Technology Solutions

Solutions for corporate, education, federal, state and local government, healthcare, retail and hospitality, industrial, broadcast and transportation.
Black Box is a leading technology solutions provider that has been dedicated to connecting people to devices for more than 40 years. We design the most trusted and advanced solutions in the industry that give our customers complete control of their IT infrastructures. It's why our customers continue to rely on our products in the most critical computing environments on earth.
All Black Box products are interoperable to bring our customers comprehensive connectivity solutions that provide maximum uptime, reliability and scalability. The above diagram provides an example of how Black Box products work together to provide a complete connectivity solution for your application.

Black Box offers the most comprehensive suite of IT solutions in the industry, including:

**AV**
- Video walls
- Digital signage
- Video splitters
- Presentation tools

**KVM**
- NIAP 3.0-certified secure KVM
- High-performance KVM
- KVM switches and extenders
- KVM management

**Cabinets and Racks**
- Network and server cabinets
- Acoustic cabinets
- Freestanding, wall mount and mobile racks

**Networking**
- Ethernet switches
- Media converters
- Ethernet extenders

**Cabling and Connectivity**
- CAT5e/6/6A Ethernet cables
- Fiber-optic bulk and patch cables
- USB 1.1, 2.0, 3.0 and 3.1 cables

**Power**
- Uninterruptible power supplies
- Data line surge protectors
- Power distribution units

**Why Black Box?**
Black Box offers 24/7 tech support, free application engineering, service level agreements, product and marketplace expertise, warranties and the most advanced IT solutions in the industry.
Joy Mining Machinery wanted to standardize communications, provide real-time metrics, promote plant competition and reduce safety issues and lost-time accidents. To do this, they needed to centralize control of company branding and messaging across 55 global facilities. They turned to Black Box, who rapidly designed, configured and provided a world-class digital signage distribution system based on the iCOMPEL platform that allowed the company to create, schedule and manage messages site-wide from one location. As a result, Joy Mining has seen improved communications, productivity, OTD and a reduction in safety issues and accidents.

Black Box empowers businesses of all sizes by aligning IT and communications solutions to desired business outcomes. We help transform operations for the better with the most innovative technology products and solutions on the market. We guide our customers through the complex challenge of transitioning from traditional communications to dynamic and integrated IT technologies and services.

Featured Products

iCOMPEL™
Motivate teams with real-time KPI display, save time while enhancing communication and manage emergency response from a simple-to-use CMS with this digital signage solution.

Coalesce™ MPE and Pro
This wireless presentation system makes meetings shorter and more productive. It keeps meetings on topic and on schedule with powerful moderator functionality.

Console Servers
Manage remote mission-critical IT, network and power devices to meet enterprise uptime requirements.

Pure Networking Media Converters
Extend the reach of your network and provide better connectivity in your enterprise. Straightforward installation means quick, hassle-free deployment.

Customer Use Case: Joy Mining
Joy Mining Machinery wanted to standardize communications, provide real-time metrics, promote plant competition and reduce safety issues and lost-time accidents. To do this, they needed to centralize control of company branding and messaging across 55 global facilities. They turned to Black Box, who rapidly designed, configured and provided a world-class digital signage distribution system based on the iCOMPEL platform that allowed the company to create, schedule and manage messages site-wide from one location. As a result, Joy Mining has seen improved communications, productivity, OTD and a reduction in safety issues and accidents.
La Roche College wanted a digital signage system that could display news, events, emergency notifications, Twitter feeds and other social media sites to engage students and staff. Their challenge was finding an intricate networked digital signage system that could display live, student and user-generated content in real time. They decided on a world-class digital signage system based on the iCOMPEL platform from Black Box. The system met all their requirements while keeping them on budget and enhanced communications for students, faculty and other staff.

Today’s classrooms require reliable real-time collaboration to be successful. Black Box offers wireless collaboration solutions that transform the way students and faculty work together. Allow group discussions, posing questions to the class and student presentations to occur without barriers with our complete education connectivity solutions.

**Featured Products**

- **iCOMPEL™**
  Maximize student, staff and faculty participation with this easy-to-use digital signage solution that supports every type of content. Integrate it with your emergency system to enhance school safety.

- **Coalesce® MPE and Pro**
  This robust wireless presentation system improves student and staff collaboration. It lets you start sharing presentations instantly through your web browser.

- **VideoPlex™ 4 Video Wall**
  Standalone display wall controller/scaler that outputs high-resolution DVI video up to 4K to multiple monitors. Display content that informs your students, faculty and staff of school events, emergencies and more.

- **Presentation Switchers**
  Make presenting more efficient in your classrooms. Easily switch and present any video signal on a display.

- **Slimline High-Speed HDMI Cable**
  Ultra-slim HDMI cable provides cleaner connections. Super flexible for easy handling and installation.

- **GigaTrue CAT6 Lockable Patch Cable**
  Get premium network connectivity, performance and security in your school system. This cable stays locked in place until you decide to take it out.

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**Customer Use Case: La Roche College**

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A new U.S. Government land base data center needed to roll out a complete data center, including infrastructure for KVM, to support deployed naval ships. Additionally, they wanted to reduce data center noise, cool sensitive equipment and reduce space. They contacted Black Box, who designed a high-performance data center with QuietCab Cabinets that kept server noise to a minimum, cooled mission-critical IT equipment and didn’t clutter the workspace. For the required KVM functionality, Black Box installed the high-performance KVM-over-IP Agility Switch that met the customer’s needs for command and control and improved naval ship support and operations.

Black Box understands federal agencies requirements for secure, compliant technology solutions. We design advanced products that meet the latest and most rigid security standards to help you achieve your objectives, meet your budget and optimize your productivity without sacrificing your safety.

**Featured Products**

- **NIAP 3.0-Certified Secure KVM**
  This broad line of secure KVM products features secure peripheral control between multiple computers and devices with different classification levels which protects confidential information. They also provide port isolation between networks, ensuring no data is leaked between secure ports and the outside world.

- **Emerald™ Unified KVM**
  4K KVM-over-IP system that delivers pixel-perfect HD or 4K video over an IP network, a proprietary direct connection or both. Greatly improves communication in control room settings.

- **Micro Mini Media Converters**
  Bring fiber to the desktop and improve connections with these ultra-compact media converters.

- **Pre-Terminated Fiber**
  Top-quality fiber built to your exact specs and guaranteed to work in environments where network downtime is not an option. Fully tested and shipped ready for installation.

- **ClimateCab™ Cabinets**
  Protect your essential electronics with the highest-quality cooling cabinets available. Ideal for remote locations, wiring closets and industrial sites.

- **Radian Flex™**
  Flexible, scalable, future-proof video wall processing platform that gives you the power to control content and how it displays. Fail-safe upgrades available to ensure performance in control room environments.

**Customer Use Case: Government Data Center**

A new U.S. Government land base data center needed to roll out a complete data center, including infrastructure for KVM, to support deployed naval ships. Additionally, they wanted to reduce data center noise, cool sensitive equipment and reduce space. They contacted Black Box, who designed a high-performance data center with QuietCab Cabinets that kept server noise to a minimum, cooled mission-critical IT equipment and didn’t clutter the workspace. For the required KVM functionality, Black Box installed the high-performance KVM-over-IP Agility Switch that met the customer’s needs for command and control and improved naval ship support and operations.
The Miami Dade E911 Center required an easy-to-use real-time KVM switching system to improve response times, eliminate inefficiencies, minimize system delay and end complex new user training. They asked Black Box to implement a complete KVM solution. Black Box deployed an easy-to-use KVM system with Glide and Switch functionality that allowed operators to instantaneously switch from one monitor and one server to up to four additional screens, improving operator workflows, response times and simplifying new user training.

Every emergency operations center (EOC), 911 call center and public-safety answering point (PSAP) relies on critical information visualization and communication. Black Box control room solutions enable real-time video and information sharing between field and operations centers, resulting in improved situational awareness and faster response times. When lives are on the line and communication is critically important, trust our extensive portfolio that showcases more than 40 years of technical expertise.

**Featured Products**

**NIAP 3.0-Certified Secure KVM**
Secures control center servers and network enclaves with hardware-based data isolation, secure EDID learn and video emulation and true isolation between device connections, making it easy to switch between networks with different classification levels. Supports resolutions up to 4K UHD.

**Freedom II KM Switch**
Switch between four or eight computers by moving a mouse from screen to screen. Perform functions that would normally require eight separate keyboard/mouse sets with one keyboard and mouse, freeing up desk space.

**Emerald™ Unified KVM**
Access and manage an unlimited number of PCs from any location. Share resources such as hardware and licenses across a dedicated KVM network or an existing IP network.

**4Site Multi-View KVM**
Control four servers from one keyboard and mouse. Display video from those four servers on one monitor all at the same time and in real time.

**Radian Flex™**
Enable faster communication and better informed decision-making with the software-based video wall system that gives you complete control over content. Display high-quality content from any source, across multi-screen display walls in any configuration.

**ControlBridge™**
Achieve the highest level of automated room control with this room control system. Connect and control everything in your control room through one platform.

**Customer Use Case: Miami Dade E911 Center**
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Jefferson Regional Hospital asked Black Box to deliver a state-of-the-art integrated operating room video system to enhance and enable their surgical teams’ capabilities to perform the latest techniques in laparoscopic, vascular and cardiothoracic surgery. Black Box designed, configured and provided a master DVI Matrix Switch to connect eight sources to eight digital screens with specially-cased Wizard SRX DVI-D Plus Transmitters and Extenders. Now surgery teams at the hospital have the video system they need to successfully perform complex procedures and ensure patient well-being.

Healthcare operations rely on leading edge technology to improve patient experiences, optimize workflows and make certain no errors occur in crucial, time-sensitive situations. Black Box provides powerful KVM, digital signage, cable and other solutions tailor-made for large hospitals, small medical private practices and any healthcare facility in between.

**Featured Products**

- **MediaCento™**
  Transmit 4K HDMI video and audio over LAN with this video extender. With lossless compression and low latency, you’ll get broadcast-quality video and audio perfect for medical applications.

- **iCOMPEL™**
  This digital signage solution lets you create a better patient experience with clear wayfinding signage and scheduling update boards. It also engages staff with easy content control.

- **Emerald™ Unified KVM**
  Experience pixel-perfect HD or 4K video resolution for high-quality imaging with no blurring or pixelation with Emerald KVM. Perfect for medical imaging where picture quality is crucial.

- **4Site Multi-Viewer KVM Switch**
  Simultaneously display and control four computers on one display. Supports analog and digital video.

- **Pre-Terminated Fiber**
  High-quality pre-terminated fiber cable that provides maximum uptime in crucial medical environments. Plug-and-play installation means no headaches during deployment.

- **QuietCab™ Cabinets**
  Put networking equipment where you need it — without the noise, space or cost concerns. Choose from cabinets ranging from 7U to 45U.

**Customer Use Case: Jefferson Regional Hospital**

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IKEA’s Service Centre in Belgium was looking for a wireless, software-based presentation solution for their nine conference rooms and huddle spaces. They decided on the Coalesce™ Wireless Presentation and Collaboration System from Black Box because it was simple to use, cost effective, didn’t clutter meeting spaces with boxes and wires and gave them the presentation tools they needed to make meetings more productive. After deploying Coalesce, the IKEA Service Centre has benefited from improved meetings that yield actionable outcomes.

Nowhere more than in retail environments is the potential to drive revenue by serving dynamic, hyper-targeted digital signage content quite so strong. Black Box offers digital signage and video wall solutions that give you the power to display the content you want where you want in real time to improve sales and awareness. Even better, our signage solutions boast perfect picture quality that’s certain to capture any potential customer’s attention.

**Featured Products**

- **MediaCento™**
  - Create eye-catching, engaging displays with this video extender. It’s scalable so you can add transmitters and receivers as you add sources and displays.

- **VideoPlex™ 4 Video Wall Controller**
  - Display high-resolution DVI video up to 4K to multiple displays to capture customer attention.

- **iCOMPEL™**
  - Create, manage and update digital signage content easily with this digital signage system. Customize your in-store content by location. Ideal for use with edge-blending projectors.

- **Radian Flex™**
  - This software-based video wall processing platform lets you personalize your video wall to your unique application. Easily manage what, where, when and how content is shown to your customers.

**Customer Use Case: IKEA**

IKEA’s Service Centre in Belgium was looking for a wireless, software-based presentation solution for their nine conference rooms and huddle spaces. They decided on the Coalesce™ Wireless Presentation and Collaboration System from Black Box because it was simple to use, cost effective, didn’t clutter meeting spaces with boxes and wires and gave them the presentation tools they needed to make meetings more productive. After deploying Coalesce, the IKEA Service Centre has benefited from improved meetings that yield actionable outcomes.
Industrial environments present much harsher conditions than those found in typical office environments. They have extreme temperatures, humidity, amounts of dirt and soot and corrosive materials that can ruin IT equipment. They can also contain devices such as motors and mechanical switches, which cause a large amount of electromagnetic interference (EMI). Black Box has a large range of solutions designed to perform in the toughest environments.

Customer Use Case: ArcelorMittal

The world’s largest steel producer, ArcelorMittal, needed to upgrade their wireless infrastructure to support their growing amount of equipment. They turned to Black Box, who implemented a new wireless technology solution that did not interfere with the already crowded Wi-Fi frequencies on-site, making full use of the 60 GHz frequency band. The solution offers a stable point-to-point wireless network connection with high bandwidth and is comprised of high-performance antennas that can operate in different distance ranges if installed in the same directional axis. Since the installation, service is operating flawlessly without interruptions even during the most unexpected heavy atmospheric conditions.
World Wrestling Entertainment, Inc. (WWE) reached out to Black Box for a KVM system that could accommodate their production load in a massive facility that was prone to system breakdowns. Black Box installed a 288-port KVM switch, a 48-port KVM switch and CAT6 cabling and connectors that gave the customer the high-performance KVM functionality and reliability they required. Since deployment, WWE has experienced significantly improved workflows, enhanced efficiency and no system breakdowns.

Broadcast and media companies are transitioning to cloud-based workflows and automating operations for program transmission, master control, news production and live production. KVM technologies play a key role in this transition, allowing managers, editors, operators and engineers to manage and reconfigure infrastructure. Black Box has extensive experience in developing KVM solutions for the broadcast industry. Prepare for the future with our complete line of KVM solutions.

Featured Products

Emerald™ Unified KVM
Optimize performance, reliability and workflow efficiency in broadcast and post-production with this KVM system. Delivers one converged system with pixel-perfect HD or 4K video extension over an IP network, a proprietary connection or both. Connect users with both physical and virtual machines across buildings or around the world.

Emerald SE
Flexible KVM solution that is customizable through license options. Add the functionality you need as your broadcast application grows, including pixel-perfect video, Glide and Switch, bonding and more.

KVM Extenders
Get reliable access to critical IT assets in your production environment with our broad range of KVM extenders.

Boxilla™
An enterprise KVM system manager housed in one easy-to-use platform. Manage hundreds to thousands of devices and enhance KVM usage in your application.

Customer Use Case: WWE
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1.877.877.2269 BLACKBOX.COM
A large German airport needed a matrix switching system to extend and switch multiple video and peripheral signal sources to different multi-screen operator desks. The system had to support 24/7 operations, central management of user access rights and both CATx and fiber cabling. They decided on the highly-reliable DKM FX HD Video and Peripheral Matrix Switching system from Black Box that was made for 24/7 operations. The DKM system met all their requirements, improved functionality for operators and increased job satisfaction and productivity.

Keeping transportation operations safe and on time comes down to having the right technology infrastructure in place. Black Box’s comprehensive portfolio of connectivity products help you track every issue, delay and emergency happening in transportation environments, such as airports, railway stations, subways, bus stations and more in real time so operators can make instant, informed decisions to keep commuters safe and satisfied.

**Solutions**

- Remote Traffic Control
- Railway Automation and Connectivity
- Emergency Vehicle Notification
- System Connectivity
- Passenger Information

**Featured Products**

- **Emerald™ Unified KVM**
  The Emerald 4K KVM-over-IP solution was designed with 24/7/365 applications in mind. It provides network resilience at every level and is capable of supporting complete switchover to a backup control room for fail-safe operation with zero downtime.

- **Boxilla™**
  Get full monitoring and control of your entire KVM system with this KVM management solution. Control user access, monitor device status and more from one management platform.

- **Freedom II KM Switch**
  Switch between multiple computers by moving a mouse from screen to screen. No software or additional networking required.

- **iCOMPEL™**
  Keep passengers informed of arrival times and delays with this easy-to-use digital signage platform. Update in real time with ease to keep content accurate.

**Customer Use Case: German Airport Operations Center**

A large German airport needed a matrix switching system to extend and switch multiple video and peripheral signal sources to different multi-screen operator desks. The system had to support 24/7 operations, central management of user access rights and both CATx and fiber cabling. They decided on the highly-reliable DKM FX HD Video and Peripheral Matrix Switching system from Black Box that was made for 24/7 operations. The DKM system met all their requirements, improved functionality for operators and increased job satisfaction and productivity.