Solutions for
K-12 Classrooms

AV systems designed for instructional settings

Extron

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 34 years, our objective has been to ensure that every customer is completely satisfied with every purchase.
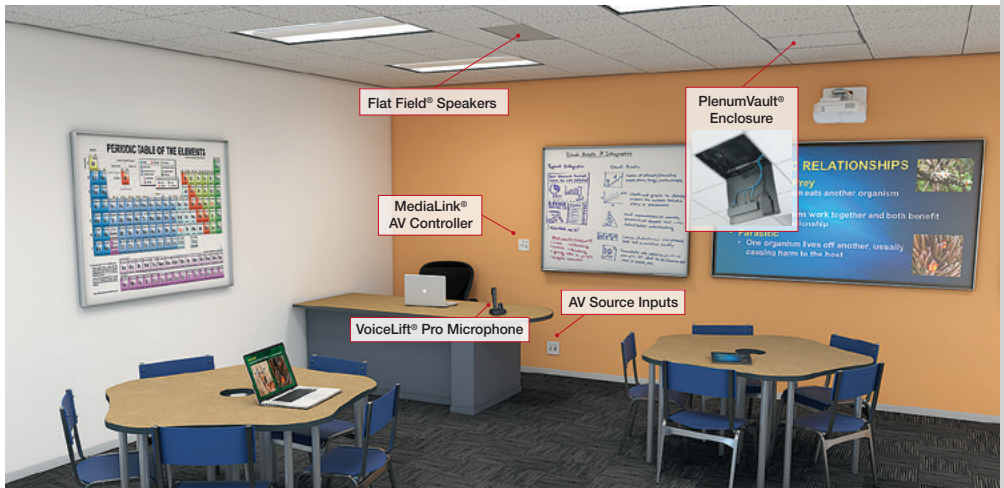
To underscore this commitment, we offer our Satisfaction Guarantee. This means we will work diligently to resolve any issue you have with your purchase until you are completely satisfied. Our dedicated K-12 Education Support Team will contact you after installation to ensure your satisfaction and that systems are being used to their full potential. We 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. 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, Extron Electronics

Extron is Committed to Education

Flat Field® Speakers

PlenumVault® Enclosure

MediaLink® AV Controller

AV Source Inputs

VoiceLift® Pro Microphone

Extron Electronics is the leading manufacturer of classroom audio and video systems for the K-12 market. Since 1983, Extron has pioneered computer video interfaces, setting standards for matrix switching, signal processing, and transmission, and simplifying the control, installation, and set-up of AV systems. These efforts have resulted in solutions that meet the unique performance and value requirements of the K-12 education market.

Extron's commitment to the education market extends beyond our products. Technology-enhanced classrooms, one-to-one computing, flipped and distance learning, and collaboration have all become part of the active learning environment. Our goal at Extron is to provide comprehensive training, industry-leading technology, and a dedicated K-12 Education Support team to help your district achieve its classroom technology objectives.

The Extron Commitment to Education Includes:

▶ A dedicated K-12 Education Support team providing direct technical and AV system design assistance

▶ Products for instructional environments
- PlenumVault®, WallVault®, and PoleVault® complete AV switching and control systems
- VoiceLift® Pro wireless microphone and voice amplification systems
- TeamWork®, ShareLink™, and MediaPort collaboration systems
- StudioStation™ and other streaming products that capture and deliver AV over IP networks
- GlobalViewer® Software network based asset management, paging, bells, and intercom

▶ Cooperative and state contract pricing

▶ Extronclassroom.com website for K-12 education technology professionals

▶ Extended manufacturer warranty

PoleVault Digital Classroom AV Systems
Complete AV Switching and Control Systems for Projectors and Displays

Extron PoleVault® Digital Classroom AV Systems are easy-to-use AV switching and control systems that seamlessly integrate digital and analog video sources. These standard systems include all the necessary audio and video switching, audio amplification, system control, source connectivity, speakers, mounting hardware, and cabling for a complete classroom AV solution. All that remains is to add the display device and sources.

High Resolution 4K Video Switching
Two local HDMI inputs and two PVT twisted pair inputs provide support for common classroom AV sources at resolutions up to 4K. Local inputs are ideal for sources that do not need direct user access such as Extron ShareLink, Apple® TV, CATV tuners, and streaming decoders. PVT wallplates can be placed by the teacher's desk or other locations in the classroom for instructor and student sources including laptop, tablet, Blu-ray player, document camera and more.

Twisted Pair Transmission
PVT input wallplates use Extron twisted pair technology to reliably transmit high resolution digital audio and video signals to the switcher over a single CATx shielded twisted pair cable. CATx cable offers lower cost, easier routing, and easier termination than standard video cable, reducing installation time and expense.

Easy-to-use Room Control
Extron classroom systems include a centralized control panel that is intuitive and easy to operate. It replaces traditional handheld IR remotes that are so easily lost or stolen, and eliminates the need for battery replacement.

Network Connectivity
Extron systems allow administrators and support personnel to configure, manage, monitor, schedule, troubleshoot, and control systems over the network. The IP enabled switcher features a four port Ethernet switch that allows up to three devices within the classroom to share a single network drop.

Energy Efficiency
As an ENERGY STAR® qualified AV product, the switcher includes Extron-exclusive power saving modes. It is designed to shut off automatically, or go into standby mode when not in use, reducing operating costs and extending the life of system components.

Classroom AV Mounting Options
Secure Component and Projector Mounting for any Environment

PlenumVault Systems

Digital PlenumVault systems use the PVM 220 PlenumVault Mounting Kit that securely mounts and conceals system components in the plenum area above a suspended ceiling. Ceiling Mount, CM, versions include a projector drop ceiling mount with adjustable pole and universal projector bracket. No Mount, NM, versions do not include projector mounting.
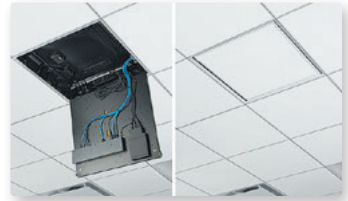
WallVault Short-Throw Systems

Digital WallVault Short-Throw systems were specifically developed for classrooms with an ultra short-throw projector. The unique USFM 100 ultra short-throw projector mount and equipment enclosure securely mounts the projector to a wall, and conceals system switching and amplification components.

PoleVault Systems

Digital PoleVault systems are ideal for classrooms with a ceiling mounted projector. The unique PMK 560 Pole Mount Kit securely mounts and conceals system components above the projector. A projector drop ceiling mount is included with adjustable pole and universal projector bracket.

WallVault Wall Mounted Systems

Digital WallVault Wall Mount systems were designed for classrooms with a flat panel display or wall mounted projector. They take their name from the unique WMK 160 wall mount kit that securely mounts and conceals system switching and audio amplification components to a wall.

VoiceLift Pro Microphone
High Performance Wireless Microphone

Extron VoiceLift® Pro Microphone employs state of the art wireless technology for classroom voice amplification. VoiceLift Pro utilizes digital transmission and pairing in a dedicated spectrum to provide superior performance over traditional systems. Benefits include higher sound quality, increased reliability, and greater transmission distance, with reduced interference. VoiceLift Pro integrates seamlessly with any PlenumVault, WallVault or PoleVault installation, providing a complete classroom AV and voice amplification solution. Studies have shown that evenly distributing the teacher's voice throughout the room results in significant gains in student achievement.

43% Fewer elementary students referred to special education

15% Higher scores on the Stanford Achievement Test, including reading, language, math, science, and social studies subtests

21% Higher scores on Oregon's Technology Enhanced Student Achievement test

35% Increase in literacy test scores

— Trost Amplification Study, Canby School District, Canby, Oregon, 2004

Advanced Wireless Technology

The VoiceLift Pro Microphone is based on an industry standard radio frequency technology operating in a spectrum reserved exclusively for voice communications. This technology is not susceptible to environmental factors, such as windows, sunlight, and florescent lighting, that create problems for infrared systems. It also does not suffer from the licensing restrictions and proximity issues of traditional RF microphones.

Sophisticated Signal Processing

VoiceLift Pro uses advanced digital signal processing to optimize voice intelligibility and audio quality as well as eliminate feedback.

Plug-and-play Integration

The VoiceLift Pro Receiver includes a convenient RJ45 connection for quick and easy integration of audio, power, and control with a PoleVault switcher. In addition, the compact receiver is designed to be mounted in close proximity to the switcher, within a secure Extron PVM, USFM, or WMK enclosure.

Instant Alert and Function Relays

Instant Alert provides instructors a quick and discreet way to signal for assistance in the event of an emergency. Holding both volume buttons on the pendant microphone closes a relay that can instruct an Ethernet-enabled MediaLink® controller to notify school officials and authorities via e-mail or text message. An independent function button on the pendant provides access to the receiver's second relay. This allows triggering additional capabilities such as lecture capture, podcast recording, and more.

Collaboration Systems
TeamWork and ShareLink

Instruction pedagogy is shifting away from lecture and towards collaborative or cooperative learning. These changes can have a dramatic impact on everything from technology used to the actual design of the classroom. Flipped classrooms as well as BYOD and 1:1 deployments require methods for students to work together with a wide array of computing and display devices. Extron offers a number of AV integration products to facilitate collaboration in a variety of different classroom environments.

The **Extron TeamWork** System is a simple, intuitive digital collaboration system for groups of four to six users. Packages typically include HDMI and VGA Show Me cables, a switcher, a system controller, a Cable Cubby® Series/2 enclosure, and other necessary system cables. Students simply connect their laptop or tablet to a TeamWork Show Me cable to start the system, and then press the Share button to display their content on the presentation display. When students disconnect their devices and walk away, the system automatically powers down.

Extron ShareLink is a wireless collaboration gateway for sharing content from computers, smartphones and tablets. It can be used to create a stand-alone wireless collaboration and presentation system or to add wireless presentation capabilities to an existing classroom AV system. ShareLink technology supports simultaneous display of slides, documents, graphs, and photos from up to four devices. It is compatible with Windows® and OS X® computers as well as Apple® and Android® smartphones and tablets. ShareLink also includes a moderator mode allowing the instructor to ensure only approved content is displayed.

Streaming AV
H.264 Capture, Encoding and Decoding

Extron **StudioStation**™ is a quick, simple, and convenient solution for one-touch recording of high quality video and audio presentations. To turn the system on, insert a USB stick and press the record button to begin recording. StudioStation solutions are ideal for flipped classroom recordings, student assessments, rehearsal spaces, moot courts, or any other application where making a recording by pressing only one button is desired.


The **SMP 300 Series** of products are high performance H.264 streaming media processors for capturing and distributing AV sources and presentations as live streaming and recorded media. Accepting HDMI, component, composite, and optional 3G-SDI signals, these processors are able to record and stream simultaneously and can stream at two different resolutions and bit rates concurrently using a range of transport protocols and session management options.

The **SMD 101** and **SMD 202** are compact, high performance H.264 decoders that create complete end-to-end streaming systems when used with Extron SMP encoders. Both units provide advanced signal processing, scaling, and aspect ratio management that supply high quality signals to AV displays. In addition to live stream decoding, the SMD 202 also offers the flexibility to playback media files from internal memory, a removable SD memory card, or a locally connected USB storage device.

Extron streaming products can be used for variety of education AV applications including:

- Lecture capture for flipped classrooms

- Campus-wide distribution of student news, CATV or DVD content

- Overflow presentation of athletic, theater, graduation, and other events

- Digital signage
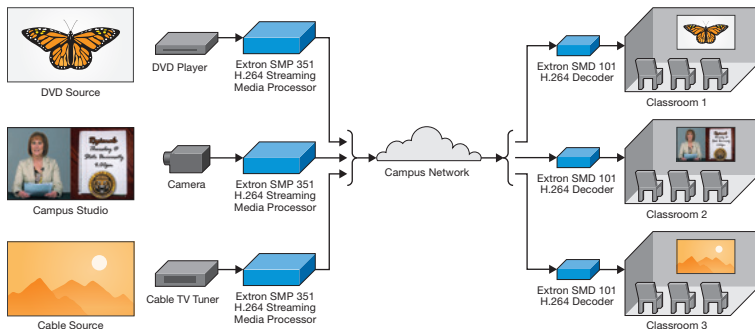
Entwine

Enterprise Media Platform for Content Management and Distribution

Entwine™ is a server based software solution designed to help organizations simplify and automate the process of capturing, cataloging, and distributing media files for consumption.

Schedule & Record

Entwine EMP affords the freedom to either create ad-hoc recordings or schedule recordings for applications that have a fixed schedule. Create schedules locally from the administrative dashboard, or import calendar data from external applications. Schedule management is simplified by viewing device or location information.

Process & Edit

Ingest MP4 media files, JPEG thumbnails, and metadata from Extron SMP Streaming Media Processors for a rich media playback experience. Users with existing MP4 video libraries or applications with user-created content can use Entwine EMP to process files and apply access permissions. The web-based editing tool allows users to trim away unnecessary content, providing a more polished presentation.

Search & View

Use Entwine VideoLounge to watch video and presentation content simultaneously in a user-configurable screen layout. Leverage powerful search tools to find and play the exact content you want. VideoLounge is built on a responsive design that accommodates rich media play back on all devices, and all browsers.

Publish & Distribute

Entwine EMP integrates easily with Learning Management Systems such as Blackboard, Canvas, Moodle, and others through the IMS Global Learning Consortium's Learning Tools Interoperability – LTI open standard.

Manage Content

Configurable and automated workflows make media management easy. Through a web-based catalog users and administrators can easily group and categorize recordings. Apply workflow rules to automate content management processes, increasing the scale and scope of administrators' deployments without increasing labor burdens. Authentication and user rights are supported through local permissions, or integration with popular systems such as Lightweight Directory Access Protocol – LDAP, Microsoft Active Directory®, Shibboleth, and CAS.

End-to-end Solution

Entwin EMP manages your presentations from the initial capture of content to presentation on a user's chosen device.
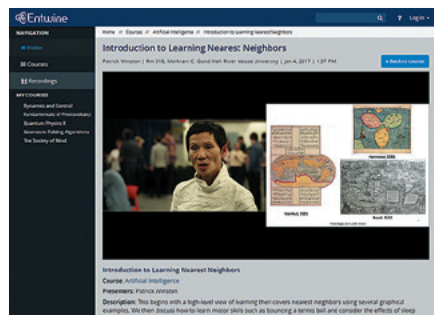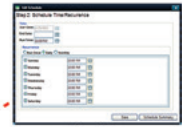
GlobalViewer Software
AV Asset Management

The Extron GlobalViewer® family of software products allows support organizations to remotely control and manage AV assets over the network, dramatically increasing their efficiency and effectiveness. New software tools also provide control of bells, intercom, and public address functions over the network.

Scheduling

Reporting

Remote Management

GlobalViewer Enterprise
Extron GlobalViewer Enterprise AV asset management software allows administrators and

GlobalViewer Enterprise

support personnel to get the most from their classroom AV systems. It provides single-school up to district-wide access to AV components over the network for remote support, energy management, and planning.

Remote Monitoring and Support – Real-time monitoring of all classroom AV assets on the network ensures they are up and running, and being used to their potential. For support issues, technicians can remotely access the AV equipment in a particular room to assist users with system operation. Disconnect and Event Alert email messages alert the proper officials of a potential theft or other AV equipment problem in the classroom.

Energy Efficiency and Cost Savings – Automatically powering down AV components and scheduling system availability lowers operating costs and extends the life of equipment. Preventing projectors from being left on overnight or over the weekend allows lamps to last longer, and saves on energy bills.

Planning – Comprehensive reporting features provide important information for proactive maintenance and asset analysis. Lamp hour reports track usage and assist in lamp replacement scheduling. Usage reports for AV components provide important data for resource allocation, budgeting, and professional development.

iGVE
Extron also offers a mobile AV resource management App, iGVE. This powerful, convenient App is used in conjunction with Extron GlobalViewer Enterprise, and allows users to effectively manage and control large-scale AV installations from Apple iPad, iPhone and iPod touch devices.

GlobalViewer Campus Communication Suite
Network Management of Bells, PA, and Intercom Systems

GlobalViewer® Campus Communication Suite is a complete solution for unifying all campus audio systems under an easy-to-use interface. The suite leverages the power of your existing network to provide bells, public address announcements and intercom communications throughout campus.

Home Screen

Flexible Bell Scheduling
Bell schedules may be created and maintained either locally or at the district level. You can quickly and easily set recurring bell schedules for each school day. For special events, such as a rally or holiday closure, the bell schedule can be modified or disabled.

Convenient PA Announcements
Support is provided for both live public address messages and pre-recorded announcements. Zone capability allows announcements to be routed to all locations on campus, a particular area, or a specific room.

Integrated Intercom System
Intercom capability provides two-way voice communication over the network.Flexible setup options allow users to be connected with the office or help desk.

Safety and Security Features
Instant Alert integration notifies administrators when a classroom is in need of assistance. Links to live feeds from camera equipped rooms help determine whether officials should contact the room via intercom or lock down the school with an All Call from the software.

CC 100C Codec

CC 100C Codec
The CC 100C is a network audio encoder and decoder designed for use with GlobalViewer Campus Communication Suite. It allows bells and announcements to be broadcast through the Extron Classroom AV System, and provides a two-way communication path for the intercom.

CC 101P Intercom Panel
The CC 101P is and intercom panel designed for use with GlobalViewer Campus Communication Suite. This Decora wallplate features a microphone and push-to-talk call button that allows the user to communicate with the office or help desk operator.
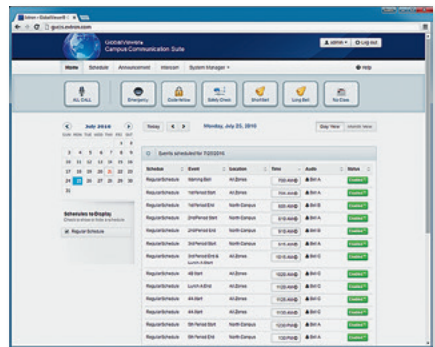
CC 101P
Intercom Panel

Technical Support

Extron is best known for supporting our customers anytime, anywhere with our Technical Support Hotline at 800.633.9876. The hotline operates 24 hours a day, as well as weekends and holidays for emergency support. Accurate and timely advice is provided for all your system operation, configuration, and technical questions.

Design Assistance

We understand that it can be difficult to know which AV products or system designs will address your unique classroom environments and methods of instruction. Extron has over 30 years of experience developing products and solutions for the education market, and we want to share our experience with you. Simply contact our S3 support line at 800.633.9876 with your project details and we will create a customized solution to suit your needs.

Extended Warranty Program

The Extron Classroom AV System Extended Warranty program provides a unique opportunity for PoleVault Digital System owners to receive a two-year extension on all standard warranties, from three years to five years for parts and labor, at no additional cost. To qualify, installation must be completed by an authorized reseller and system controllers connected to the network. Contact your Extron Education Support Team representative to register your project, and receive the benefits of the extended warranty program.

Education Pricing

Extron Classroom System products are listed on cooperative purchasing agreements available in most states. These agreements provide not to exceed pricing for schools, libraries, government, and other eligible non-profit agencies. By centralizing the process, these agreements save you time and money. Extron does not sell directly to end users, but contract pricing is available through our Authorized Resellers.

Extron Grant Program

Extron's aggressive Classroom Technology Grant Programs are just one more example of our commitment to enhancing the K-12 learning environment. The goal of these programs is to provide increased visibility and expanded access for AV technology by supplying selected pilot classrooms with advanced audio video solutions at no cost to the district. To date, Extron has granted more than $8.4 million worth of equipment to over 1,350 classrooms in U.S. school districts. Each grant award includes installation of Extron classroom system technology, along with complete training.

How to Apply

Applying for the Extron Classroom AV System Grant is easy using the online form available at **www.extronclassroom.com/grant**. There is no need to commit valuable resources to generating a lengthy grant proposal. Simply provide your contact information and location, as well as details on your classroom environment. Once your information has been submitted, an Extron Grant Administrator will review the application and contact you to discuss your project.

Extron Installations

While budget, system design, and component choice are important, it is also critical to ensure that the selected technology provides measurable benefits to students, supports the curriculum, and is adopted by teachers. Below is a sample list of districts that have found success with Extron classroom AV Technology.

LEANDER ISD, TX	PLACENTIA-YORBA LINDA USD, CA
Over 1,500 Classrooms	Over 1,100 Classrooms
MURRIETTA VALLEY USD, CA	INDIAN RIVER CSD, FL
Over 1,400 Classrooms	Over 1,000 Classrooms
BAY DISTRICT SCHOOLS, FL	SOUTH WASHINGTON COUNTY, MN
Over 1,300 Classrooms	Over 800 Classrooms
MUSCOGEE COUNTY SD, GA	DEL VALLE ISD, TX
Over 1,300 Classrooms	Over 700 Classrooms
SANTA ANA USD, CA	BARTHOLOMEW CSC, IN
Over 1,300 Classrooms	Over 500 Classrooms
POWAY USD, CA	FRANKLIN COUNTY SCHOOLS, NC
Over 1,200 Classrooms	Over 200 Classrooms
CLOVIS UNIFIED SD, CA	MONROE TOWNSHIP SD, NJ
Over 1,200 Classrooms	Over 200 Classrooms

Web Site for Education Users

The Extron Classroom Web site is designed exclusively for anyone at K-12 institutions involved in selecting, purchasing, or supporting AV presentation equipment.

Sign up for an Extron classroom Login and gain access to:

▶ Design guides, white papers, product brochures and a wealth of other AV technology resources

▶ Classroom AV Systems Builder - Powerful online tool for configuring and pricing custom classroom AV systems

▶ An expanded tradeshow list that includes instructional technology events

▶ Case studies, quotes, and video testimonials
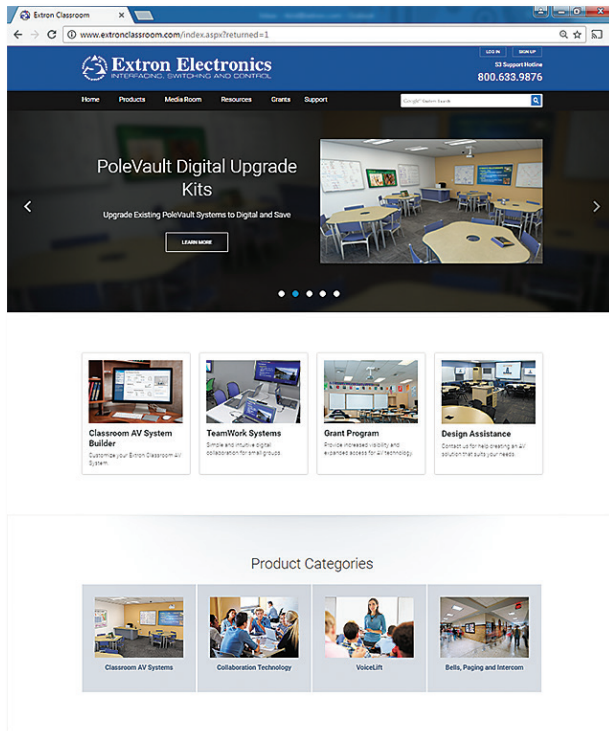
K-12 Web Site
www.extronclassroom.com

Classroom AV System Builder

FREE Online Tool for Customizing Systems

The Classroom AV System Builder is an online, drag-and-drop configuration utility that allows users to customize Extron classroom AV systems. The dynamic, graphical user interface makes system customization easy. Helpful wizards ensure that only valid systems are built and vital accessories are included. You begin designing your system with a standard configuration. Then customize the inputs, controller, speakers, mounting, cabling, and more to create a system that meets your requirements.

Export Diagram and Bill of Materials

The Classroom AV System Builder provides the ability to export the system diagram and bill of materials as a PDF. This helps you verify all components are included and may be used as a reference for bid specifications.

Custom Part Number

Each Classroom AV System includes over 15 separate components. Ordered separately, each of these items would require listing a part number and price on the purchase order. When you use the Classroom AV System Builder, it will automatically generate a single part number for each customized system saving money, time, and paperwork.

Convenient 24/7 Access

The Classroom AV System Builder is available 24 hours a day, seven days a week, absolutely free-of-charge. To access the Classroom AV System Builder, visit **www.extronclassroom.com/builder**

K-12 Education Support Team

Extron's friendly and knowledgeable K-12 Education Support team is always ready to assist with product or application questions, technical support, and system design advice. You can be confident that our highly trained staff will provide you with any resources or support needed.

The Extron K-12 Education Support Team provides the following support and training programs:

- ▸ Product availability status
- ▸ Design Assistance Program
- ▸ Classroom AV System Builder
- ▸ Classroom Technology Grant Programs
- ▸ Extended Warranty Program
- ▸ Education Contract Pricing

- ▸ Product presentation and training videos
- ▸ On-Line and On-Site Training and Development
- ▸ Configurable Control System Hands-on Training
- ▸ Advanced Certification
- ▸ Project and Technical Troubleshooting
- ▸ Support and Repairs Open Account

Locations and Contact Information

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