Choosing a High-Performance IP KVM Solution for Your Broadcast and Media Environment: 

Overview and Key Considerations

Comfortable, functional work environments are essential for broadcast and media professionals to be able to produce content that captivates audiences worldwide. Broadcasters count on IP KVM extenders to provide the foundation on which to build ideal work environments, and increase user productivity for day-to-day operations. By allowing for the centralization of hardware, IP KVM extenders give broadcasters the ability to optimize resources, facilitate collaborative workflows, and eliminate distractions from noise, heat emissions, and cramped workspaces—so they can stay focused on what matters. Learn how post-production facilities, control rooms, OB vans, and more can benefit from a high-performance KVM solution, as well as what to look for when choosing the right IP KVM solution for your broadcast environment.
High-performance IP KVM solutions allow computers to be centralized in a secured server room, and out of the editors’ way, while at the same time increasing security. From a single bay, editors can access and control multiple remote computers, no matter if they're located in another room, building, or city. Another benefit is that it reduces heat and noise, and frees up space in small, cramped suites, improving the ergonomics of the work environment, and ensuring that employees can work quietly and comfortably. Video editing applications also demand the highest possible, visually lossless, video and audio quality.

For post-production environments, Extio 3 IP KVM can support 4Kp60 4:4:4 video and audio over standard Gigabit Ethernet, with no compromise to performance. This means that users can feel as if they are sitting at their own computer, sharing content with peers, whether over LAN or private WAN.
High-performance IP KVM extenders can streamline operations, control costs, and increase local and remote collaboration between operators. In this environment, the physical machines can be moved from the control rooms and relocated to a secure server room, enabling operators in adjacent control rooms to access any number of workstations or servers over IP. Switching is also a must in this environment.

With Extio Aggregator Mode leveraged for broadcast control rooms, users can access up to four systems simultaneously, and switch between sources with just a single keyboard and mouse. One Extio 3 receiver can support up to four displays. This enables the operators to view the content they want on multiple displays and instantly switch between shoots or segments, for example. Operators can work at one workstation, avoiding the need to physically move to different locations, thus streamlining the workflow for the whole production team. With the tremendous amounts of content produced in broadcast facilities, security is also of paramount importance. To protect the confidentiality of your content, Extio 3 provides advanced encryption protocols, password protection, and Active Directory® authentication.
OB vans are used for live coverage of events. Much like traditional broadcast control rooms, they must offer operational flexibility and be easily reconfigured to support different workflows. High-performance IP KVMs can further maximize the limited operational space in OB vans, enabling the workstations to be centralized in a server rack on the truck. From a single desk, outfitted with a dual-display or quad-display setup and operated with a single keyboard and mouse, users can access a number of remote workstations, thus reducing the peripherals required at a station.

In OB vans, Extio 3 IP KVM setup can support one-to-many and many-to-many configurations, allowing operators to rapidly access and switch between various functions—recording devices, production switchers, and replay systems—all from one desk. Systems can also be remotely monitored and serviced over private WAN.
High-performance IP KVM extenders allow audio workstations, automation servers, and any other equipment to be housed in a secure server room. This eliminates any unwanted noise generated by the machines, a top priority in settings where noise levels are a concern. Another benefit is that it allows different operators to work together, simply by connecting to the same source system. Multi-display support can further increase operational efficiency: operators can run the different production, scheduling, and radio automation applications needed on each display.

Extio Aggregator Mode for radio control rooms makes it easy to move from one display to another, automatically switching the focus to the connected system. Extio 3 delivers KVM signals at low bitrates over standard Gigabit Ethernet, making it easy to add devices to the network and scale to changing requirements. With large amounts of content passing through broadcast facilities, security is of paramount importance. Extio 3 provides the option to whitelist or block selected USB devices, and ensures maximum security of both devices and network.
**MATROX EXTIO 3 IP KVM:**
THE ULTIMATE SOLUTION FOR BROADCAST AND MEDIA ENVIRONMENTS

With the ability to extend 4Kp60 4:4:4 and up to quad 1080p60 4:4:4 video support over a one Gigabit Ethernet network—at the industry’s lowest bitrates—Matrox Extio 3 IP KVM extenders offer broadcast environments a best-in-class KVM extension and switching solution. Working with standard COTS network switches, Extio 3 enables a scalable and cost-effective IP KVM matrix solution over LAN or private WAN, allowing operators to securely access, share, and control computers from different locations in the same facility or across campuses.