

The Extron **DTP CrossPoint® 84** is a 4K, 8x4 matrix switcher with HDMI and DTP® twisted pair inputs and outputs, scaling, comprehensive audio DSP, an integrated audio power amplifier, and a built-in IPCP Pro 350 control processor. The DTP CrossPoint 84 provides complete system integration in a 2U enclosure, for applications with multiple displays, sound reinforcement, and AV system control. It supports local and remote sources and displays with six HDMI inputs and two DTP inputs, plus two HDMI outputs and two DTP outputs. DTP extension allows connection to DTP endpoints and XTP® matrix switchers. Each DTP output features independent scaling up to 1080p and 2K. Full audio optimization is available with an integrated Extron ProDSP™ audio digital signal processor, which can be linked to an additional Extron DSP for AEC and I/O expansion.

The DTP CrossPoint 84 delivers all of the core functionality of a conventional AV system, in a single 2U enclosure that replaces as many as eleven separate components. In addition to saving substantial space in a rack, the compact size also makes it easy to standardize on a common system design throughout a facility, and to adapt the DTP CrossPoint 84 to many different environments where equipment space may be limited. This fully-featured presentation matrix switcher is highly versatile and is ideal for presentations with content on multiple displays, and for providing a variety of AV system configurations to serve multi-purpose and divisible rooms.

A 4K Matrix Switcher

The DTP CrossPoint 84 is a 4K-capable switcher for integration with computers equipped with compatible graphics cards, 4K media players, 4K cameras, and displays at 4K or UHD native resolution. All HDMI and DTP inputs accept high resolution signals up to 4K. These signals can be passed to both HDMI outputs.

Support Local and Remote Sources and Displays

The DTP CrossPoint 84 includes six HDMI inputs and two HDMI outputs. The two DTP twisted pair inputs and two DTP outputs are compatible with a wide variety of DTP 230 and DTP 330 endpoints, as well as DTP-enabled switchers and signal processors to support remote HDMI, DisplayPort, and DVI sources and displays. Analog sources can be supported with select DTP 230 and DTP 330 switching transmitters. The DTP inputs can receive signals from remote DTP 230 or DTP 330 transmitters in areas such as a conference table, lectern, or wall for connecting a guest laptop. Each independently scaled DTP output can be used to transmit from a DTP CrossPoint 84 in a rack to a DTP 230 or DTP 330 receiver behind a flat-panel display on a wall, above a ceiling-mounted projector, or any other remote location. DTP 230 and DTP 330 transmitters and receivers are available in compact, low-profile enclosures, plus Decora® wallplate and floorbox versions.

When the DTP CrossPoint 84 is paired with a DTP 330 transmitter or receiver, HDMI, DisplayPort, DVI, or VGA, plus control and analog audio signals can be extended up to 330 feet (100 meters) over a single shielded CATx cable. With a DTP 230 endpoint, signals can be extended up to 230 feet (70 meters).

The DTP twisted pair inputs and outputs include additional convenient, integrator-friendly features designed to help simplify installation. Bidirectional RS-232 and IR signals can be inserted from a control system and transmitted over the single shielded CATx cable together with the video and audio, enabling control of a source or display. Additionally, the DTP CrossPoint 84 can send power to select DTP transmitters and receivers over the same shielded CATx cable, streamlining system design and installation.

Compatible with XTP CrossPoint Matrix Switchers

In addition to supporting DTP endpoints, the DTP CrossPoint 84 can be integrated into an XTP CrossPoint matrix switcher system with digital video and embedded audio, plus bidirectional RS-232 and IR signals extended up to 330 feet. This is ideal for facility-wide AV system applications with a centralized AV signal distribution infrastructure, as well as several presentation spaces with local AV functions such as switching and processing. A DTP CrossPoint 84 in a room can connect into an XTP CrossPoint matrix switcher in a central equipment rack or closet for accessing shared AV resources, or sending a local presentation to several destinations in a facility.

HDBaseT-Compatible Outputs

The DTP outputs can be configured for compatibility with HDBaseT-enabled displays to send digital video and embedded audio, plus bidirectional RS-232 and IR signals up to 330 feet (100 meters) over a shielded CATx cable.

Integrated 8x4 Matrix Switcher

The DTP CrossPoint 84 is a fully-featured matrix switcher with many familiar capabilities that are common to Extron matrix switchers, including I/O memory presets and the QS-FPC™ - QuickSwitch Front Panel Controller with tri-color backlit buttons. Matrix switching between the HDMI and DTP inputs and outputs enables a wide range of design possibilities to meet the audio and video requirements of boardrooms, lecture halls, or other applications with multiple displays. Flexible signal routing and reliable digital video switching with the DTP CrossPoint 84 allows support for multiple applications in one installation.

Powerful Integrated Control Processor

The DTP CrossPoint 84 IPCP features a built-in Extron IP Link® Pro control processor, with the advanced features, processing power, and breakthrough technologies found in the standalone Extron IPCP Pro 350 control processor. The DTP CrossPoint 84 IPCP delivers high-speed processing and abundant control port capacity for complete, customizable control of an entire AV system, including all source devices and displays, plus lighting, window shades, projection screens, occupancy sensing, and more. Select from a full line of Extron TouchLink® Pro touchpanel models, available in screen sizes from 3.5" to 15" in tabletop, wall-mount, and Extron Cable Cubby® form factors. Simply connect a TouchLink Pro touchpanel to the built-in Gigabit Ethernet switch to create a complete AV control system.

Extron eBUS® button panels can also be used with the built-in IPCP Pro 350 control processor. The integration-friendly eBUS technology is based on a unique digital bus architecture that allows for easy control system expansion, greater design options, and future upgrades. As with our TouchLink Pro touchpanels, eBUS button panels are designed for use with any Extron IPCP Pro Series control processor, allowing them to be used as a single user interface for a smaller system or multiple button panels and touchpanels may be combined when a more elaborate control system is required.

As with all Extron control systems, the DTP CrossPoint 84 IPCP is very intuitive and easy to configure with Global Configurator® software. The latest version of Global Configurator includes powerful, advanced features such as conditional logic, local variables, and macros. The DTP CrossPoint 84 IPCP offers the versatility to integrate a wide range of system control applications, from system powering and source switching, to elaborate operations such as videoconferencing management.

Global Configurator Professional adds unprecedented scalability with Controller Groups, a unique feature that allows a DTP CrossPoint 84 IPCP to be combined with additional IP Link Pro processors to create a large-scale control system. This is ideal for controlling multiple systems, rooms, or even remote locations around the world. DTP CrossPoint 84 IPCP systems throughout a facility, building, campus, or offices worldwide can be monitored and managed using Extron GlobalViewer® Enterprise server-based software. GlobalViewer Enterprise enables powerful enterprise-wide scheduling, monitoring, and helpdesk functions from a central location.

Extron [LinkLicense®](#) is an easy, cost-effective way for people to add even more powerful capabilities to Extron products. Purchasing a LinkLicense for User Interfaces upgrade for the DTP CrossPoint 84 IPCP will enable a mobile device or computer to serve as the primary control interface for the AV system. This expands AV control options, and promotes BYOD - Bring Your Own Device convenience. Another LinkLicense option - LinkLicense for Software Conferencing, transforms traditional software conferencing codecs into customizable applications that enhance all aspects of conferencing and AV system control. LinkLicense is applied per-system, not per-user, and there are no hidden costs.

Built for Easy Source Integration, Reliable Operation, and Quick Switching

The DTP CrossPoint 84 is HDCP compliant and delivers highly reliable digital switching of HDMI signals. To simplify integration of HDMI sources and displays, and to help ensure optimal system performance and dependability, the DTP CrossPoint 84 features three Extron-exclusive technologies: EDID Minder®, Key Minder®, and SpeedSwitch®. EDID Minder manages EDID communication between the display devices and input sources to ensure that the correct video formats are displayed reliably. For HDMI signals with protected content, Key Minder authenticates and maintains continuous HDCP encryption between input and output devices to ensure quick and reliable switching. With SpeedSwitch Technology, the DTP CrossPoint 84 delivers exceptional, virtually instantaneous switching speeds for HDCP-encrypted content.

Two Independent Scalers for DTP Outputs

The DTP CrossPoint 84 provides individual scaling up to 1920x1200 and 2K or 2048x1080 for each DTP output. This enables content from two sources to be shown simultaneously on two remote displays. When connecting a guest device, independent scaling also optimizes the video output for a confidence monitor and a main display, where each may have a different resolution and aspect ratio. The DTP CrossPoint 84 also provides selectable FILL and FOLLOW modes on the DTP outputs to ensure the proper aspect ratio of the output. FILL mode provides full screen output, while the FOLLOW mode preserves the original aspect ratio of the input signal.

Designed for Full Audio System Integration

In addition to video matrix switching and scaling of the DTP outputs, the DTP CrossPoint 84 can serve as the central component for full audio system integration. It includes audio switching and breakaway for all eight video sources, four mic/line inputs that can be matrix mixed into any output, as well as HDMI audio embedding and de-embedding. The DTP CrossPoint 84 also provides highly flexible configuration and processing options for the audio inputs and outputs, and for distributing the audio in a system. Each video input, including the DTP endpoints, can be accompanied by embedded digital audio or separate analog audio.

Audio from the DTP CrossPoint 84 can be output with or without processing, as HDMI embedded audio, two-channel analog audio, S/PDIF digital audio, or amplified with the matrix switcher's integrated mono 70 volt or two-channel stereo power amplifier - MA and SA models. Multi-channel bitstream formats are routed directly to the outputs, without de-embedding or processing. The DTP CrossPoint 84 IPCP amplifier-equipped models deliver stereo power amplification with 50 watts rms per channel into 4 ohms and 25 watts rms per channel into 8 ohms, or mono 70 volt amplification with 100 watts rms output. These integrated amplifiers feature an Extron exclusive Class D amplifier design with patented CDRS™ - Class D Ripple Suppression technology that provides a smooth, clean audio waveform and an improvement in signal fidelity over conventional Class D amplifier designs.

ProDSP for Complete Audio System Design and Optimization

All DTP CrossPoint 84 models feature Extron ProDSP, the same full-featured, high performance audio signal processing found in the Extron DMP 128 and DMP 64 digital signal processors. Extron's exclusive ProDSP is engineered from the ground up using a powerful 64-bit floating point DSP engine to provide very wide dynamic range and reduce the potential for clipping. ProDSP also utilizes studio grade 24-bit audio converters with 48 kHz sampling to maintain audio signal transparency. ProDSP is loaded with a comprehensive selection of powerful, easy-to-configure tools to control level, dynamics, filters, delay, ducking, loudness, and feedback suppression.

Truly professional grade DSP allows full audio system design, precise optimization and fine tuning, and proper gain structure. The four mic/line inputs can be matrix mixed into any of the four stereo output buses to create finely tuned audio zones for the corresponding outputs. In addition, these inputs can be routed to any of the eight "virtual" buses to allow inputs to be processed together as a group, before routing into the output buses. If desired, mic/line input signals can be mixed with the signal processing bypassed. The flexible routing and mixing capabilities of the DTP CrossPoint 84 allow system designers to create simple

or complex signal management schemes to accommodate a wide variety of system application requirements.

Setup and optimization is easy with the intuitive DSP Configurator™ Software. The flexible on-screen layout offers fast access to all digital audio signal processing tools for the DTP CrossPoint 84, including level control, dynamics, filters, delay, ducking, loudness, feedback suppression, and matrix mixing. Designers can quickly get a snapshot of the audio system, including all processing blocks, AV matrix switching ties, and audio matrix mixing, all at once.

Integrate with Extron Audio Processors for Larger Systems and AEC

An Extron digital audio expansion port is included on all DTP CrossPoint 84 models for interfacing with an Extron DMP 128 Digital Matrix Processor. This allows an 8x16 I/O channel transport between devices, and the DMP 128 provides an additional 12 inputs and eight outputs for microphones, multiple speaker zones, recording, assistive listening, and more. A linked DMP 128 also offers additional capabilities such as automixing, AEC - acoustic echo cancellation with DMP 128 C models, and POTS analog phone interfacing with the DMP 128 C P. Many unique and scalable system designs are possible when linking a DTP CrossPoint 84 to a DMP 128 AT in a Dante™ network. As an example, this can be ideal for supporting a large number of microphones in a city council meeting chamber, or in a lecture hall for distance learning.

Configuration

The DTP CrossPoint 84 can be controlled via the front panel, Ethernet, USB, or RS-232. The matrix switcher can be configured using Extron's PCS - Product Configuration Software with a user-friendly GUI that is very easy to navigate. This software application allows for expedited setup and commissioning, real-time operation and monitoring, plus the ability to configure several DTP CrossPoint 84 units in the same session.

Features

- **All-in-one 8x4 4K matrix switcher, scaler, audio DSP, audio power amplifier, and control processor** — The DTP CrossPoint 84 delivers all of the core functionality of a conventional AV system. Advanced technological capabilities from Extron allow complete system design and integration from a single 2U device.
- **Inputs: Six HDMI, two DTP® twisted pair inputs on RJ-45, six stereo balanced/unbalanced audio inputs on captive screw, four mic/line audio inputs on captive screw**
- **Outputs: Two HDMI; two DTP twisted pair outputs on RJ-45; one S/PDIF digital audio output on coaxial RCA; four variable audio outputs on captive screw; speaker outputs on 5 mm, 4-pole captive screw connector - DTP CrossPoint® 84 IPCP SA or on 5 mm, 2-pole captive screw connector - DTP CrossPoint 84 IPCP MA 70**
- **Two DTP inputs and six HDMI inputs**
- **Two HDMI outputs and two independently scaled DTP outputs**
- **Integrated DTP inputs and outputs support transmission of video, control, and audio up to 330 feet (100 meters) over a shielded CATx cable** — Two DTP inputs and two DTP outputs support digital signal transmission of HDMI or DVI plus control and analog audio up to 330 feet (100 meters) over a shielded CATx cable, providing high reliability and maximum performance on an easily installed cable infrastructure.
- **Supports 4K signals at all inputs and on both HDMI outputs** — Incoming 4K signals are supported at all HDMI and DTP inputs, and can be passed only to the HDMI outputs.
- **Selectable scaled DTP output rates from 640x480 to 1920x1200, including 1080p/60 and 2K** — The output rate can be individually selected for each of the two scaled DTP outputs. Available output rates include computer and video up to 1920x1200, including 1080p/60 and 2K.

- **Compatible with DTP 230 Series and DTP 330 Series, plus XTP® CrossPoint matrix switchers** — Enables mixing and matching with desktop and wallplate transmitters and receivers, as well as other DTP-enabled products. The DTP CrossPoint 84 IPCP can also be integrated with an XTP CrossPoint matrix switcher to provide connectivity between presentation spaces and a larger, facility-wide system.
- **DTP outputs are compatible with HDBaseT-enabled devices** — The DTP outputs can be configured to send video and embedded audio, plus bidirectional RS-232 and IR signals to HDBaseT-enabled displays.
- **Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance**
- **Compatible with CATx shielded twisted pair cable** — The DTP CrossPoint 84 fully supports a maximum transmission distance of 330 feet (100 meters) for all compatible resolutions when used with CATx shielded twisted pair cable. Shielded twisted pair cabling with solid center conductor sizes of 24 AWG or better is recommended for optimal performance.
- **Remote powering of select DTP transmitters and receivers** — The DTP CrossPoint 84 can provide power to select DTP transmitters and DTP receivers over the twisted pair connections, eliminating the need for separate power supplies at the remote units.
- **RS-232 insertion from the Ethernet control ports** — System level device control to all remote locations via the matrix switcher's Ethernet ports, providing comprehensive control of endpoints and attached devices without needing additional equipment.
- **Bidirectional RS-232 and IR insertion for AV device control** — Bidirectional RS-232 control and IR signals can be transmitted alongside the video signal over DTP connections, allowing the remote device to be controlled without the need for additional cabling. Bidirectional control insertion eliminates the need for control system wiring to remote devices.
- **Available with integrated IPCP Pro 350 control processor** — DTP CrossPoint 84 IPCP models include a built-in IPCP Pro 350 control processor for complete AV system control.
 - **Supports TouchLink® Pro touchpanels and eBUS® button panels**
 - **Supports secure industry standard communications protocols** — Uses industry standard communication protocols, including HTTP (insecure), HTTPS, SSH, SFTP, SMTP, NTP, Discovery Service, DHCP, DNS, ICMP, and IPv4.
 - **Supports LinkLicense®** — Extron [LinkLicense](#) enhances the capabilities of Extron Pro Series control systems.
 - **Two bidirectional RS-232 ports with software handshaking** — Captive screw serial ports that can control two RS-232 devices.
 - **One bidirectional RS-232/RS-422/RS-485 port with hardware and software handshaking** — Captive screw serial port that can communicate with one RS-232/RS-422/RS-485 serially controlled device.
 - **Two IR/Serial ports for one-way control of external devices**
 - **Four Digital I/O ports** — Allows for interfacing with other systems in the room.
 - **Four relays for controlling room functions** — Enables control of lighting, screen settings, and other device functions.
 - **eBUS port for connecting eBUS button panels and accessories**
 - **Ethernet monitoring and control** — Manage, monitor, and control AV devices using a standard Ethernet network.
 - **Supports popular BMS – Building Management System protocols, such as BACnet, KNX, and DALI** — These protocols allow for centralized monitoring and control of mechanical and electrical systems that include HVAC, lighting, power, fire, and security.

- **Integrated three port network switch** — Allows for easy connection of touchpanels or other network controlled devices.
- **Supports 10/100/1000Base-T**
- **Supports Ethernet-controllable devices** — Allows for control of multiple Ethernet-enabled AV devices such as displays, switchers, and sources.
- **Automatic clock synchronization allows touchpanel to display the accurate time and date**
- **Supports control system synchronization** — Synchronization will allow users to retain and recover the state of their configured endpoints in case of network or power failure.
- **Front panel port status indicators**
- **Multi-level password protection** — Allows security to be set based on user roles.
- **Fully customizable using Extron control system software** — GUI Designer can be combined with Global Configurator® Plus or Global Configurator Professional.
- **Create controller groups** — Allows multiple IP Link Pro control processors to be grouped together to function as one when configured with Global Configurator Professional.
- **Library of enhanced Extron Certified device drivers** — Device drivers allow Extron products to control various display and source devices, such as projectors, flat-panel displays, and Blu-ray players. Extron has produced fully tested Ethernet, serial, and IR device drivers.
- **HDMI audio embedding** — Two-channel audio signals can be embedded onto the HDMI and DTP outputs.
- **HDMI audio de-embedding** — Embedded HDMI two-channel PCM audio can be extracted for routing and further processing. Embedded multi-channel bitstream formats are routed with the video to the HDMI and DTP outputs.
- **Output volume control** — The DTP CrossPoint 84 provides master volume control for the variable line level and amplified audio outputs, as well as a separate control for mic volume.
- **Audio input gain and attenuation** — Gain or attenuation can be adjusted for each two-channel audio input to eliminate noticeable differences when switching between sources.
- **Audio breakaway** — Provides the capability to break two-channel audio away from its corresponding video signal and route to the audio outputs, allowing the audio and video signals from one source to be switched to different destinations.
- **S/PDIF audio output** — The DTP CrossPoint 84 includes an S/PDIF output for two-channel PCM audio or encoded bitstream audio for Dolby® or DTS® multi-channel surround sound.
- **Integrated audio digital signal processor with ProDSP™ 32/64-bit processing** — The DTP CrossPoint 84 features 32/64-bit floating point audio DSP processing, which maintains very wide dynamic range and audio signal transparency, to simplify management of gain staging while reducing the possibility of DSP signal clipping.
- **Digital audio expansion port provides interfacing to an Extron DMP 128 processor for AEC and audio system scalability** — An expansion port allows the DTP CrossPoint 84 and any DMP 128 model to be linked together via a single shielded CAT 6 cable for an 8x16 I/O channel transport between devices. This allows for audio system scalability with expanded audio processing and signal routing capabilities.
- **Four mic/line inputs with 48 volt phantom power** — Four mic or line level audio sources can be independently mixed with program audio. Selectable 48 volt phantom power allows the use of condenser microphones.
- **Mic ducking** — Automatically reduces program audio when a microphone or other incoming audio signal is detected, replacing the need for a separate audio ducking processor.

- **Studio grade 24-bit/48 kHz analog-to-digital and digital-to-analog converters** — Professional converters fully preserve the integrity of the original audio signal.
- **Fixed, low latency DSP processing** — Input to output latency is a constant 4.5 ms within the DTP CrossPoint 84, regardless of the number of active channels or processes. Fixed, low latency processing keeps audio in sync with video, and prevents distractions to the presenter resulting from delayed live audio.
- **DSP Configurator™ Software** — A powerful yet user-friendly PC-based software tool for managing all audio operations of the DTP CrossPoint 84. It enables complete setup and configuration of digital audio processing tools on the ProDSP platform, as well as routing and mixing.
- **Group masters** — The DTP CrossPoint 84 provides the capability to consolidate gain or mute control throughout the system. Gain or mute controls can be selected and added to a group master, which can then be controlled by a single master fader or mute control. Up to 32 group masters can be created.
- **Soft limits provide optimal group master adjustment range** — The group master volume range can be limited using soft limits to maintain optimal minimum and maximum levels when using external volume control. This prevents operators from over or under-adjusting levels when using Ethernet, USB, or RS-232 control. The DSP Configurator Software provides quick drag-and-drop adjustment of soft limits from the Group Controls screen.
- **32 DSP Configurator presets** — Using the DSP Configurator Software, any or all parameters for DSP processing, levels, AV matrix switching ties, and audio matrix mixing can be saved as presets.
- **Flexible matrix design provides output, virtual, and expansion routing options** — The DSP architecture of the DTP CrossPoint 84 employs an intuitive matrix design that offers substantial flexibility in routing, mixing, and processing audio input sources. An output matrix allows any of the four microphone inputs to be matrix mixed to any or all of the four stereo outputs of the AV switcher block. If desired, any of the microphone inputs or AV switcher outputs can first be directed into a virtual matrix, which routes the inputs to eight virtual buses, before being mixed back into the output matrix. Virtual buses allow inputs to be processed together as a group. The expansion matrix provides signal routing between the DTP CrossPoint 84 and a DMP 128 processor linked via the expansion port.
- **Building Blocks processor settings** — A collection of pre-designed processor settings optimized for a specific type of input or output device, such as microphones and Extron speakers, with preset levels, filters, dynamics, and more. Flexible Building Blocks are available on each I/O strip and allow system designers to fully customize and save their own Building Blocks, further streamlining audio system design and integration.
- **Available with energy efficient Class D stereo or mono amplifier: 2 x 50 watts @ 4 ohms; 2 x 25 watts @ 8 ohms 1 x 100 watts @ 70 volts** — All DTP CrossPoint 84 power amplifier options feature an Extron exclusive, highly efficient, advanced Class D amplifier design with CDRS - Class D Ripple Suppression, an Extron patented technology that provides a smooth, clean audio waveform and an improvement in signal fidelity over conventional Class D amplifier designs. CDRS eliminates the high frequency switching ripple characteristic of Class D amplifiers, a source of RF emissions which can interfere with sensitive AV equipment such as wireless microphones.
- **Supported HDMI specification features include data rates up to 10.2 Gbps, Deep Color up to 12-bit, 3D, and HD lossless audio formats**
- **HDCP 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.

- **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 signal to one or more displays.
- **EDID Minder® automatically manages EDID communication between connected devices** — EDID Minder ensures that all sources power up properly and reliably output content for display.
- **SpeedSwitch® Technology provides exceptional switching speed for HDCP-encrypted content**
- **HDCP authentication and signal presence confirmation** — 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, USB, 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-compliant display** — 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.
- **HDMI to DVI Interface Format Correction** — Automatically enables or disables embedded audio and InfoFrames, and sets the correct color space for proper connection to HDMI and DVI displays.
- **QS-FPC™ - QuickSwitch Front Panel Controller with tri-color backlit buttons** — Provides a discrete button for each input and output, allowing for simple, intuitive operation. 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.
- **View I/O mode** — Users can easily view which inputs and outputs are actively connected.
- **Global presets** — Frequently used I/O configurations may be recalled either from the QuickSwitch Front Panel Controller, Ethernet, USB, or RS-232 serial control.
- **Output muting control** — Provides the capability to mute one or all outputs at any time. This allows, for example, content to be viewed on a local monitor prior to appearing on the main presentation display.
- **Aspect ratio control** — For the scaled DTP outputs, the aspect ratio of the video can be controlled by selecting a FILL mode, which provides a full screen output, or a FOLLOW mode, which preserves the original aspect ratio of the input signal.
- **Auto Input Memory** — When activated for the scaled DTP outputs, the unit automatically stores size, position, and picture settings based on the incoming signal. When the same signal is detected again, these image settings are automatically recalled from memory.
- **Output Standby Mode** — The unit can be set to automatically mute video and sync output to the display device when no active input signal is detected. This allows the projector or flat-panel display to automatically enter into standby mode to save energy and enhance lamp or panel life.
- **Picture controls for brightness, contrast, color, tint, detail, as well as horizontal and vertical positioning, and sizing – DTP outputs**
- **User presets** — Memory presets are available for each input to store and recall optimized image settings.
- **Internal video test patterns for calibration and setup** — The unit offers several video test patterns for the scaled DTP outputs, to facilitate proper system setup and calibration of display devices.
- **Automatic input cable equalization to 100 feet (30 meters) at 1080p/60 with 8-bit color when used with Extron HDMI Pro cables** — Actively conditions incoming HDMI signals to compensate for signal loss when using long cables, low quality cables, or source devices with poor HDMI signal output. 4K and 2560x1600 @ 60 Hz resolutions are equalized to 50 feet (15 meters).

- **Automatic HDMI output reclocking** — Reshapes and restores timing of digital video signals at each HDMI output, eliminating high frequency jitter to ensure reliable transmission over long cables.
- **Provides +5 VDC, 250 mA power on each HDMI output for powering external peripheral devices** — Power provided via an HDMI output eliminates the need of a separate power supply for the connected peripheral device.
- **Front panel security lockout** — Prevents unauthorized use in non-secure environments. In lockout mode, a special button combination is required to operate the matrix switcher from the front panel controller.
- **Ethernet monitoring and control** — Enables control and proactive monitoring over a LAN, WAN, or the Internet.
- **Built-in Web pages** — Enables the use of a standard browser for device monitoring and troubleshooting over an intuitive Web interface.
- **RS-232 control port** — Enables the use of serial commands for integration into a control system. Extron products use the SIS™ - Simple Instruction Set command protocol, a set of basic ASCII commands that allow for quick and easy programming.
- **Front panel USB configuration port** — Enables easy configuration without having to access the rear panel.
- **RJ-45 signal and link LED indicators for DTP ports** — Provides a means for validating signal flow and operation, allowing quick identification of connectivity issues.
- **New JITC Certified** — Successfully completed interoperability and information assurance testing for use in government applications and other mission-critical environments.
- **Easy setup and commissioning with Extron's PCS - Product Configuration Software** — Conveniently configure multiple products using a single software application.
- **Rack-mountable 2U, full rack width metal enclosure**
- **Includes LockIt® HDMI cable lacing brackets**
- **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](#).