

OVERVIEW

Tri-color, backlit buttons

The QS-FPC - QuickSwitch Front Panel Controller allows for simple, intuitive matrix switcher operation

Extron Vector 4K scaling engine

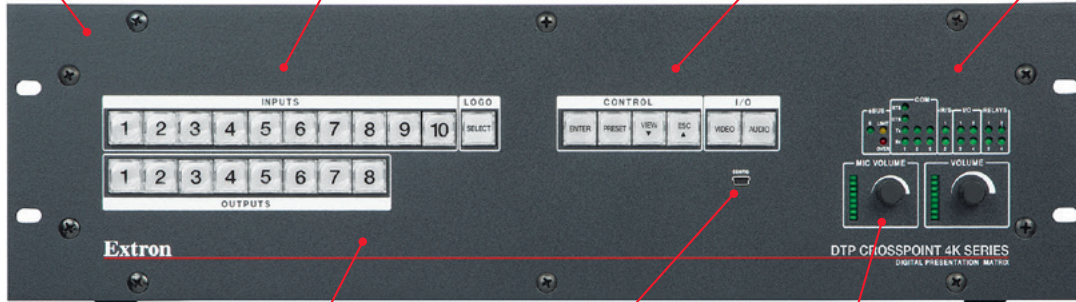
The exclusive 4K scaling engine is specifically designed for critical-quality 4K imagery, with best-in-class image upscaling and downscaling. Scaling and video format conversion are performed at 30-bit precision for signals up to 4K to provide enhanced color accuracy and picture detail

Flexible video and audio routing options

AV signals can be routed together or independently, including embedded HDMI stereo audio signals

Complete AV system integration in one box

The DTP CrossPoint 4K IPCP Q is an all-in-one matrix switcher, scaler, audio DSP with AEC, audio amplifier, and control processor



DTP CrossPoint 108 4K IPCP SA - Front

HDCP compliant

The DTP CrossPoint 4K is fully HDCP compliant at all inputs and outputs.

USB configuration port

Provides convenient user access for configuring, controlling, and monitoring the matrix switcher

Volume controls

Allow for adjustment of master volume and microphone level, with accompanying LEDs to indicate volume level

Powerful IPCP Pro xi control processor

DTP CrossPoint 4K IPCP Q models are available with an integrated IP Link Pro xi quad core control processor for complete and secure AV system control

Built-in three-port AV LAN switch

Enables local control of AV devices while isolating the AV LAN network traffic from outside interference or intrusion

DMP digital audio expansion port

Allows the matrix switcher and an Extron DMP 128 Plus DSP to be linked together via a shielded CAT 6 cable for system expansion

Mic/line inputs with 48 volt phantom power and ducking

Four mic/line inputs are available for mixing microphones or line level sources into the audio outputs

Scaled DTP outputs

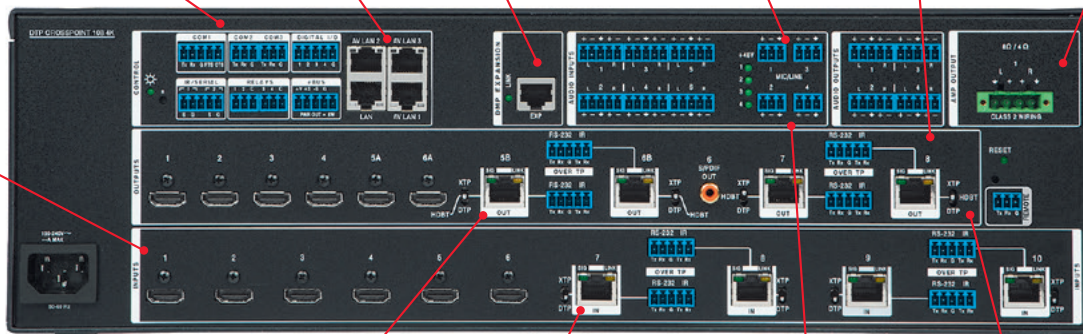
The DTP CrossPoint 4K provides individual scaling up to 2560x1600 and 4K for each DTP output

Integrated XTRA Series audio amplifier technologies

DTP CrossPoint 4K IPCP Q models are available with an integrated stereo or mono amplifier

HDMI inputs and HDMI outputs

Enable easy integration with HDMI sources and displays



DTP CrossPoint 108 4K IPCP Q SA - Back

Two DTP outputs with mirrored HDMI connections

Two DTP outputs on the DTP CrossPoint 4K feature mirrored HDMI connections to support local monitoring

DTP inputs and DTP outputs

The DTP inputs and outputs are compatible with DTP Systems, including DTP 230 and DTP 330 products, or XTP CrossPoint matrix switchers. They support digital signal transmission up to 330 feet (100 meters) over a single shielded CATx cable

Extron ProDSP

Provides full control of audio input and output levels, plus a wide array of audio processing tools and matrix mixing options for program and microphone signals

Compatible with HDBaseT-enabled displays

The DTP outputs can be configured to send video and embedded audio, plus bidirectional RS-232 and IR signals to projectors and flat-panel displays equipped with HDBaseT inputs

FEATURES

All-in-one matrix switcher, scaler, audio DSP with AEC, audio power amplifier, and control processor

Choose from 10x8, 8x6, 8x4, and 8x2 matrix switcher configurations

Independently scaled DTP outputs

Two DTP outputs feature mirrored HDMI connections to support local monitoring.

4K matrix switching and scaling with logo keying

The DTP CrossPoint 4K supports 4K signals at all video inputs and outputs. Each DTP output features a built-in high performance Vector 4K video scaler, with the ability to insert a logo image.

Integrated DTP inputs and outputs support transmission of video, control, and audio up to 330 feet (100 m) over a shielded CATx cable

Select DTP endpoints can be remotely powered over each twisted pair connection.

Advanced Extron Vector 4K scaling engine

The Vector 4K scaling engine is specifically designed for critical-quality 4K imagery, with best-in-class image upscaling and downscaling. Scaling and video format conversion are performed at 30-bit precision for signals up to 4K to provide enhanced color accuracy and picture detail.

Selectable scaled DTP output rates from 640x480 to 4K

The output rate can be individually selected for each of the scaled DTP outputs. Available output rates include computer and video up to 4K.

Compatible with DTP 230, DTP 330, DTP2 Series, plus XTP CrossPoint Matrix Switchers

This enables mixing and matching with desktop and wallplate transmitters and receivers, as well as other DTP-enabled products. The DTP CrossPoint 4K 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

Bidirectional RS-232 and IR insertion for AV device control

Bidirectional RS-232 and IR signals can be inserted from a control system via dedicated control ports on the matrix switcher. Bidirectional RS-232 signals can also be inserted via Ethernet.

HDMI audio embedding and de-embedding

Two-channel audio signals can be embedded onto the HDMI and DTP outputs. 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

Master volume control is provided for the variable line level and amplified audio outputs. A separate control is provided for mic volume.

Audio input gain and attenuation, plus audio breakaway

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 the two-channel audio away from its corresponding video signal and route to the audio outputs.

Integrated audio digital signal processor with ProDSP 32/64-bit floating point signal processing

The DTP CrossPoint 4K 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.

Four channels of AEC

The matrix switcher includes four independent channels of high performance AEC, and selectable noise cancellation. Extron AEC features advanced algorithms that deliver fast echo canceler convergence for optimal intelligibility in situations that challenge AEC performance, including double talk and the use of wireless microphones.

Automixer with eight groups

The matrix switcher features an automixer with gated and gain sharing modes for managing up to eight groups of microphone signals. Gating threshold, signal level reduction, and timing parameters are user adjustable per channel, allowing for fine tuning to avoid the "chopped" sound characteristic of a traditional automixer when a mic is gated off.

Digital audio expansion port provides interfacing to an Extron DMP 128 Plus processor for audio system scalability

An expansion port allows the DTP CrossPoint 4K and any DMP 128 Plus model to be linked together via a single shielded CAT 6 cable for 16x16 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.

Mic ducking

Automatically reduces program audio when a microphone or other incoming audio signal is detected, eliminating the need for a separate audio ducking processor.

DTP
SYSTEMS

4K UHD

ProDSP

EDID
MINDER

SPEED SWITCH

KEY
MINDER

FEATURES

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.

Low latency DSP processing

The DTP CrossPoint 4K features very low, deterministic latency from input to output, regardless of the number of active channels or processes. While latency increases marginally in channels with AEC enabled, overall latency remains extremely low. This keeps audio in sync with video, and prevents distractions resulting from delayed live audio.

DSP Configurator Software

DSP Configurator Software is a powerful yet user-friendly PC-based software tool for managing all audio operations of the DTP CrossPoint 4K. It enables complete setup and configuration of digital audio processing tools on the ProDSP platform, as well as routing and mixing.

Flexible matrix design provides output, virtual, and expansion routing options

The DSP architecture employs an intuitive matrix design that offers substantial flexibility in routing, mixing, and processing audio input sources.

Available with integrated energy-efficient Class D audio amplifier

IPCP Q models include a stereo power amplifier with 50 watts rms per channel into 4 ohms and 25 watts rms per channel into 8 ohms, or a mono 70 volt amplifier with 100 watts rms output.

Professional grade audio performance

The integrated amplifier delivers professional grade signal-to-noise ratio and THD+N performance.

Extron Patented CDRS - Class D Ripple Suppression

CDRS technology provides a smooth, clean audio waveform and an improvement in signal fidelity over conventional Class D amplifier designs. It 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

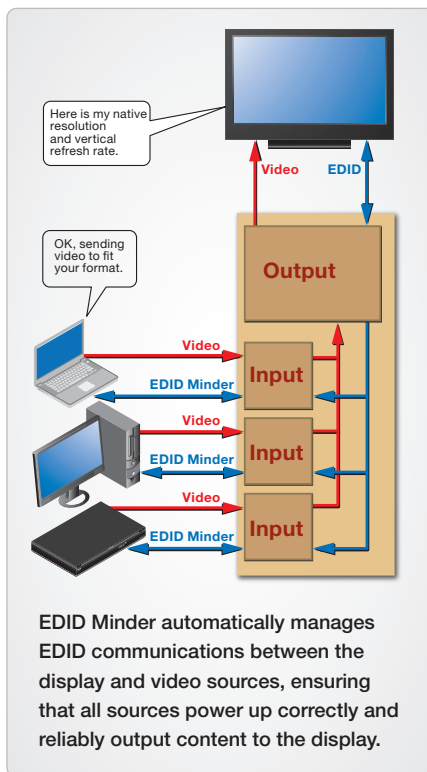
HDCP compliant

User-selectable HDCP authorization

Allows individual inputs to appear HDCP compliant or non-HDCP compliant to a source that encrypts content by default. Protected material is not passed in non-HDCP mode.

Logo image keying and display

A logo graphic may be placed at any position on any scaled video output as a foreground image. Logo graphics in BMP, JPG, PNG, or TIFF format may be uploaded to the unit. Full screen images up to 4096x2400 resolution can also be displayed to eliminate blank screens between presentations.



Seamless switching

Seamless freeze/fade, cut through black, and fade through black transition effects are available at the scaled video outputs.

Extron digital video technologies

EDID Minder, Key Minder, and SpeedSwitch simplify integration of HDMI devices and help ensure optimal system performance and dependability.

HDCP Visual Confirmation

When processing HDCP-encrypted content, the DTP CrossPoint 4K outputs a full-screen green signal on any video output connected to a non-HDCP compliant display, providing immediate visual confirmation that protected content cannot be viewed.

QS-FPC™ - QuickSwitch Front Panel Controller

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 from the QuickSwitch Front Panel Controller, Ethernet, USB, or RS-232.

Output muting control

One or all outputs can be muted at any time. This allows, for example, content to be viewed on a local monitor prior to appearing on the main 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.

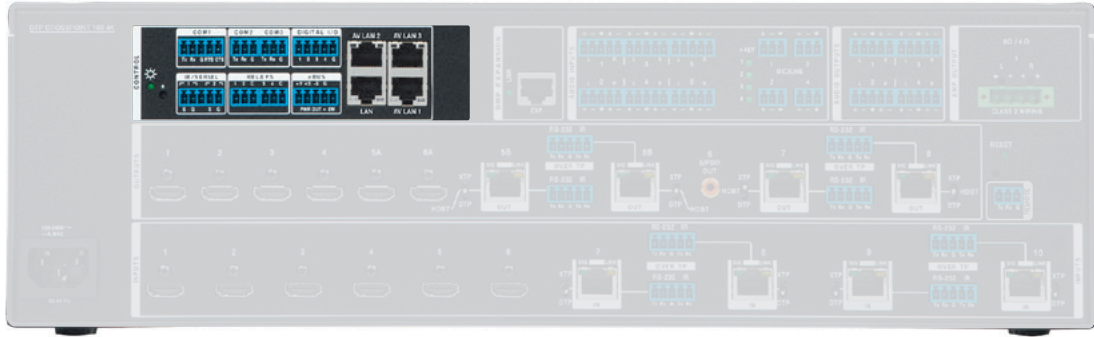
Available with integrated quad core control processor

DTP CrossPoint 4K IPCP Q models include a built-in IPCP Pro xi control processor for full AV system control.

Easy setup and commissioning with Extron's PCS - Product Configuration Software

Conveniently configure multiple products, including the DTP CrossPoint 4K, using a single software application.

INTEGRATED CONTROL PROCESSOR



Built-in IP Link Pro xi Quad Core Control Processor

The integrated IPCP Pro xi control processor includes all of the same advanced features, processing power, and breakthrough technologies found in standalone Extron Pro xi Series control systems. It enables the DTP CrossPoint 4K IPCP Q to provide powerful AV and room control capabilities, including control of all sources and displays, lighting, window shades, projection screens, occupancy sensing, and much more. The DTP CrossPoint 4K IPCP Q can also be grouped with up to three additional IPCP Pro xi control processors using Global Configurator Professional software to create large, sophisticated control systems. This is ideal for controlling multiple systems, rooms, or even remote locations around the world.

Two bidirectional RS-232 serial ports with software handshaking

One bidirectional RS-232/RS-422/RS-485 serial port with hardware and software handshaking

Two IR/serial ports for one-way control of external devices

Four digital I/O ports and four relays
Provide control of various room functions

Quad-core processor and four times more memory with 2 GB of RAM and 8 GB of Flash

For increased project upload speeds, faster runtime performance, and more sophisticated projects

Integrated three-port AV LAN switch allows AV devices to be isolated from the corporate network

Supports secure industry standard communications protocols

Supports LinkLicense

Enhances the capabilities of Extron Pro Series control systems

Multi-level password protection

Allows security to be set based on user roles

Fully customizable using Extron control system software

GUI Designer combined with Global Configurator Plus or Global Configurator Professional

Pair with TouchLink Pro Touchpanels for a Powerful AV Control System

The DTP CrossPoint 4K IPCP Q supports direct connectivity with Extron TouchLink® Pro touchpanels through the Gigabit switch on the presentation matrix switcher. TouchLink Pro touchpanels feature enhanced processing and memory, plus capacitive touchscreens for select models. These touchpanels are available in a variety of form factors and sizes to suit a wide range of applications.

