

XTP SYSTEMS

AV INFRASTRUCTURE FOR AN 8K FUTURE



50 Gbps
ULTRA PERFORMANCE
BACKPLANE

The Only AV Platform for HDMI 2.1

- ▶ 50 Gbps ultra performance backplane supports resolutions up to 8K
- ▶ I/O sizes from 4x4 up to 64x64
- ▶ 4K fiber & twisted pair I/O boards
- ▶ HDMI 2.0b I/O boards support HDR
- ▶ Transmitter and receiver endpoints available in a variety of form factors
- ▶ Easy to set up and configure
- ▶ Advanced 24/7 system monitoring and hot-swappable modular components

Extron

XTP Systems

The XTP II CrossPoint® Series modular matrix switchers represent a monumental leap in engineering and product design, providing unmatched, high performance routing of video, audio, bidirectional control, and Ethernet in a future-ready integrated solution. They feature a 50 Gbps ultra-performance backplane easily exceeds the data rate required to distribute 4K/60 video with 4:4:4 chroma at 16 bits per color. These matrix systems can be configured with a complete family of boards and endpoints, including XTP 4K twisted pair, XTP 4K fiber optic, and XTP II HDMI input and output boards that support 4K/60 @ 4:4:4 and HDR. They are available in three modular frames for configurable I/O sizes from 4x4 to 16x16, 32x32, and 64x64. XTP II CrossPoint is the definitive AV industry standard you can depend on now and to meet the challenges of an 8K future.



Reliability and Performance by Design

Designed and engineered to the highest standards, the 50 Gbps backplane delivers bandwidth performance that exceeds HDMI 2.1 and DisplayPort 1.4 signal requirements for all 4K/60 rates and gives future support for emerging resolutions, such as 8K.



50 Gbps

Digital switching backplane performance exceeds the data rate requirements of today's most demanding signals



4K

Twisted pair, fiber optic, and HDMI boards provide 4K video switching and transmission



64 I/Os

Modular, hot-swappable design supports I/O sizes up to 64x64 and upgrades to next-generation video boards



4 Power Supplies

Robust, hot-swappable, state-of-the-art power supplies are engineered to last



100,000 Hour MTBF

Highest quality metal fans are individually monitored to ensure optimal cooling

4K SWITCHING AND EXTENSION

Twisted pair and fiber optic I/O boards and endpoints deliver end-to-end capability for extending 4K video along with audio, control and Ethernet over a single cable. HDCP 2.3 compliant, XTP 4K Twisted Pair supports signal transmission up to 330 feet (100 meters) and supports remote powering of endpoints. XTP 4K Fiber offers a completely integrated solution that incorporates Extron exclusive, custom designed optical modules for signal extension up to 500 meters (1,640 feet) over OM4 multimode fiber optic cable and up to 10 km (6.21 miles) when using singlemode cable.



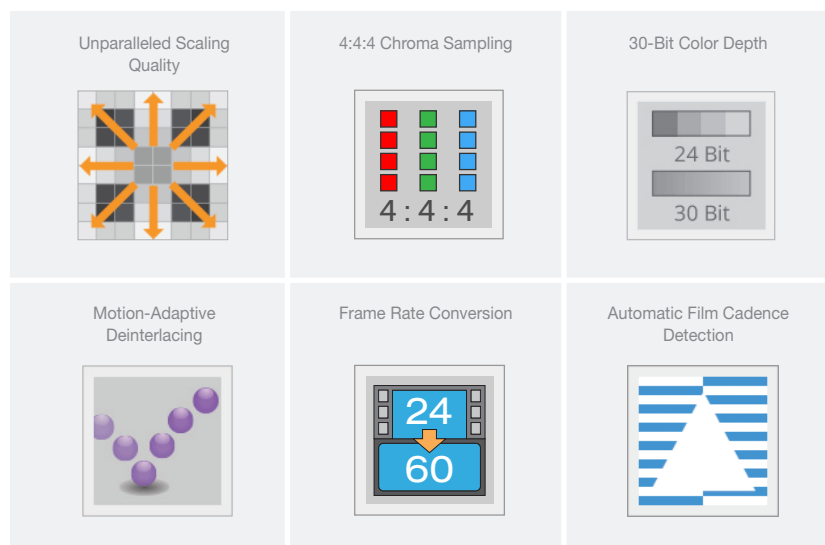
4K UHD

Extron Vector 4K Scaling Technology

Vector 4K was developed internally by Extron's expert team of signal processing engineers. Extron engineers have crafted patented image processing technologies that set the industry benchmark for visual performance. Features such as bicubic scaling, 30-bit color depth, and 4:4:4 chroma sampling ensure very high image quality while preserving detail present in the original source material.



XTP receivers with Vector 4K scaling offer a variety of convenient, user-friendly features. Aspect ratio control, dynamic vector-based test patterns, and remote power capability are just a few of the many standard product features that streamline integration and optimize system performance.



50 Gbps
ULTRA PERFORMANCE
BACKPLANE

4K / UHD

18 Gbps
4K/60 4:4:4

SPEED SWITCH

SD PRO
PROCESSING

EDID
MINDER

KEY
MINDER


EVERLAST
POWER SUPPLIES

50 Gbps digital backplane

XTP II CrossPoint matrix switchers are engineered to exceed the bandwidth required by HDMI 2.1 and DisplayPort 1.4 signals. The 50 Gbps digital switching backplane provides more than enough bandwidth to switch 4K/60 at 4:4:4 with 16 bits per color, and anticipates future video standards, such as 8K.

I/O sizes from 4x4 up to 64x64

XTP II CrossPoint 1600 can be configured up to 16x16, and the XTP II CrossPoint 3200 supports I/O sizes up to 32x32. The XTP II CrossPoint 6400 supports configurations up to 64x64. Each matrix switcher can be populated with XTP input and output boards to create customized system configurations starting from 4x4, with available I/O sizes in four-input and four-output increments.

Extension of 4K video, audio, bidirectional control, & Ethernet over fiber optic cable

XTP Fiber I/O boards, transmitters, and receivers allow long-haul transmission over OM4 multimode or singlemode cable.

Supports transmission of video, audio, bidirectional RS-232 and IR, Ethernet, and remote power over one shielded CATx cable

XTP Systems support signal transmission up to 330 feet (100 meters) over one shielded twisted pair cable, providing high reliability and maximum performance on an economical and easily installed cable infrastructure.

Extron XTP DTP 24 Shielded Twisted Pair cable provides added protection from outside interference and ensures high quality signal transmission

Fully digital signal routing

Incoming analog signals are digitized so that a reliable, high quality digital video signal is sent to the output destination.

SD Pro processing

Baseband 480i and 576i input video is deinterlaced to ensure compatibility with HDMI and DVI-equipped display devices, without the need for scalers.

Wide selection of input and output boards

A family of XTP input and output boards provide integration for a variety of signal types and formats, enabling system customization for the specific application.

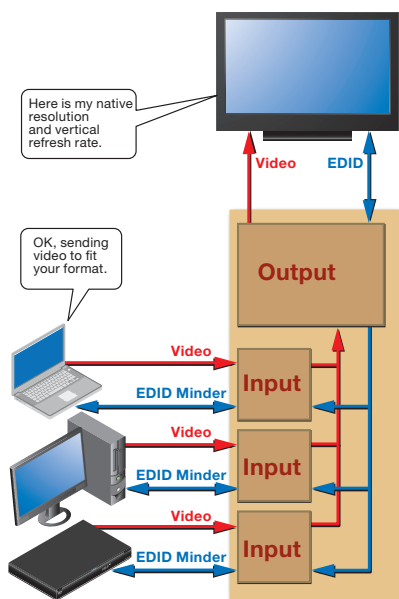
RS-232 control via Ethernet insertion

RS-232 control signals can be inserted, via Ethernet from a control system, into the Ethernet control port on the XTP matrix switcher. These signals can then be transmitted to remote endpoints to allow total system control without additional cabling.

Bidirectional RS-232 and IR insertion for AV device control

Control signals can be inserted into RS-232 and IR ports on an XTP I/O board or extender. Inserting RS-232 and IR control signals into XTP Systems allows a control system to interface with devices at remote endpoints via the matrix switcher.





XTP Systems actively manage EDID communication between the display and input sources to ensure consistent, reliable operation.

Remote power over CATx cabling to XTP transmitters and receivers

XTP matrix switchers can remotely power XTP transmitters and receivers over the same twisted pair cable for sending AV signals. This avoids the need to separately power XTP devices at remote endpoints.

HDCP compliant

XTP Systems are HDCP-compliant, including the matrix switcher and the remote endpoints. The XTP II I/O boards and the XTP 4K twisted pair products comply with HDCP 2.3 specifications.

SpeedSwitch® Technology

Provides exceptional switching speed for HDCP-encrypted content.

EDID Minder® automatically manages EDID communication between connected devices

EDID Minder ensures that all sources power up properly and reliably provide content for display.

Key Minder® continuously verifies HDCP compliance for quick, reliable switching

Audio breakaway

Provides the capability to separate audio signals from their corresponding video signals within the matrix switcher, including HDMI and DisplayPort embedded audio. This allows the audio and video signals from one source to be switched to different destinations.

Modular, field-upgradeable and hot-swappable design

XTP matrix switchers provide 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 input or output board at any time without the need to power down the unit. This is especially useful for mission-critical applications that require continuous system operation.

Ethernet extension

Ethernet access can be extended to remote endpoints over the same cable used for AV transmission, avoiding the need to install additional network drops or switches. This provides convenient Internet access for remote devices as well as integration into Ethernet-based control systems.

HDMI to DVI Interface Format Correction

Automatically reformats HDMI source signals for output to a DVI display.

HDCP authentication and signal presence confirmation via RS-232 or Ethernet

Provide 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 HDCP-encrypted content is transmitted 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.

Automatic color bit depth management

The matrix switcher automatically adjusts color bit depth based on the display EDID, preventing color compatibility conflicts between source and display.

Automatic cable equalization

Actively conditions incoming signals to compensate for loss when using long cables, low quality cables, or source devices with poor HDMI signal output.

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.

Ethernet monitoring and control

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.

Redundant power supply

XTP matrix switcher frames configurable to 32x32 or 64x64 include a redundant power supply for continuous, mission-critical applications where power reliability is crucial. Optional versions of the 16x16 frames feature a redundant power supply.

Global presets

Frequently used I/O configurations may be saved and recalled either from the front panel, serial, USB, or Ethernet control. This time-saving feature allows I/O configurations to be set up and stored in memory for future use.

Advanced computer-aided diagnostics

Provides 24-hour self-diagnostics of input/output boards, primary and redundant power supply voltages, XTP links, and overall functional status of the matrix. Using the Ethernet or RS-232/RS-422 communications port, status monitoring is possible for off-site or unmanned locations, such as government, military, medical, and other sensitive 24/7 environments.

Front panel security lockout

Prevents unauthorized use in non-secure environments.

XTP II CROSSPOINT



XTP II CrossPoint 6400 - Front

AV routing options

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

USB configuration port

Provides convenient user access for setting up, operating, and monitoring XTP Systems.

Configurable from 4x4 to 64x64

The modular XTP matrix switchers can be appropriately sized to application requirements while allowing for future expansion and formats.

Hot-Swappable primary and redundant power supplies

Provides reliability for mission-critical operations.

Tri-color, backlit buttons and Front Panel Controller

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

Advanced system monitoring

Provides continuous self-diagnostics of the matrix switcher and its essential components, including the primary and redundant power supplies.

Completely integrated solution for digital and analog video

XTP Systems feature fully digital signal routing with digital conversion of analog signals.

50 Gbps ultra-performance backplane

XTP II CrossPoint matrix switchers are engineered to exceed the bandwidth required by HDMI 2.1 and DisplayPort 1.4 signals. The 50 Gbps digital switching backplane provides more than enough bandwidth to switch 4K/60 at 4:4:4 with 16 bits per color, and anticipates future video standards.

RS-232 insertion for system control

The entire XTP system, including the matrix switcher and devices at remote endpoints, can be controlled via RS-232 commands inserted into the Ethernet control port.

Wide variety of input and output boards

XTP I/O boards connect to XTP transmitters and receivers installed in remote locations, while HDMI, DVI, 3G-SDI, analog video, and audio I/O boards support local connections.

Hot-swappable, modular, field-upgradeable design

Ensures flexibility and minimizes system downtime.

RS-232 and IR insertion

Bidirectional control signals can be inserted to control devices at remote endpoints.

Ethernet extension

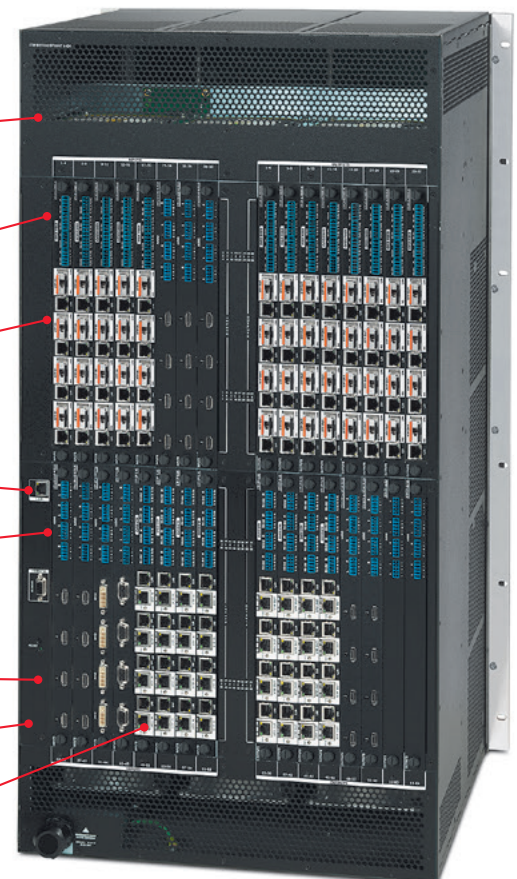
Ethernet can be extended to remote endpoints for network access or system control.

Audio signal routing and management

XTP Systems integrate analog audio alongside digital audio, with extensive signal routing and management options.

Remote powering over CATx cabling

XTP matrix switchers can remotely power XTP transmitters and receivers over the same twisted pair cable for AV.



XTP II CrossPoint 6400 - Back

XTP CROSSPOINT MATRIX SWITCHERS

COMMON FEATURES

- Ultra performance 50 Gbps digital backplane
- Modular, field-upgradeable and hot-swappable design
- Compatible with all XTP input and output boards
- RS-232 insertion from the Ethernet control port
- Remote powering of XTP twisted pair transmitters and receivers
- SpeedSwitch® Technology provides exceptional switching speed for HDCP-encrypted content
- EDID Minder® automatically manages EDID communication between connected devices
- Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- Audio breakaway
- Ethernet extension
- Ethernet monitoring and control

XTP II CrossPoint 1600

Modular Matrix Switchers from 4x4 to 16x16

UNIQUE FEATURES

- Available in I/O sizes from 4x4 to 16x16
- Optional redundant power supply
- Rack-mountable 5U, full rack width metal enclosure

Model	Version Description	Part Number
XTP II CrossPoint 1600 Frame	5U, 8-slot Frame	60-1545-01
XTP II CrossPoint 1600 Frame w/ RPS	5U, 8-slot Frame w/ redundant power	60-1545-11



XTP II CrossPoint 3200

Modular Matrix Switchers from 4x4 to 32x32

UNIQUE FEATURES

- Available in I/O sizes from 4x4 to 32x32
- Redundant power supply
- Rack-mountable 10U, full rack width metal enclosure

Model	Version Description	Part Number
XTP II CrossPoint 3200 Frame	10U, 16-slot Frame	60-1546-01



XTP II CrossPoint 6400

Modular Matrix Switchers from 4x4 to 64x64

UNIQUE FEATURES

- Available in I/O sizes from 4x4 to 64x64
- Redundant power supply
- Rack-mountable 20U, full rack width metal enclosure

Model	Version Description	Part Number
XTP II CrossPoint 6400 Frame	20U, 32-slot Frame	60-1386-01



XTP CP I/O BOARDS

The Extron XTP CrossPoint input and output boards enable long distance signal transmission between the XTP matrix switchers and XTP transmitters and receivers. In a twisted pair cable infrastructure, video, audio, bidirectional RS-232 and IR control, power plus Ethernet can be sent up to 330 feet (100 meters) over Extron XTP DTP 24 or shielded CATx cable. XTP 4K fiber optic I/O boards enable long-haul signal extension of AV, bidirectional control, and Ethernet over OM4 multimode or singlemode cable. Boards also support direct HDMI, DVI, 3G-SDI, analog video, and audio connections to local sources and displays. The input and output boards can be mixed and matched to meet application requirements for supporting sources and displays in local and remote locations, and integrating various digital and analog video formats into a single system.



XTP CP 4i 4K



XTP CP 4o 4K



XTP CP 4K Twisted Pair I/O Boards

Twisted Pair Input and Output Boards with RS-232 and IR Insertion

- Four XTP inputs or four XTP outputs with RS-232 and IR insertion
- Extends video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 meters) over a shielded CATx cable
- Supports computer and video resolutions up to 4K
- HDCP 2.3 compliant
- Remote power to XTP transmitters and receivers

Model	Version Description	Part Number
XTP CP 4i 4K	Four Input Board, XTP - 26W Remote Power Capable	70-940-31
XTP CP 4o 4K	Four Output Board, XTP - 26W Remote Power Capable	70-943-31



XTP CP 4i Fiber 4K



XTP CP 4o Fiber 4K



XTP CP 4K Fiber I/O Boards

Fiber Optic Input and Output Boards with RS-232 and IR Insertion

- Four fiber optic inputs or outputs with RS-232 and IR insertion
- Extends video, audio, bidirectional RS-232 and IR, and Ethernet over one fiber optic cable
- Supports computer and video resolutions up to 4K
- HDCP compliant
- Bidirectional RS-232 and IR insertion for AV device control
- Ethernet extension

Model	Version Description	Part Number
XTP CP 4i Fiber 4K MM	Four Input Board, Fiber 4K - Multimode	70-985-01
XTP CP 4i Fiber 4K SM	Four Input Board, Fiber 4K - Singlemode	70-985-02
XTP CP 4o Fiber 4K MM	Four Output Board, Fiber 4K - Multimode	70-986-01
XTP CP 4o Fiber 4K SM	Four Output Board, Fiber 4K - Singlemode	70-986-02



XTP II CP 4i HD 4K PLUS



XTP II CP 4o AT HD 4K PLUS



XTP II CP HD PLUS I/O Boards

4K/60 HDMI Input and Output Boards with Stereo Audio

- Four HDMI inputs or outputs with stereo audio
- Supports computer and video resolutions up to 4K/60 @ 4:4:4
- Supported HDMI 2.0b specification features include data rates up to 18 Gbps, HDR, Deep Color up to 12-bit, 3D, and HD lossless audio formats
- HDCP 2.3 compliant
- Support for HDR - High Dynamic Range video
- Dante® audio output enables transport over a local area network using standard Internet protocols

Model	Version Description	Part Number
XTP II CP 4i HD 4K PLUS	Four Input Board, HDMI 4K/60 w/ Stereo Audio	70-1112-01
XTP II CP 4o HD 4K PLUS	Four Output Board, HDMI 4K/60 w/ Stereo Audio	70-1113-01
XTP II CP 4o HD AT 4K PLUS	Four Output Board, HDMI 4K/60 w/ Dante Out	70-1182-01



XTP CP 4i DVI Pro



XTP CP 4o DVI Pro

XTP CP DVI Pro I/O Boards

HDCP-Compliant DVI Input and Output boards with Stereo Audio

- Four DVI inputs or four DVI outputs with stereo audio
- Supports computer and video resolutions up to 1920x1200, including 1080p/60 Deep Color and 2K
- HDCP compliant
- Automatic cable equalization
- Automatic output reclocking
- Audio breakaway enables independent audio and video switching

Model	Version Description	Part Number
XTP CP 4i DVI Pro	Four Input Board, DVI w/ Stereo Audio	70-684-11
XTP CP 4o DVI Pro	Four Output Board, DVI w/ Stereo Audio	70-686-11

XTP CP I/O BOARDS



XTP CP 4i 3G-SDI Board

3G-SDI Input Board with Stereo Audio

- Four 3G-SDI inputs with stereo audio
- Converts 3G-SDI, HD-SDI, and SDI signals for long distance transmission within XTP Systems®
- Supports 3G-SDI/HD-SDI/SDI signals up to 2.97 Gbps
- Automatically adapts to SMPTE and ITU digital video standards for 3G-SDI, HD-SDI, and SDI
- Buffered 3G-SDI/HD-SDI/SDI input loop-throughs
- Input equalization and reclocking on buffered loop-throughs

Model	Version Description	Part Number
XTP CP 4i 3G-SDI	Four Input Board, 3G-SDI w/ Stereo Audio	70-1050-01



XTP PI 100

Single Port XTP Power Injector

- Supplies 13 watts of power to one XTP twisted pair extender
- Designed specifically for the high data rates of XTP Systems
- Patented ZipClip™ 200 mounting kit included
- Real-time status LEDs for troubleshooting and monitoring
- UL/c-UL listed and CE compliant

Model	Version Description	Part Number
XTP PI 100	Single Port Power Injector	60-1233-01



XTP CP 4i VGA Board

Universal Input Board with Stereo Audio

- Four universal inputs with stereo audio
- Supports computer and video up to 1920x1200, including 1080p/60
- Accepts RGBHV, HD component video, S-video, and composite video
- Auto input format detection
- Analog-to-digital signal conversion
- SD Pro processing provides deinterlacing of standard definition video

Model	Version Description	Part Number
XTP CP 4i VGA	Four Input Board, VGA w/ Stereo Audio	70-941-01



XTP PI 400

Four Port XTP power Injector

- Supplies 13 watts of power for up to four XTP twisted pair extenders
- Designed specifically for the high data rates of XTP Systems
- No impact on signal quality
- Real-time status LEDs for troubleshooting and monitoring
- UL/c-UL listed and CE compliant
- 1U, half rack width enclosure

Model	Version Description	Part Number
XTP PI 400	Four Port Power Injector	60-1298-01



XTP CP 4o SA Board

Stereo Audio Output Board

- Four stereo audio outputs
- Balanced or unbalanced audio outputs
- Audio output volume adjustment and muting
- Audio breakaway enables independent audio and video switching

Model	Version Description	Part Number
XTP CP 4o SA	Four Output Board, Stereo Audio	70-944-01

XTP TRANSMITTERS

Extron XTP transmitters and receivers are used to interface with remote sources and displays via long distance transmission of AV and control signals as well as Ethernet over a shielded CATx or fiber optic cable. XTP transmitters and receivers are fully compatible with XTP matrix switchers as part of a completely integrated switching and distribution system for local and remote sources and display devices. They support HDMI, DisplayPort, DVI, analog video, and audio signals. Select XTP transmitters feature automatic multi-input switching to streamline integration of multiple remote sources into XTP Systems. Note: Extron XTP DTP 24 Shielded Twisted Pair cable provides added protection from outside interference and ensures high quality signal transmission.

XTP FT HD 4K 4K HDMI Fiber Optic Transmitter

Features

- Transmits video, audio, bidirectional RS-232 and IR control, and Ethernet over one fiber optic cable
- Supports computer and video resolutions up to 4K
- HDMI loop-through with selectable audio control
- HDCP compliant
- Bidirectional RS-232 and IR insertion for AV device control
- Ethernet extension
- Supported HDMI specification features include data rates up to 10.2 Gbps, Deep Color up to 12-bit, 3D, and HD lossless audio formats
- EDID Minder and Key Minder
- Supports multiple embedded audio formats
- Selectable analog stereo audio input embedding
- Industry standard LC connector provides reliable physical connectivity and precise fiber core alignment
- Multimode and singlemode models available



Model

XTP FT HD 4K MM

XTP FT HD 4K SM

Version Description

HDMI Transmitter - Multimode

HDMI Transmitter - Singlemode

Part Number

60-1276-11

60-1276-12

XTP T HD 4K 4K HDMI Twisted Pair Transmitter

Features

- Transmits video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 meters) over a shielded CATx cable
- Supports computer and video resolutions up to 4K
- HDMI loop-through with selectable audio control
- HDCP 2.3 compliant
- Remote power capability
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- Bidirectional RS-232 and IR insertion for AV device control
- Supported HDMI specification features include data rates up to 10.2 Gbps, Deep Color up to 12-bit, 3D, and HD lossless audio formats
- EDID Minder and Key Minder
- Ethernet extension
- Supports multiple embedded audio formats
- Selectable analog stereo audio input embedding



Model

XTP T HD 4K

Version Description

HDMI Transmitter

Part Number

60-1524-12

XTP T USW 103 4K

Three Input Switcher with HDMI Output and Integrated XTP 4K Twisted Pair Transmitter

Features

- Transmits DisplayPort, HDMI or VGA video, audio, bidirectional RS-232 and IR, along with Ethernet up to 330 feet (100 meters) over a shielded CATx cable
- Supports computer and video resolutions up to 4K
- HDMI output enables local display of the selected input
- HDCP 2.3 compliant
- 26W Remote Power Capability
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- Auto-switching between inputs
- Bidirectional RS-232 and IR insertion for AV device control
- EDID Minder and Key Minder
- Ethernet extension
- RS-232 control



4K UHD

Model	Version Description	Part Number
XTP T USW 103 4K	DP, HDMI, VGA Switcher - 26W Remote Power Capable	60-1717-12

XTP T HWP 101 4K

4K HDMI Twisted Pair Transmitter - Decorator-Style Wallplate

Features

- Transmits HDMI with embedded audio up to 330 feet (100 meters) over a shielded CATx cable
- Supports computer and video resolutions up to 4K
- HDCP 2.3 compliant
- Remote power capability
- Supported HDMI specification features include data rates up to 10.2 Gbps, Deep Color up to 12-bit, 3D, and HD lossless audio formats
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- EDID Minder and Key Minder



4K UHD

Model	Version Description	Part Number
XTP T HWP 101 4K	HDMI Decorator-Style Transmitter - Black	60-1611-12
XTP T HWP 101 4K	HDMI Decorator-Style Transmitter - White	60-1611-13

XTP T UWP 202 4K

Two Input 4K Twisted Pair Transmitter - Decorator-Style Wallplate

Features

- Transmits HDMI or analog video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 meters) over a shielded CATx cable
- Supports computer and video resolutions up to 4K
- HDCP 2.3 compliant
- Remote power capability
- Bidirectional RS-232 and IR insertion for AV device control
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- Auto-switching between inputs
- EDID Minder and Key Minder
- Ethernet extension - XTP T UWP 202 4K model only
- RS-232 control



XTP T UWP 202 4K NL

4K UHD

Model	Version Description	Part Number
XTP T UWP 202 4K	HDMI, VGA Decorator-Style Transmitter - Black	60-1529-12
XTP T UWP 202 4K	HDMI, VGA Decorator-Style Transmitter - White	60-1529-13
XTP T UWP 202 4K NL	HDMI, VGA Decorator-Style Transmitter, No LAN - Blk	60-1530-12
XTP T UWP 202 4K NL	HDMI, VGA Decorator-Style Transmitter, No LAN - Wht	60-1530-13

XTP TRANSMITTERS

XTP T FB 202 4K

Two Input 4K Twisted Pair Transmitter for Floor Boxes

Features

- Designed to mount in a variety of floor boxes
- Transmits HDMI or analog video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 meters) over a shielded CATx cable
- Supports computer and video resolutions up to 4K
- HDCP 2.3 compliant
- Remote power capability
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- Auto-switching between inputs
- Bidirectional RS-232 and IR insertion for AV device control
- EDID Minder and Key Minder
- RS-232 control



Model	Version Description	Part Number
XTP T FB 202 4K	HDMI & VGA Transmitter for Floor Boxes	60-1582-12

XTP T VGA

Universal VGA Twisted Pair Transmitter

Features

- Transmits analog video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 m) over a shielded CATx cable
- Supports computer and video resolutions up to 1920x1200, including 1080p/60
- Supports RGBHV, HD component video, S-video, and composite video signals
- Remote power capability
- Bidirectional RS-232 and IR insertion for AV device control
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance



Model	Version Description	Part Number
XTP T VGA	Universal VGA Transmitter	60-1231-12

XTP T MK 202

Two Input Twisted Pair Transmitter for MK-type Junction Boxes

Features

- Designed to mount into two-gang MK boxes and enclosures for use in the UK, Middle East, Singapore, and other regions using MK-type enclosure
- Transmits HDMI or analog video, audio, and bidirectional RS-232 and IR up to 330 feet (100 meters) over a shielded CATx cable
- Supports computer and video resolutions up to 1920x1200, including 1080p/60 Deep Color and 2K
- HDCP compliant
- Remote power capability
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- One HDMI and one VGA input
- Auto-switching between inputs
- Bidirectional RS-232 and IR insertion for AV device control
- EDID Minder and Key Minder



Model

XTP T MK 202

Version Description

HDMI & VGA MK Transmitter

Part Number

60-1358-23

XTP T EU 202

Two Input Twisted Pair Transmitter for EU-type Junction Boxes

Features

- Designed to mount into two-gang EU junction boxes and enclosures with 60 mm mounting centers
- Transmits HDMI or analog video, audio, and bidirectional RS-232 and IR up to 330 feet (100 meters) over a shielded CATx cable
- Supports computer and video resolutions up to 1920x1200, including 1080p/60 Deep Color and 2K
- HDCP compliant
- Remote power capability
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- One HDMI and one VGA input
- Auto-switching between inputs
- Bidirectional RS-232 and IR insertion for AV device control
- EDID Minder and Key Minder



Model

XTP T EU 202

Version Description

HDMI & VGA EU Transmitter

Part Number

60-1358-35

XTP RECEIVERS

XTP SFR HD 4K

4K HDMI Fiber Optic Scaling Receiver

Features

- Receives video with embedded audio, bidirectional RS-232 and IR control, and Ethernet over one fiber optic cable
- Advanced Extron Vector™ 4K scaling technology
- Selectable output rates from 640x480 to 3840x2160
- HDCP compliant
- Bidirectional RS-232 and IR insertion for AV device control
- Ethernet extension
- Scales HDMI, DVI, RGB, HD component video, and standard definition video received from XTP devices
- EDID Minder and Key Minder
- HDMI audio de-embedding with multi-channel digital S/PDIF audio and analog stereo audio outputs
- Audio output volume adjustment and muting
- Selectable HDMI audio pass-through
- Two relays for controlling room functions
- Aspect ratio control
- Image freeze control
- On-screen menus
- RS-232 control



VECTOR 4K
SCALING

Model	Version Description	Part Number
XTP SFR HD 4K MM	HDMI Scaling Receiver - Multimode	60-1278-21
XTP SFR HD 4K SM	HDMI Scaling Receiver - Singlemode	60-1278-22

XTP R HD 4K

4K HDMI Twisted Pair Receiver

Features

- Receives video with embedded audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 meters) over a shielded CATx cable
- Supports computer and video resolutions up to 4K
- Bidirectional RS-232 and IR insertion for AV device control
- HDCP 2.3 compliant
- Remote power capability
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- HDMI audio de-embedding with analog stereo and digital S/PDIF audio outputs
- Ethernet extension
- Two relays for controlling room functions



4K UHD

Model	Version Description	Part Number
XTP R HD 4K	HDMI Receiver	60-1524-13

XTP SR HD 4K

4K HDMI Twisted Pair Scaling Receiver

Features

- Receives video with embedded audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 meters) over a shielded CATx cable
- Advanced Extron Vector™ 4K scaling technology
- Selectable output rates from 640x480 to 3840x2160
- HDCP 2.3 compliant
- Remote power capability
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- Scales HDMI, DVI, RGB, HD component video, and standard definition video received from XTP devices
- Bidirectional RS-232 and IR insertion for AV device control
- EDID Minder and Key Minder
- Ethernet extension
- HDMI audio de-embedding with multi-channel digital S/PDIF audio and analog stereo audio outputs
- Selectable HDMI audio pass-through
- Two relays for controlling room functions
- Aspect ratio control
- Image freeze control
- On-screen menus
- RS-232 control

Model
XTP SR HD 4K

Version Description
HDMI Scaling Receiver

Part Number
60-1524-01



VECTOR 4K
SCALING

XTP R HWP 201 4K

4K HDMI Twisted Pair Receiver with 90° Connector for Wall-Mounted Displays

Features

- Unique low-profile wallplate design requires minimal space behind a flat panel display
- Receives video with embedded audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 meters) over a shielded CATx cable
- Supports computer and video resolutions up to 4K
- HDCP 2.3 compliant
- Remote power capability
- Extron XTP DTP 24 shielded twisted pair cable is strongly recommended for optimal performance
- Bidirectional RS-232 and IR insertion for AV device control
- EDID Minder and Key Minder
- Ethernet extension
- HDMI audio de-embedding with analog stereo audio outputs and volume control
- Mounts in an included two-gang decorator-style wallplate

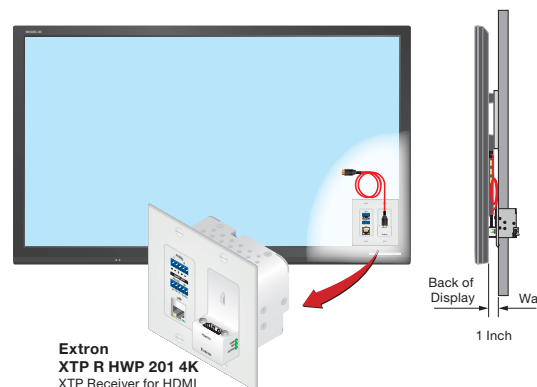
Model
XTP R HWP 201 4K
XTP R HWP 201 4K

Version Description
HDMI Decorator-Style Receiver - Black
HDMI Decorator-Style Receiver - White

Part Number
60-1629-22
60-1629-23



4K UHD



XTP CABLE & ACCESSORIES

Extron offers a wide variety of products to streamline the installation and integration of XTP Systems. XTP DTP 24 twisted pair cables, fiber optic bulk cable and cable assemblies, along with termination accessories are designed to provide optimal signal transmission over the XTP cable infrastructure. For discreet AV connectivity within a room, architectural connectivity products are available in various form factors.



XTP DTP 24

Shielded Twisted Pair Cable for XTP Systems and DTP Systems

- Engineered for superior performance with Extron XTP Systems and DTP Systems products
- Provides added protection from outside interference and ensures high quality signal transmission
- Certified to 475 MHz bandwidth at distances up to 330 feet (100 m)
- Independently tested and verified to meet performance requirements set by HDBaseT Alliance
- Engineered and tested to exceed HDMI error rate specifications of less than one pixel per billion at 100 meters
- 24 AWG solid copper construction
- Plenum and Non-Plenum rated versions available

Model	Version Description	Part Number
XTP DTP 24/1000	Non-Plenum 1000' (305 m) spool	22-236-03
XTP DTP 24P/1000	Plenum 1000' (305 m) spool	22-235-03
XTP DTP 24 Plug	XTP DTP 24 Plug, Package of 10	101-005-02
XTP DTP 24 Jack	XTP DTP 24 Jack, Package of 10	101-023-01
XTP DTP 24 Coupler	XTP DTP 24 Coupler, Package of 10	101-022-02



XTP DTP 24 Series

Precision-terminated Shielded Twisted Pair Cables for XTP Systems and DTP Systems

- Engineered for superior performance
- Provides added protection from outside interference and ensures high quality signal transmission
- Certified to 475 MHz bandwidth at distances up to 330 feet (100 m)
- Independently tested and verified to meet performance requirements set by HDBaseT Alliance
- Engineered and tested to exceed HDMI error rate specifications of less than one pixel per billion at 100 meters
- 24 AWG solid copper construction
- Plenum and Non-Plenum rated versions available
- Available in lengths from 3' (90 cm) to 300' (91.4 m)

Model	Version Description	Part Number
XTP DTP 24	Non-Plenum	26-702-xx
XTP DTP 24P	Plenum	26-695-xx



Fiber Optic Bulk Cable and Cable Assemblies

Bend-Insensitive Duplex Multimode and Singlemode Fiber - Plenum

- Laser-optimized OM4 multimode fiber
- Bend-insensitive
- OFNP plenum-rated jacket
- Durable duplex zip-cord cable construction
- Standard 2 mm duplex fiber optic cable for easy termination
- Quick LC Fiber Optic Connectors also available

Model	Version Description	Part Number
OM4 MM P/2K	Plenum 2 km (6,562') Spool	22-225-02
SM P/2K	Plenum 2 km (6,562') Spool	22-223-02



Fiber Optic Cable Assemblies

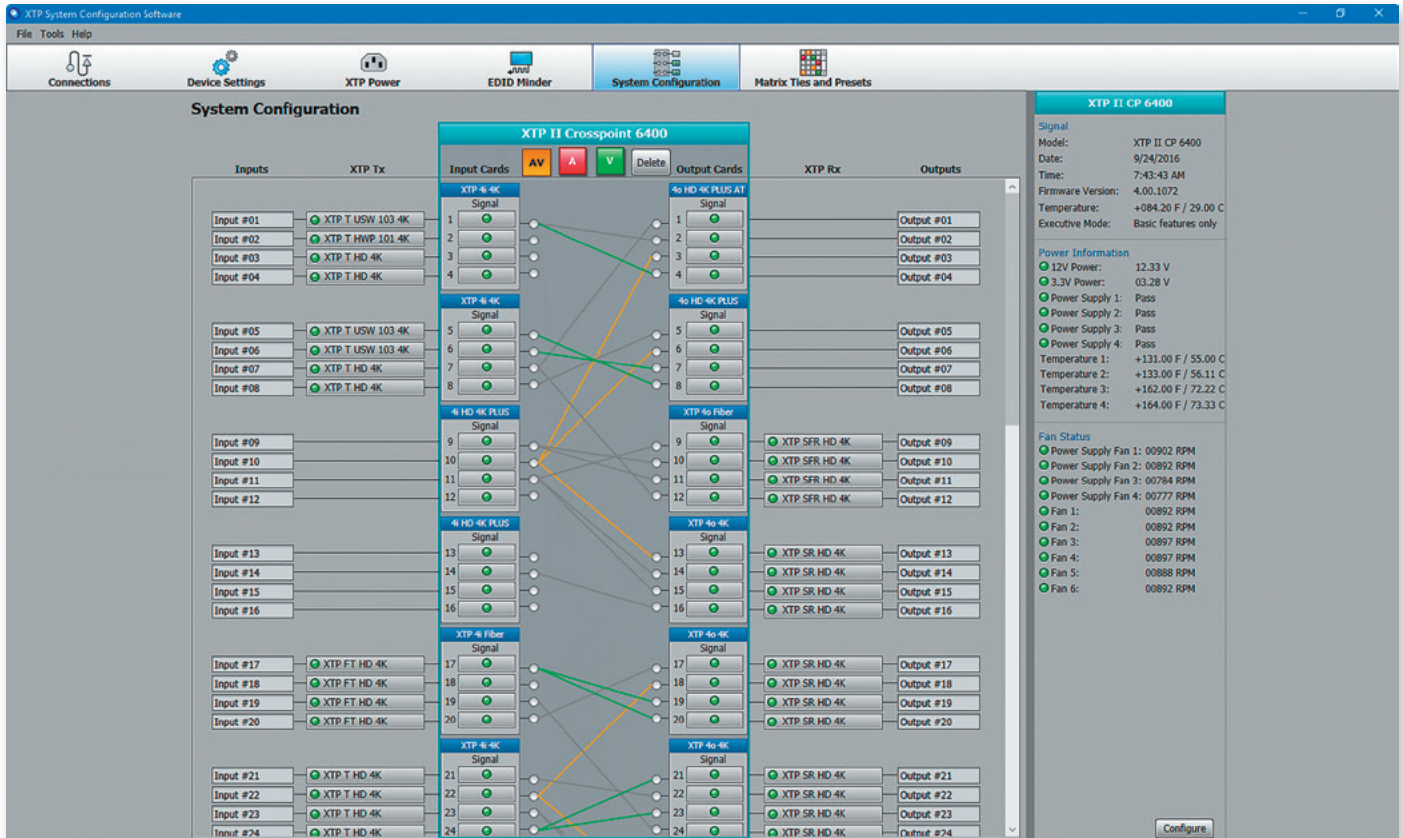
LC to LC Multimode and Singlemode Fiber Optic Cable Assemblies

- Available in Laser-Optimized Multimode or low-loss Singlemode
- Bend-insensitive
- OFNP plenum-rated jacket
- Durable duplex zip-cord cable construction
- Terminated with industry standard LC connectors
- Available in lengths from 1 meter (3.3 feet) to 60 meters (197 feet)

Model	Version Description	Part Number
2LC OM4 MM P	Multimode - Plenum	26-671-xx
2LC SM P	Singlemode - Plenum	26-670-xx

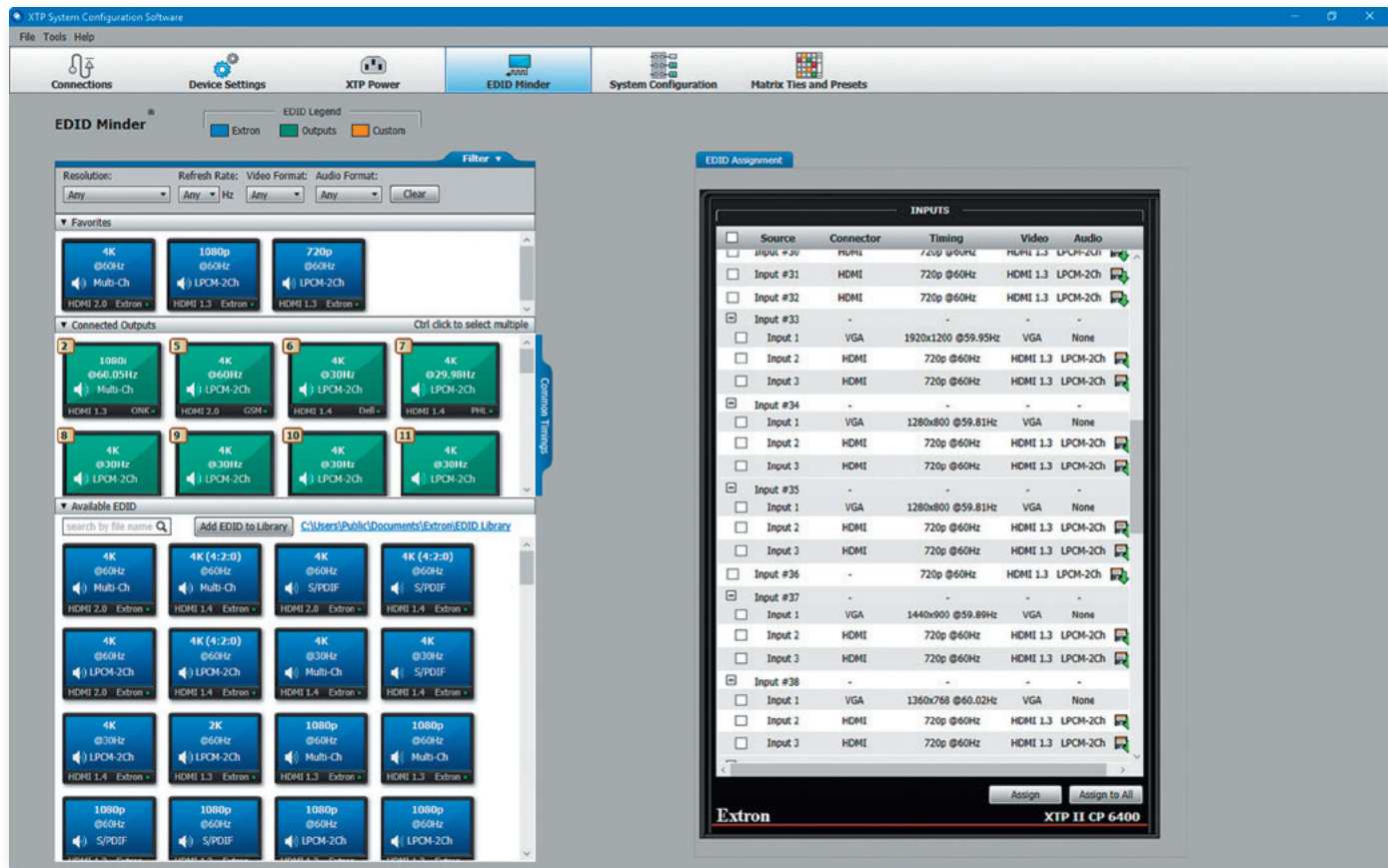
XTP SYSTEM CONFIGURATION SOFTWARE

XTP Systems include convenient, user-friendly control software for configuring, operating, and monitoring the matrix switcher and remote XTP transmitters and receivers. Within a single window, the software provides a complete view of the system, allowing a user to manage input and output ties, monitor real-time signal and HDCP status for local and remote endpoints, and verify EDID communication as well as the audio format for any signal path. It also makes it easy to control remote XTP devices and manage power to select XTP twisted pair devices. Additional features include tools for configuring EDID communication, creating I/O presets, and backing up or restoring system settings.



XTP SYSTEM CONFIGURATION SOFTWARE

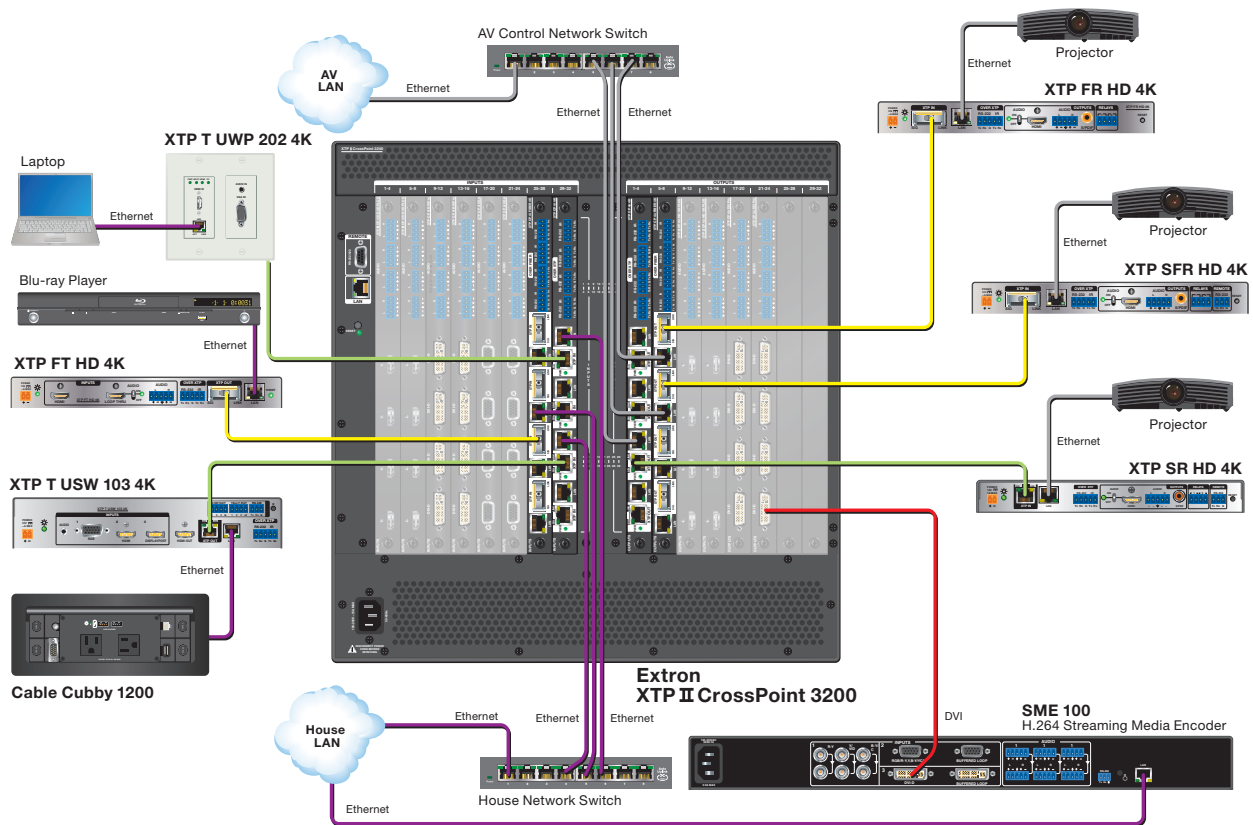
XTP System Configuration Software makes it easy to manage EDID communication between displays and sources. It allows a user to examine the EDID that is automatically captured from displays connected to the XTP matrix switcher or XTP receivers to determine a display's native or optimal resolution and refresh rate as well as audio format compatibility. The user can then assign this EDID to any local or remote input device connected to the system. Alternatively, several pre-stored EDID settings are available based on various resolutions, refresh rates, and audio formats. All EDID management options are accessible within a single window of the XTP Systems software.



APPLICATION DIAGRAM

Ethernet Extension

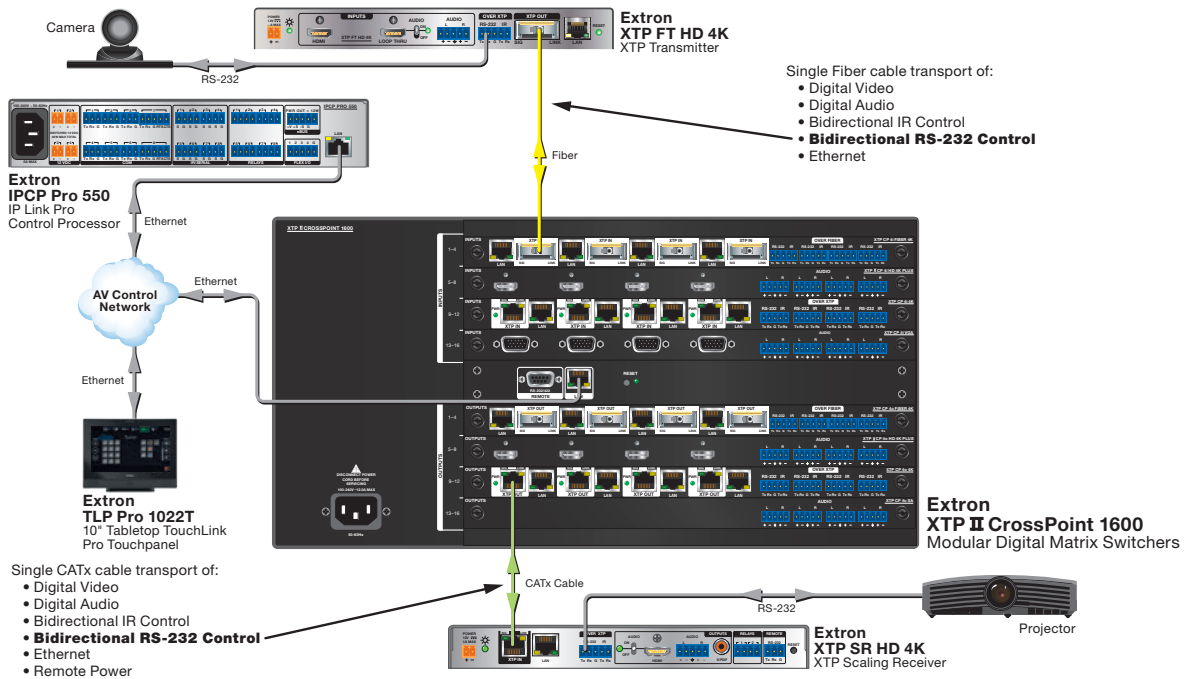
XTP Systems can extend Ethernet over the same CATx or fiber optic cable used for transmitting AV and control signals. This capability easily provides LAN access for remote endpoints via the XTP matrix switcher, without the need for dedicated network drops, additional Ethernet switches, or additional IP addresses. A house LAN and a separate AV control LAN can be connected into the matrix switcher, enabling Internet access for source devices and control of remote displays. A shared LAN can also be used to provide both Internet access and AV system control at remote endpoints, and also provides the flexibility to install touchpanels and other control devices anywhere in the system.



APPLICATION DIAGRAMS

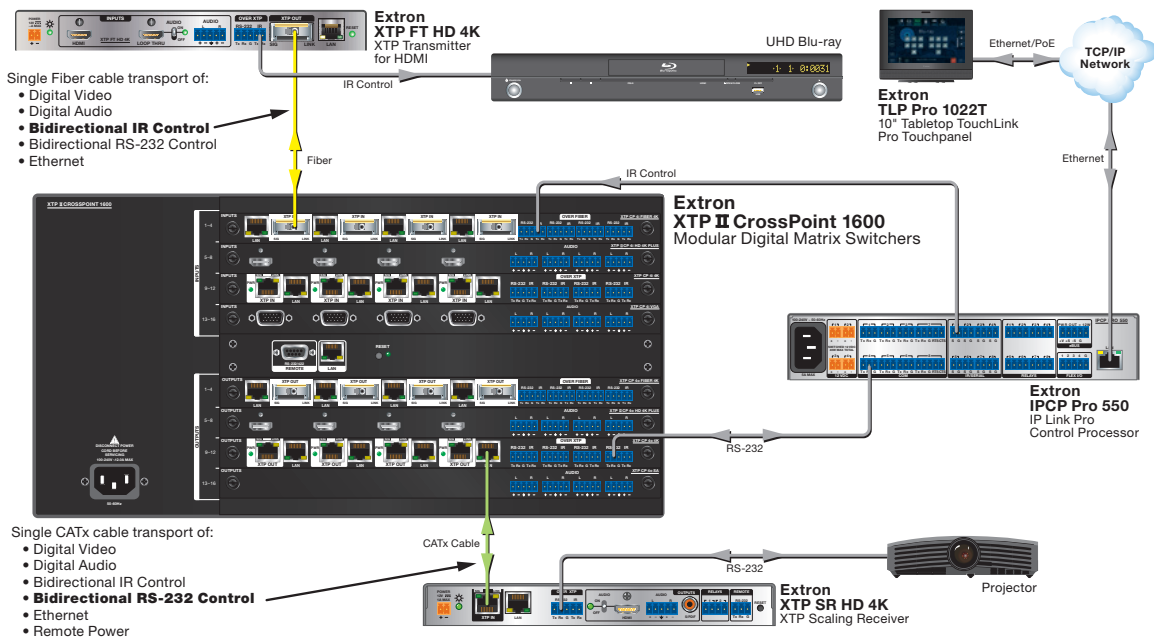
XTP System Control via Bidirectional RS-232 Insertion

Entire XTP Systems, including the matrix switcher, transmitters and receivers, and remote devices, can be operated from a single point of control. RS-232 signals delivered via Ethernet from a control system can be inserted into the XTP matrix switcher, which are then transmitted to remote endpoints. Using the same cable for AV, control, and Ethernet streamlines and simplifies system installation.



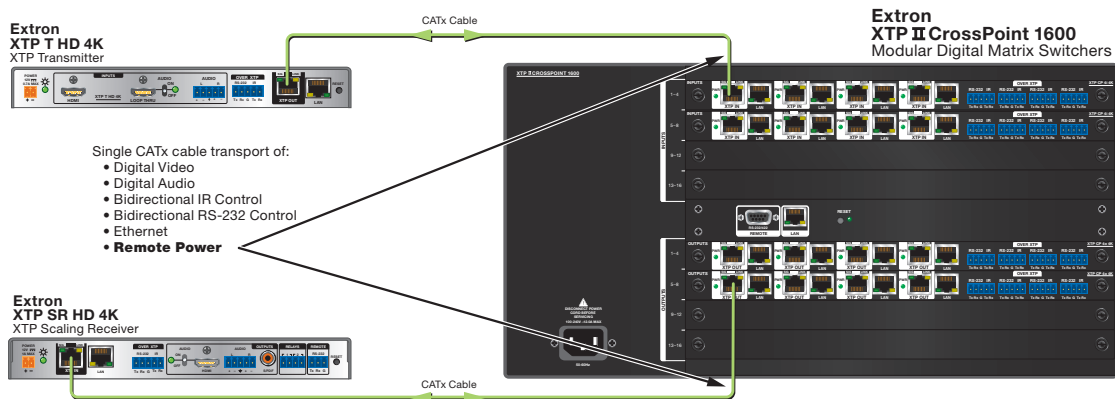
Bidirectional RS-232 and IR Insertion

XTP Systems provide easy interfacing of control signals for devices at remote endpoints through bidirectional RS-232 and IR insertion ports on the matrix switcher I/O boards and the XTP extenders. A control processor or other device can directly insert RS-232 or IR commands into the matrix switcher. These commands are then sent out to the endpoints over the shared CATx or fiber optic cable, so that no additional cabling is required for system control.

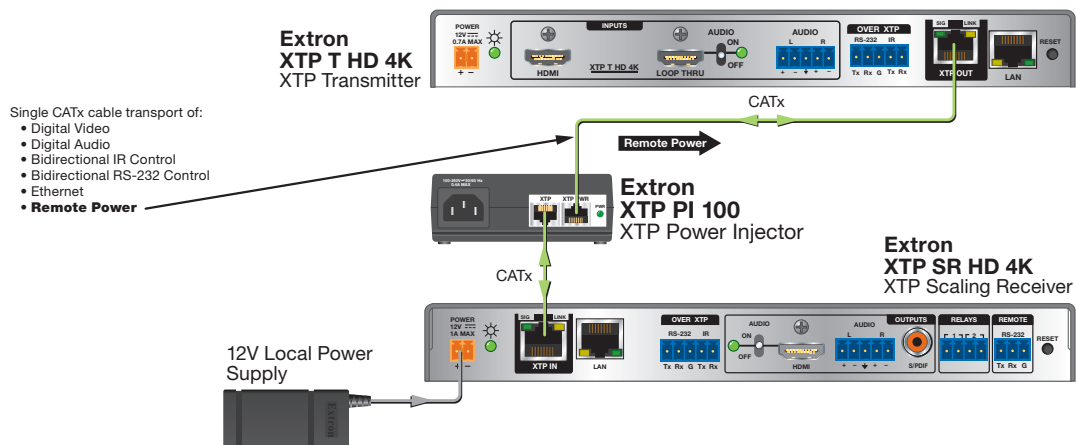


Remote Device Powering over twisted pair cable

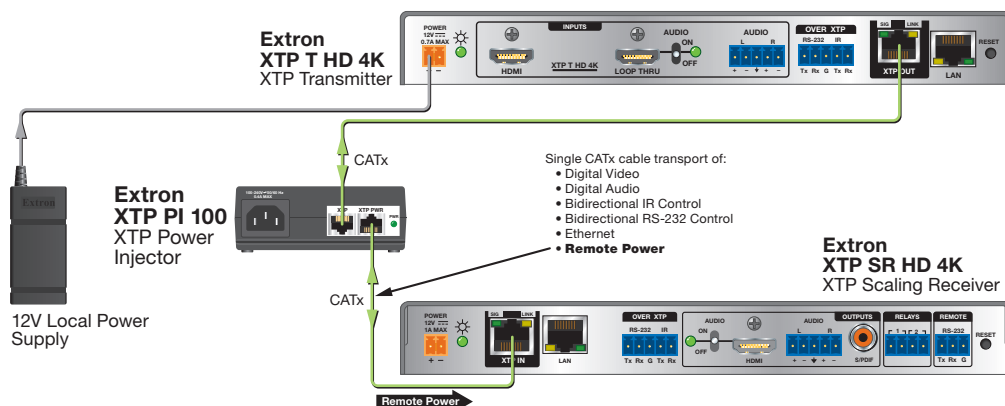
In twisted pair cable infrastructures, XTP transmitters and receivers can be remotely powered by the XTP matrix switcher over the shared CATx cable. This simplifies installation of remote XTP devices, especially the wall-mount and floor box models, since external AC power is not necessary. The matrix switcher is capable of delivering power through its I/O ports to a set number of endpoints, depending on frame model, and automatically monitoring and managing power consumed by the remote XTP devices. The control software provides a convenient GUI to view and configure remote power distribution. Additional powering for endpoints can be provided by an optional XTP PI 100 or XTP PI 400 power injector, which injects supplemental voltage into a shielded CATx cable.



Remote Power of Transmitters



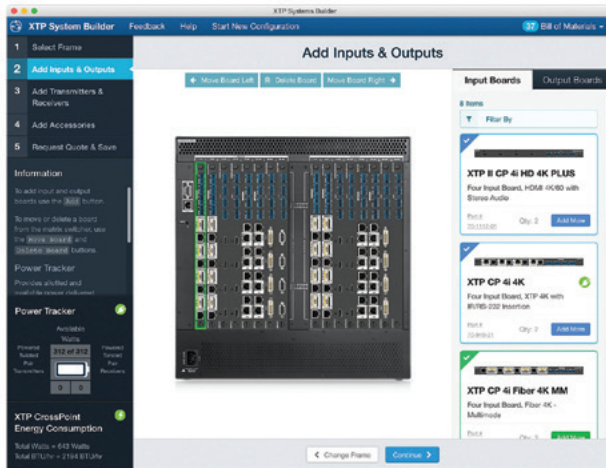
Remote Power of Receivers



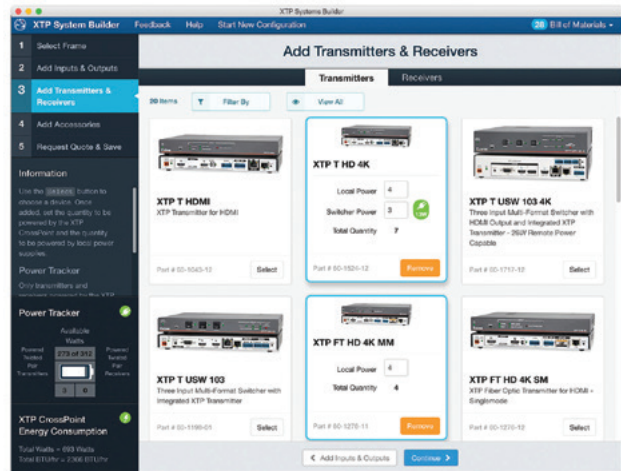
XTP SYSTEM BUILDER

Full configuration capability with all system components

XTP System Builder steps you through designing your AV signal switching and distribution solution. With a few clicks of the mouse, your XTP system evolves from an empty frame to a complete design that includes extenders, accessories, and cabling. This online tool generates an as-configured custom part number for the XTP matrix switcher and compiles all selected components into a single equipment list. With convenient 24/7 access, the intuitive XTP System Builder is always available for system design, quote submittal, and pricing.



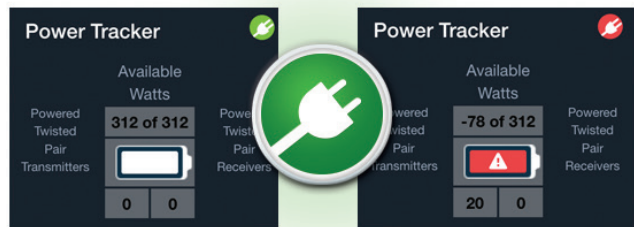
Configuration of the XTP system begins with selection of the appropriate XTP modular matrix switcher frame. The image of the frame in XTP System Builder automatically populates with each board selection or configuration change.



To complete your design, the online tool lists XTP transmitters and receivers as well as other XTP accessories. Selection of local or remote power for each XTP Twisted Pair device helps to streamline system integration and ensure power needs are met prior to going on site.

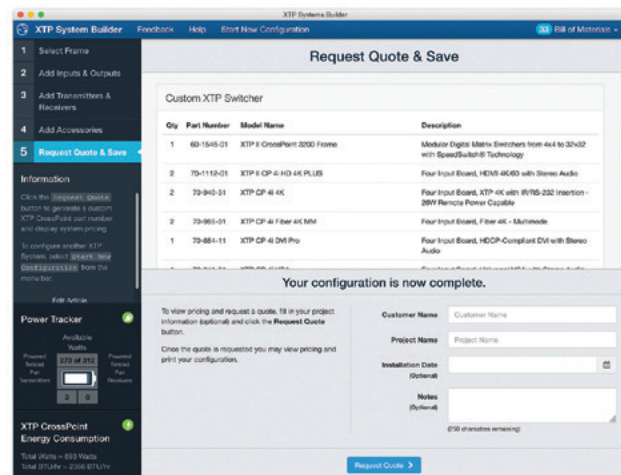
Power Tracker

Know at a glance how many XTP twisted pair devices can be and are being powered by the XTP matrix switcher in its current configuration. Power Tracker also lets you know when it is time to reassign an endpoint device to receive local power, or if adding an input or output board can provide the desired remote power capabilities.



Printable Bill of Materials

The complete BOM, including an image of the configured XTP matrix switcher, can be saved as a PDF file or Excel worksheet with optional pricing and project information. It is ideal for your project files and is also suitable for sharing with your client.



SPECIFICATIONS

XTP II CrossPoint 1600 – XTP II CrossPoint 3200 – XTP II CrossPoint 6400

XTP II CrossPoint 1600 / 3200 / 6400

TRUE 4K SPECIFICATION

Max 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max Bit Depth per Color
4096 x 2160 at 60 Hz 3840 x 2160 at 60 Hz	4:4:4	16 bit
Frame Rate	24, 25, 30, 50, or 60 fps	
Chroma Sampling	4:4:4, 4:2:2, or 4:2:0	
Color Bit Depth	8, 10, 12, or 16 bits per color	
Backplane Throughput	50 Gbps per input and output	
NOTE: Use our calculator (http://www.extron.com/8KdataRate) to determine video parameters supported by this data rate.		

AV ROUTING CAPABILITIES

Number of input slots	
XTP II CrossPoint 1600	4
XTP II CrossPoint 3200	8
XTP II CrossPoint 6400	16
Input video signal format	HDMI, DVI, 3G-SDI, RGBHV, RGBS, RGSB, RGSBs, YUV, S-video, composite video, XTP twisted pair, XTP fiber
Input audio signal format	Analog stereo, Dolby® Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD, Dolby® Atmos™, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio™, up to 8 ch PCM
Number of output slots	
XTP II CrossPoint 1600	4
XTP II CrossPoint 3200	8
XTP II CrossPoint 6400	16
Output video signal format	HDMI, DVI, XTP twisted pair, XTP fiber
Output audio signal format	Analog stereo, Dolby® Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD, Dolby® Atmos™, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio™, up to 8 ch PCM
Backplane	
Maximum throughput	50 Gbps
XTP II CrossPoint 1600	16x16 matrix
XTP II CrossPoint 3200	32x32 matrix
XTP II CrossPoint 6400	64x64 matrix

COMMUNICATIONS — SWITCHER HOST PORTS

Serial host control port	1 bidirectional RS-232 or RS-422, rear panel female 9-pin D connector
Ethernet control port	1 female RJ-45

GENERAL

Power	
XTP II CrossPoint 1600	Internal Input: 100-240 VAC, 50-60 HZ Redundant power supply is optional.
XTP II CrossPoint 3200	Input: 100-240 VAC, 50-60 HZ Redundant power supply is standard.
XTP II CrossPoint 6400	Input: 200-240 VAC, 50-60 HZ Redundant power supply is standard.
Enclosure dimensions	
XTP II CrossPoint 1600	(Depth excludes connectors. Width excludes rack ears.) 8.75" H x 17.0" W x 17.5" D (5U high, full rack wide) (22.3 cm H x 43.2 cm W x 44.5 cm D)
XTP II CrossPoint 3200	17.5" H x 17.0" W x 17.5" D (10U high, full rack wide) (44.5 cm H x 43.2 cm W x 44.5 cm D)
XTP II CrossPoint 6400	35.0" H x 17.0" W x 17.5" D (20U high, full rack wide) (89.0 cm H x 43.2 cm W x 44.5 cm D)

XTP CP 4K Twisted Pair I/O Boards

TRUE 4K SPECIFICATION

Max 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max Bit Depth per Color
4096 x 2160 at 24 Hz 3840 x 2160 at 30 Hz	4:4:4	8 bit
4096 x 2160 at 60 Hz	4:2:0	
3840 x 2160 at 60 Hz		
Frame Rate	24, 25, 30, 50, or 60 fps	
Chroma Sampling	4:4:4, 4:2:2, or 4:2:0	
Signal type ¹	Refer to XTP Endpoints	
Max. video data rate ¹	10.2 Gbps (3.4 Gbps per color)	
NOTE: ¹ Subject to the maximum data rate limit. Use our calculator at www.extron.com/8KdataRate to determine video parameters supported by this rate.		

VIDEO — XTP CP 4i 4K, XTP CP 4o 4K

Resolution range	Up to 2560x1600* @ 60 Hz, or 4K (4096x2160) @ 30 Hz, UHD (3840x2160) @ 30 Hz, 4K/UHD @ 60 with 4:2:0 chroma subsampling (* reduced blanking)
Maximum data rate	10.2 Gbps (3.4 Gbps per color)
Maximum pixel clock	300 MHz
Standards	Refer to XTP Endpoints
Audio format	Analog stereo, Dolby® Digital® Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos™, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio™, up to 8 ch PCM,
VIDEO INPUT — XTP CP 4i 4K	
Connectors	4 female RJ-45 per board
Signal transmission distance	
1080p @ 60 Hz	Up to 330' (100 m) using shielded twisted pair (STP) cable or XTP DTP 24 cable
2560x1600 @ 60 Hz	Up to 330' (100 m) using shielded twisted pair (STP) cable or XTP DTP 24 cable
4K/UHD @ 30 and 60 Hz	Up to 330' (100 m) using shielded twisted pair (STP) cable or XTP DTP 24 cable
Cable requirements	Solid conductor, 24 AWG or better
Cable recommendations	400 MHz bandwidth STP cable

VIDEO OUTPUT — XTP CP 4o 4K

Connectors	4 female RJ-45 per board
Signal transmission distance	
1080p @ 60 Hz	Up to 330' (100 m) using shielded twisted pair (STP) cable or XTP DTP 24 cable
2560x1600 @ 60 Hz	Up to 330' (100 m) using STP cable or XTP DTP 24 cable
4K/UHD @ 30 and 60 Hz	Up to 330' (100 m) using STP cable or XTP DTP 24 cable
Cable requirements	Solid conductor, 24 AWG or better
Cable recommendations	400 MHz bandwidth STP cable

CONTROL/REMOTE — EXTERNAL DEVICE (PASS-THROUGH)

Serial control pass-through ports	4 RS-232, via 3.5 mm, 5-pole captive screw connectors (shared with IR ports)
Ethernet pass-through ports	4 female RJ-45
Ethernet data rate	10/100Base-T, half/full duplex with autotdetect

GENERAL

Power	Supplied by XTP CrossPoint or XTP II CrossPoint enclosure
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SPECIFICATIONS

XTP II CrossPoint HD 4K PLUS I/O Boards

TRUE 4K SPECIFICATION		
Max 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max Bit Depth per Color
4096 x 2160 at 60 Hz 3840 x 2160 at 60 Hz	4:4:4	8 bit
4096 x 2160 at 30 Hz 3840 x 2160 at 30 Hz		12 bit
4096 x 2160 at 60 Hz 3840 x 2160 at 60 Hz	4:2:0	
Frame Rate ¹	24, 25, 30, 50, or 60 fps	
Chroma Sampling ¹	4:4:4, 4:2:2, or 4:2:0	
Color Bit Depth ¹	8, 10, or 12 bits per color	
Signal Type	HDMI 2.0b, HDCP 2.3	
Max Video Data Rate	18 Gbps (6 Gbps per color)	
NOTE: Use our calculator at www.extron.com/8Kdata to determine video parameters supported by this data rate.		

VIDEO	
XTP II CP 4i HD 4K PLUS, XTP II CP 4o HD 4K PLUS, XTP II CP 4o HD AT 4K PLUS	
NOTE: Support for 4K/60 at 4:4:4 color subsampling requires installation in an XTP II CrossPoint frame.	
Resolution range	Up to 4K @ 60 Hz (4:4:4 color subsampling)
Maximum data rate	18 Gbps (6 Gbps per color)
Maximum pixel clock	600 MHz
Standards	DVI 1.0, HDMI 2.0b, HDCP 2.3
Video format	HDMI and DVI
HDR	HDR10, HDR10+, and Dolby Vision
AUDIO INPUT — XTP II CP 4i HD 4K PLUS	
Number/signal type	4 analog stereo, balanced/unbalanced or 4 digital audio, de-embedded from HDMI
Supported formats — Pass through	LPCM up to 7.1/24-bit/192 kHz, Dolby® Digital EX, Dolby Digital Plus™, Dolby Digital 5.1, Dolby Digital 2.0 Surround, Dolby Digital 2.0, Dolby TrueHD, Dolby Atmos™, DTS-HD Master Audio, DTS-X, DTS-HD, DTS-ES Discrete 6.1, DTS-ES Matrix 6.1, DTS-Digital Surround 5.1, DTS 2-Channel
AUDIO OUTPUT — XTP II CP 4o HD 4K PLUS	
Number/signal type	4 stereo, balanced/unbalanced 4 digital audio, embedded with HDMI
Supported formats — Pass through	LPCM up to 7.1/24-bit/192 kHz, Dolby® Digital EX, Dolby Digital Plus™, Dolby Digital 5.1, Dolby Digital 2.0 Surround, Dolby Digital 2.0, Dolby TrueHD, Dolby Atmos™, DTS-HD Master Audio, DTS-X, DTS-HD, DTS-ES Discrete 6.1, DTS-ES Matrix 6.1, DTS-Digital Surround 5.1, DTS 2-Channel
AT PORTS — AUDIO TRANSPORT (XTP II CP 4o HD AT 4K PLUS ONLY)	
Transmission type	Dante/AES-67, software selectable
Connectors	(2) RJ-45 to Dante interface
Outputs	Up to 8 channels (4 stereo channels)

XTP CP 4K Fiber I/O Boards

TRUE 4K SPECIFICATION		
Max 4K Capabilities		
Resolution and Refresh Rate	Chroma Sampling	Max Bit Depth per Color
4096 x 2160 at 24 Hz 3840 x 2160 at 30 Hz	4:4:4	8 bit
3840 x 2160 at 60 Hz	4:2:0	8 bit
Frame Rate ¹	24, 25, 30, 50, or 60 fps	
Chroma Sampling ¹	4:4:4, 4:2:2, or 4:2:0	
Color Bit Depth ¹	8 bits per color	
Signal Type	DVI 1.0, HDMI 1.4a, HDCP 1.4	
Max Video Data Rate	8.91 Gbps (2.97 Gbps per color)	
NOTE: ¹ Subject to the maximum data rate limit. Use our calculator at www.extron.com/8Kdata to determine video parameters supported by this data rate.		

VIDEO — XTP CP 4i FIBER 4K, XTP CP 4o FIBER 4K	
Resolution range	Up to 2560x1600 @ 60 Hz* or 4K (4096x2160) @ 24 Hz, UHD (3840x2160) @ 30 Hz UHD @ 60 Hz with 4:2:0 color subsampling *reduced blanking
Maximum data rate	8.91 Gbps (2.97 Gbps per color)
Maximum pixel clock	300 MHz
Audio format	Analog stereo, Dolby® Digital® Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos™, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio™, up to 8 ch PCM,
OPTICAL FIBER INTERCONNECTION	
Number/signal type	4 sets of proprietary signals
Connectors	4 LC fiber connector
Operating distance	Singlemode 10 km (6.2 miles) with singlemode cables Multimode 400 m (1312') with 50 µm OM3 2000 MHz bandwidth laser optimized cable multimode cables 500 m (1640') with 50 µm OM4 4700 MHz bandwidth laser optimized cable multimode cables
NOTE: Multimode units are compatible with OM1 and OM2 multimode cables, but at reduced operating distances.	
Data rate	8.5 Gbps
COMMUNICATIONS	
External device (pass-through, unidirectional or bidirectional)	
Serial control pass-through ports	RS-232 (±5 V) via (4) 3.5 mm, 5 pole captive screw connectors (uses 3 poles) (connector is shared with IR control ports)
IR control port	(4) 3.5 mm, captive screw connector, 5-pole (uses 3 poles) (connector is shared with RS-232 control ports) TTL level (0 to 5 V) modulated infrared control from 30 kHz up to 56 kHz
Ethernet pass-through ports	4 female RJ-45

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