The Extron **XTP CrossPoint® 3200** provides flexible, reliable digital and analog video switching and distribution between local and remote endpoints. This modular matrix switcher is configurable from 4x4 up to 32x32 using a wide variety of available input and output boards. It sends high-resolution video, audio, RS-232, and Ethernet up to 330 feet (100 m) over a shielded CATx cable to remote XTP® transmitters and receivers, and even greater distances over fiber optic cable. The XTP CrossPoint 3200 also supports direct HDMI, DVI, VGA, video, and audio connections to local sources and displays. XTP Systems® deliver robust signal routing and reliability with ultra-fast digital video switching and advanced system monitoring.

XTP Systems are HDCP compliant and delivers ultra-fast, highly reliable digital switching with Extron exclusive SpeedSwitch® Technology. They include a wide range of integrator-friendly features such as EDID Minder®, Key Minder®, and advanced system monitoring and control capability.

An Extron XTP CrossPoint matrix switcher is the heart of XTP Systems. The high speed, 15.2 Gbps data-rate digital backplane designed into the matrix switcher ensures full compatibility with the highest resolution signals currently in use, while also providing a future-ready upgrade path for new formats with higher resolutions such as 4K and Ultra HD - UHD video. Its modular design allows the system to be customized to the application, with available input and output boards providing local distribution of HDMI, DVI, VGA, video, and audio connections in addition to long-distance transmission to and from remote XTP transmitters and receivers. Each XTP board is hot-swappable so that the matrix switcher can be serviced or reconfigured without interrupting signal routing. Unoccupied board slots can be reserved for future system expansion.

XTP Systems also provide extensive audio signal routing and management features. Some of these features include integrating analog stereo audio alongside digital HDMI audio, HDMI audio embedding and de-embedding, audio breakaway, and downmixing multi-channel formats. In addition, it can provide extension of Ethernet plus RS-232 and IR over the same shielded twisted pair cable as used for high resolution video and audio signal transmission. The use of a shielded twisted pair cable for multiple signals streamlines device operation and control, simplifies the cabling infrastructure, and reduces the need for added network drops.

Extron recommends Extron-certified XTP DTP 24 shielded twisted pair cable, shielded RJ-45 plugs, jacks, and couplers engineered for optimum signal transmission with Extron XTP Systems. The XTP DTP 24 cable is certified to 475 MHz, and utilizes a SF/UTP design with four unshielded 24 AWG twisted pair conductors inside an overall braid and foil shield for superior performance and noise immunity.

Easy Setup and Configuration

The XTP CrossPoint matrix switcher provides convenient, user-friendly control software, for configuring, operating, and monitoring the system. It also includes numerous features to simplify system configuration and operation, including the many features common to Extron matrix switchers such as I/O memory presets and the QS-FPC™ - QuickSwitch Front Panel Controller with tri-color backlit buttons.

To enhance and simplify integration of digital and analog AV devices, the matrix switcher utilizes two Extron technologies: EDID Minder and Key Minder. EDID Minder automatically manages EDID communication between all connected input sources. This technology allows EDID from any of the displays, or pre-stored selectable EDID information, to be assigned to any input. By maintaining continuous EDID communication with all sources, EDID Minder ensures that sources power up properly and reliably send content to the

displays. For HDMI signals with protected content, Key Minder authenticates and maintains continuous HDCP encryption between input and output devices to ensure reliable switching while enabling simultaneous distribution of a single source signal to one or more displays. If an HDCP-encrypted signal is routed to a non-compliant display, a full-screen green signal is transmitted to the destination, providing immediate visual confirmation that protected content cannot be viewed on the selected display.

With the included software, EDID communication can easily be set for all devices. The software provides a complete view of the matrix switcher and remote XTP transmitters and receivers, and facilitates control and real-time status monitoring of all XTP devices through a computer.

System Monitoring and Control

The XTP CrossPoint matrix switcher can be controlled via RS-232, Ethernet, and the USB port on the front panel. With the capability to transmit control signals over the same CATx cabling as for AV, XTP Systems provide considerable flexibility to control the entire system. Bidirectional RS-232 signals can be inserted from a control system into the Ethernet port on the matrix switcher, enabling RS-232 control of devices attached to XTP transmitters and receivers.

Bidirectional RS-232 and IR insertion ports are included on the XTP CP input and output boards, transmitters, and receivers. These insertion ports allow, for example, a control system to insert IR signals into an XTP CP input board. The signals are then communicated to an XTP transmitter for controlling a Blu-ray Disc player. Similarly, the same control system can also insert RS-232 signals into an XTP CP output board for relay to an XTP receiver interfaced with a display device. All of this flexible system control capability is available using the same CATx cable to send control signals, alongside AV and Ethernet. The end result is a simplified wiring infrastructure that reduces costs and labor.

Extend Ethernet to Expand Network Access and AV Device Control

An Ethernet port accompanies each XTP RJ-45 port on an XTP transmitter or receiver, and the XTP CP input and output boards. These ports can be used to extend Ethernet access from the matrix switcher to remote endpoints over the same CATx cable, without the need to provide additional network drops or switches. For example, Blu-ray Disc players at the source endpoints can receive Internet access from the house LAN that is interfaced into the Ethernet ports of an XTP CP input board. A separate LAN for the control system can be used to control remote displays via the Ethernet ports on the XTP CP output boards.

The Ethernet ports on the XTP CP input and output boards can also be connected into a shared house LAN for both system control and network access. This also allows control system devices to be situated at remote endpoints. The capability to extend Ethernet to remote endpoints provides substantial flexibility to set LAN access in accordance with end-user requirements and IT policy.

Power Capabilities

Housed in a rack-mountable 10U enclosure, the XTP CrossPoint 3200 includes a redundant power supply to ensure continuous operation in mission-critical installations. As an added feature, the matrix switcher is capable of providing remote power to select XTP twisted pair devices using the same cable that transmits high resolution video, audio, RS-232 and IR control, and Ethernet. The use of one shielded CATx cable for AV, control, and power simplifies endpoint integration.

With hot-swappable modular components, a wide selection of XTP transmitters and receivers, and advanced 24/7 system monitoring, the XTP CrossPoint 3200 is designed to provide continuous, trouble-free operation in the most critical applications.

Features

- **Available in I/O sizes from 4x4 to 32x32** — System configuration is flexible to match a wide variety of small to large-sized installations.
- **15.2 Gbps data-rate digital backplane** — Ensures switching and distribution of video signals without degradation, offering the performance required to maintain signal integrity with the most demanding high resolution signals.
- **Wide selection of local, twisted pair, and fiber optic input and output matrix boards** — Boards provide integration for a variety of signal types and formats, ensuring system customization appropriate for a wide range of applications.
- **RS-232 insertion from the Ethernet control port** — System level device control to all remote locations via the matrix switcher's Ethernet port, providing comprehensive control of endpoints and attached devices without needing additional cabling.
- **Remote power to select XTP twisted pair transmitters and receivers** — For simplified installation, an XTP CrossPoint matrix switcher can remotely power select XTP transmitters and receivers over the same CATx cable used for sending AV signals. This reduces the need to separately power XTP devices at remote locations.
- **Audio breakaway** — Provides the capability to separate an embedded audio signal from its corresponding video signal within the matrix switcher, allowing the audio and video signals from one source to be switched to different destinations.
- **Modular, field-upgradeable and hot-swappable design** — The XTP CrossPoint matrix switcher provides substantial flexibility, expandability, and affordability by allowing users to select the configuration required for a system. Additional input and output boards may be added at any time for quick and easy upgradeability or expansion. Hot-swappable components allow the user to replace an I/O board at any time without the need to power down the switcher. This is especially useful for mission-critical applications that require continuous system operation.
- **Supported HDMI 2.0b specification features include data rates up to 15.2 Gbps, HDR, Deep Color up to 12-bit, 3D, and HD lossless audio formats**
- **HDCP 2.2 compliant** — Ensures display of content-protected media and interoperability with other HDCP-compliant devices.
- **User-selectable HDCP authorization** — Allows individual inputs to appear HDCP compliant or non-HDCP compliant to the connected source, which is beneficial if the source automatically encrypts all content when connected to an HDCP-compliant device. Protected material is not passed in non-HDCP mode.
- **SpeedSwitch® Technology provides exceptional switching speed for HDCP-encrypted content**
- **SD Pro processing provides deinterlacing of standard definition video** — SD Pro processing deinterlaces 480i and 576i signals for compatibility with HDMI and DVI-equipped displays, without the need for additional scalers.

- **EDID Minder® automatically manages EDID communication between connected devices** — EDID Minder ensures that all sources power up properly and reliably output content for display.
- **Key Minder® continuously verifies HDCP compliance for quick, reliable switching** — Key Minder authenticates and maintains continuous HDCP encryption between input and output devices to ensure quick and reliable switching in professional AV environments, while enabling simultaneous distribution of a single source to multiple displays.
- **Automatic color bit depth management** — The switcher automatically adjusts color bit depth output based on the display EDID, preventing color compatibility conflicts between source and display.
- **HDMI to DVI Interface Format Correction** — Automatically reformats HDMI source signals for output to a connected DVI display.
- **Compatible with all XTP products** — XTP Systems provide a flexible signal switching and distribution solution that is completely integrated, ensuring reliable routing of multiple digital and analog formats.
- **Ethernet extension** — Centralized 10/100 Ethernet communication can be implemented via an Ethernet pass-through port to reduce the amount of independent network drops required within a system.
- **Fully digital signal routing** — Analog signals are digitized, sending a reliable, high quality digital video signal to the output destination.
- **HDMI and DVI output boards provide +5 VDC, 250 mA power on each output for powering external peripheral devices** — Power provided via a board's digital output eliminates the need of a separate power supply for the connected peripheral device.
- **Automatic cable equalization for each digital input** — Cable input equalization optimizes signal performance for all incoming signals, ensuring pristine image quality is delivered throughout XTP Systems.
- **Automatic output reclocking** — Reshapes and restores timing of digital video signals at each output, eliminating high frequency jitter to ensure reliable transmission over long cables.
- **HDCP authentication and signal presence confirmation via RS-232 or Ethernet** — Provides real-time verification of HDCP status for each digital video input and output. This allows for simple, quick, and easy signal and HDCP verification through RS-232/RS-422 or Ethernet, providing valuable feedback to a system operator or helpdesk support staff.
- **HDCP Visual Confirmation provides a green signal when encrypted content is sent to a non-compliantdisplay** — A full-screen green signal is sent when HDCP-encrypted content is transmitted to a non-HDCP compliant display, providing immediate visual confirmation that protected content cannot be viewed on the display.
- **Audio input gain and attenuation** — Allows the level of gain or attenuation to be set, eliminating noticeable volume differences when switching between sources.
- **Output muting control** — Provides the capability to mute one or all outputs at any time. In addition to muting audio, video, or both, the unit can also be set to mute video and sync to allow projectors or flat-panel displays to automatically enter into standby mode to save energy and enhance lamp or panel life.

- **Audio output volume adjustment** — Audio output can be set dynamically for each channel through the front panel or serial control eliminating the need for audio preamplifiers in many system designs.
- **Ethernet monitoring and control** — Engineered to meet the needs of professional AV environments, Ethernet control provides proactive monitoring and system management over a LAN, WAN, or the Internet, using standard TCP/IP protocols. Ethernet control provides for remote selection of input and output ties, adjustment and control of audio input and output levels, and advanced system diagnostics.
- **Internal color bars test pattern with or without audio for setup and calibration**
- **Redundant power supply** — The XTP CrossPoint 3200 includes a redundant power supply for continuous, mission-critical applications where power reliability is crucial.
- **Tri-color, backlit buttons** — Buttons can be custom labeled for easy identification. The buttons illuminate red, green, or amber, depending on function, for ease of use in low-light environments.
- **QS-FPC™ - QuickSwitch Front Panel Controller** — Provides a discrete button for each input and output, allowing for simple, intuitive operation.
- **Global presets** — Frequently used I/O configurations may be saved and recalled either from the front panel, serial, or Ethernet control. This time-saving feature allows I/O configurations to be set up and stored in memory for future use.
- **View I/O mode** — Users can easily view which inputs and outputs are actively connected.
- **Front panel configuration port** — Enables easy configuration without having to access the matrix switcher's rear panel.
- **Front panel security lockout** — Prevents unauthorized use in non-secure environments. In lockout mode, a special button combination is required to operate the switcher from the front panel controller.
- **Optional remote control** — The optional MKP 2000 and MKP 3000 X-Y Remote Control Panels provide the flexibility to control the matrix switcher from a remote location.
- New **JITC Certified** — Successfully completed interoperability and information assurance testing for use in government applications and other mission-critical environments.
- **Rack-mountable 10U, full rack width metal enclosure**
- **Highly reliable, energy-efficient internal universal power supply** — The 100-240 VAC, 50/60 Hz, international power supply provides worldwide power compatibility with high demonstrated reliability.