



## Extron® Satisfaction Guarantee

As a leading manufacturer in the AV industry, we are committed to engineering and manufacturing our products to the highest standards of quality, performance, and value. From our advanced product design, manufacturing and quality control procedures to our friendly and knowledgeable support teams, our commitment to satisfy you is paramount. In every interaction with Extron, you can be confident you will receive our S3 commitment to Service, Support, and Solutions. For more than 29 years, our objective has been to ensure that every customer is completely satisfied with every purchase.

To underscore this commitment, we offer our Satisfaction Guarantee. This means we will work diligently to resolve any issue you have with your purchase until you are completely satisfied. Extron employees are prepared to do whatever it takes to make certain that the entire process of doing business with us is a positive and professionally rewarding experience for you.

I'm so confident in our ability to deliver on this pledge that I back it personally. If you are not satisfied with any part of your transaction with Extron, I want to know. Please contact me at [president@extron.com](mailto:president@extron.com). I will personally address any unresolved customer issue. We greatly appreciate your business. It is our intent to keep you as a customer for life.

Andrew C. Edwards

President

# XTP | CROSSPOINT SYSTEMS



## A Completely Integrated Solution for Digital AV Switching and Distribution

Extron XTP CrossPoint® is a flexible, reliable signal switching and distribution system that provides a completely integrated solution for multiple digital and analog formats. XTP CrossPoint matrix switchers support local connectivity as well as extended transmission capability for sending high resolution video, audio, control, Ethernet, and power up to 330 feet (100 m) over a single CAT 5-type cable.

### Easy to Set Up

XTP CrossPoint Systems can easily be set up and configured out of the box to save you time and money. Intuitive control software provides straightforward system configuration without complicated programming.

### Performance

XTP CrossPoint Systems deliver extremely high switching and transmission performance to support a wide range of video formats, including the highest resolution DVI and HDMI signals. The high data-rate digital backplane designed into the XTP CrossPoint digital matrix switchers provides a truly future-ready AV integration solution.

### Reliable

XTP CrossPoint Systems deliver robust system reliability and dependable switching of video signals through EDID and HDCP key management. Featuring advanced 24/7 system monitoring and hot-swappable modular components, XTP CrossPoint Systems are built for continuous, trouble-free operation in the most critical applications.

### Flexible System Designs

XTP CrossPoint Systems let you easily integrate digital and analog devices into your system design. Connect and switch between local devices, or extend to remote locations up to 330 feet away using just a single CAT 5-type cable that carries video, audio, RS-232 or IR control, Ethernet, and power.

### XTP Technologies

#### SpeedSwitch™ Technology



SpeedSwitch Technology provides exceptional switching speed for HDCP-encrypted content.

#### SD Pro processing



SD Pro processing provides deinterlacing of standard definition video to provide compatibility with HDMI and DVI-equipped displays, without the need for additional scalers.

#### EDID Minder®



EDID Minder automatically manages EDID communication between connected devices, ensuring that all sources power up properly and reliably output content for display.

#### Key Minder®



Key Minder continuously verifies HDCP compliance for quick, reliable switching. It 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.

Learn more about Extron XTP CrossPoint Systems  
at [www.extron.com/xtpcrosspoint](http://www.extron.com/xtpcrosspoint)

## XTP CROSSPOINT SYSTEMS

## XTP CrossPoint 1600 Series

## Modular Digital Matrix Switchers from 4x4 to 16x16 with SpeedSwitch™ Technology

The Extron XTP CrossPoint® 1600 provides flexible, reliable digital and analog video switching and distribution between local and remote endpoints. This modular matrix switcher is configurable from 4x4 up to 16x16 using a wide variety of available input and output boards. It sends high-resolution video, audio, RS-232, Ethernet, and power up to 330 feet (100 m) over a single CAT 5-type cable to remote XTP transmitters and receivers. The XTP CrossPoint 1600 also supports direct HDMI, DVI, VGA, video, and audio connections to local sources and displays. The XTP CrossPoint System delivers robust signal routing and reliability with ultra-fast digital video switching and advanced system monitoring.

## FEATURES

- Available in I/O sizes from 4x4 to 16x16
- 15.2 Gbps data-rate digital backplane
- Compatible with all XTP integrated system products
- Fully digital signal routing
- Wide selection of input and output boards
- RS-232 insertion from the Ethernet control port
- Remote power to XTP transmitters and receivers

- HDMI 1.3 compatible
- HDCP compliant
- SpeedSwitch™ Technology provides exceptional switching speed for HDCP-encrypted content
- SD Pro processing provides deinterlacing of standard definition video
- EDID Minder® automatically manages EDID communication between connected devices
- Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- Modular, field-upgradeable and hot-swappable design
- Audio breakaway
- Ethernet extension
- HDCP authentication and signal presence confirmation via RS-232 or Ethernet
- HDCP Visual Confirmation provides a green signal when encrypted content is sent to a non-compliant display
- Ethernet monitoring and control
- Optional redundant power supply
- Global presets



## Model

## Version Description

## Part Number

XTP CrossPoint 1600 Frame	5U, 8-slot Frame.....	60-1250-01
XTP CrossPoint 1600 Frame w/RPS	5U, 8-slot Frame w/redundant power .....	60-1250-11

## XTP CrossPoint 3200 Series

## Modular Digital Matrix Switchers from 4x4 to 32x32 with SpeedSwitch™ Technology

The Extron XTP CrossPoint® 3200 provides flexible, reliable digital and analog video switching and distribution between local and remote endpoints. This modular matrix switcher is configurable from 4x4 up to 32x32 using a wide variety of available input and output boards. It sends high-resolution video, audio, RS-232, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable to remote XTP transmitters and receivers. The XTP CrossPoint 3200 also supports direct HDMI, DVI, VGA, video, and audio connections to local sources and displays. The XTP CrossPoint System delivers robust signal routing and reliability with ultra-fast digital video switching and advanced system monitoring.

- HDMI 1.3 compatible
- HDCP compliant
- SpeedSwitch™ Technology provides exceptional switching speed for HDCP-encrypted content
- SD Pro processing provides deinterlacing of standard definition video
- EDID Minder® automatically manages EDID communication between connected devices
- Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- Modular, field-upgradeable and hot-swappable design
- Audio breakaway
- Ethernet extension
- HDCP authentication and signal presence confirmation via RS-232 or Ethernet
- HDCP Visual Confirmation provides a green signal when encrypted content is sent to a non-compliant display
- Ethernet monitoring and control
- Redundant power supply
- Global presets



## FEATURES

- Available in I/O sizes from 4x4 to 32x32
- 15.2 Gbps data-rate digital backplane
- Compatible with all XTP integrated system products
- Fully digital signal routing
- Wide selection of input and output boards
- RS-232 insertion from the Ethernet control port
- Remote power to XTP transmitters and receivers



## Model

## Version Description

## Part Number

XTP CrossPoint 3200 Frame	10U, 16-slot Frame.....	60-1167-01
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## XTP CROSSPOINT SYSTEMS

### XTP CP I/O Boards

#### XTP Transmitter and Receiver Boards with RS-232 and IR Insertion

The Extron XTP CP Input and Output Boards enable long distance transmission of AV signals between the XTP CrossPoint® matrix switcher and remote XTP transmitters and receivers. They can send video, audio, control, Ethernet, and power up to 330 feet (100 m) over a single CAT 5-type cable. The XTP CP boards are HDCP compliant, HDMI 1.3 compatible, and support 1080p/60 Deep Color and 1920x1200 signals. Audio signals can be routed independently, including embedded HDMI audio, with one model also providing simultaneous multi-channel audio downmixing to two-channel PCM stereo audio for separate distribution. To streamline integration, the boards enable Ethernet extension and bidirectional RS-232 and IR insertion for LAN access and AV device control at remote endpoints.

#### FEATURES

- Supports 1080p/60 Deep Color and 1920x1200 signals
- Compatible with all XTP integrated system products
- Bidirectional RS-232 and IR insertion for AV device control
- HDCP compliant
- 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
- Ethernet extension
- Remote power to XTP transmitters and receivers

#### Model

#### Version Description

#### Part Number

XTP CP 4i	Four Input, XTP .....	70-940-01
XTP CP 4i DMA	Four Input, XTP - Downmixing Audio .....	70-940-02
XTP CP 4o	Four Output, XTP .....	70-943-01

### XTP CP HDMI I/O Boards

#### HDMI Input and Output Boards with Analog Stereo Audio

The Extron XTP CP HDMI Input and Output Boards support HDMI and separate analog stereo audio signals. They provide the capability to connect local HDMI sources and output devices to an XTP CrossPoint® System. The XTP CP HDMI boards are HDCP-compliant, HDMI 1.3 compatible, and support 1080p/60 Deep Color and 1920x1200 signals. Audio signals can be routed independently, including embedded HDMI audio, with one model also providing simultaneous multi-channel audio downmixing to two-channel PCM stereo audio for separate distribution.

#### FEATURES

- Supports 1080p/60 Deep Color and 1920x1200 signals
- Compatible with all XTP integrated system products
- HDCP compliant
- 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
- Local analog stereo audio inputs and outputs
- Output volume control
- Automatic cable equalization
- Automatic output reclocking
- Provides +5 VDC, 250 mA power on HDMI outputs for external peripheral devices

#### Model

#### Version Description

#### Part Number

XTP CP 4i HDMI	Four Input, HDMI with Stereo Audio .....	70-685-11
XTP CP 4i HDMI DMA	Four Input, HDMI - Downmixing Audio .....	70-685-12
XTP CP 4o HDMI	Four Output, HDMI with Stereo Audio .....	70-687-11



XTP CP 4i



XTP CP 4i DMA



XTP CP 4o



XTP CP 4i HDMI



XTP CP 4i HDMI DMA



XTP CP 4o HDMI

## XTP CROSSPOINT SYSTEMS

## XTP CP DVI Pro I/O Boards

## HDCP-Compliant DVI Input and Output Boards with Analog Stereo Audio

The Extron XTP CP DVI Pro Input and Output Boards support DVI and separate analog stereo audio signals. They provide the capability to connect local DVI sources and output devices to an XTP CrossPoint® System. The boards are HDCP compliant, HDMI 1.3 compatible, and support 1080p/60 Deep Color and 1920x1200 signals. Audio signals can be routed independently.

## FEATURES

- Supports 1080p/60 Deep Color and 1920x1200 signals
- Compatible with all XTP integrated system products
- HDCP compliant
- 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
- Local analog stereo audio inputs and outputs
- Output volume control
- Automatic cable equalization
- Automatic output reclocking
- Provides +5 VDC, 250 mA power on DVI outputs for external peripheral devices



XTP CP 4i DVI Pro



XTP CP 4o DVI Pro

## Model

## Version Description

## Part Number

XTP CP 4i DVI Pro	Four Input, DVI with Stereo Audio .....	70-684-11
XTP CP 4o DVI Pro	Four Output, DVI with Stereo Audio.....	70-686-11

## XTP CP 4i VGA Board

## Universal Input Board with Analog Stereo Audio

The XTP CP 4i VGA Input Board features universal video inputs that automatically detect incoming RGBHV, HD component video, S-video, and composite video signals. It provides the capability to connect a variety of local analog video sources to an XTP CrossPoint® System. The board digitizes all incoming formats, and applies SD Pro processing to deinterlace 480i and 576i video signals for reliable display on a variety of output devices. It also features analog stereo audio inputs for independent routing of audio signals.

## FEATURES

- Accepts RGBHV, HD component video, S-video, and composite video
- Supports 1920x1200 and 1080p/60 signals
- Auto input format detection
- Analog-to-digital signal conversion
- SD Pro processing provides deinterlacing of standard definition video
- Compatible with all XTP CP output boards
- EDID Minder® automatically manages EDID communication between connected devices
- Local analog stereo audio inputs



## Model

## Version Description

## Part Number

XTP CP 4i VGA	Four Input, Universal VGA - Stereo Audio .....	70-941-01
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## XTP CP 4o SA Board

## Analog Stereo Audio Output Board

The XTP CP 4o SA Output Board provides four analog stereo audio outputs for local connectivity to an XTP CrossPoint® System. It provides balanced or unbalanced analog stereo audio output, and can be used in audio breakaway applications. For added flexibility, the board includes volume adjustment and muting for each output.

## FEATURES

- Balanced or unbalanced audio outputs
- Audio output volume adjustment and muting
- Compatible with all XTP CP input boards



## Model

## Version Description

## Part Number

XTP CP 4o SA	Four Output, Analog Stereo Audio .....	70-944-01
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## XTP CROSSPOINT SYSTEMS

### XTP T HDMI

#### Long Distance XTP Transmitter for HDMI

The Extron XTP T HDMI is an XTP transmitter that sends video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable. It is HDCP compliant, HDMI 1.3 compatible, and supports 1080p/60 Deep Color and 1920x1200 signals. The transmitter also allows Ethernet extension and insertion of bidirectional RS-232 and IR for LAN access and AV device control. The XTP T HDMI transmitter works with the XTP CrossPoint® System for signal distribution and long-distance transmission between remote endpoints.

#### FEATURES

- Transmits video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable
- Supports 1080p/60 Deep Color and 1920x1200 signals
- Bidirectional RS-232 and IR insertion
- HDMI loop-through with selectable audio control
- HDMI 1.3 compatible
- HDCP compliant
- EDID Minder® and Key Minder®
- Ethernet extension
- Remote power capabilities
- Selectable analog stereo audio input embedding



#### Model

#### Version Description

#### Part Number

XTP T HDMI	XTP HDMI Transmitter.....	60-1043-12
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### XTP R HDMI

#### Long Distance XTP Receiver for HDMI

The Extron XTP R HDMI is an XTP receiver that accepts video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable. The receiver features HDMI audio de-embedding with digital S/PDIF or analog stereo audio outputs. It also allows Ethernet extension and insertion of bidirectional RS-232 and IR for LAN access and AV device control. The XTP R HDMI receiver works with the XTP CrossPoint® System for signal distribution and long-distance transmission between remote endpoints.

#### FEATURES

- Receives video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable
- Supports 1080p/60 Deep Color and 1920x1200 signals
- Bidirectional RS-232 and IR insertion
- HDMI 1.3 compatible
- HDCP compliant
- EDID Minder® and Key Minder®
- HDMI audio de-embedding with analog stereo and digital S/PDIF audio outputs
- Ethernet extension
- Remote power capabilities



#### Model

#### Version Description

#### Part Number

XTP R HDMI	XTP HDMI Receiver.....	60-1043-13
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### XTP SR HDMI

#### Long Distance XTP Scaling Receiver

The Extron XTP SR HDMI is an XTP receiver that scales HDMI, DVI, RGB, HD component video, and standard definition video to the optimal output resolution for the display. It accepts video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable. The receiver features HDMI audio de-embedding with digital S/PDIF or analog stereo audio outputs. It also allows Ethernet extension and insertion of bidirectional RS-232 and IR for LAN access and AV device control. The XTP SR HDMI scaling receiver works with the XTP CrossPoint® System for signal distribution and long-distance transmission to remote endpoints.

#### FEATURES

- Receives video with embedded audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable
- Scales HDMI, DVI, RGB, HD component video, and standard definition video received from XTP devices
- Bidirectional RS-232 and IR insertion
- Selectable output rates from 640x480 to 1920x1200, including HDTV 1080p/60
- HDMI 1.3 compatible
- HDCP compliant
- EDID Minder® and Key Minder®
- Ethernet extension
- HDMI audio de-embedding with analog stereo and digital S/PDIF audio outputs
- Remote power capabilities



#### Model

#### Version Description

#### Part Number

XTP SR HDMI	XTP Scaling Receiver .....	60-1199-01
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**Extron®**

## XTP CROSSPOINT SYSTEMS

## XTP T UWP 202

## Long Distance Two Input XTP Transmitter - Decora® Wallplate

The XTP T UWP 202 is a two-input transmitter for sending HDMI or RGBHV video, audio, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable. It digitizes incoming analog video for reliable display on a variety of output devices. The transmitter is HDCP compliant, HDMI 1.3 compatible, and supports 1080p/60 Deep Color and 1920x1200 signals. It also allows Ethernet extension for LAN access. The XTP T UWP 202 transmitter works with the XTP CrossPoint® System for signal distribution and long-distance transmission between remote endpoints.

## FEATURES

- Transmits HDMI or digitized analog video, audio, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable
- HDMI and VGA inputs
- Supports 1080p/60 Deep Color and 1920x1200 signals
- Auto-input switching
- HDMI 1.3 compatible
- HDCP compliant
- EDID Minder® automatically manages EDID communication between connected devices
- Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- Ethernet extension
- Remote power capability
- Supports multiple embedded audio formats
- RS-232 control
- Selectable analog stereo audio input embedding
- Audio input gain and attenuation
- Supports DDC transmission
- LED indicators for signal presence, HDCP, and power
- RJ-45 signal and link status LED indicator for XTP port
- Compatible with all XTP integrated system products

## Model

## Version Description

## Part Number

XTP T UWP 202	Two Input Decora XTP Transmitter -Black .....	60-1216-12
XTP T UWP 202	Two Input Decora XTP Transmitter -White .....	60-1216-13



## XTP T UWP 304

## Long Distance Four Input XTP Transmitter - Decora® Wallplate

The XTP T UWP 304 is a four-input transmitter for sending HDMI or multi-format analog video, audio, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable. It digitizes all incoming analog formats and applies SD Pro processing to deinterlace 480i and 576i video signals for reliable display on a variety of output devices. The transmitter is HDCP compliant, HDMI 1.3 compatible, and supports 1080p/60 Deep Color and 1920x1200 signals. To streamline integration, it provides auto-switching between inputs or switching via RS-232 control and allows Ethernet extension for LAN access. The XTP T UWP 304 transmitter works with the XTP CrossPoint® System for signal distribution and long-distance transmission between remote endpoints.

## FEATURES

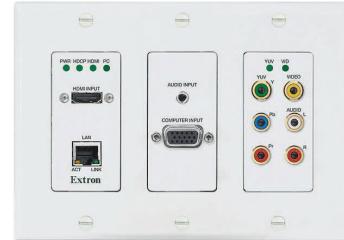
- Transmits HDMI or digitized multi-format analog video, audio, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable
- HDMI, VGA, and standard definition inputs
- Supports 1080p/60 Deep Color and 1920x1200 signals
- SD Pro processing provides deinterlacing of standard definition video
- Digital conversion of analog video formats
- Auto-input switching
- HDMI 1.3 compatible
- HDCP compliant
- EDID Minder® automatically manages EDID communication between connected devices
- Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- Ethernet extension
- Remote power capability
- Supports multiple embedded audio formats
- RS-232 control
- Selectable analog stereo audio input embedding
- Audio input gain and attenuation
- Supports DDC transmission
- LED indicators for signal presence, HDCP, and power
- RJ-45 signal and link status LED indicator for XTP port
- Compatible with all XTP integrated system products

## Model

## Version Description

## Part Number

XTP T UWP 304	Four Input Decora XTP Transmitter -Black .....	60-1222-12
XTP T UWP 304	Four Input Decora XTP Transmitter -White .....	60-1222-13



## XTP CROSSPOINT SYSTEMS

### XTP T USW 103

#### Long Distance Three Input XTP Switcher with Integrated XTP Transmitter

The XTP T USW 103 is a three-input switcher for sending HDMI or RGBHV video, audio, control, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable. It is HDCP compliant, HDMI 1.3 compatible, and supports 1080p/60 Deep Color and 1920x1200 signals. It digitizes incoming analog video for reliable display on a variety of output devices. The transmitter also allows Ethernet extension and insertion of bidirectional RS-232 and IR for LAN access and AV device control at remote locations. The XTP T USW 103 transmitter works with the XTP CrossPoint® System for signal distribution and long-distance transmission between remote endpoints.

#### FEATURES

- Transmits HDMI or digitized analog video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable
- Two HDMI inputs and one VGA input
- Supports 1080p/60 Deep Color and 1920x1200 signals
- Auto-input switching
- Digital conversion of analog video formats
- Bidirectional RS-232 and IR insertion for AV device control
- HDMI 1.3 compatible
- HDCP compliant
- EDID Minder® automatically manages EDID communication between connected devices
- Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- Ethernet extension
- Remote power capability
- Supports multiple embedded audio formats
- Selectable analog stereo audio input embedding
- Audio input gain and attenuation
- Supports DDC transmission
- LED indicators for signal presence, HDCP, and power
- RJ-45 signal and link status LED indicator for XTP port
- Compatible with all XTP integrated system products

Model	Version Description	Part Number
XTP T USW 103	Three Input XTP Transmitter Switcher .....	60-1198-01



### XTP T VGA

#### Long Distance Universal XTP Transmitter for VGA

The Extron XTP T VGA is a universal XTP transmitter that sends multi-format analog video, audio, control, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable. It digitizes all incoming analog formats and applies SD Pro processing to deinterlace 480i and 576i video signals for reliable display on a variety of output devices. To simplify integration, the transmitter features VGA loop-through for source monitoring. It also allows Ethernet extension and insertion of bidirectional RS-232 and IR for LAN access and AV device control at remote locations. The XTP T VGA transmitter works with the XTP CrossPoint® System for signal distribution and long-distance transmission to remote endpoints.

#### FEATURES

- Transmits digitized analog video, audio, bidirectional RS-232 and IR, and Ethernet up to 330 feet (100 m) over a single CAT 5-type cable
- Supports 1080p/60 and 1920x1200 signals
- Supports RGB, HD component video, S-video, and composite video signals
- SD Pro processing provides deinterlacing of standard definition video
- Digital conversion of analog video formats
- Auto input format detection
- Universal 15-pin HD input loop-through
- Bidirectional RS-232 and IR insertion for AV device control
- EDID Minder® automatically manages EDID communication between connected devices
- Ethernet extension
- Remote power capability
- Selectable analog stereo audio input embedding
- Audio input gain and attenuation
- Supports DDC transmission
- Comprehensive, LED indicators for signal format, presence, and power
- RJ-45 signal and link status LED indicator for XTP port
- Compatible with all XTP integrated system products



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

## TOUCHLINK™ TOUCHPANELS

## TLP 710TV

## 7" Tabletop TouchLink™ Touchpanel

The Extron TLP 710TV TouchLink™ Touchpanel is a fully configurable, 7" tabletop touchpanel featuring a contemporary, thin bezel design that complements the aesthetics of any environment. An integrated MTP twisted pair receiver accepts S-video or composite video and audio input signals over standard CAT 5 cable. Power over Ethernet - PoE allows the touchpanel to receive power via the Ethernet connector instead of an attached power source. The TLP 710TV is ideal for a wide variety of applications that require a compact tabletop or VESA mount touchpanel with flexible connectivity and advanced control capabilities.

## FEATURES

- 7" color touchscreen with 800x480 resolution and 18-bit color depth
- Full-motion video display supports preview and monitoring applications
- Compatible with all IP Link® control processors
- Power over Ethernet allows the touchpanel to receive power and control over a single CAT 5-type cable, eliminating the need for a local power supply - PoE injector included
- Built-in speaker provides audio for the full-motion video preview and audible feedback from button presses



## Model

## Version Description

## Part Number

TLP 710TV	Tabletop	60-1208-02
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## TLP 710MV

## 7" Wall Mount TouchLink™ Touchpanel

The Extron TLP 710MV TouchLink™ Touchpanel is a fully configurable, 7" wall mount touchpanel featuring a contemporary, thin bezel design that complements the aesthetics of any environment. An integrated MTP twisted pair receiver accepts S-video or composite video and audio input signals over standard CAT 5 cable. Power over Ethernet - PoE allows the touchpanel to receive power via the Ethernet connector instead of an attached power source. The TLP 710MV is ideal for a wide variety of applications that require a compact, wall mount touchpanel with flexible connectivity and advanced control capabilities.

## FEATURES

- 7" color touchscreen with 800x480 resolution and 18-bit color depth
- Full-motion video display supports preview and monitoring applications
- Compatible with all IP Link® control processors
- Power over Ethernet allows the touchpanel to receive power and control over a single CAT 5-type cable, eliminating the need for a local power supply - PoE injector included
- Built-in speaker provides audio for the full-motion video preview and audible feedback from button presses



## Model

## Version Description

## Part Number

TLP 710MV	Black - Wall Mount	60-1209-02
TLP 710MV	White - Wall Mount	60-1209-03

## TLP 710CV

## 7" Cable Cubby® TouchLink™ Touchpanel

The Extron TLP 710CV is a configurable 7" Cable Cubby® TouchLink Touchpanel that combines AV system control with the convenience of an Extron Cable Cubby enclosure. It features a flip-up, full-color, high-resolution touchscreen in an elegant, metal enclosure that can be mounted securely into a tabletop, lectern, or other flat surface. An integrated MTP twisted pair receiver accepts S-video or composite video and audio input signals over CAT 5-type cable. Power over Ethernet - PoE allows the touchpanel to receive power and control over an additional CAT 5-type cable, eliminating the need for a local power supply. The touchpanel enables integrators to deploy furniture-mountable, fully configurable touchscreen control, with cable management and easy access to AV, data, and power.

## FEATURES

- 7" color touchscreen with 800x480 resolution and 18-bit color depth
- Full-motion video display for preview and monitoring using Extron twisted pair technology
- Power over Ethernet allows the touchpanel to receive power and control over a single CAT 5-type cable, eliminating the need for a local power supply - PoE injector included
- Built-in speaker provides audio for video preview and audible feedback from button presses
- Cable Cubby design offers easy access to AV, data, and power connections



## Model

## Version Description

## Part Number

TLP 710CV	Two US AC - Black Anodized	60-1175-020A
TLP 710CV	No AC - Black Anodized	60-1175-0200
TLP 710CV	No AC - Brushed Aluminum	60-1175-0210

## IP LINK® CONTROL PROCESSORS

### IPCP 305

#### IP Link® Control Processor

The Extron IPCP 305 is a compact IP Link® control processor designed to support configurable control systems. The IPCP 305 integrates IP connectivity into AV systems, giving users the ability to remotely control, monitor, and troubleshoot AV systems and equipment, including display devices and switchers. With a high performance embedded Web server, three bidirectional serial ports, two IR/serial ports, four relays, and four digital I/O ports, the IPCP 305 is ideal for a wide range of TouchLink applications.

#### FEATURES

- Ethernet monitoring and control
- Supports TouchLink™ Touchpanels
- Three bidirectional RS-232 ports for universal control of display devices, switchers, and other AV equipment
- Two IR/Serial ports for one-way control of external devices
- Four relays for controlling room functions
- Four Digital I/O ports for interfacing with other systems in the room
- Supports Ethernet-controllable devices
- Easy to configure using Global Configurator



#### Model

#### Version Description

#### Part Number

IPCP 305

IP Link Control Processor

60-1072-02

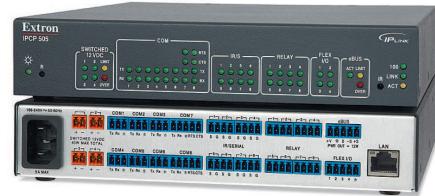
### IPCP 505

#### IP Link® Control Processor

The Extron IPCP 505 is an IP Link® control processor designed to support larger configurable control systems. The IPCP 505 integrates Ethernet connectivity into AV systems, giving users the ability to remotely control, monitor, and troubleshoot AV equipment, including display devices and switchers. With a high performance embedded Web server, multiple bidirectional serial ports, relays, flex I/O ports, and an Ethernet port, as well as four independently switched 12 VDC outputs, this control processor is ideal for applications that require control for multiple devices within a large-scale AV system. Bidirectional ports provide simultaneous two-way control and monitoring of serially controlled devices such as displays, switchers, and other AV equipment.

#### FEATURES

- Ethernet monitoring and control
- Supports TouchLink™ Touchpanels
- Eight bidirectional RS-232 ports for universal control of display devices, switchers, and other equipment
- Eight one-way IR/Serial ports
- Eight relays for controlling room functions
- Four Flex I/O ports for interfacing with other systems in the room



#### Model

#### Version Description

#### Part Number

IPCP 505

IP Link Control Processor

60-1071-02

#### Europe

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#### Middle East

+971.4.2991800  
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+81.3.3511.7656 FAX

## MEDIALINK®

## MLC 64 RS VC D

## MediaLink® Controller With Volume Control Knob - Decora® Wallplate

The MediaLink MLC 64 RS VC D is an easy-to-use, two-gang keypad controller featuring seven backlit soft touch buttons and a volume control knob. It is used for controlling common AV functions, such as power and input switching, in single display applications such as classrooms and meeting facilities. The MLC 64 RS VC D mounts in a two-gang junction box, and includes black and white Decora®-style wallplates.

## FEATURES

- Universal display control
- Centralized AV and room control
- Volume control knob
- Continuous gain control for fine adjustment of volume
- Dual-color, illuminated mute button
- Customizable backlit buttons



Model	Version Description	Part Number
MLC 64 RS VC D	IR and RS-232 Control - Decora wallplate	60-1182-02

## MEDIALINK® AND TOUCHLINK™ FOR IPAD

## MediaLink® for iPad

## iPad Control App for MLC 104 IP Plus and MLC 226 IP Controllers

Extron's MediaLink for iPad is an AV control system app designed for the Apple iPad. MediaLink for iPad provides users with an additional point of control for rooms with an installed Ethernet-enabled MediaLink controller. Each button press is tracked between the app and the controller, allowing both to stay in sync. Presenters can wirelessly control the AV system using a Wi-Fi network, allowing them the freedom to move throughout the room. MediaLink for iPad is available for download at the Apple iTunes App store.

## FEATURES

- Provides an additional point of control for Ethernet-enabled MediaLink controllers
- Supports MLC 104 IP Plus and MLC 226 IP controllers
- Connection manager allows presenters to control different rooms
- Button tracking allows iPad and controller to stay in sync
- Provides real-time status and remote control of multiple rooms for troubleshooting and management
- Wireless control using a Wi-Fi network allows users to move freely throughout the room

Model	Version Description
MediaLink for iPad	iPad App for MLC 104 IP Plus, MLC 226 IP



## TouchLink™ for iPad

## iPad Control App for TouchLink™ Touchpanels

Extron's TouchLink™ for iPad is an AV control system app designed for the Apple iPad. This app requires Global Configurator Professional, and is easily enabled with a single mouse click. TouchLink for iPad provides users with an additional point of control for rooms with an installed TouchLink touchpanel. Each button press is tracked between the app and the touchpanel, allowing both to stay in sync. Presenters can wirelessly control the AV system using a Wi-Fi network, allowing them the freedom to move throughout a room. TouchLink for iPad will soon be available for download at the Apple iTunes App store.

## FEATURES

- Provides an additional point of control for TouchLink touchpanels
- Connection manager allows presenters to control different rooms
- Button tracking allows iPad and touchpanel to stay in sync
- Provides real-time status and remote control of multiple rooms for troubleshooting and management
- Wireless control using a Wi-Fi network allows the user to move freely throughout the room

Model	Version Description
TouchLink for iPad	iPad App for TouchLink Touchpanels



## CONFIGURATION SOFTWARE

### Global Configurator Professional

#### Advanced Configuration Software for AV Control Systems

Global Configurator Professional is Extron's next generation configuration software for larger, more sophisticated TouchLink™-based configurable control systems. It offers an integrated environment for defining advanced AV control system functionality from an easy-to-use graphical user interface. Powerful features, such as controller groups and conditional logic, provide greater flexibility for more elaborate control system designs. GC Pro is ideal for any TouchLink-based control system requiring enhanced functionality and advanced configuration.

#### FEATURES

- Supports larger, more sophisticated TouchLink-based control systems
- Conditional logic with use of local variables
- Controller groups
- Virtual TouchLink support
- Controller macros
- Controller templates
- Enhanced user interface
- Enhanced button grouping
- Extensive library of thousands of certified, ready-to-use Ethernet, serial, and IR drivers
- Driver Configurator support
- Device driver subscription service
- String support within drivers
- Serial driver replacement maintains configuration settings when a serial driver is replaced
- Checks for missing drivers
- GlobalViewer system designer
- GlobalViewer Help button
- Project file import and export
- Scheduling and monitoring wizards
- Multiple action scheduling
- Event reporting
- Intelligent upload manager
- Aggregate event triggers
- Enhanced labeling options
- Three different methods for sorting and displaying control processors in a system
- Project AutoSave

#### Enhanced Functionality With Use of Conditional Logic

Conditional logic allows advanced functionality by making "if" and "else" statements available. With the help of conditional logic, one can easily set up operations that are dependent upon occurrence and non-occurrence of certain events. Conditional logic with local variables also allows examination of conditions within the configured button actions before performing a task. This ultimately helps in streamlining project creation by minimizing the need for monitors and schedules.

#### Combining Multiple Controllers for Larger Control Systems

With GC Pro, the controller groups feature allows control processors to be grouped together to work as one big controller. This feature is required to serve the needs of advanced systems that require more control ports than any single control processor possesses. Grouping the control processors will also reduce the need for long RS-232 cable runs as the group can span several rooms instead of being limited to a single room. Existing control systems benefit with this added feature as it affords an opportunity for easy expansion.

#### Easy Duplication of Control System Configurations

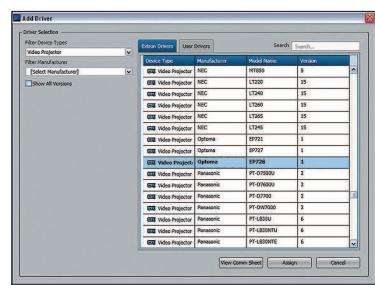
The controller templates feature helps create a baseline configuration that can be reused to create identical control systems. In essence, this feature creates an abstract representation of a controller. When a controller is linked to a template, it becomes an exact replica of that abstract. Any changes made to a template are automatically duplicated to all the controllers linked to it.

#### Create Additional Point of Control for TouchLink

Global Configurator Professional enables Virtual TouchLink, which creates an additional point of control for rooms with installed TouchLink Touchpanels. This can be established in one of two ways: TouchLink for Web is accessed from any Web browser that supports Microsoft Silverlight, and TouchLink for iPad is an AV control system app designed for the Apple iPad. Both the Web and iPad versions support button tracking, which tracks each button press to the touchpanel, allowing both virtual and installed touchpanels to stay in sync. For TouchLink for iPad, presenters can wirelessly control the AV system using a Wi-Fi network, allowing them the freedom to move throughout a room.



Global Configurator Professional



Driver Configurator Support - Allows creation of user defined serial and Ethernet drivers for devices that do not already have drivers available.



Global Configurator Professional enables TouchLink for iPad

Model	Version Description	Part Number
Global Configurator Professional	Configuration Software.....	79-544-01

Global Configurator Professional is available to qualified AV professionals.  
Call your Extron Customer Support Representative for details.

**Europe**  
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**Extron®**

## MOUNTING HARDWARE

## RFF Series

## Basic Rack False Faceplate Kits

The Extron RFF Series Basic Rack False Faceplate Kits are designed for use with Extron RSF, RSB, and RSU Series 1U Rack Shelf Kits. RFF Series Faceplates are available in two versions: Low Profile, for use with rack-mountable, 1" quarter-rack and half-rack width enclosures; and 1U eighth-rack, quarter-rack, and half-rack width. Both versions provide additional thermal management and complement rack aesthetics. Available in a gray powder coat finish.

## FEATURES

- False faceplates for use with Extron RSF, RSB, and RSU Series 1U Rack Shelf Kits
- Available in 1U and Low Profile versions
- Low Profile faceplates are compatible with Extron products with 1" enclosures
- Available in eighth, quarter, or half-rack widths, depending on version



RFF 052



RFF 054

## Model

## Version Description

## Part Number

<b>RFF 052</b>	Half-Rack Width, 1"	70-972-01
<b>RFF 054</b>	Quarter-Rack Width, 1"	70-973-01
<b>RFF 108</b>	Eighth Rack Width, 1U	70-337-01
<b>RFF 104</b>	Quarter Rack Width, 1U	70-338-01
<b>RFF 102</b>	Half Rack Width, 1U	70-339-01

## Half Rack Shelf System

## Half-Rack Width Rack Shelf and Accessories

The Extron Half Rack Shelf System of rack shelves and related accessories is designed for applications utilizing one-half rack width and smaller products. The compact, 1U half-rack width size allows the mounting of half-, quarter-, and eighth-rack products in space-constrained furniture such as lecterns and cabinets that are not wide enough to support the mounting of full width, 19" rack shelves or electronics. The Half Rack System is comprised of the HRB 109 Basic Rack Shelf; the HRU 109 Universal Rack Shelf Kit, which includes eighth-rack and quarter-rack false faceplates; and HRP 100 Blank Panel. Half Rack System products are finished in a durable gray powder coat finish to match other Extron products.

## FEATURES

- Compact, 1U half-rack width size fits narrow lecterns and cabinets
- Holds one half-rack, two quarter-rack, or four eighth-rack width products
- Includes mounting holes for 3", 6", and 9.5" deep Extron products
- Available in a gray powder coat finish
- Matching blank filler plate also available



HRB 109



HRU 109



HRP 100

## Model

## Version Description

## Part Number

<b>HRB 109</b>	1U Basic Half Rack Shelf, gray	60-1251-10
<b>HRU 109</b>	1U Universal Half Rack Shelf Kit, gray	60-1251-20
<b>HRP 100</b>	1U Half Rack Blank Panel, gray	60-1251-01



## FIBER OPTICS

### FOX USB Extender

#### Fiber Optic Extender for USB Peripherals

The Extron FOX USB Extender is a fiber optic transmitter and receiver set capable of sending USB signals extreme distances. The extender enables USB peripheral devices to be remotely located up to 10 km (6.25 miles) from the host computer. The transmitter features peripheral emulation to support uninterrupted communication between the host and the USB device, ensuring USB port recognition during system boot-up and in a switching environment. For simplified integration, the receiver features an active four-port hub that supplies 5 Volts, 500 mA per port to power attached devices. Also, port LED indicators provide visual confirmation of system activity. These features make the FOX USB Extender ideal for extending USB signals long distance over fiber optic cabling.

#### FEATURES

- Extends USB peripherals very long distances over fiber optic cabling
- Supports USB 2.0, 1.1, and 1.0 standards with data transfer rates up to 480 Mbps
- Receiver features an integrated four-port hub with 5 Volts, 500 mA available on each port
- Peripheral Emulation
- Real-time status LED indicators for troubleshooting and monitoring
- Compatible with FOX Series matrix switchers



FOX USB Extender Tx

FOX USB Extender Rx

### FOXBOX SR HDMI

#### Fiber Optic Scaling Receiver for HDMI, Audio, and RS-232

The Extron FOXBOX SR HDMI is a high performance fiber optic-to-HDMI scaling receiver for the FOX Series transmitters. It accepts a fiber optic signal with HDCP-compliant HDMI, DVI, VGA, or HD component video, stereo audio, and RS-232 control from a FOX Series transmitter, scaling the video to the optimal output resolution. Engineered for reliability and exceptional high resolution image performance, the FOXBOX SR HDMI supports resolutions up to 1920x1200, including HDTV 1080p/60. It also provides many integrator-friendly features such as Key Minder®, audio de-embedding, Auto Input Memory, and internal test patterns. In addition, the compact, low profile enclosure of the FOXBOX SR HDMI allows for discreet installation behind a flat-panel display.

#### FEATURES

- Accepts fiber optic signals from FOX Series transmitters and provides scaled HDMI video, stereo audio, and RS-232 control signals
- High performance scaler provides selectable output resolutions up to 1920x1200, including HDTV 1080p/60
- HDMI 1.3 compatible
- HDCP compliant
- Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- HDMI, DVI, RGB, and HD component video upscaling and downscaling
- HDMI audio de-embedding with analog stereo outputs
- Compatible with FOX Series transmitters



### Model

### Version Description

### Part Number

FOXBOX SR HDMI MM  
FOXBOX SR HDMI SM

Multimode - Receiver .....  
Singlemode - Receiver .....

60-1187-21  
60-1187-22

## FIBER OPTICS

## FOX AEX 108

## Eight Port Audio Extractor

The Extron FOX AEX 108 is an eight-port, fiber optic audio extractor for independent processing and routing of audio signals in a fiber optic AV distribution system. Each port accepts signals from a FOX Series transmitter, extracts the two-channel audio signal to provide a balanced or unbalanced analog stereo output, and re-transmits the original signal to a FOX Series receiver. Output reclocking on the buffered pass-through maintains signal integrity, transmitting the fiber optic signal at original power levels. Featuring high-speed, all digital signal transmission of pixel-perfect video, audio, and control signals over fiber optic cabling, the FOX AEX 108 is compatible with FOX Series HDMI, DVI Plus, DVI, VGA, VGA/YUV, and AV transmitters and receivers.

## FEATURES

- Eight simultaneous audio extraction ports
- Buffered input loop-throughs
- Balanced or unbalanced analog audio output
- Selectable output reclocking
- Compatible with Extron FOX Series matrix switchers for signal distribution systems up to 1000x1000 and larger
- Compatible with Extron FOX Series HDMI, DVI Plus, DVI, VGA, VGA/YUV, and AV transmitters and receivers
- Rack-mountable 1U, half rack width metal enclosure
- Internal universal power supply



## Model

## Version Description

## Part Number

FOX AEX 108 MM	Multimode.....	60-1227-01
FOX AEX 108 SM	Singlemode.....	60-1227-02

## PowerCage™ FOX HDMI

## Fiber Optic Extender for HDMI, Audio, and RS-232

The PowerCage™ FOX HDMI fiber optic extender is a modular board-designed transmitter and receiver set for the PowerCage 1600 enclosure that provides long haul transmission of HDCP-compliant HDMI, stereo audio, and RS-232 control signals over fiber optic cabling. Engineered for reliability and exceptional high resolution image performance, it uses Extron all digital technology to deliver pixel-perfect transmission of HDMI computer-video images up to WUXGA 1920x1200 resolution, including HDTV 1080p/60. The PowerCage FOX HDMI also includes many integrator-friendly features such as Key Minder®, EDID Minder®, Auto Input Memory, audio embedding/de-embedding, audio gain and attenuation, internal test patterns, and real-time system monitoring.

## FEATURES

- Extends HDMI, stereo audio, and RS-232 control signals very long distances over fiber optic cabling
- HDCP compliant
- All digital technology provides pixel-for-pixel performance with signals up to 1920x1200, including HDTV 1080p/60
- Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- EDID Minder® automatically manages EDID communication between connected devices
- HDMI 1.3 compatible
- Modular, field-upgradeable, and hot-swappable boards designed for the PowerCage 1600 enclosure
- Audio embedding with gain, attenuation, and muting control
- HDMI audio de-embedding with analog stereo outputs
- HDCP Visual Confirmation provides a green signal when encrypted content is sent to a non-compliant display



## Model

## Version Description

## Part Number

PowerCage FOX Tx HDMI MM	Multimode - Transmitter.....	70-889-11
PowerCage FOX Rx HDMI MM	Multimode - Receiver.....	70-889-21
PowerCage FOX Tx HDMI SM	Singlemode - Transmitter.....	70-889-12
PowerCage FOX Rx HDMI SM	Singlemode - Receiver.....	70-889-22

## FIBER OPTICS

### FOX DA8 Plus

#### Configurable Eight Output Fiber Optic Distribution Amplifier

The Extron FOX DA8 Plus is a configurable eight-output fiber optic distribution amplifier for long haul transmission of AV and control signals over fiber optic cabling. For maximum flexibility, it can be configured as a single 1x8 distribution amplifier, or as two 1x4 or four 1x2 distribution amplifiers. Featuring high-speed, all digital signal transmission of pixel-perfect HDMI, DVI, RGB, HD component video, S-video, composite video, multi-rate SDI, audio, and control signals, it is compatible with Extron FOX Series products. Output reclocking and active signal splitting maintains signal integrity, transmitting output signals at original power levels. The FOX DA8 Plus includes integrator-friendly features such as RS-232 control, rack-mount capability, and ability to mute one or more outputs.

#### FEATURES

- Configurable as a single 8-output distribution amplifier, or as two 4-output or four 2-output distribution amplifiers
- Distributes and extends AV and control signals long distances over fiber optic cabling
- Compatible with Extron FOX Series extenders, switchers, and matrix switchers
- Eight active and individually isolated outputs
- Selectable output reclocking
- Output muting control
- Available in multimode and singlemode models



#### Model

#### Version Description

#### Part Number

FOX DA8 Plus MM	Eight Output Fiber Optic DA - MM .....	60-1171-01
FOX DA8 Plus SM	Eight Output Fiber Optic DA - SM .....	60-1171-02

### FOX SW8

#### Eight Input Fiber Optic Switcher

The Extron FOX SW8 is an eight input fiber optic switcher for switching and long haul transmission of fiber optic AV and RS-232 control signals over fiber optic cabling. It provides eight optical inputs and one buffered optical output with active switching and reclocking for long-distance connectivity to FOX Series fiber optic extenders, distribution amplifiers, and matrix switchers. The switcher features very high-speed, all-digital switching of HDMI, DVI, multi-rate SDI, RGBHV, HD component video, S-video, composite video, audio, and control signals. Designed specifically for AV systems, the FOX SW8 includes a host of integrator-friendly features such as RS-232 control, output mute, and input loop-through for seven of the eight inputs.

#### FEATURES

- Switches and extends fiber optic AV and RS-232 control signals very long distances over fiber optic cabling
- Compatible with all FOX Series transmitters and receivers
- Optical inputs with loop-throughs
- SpeedSwitch™ Technology provides exceptional switching speed for HDCP-encrypted content
- Selectable output reclocking
- Output muting control
- Available as an 850 nm multimode model for moderate-range transmissions, and a 1310 nm singlemode model for extreme distances up to 30 km (18.75 miles)



#### Model

#### Version Description

#### Part Number

FOX SW8 MM	Multimode .....	60-1172-01
FOX SW8 SM	Singlemode .....	60-1172-02

## FIBER OPTICS

## FOX I/O 1616 HD-SDI

## 16x16 Multi-Rate SDI I/O Board for the FOX Matrix 14400/320x

The Extron FOX I/O 1616 HD-SDI board is available as an option for the FOX Matrix 14400 and FOX Matrix 320x Modular Fiber Optic Matrix Switchers, and enables connection to local multi-rate SDI-equipped devices. This board offers a 16x16 configuration for switching and distribution of multi-rate SDI signals up to 2.97 Gbps, including SDI, HD-SDI, and 3G-SDI. With this board, the FOX Matrix switchers can be configured as dedicated multi-rate SDI matrix switchers, or with a combination of multi-rate SDI and fiber optic matrix switching. The FOX I/O 1616 HD-SDI board is compliant with SMPTE 259M, 292M, 424M, and ITU digital video standards.

## FEATURES

- Supports multi-rate SDI signals up to 2.97 Gbps
- Multi-rate SDI I/O board for the FOX Matrix 14400 and FOX Matrix 320x
- Passes embedded audio, ancillary ID and metadata information, and SD/HD-SDI digital video signals
- Immunity to SDI and HD-SDI pathological signal patterns
- Hot-swappable
- Individually buffered inputs and outputs
- Input equalization and reclocking on buffered outputs



## Model

## Version Description

## Part Number

FOX I/O 1616 HD-SDI

16x16 I/O Board - Multi-Rate SDI .....

70-966-01

## FOX 3G I/O SM P

## Fiber Optic Multi-Rate SDI I/O Board for the FOX Matrix Series

The Extron FOX 3G I/O SM P board is available as an option for the FOX Matrix Series modular fiber optic matrix switchers, and enables the transmission and distribution of fiber optic multi-rate SDI signals, including pathological signals, over singlemode fiber optic cabling. The board offers an 8x8 or 16x16 configuration for switching and distribution of multi-rate SDI signals up to 2.97 Gbps, including SDI, HD-SDI, and 3G-SDI. With the board, a FOX Matrix switcher can be configured as a dedicated multi-rate SDI matrix switcher, or with a combination of multi-rate SDI and fiber optic matrix switching solutions. The FOX 3G I/O SM P board is compliant with SMPTE 259M, 292M, 424M, RP 178 and RP 198 for pathological immunity, and ITU digital video standards.

## FEATURES

- Fiber optic multi-rate SDI I/O board for the FOX Matrix Series
- Supports multi-rate SDI at rates up to 2.97 Gbps
- Immunity to SDI and HD-SDI pathological signal patterns
- Passes embedded audio, ancillary ID and metadata information, and SD/HD-SDI digital video signals
- Hot-swappable
- Individually buffered inputs and outputs
- Real-time status LED indicators for monitoring and troubleshooting
- Available as a 1310 nm singlemode I/O board for extreme distances up to 30 km (18.75 miles)



FOX 3G I/O 1616 SM P



FOX 3G I/O 88 SM P

## Model

## Version Description

## Part Number

FOX 3G I/O 1616 SM P

16x16 I/O Board - Singlemode, Path Comp ...

70-965-01

FOX 3G I/O 88 SM P

8x8 I/O Board - Singlemode, Path Comp .....

70-965-02

## FIBER OPTICS

### Fiber Optic Test Set

#### Complete Kit to Measure Optical Power and Loss in Fiber Optic Cable

The Extron Fiber Optic Test Set includes all the tools needed to measure optical power and loss in multimode and singlemode fiber optic AV equipment and fiber optic cabling. The FLS 101 light source includes both a multimode LED output that operates at 850 nm and 1300 nm, and a singlemode laser output that operates at 1310 nm and 1550 nm. The FPM 101 power meter is compatible with both multimode and singlemode fiber and features an easy-to-read LCD display for measuring optical power in dBm or watts and insertion loss in dB. The test set also includes all the cables and adapters needed for testing fiber optic AV systems and a durable padded carrying case to organize and protect the test equipment with room for the power meter, light source, cables, and adapters.

#### FEATURES

- Complete kit for testing power and loss in multimode and singlemode fiber optic AV systems
- Fiber optic light source includes both multimode and singlemode outputs
- Fiber optic power meter accepts multimode or singlemode fiber
- Power measurements in dBm or watts and loss measurements in dB
- Automatic wavelength identification with Wave ID enables the power meter to automatically detect and set wavelengths to simplify setup
- Handheld and battery-powered
- Durable padded carrying case



Model	Version Description	Part Number
Fiber Optic Test Set	Multimode and Singlemode Kit	70-962-01

### Fiber Optic Termination Kit

#### Tool Kit for Field Termination of Fiber Optic Cables

The Extron Fiber Optic Termination Kit enables quick, reliable termination of Extron multimode and singlemode fiber optic cables with high-performance, pre-polished connectors. Each kit includes all the tools and equipment needed to strip, prepare, cleave, and terminate a fiber optic cable using Extron Quick LC Fiber Optic Connectors. A VFL - Visual Fault Locator is also included to provide a visual indication of a properly terminated fiber optic connector. A durable canvas bag offers a convenient way to organize, transport, and protect the tools and supplies provided in the termination kit.

#### FEATURES

- Complete kit for terminating fiber optic cables
- Compatible with all Extron Fiber Optic Quick LC Connectors
- Precision fiber cleaver
- Visual Fault Locator included
- Durable canvas tool bag



Model	Version Description	Part Number
Fiber Optic Termination Kit	Termination Kit	100-656-01

## DVI &amp; HDMI

## DTP HDMI 301

## Long Distance HDMI Twisted Pair Extender

The Extron DTP HDMI 301 is a transmitter and receiver set for long distance transmission of HDMI video, embedded audio, plus bidirectional control signals over a single CAT 5-type cable. For added flexibility and convenience, separate analog stereo audio signals can also be transmitted on a second twisted pair cable. It is HDMI 1.3 compatible and capable of sending 1080p/60 Deep Color and 1920x1200 signals up to 330 feet (100 meters). These integrator-friendly features, combined with the compact enclosure sizes and remote powering of either unit, make the DTP HDMI 301 ideal for extending video, multi-channel audio, and bidirectional control in space-challenged environments.

## FEATURES

- Transmits HDMI plus RS-232 and IR signals over a single CAT 5-type cable
- Extends 1080p/60 Deep Color and 1920x1200 signals up to 330 feet (100 meters)
- Optimized for use with standard CAT 5e cable
- Transmits separate analog stereo audio signals
- HDMI 1.3 compatible
- HDCP compliant
- Remote powering of transmitter or receiver



DTP HDMI 301 Tx

DTP HDMI 301 Rx

## Model

## Version Description

## Part Number

DTP HDMI 301 Tx	HDMI Transmitter .....	60-1212-12
DTP HDMI 301 Rx	HDMI Receiver .....	60-1212-13

## DTP DVI 301

## Long Distance DVI Twisted Pair Extender

The Extron DTP DVI 301 is a transmitter and receiver set for long distance transmission of DVI-D video plus bidirectional RS-232 and IR signals over a single CAT 5-type cable. In addition, separate analog stereo audio signals can be transmitted on the second twisted pair cable. It is capable of sending 1920x1200 and 1080p/60 Deep Color signals up to 330 feet (100 meters). For added flexibility and convenience, the transmitter is equipped with a buffered DVI loop-through output to support a local computer monitor. These integrator-friendly features, combined with the compact enclosure sizes and remote powering of either unit, make the DTP DVI 301 ideal for extending video and bidirectional control in space-challenged environments.

## FEATURES

- Transmits single-link DVI-D plus RS-232 and IR signals over a single CAT 5-type cable
- Extends 1920x1200 and 1080p/60 Deep Color up to 330 feet (100 meters)
- Optimized for use with standard CAT 5e cable
- Transmits separate analog stereo audio signals
- DVI input loop-through
- Supports EDID and HDCP transmission
- Remote powering of transmitter or receiver
- Bidirectional RS-232 and IR control pass-through



DTP DVI 301 Tx

DTP DVI 301 Rx

## Model

## Version Description

## Part Number

DTP DVI 301 Tx	DVI Transmitter .....	60-1213-12
DTP DVI 301 Rx	DVI Receiver .....	60-1213-13

## DVI &amp; HDMI

**LockIt™****HDMI Cable Lacing Bracket**

The Extron LockIt™ is a cable lacing bracket for securing HDMI cables to the host product's input and output connectors. LockIt reduces the stress on the HDMI connectors and prevents intermittent or complete signal loss due to a loose cable connection. Its compact design allows for easy installation with most HDMI cables and devices, including in space constrained areas where the HDMI connectors are stacked. The LockIt lacing bracket can be used when installing new HDMI cables, or as a retrofit to secure previously installed cables. LockIt comes with tie wraps and is available in packages of 50.

**FEATURES**

- Locks the cable to the HDMI device
- Works with most HDMI cables and devices
- Ideal for use with single or stacked connectors
- Guide posts prevent tie wrap from slipping
- Recessed lacing grooves secure the tie wrap
- Included accessory with Extron HDMI powered products
- Sold in packages of 50
- Zip ties included



To see LockIt in action, visit [www.extron.com/lockit](http://www.extron.com/lockit)

**LockIt is now included with  
Extron HDMI powered products**

Model	Version Description	Part Number
LockIt	HDMI Cable Lacing Bracket; Package of 50...	101-020-01

## HDMI 101 Plus

### HDMI Cable Equalizer

The Extron HDMI 101 Plus is an HDMI equalizer that offers a convenient, economical solution for extending HDMI signals beyond the suggested 15 m (45 ft) distance limit for HDMI cables. The HDMI 101 Plus attaches to the end of a long HDMI cable run of up to 200 ft at 1080p/60 with 8-bit color and 150 ft at 1080p/60 with 12-bit color when used with Extron HDMI Pro Series cables. It automatically provides the necessary active equalization to ensure optimal image quality with HDTV signals up to 1080p/60 and high resolution computer-video signals up to 1920x1200. It is HDCP compliant, ensuring display of content-protected media and interoperability with other HDCP-compliant devices. The HDMI 101 Plus is ideal for permanent installations as well as temporary applications with long HDMI cable runs.

**FEATURES**

- Extends HDMI signals over HDMI cable up to 200 feet (60 meters)
- Supports HDTV 1080p/60 12-bit color and PC resolutions up to 1920x1200
- HDMI 1.3 compatible
- HDCP compliant
- Automatic input cable equalization
- Powered by source device at distances up to 125 feet (38 meters)
- LED indicator for source signal presence and power
- Includes LockIt™ HDMI cable lacing brackets



Model	Version Description	Part Number
HDMI 101 Plus	HDMI Cable Equalizer.....	60-872-02

## DVI &amp; HDMI

## HDMI Ultra Series

## Ultra Flexible High Speed HDMI Cables

The Extron HDMI Ultra Series cables are designed to transmit high-speed digital video and audio signals. The HDMI Ultra Series is engineered with Extron-exclusive ultra-flexible, 30 AWG cable and features a low bend radius and compact, gold-plated connectors. They are ideal for applications with tight equipment racks or AV presentation furniture, or with wall-mount or pole-mount displays. The HDMI Ultra cables conform to HDMI High Speed cable specifications and are available in lengths from 6 feet to 15 feet (1.8 m to 4.5 m).

## FEATURES

- Certified for use with Cable Cubby and HSA surface access enclosures
- Ultra flexible HDMI cables
- 1080p/60 verified
- Available in lengths from 6 feet to 15 feet (1.8 m to 4.5 m)
- Conforms to HDMI High Speed Cable Specifications:
  - Supports signals up to 1920 x 1200 @ 60 Hz and 1080p/60
  - Data rates to 10.2 Gbps
  - Refresh rates to 120 Hz
  - Color depth to 48 bits - 16 bits per color
- 30 AWG copper wire construction
- Gold-plated contacts



## Model

## Version Description

## Part Number

HDMI Ultra/6	6' (1.8 m) High Speed .....	26-663-06
HDMI Ultra/9	9' (2.7 m) High Speed .....	26-663-09
HDMI Ultra/12	12' (3.6 m) High Speed.....	26-663-12
HDMI Ultra/15	15' (4.5 m) High Speed.....	26-663-15

## DVID SL Ultra Series

## Ultra Flexible Single Link DVI-D Cables

The Extron DVID SL Ultra Series cables are designed to transmit high resolution single link DVI-D signals. The DVID SL Ultra Series is engineered with Extron-exclusive ultra-flexible, 30 AWG cable and features a low bend radius and compact, gold-plated connectors. They are ideal for applications with tight equipment racks or AV presentation furniture, or with wall-mount or pole-mount displays. The DVID SL Ultra cables support resolutions up to 1920x1200 @ 60 Hz and 1080p/60 and are available in lengths from 1.5 feet to 15 feet (0.4 m to 4.5 m).

## FEATURES

- Certified for use with Cable Cubby and HSA surface access enclosures
- Ultra flexible single link DVI cables
- 1080p/60 verified
- Available in lengths from 1.5 feet to 15 feet (0.4 m to 4.5 m)
- Supports single link DVI-D signals up to 1920 x 1200 @ 60 Hz and 1080p/60:
  - Data rates to 4.95 Gbps
  - Refresh rates to 60 Hz
  - Color depth to 24 bits - 8 bits per color
- 30 AWG copper wire construction
- Gold-plated contacts



## Model

## Version Description

## Part Number

DVID SL Ultra/1.5	1.5' (45 cm).....	26-662-02
DVID SL Ultra/3	3' (90 cm).....	26-662-03
DVID SL Ultra/6	6' (1.8 m) .....	26-662-06
DVID SL Ultra/9	9' (2.7 m) .....	26-662-09
DVID SL Ultra/12	12' (3.6 m) .....	26-662-12
DVID SL Ultra/15	15' (4.5 m) .....	26-662-15

## DISPLAYPORT

### MDP Series

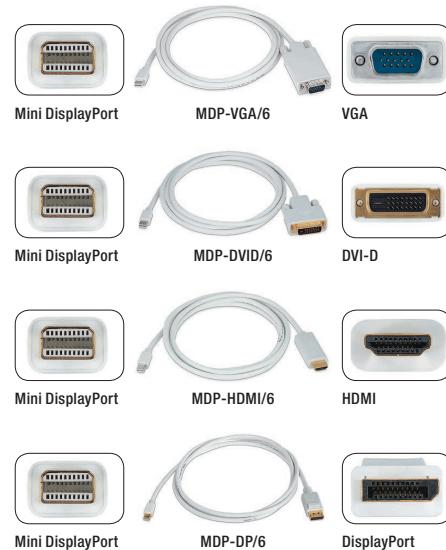
#### Mini DisplayPort Adapter Cables

The Extron MDP Series are active, one-way adapter cables for Mini DisplayPort applications. They allow transmission of digital signals from a dual-mode Mini DisplayPort enabled source. Built-in active circuitry converts DisplayPort into HDMI, single link DVI, or VGA signals, depending on the model in use. EDID and HDCP information is passed through between source and display. The Extron MDP Series are ideal for cabling dual-mode Mini DisplayPort enabled sources to digital or analog displays and projectors.

#### FEATURES

- Certified for use with Cable Cubby and HSA surface access enclosures
- Provides connectivity between dual-mode Mini DisplayPort enabled sources and HDMI, single link DVI, VGA, or DisplayPort displays
- White colored jacket and molded ends for easy identification
- Complies with VESA Interoperability Guideline
- Passes EDID information from display to the source
- Gold-plated contacts
- 6' (1.8 m) cable length

Model	Version Description	Part Number
MDP-VGA/6	Mini DP to VGA, Active, 6' (1.8m).....	26-672-06
MDP-DVID/6	Mini DP to DVI-D SL, Active, 6' (1.8m).....	26-673-06
MDP-HDMI/6	Mini DP to HDMI, Active, 6' (1.8m).....	26-674-06
MDP-DP/6	Mini DP to DisplayPort, 6' (1.8m).....	26-675-06



## SCALERS & SCAN CONVERTERS

### DVS 605

#### Five Input HDCP-Compliant Scaler with Seamless Switching

The Extron DVS 605 is a high performance video scaler that includes three HDMI inputs, two universal analog video inputs, and simultaneous HDMI and analog high resolution outputs. The DVS 605 accepts a wide variety of video formats including HDMI with HDCP, HDTV, RGB, and standard definition video. It features advanced Extron video signal processing with 1080i deinterlacing, Deep Color processing, and true seamless switching for professional-quality presentations. Designed for professional AV integration, the DVS 605 offers flexible control options including Ethernet, RS-232, USB, and contact closure. The DVS 605 is available in models with audio switching plus HDMI audio embedding / de-embedding, and also 3G-SDI/HD-SDI output with genlock.

#### FEATURES

- Three HDMI inputs and two universal auto-detecting analog video inputs
- HDCP compliant
- Advanced scaling engine
- True seamless switching
- PIP - picture-in-picture
- SpeedSwitch™ Technology provides exceptional switching speed for HDCP-encrypted content
- Deep Color processing
- Simultaneous outputs for HDMI and analog RGB or HD component video
- Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- EDID Minder® automatically manages EDID communication between connected devices
- Power Save and standby modes
- Audio switching
- Output volume control



Model	Version Description	Part Number
DVS 605	Standard Version.....	60-1059-01
DVS 605 A	With Audio Switching .....	60-1059-02
DVS 605 D	With 3G/HD-SDI Output.....	60-1059-03
DVS 605 AD	With 3G/HD-SDI Out and Audio Switching .....	60-1059-04



DVS 605 AD - Back

## VIDEOWALL PROCESSORS

## Quantum® Elite

## HDCP-Compliant Scalable Videowall Processing System

The Extron Quantum® Elite is an HDCP-compliant, scalable, expandable videowall processor configurable to support a variety of input, output, and windowing capabilities. It features high performance video scaling capable of producing very high quality images. The Quantum Elite offers two card cages that support various combinations of input and output cards for HDMI, DVI, RGB, HDTV or video sources. Hundreds of additional DVI or RGB sources can be streamed over an IP network to the Quantum Elite using the Extron QGE 100 graphics capture encoder. Each HDMI or DVI-I dual output card supports up to 128 video/graphic source windows, and multiple Quantum Elite card cages can be cascaded to create very large display arrays. A dedicated, high-speed video/graphic bus maintains real-time performance even under heavy loading of inputs.

## FEATURES

- Scalable videowall processing for large videowalls with up to 28 displays or more
- Card frame videowall processing system available with 8 or 15 slots
- HDCP-compliant input/output options
- HDCP Visual Confirmation provides a green signal when encrypted content is sent to a non-compliant display
- Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- Scalable, field-expandable systems: Extron field staff can add cards or cascade card frames to add more inputs and outputs

- High speed, dedicated video/graphic bus delivers real-time performance
- Flexibility to support a variety of input and output configurations
- Dual HDMI/DVI output card supports resolutions up to 1920x1200 and HDTV 1080p/60
- Dual DVI/RGB output card supports resolutions up to 1600x1200 and HDTV 1080p/60
- Up to 128 video/graphic windows per dual output card
- Dual input card for HDMI or DVI graphics and video
- Dual input card for DVI signals
- Dual input card for analog RGB or HD component video signals
- 12-channel video input card supports any mix of composite or S-video signals
- IP streaming enables interfacing of hundreds of RGB/DVI input signals with QGE 100 Quantum Graphics Encoders
- High quality image upscaling and downscaling
- Supports digital and analog input signals up to 1920x1200
- Easy-to-use configuration and control software
- Solid state flash storage in 15-slot frame eliminates risk of virus retention and allows simple removal of system data
- Ruggedized real-time operating system and power redundancy features support 24/7 operation



Model	Version Description	Part Number
Quantum Elite 615	Quantum Elite System 6U/15 slot .....	Call
Quantum Elite 408	Quantum Elite System 4U/8 slot .....	Call
QEC 02	Quantum Elite DVI/RGB Output Card .....	Call
QEC 02HDMI	Quantum Elite HDMI Output Card .....	Call
QEC 12VID	Quantum Elite 12 Video Input Card .....	Call
QEC 12RGB	Quantum Elite Dual RGB Video Input Card .....	Call
QEC 12DVI	Quantum Elite Dual DVI Video Input Card .....	Call
QEC 12HDMI	Quantum Elite HDMI Input Card .....	Call
QGE 100	Quantum Graphics Encoder .....	Call

## VIDEOWALL PROCESSORS

### Quantum® Connect

#### HDCP-Compliant Videowall Processing System

The Extron Quantum® Connect is an HDCP-compliant videowall processor that delivers the same high quality video scaling, windowing capability, and reliable, real-time performance as Extron's flagship Quantum Elite. Quantum Connect is ideal for small to medium-sized videowalls with two to 14 screens in installations with permanent AV system configurations. It supports a wide variety of input, output, and windowing capabilities in a small form factor, and features high performance video scaling technology capable of producing superior quality images. The Quantum Connect is a non-expandable card-cage design that is populated at the factory with user-selected combinations of input and output cards for HDMI, DVI, RGB, HDTV or video sources. Each HDMI or DVI-I dual output card supports up to 128 video/graphic source windows.

#### FEATURES

- Videowall processing for mid-sized videowalls with up to 14 displays
- Card frame videowall processing system available with eight slots
- HDCP-compliant input/output options
- HDCP Visual Confirmation provides a green signal when encrypted content is sent to a non-compliant display
- Key Minder® continuously verifies HDCP compliance for quick, reliable switching
- High speed, dedicated video/graphic bus delivers real-time performance
- Flexibility to support a variety of input and output configurations
- Dual HDMI/DVI output card supports resolutions up to 1920x1200 and HDTV 1080p/60
- Dual DVI/RGB output card supports resolutions up to 1600x1200 and HDTV 1080p/60
- Up to 128 video/graphic windows per dual output card
- Dual input card for HDMI or DVI graphics and video
- Dual input card for DVI signals
- Dual input card for analog RGB or HD component video signals
- 12-channel video input card supports any mix of composite or S-video signals
- High quality image upscaling and downscaling
- Supports digital and analog input signals up to 1920x1200
- Easy-to-use configuration and control software
- Optimal reliability



Model	Version Description
Quantum Connect	Videowall Processing System

## STREAMING AV

## SME 100

## H.264 Streaming Media Encoder

The Extron SME 100 is a live streaming media encoder that interfaces with DVI, RGB, HDTV, and standard definition signals for delivering media over IP networks. It is designed specifically for pro AV applications and features an integrated three-input switcher with audio, plus buffered loop-throughs for simplified integration into AV systems. The SME 100 employs standards-based H.264 / MPEG-4 AVC and AAC encoding, and outputs an IP stream that can easily be decoded and viewed on desktop or laptop PCs. High performance Extron signal processing scales and optimizes video input signals for the intended viewing application. Encoding controls also provide adjustments for bit rate and quality. By extending AV signals over networks, the SME 100 significantly expands AV system capability.

## FEATURES

- Streams DVI, RGB, HDTV, and video signals with audio over IP networks
- Supports input signal resolutions up to 1920x1200, including HDTV 1080p/60
- Available in two models supporting streaming at SD or HD resolutions
- Standards-based H.264 / MPEG-4 AVC video compression
- Integrated three-input AV switcher
- Buffered input loop-throughs for video and audio
- DVI, RGB, HDTV, and standard definition video upscaling and downscaling
- Auto Input Format Detection
- Auto-Image™ setup
- Encoding quality controls including video resolution, video bit rate, frame rate, constant or variable bit rate control, GOP length, and audio bit rate
- Streaming presets for quick recall of streaming profiles based on target resolution or bit rates
- Auto Input Memory
- EDID Minder® automatically manages EDID communication between connected devices
- Audio breakaway
- Picture controls for brightness, contrast, color, tint, detail, as well as horizontal and vertical positioning, sizing, and zoom
- Advanced deinterlacing
- Internal test patterns for setup
- Ethernet monitoring and control



## Model

## Version Description

## Part Number

SME 100 HD	H.264 HD Encoder.....	60-1061-01
SME 100 SD	H.264 SD Encoder.....	60-1061-02

## VN-Matrix® 225 Series

## DVI &amp; RGB Video Over IP Encoders &amp; Decoders

The VN-Matrix® 225 Series provides real-time transmission of high resolution audio visual content across standard IP networks for live viewing, collaboration, storage, and playback. The VN-Matrix 225 Series encodes video or graphics sources at resolutions up to HD or WUXGA, streams the video and audio over an IP network, then decodes the content back to the original source resolution. VN-Matrix applies Extron's PURE3® Codec, a unique wavelet-based compression technology. The VN-Matrix 225 Series offers real-time performance and low latency, making it ideal for remote collaborative and interactive or control applications. It can be deployed in live event streaming and high level collaboration in mission-critical applications with the most demanding image quality requirements.

## FEATURES

- Supports up to WUXGA resolution 1920x1200
- HD video over IP up to 1080p
- Low delay streaming - 35 ms encode and 35 ms decode
- High immunity to network errors
- Compatible and interoperable with VN-Matrix 200 models
- Supports refresh rates from 24 to 85 Hz
- Dual 1 Gigabit network interfaces
- Compatible with the VN-Matrix Recorder for real-time recording, storage, and playback
- S/PDIF digital audio interface
- Extensive bit rate management
- Analog RGB, Component HD, or DVI-D input
- Analog RGB or DVI-D output



## Model

## Version Description

## Part Number

VNC 225 DVI	Codec for DVI-I, Audio/Keyboard/Mouse.....	60-1118-02
VNE 225 DVI	Encoder for DVI-I & Digital Audio.....	60-1119-02
VND 225 DVI	Decoder for DVI-I & Digital Audio.....	60-1120-02

## STREAMING AV

## JMP 9600

## Two-Channel JPEG 2000 HD Video Player

The JMP 9600 HD and JMP 9600 2K are high resolution video players that provide 2D and 3D playback of JPEG 2000 encoded video files at up to 250 Mbps. The players are ideal for entertainment and commercial applications where superior image quality is critical to the audience experience. The JMP 9600 offers two playback channels that can be independently controlled or synchronized for super widescreen or 3D displays.

## FEATURES

- JPEG 2000 DCP file playback via HD-SDI or DVI-I
- Plays back JPEG 2000 encoded content at up to 250 Mbps with 36 bits per pixel and 4:4:4 color sampling
- Dual outputs can operate as two independent sources or as two synchronized outputs
- Multiple JMP 9600 2K units can lock together for multi-screen applications
- 1080p HD and 2K playback at up to 50/60p
- Genlock input and linear time code input and output, JMP 9600 2K model only
- Standard JMP 9600 models feature 1 TB of hard disk storage capacity
- 128 GB solid state storage models are available on a build-to-order basis



## Model

## Version Description

## Part Number

JMP 9600 HD 128	JPEG 2000 Media Player HD 128 GB SSD ....	60-1135-02
JMP 9600 2K 128	JPEG 2000 Media Player 2K 128 GB SSD.....	60-1136-02

## USB

## USB Extender Series

## Twisted Pair Extender for USB Peripherals

The USB Extender Series enables USB peripheral devices to be remotely located up to 450 feet (135 meters) from the host computer. The extender consists of a transmitter and receiver set that are linked using a single, standard CAT 5/5e/6 or CAT 7 cable. The receiver features a built-in, active four port hub that supplies 5 Volts, 500 mA to each port to power attached devices. This allows peripherals such as smart phones, webcams, personal media players, and mass storage devices to be connected and powered or charged at the same time. The USB Extender Series is ideal for use in applications utilizing the Extron Annotator and remote touchscreen displays, as well as applications that require the remote location of USB peripherals such as interactive whiteboards, keyboards, mice, and other human interface devices.

## FEATURES

- Extends USB peripherals up to 450 feet (135 meters) on one CAT 5/5e/6 or CAT 7 cable
- Supports USB 1.0, 1.1, and 2.0 standards with data transfer rates up to 480 Mbps
- Receiver features an integrated four port hub with 5 Volts, 500 mA available on each port
- Port Status LEDs
- Choice of tabletop and architectural form factors
- Form factors can be mixed and matched for optimum integration flexibility



## Model

## Version Description

## Part Number

USB Extender D Tx	Transmitter - Decora Version - White .....	60-1252-13
USB Extender D Rx	Receiver - Decora Version - White .....	60-1252-23

## USB

## SMX System MultiMatrix

### Digital and Analog Multi-Plane Modular Matrix Switcher

The SMX System MultiMatrix Series of digital and analog multi-plane matrix switchers combines multiple, independent matrix switchers in a truly modular, field-configurable frame. SMX frames are available in sizes from 2U up to 5U, capable of supporting up to 10 separate matrix boards which can be switched independently or simultaneously, all under a single point of control. The SMX System is an ideal choice for medical imaging systems, conference and training facilities, and other mid-sized applications that require the switching of different signal types and a cost-effective upgrade path for ongoing I/O or signal format changes.

### Extron Out of the Box Videos

See it in Action. Visit [www.extron.com/OutOfTheBox](http://www.extron.com/OutOfTheBox)



SMX 300 frame populated with:  
- SMX 1616 A - SMX 88 V - SMX 44 HDMI - SMX 84 USB

## SMX USB

### USB 2.0 Matrix Switcher Boards

SMX USB matrix boards are designed to route up to eight Host CPUs to one or more USB peripheral devices, such as keyboards and mice. They support data transfer rates up to 480 Mbps and are compatible with USB 2.0/1.1/1.0 specifications. Host and Peripheral Emulation is provided on all ports for reliable, problem-free boot up, even without a tie being made to a connected device. Four integrated, two-port USB hubs simplify integration in common keyboard/mouse applications. Each hub port supplies 5 Volts, 500 mA power for attached keyboards, mice, or other peripheral devices. SMX USB Matrix Boards are ideal for use in the creation of KVM - keyboard, video, mouse matrix applications when combined with available SMX DVI, HDMI, or VGA matrix switching boards. They are available in two I/O sizes: 4x4 and 8x4.

#### FEATURES

- USB 2.0 compatible
- Supports data transfer rates up to 480 Mbps
- Host and Peripheral Emulation Mode
- Integrated two port hubs with 5 Volts, 500 mA available on each output



SMX 84 USB



SMX 44 USB

Model	Version Description	Part Number
SMX 44 USB	4x4 USB; 1 slot	70-672-01
SMX 84 USB	8x4 USB; 1 slot	70-672-02

## AUDIO PRODUCTS &amp; SPEAKERS

**XPA 4002****Two Channel Power Amplifier - 400 Watts Per Channel**

The Extron XTRA™ Series XPA 4002 is a 1U, convection-cooled power amplifier delivering two channels of 400 watts rms. This professional grade amplifier features a 100 dB signal-to-noise ratio with 0.1% THD+N. The XPA 4002 is an ENERGY STAR® qualified amplifier with an Extron exclusive, highly efficient, advanced Class D amplifier design. It also features patented CDRS™ - Class D Ripple Suppression technology that provides a smooth, clean audio waveform and an improvement in signal fidelity over conventional Class D amplifiers. The XPA 4002 is half the size of comparable amplifiers, conserving rack space and weighing only 9 lbs (4 kg). The Extron exclusive, high efficiency design generates very little heat and allows the amplifier to be convection cooled.

**FEATURES**

- Two models with 800 watts rms output power per model:
  - 2 x 400 watts @ 4 ohms; 2 x 200 watts @ 8 ohms;
  - 1 x 800 watts @ 8 ohms (bridged)
  - 2 x 400 watts @ 70 volts
- ENERGY STAR® qualified amplifier
- Professional grade signal-to-noise and THD+N performance
- Extron Patented CDRS™ - Class D Ripple Suppression
- Convection cooled, fanless operation
- Ultra low inrush current - no need for power sequencing
- Rack-mountable 1U, full rack width enclosure



ENERGY STAR

**Model****Version Description****Part Number**

XPA 4002	Two Channel Power Amplifier .....	60-1244-01
XPA 4002-70V	70 V Two Channel Power Amplifier .....	60-1245-01

**MPA 152****Stereo Power Amplifier - 15 Watts Per Channel**

The Extron MPA 152 is an ENERGY STAR® qualified, integrated mini power amplifier featuring an Extron exclusive, highly efficient, advanced Class D amplifier design. It also features patented CDRS™ - Class D Ripple Suppression technology that provides a smooth, clean audio waveform and an improvement in signal fidelity over conventional Class D amplifiers. The Extron exclusive, high efficiency design generates very little heat and allows the amplifier to be fanless and operate in environments with little or no ventilation. The MPA 152 provides stereo amplification for speaker systems in classrooms and other applications requiring compact, economical audio solutions. It is an ideal step-up from a basic classroom system utilizing built-in video projector speakers.

**FEATURES**

- 30 watts rms output power:
  - 2 x 15 watts @ 4 ohms; 2 x 8 watts @ 8 ohms
- ENERGY STAR® qualified amplifier
- Extron Patented CDRS™ - Class D Ripple Suppression
- Front panel bass, treble, and input level controls
- Stereo/dual mono toggle switch
- UL 2043 plenum rated
- Balanced and unbalanced buffered audio inputs
- Fanless design
- Automatic clip limiter
- Remote volume and mute control port
- Rack-mountable 1U, quarter rack width metal enclosure



ENERGY STAR

**Model****Version Description****Part Number**

MPA 152	ENERGY STAR Qualified Stereo Power Amp ...	60-844-02
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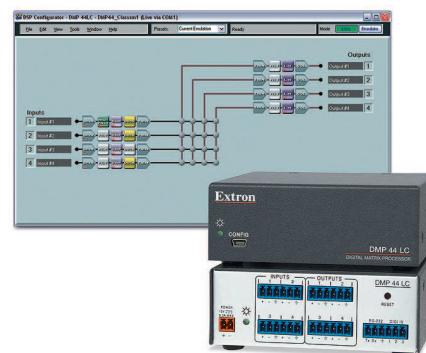
## AUDIO PRODUCTS &amp; SPEAKERS

**DMP 44 LC****Digital Matrix Processor**

The Extron DMP 44 LC Digital Matrix Processor is a compact 4x4 audio matrix mixer featuring a digital signal processing platform for audio signal routing and control. The DMP 44 LC features four line level inputs and outputs, all balanced or unbalanced. It offers several audio DSP tools for mixing, routing, and room optimization. Quick and intuitive configuration using the DSP Configurator™ Software allows the DMP 44 LC to be installed in very little time. The DMP 44 LC is ideal for presentation applications that require line level audio matrix mixing with DSP in a small form factor.

**FEATURES**

- 4x4 line level audio matrix mixer
- DSP audio signal processing
- 24-bit/48 kHz analog-to-digital and digital-to-analog converters
- Fixed, low latency DSP processing
- DSP Configurator™ Software
- Intuitive Graphical User Environment
- Building Blocks processor templates
- Console View with gain settings, metering, and routing in a single window
- Three digital input ports for remote triggering



Model	Version Description	Part Number
DMP 44 LC	Digital Matrix Processor	60-1095-01

**MVC 121 Plus****Three Input Stereo Mixer with DSP**

The Extron MVC 121 Plus is a compact, three input stereo audio mixer featuring a digital signal processing platform for audio signal mixing and control. The MVC 121 Plus features a stereo line level input and two mic/line level inputs with 48 volt phantom power for condenser microphones, plus fixed and variable stereo line level outputs. It offers gain, filter, tone processing, and parametric EQ. Quick and intuitive configuration using the DSP Configurator™ Software allows the MVC 121 Plus to be installed in very little time. The MVC 121 Plus is ideal for presentation applications that require line and microphone audio mixing with DSP in a small form factor.

**FEATURES**

- Mixes two microphone inputs and one stereo line input to two stereo outputs
- DSP audio signal processing
- 24-bit/48 kHz analog-to-digital and digital-to-analog converters
- Fixed, low latency DSP processing
- DSP Configurator™ Software
- Intuitive Graphical User Environment
- Fixed and variable stereo line level outputs
- Front panel mix level adjustments for each input
- Multi-function LED level indicator
- Three digital input ports for remote mute triggering



Model	Version Description	Part Number
MVC 121 Plus	Three Input Stereo Mixer with DSP	60-1096-01

## AUDIO PRODUCTS &amp; SPEAKERS

**SF 228T****Two-Way SoundField® Ceiling Tile Speakers with 8" Woofer and 70/100 V Transformer**

The Extron SoundField® SF 228T is a two-way ceiling tile speaker for low impedance and 70 volt/100 volt systems. This Extron exclusive design features a low profile, 2' x 2' (61 cm x 61 cm) by 5.3" (13.5 cm) deep enclosure that is UL 2043 plenum rated, weighs less than 20 pounds (9 kg), and drops directly into standard suspended ceilings, providing quicker installations. The two-way ported design includes an 8" (165 mm) woofer and a 1" (2.5 mm) silk dome tweeter that provides a frequency response of 50 Hz to 20 kHz for high fidelity music and speech reproduction. The SF 228T offers 60 watts continuous pink noise and 120 watts continuous program output. This speaker is sold in pairs and is designed for fast and easy installation into sound systems requiring high quality, wide bandwidth audio playback.

**FEATURES**

- 2' x 2' (61 cm x 61 cm), 18.5 lb (8.4 kg) drop-in ceiling tile speaker for suspended ceilings
- UL 2043 plenum rated enclosure
- 1" (2.5 cm) silk dome tweeter
- 8" (20.3 cm) long-throw woofer with tuned bass reflex port
- MDF front baffle reduces unwanted enclosure resonances
- Extron exclusive hybrid MDF / aluminized composite enclosure weighs less than 20 pounds (9 kg)
- White perforated grille matches appearance of air conditioning vents
- 8 ohm direct or 70/100 volt operation with selectable power taps
- Frequency response: 50 Hz to 20 kHz
- 60 watts continuous pink noise, 120 watts continuous program
- 5.3" (13.5 cm) deep low profile enclosure for plenum environments
- 5 year parts and labor warranty
- Designed and manufactured by Extron

**Model****Version Description****Part Number**

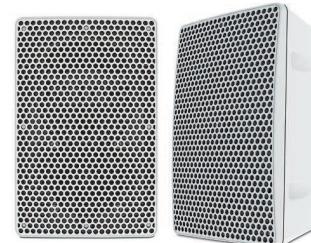
<b>SF 228T</b>	Ceiling - 2x2 Drop-In, Transformer, Pair .....	42-168-03
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**SM 3****Compact Full-Range Speaker with SpeedMount™**

The Extron SM 3 is a compact, fast-installing flush mount speaker featuring the Extron SpeedMount™ System. The enclosure measures less than 4" (10.2 cm) deep. The 8 ohm speaker features a 3" (7.6 cm) full-range driver and tuned bass port, a wide frequency response of 75 Hz to 18 kHz, and a power rating of 15 watts continuous pink noise, 30 watts continuous program capacity. SpeedMount is an Extron-exclusive, concealed mounting system designed to speed up installation. During rough-in, electrical contractors can install a 0° or 10° mounting plate on the wall and terminate the speaker cable to the mount's integrated wiring contacts. Later, installers can slide the SM 3 speaker onto the mount and secure it into place with a "click," while automatically connecting to the wiring contacts.

**FEATURES**

- Compact low profile, full-range speaker
- Exclusive SpeedMount™ mounting system included with 0° and 10° mounting plates
- 8 ohm nominal impedance
- 3" (7.6 cm) full-range driver with a tuned bass reflex port
- Frequency response: 75 Hz to 18 kHz
- 15 watts continuous pink noise, 30 watts continuous program
- Flush mount design with shallow profile
- Speaker easily slides onto mounting plate, connects to wiring contacts, and secures into place with a "click"
- Complies with ADA requirements on protrusion limits when used with 0° mounting plate
- Hidden locking speaker release mechanism
- Black or white high-impact enclosure
- Dimensions - with 0° mounting plate: 8.75" H x 5.75" W x 5.6" D (22.2 cm H x 14.6 cm W x 14.2 cm D)
- 5 year parts and labor warranty



To see SpeedMount in action, visit [www.extron.com/speedmount](http://www.extron.com/speedmount)

**Model****Version Description****Part Number**

<b>SM 3</b>	Low Profile - 3" Driver, Black, Pair .....	42-133-02
<b>SM 3</b>	Low Profile - 3" Driver, White, Pair .....	42-133-03

## CLASSROOM AV SYSTEMS

**MediaLink® for iPad****iPad Control App for MLC 104 IP Plus and MLC 226 IP Controllers**

Extron's MediaLink for iPad is an AV control system app designed for the Apple iPad. MediaLink for iPad provides users with an additional point of control for rooms with an installed Ethernet-enabled MediaLink Controller. Each button press is tracked between the app and the controller, allowing both to stay in sync. Presenters can wirelessly control the AV system using a Wi-Fi network, allowing them the freedom to move throughout the room. MediaLink for iPad is available for download at the Apple iTunes App store.

**FEATURES**

- Provides an additional point of control for Ethernet-enabled MediaLink controllers
- Supports MLC 104 IP Plus and MLC 226 IP controllers
- Connection manager allows presenters to control different rooms
- Button tracking allows iPad and controller to stay in sync
- Provides real-time status and remote control of multiple rooms for troubleshooting and management
- Wireless control using a Wi-Fi network allows users to move freely throughout the room



MLC 104 IP Plus Screen

**Model****MediaLink for iPad****Version Description**

iPad App for MLC 104 IP Plus, MLC 226 IP



MLC 226 IP Screen

**TouchLink™ for iPad****iPad Control App for TouchLink™ Touchpanels**

Extron's TouchLink™ for iPad is an AV control system app designed for the Apple iPad. This app requires Global Configurator Professional, and is easily enabled with a single mouse click. TouchLink for iPad provides users with an additional point of control for rooms with an installed TouchLink touchpanel. Each button press is tracked between the app and the touchpanel, allowing both to stay in sync. Presenters can wirelessly control the AV system using a Wi-Fi network, allowing them the freedom to move throughout a room. TouchLink for iPad will soon be available for download at the Apple iTunes App store.

**FEATURES**

- Provides an additional point of control for TouchLink touchpanels
- Connection manager allows presenters to control different rooms
- Button tracking allows iPad and touchpanel to stay in sync
- Provides real-time status and remote control of multiple rooms for troubleshooting and management
- Wireless control using a Wi-Fi network allows the user to move freely throughout the room

**Model****TouchLink for iPad****Version Description**

iPad App for TouchLink Touchpanels

## DESIGN AND EDUCATION RESOURCES

### Control Systems Design Guide

#### AV Control System Design Strategies

This Guide offers an "insider's look" at what we consider the best methodologies for AV system design. It focuses on educating the control system designer, integrator, and consultant on the importance of designing for control, and helps the AV professional develop the required expertise to design functional, highly-effective, and intuitive control systems. This Guide includes sample AV system designs that focus on the control aspects of each system. Designs range from simple, single-projector classrooms, to large, sophisticated presentation environments, and emphasize the unique challenges of each type of application.

Call your Extron Representative for a copy.

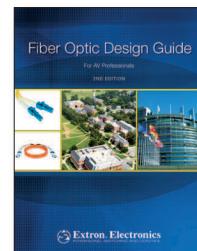


### Fiber Optic Design Guide - Second Edition

#### A Guide to Fiber Optic AV System Design

This updated edition of the Extron Fiber Optic Design Guide is a complete reference tool for understanding and applying fiber optic solutions in real-world scenarios. Building upon the foundation established in the first edition, it is designed to help AV professionals of all levels enhance their ability to employ fiber optics in AV systems. With material ranging from technology fundamentals to advanced concepts, including system testing, this guide provides detailed yet practical approaches for a variety of system designs, and offers updated solutions using the extensive family of Extron fiber optic products.

Call your Extron Representative for a copy.



### Digital Design Guide - Second Edition

#### Digital Video for Professional AV Systems

The Extron Digital Design Guide is an 80 page reference guide that provides comprehensive, in-depth coverage of the technical and design issues involved with the integration of digital video signals into AV systems for various markets. The material is presented in a clear and concise manner that allows readers at all levels of sales and design to gain valuable understanding of associated formats, standards, and design approaches.

Call your Extron Representative for a copy.

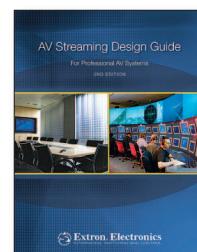


### AV Streaming Design Guide - Second Edition

#### AV Streaming Over IP for the AV Professional

AV streaming technologies have been around for over a decade, yet only recently has video streaming found its way into the professional AV market. We designed the Extron AV Streaming Design Guide as an educational resource aimed at familiarizing AV professionals with the technologies, challenges, and potential applications of AV over IP streaming. Inside you'll find discussions on the differences between consumer and professional AV streaming, as well as the quality expectations and technologies associated with both. You will also find detailed system designs constructed from real-world applications utilizing Extron AV streaming solutions.

Call your Extron Representative for a copy.

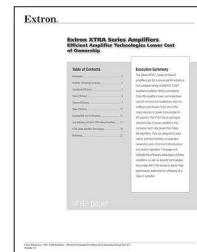


### Extron XTRA Series Amplifiers

#### Efficient Amplifier Technologies Lower Cost of Ownership

The Extron XTRA™ Series of Class D amplifiers are the commercial AV industry's first complete family of ENERGY STAR® qualified amplifiers. The XTRA Series are highly efficient Class D power amplifiers designed to save clients and their facilities considerable ownership costs. This paper highlights the energy efficiency, low heat dissipation, and space efficiency of these amplifiers.

Download your copy at [www.extron.com/xtrapaper](http://www.extron.com/xtrapaper)



## NEW FACILITIES

Extron has recently added several new facilities in the United States, Europe, and India, to further enhance our industry-leading customer support and AV training. Expanding our facilities throughout the world makes it even easier for our customers to meet Extron representatives, attend a training class, and participate in new product demonstrations. In addition to the new facilities shown below, Extron has training facilities in the Netherlands, Singapore, Shanghai, Japan, and Dubai.

**EXTRON USA WEST**

Headquarters — Anaheim, CA

With the opening of a new six-story, 200,000 square foot headquarters building, we've expanded our base of operations in Anaheim, California to more than 700,000 square feet in seven buildings that house support, administrative, engineering, and manufacturing operations, along with our S3 Training Facility.

**EXTRON USA EAST**

Raleigh, NC

Our new, full-service East Coast office in Raleigh, North Carolina, opened in a 140,000 square foot building that houses a research and development center, distribution center, service and support functions, and on-site training.

**NEW REGIONAL OFFICES**

New regional facilities in Washington D.C., Paris, London, Frankfurt, and Bangalore will be staffed by Extron S3 Institute experts who will provide customer support and training. Training offered at these facilities will feature a familiar variety of Extron educational choices, including hands-on training with real world scenarios, and courses to pursue various Extron certifications.



Washington, DC



London



Paris



Frankfurt



Bangalore



# Extron® Electronics

INTERFACING, SWITCHING AND CONTROL

Worldwide Sales Offices

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**Extron Electronics, USA - West**  
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USA

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Order Support: +800.633.9873  
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+1.714.491.1500  
Fax: +1.714.491.1517

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**Extron Electronics, Middle East**

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Dubai Airport Free Zone  
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**Extron Electronics Asia Pte Ltd**

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**Extron Electronics, Japan**

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Shanghai 201611  
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+4000.398766 (Inside China Only)  
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**S3 Sales & Technical Support Hotline**

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Europe: +800.EXTRON.S3  
+800.3987.6673 (Inside Europe only)  
+31.33.453.4040

Asia: +65.6383.4400  
Japan: +81.3.3511.7655  
China: +4000.398766 (Inside China Only)  
Dubai: +971.4.2991800

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**Extron Web Site**

[www.extron.com](http://www.extron.com)

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**Order & Support Fax Line**

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Europe: +31.33.453.4050  
Asia: +65.6383.4664

Japan: +81.3.3511.7656  
China: +86.21.3760.1566  
Dubai: +971.4.2991880

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**Normal Office Hours**

USA: 7:00 am – 5:30 pm (PST)  
Monday – Friday  
Europe: 0900 – 1800 (+1 GMT)  
Monday – Friday  
Asia: 0900 – 1800 (+8 GMT)  
Monday – Friday

Japan: 0900 – 1800 (+9 GMT)  
Monday – Friday  
China: 8:30 am – 5:00 pm (+8 GMT)  
Monday – Friday  
Dubai: 8:30 am – 5:30 pm (+4 GMT)  
Sunday – Thursday

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**24-Hour Technical Support**

Dial +800.633.9876 (Inside USA & Canada only) then press (3) — 24-Hour Technical Support.  
Calls are returned within 30 minutes.

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**Special Orders & Handling**

Next day shipment for stock items ordered by 2:00 pm (PST) is standard.

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**Open Account Information**

Qualified accounts may receive Net 30 day payment terms upon approved credit and acceptance  
of Extron's international credit policy. A hard copy Purchase Order (PO) is required by fax or mail.

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**International Shipping Terms**

Ex works Extron Anaheim, Ex works Extron Amersfoort, Ex works Extron Singapore, Ex works Extron Shanghai,  
and Ex works Extron Dubai

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**Powered Product Warranty**

Three years parts and labor  
Touchscreen display and overlay components carry a one year parts and labor warranty, while the electronic  
components are covered by the Extron three year warranty.

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**System Integrator®  
Speaker Warranty**

Five years parts and labor

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**Cable Performance Warranty**

Limited lifetime. Extron Cable Products will be free from defects in material and workmanship  
for as long as you or your customer own the cable.

Please refer to Extron business policies for full details.