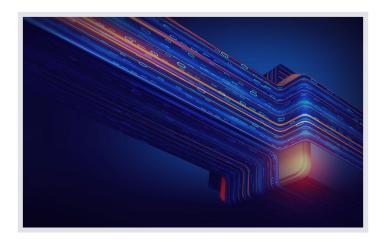


## JST MultiStreaming<sup>®</sup>: This KVM solution allows flexibility without limits

Outstanding performance: Switch any source to any desired screen. Just one mouse and keyboard for all applications. Intuitive operation with the myGUI<sup>®</sup> interface. And all this in a cost-saving way and with a keen eye on safety. Get to know the comfortable control room operation with JST MultiStreaming<sup>®</sup> here!

## **REQUEST A QUOTE**



**In the video:** JST control room specialist Dirk Lüders gets to the point. Learn how control room operations can be optimized.

## **PLAY NOW**

# Unbeatable arguments make JST MultiStreaming<sup>®</sup> the perfect tool

- Flexible: Each individual display becomes a multiscreen with SplitView
- Calculable: No complex special hardware necessary
- Limitless: Remote access to target locations worldwide
- Secure: Network based redundancy warranted
- Comfortable: Control of all systems with the myGUI® user interface
- Functional: Streaming of all information over the network
- Compatible: Hybrid solution with MultiConsoling<sup>®</sup> possible
- Clearly arranged: Only one keyboard and mouse per workstation



# Smart control station operation – highly available and secure

Efficient and reliable, secure and convenient – this is how KVM technology works today! With the JST MultiStreaming<sup>®</sup> succeeds the change to a new level of control room operation.

Special bonus of this high-performance solution: JST MultiStreaming<sup>®</sup> transforms the control station into **a highly available real-time control center** which can be flexibly scaled with regard to the issue of security. The options range from pure software systems, hybrid concepts, and hardware-based arrangements that meet even the **highest requirements for critical infrastructures (Cl)**.

Flexible connection of any source to any screen with just one operating unit. Intuitive control with the Graphical User Interface myGUI<sup>®</sup>. The high level of functionality makes JST MultiStreaming<sup>®</sup> a trend-setting control room component.

The system provides impressive options, especially in the "remote access" discipline. Smooth, stable, with great transmission quality – **access to worldwide target locations** is established at lightning speed, even when security-related aspects are taken into account.





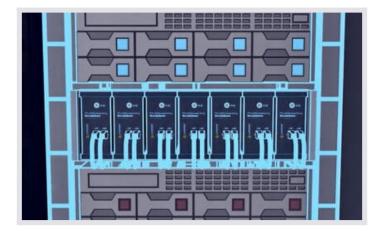
JST MultiStreaming<sup>®</sup> offers new perspectives in display usage: One of the most striking features is the **SplitView function**. A single screen serves as a playback device for various application combinations. Whether the entire screen content or a critical part of it – the user decides with which mix of sources he wants to turn the monitor into a multi-display.

**Further plus points**: When setting up the software-based streaming solution, time and costs are significantly minimized compared to conventional KVM structures. Future system expansions can be easily added – just as with a hybrid system in combination with JST MultiConsoling®<sup>®</sup>.

With JST MultiStreaming<sup>®</sup>, there are no limits to the flexible interconnection of sources in the control room. Even newcomers can easily master the operation.

< class="img-cnt-dark\_header title" > 01 Selection: Hardware solution, software-based variant or hybrid alternative





### test

Access and operate every source in the control room? JST MultiStreaming<sup>®</sup> has three solution options ready for this. Depending on your priorities, the system can optimize the work in the control room both on a software basis and as a hardware version. Even the combination with existing MultiConsoling<sup>®</sup> systems is possible.

< class="img-cnt-dark\_header title" > 02 SplitView: This way each single display becomes a flexible multiscreen



#### test

Gone are the days of rigid specifications based on fixed 16:9 formats. You determine the image section, size and positioning when displaying your applications. With JST MultiStreaming<sup>®</sup> you perfect the rendering on your displays and combine several sources on one screen thanks to the unique SplitView function.

< class="img-cnt-dark\_header title" > 03 Dynamic split control opens the gate to one new performance world

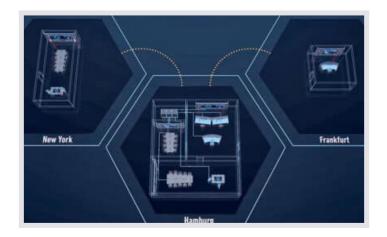




### test

Combine relevant systems independently in a clear presentation. Then operate the sources directly in the user interface! Then operate the sources directly in the user interface! With this decisive performance advantage, Dynamic SplitControl turns every single monitor at the operator workstation into an individual instrument of control room operation.

< class="img-cnt-dark\_header title" > 04 Limitless remote to the world: fast, secure and constantly stable

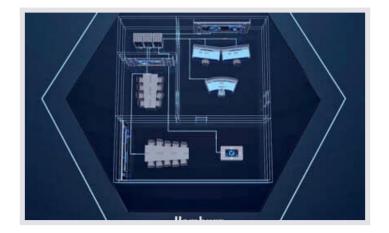


#### test

Sensationally fast remote access – regardless of spatial distances. JST MultiStreaming<sup>®</sup> proves to be unbeatable in this discipline. But it is not only the exceptional speed that makes the remote aspect so impressive: Stable and at the same time " smooth" transmissions are among the convincing features.

< class="img-cnt-dark\_header title" > 05 Flexible scalability: The network architecture grows with your needs





### test

"Standstill" – this word does not exist in modern control rooms. Tasks and requirements grow continuously. To take into account this digital expansion, we have designed the JST MultiStreaming<sup>®</sup> System in such a way that expansions are possible at any time – perfectly uncomplicated, even from an economic point of view.

< class="img-cnt-dark\_header title" > 06 AlarmLight, text ticker and source activation – this is how alarm detection works today



test

\*\*\* your individual text ticker \*\*\* current & up to date \*\*\* important info \*\*\*

Detect alarms faster and shorten response times. JST MultiStreaming<sup>®</sup> not only controls warnings via the AlarmLight, but also switches on alarm sources at the workstation or large screen wall. Security is also provided by individual information via the text ticker – a message line that is impossible to miss on the monitors.



## Compact and clear as a download

Do you have questions about safety, flexibility, cost efficiency and use options? Then take advantage of our factsheet about JST MultiStreaming<sup>®</sup>!

• Factsheet about JST MultiStreaming<sup>®</sup>

We will gladly answer your questions about JST MultiStreaming<sup>®</sup> and MultiConsoling<sup>®</sup>!

## A secure foundation for the tasks of the future

Clever software solutions from the JST developer forge create new perspectives for the operator's job. 100 percent compatibility! This applies in combination with the MultiConsoling<sup>®</sup> concept both to the <u>PixelDetection<sup>®</sup></u> monitoring software and to an individually configurable dashboard with JST <u>CockpitView<sup>®</sup></u>. Perfect tools in times of Big Data!





## Remote access with JST MultiStreaming<sup>®</sup>: effortless and convenient!

Fast, fluid, secure, with excellent transmission quality and no noticeable delays – in the discipline of "remote access", JST MultiStreaming<sup>®</sup> shines as an unbeatable frontrunner. Regardless of whether you are accessing the control center from your home office or connecting to other sites. Would you like to see for yourself the impressive performance of the remote solution via JST MultiStreaming<sup>®</sup>? Our expert Dirk Lüders will show you how effortlessly this can be done.

## • 01 - Just sign up and go

Remote contact from the home office to the control center or other selected locations is child's play: In addition to the JST MultiStreaming<sup>®</sup> solution, you simply establish a secure connection, for example via VPN, and you are online.

## • 02 - Increased risk? Not at all!

The term "receiving software" in combination with remote access immediately sets alarm bells ringing in many IT departments. Not without reason! Software can violate a company's security standards and expose sensitive information, VPN connections and much more to a risk that can hardly be assessed. JST MultiStreaming<sup>®</sup> lowers the often-cited dangers at this point: Even from remote locations, system dial-in is possible via a standard browser. Software installation on the client PC is not required.

## • 03 - "Thumbs up" for security

When dialing into the control center systems from the home office, users want the greatest possible convenience. Nevertheless, access must also withstand risk analyses. The security concept must not be pushed into the background. Logging on to myGUI<sup>®</sup>, the user interface for JST MultiStreaming<sup>®</sup>, meets both requirements: secure dial-in through two-factor authentication on the one hand, and easy handling and perfect clarity thanks to an intuitive user interface on the other.

### • 04 - Flexible: with the tablet also access in the field

Mobile real-time monitoring! JST MultiStreaming<sup>®</sup> does not necessarily require the PC in the home office to dial in to the control center systems. Access via myGUI<sup>®</sup> can also be displayed on a tablet. You decide when and where you need access to your applications.



We will gladly answer your questions about JST MultiStreaming<sup>®</sup> and MultiConsoling<sup>®</sup>!

# JST MultiStreaming<sup>®</sup>

All sources of the control station can be conveniently connected via the network. The advantages of the software-based control option are obvious: economical and clearly, functional and flexible, future-proof and efficient. Innovative USPs: the SplitView and Dynamic SplitControl functions.

1

**JST MultiStreaming**<sup>®</sup> **consoles at the workstations:** Target sources are switched on at lightning speed and can be operated directly.

2

**Network switch:** It takes over the connecting role: The switch connects workstations and DisplayWall with the relocated source PCs.

3

**Video wall with JST MultiStreaming**<sup>®</sup> **consoles:** The IP streams are sent directly over the network to the JST MultiStreaming<sup>®</sup> consoles.

4

**Source PCs send KVM signals:** You have the choice – transmission via hardware grabber or via the JST MultiStreaming<sup>®</sup> software.

5

**Remote access:** From the home office or on the road – secure dial-in enables control and also direct operation of the systems.

6

**Networking of worldwide locations:** Remote branches are bundled in a central control station. Georedundancy creates security.



# **MultiConsoling**<sup>®</sup>

Hundreds of monitoring centers have relied on the superior performance of MultiConsoling<sup>®</sup> control room operation for years. No additional software on your source computers! Maximum security thanks to well thought-out hardware components. A real-time control center – highly available and network-independent.

1

MultiConsoling<sup>®</sup> consoles at the workstation: The selected target sources are switched directly on the workstation monitor in a flash and are immediately available for operation.

2

**Control hub MultiCenter:** A classic KVM matrix offers flexible options here. Proprietary signals serve as the basis for interconnection with the MultiCenter in the MultiConsoling<sup>®</sup> network.

3

**Video wall with MultiConsoles:** Sources are switched to the large-screen displays without delay and without compression; as BigPicture even across several displays (in 16:9 ratio).

4

Signal transmission via hardware: The MultiConsoling<sup>®</sup> Grabbers handle the transfer of the keyboard-videomouse signals to the MultiCenter, the heart of the hardware-based system.

## The hybrid solution

The best of both worlds: Do you want to add the benefits of JST MultiStreaming<sup>®</sup> to your MultiConsoling<sup>®</sup> system? Or do you generally favor hardware solutions for your control room? No problem! In combination with the JST MultiStreaming<sup>®</sup> grabbers, mixed operation can be realized with ease.

1

**MultiConsoling**<sup>®</sup> **consoles at the workstation:** The selected target sources are switched directly on the workstation monitor in a flash and are immediately available for operation.

2



**Control hub MultiCenter:** KVM matrix offers flexibility. Proprietary signals are the basis for interconnection with the MultiCenter.

3

**Video wall with JST MultiStreaming**<sup>®</sup> **consoles:** Signals are received from the consoles via the IP network and automatically detected.

4

**Signal transmission via hardware:** The MultiConsoling<sup>®</sup> Grabbers take over the transfer of the KVM signals to the MultiCenter.

5

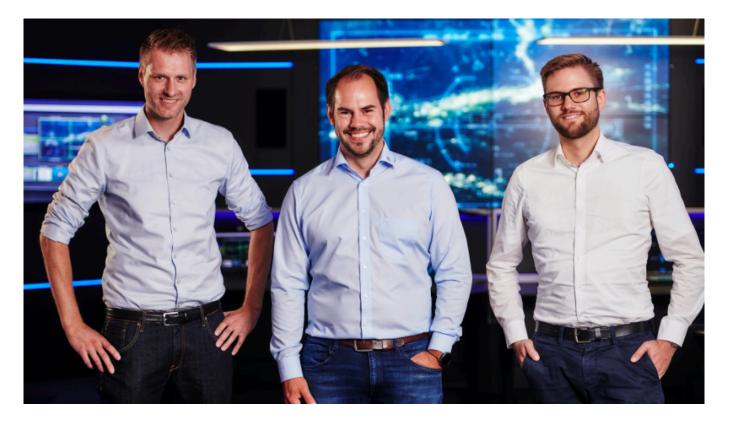
**Signal converter:** The KVM signals are transferred and converted from the MultiConsoling<sup>®</sup> system directly into the JST MultiStreaming<sup>®</sup> system.

6

**Software or grabber for choice:** KVM signals are transmitted from source PCs alternatively with softwareor hardware-based solution.

# Would you like to learn more about JST MultiStreaming<sup>®</sup>?





# I would like a callback for a non-binding consultation from the control room specialists at JST!

## 0800 / 777 8 666

Schedule a telephone consultation appointment. The consultation is **free of charge** and without obligation.

# I would like to visit the Europe-wide unique control room simulator!

## **SCHEDULING A "TEST DRIVE"**

Visiting the control room simulator is **free of charge.** We ask for registration and reservation of dates.





I would like to receive "The Great Praxis Book of Control Rooms" from JST!

## **REQUEST FREE OF CHARGE**

The praxis book is free of **charge** for JST customers.

# Sophisticated hardware components as a foundation for JST MultiStreaming<sup>®</sup>

"A small piece of hardware that brings great freedom" – that's how the first users of the JST MultiStreaming<sup>®</sup> system put it. In fact, only a minimum of components is required to benefit fully from the advantages of this innovative operating solution for modern control stations. You have the choice: Do you use the JST MultiStreaming<sup>®</sup> software? Or do you opt for the hardware-based option? A look at JST's 19-inch installation cabinets and CaseMounts shows which technical elements are used, what possibilities they offer you and your team. Learn why JST MultiStreaming<sup>®</sup> outshines all other control room operation concepts.



# Intuitive user interface – comfort and safety with the <u>myGUI<sup>®</sup> controller</u>

Clearly structured and intuitively understandable: the myGUI<sup>®</sup> user interface (GUI: Graphical User Interface) in the 3D layout of your control room has distinguished itself in practical tests for years. With one click, the operator controls workstations and large-screen technology as well as cameras, meeting rooms and building technology from any location.

The JST development team combines this effortless control of all systems with reliable security standards for the highly sensitive sources in the control room environment – with the myGUI<sup>®</sup> controller, specially designed for the myGUI<sup>®</sup> database. You can easily implement strategic rights and role management using this solution. You decide who has access to the existing data and to what extent.





## **<u>Grabber and network switch</u>** take over the connecting role – also remotely

You want to access local sources, but also information from worldwide locations? With GrabberIP, spatial distances are no longer a criterion. The JST MultiStreaming<sup>®</sup> Grabbers allow linking all desired systems via the network. They forward signals to a network switch, which acts as a coupling element and outputs the data streams according to the user's requirements.

Proprietary signals are no longer required with the use of JST MultiStreaming<sup>®</sup>. They are replaced by TCP/IP data traffic. The communication protocols reliably handle the switching and transport of data packets.

**An added bonus:** Remote access via JST MultiStreaming<sup>®</sup> is lightning fast and of the highest quality.

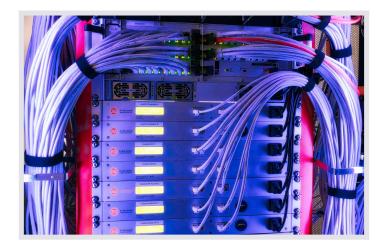




## Streaming concept provides the direct link to the world of VMs

Immediate switching between virtuality and reality. JST GrabberVM<sup>®</sup> technology, in combination with JST MultiStreaming<sup>®</sup>, enables the perfect integration of virtual systems. While one monitor is occupied with the applications of a conventional PC, another receives the signals of the virtual machine.

The streaming software allows direct access to the VM server sources via the JST GrabberVM<sup>®</sup>. The operator switches between the individual applications without noticeable differences. The advantages of this comfortable use of the Virtual Machines are obvious: more efficient deployment of the hardware with a quantitative reduction of the required components, but also reduced maintenance and energy costs with high availability.



We will gladly answer your questions about JST MultiStreaming<sup>®</sup> and MultiConsoling<sup>®</sup>!





# Image: Constrained and the constrained and

JST MultiStreaming®

KVM IP Streaming zur Optimierung des Leitstands





# No space for errors and incorrect entries: Convenient operating options offer seamless security in control room operation

Every single workstation in the control room is enabled to monitor and control any desired system – independent of software and productive networks via the JST MultiStreaming<sup>®</sup> Grabbers. Outstanding performance and consistent security go hand in hand. Ease of use also plays a decisive role in modern control rooms. The more intuitive and effortless the application, the lower the error rate. Mistakes and inadvertent incorrect entries are eliminated a priori. In order to strictly follow this guideline and to significantly optimize the handling for the operator, JST offers constructive solutions that complement the JST MultiStreaming<sup>®</sup> concept and increase efficiency.

## <u>01</u>

## myGUI<sup>®</sup> gives safety to the operator

A user interface that displays consoles and the large screen wall of the control room as a clear 3D image. This is the basis for myGUI<sup>®</sup> (GUI: Graphical User Interface). In many years of practical tests, with the feedback of hundreds of operators, we were able to develop a component which, thanks to intuitive handling, provides security even in stressful situations and ensures sovereign operation.





# <u>02</u>

# Lightning fast control with the <u>JST CommandPad®</u>

Time-consuming searching was yesterday! With the JST CommandPad<sup>®</sup>, the operator has the myGUI<sup>®</sup> and thus the entire control room permanently in view. The user panel, which has been specially optimized for 24/7 operation, enables lightning-fast reactions. There is no need for inconvenient switching of single systems. Thanks to predefined myActions, a tap of the finger is all it takes to gain immediate control.



## <u>03</u>

## **<u>CommandButton Box:</u>** The push of a button is all it takes



Acknowledge the alarm! Light on! Lock door! You decide which action is to be carried out quickly and without time-consuming input. The CommandButton Box provides buttons integrated into the console interface that make even complex scenarios available at the touch of a button. The various buttons are assigned individually and provide safety even in critical situations.



## <u>04</u>

# <u>JST TacticTable<sup>®</sup></u> – the interactive situation table

This smart solution puts interaction at the center of the control room.

Full integration with the JST MultiStreaming<sup>®</sup> operating system provides access to all sources and processes in the control room. Information is shared and freely positioned in any size. The JST TacticTable<sup>®</sup> warrants safe handling through the intuitive myGUI<sup>®</sup> user interface.





We will gladly answer your questions about JST MultiStreaming<sup>®</sup> and MultiConsoling<sup>®</sup>!

# Chosen by leading companies and institutions





# What clients say about their experience with JST – Jungmann Systemtechnik®





"Colleagues are enthusiastic by the progress we've made here."

Plant engineer // Colleagues from engineering

**TO THE PROJECT** 



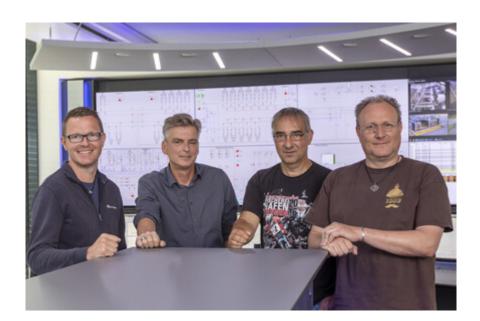


## VOLKSWAGEN SACHSEN

"We have achieved significant improvements in terms of work quality – this is also confirmed by the feedback from colleagues."

Technical IT project manager // Subdivision manager material control center

## **TO THE PROJECT**







"We have set up highly available technology here. That is of great importance to us."

Project Manager // Team





"We now flexibly switch on the systems we want to see depending on the situation – with just one mouse and one keyboard. Three screens at the workstation and the large-screen technology provide a perfect overview."

Head of Technical Systems CÜ Charité









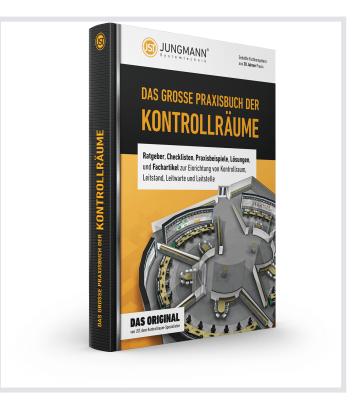
"Great products, great service and at every point of our cooperation we met a very friendly team from JST."

Managing Director

**TO THE PROJECT** 

# THE GREAT PRACTICAL BOOK OF CONTROL ROOMS





**Guidebooks, checklists, practical examples, solutions** and **technical articles** for the installation of control rooms, control stations and control centers

## **REQUEST FREE OF CHARGE**

The great practical book of control rooms is free of charge for JST customers and interested parties.

## Experience more at a planning workshop in the control room simulator

**Having visions of the future is good. Experiencing is better!** Visit the control room simulator, unique in Europe, where state-of-the-art technology and the latest ergonomic know-how are combined. The control room of the future. **The special feature:** Here you can touch everything and try it out for yourself.

## **MAKE AN APPOINTMENT**

Whether virtual or live on site – the workshop in the control room simulator is **free of charge**. **We kindly ask for prior registration.** 



• Watch video