IP Link Pro

PRO SERIES CONTROL PROCESSORS



Full-Featured Control Processors with Enhanced Speed and Security

- ▶ Fast and secure control processors for use with TouchLink Pro touchpanels, Network Button Panels and eBUS devices
- Multiple AV Network ports provide versatile control options for a wide range of system sizes
- Support secure industry standard communication protocols
- Powerful software available for configuration, programming, and enterprise-wide resource management
- Compact enclosures mount on a rack, under furniture, or in a DIN rail



IP LINK PRO CONTROL PROCESSORS

IP Link Pro Series control processors work with a variety of user control interfaces including TouchLink® Pro touchpanels, eBUS devices, Network Button Panels, and the Extron Control App. They are available as stand-alone control processors or integrated into other Extron products and enable almost any AV device to be controlled, monitored, and accessed from a standard networks or the Internet. They are available with a wide variety of RS-232, IR, relay, contact closure, Flex I/O, eBUS, and Ethernet port combinations. This allows displays, switchers, source devices, screen control systems, and lighting systems to be networked for centralized management and operation by the control system.

Extron Control - More Choices. Better Results.

Whether it is the convenience of configuration with the industry's most powerful configuration-based control system solution, or the unbridled freedom of Extron Control System Programming, you'll be confident that you have the right control solution for any AV application.

Global Configurator Professional

Global Configurator® is Extron's most powerful and versatile control system configuration software. It is designed to be used exclusively with Extron Pro Series Control products, including TouchLink® Pro touchpanels, IP Link® Pro control processors, Network Button Panels, eBUS devices, and MediaLink® Plus controllers. Powerful features, such as conditional logic, variables, and macros provide greater flexibility for more elaborate control system designs. Global Configurator has two modes. Global Configurator Plus is ideal for smaller applications requiring one control processor and one control interface. Global Configurator Professional is suited for applications requiring multiple control processors, enhanced functionality, and advanced configuration. Access to Global Configurator Professional requires an individual to successfully complete ECP Certification.



Global Scripter

Global Scripter® is Extron's powerful and versatile control system programming software. This feature-rich integrated development environment is used to program Extron Pro Series control systems, and utilizes the easy-to-learn Python scripting language. Global Scripter includes an Extron-exclusive Python library - ControlScript®, that is designed to increase the productivity of AV programmers through incorporating functions used in AV control system projects, as well as helpful documentation, reference material, and sample code. Extron built Global Scripter and the ControlScript Python libraries with programmers in mind. Working together, these components make it easier than ever to develop refined and innovative programmable control systems.

Unlock Powerful New Features with LinkLicense

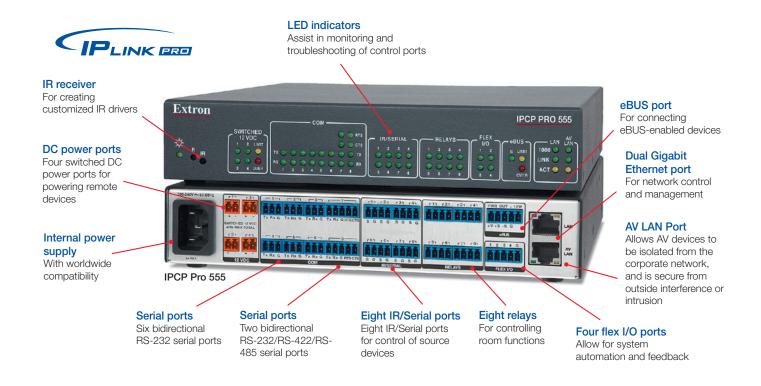
Extron LinkLicense® is a quick, cost-effective way for people to add even more powerful capabilities to Extron products. Each type of LinkLicense unlocks a unique set of features that add convenience and expand the functionality available in your system.

Enterprise-Level Resource Management

GlobalViewer® Enterprise server-based software simplifies AV system resource management with intuitive control for hundreds of common AV tasks. Whether you're working with 5 or 5000 rooms, GlobalViewer Enterprise provides a powerful, flexible way to manage, monitor, and control nearly any device over a standard network. Support teams will appreciate the agility and flexibility GlobalViewer Enterprise provides to access usage data, create reports, and control the system from any computer on the LAN or WAN.



IPCP PRO SERIES CONTROL PROCESSORS



The IPCP Pro Series are versatile, high-performance control processors designed for use in a wide variety of AV systems. As part of the IP Link® Pro Series, these control processors feature advanced security standards and Gigabit Ethernet, which ensures compatibility with multiple TouchLink® Pro touchpanels and Network Button Panels using a standard network infrastructure. They also support Extron's LinkLicense® for User Interfaces, which is an easy way for people to use their mobile devices or computers as primary control interfaces.

SERIES COMMON FEATURES

- ► Supports TouchLink Pro touchpanels, eBUS® button panels, and Network Button Panels
- Supports secure industry standard communications protocols
- Supports LinkLicense® for User Interfaces
- eBUS port for connecting eBUS button panels and accessories
- Central Deployment Use the primary control processor to deploy all system files, configurations and programs
- Supports popular BMS Building Management System protocols, such as BACnet, KNX, and DALI
- ▶ Supports 10/100/1000Base-T

- Supports Ethernet-controllable devices
- Ethernet monitoring and control on each Ethernet port
- Automatic clock synchronization allows touchpanel to display the accurate time and date
- Supports control system synchronization
- Front panel port status indicators
- Multi-level password protection
- Fully customizable using Extron control system software
- Our extensive library of Global Configurator device drivers and Global Scripter modules support devices from a broad range of manufacturers, streamlining configuration and programming





IPCP Pro 555

Unique Features

- AV LAN port allows AV devices to be isolated from the corporate network
- Six bidirectional RS-232 serial ports with software handshaking
- Two bidirectional RS-232/RS-422/RS-485 serial ports with hardware and software handshaking
- Eight IR/Serial ports for one-way control of external devices
- Four Flex I/O ports
- Eight relays for controlling room functions
- Four independently switched 12 VDC outputs
- DHCP server for AV LAN





- LAN port allows convenient firmware updates for connected Extron Pro Series control devices
- Integrated IR learner

Part Number

60-1434-01

60-1434-01A

• 1U, half rack width metal enclosure

IPCP Pro 550

Unique Features

- Six bidirectional RS-232 serial ports with software handshaking
- Two bidirectional RS-232/RS-422/RS-485 serial ports with hardware and software handshaking
- Eight IR/Serial ports for one-way control of external devices
- Four Flex I/O ports
- Eight relays for controlling room functions
- Four independently switched 12 VDC outputs
- Integrated IR Learning capability
- 1U, half rack width metal enclosure

Model	Version Description	Part Number
IPCP Pro 550	IP Link Pro Control Processor	60-1418-01
IPCP Pro 550	IP Link Pro Control Proc., LL UI Upgrade	60-1418-01A



IPCP Pro 360

Unique Features

- Three AV LAN ports allow AV devices to be isolated from the corporate network
- AV LAN ports provide PoE+ to external devices
- Two bidirectional RS-232 serial ports with software handshaking
- One bidirectional RS-232/RS-422/RS-485 serial port with hardware and software handshaking
- Two IR/Serial ports for one-way control of external devices
- Four Digital I/O ports
- Four relays for controlling room functions
- DHCP server for AV LAN



- LAN port allows convenient firmware updates for connected Extron Pro Series control devices
- Integrated IR Learner
- 1U, half rack width metal enclosure

 Model
 Version Description

 IPCP Pro 360
 IP Link Pro Control Processor

 IPCP Pro 360
 IP Link Pro Control Proc., LL UI Upgrade

Part Number 60-1432-01 60-1432-01A

IPCP Pro 355DR

Unique Features

- Securely mounts to an industry-standard DIN rail
- · AV LAN port allows AV devices to be isolated from the corporate network
- Two bidirectional RS-232 serial ports with software handshaking
- One bidirectional RS-232/RS-422/RS-485 serial port with hardware and software handshaking
- Two IR/Serial ports for one-way control of external devices
- Four Digital I/O ports
- Four relays for controlling room functions
- DHCP server for AV LAN



- LAN port allows convenient firmware updates for connected Extron Pro Series control devices
- Integrated IR Learning capability

Model **Version Description** Part Number IPCP Pro 355DR IP Link Pro Control Processor, DIN Rail 60-1433-01 IPCP Pro 355DR IP Link Pro Control Proc., DIN Rail, LL UI Upgrade 60-1433-01A

IPCP Pro 350

Unique Features

- Two bidirectional RS-232 serial ports with software handshaking
- One bidirectional RS-232/RS-422/RS-485 serial port with hardware and software handshaking
- Two IR/Serial ports for one-way control of external devices
- Four Digital I/O ports
- · Four relays for controlling room functions
- Integrated three port network switch
- Integrated IR Learning capability
- 1U, half rack width metal enclosure

Model	Version Description	Part Number
IPCP Pro 350	IP Link Pro Control Processor	60-1417-01
IPCP Pro 350	IP Link Pro Control Proc., LL UI Upgrade	60-1417-01A



IPCP Pro 350DR

Unique Features

- Securely mounts to an industry-standard DIN rail
- Two bidirectional RS-232 serial ports with software handshaking
- One bidirectional RS-232/RS-422/RS-485 serial port with hardware and software handshaking
- Two IR/Serial ports for one-way control of external devices
- Four Digital I/O ports
- Four relays for controlling room functions
- Integrated three port network switch
- Integrated IR Learning capability





IPCP Pro 255

Unique Features

- AV LAN port allows AV devices to be isolated from the corporate network
- One bidirectional RS-232 serial port with software handshaking
- One bidirectional RS-232/RS-422/RS-485 serial port with hardware and software handshaking
- One IR/Serial port for one-way control of external devices
- Four Digital I/O ports
- Two relays for controlling room functions
- Remote volume control port for the Extron MPA Series and select XTRA™ Series amplifiers

Version Description



- DHCP server for AV LAN
- LAN port allows convenient firmware updates for connected Extron Pro Series control devices
- Integrated IR Learner

Part Number

60-1431-01

• 1U, quarter rack width metal enclosure

IPCP Pro 255 IP Link Pro Control Processor IPCP Pro 255 IP Link Pro Control Proc., LL U

IP Link Pro Control Proc., LL UI Upgrade 60-1431-01A

IPCP Pro 250

Unique Features

Model

- One bidirectional RS-232 serial port with software handshaking
- One bidirectional RS-232/RS-422/RS-485 serial port with hardware and software handshaking
- One IR/Serial port for one-way control of external devices
- Four Digital I/O ports
- Two relays for controlling room functions
- Remote volume control port for the Extron MPA Series and select XTRA™ Series amplifiers
- Integrated IR Learner
- 1U, quarter rack width metal enclosure

Model	Version Description	Part Number
IPCP Pro 250	IP Link Pro Control Processor	60-1429-01
IPCP Pro 250	IP Link Pro Control Proc., LL UI Upgrade	60-1429-01A



IPCP Pro PCS1

Unique Features

- Intelligent current sensing with alarm
- Outlet status retention during power loss
- One male AC input and one female AC output both using IEC connections
- Easily-accessible, front panel circuit breaker adds over-current protection for remotely controlled connected devices
- One bidirectional RS-232 serial port with software handshaking
- One IR/Serial port for one-way control of external devices
- Three digital I/O ports
- Supports control system synchronization
- 1U, quarter rack width metal enclosure

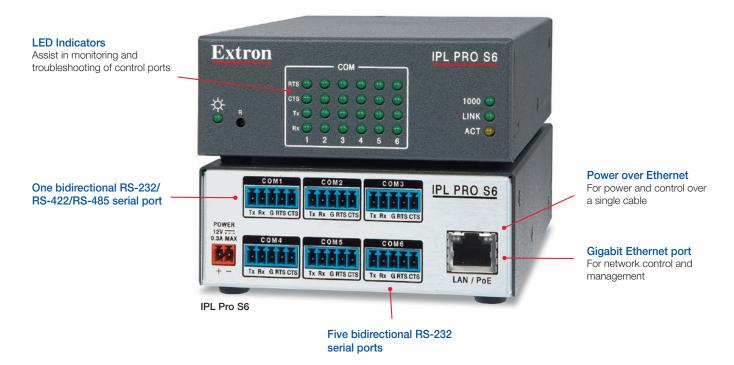


 Model
 Version Description
 Part Number

 IPCP Pro PCS1
 IP Link Pro Control Processor
 60-1618-01

 IPCP Pro PCS1
 IP Link Pro Control Proc., LL UI Upgrade
 60-1618-01A





The IPL Pro Series of compact, high-performance control processors integrate Ethernet connectivity over a standard network infrastructure, allowing users to remotely control, monitor, and troubleshoot their AV equipment. All models are designed with greater processing power, memory, and enhanced network security features, that makes them ideal for sensitive applications where data security is important. These IP Link® Pro control processors are designed to work either as stand-alone, primary control processors or as secondary control processors in larger systems .

SERIES COMMON FEATURES

- Supports TouchLink Pro touchpanels and Network Button Panels
- Supports secure industry standard communication protocols
- Manage, monitor, and control AV devices using a standard Ethernet network
- Central Deployment Use the primary control processor to deploy all system files, configurations and programs
- Power over Ethernet allows the control processor to receive power and communication over a single Ethernet cable, eliminating the need for a local power supply
- ▶ Supports 10/100/1000Base-T
- Supports Ethernet-controllable devices
- Automatic clock synchronization allows touchpanel to display the accurate time and date

- Supports control system synchronization
- Front panel port status indicators
- Multi-level password protection
- ▶ Fully customizable using Extron control system software
- Library of Pro Series device drivers and modules for use with Global Configurator and Global Scripter respectively
- ▶ 1U, quarter rack width metal enclosure
- Plenum rated meets UL 2043 for heat and smoke release, excluding power supply
- Extron Everlast Power Supply is covered by a 7 year parts and labor warranty

IPL Pro S1

Unique Features

• One bidirectional RS-232 serial port with hardware and software handshaking

Model IPL Pro S1 **Version Description**One Serial Port

Part Number 60-1412-01



IPL Pro S3

Unique Features

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

 Model
 Version Description
 Part Number

 IPL Pro S3
 Three Serial Ports
 60-1413-01



IPL Pro S6

Unique Features

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

 Model
 Version Description
 Part Number

 IPL Pro S6
 Six Serial Ports
 60-1414-01



IPL PRO SERIES CONTROL PROCESSORS

IPL Pro CR88

Unique Features

- Eight relays for controlling room functions
- Eight contact closure ports

ModelVersion DescriptionIPL Pro CR88Eight Contact and Eight Relays

Part Number 60-1416-01



IPL Pro IRS8

Unique Features

• Eight IR/Serial ports for one-way control of external devices

 Model
 Version Description
 Part Number

 IPL Pro IRS8
 Eight IR/Serial Ports
 60-1415-01



IP LINK PRO CONTROL PROCESSORS - EMBEDDED



Powerful Integrated Control Processors

The IN1808, IN1608 xi, and DTP CrossPoint 4K matrix switchers feature built-in Extron IP Link® Pro control processors with a secure, dedicated three-port AV LAN switch and one standard Ethernet port. The network switch ports of the AV LAN are designed to control local AV devices, and safeguard them from outside intrusion or interference. The control processors deliver high-speed processing and abundant control port capacity for complete, customizable control of an entire AV system, including all source devices and displays, plus lighting, window shades, projection screens, occupancy sensing, and more. Simply connect a touchpanel or button panel to create a complete AV control system.

IN1808 IPCP

The Extron IN1808 IPCP is an eight input seamless presentation switcher that supports signal resolutions up to 4K/60 at 4:4:4. It incorporates Extronpatented Vector 4K seamless scaling technology specifically engineered for the most demanding applications. It features DisplayPort and HDMI inputs on HDMI output and Extron DTP2 extension to send video, audio, and control signals up to 330 feet (100 meters) over a shielded CATx cable. A builtin Extron IPCP Pro control processor and integrated 100 watt class D power amplifier make the IN1808 IPCP an all-in-one system design solution.

IN1608 xi IPCP

The Extron IN1608 xi IPCP is an HDCPcompliant scaling presentation switcher with four HDMI inputs, two universal analog video inputs, and two Extron DTP® inputs. It includes dual HDMI outputs, one DTP output, an integrated Class D audio power amplifier, and a built-in IPCP Pro control processor for complete AV system control. The DTP inputs and output work with DTP endpoints to extend video, audio, and bidirectional control signals. Each DTP transmitter/receiver link requires just a single shielded CATx cable. The DTP output is configurable for HDBaseT compatibility.

DTP CrossPoint 4K IPCP

The industry-leading Extron DTP CrossPoint® 4K IPCP is a definitive game-changer for 4K presentation systems. These highly versatile presentation matrix switchers deliver all of the technologically advanced capabilities necessary to design and integrate advanced AV systems in one box. They incorporate a matrix switcher with 4K inputs and outputs, built-in scalers that are powered by Extron Vector™ 4K scaling technology and support seamless switching, integrated DTP and XTP signal extension, comprehensive audio DSP and AEC capabilities unmatched in the industry, a high performance mono or stereo amplifier, and an advanced control processor for complete AV system control.



Global Configurator Software

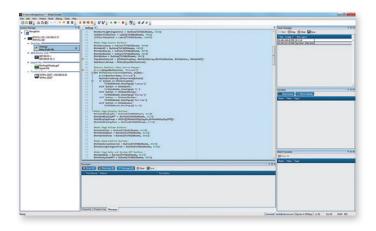
Global Configurator® Professional is Extron's most powerful and versatile control system configuration software. It is designed to be used exclusively with Extron Pro Series control systems, and helps streamline integration within today's demanding AV control environments. Powerful features, such as conditional logic, variables, and macros provide greater flexibility for more elaborate control system designs. Global Configurator has two modes. Global Configurator Plus is ideal for smaller scale applications requiring one control processor and one control interface. Global Configurator Professional is suited for applications requiring multiple control processors, enhanced functionality, and advanced configuration.

Combining Multiple Controllers for Larger Control Systems

The Controller Groups feature within GC Pro allows up to four control processors to be grouped and work as one big controller. Grouping the control processors reduces the need for long RS-232 cable runs, as the group can span several rooms instead of being limited to a single room. This feature enables easy system expansion and ideally serves advanced systems that require more control ports than are offered in a single control processor.

Drivers Enable Greater System Capabilities

Serial over Ethernet drivers expand control capabilities through devices such as Extron XTP Systems that are capable of IP to serial direct port control. In addition, Global Configurator allows system designers to configure Extron IP Link Pro control processors for the latest Building Management System protocols, including BACnet, KNX, and DALI. Modern BMS allow for centralized monitoring and control of mechanical and electrical systems that include HVAC, lighting, power, fire, and security systems.



Global Scripter

Global Scripter® is Extron's powerful and versatile control system programming software. This feature-rich integrated development environment is used to program Extron Pro Series control systems, and utilizes the easy-to-learn Python scripting language. Global Scripter includes an Extron-exclusive Python library - ControlScript®, that is designed to increase the productivity of AV programmers through incorporating

functions used in AV control system projects, as well as helpful documentation, reference material, and sample code.

Extron built Global Scripter and the ControlScript Python libraries with programmers in mind. Working together, these components make it easier than ever to develop refined and innovative programmable control systems.

Python and the Pro Series Control Systems Platform

Python is a clean, easily readable and easily editable object-oriented programming language. With ample documentation available in print and on the Internet, there are numerous programming resources for novices and experts alike. As an interpreted language, Python does not require compiling and offers a quicker workflow from editing code to testing a program. Instructions are executed immediately, and functions can be added or modified at runtime.

GlobalViewer Enterprise

GlobalViewer® Enterprise - GVE software simplifies AV system resource management with intuitive control for hundreds of common AV tasks. Whether you're working with 5 or 5000 rooms, GVE provides a powerful, flexible way to manage, monitor, and control nearly any device over a standard network. Support teams will appreciate the agility and flexibility GVE provides to access usage data, create reports, and control the system from any computer on the network.

Enterprise-Wide Scheduling and Monitoring

GVE simplifies system management across the enterprise through global schedules and conditional monitors. Support teams can schedule system actions and proactively monitor the status of AV equipment. These tools help provide significant time and cost savings.

Valuable AV Data Management

GlobalViewer Enterprise includes a SQL-based data repository for logging device and room data. This data is gathered for valuable management reports covering network connections, device usage, and AV equipment inventory.



EXPLORER





CHROME





| Company | Comp

Building Smarter Conference Rooms with RoomAware Technology

Extron RoomAware™ Technology is a suite of time-saving features that anticipate user needs and intelligently deliver room automation and control across the enterprise. RoomAware enables smart connections between Extron devices and services to save valuable time by preparing the room for the participant prior to their arrival.

Toolbelt

The Extron Toolbelt utility is a powerful stand-alone Windows application created for the management and troubleshooting of Pro Series control systems. This utility allows users to easily perform several different tasks such as; change device network settings, add an email server, upload firmware, view trace messages, remotely reboot Pro Series control products, and much more from a single application. Devices on the network can be automatically discovered or manually added if desired. Toolbelt also provides users with memory usage, device run time, author of the current project, and software version used.

Features

- Manage and troubleshoot Extron Pro Series control products
- Use Auto Discovery to find control products located on the same subnet as Toolbelt or manually add routable control products using the Add button
- View and change network settings, mail server information, and user permissions
- Discover eBUS panels connected to IPCP Pro Control Processors and diagnose addressing, connectivity, and voltage issues



- Configure SNMP and 802.1x settings and manage security certificates
- Trace window allows users to view control system messages passed between connected devices for troubleshooting
- Upload LinkLicense to IPCP Pro Series control processors
- Remotely reboot IP Link Pro control processors and MediaLink Plus controllers
- Proxy Ping provides a means to test a connection between a control processor and another network device

LINKLICENSE FOR USER INTERFACES

The LinkLicense for user interfaces upgrade is an easy way for people to use their mobile devices or computers as primary control interfaces. Systems using a standalone Extron IPCP Pro control processor or switcher with embedded control processor, HC 400 Series systems, and select TeamWork® collaboration systems can all benefit from this upgrade.

When LinkLicense for User Interfaces is combined with one of these products and the Extron Control App, BYOD room control is easier than ever. Simply open the App or Web browser and gain instant access to the room's AV. The intuitive, custom-built interface allows full control of source devices, sound, lighting - anything you can control with a standard touchpanel, but with the convenience of using your own device.



Start Using LinkLicense for User Interfaces in Three Easy Steps:

Step 1

Purchase an Extron IPCP Pro Series Control Processor with a LinkLicense included or add a LinkLicense to an existing IPCP Pro control processor.



Step 2

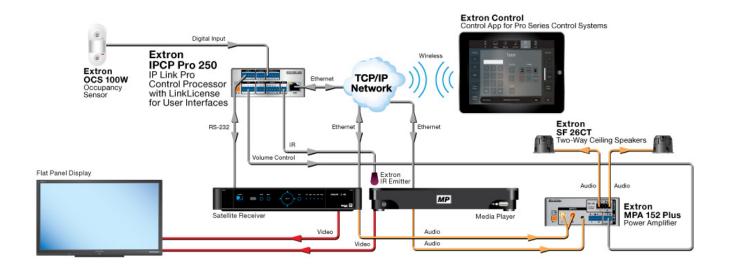
Create a custom user interface and configure your control system using Global Configurator Plus or Professional.



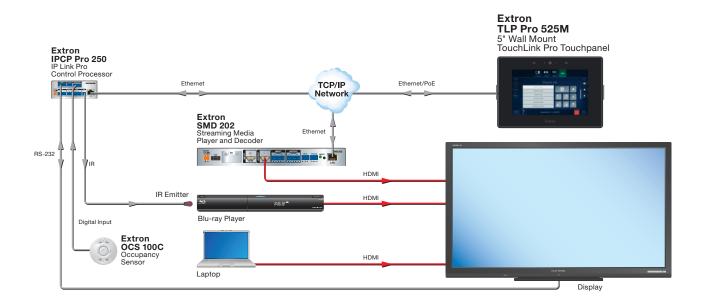
Step 3

Upload your user interface designs and use your mobile device or computer to control the system.

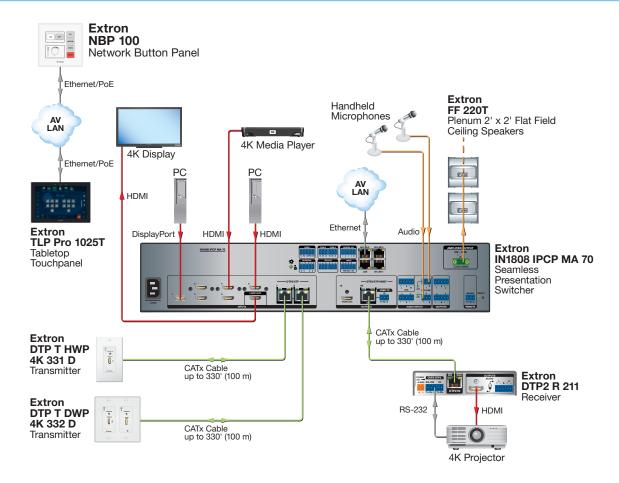




IPCP PRO 250 CONTROL PROCESSOR WITH TLP PRO 525M



IN1808 IPCP MA 70 WITH BUILT IN CONTROL PROCESSOR AND TLP PRO 1025T









Extron Control Systems Certification Programs

Establish Your Knowledge of Extron Control Systems

Extron offers three control systems certification programs designed to prepare individuals to successfully deploy and maintain customized AV control systems built around our Pro Series control systems.

Certification Comparison



Extron Control Specialist - ECS

Extend Your Ability to Customize and Manage Extron Pro Series Systems

Course Content

ECS is a two-day course that consists of the following general categories:

- Learn Global Configurator Plus, and use its powerful capabilities to configure and manage Extron Pro Series control systems
- Control system design concepts
- Configure a wide range of room control functions using Global Configurator Plus
- Create custom control interfaces using GUI Designer software, plus GUI design best practices
- Validate Pro Series control systems in multiple AV environments using acquired knowledge of installation, configuration, and commissioning principles



Extron Control Professional - ECP

Unleash the Power of Global Configurator Professional for Advanced Extron Pro Series Control Systems

Course Content

ECP is a three-day course that consists of:

- Learn Global Configurator Professional software and the advanced features used in complex system designs
- Sophisticated control system design concepts and advanced configuration techniques
- Create custom control interfaces using GUI Designer software, plus GUI design best practices
- Validate complex Pro Series control systems in multiple AV environments using acquired knowledge of installation, configuration, and commissioning principles



Extron Authorized Programmer - EAP

Learn Global Scripter and ControlScript to Design Powerful, Programmable Control Systems

Course Content

EAP is a four-day course that consists of:

- Use Global Scripter software and ControlScript, the Extron Python library for AV professionals, to program Extron Pro Series Control Systems
- Apply best practices and troubleshooting techniques to ensure optimum system performance
- Utilize methodologies for implementing and developing reusable modules for control system programs

LEARN MORE -

To find out more about the Extron Control Systems Certification programs, contact your Extron S3 Customer Support Representative.

WORLDWIDE SALES OFFICES

Anaheim • Raleigh • Silicon Valley • Dallas • New York • Washington, DC • Toronto • Mexico City • Paris • London Frankfurt • Madrid • Stockholm • Amersfoort • Moscow • Dubai • Johannesburg • Tel Aviv • Sydney • Melbourne Bangalore • Mumbai • New Delhi • Singapore • Seoul • Shanghai • Beijing • Hong Kong • Tokyo