



## IP KVM SOLUTIONS FOR 24/7 ENVIRONMENTS

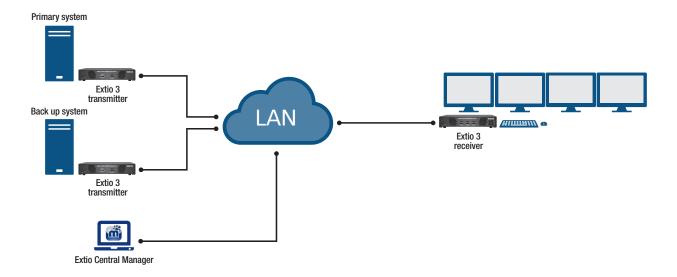


Extio 3 Series

Organizations running critical systems for control or monitoring need a high availability strategy for continuous operation. This strategy puts in place redundancies and failover mechanisms to help them recover quickly in the event of a system failure. Matrox® Extio 3 IP KVM extenders offer several essential features that help organizations to build redundancy and fault tolerance into their installations, and remove single point of failures that disrupt operations.

# SYSTEM REDUNDANCY VIA SWITCHING

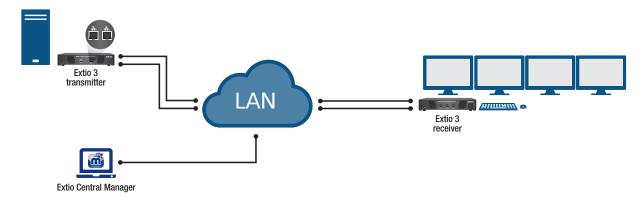
Matrox Extio 3 IP KVM extenders transmit and extend all audio, video, and USB signals efficiently over 1 Gigabit Ethernet (GbE) networks, and the inherent switching capability of this product is useful to build system redundancy. With support for many-to-one configurations, each remote user will have access to a main system, and the option to quickly switch to the back-up unit when the main system fails. In case of system failure, either the user could switch directly through the Extio 3 receiver units' on-screen display, or an IT staff could route the back-up system to the receiver unit through the Matrox Extio Central Manager (ECM) software, in real-time.



Extio 3 IP KVM extender's switching capabilities deliver system redundancy

# REDUNDANT NETWORK INTERFACE

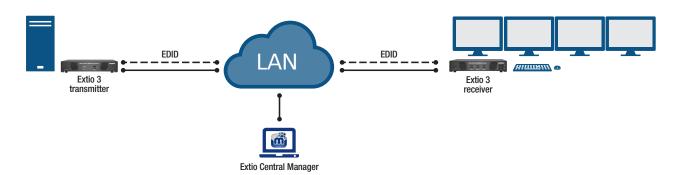
Matrox Extio 3 appliances feature two network interface ports for redundancy—the built-in RJ45 interface acts as the primary port, and the second port serves as the back-up interface. When Extio 3 detects a communication failure on the primary port—for example, due to a cable disconnection, or faulty network switch—its failover feature will automatically switch to the back-up interface, enabling operations to quickly resume. When Extio 3 transmitter cards are used in a PC system, fiber optic or CAT5e cable disconnects remain transparent to the server, and once the link is re-established, the system will be accessible again without requiring a server reboot.



Extio 3 transmitter and receiver appliances can be configured to support redundant network interfaces

### EDID MANAGEMENT FOR RELIABLE OPERATION

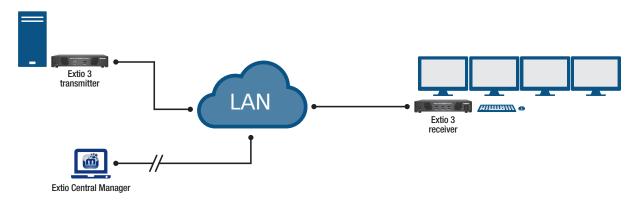
Accidental cable disconnects are always a concern in AV installations, especially in multi-display environments, where the user works with two or more displays. For example, a monitor cable disconnecting might generate a series of operating system events that could alter the multi-display configuration of the system. A robust solution, Extio 3 units feature lockable video and power connectors, as well as advanced extended display identification data (EDID) management. With EDID caching, Extio 3 saves the monitor's EDID information including available resolutions, refresh rates, and display timings in the transmitter unit—this hides the impact of accidental cable disconnects from the system, and the monitor's operation seamlessly resumes when the cables are reconnected.



Extio 3's EDID management feature saves monitor's EDID information in the transmitter unit and facilitates seamless operation

## DISTRIBUTED MODEL

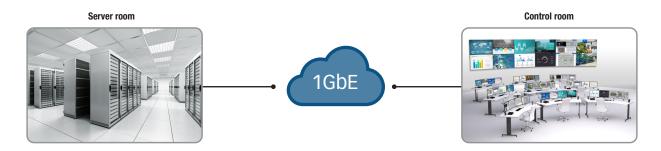
Extio Central Manager software is used for configuring, managing, and monitoring units from a central location over IP. It supports a distributed model—once all the units are configured, the settings and parameters reside locally in each transmitter and receiver unit. Even when the central system running ECM gets accidently or intentionally disconnected from the KVM network, or an Extio 3 unit is taken offline, the rest of the KVM system continues to operate. Unlike other IP KVM products, the Extio 3 management software will not become the cause for a single point of failure in the entire ecosystem. ECM also provides the ability to export and import device settings, and simplifies the addition and configuration of a new unit to the KVM network.



Extio 3 IP KVM's distributed model of operation eliminates single point of failure

### RESILIENT IP TRANSPORT

A well-designed network infrastructure should have virtually no packet loss. Extio 3 extender's unique design further mitigates this risk by transporting multiple high-resolution videos over a 1 GbE network at very low bitrates. Incredibly, Extio 3 utilizes merely 5% of the network bandwidth required by the next most bitrate-efficient IP KVM extender. This low bandwidth consumption greatly simplifies the deployment and management of the overall KVM network. Designed to be resilient in varying network conditions, Extio 3 continuously monitors the transmitted information, and supports under the hood, several error detection and correction mechanisms, that help it gracefully recover from packet loss or transmission errors. Using unique patented technologies, Extio 3 intelligently adjusts its internal processing parameters, and helps to deliver a resilient KVM system that minimizes downtime and favors continuous operation.



Extio 3 reliably transports multiple high-resolution videos over a 1 GbE network at very low bitrates

## CONCLUSION

In applications where the system goals are high availability, the Extio 3 IP KVM extenders excel. Their resilient operation, and built-in hardware- and software-based redundancy-enabling features make them an excellent choice for critical environments where 24/7 operations are expected.

#### **Contact Matrox**

video@matrox.com

North America Corporate Headquarters: 1-800-361-4903 or 514-822-6364 Serving: Canada, United States, Latin America, Asia, Asia-Pacific, and Oceania

London Office: +44 (1895) 827300

Serving: United Kingdom, Ireland, Benelux, France, Spain, Portugal, Middle East, Africa

Munich Office: +49 89 62170-444

Serving: Germany, Austria, Switzerland, Denmark, Finland, Norway, Sweden,

Central and Eastern Europe, the Baltic States, Greece, Turkey, Italy

#### **About Matrox Video**

Matrox Video is a global manufacturer of reliable, high-quality ASICs, boards, appliances, and software. Backed by in-house design expertise and dedicated customer support, Matrox products deliver stellar capture, extension, distribution, and display. Engineering high-quality products since 1976, Matrox technology is trusted by professionals and partners worldwide. Matrox is a privately held company headquartered in Montreal, Canada. For more information, visit www.matrox.com/video.

