

Barco TruePix

**The best way to
predict the future
is to create it**



Install, Maintain, and Manage

protect your investment
and ensure rock-solid
performance.

With the introduction of the TruePix platform, Barco now has the ultimate solution for direct-view LED in control rooms. LED video wall technology has made a giant leap forward in terms of image quality and viewer ergonomics. But choosing the right technology for your video wall is one thing; installing it, keeping it operational and making sure it offers the best viewing performance throughout its lifetime is another.

In control rooms, it's important to prevent equipment failures and reduce video wall maintenance interventions as much as possible. Control centers for critical applications, such as energy & utility monitoring, network operations, traffic monitoring, command and control or any other business-critical application, need to be able to provide continuous service. **Downtime needs to be limited, which is why your video wall technology needs to be easy to install, maintain and manage.**





Truly seamless installation

Over 80% of LED installations globally are impacted by damages.

With TruePix, a worry-free lifetime already starts during installation. This is a critical moment, because it will determine the visual performance of the video wall for many years. Installing an LED video wall takes quite some skills. The LED modules need to be perfectly aligned to avoid gaps or deviations in the

Z-axis of the tiles. Although an LED video wall can be made fully seamless, damaging the pixels at the edge of the LED tile while performing the placement is always a risk.

Installing an LED video wall is a challenging job. The LED modules can be easily damaged during

installation, but also the installation time is often unpredictable, because the video wall commonly needs some tweaking afterwards. Over 80% of LED installations globally are impacted by pixel damage. This can be visually disturbing, plus it could reduce the life or performance of the individual LEDs.

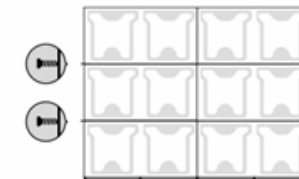
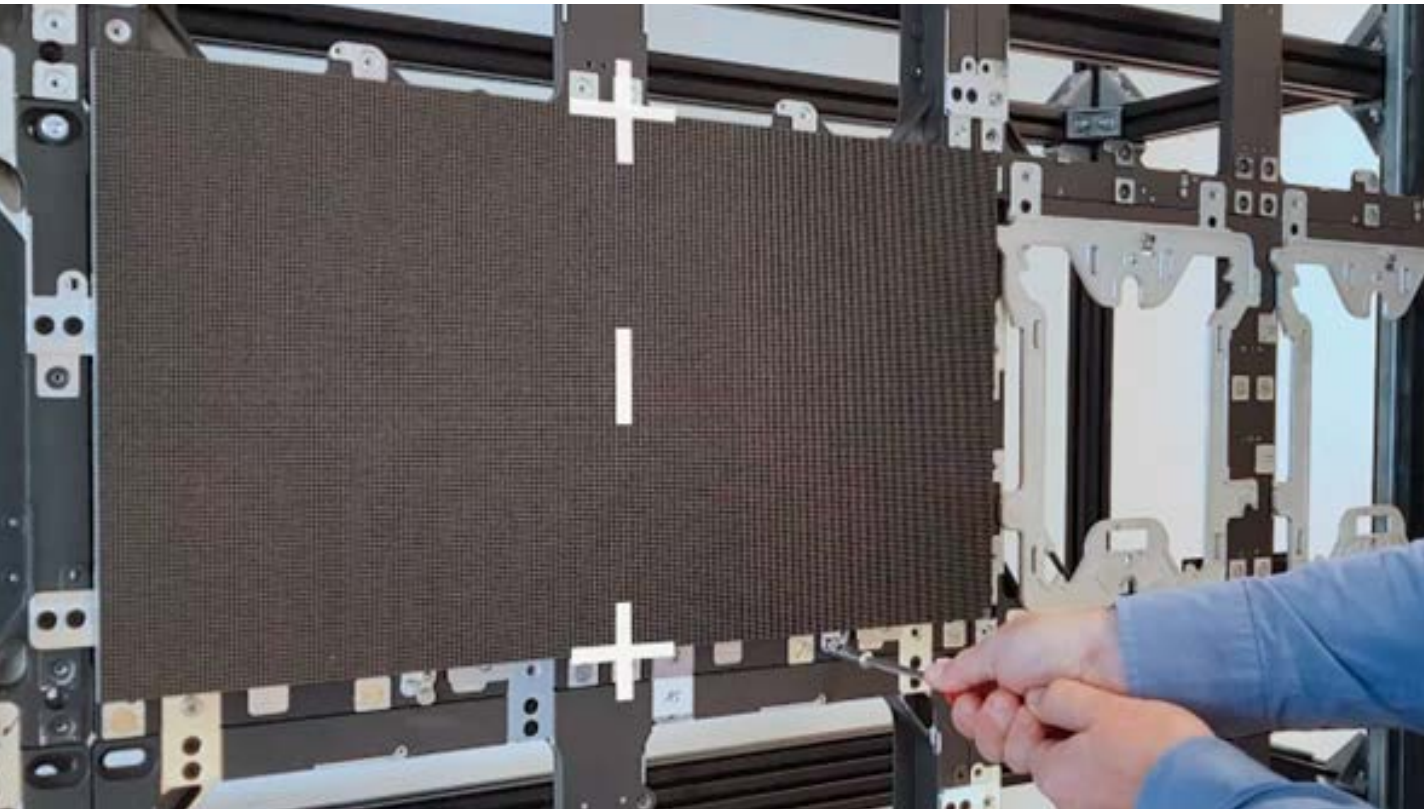
Smart engineering has made the installation of a TruePix video wall much easier, fully predictable and risk-free. **This reduces the downtime of the video wall and makes sure less lengthy interventions are needed in the future.**

Auto-balancing mechanics

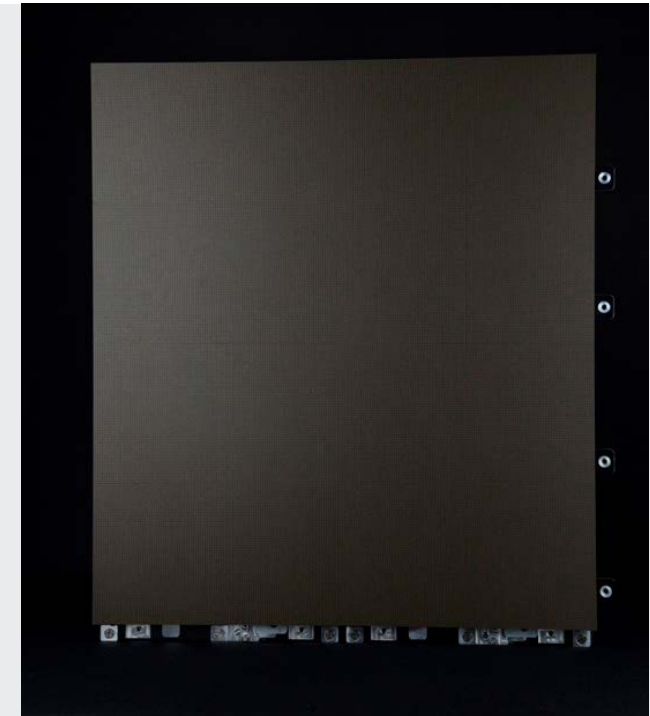
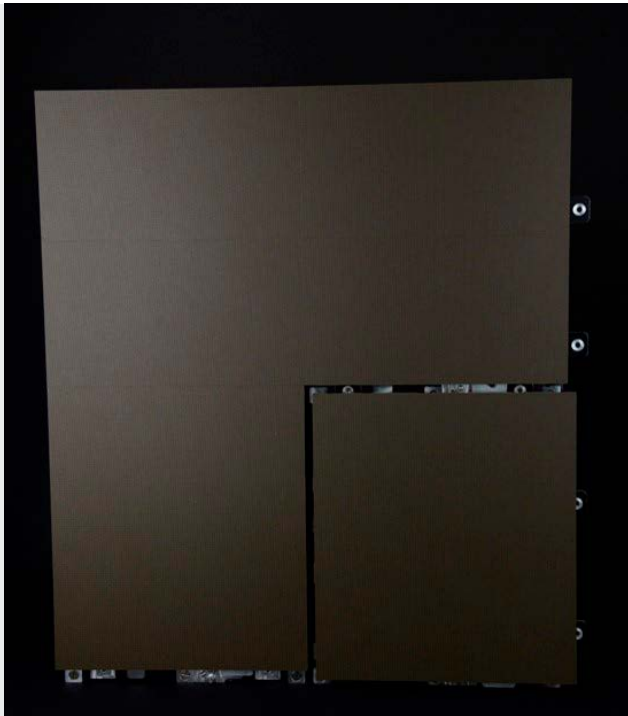
Site conditions are never perfect. Walls and floors are never perfectly flat. If a narrow pixel pitch LED display is installed in these conditions, the tile frames may be subject to mechanical stress, resulting in visible seams and difficulties during maintenance. Barco TruePix there-

fore uses a unique auto-balancing system that relies on the force of gravity and the principle of communicating vessels to make sure the LED wall is perfectly level and completely frictionless. This eliminates mechanical stress on the LED frame.

The mechanical structure will automatically align, absorb imperfections of the underlying surface and ensure a predictable installation process.



Guided module placement



Barco's Video wall Manager - free guided workflow for **wall setup & intuitive cable guidance**

Even when the video wall frame is perfectly installed, inserting narrow pixel pitch modules into the frame can be challenging. Pixels are so close to the edge that the slightest bump or rub against a neighboring module can damage the LEDs.

Barco's TruePix takes the risk out of the installation process, thanks to a unique mechanical concept.

During the installation, the LED module is connected to the frame, leaving a large enough gap on every side

of the module. In a next step, by turning a lock, the module will be pushed in place, resulting in a perfect module-to-module alignment. **This method makes sure that no LED damages occur, because the individual LEDs never**

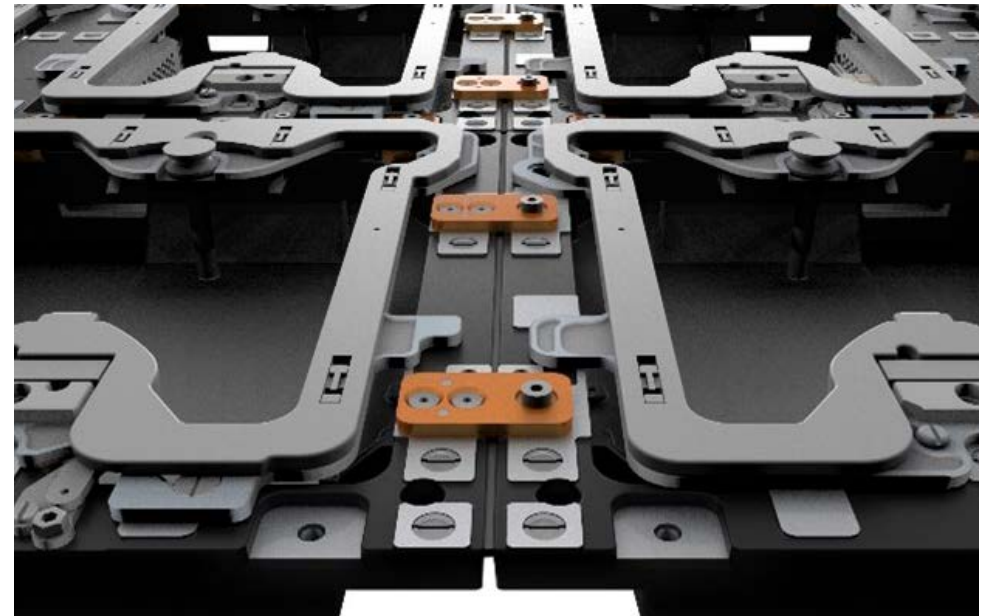
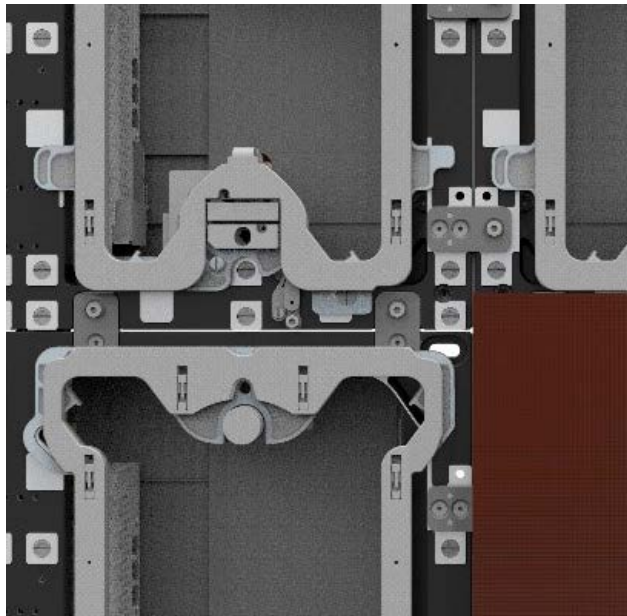
risk bumping into each other. For the finest pixel pitches, this procedure is **camera-supported**.

Truly seamless and flat

TruePix LED tiles are manufactured in a fully automated way. **This results in a controlled tolerance stack which ensures that the wall is 100% seamless and uniformed.** During the LED manufacturing process, each individual LED

is evaluated and grouped according to color wavelength and brightness intensity. Barco stores sufficient batch-compatible spare parts to ensure that the LED modules can be replaced with components of the same production batch. In

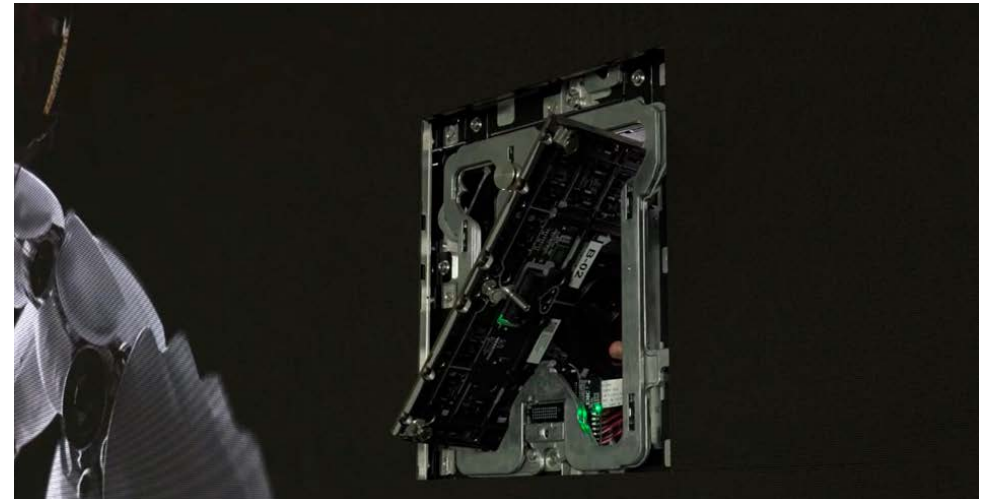
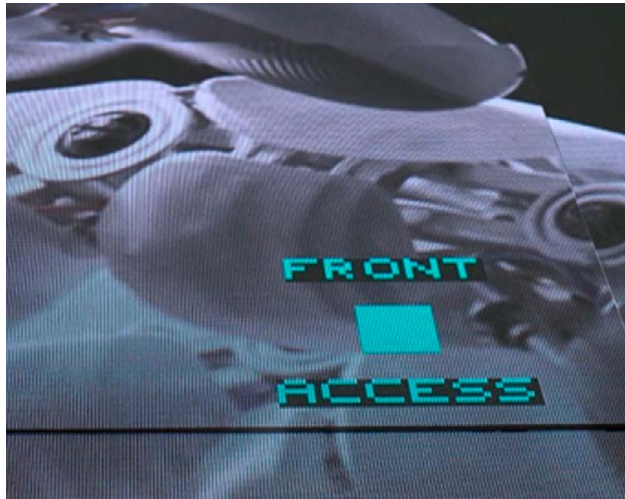
addition, there is no need to label tiles or modules to indicate which tile goes where in the video wall. **All modules and tiles have the exact same dimensions, leading to consistent and guaranteed performance.**



Time-saving maintenance

Although service may be needed to keep your LED video wall in the best shape, it should not lead to downtime. TruePix has a number of smart innovations that make servicing easy and fast, and therefore **limiting downtime to a minimum.**

Full back and front serviceability



Efficient maintenance starts with easy access to your LED modules. Barco TruePix is completely serviceable from the front and the back. Each individual component can be accessed both from the front and from the back. Rear access can be essential for 24/7 operations, as any intervention can be done behind the video wall

thus avoiding any personnel or equipment in front of the video wall. Any personnel or equipment will compromise the critical operations of the control room. For example, a tile can be removed from the rear of the video wall while it is operational thus avoiding any operational disruptions.

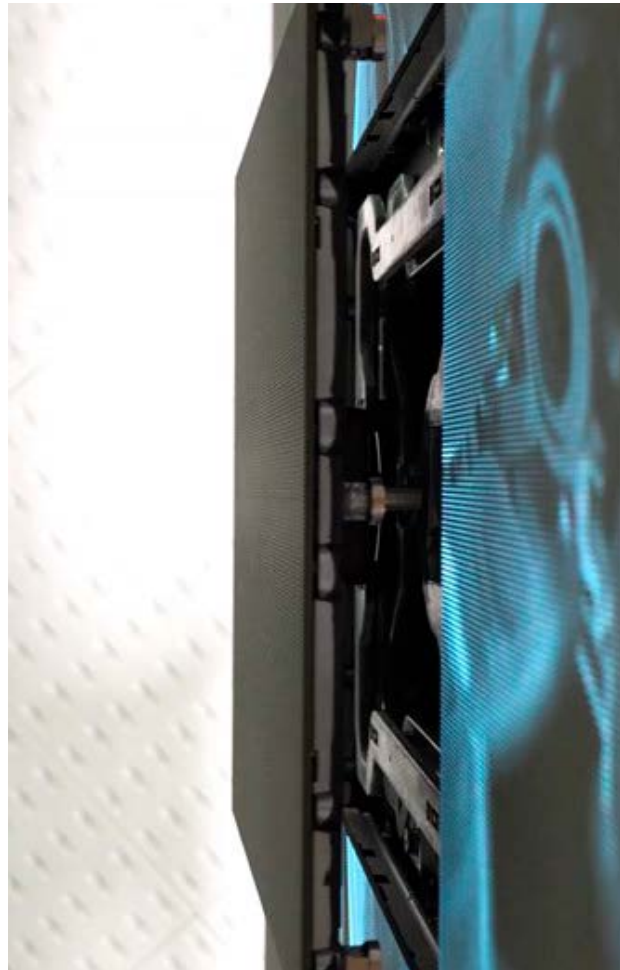
Efficient maintenance
starts with easy access
to your LED modules.

Motorized parallel module extraction

Barco was the first manufacturer to introduce motorized module extraction on LED walls. With TruePix, this technology has been perfected, allowing you to stay in control of the extraction process and limit the risk of damage.

A motor is activated which pushes the module out in a parallel way, allowing easy removal of the module. **When the module needs to be removed from the back, a sliding mechanism is foreseen to make it just as simple.**

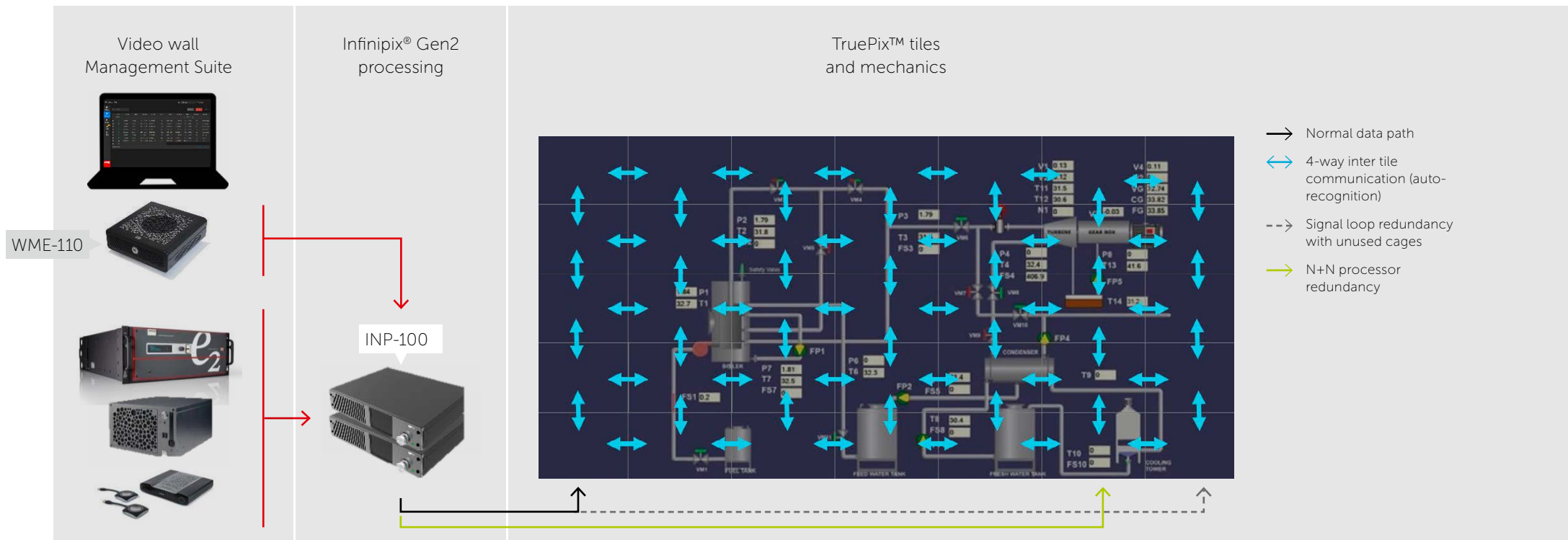
Barco was the first manufacturer to introduce **motorized module extraction** on LED walls.



Built-in redundancy

To ensure system uptime, Barco foresees redundancy of several critical components. Four-way inter-tile communication and signal loop redundancy are embedded, **to guarantee an**

uninterrupted data flow. To complement this, Barco also offers redundant processors and power supplies. These measures account for TruePix' rock-solid performance.



Limiting power consumption



In order to optimize the power consumption of the LED video wall, Barco TruePix comes with an EcoPower standby mode,

which **reduces the power consumption with up to 95%** compared to a full black screen - amounting to only 10W/m². This stand-

by mode can be easily scheduled or can be activated when no communication, source signals or test patterns are active.



Worry-free operations

Barco's TruePix video wall platform has been designed for years of worry-free operations. However, service may still be needed from time to time. TruePix has therefore been developed to make **installation** and **maintenance interventions** as seamless and efficient as possible. TruePix also offers you the ability to monitor and **manage the performance** of your video wall 24/7, so that **unexpected downtime can be avoided**.




24/7 remote control over your video wall


Monitoring the performance of your video wall is one of the most effective ways to prevent downtime. Ideally, this is done from a central location, from where a managed service provider can monitor single video walls or a large fleet

of video walls. With **Barco's Video Wall Management Suite**, all vital parameters of the LED video wall can be viewed remotely. This saves a lot of site visits – contributing to reduced expensive operational downtime and maintenance costs.

Barco's Video wall Management Suite enables you to diagnose and solve issues before they turn into failures thanks to the e-mail warning notifications. You have all the tools for more effective and prompter remote assistance.



Barco's Video Wall Management Suite saves a lot of site visits, contributing to **reduced downtime and costs.**





Manage more effectively

Optimized management

The Barco Video wall Management Suite allows you to get rid of time-consuming and error-prone manual administration thanks to the automatic cloud-based storage of video walls usage data and their critical operational parameters (brightness, temperature, settings ...). **Its live dashboard gives real-time information on the operating conditions of the video walls allowing you to manage in the most efficient way.**

Plug and play

You can access the Video wall Management Suite on any device with internet access, whether it's your laptop, mobile phone or tablet. The Video wall Management Suite data can also easily be combined with your own tools and processes using APIs.

Security and privacy by design

The state-of-the-art security ensures complete data protection. The Video wall Management Suite has been designed with **security as a top priority throughout its full lifetime.** Extensive threat modelling, setting security baseline requirements, vulnerability management and penetration testing all contribute into making the Video wall Management Suite a highly secure solution for remote large video wall management.

Get notified

Diagnose and solve issues before they turn into failures thanks to the e-mail warning notifications. You have all the tools for more effective and prompter remote assistance.

BARCO Video wall Management Suite

Account: Barco Internal Systeme | Jay Badve

Dashboard | Video Walls | Insights | Audit | Settings

Video Wall Status

- 17/67 Online
- 14 Warnings
- 1 Error
- 4 Warnings
- 0 Maintenance coverage

Software Version

- LCD-UniSee
- LCD-LVD5521B
- LCD-KVD5521B
- RPC-ODL
- LCD-LVD5521C
- LCD-KVD5521C

Wall Types

64

14/17 | TruePix Install, Maintain and Manage

Trusted service partner

10 years peace of mind with EssentialCare and SmartCare

A video wall is an investment for the long haul. That is why Barco offers 10 years of services, with full availability of batch-compatible spare parts. To ensure fast resolution of the system in case of an issue, we have spare modules on site, priority helpdesk support and express shipment for all spare parts.

Barco offers a wide range of installation and maintenance services, so you can enjoy the high performance of your TruePix

video wall without interruption. With its EssentialCare program, Barco does not only provide extended warranty on the components and fast resolution for the full system, but Barco also ensures batch compatibility for up to 10 years. This is important to guarantee uniformity of your video wall over time. With Barco's SmartCare program, you can also benefit from remote diagnostics, enabled through Barco's Video wall Management Suite.



Barco. At your service.



TruePix for control rooms

TruePix for energy & utilities

TruePix offers a highly accurate representation of all critical applications and workflows, including SCADA, GIS, outage management systems, dispatch information, or other sources. TruePix provides uninterrupted 24/7 visualization and long-term supportability for your operations.

TruePix for defense & government

Barco's TruePix LED video wall platform provides operators and decision-makers of command centers uninterrupted 24/7 visualization of all their critical applications and mission content, so they can maintain situational awareness and continue your operations in all confidence.

TruePix for network and security operations centers

TruePix offers an accurate, uninterrupted visualization of all business-critical applications, including network services, Remote Monitoring and Management (RMM), and Security Information and Event Management (SIEM), all of which provide insight into security-focused data streams, infrastructure and assets.



成都天府国际机场联合运控中心

ENABLING BRIGHT OUTCOMES

About Barco

View better, share faster, resolve quicker. That's what Barco helps control room operators achieve every day. Barco has been building control room visualization and collaboration solutions since 1994 for a variety of industries. Today, we are still the number one choice for control room professionals who want to stay on top of their situational awareness.

www.barco.com/truepix

