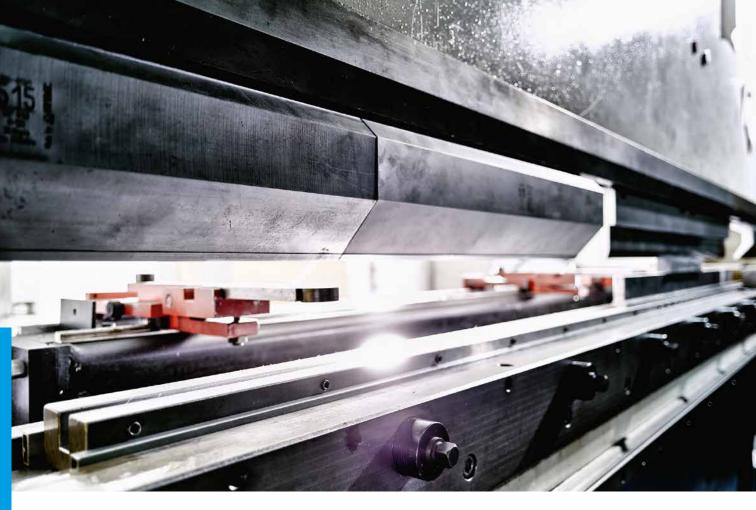


## Built from scratch into a turnkey solution

The skills and knowledge we have accumulated in the course of 30-plus years of experience have enabled us to provide our customers with professional advice and services. With our TV production trained rental staff and our highly skilled system design engineers, we achieve results that bring great satisfaction to our customers.

Our qualified team of engineers and technicians will take care of designing and constructing all the components, as a result of which they will deliver to you a comprehensive, tailor-made solution for your project. THE FUTUR

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### Quality that you can count on

Once the design and construction phases of all the components of your new system have been completed, the assembly and installation can begin. Whether at the studio or in the OB truck, our technicians will be at your side in order to respond to all your requests and concerns until the very last stage of delivery. If you still have any requests for changes or new ideas at the end of a project, we will make sure they are accommodated to your complete satisfaction.



#### Customized solutions

From generic mechanics to devising complex studios, transmission equipment, OB trucks and custom-made studio outfitting, all the work we do is undertaken in-house. With our spacious manufacturing facility and our project-related production, electronics, carpentry and mechanical departments, we respond promptly to our customers' requests.

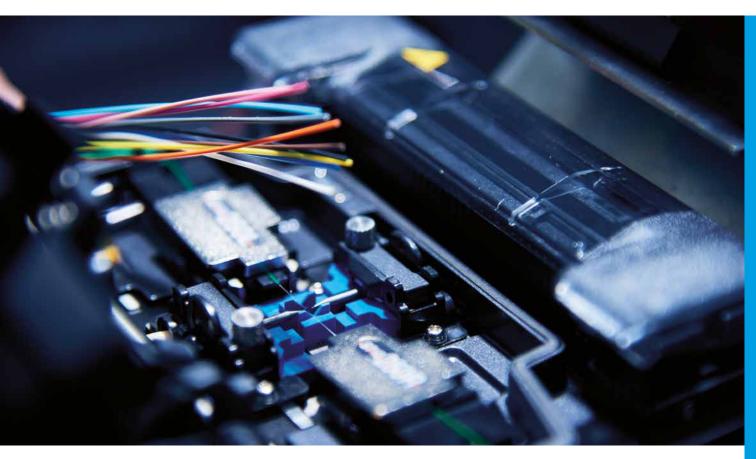




# Wire & cable solutions

We know the cabling types, hardware and specifications that will enable you to realize your connections in a cost-effective and accurate manner, no matter if it's a temporary or permanent installation. Whether you simply need audio or video copper cabling, gigabit ethernet, fiber optics, or all of the above, we have the expertise and the right mix of equipment to get your connection up and running quickly.





#### Certified wiring

We offer customer-oriented implementation, high production accuracy wiring, soldering, splicing, measurement and documentation. Our range of services covers fiber optics, audio-, video- and network connectors as well as Triax- and hybrid fiber camera connectors. Everything is executed by a certified team of electricians and engineers.



#### Systems meets rental

We support our systems division by bridging delivery times and training engineers by using our large scale rental equipment pool. We also make use of special solutions from systems in our rental division.

## We are there for you every step of the way

Right from the beginning, we will consult you about the proper selection of your means of production and the configuration of complex systems. No matter what size, we can offer all-in-one system rentals as well as supply multiple venues at large global sports events with temporary turnkey solutions for TV production.



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# SONOVTS Media HD2LINE and HDQLINE series of broadcast displays combine the best of 2 worlds:

- the robust workhorse HD2LINE with modular structure, analog and digital inputs, selected
  Full HD LC panels, proven digital processing
- the future-proof HDQLINE, based on a platform concept, all digital inputs, upgradable to new standards like Video-over-IP. Heart of the platform is a powerful high-precision processing engine which together with high quality UHD/HD LC panels and clever designed software fulfils the requirements professionals need

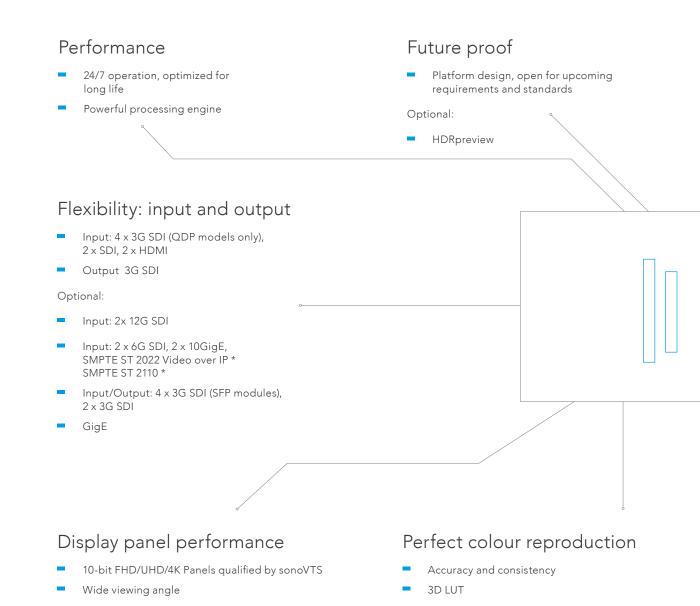


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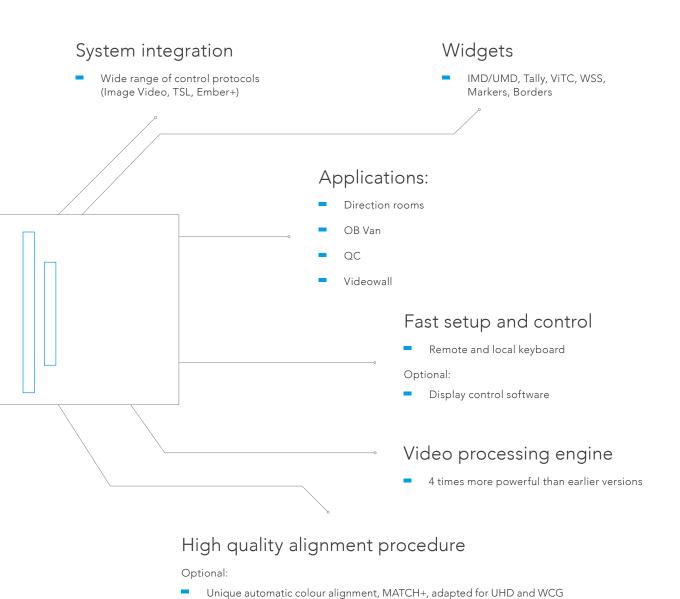
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HDQLINE represents the latest generation of Multistandard Broadcast Displays, based on a new custom-developed video and audio processing platform utilizing state-of-the-art silicon in combination with the most precise LC display technology available today. At the heart of the platform is a powerful, high-precision video processing engine – 4 times more powerful than earlier versions – controlled by a fast embedded processor and purpose-designed software.



# MAIN FEATURES







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### ServusTV (red bull media house) / Austria

The studio display installation solutions made exclusively by SONOVTS Media include a 3x3 movable HDQLINE video wall located behind the newscaster, a 1x3 wall for live video conferen- ces, and a 1x2 wall for additional news correspondents.



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# SONOVTS Media contracted for the Nilesat central monitoring center CMC in Egypt

Egyptian satellite company Nilesat selected SONOVTS Media GmbH to deliver their Central Monitoring Center CMC.

The Nilesat Central Monitoring Center consists of delivery and integration of the display subsystem, incorporating multiple SONOVTS Media HDQLINE displays. These displays provide colour calibration, a no-fan design to limit noise impact, central video wall control, and dynamic and static IMD (Internal Monitor Display) via Internet connectivity. In addition to the displays SONOVTS Media provided the video wall, which was designed and built by SONOVTS Media. The receiving subsystem is capable of decoding and carrying TV services in SD/HD/4K as well as radio services. The multiviewer subsystem is capable of processing







PRODUCTS

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inputs from an IP source, SDI source and HDMI source based on various broadcast specs. Meanwhile, the measurement and analysis sub-system is based on monitoring downlink transport streams. Rounding out the new Nilesat Central Monitoring Center, the furniture was also designed and manufactured by SONOVTS Media. The experience SONOVTS Media GmbH offers as a system integrator and a manufacturer of high quality displays and furniture ensured that SONOVTS Media GmbH was the right company for the delivery and integration of this significant new monitoring facility.

"We are very pleased to have worked on this major international project with Nilesat" *Marc Doderer, Managing Director* 



PRODUCTS



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HD2LINE stands for the proven and well-known generation of Full HD Broadcast Displays, utilizing high quality video and audio processing hardware combined with Broadcast grade LC display technology. HD2LINE delivers the performance and features broadcast professionals' request: robustness, stability, colour accuracy, precise imaging, and picture quality.







## RENTAL

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### 1st choice for broadcast equipment and on-site service

Our rentals are precisely tailored and configured to meet our customers' specific production requirements. The equipment is thoroughly designed and tested to be sent off for final approval.

### "Our team is at your service and happy to assist you with your requests at any time."

Temporary on-site installation expertise is included together with commissioning, training and skilled field service personnel for setup and operation.

Our collection of rental equipment is based on cutting-edge technology that contains everything you might need for your TV production or live event. RENTA

REFERENCES / G20 SUMMIT HAMBURG

### G20 summit Hamburg

On the 23rd floor of the Scandic Hamburg Emporio – specifically rented by host broadcaster ARD for coverage of the 2017 G20 Hamburg summit – SONOVTS Media GmbH installed two studio sets with corresponding production and equipment rooms for the world feed pro-duction, as well as national reporting facilities for ARD and NDR.



#### RENTA

#### REFERENCES / FOOTBALL WORLD CUP RUSSIA 2018

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RENTA

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### Football World Cup Russia 2018

For this event we worked with the host broadcaster to integrate Equipment Room Containers (ERCs) that were located at each of the 12 venues and connected to the International Broadcast Centre. The priority with the ERCs was on delivering the utmost production flexibility, and as a result they were each able to accommodate simultaneous output in multiple formats.

# SYSTEMS

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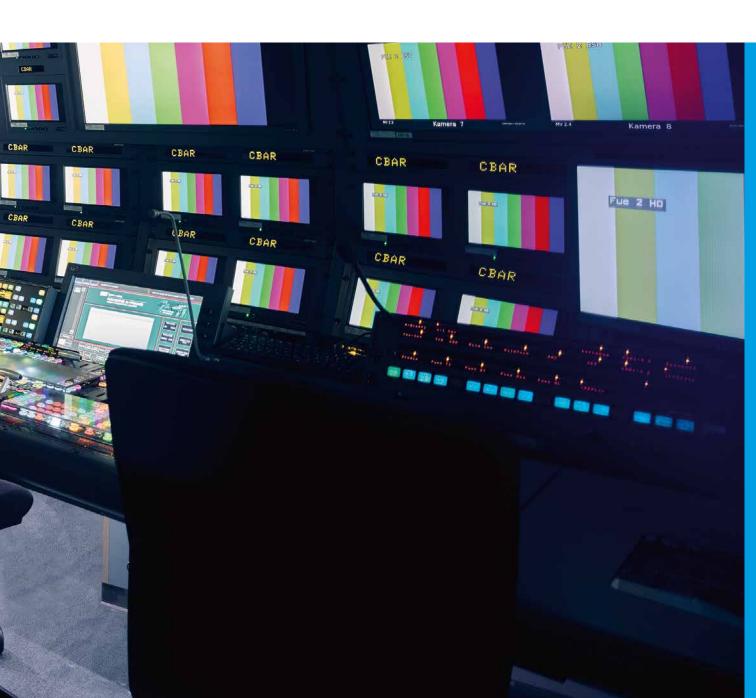
### Projects are clearly outlined & well-structured

Our projects are delivered to customers operating digital production studios, master control rooms, mobile production facilities, broadcasting studios, OB trucks, DSNG vehicles and mobile editing facilities. The skills and knowledge we have accumulated in the course of many years of experience have enabled us to provide professional advice and services no matter what the complexity of the systems and equipment involved.

"To deliver successful results every single time we follow one precise approach with all of our system integration projects."

Our main objective is to achieve outstanding results for our customers. Our qualified team of engineers and technicians will take care of designing, constructing and delivering a comprehensive tailor-made solution for your project.





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We completed the integration of a comprehensive IP-based infrastructure at Plazamedia's new broadcasting centre situated in Ismaning, near Munich. The new centre – whose capabilities will include a scalable network architecture with a total data throughput of up to 12.8 terabits per second – is scheduled for completion in time for the start of the 2018-19 Bundesliga season.











SYSTEMS

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### SONOVTS Media supplies NDR in Kiel with a Three-Camera HDTV-Broadcasting Vehicle with uplink in July 2017

The vehicle's base, a Mercedes Sprinter, was equipped with additional air suspension and axis in order to obtain licensing with a permissible total weight of 7.5 tons.

A special box body with outside measurements of 4200 x 2250 x 2320 mm (length x width x height) was installed on the chassis. In total, the vehicle is 7 meters long and 3.5 meters high.

A 1.8 meter KU band uplink antenna – as well as the corresponding HPAs, a SAT-antenna (85cm), several antennas for e.g. microport reception, DAB+, LTE etc. – were mounted onto the rear of the accessible roof. A complete redundant transmission system is included with automatic changeover. Also on the roof is a cooler for a 15kVA Fischer-Panda in-built emergency power unit, which provides for independent operation of the entire broadcast technology if required. The primary power supply is provided by Cekon-32A, an additional underfloor, threephase generator that is connected to the power take-off (PTO) of the vehicle's engine.

Air conditioning consists of two Scroll compressor units with 4.2 kW each and three heat exchanger units of 4.5 kW, respectively. 4.8 kW is provided for frame and room cooling.

All technical devices inside the vehicle were ergonomically arranged and designed to meet all regulations, enabling 1-3 people to operate the equipment in comfort and safety. In addition, editors or speakers can use the rotating passenger seat. SONOVTS Media attaches the greatest value to vehicle interior noise control, and as a result the noise interference level is less than GK40.

Comprehensive monitoring is provided by eight SONOVTS Media displays.



#### SYSTEMS



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### SONOVTS Media completes new 24-Camera UHD IP-Broadcasting Vehicle for TPC

SONOVTS Media recently undertook the design and build of a new 24-camera UHD broadcasting vehicle for Switzerland-based tpc.

In line with its wishes to utilise the SMPTE 2110 IP-standard, tpc decided to use Imagine Communications' IP-based distribution core, processing and multiviewer technology. The new truck was reportedly the first in the industry to fully support uncompressed HD and UHD signals over IP.

All signal processing in the truck is accomplis-hed in uncompressed UHD by network proces-sors that have been adapted to the IP-back-bone with dual 100 Gb/s Ethernet connectivity. SONOVTS Media designed and installed a total of 24 UHD workstations for the UHD trailer, with a total length of 16.5 meters, width of 4.5 meters, and an overall weight of 40 tons when fully assembled with four extensions.

Marc Doderer. Managing Director of SONOVTS Media GmbH said: "Following a call for tenders, we demonstrated our abilities with a technically advanced and economically sound proposal. Upon winning the tender, we executed complete project planning, system design, body and vehicle construction, interior design and construction, and the installation of electronics and air-conditioning as well as system integration."

### We are your trusted broadcast service partner

SONOVTS Media offers first-class support that you can rely on, no matter what the project. We are always ready and able to deliver the support that your business requires for its continued growth and success.

As a full service provider, we have more than 30 years of technical and operational experience in the international broadcast environment. Throughout the years, SONOVTS Media has supported countless high-profile broadcast customers, giving us ample opportunity to demonstrate and further enhance our competences.

"Our aim as the service & support department is to provide excellent support and guidance for new and existing customers alike. " *Uwe Lohage, Head of Service & Support*  Our service desk is supported by our first and second level support. In order to ensure high quality service and reliability we control all of our service processes.

Our response time commitments are defined by our service level agreements, which can be tailored to specific customer requirements. Our first line of engineers are there to assist you in German or English, including during critical production events, 24 hours per day, every day of the year.

SONOVTS Media is therefore the "single point of con-tact" for your service projects and your trusted service partner for maximizing system uptime and reducing total cost of ownership (TCO).









**PRODUCTS . RENTAL . SYSTEMS** 

As another rewarding project ends, we are ready to start the next! It is our duty to give you with the tools to cope with whatever demands the future might bring.

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