CLASSROOM AV SYSTEMS

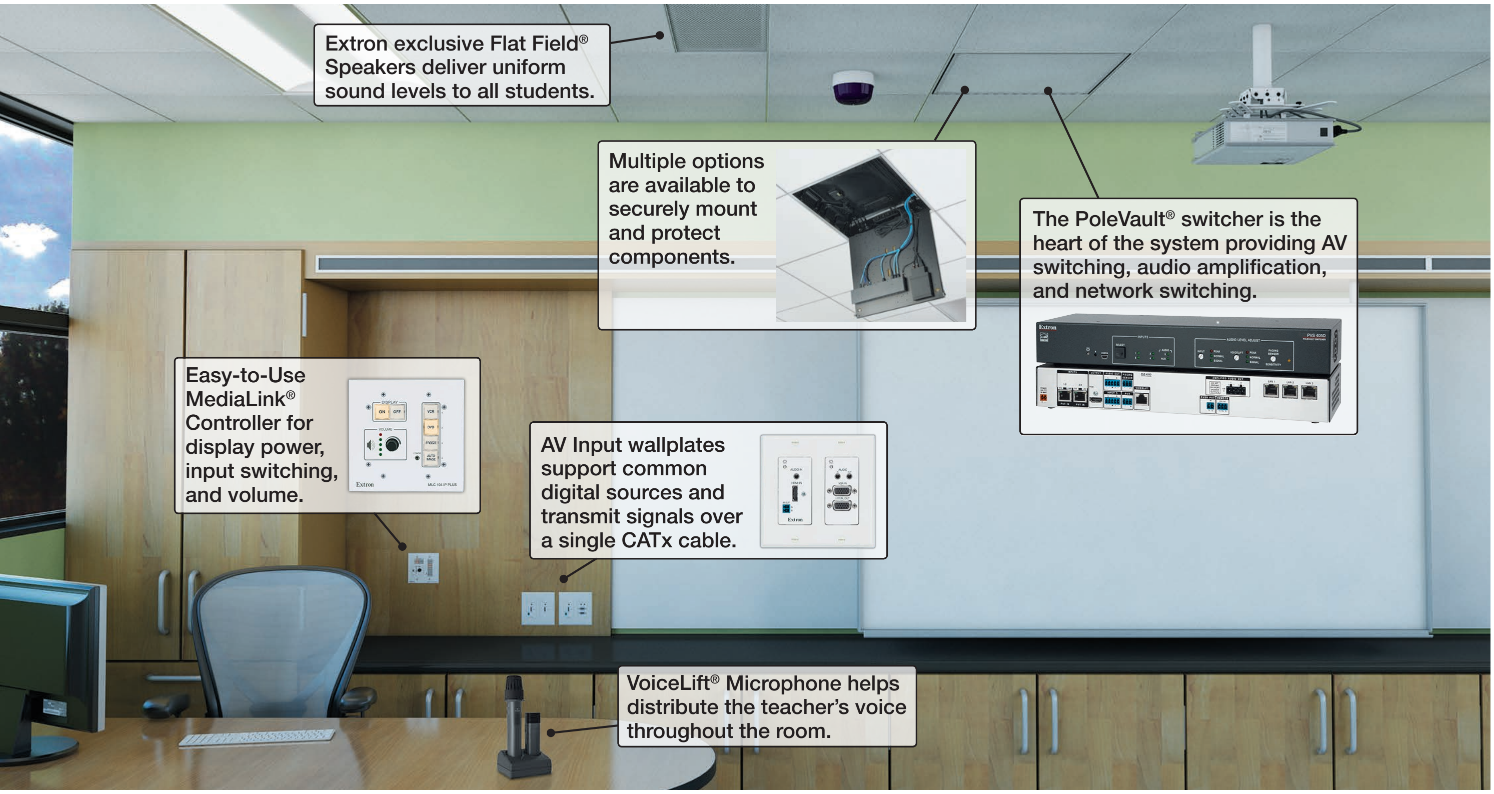
PoleVault Digital Systems

Complete Classroom AV Switching and Control Systems for Digital Sources

- Complete, centralized HDMI/VGA switching and control systems with stereo audio amplification
- Securely mount and conceal switching and audio components
- AV Input wallplates transmit audio and video signals over a single CATx cable
- Integrated network switch allows devices to share a single drop
- Network connectivity for Web-based monitoring
- ENERGY STAR® qualified switcher designed to lower energy usage

Extron Electronics
INTERFACING, SWITCHING AND CONTROL

Complete Classroom AV Solution


Extron exclusive Flat Field® Speakers deliver uniform sound levels to all students.

Multiple options are available to securely mount and protect components.

The PoleVault® switcher is the heart of the system providing AV switching, audio amplification, and network switching.

Easy-to-Use MediaLink® Controller for display power, input switching, and volume.

AV Input wallplates support common digital sources and transmit signals over a single CATx cable.

VoiceLift® Microphone helps distribute the teacher's voice throughout the room.

Extron **PoleVault Digital Systems** are complete, easy-to-use AV switching and control systems that seamlessly integrate digital and analog video sources. Each system uses economical twisted pair cable for transmitting signals and includes network connectivity for Web-based AV resource management, monitoring, and control. These standard systems include all the necessary audio and video switching, system control, source connectivity, audio amplification, speakers, mounting hardware, and cabling for a complete classroom AV solution. All that remains is to add the display device and sources.

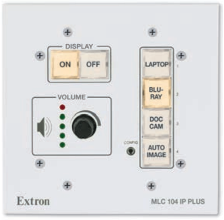
Designed for K-12 Classrooms

When it comes to adding an AV control system to the classroom, educators, instructional technologists, and school administrators have told us they have three primary concerns: the system should be easy to use, reliable, and sized properly to meet the needs of the classroom.

PoleVault Digital systems are designed to create a complete classroom AV technology integration solution that offers benefits for all stakeholders. Teachers will enjoy the simplicity of the system controller and enhanced sound quality. Students will benefit because technology that is easy to use gets used more often. Administrators will appreciate the ability to centrally monitor all classroom systems using the network, as well as the ability to expand video and audio capabilities beyond that of the display device.

Easy-to-Use AV Room Control

One of the most important features of any classroom technology is ease of use. No matter how new or helpful a piece of technology, if it is difficult to operate, it is unlikely to be used to its full potential. 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.



Easy-to-Use MediaLink® controller

Whether you choose our standard button panel or optional touchpanel, teachers will experience more freedom and functionality. When Extron systems are installed in multiple classrooms, teachers

PoleVault Digital Benefits

can confidently move from room to room, always encountering the same familiar control panel.

Software Control Options

Extron offers a variety of software options for controlling PoleVault Digital Systems from a Web page, iPad®, or Windows® PC.

Web-Based Graphical User Interface allows the system to be controlled from any computer running Internet Explorer with access to the network.

MediaLink® for iPad

MediaLink for iPad enables a presenter to wirelessly control the AV system using an iPad, as she freely moves around the room.

MediaLink for Windows turns any Windows PC or laptop in the classroom into an additional point of control for the AV system.

High Resolution Digital Video Connections

PoleVault Digital Systems offer dual input wallplates that provide connections for the most common classroom sources including laptop, tablet, Apple® TV, Blu-ray, document camera, and more. The PVT SW HDMI D supports two HDMI inputs and the PVT SW HDMI RGB D supports one HDMI and one VGA input.

Twisted Pair Transmission

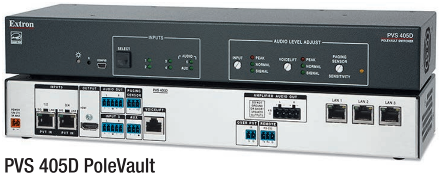
PoleVault Digital Systems provide high reliability and maximum performance on an economical and easily installed cable infrastructure. Input wallplates use Extron twisted pair technology to transmit high resolution digital audio and video signals to the switcher over a single CATx shielded twisted pair cable.

AV Input wallplates transmit AV signals over a single CATx cable

CATx cable offers lower cost and easier installation than standard coaxial cable. It is lighter, smaller and more flexible, so it is easier to route through walls and small conduit. CATx cable connectors are also easier to terminate and don't require highly skilled and costly technicians for installation.

Advanced Source Switching

A unique modular approach to system design gives PoleVault Digital Systems the flexibility to support both HDMI and VGA video sources. The PVS 405D switcher at the heart of these systems does all the work of routing audio, video, and network signals. It offers two inputs for the wallplates and one switched audio input. This capability allows expansion of the classroom AV signal switching far beyond what is available using projector switching alone.



PVS 405D PoleVault Digital Switcher

EDID Minder®

PoleVault Digital Systems also include EDID Minder, an Extron exclusive technology that provides automatic and continuous Extended Display Identification Data management. EDID Minder ensures that the source powers up properly and reliably outputs content to the display.

FF 120 plenum rated speakers utilize Extron exclusive Flat Field technology and wide dispersion to fill the room with high quality sound

Flat Field Speakers

Extron FF 120 speakers are full range, wide dispersion speakers that drop easily into standard suspended ceilings. Extron patented Flat Field technology makes this speaker truly unique by reducing beaming and delivering consistent sound levels across the listening area to each student. Only two FF 120 speakers are required in most standard classrooms, as opposed to four or more traditional ceiling speakers. For rooms that cannot support ceiling speakers, optional surface mount speakers can be installed near the projection screen or display.

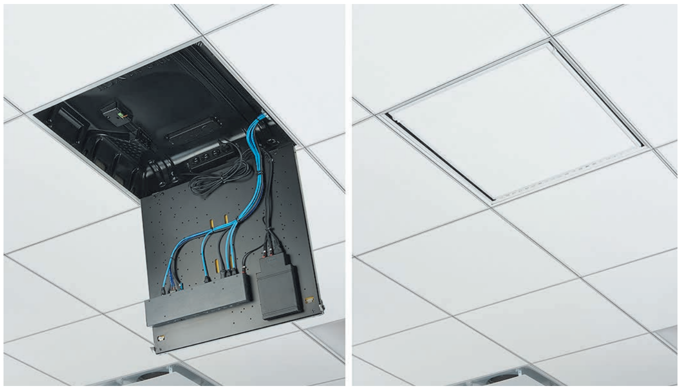
Advanced Audio Capabilities

The integrated 50 watt stereo audio amplifier in the PVS 405D is capable of filling the room with clean, rich sound. Switched and auxiliary line-level inputs support audio only sources such as music players or public address systems. A line level output allows system audio to be used for podcasting or assistive listening.

Network Connectivity

PoleVault Digital Systems feature network integration technology specifically engineered to meet the needs of professional AV environments. Network integration enables administrators and support personnel to manage, monitor, troubleshoot, and control systems over the network. The PVS 405D switcher incorporates a three port Ethernet switch which allows two devices within the classroom to share a single network drop.

PoleVault Digital Benefits



PlenumVault® protects components and saves floor space by mounting equipment in the ceiling

Mounting Options

System options are available to support classrooms with any type of display device mounted on the ceiling or a wall. All four system types offer secure mounting for critical AV system equipment.

Digital PoleVault Systems securely mount and conceal system components above the projector. A projector drop ceiling mount is included with an adjustable pole and universal projector bracket.

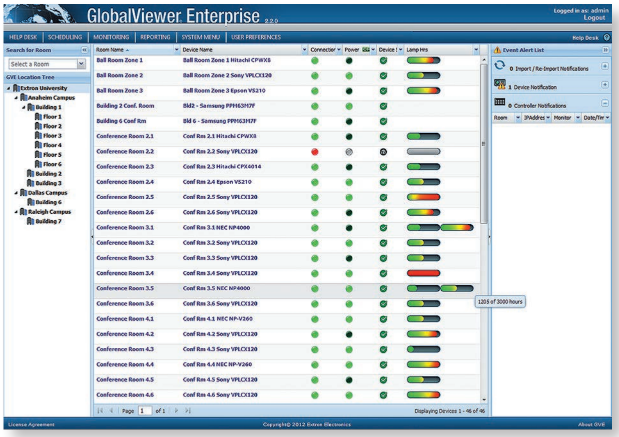
Digital PlenumVault® Systems securely mount and conceal system components in the plenum area above a suspended ceiling. Options are available with or without projector mounting hardware.

Digital WallVault® Short-Throw Systems include an ultra short-throw projector mount and equipment enclosure for securing system components on the wall.

Digital WallVault Wall Mount Systems also secure and mount system components on the wall, but are designed for classrooms with a flat panel display or wall mounted projector.

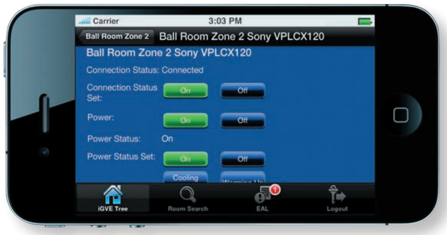
Powerful AV Resource Management Software

GlobalViewer® Enterprise software is a powerful server-based AV resource management tool. It provides school or district-wide management, monitoring, and usage reporting of classroom AV systems over the network. Administrators can limit classroom system availability and create detailed shut-off schedules. This prevents unauthorized use, reduces operating costs, and extends the life of system components. Management reports can be used to maintain inventory lists, track and analyze device and room usage, and proactively plan maintenance activities to reduce system downtime. Remote management provides real-time status for all connected devices for better troubleshooting response with a small support staff.


GlobalViewer Enterprise 2.2.0
Logged in as: admin
Logout
HELP DESK
SCHEDULING
MONITORING
REPORTING
SYSTEM MENU
USER PREFERENCES
Help Desk
Search for Room
Select a Room
GVE Location Tree
Extron University
Anaheim Campus
Building 1
Floor 1
Floor 2
Floor 3
Floor 4
Floor 5
Floor 6
Building 2
Building 3
Dallas Campus
Building 6
Raleigh Campus
Building 7
Event Alert List
0 Import / Re-Import Notifications
1 Device Notification
0 Controller Notifications
Room
IPAddres
Monitor
Date/Tim
1205 of 3000 hours
License Agreement
Copyright© 2012 Extron Electronics
About GVE

Room Name	Device Name	Connection	Power	Device Status	Lamp Hrs
Ball Room Zone 1	Ball Room Zone 1 Hitachi CPWX8	🟢	⚫	✓	
Ball Room Zone 2	Ball Room Zone 2 Sony VPLCX120	🟢	🟢	✓	
Ball Room Zone 3	Ball Room Zone 3 Epson VS210	🟢	⚫	✓	
Building 2 Conf. Room	Bld2 - Samsung PPM63M7F	🟢	🟢	✓	
Building 6 Conf Rm	Bld 6 - Samsung PPM63M7F	🟢	⚫	✓	
Conference Room 2.1	Conf Rm 2.1 Hitachi CPWX8	🟢	⚫	✓	
Conference Room 2.2	Conf Rm 2.2 Sony VPLCX120	🔴	⚪	?	
Conference Room 2.3	Conf Rm 2.3 Hitachi CPX4014	🟢	⚫	✓	
Conference Room 2.4	Conf Rm 2.4 Epson VS210	🟢	🟢	✓	
Conference Room 2.5	Conf Rm 2.5 Sony VPLCX120	🟢	🟢	✓	
Conference Room 2.6	Conf Rm 2.6 Sony VPLCX120	🟢	⚫	✓	
Conference Room 3.1	Conf Rm 3.1 NEC NP4000	🟢	⚫	✓	
Conference Room 3.2	Conf Rm 3.2 Sony VPLCX120	🟢	🟢	✓	
Conference Room 3.3	Conf Rm 3.3 Sony VPLCX120	🟢	⚫	✓	
Conference Room 3.4	Conf Rm 3.4 Sony VPLCX120	🟢	🟢	✓	
Conference Room 3.5	Conf Rm 3.5 NEC NP4000	🟢	🟢	✓	
Conference Room 3.6	Conf Rm 3.6 Sony VPLCX120	🟢	🟢	✓	
Conference Room 4.1	Conf Rm 4.1 NEC NP-V260	🟢	🟢	✓	
Conference Room 4.2	Conf Rm 4.2 Sony VPLCX120	🟢	⚫	✓	
Conference Room 4.3	Conf Rm 4.3 Sony VPLCX120	🟢	🟢	✓	
Conference Room 4.4	Conf Rm 4.4 NEC NP-V260	🟢	🟢	✓	
Conference Room 4.5	Conf Rm 4.5 Sony VPLCX120	🟢	⚫	✓	
Conference Room 4.6	Conf Rm 4.6 Sony VPLCX120	🟢	🟢	✓	

Page 1 of 1 Displaying Devices 1 - 46 of 46


Carrier
3:03 PM
Ball Room Zone 2
iGVE Tree
Room Search
EAL
Logout

Ball Room Zone 2 Sony VPLCX120

Ball Room Zone 2 Sony VPLCX120

Connection Status: Connected

Connection Status Set: On Off

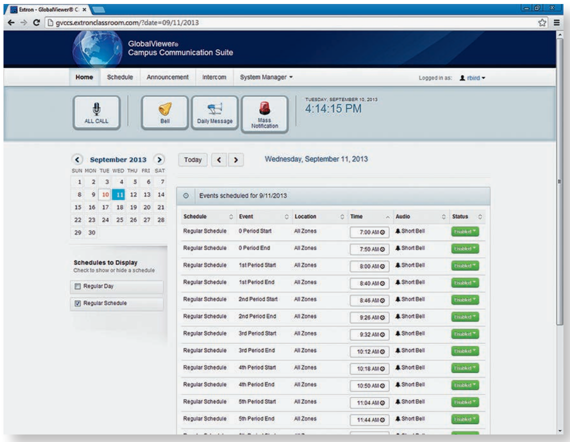
Power: On Off

Power Status: On

Power Status Set: On Off

Cooling

iGVE allows support staff to effectively manage and control large-scale AV installations using an Apple® iPhone® or iPod® touch. iGVE is easy-to-use, and provides a powerful feature set comprised of all the most common GVE monitoring, control, and helpdesk functions.


Extron - GlobalViewer® C
gvccs.extronclassroom.com/?date=09/11/2013
GlobalViewer®
Campus Communication Suite
Home
Schedule
Announcement
Intercom
System Manager
Logged in as:
rbird
ALL CALL
Bell
Daily Message
Mass Notification
TUESDAY, SEPTEMBER 10, 2013
4:14:15 PM
September 2013
Today
Wednesday, September 11, 2013
Schedules to Display
Check to show or hide a schedule
☐ Regular Day
☑ Regular Schedule

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Events scheduled for 9/11/2013

Schedule	Event	Location	Time	Audio	Status
Regular Schedule	0 Period Start	All Zones	7:00 AM	Short Bell	Enabled
Regular Schedule	0 Period End	All Zones	7:50 AM	Short Bell	Enabled
Regular Schedule	1st Period Start	All Zones	8:00 AM	Short Bell	Enabled
Regular Schedule	1st Period End	All Zones	8:40 AM	Short Bell	Enabled
Regular Schedule	2nd Period Start	All Zones	8:46 AM	Short Bell	Enabled
Regular Schedule	2nd Period End	All Zones	9:26 AM	Short Bell	Enabled
Regular Schedule	3rd Period Start	All Zones	9:32 AM	Short Bell	Enabled
Regular Schedule	3rd Period End	All Zones	10:12 AM	Short Bell	Enabled
Regular Schedule	4th Period Start	All Zones	10:18 AM	Short Bell	Enabled
Regular Schedule	4th Period End	All Zones	10:50 AM	Short Bell	Enabled
Regular Schedule	5th Period Start	All Zones	11:04 AM	Short Bell	Enabled
Regular Schedule	5th Period End	All Zones	11:44 AM	Short Bell	Enabled

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 the campus. The user interface is Web-based and allows office personnel to easily manage bell schedules, broadcast announcements to various zones, or have two-way conversations with classrooms.

PoleVault Digital Benefits

Energy Efficiency

The ENERGY STAR® qualified switcher 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.

VoiceLift® Microphone Option

The Extron VoiceLift Microphone option helps create a "sound field" that allows the teacher's voice to be heard clearly throughout the classroom. Studies show that use of a sound field system results in increased student achievement and a reduction in teacher health issues related to voice fatigue. The compact pendant microphone can be worn around the teacher's neck or clipped onto their clothing. The handheld microphone is ideal for student use, team teaching, or guest speakers.

Instant Alert

The Instant Alert capability of Extron VoiceLift Microphone provides instructors a quick and discreet way to signal for assistance in the event of an emergency in the classroom. Simply press and hold both volume buttons on the VoiceLift Pendant Microphone for three seconds. This instructs an Ethernet-enabled MediaLink controller to notify school administration officials or campus authorities via e-mail or text message.

In addition to text indicating that assistance is needed, Instant Alert and the Classroom AV System can be integrated with an IP camera surveillance system to provide both visual and audio feedback from the classroom. This extra layer of security allows officials to view and listen to activities in the classroom when and Instant Alert is triggered, allowing them to determine the best course of action such as summoning police or medical personnel, or starting lock down procedures.

Extron Satisfaction Guarantee

To underscore our S3 commitment to Service, Support, and Solutions, 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.

Extron Classroom Technology Grant Program

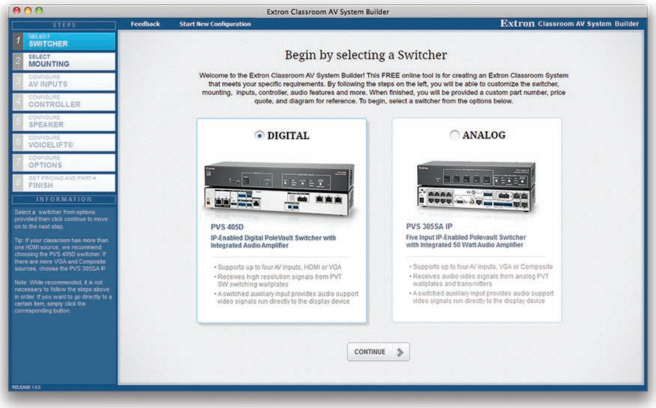
Extron's Classroom Technology Grant Program is just one more example of our commitment to enhancing the K-12 learning environment. The program provides increased visibility and expanded access for AV technology by supplying selected pilot classrooms with advanced audio video solutions at no cost to the district. Each grant award also includes installation of Extron classroom system technology, along with complete training. For more information, or to apply for the program, contact the K-12 Education Support Team, or visit our web site at **www.extronclassroom.com/grant.**

State Contract/GSA 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. Visit www.extronclassroom.com/contracts for contract listings by state.

Online System Builder

Standard PoleVault Digital Systems were developed to reflect the most common classroom AV requirements and are offered in two and four input versions. For example, four input systems accept three HDMI signals and one high resolution computer-video signal. But this is just a start, as these systems are designed to be configurable. Our online Classroom AV System Builder allows users to customize a system to meet the specific requirements of the classroom. When system customization is complete, the System Builder will generate a single part number, making it easy to specify and order each custom system.



Begin by selecting a Switcher

Welcome to the Extron Classroom AV System Builder! This FREE online tool is for creating an Extron Classroom System that meets your specific requirements. By following the steps on the left, you will be able to customize the switcher, mounting, inputs, controller, audio features and more. When finished, you will be provided a custom part number, price quote, and diagram for reference. To begin, select a switcher from the options below.

● DIGITAL

PVS 405D

IP-Enabled Digital PoleVault Switcher with Integrated Audio Amplifier

- Supports up to four AV inputs, HDMI or VGA
- Receives high resolution signals from PVT SW switching wallplates
- A switched auxiliary input provides audio support video signals run directly to the display device

○ ANALOG

PVS 305SA IP

Five Input IP-Enabled Polevault Switcher with Integrated 50 Watt Audio Amplifier

- Supports up to four AV inputs, VGA or Composite
- Receives audio video signals from analog PVT wallplates and transmitters
- A switched auxiliary input provides audio support video signals run directly to the display device

Select a switcher from options provided then click continue to move on to the next step.

Tip: If your classroom has more than one HDMI source, we recommend choosing the PVS 405D switcher. If there are more VGA and Composite sources, choose the PVS 305SA IP.

Note: While recommended, it is not necessary to follow the steps above in order. If you want to go directly to a certain item, simply click the corresponding button.

PoleVault Digital Classroom AV Systems

PoleVault Systems

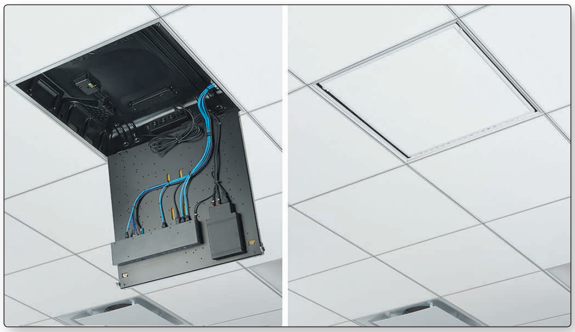
Digital PoleVault systems are ideal for classrooms with a ceiling mounted projector. The unique PMK 560 Pole Mount Kit securely mounts and conceals system components above the projector. A projector drop ceiling mount is included with adjustable pole and universal projector bracket. Two input systems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

Model	Version	Part Number
PVS 200D	Two Input Digital PoleVault	42-207-03
PVS 400D	Four Input Digital PoleVault	42-208-03

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. Two input systems support one HDMI and one VGA input. Four input systems support three HDMI and one VGA.

Model	Version	Part Number
PLS 200D	Two Input Digital PlenumVault, CM	42-220-03
PLS 400D	Four Input Digital PlenumVault, CM	42-221-03
PLS 210D	Two Input Digital PlenumVault, NM	42-230-03
PLS 410D	Four Input Digital PlenumVault, NM	42-231-03



WallVault Short-Throw Systems

Digital WallVault Short-Throw, UST, 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. Two input systems support one HDMI and one VGA input. Four input systems support three HDMI and one VGA.

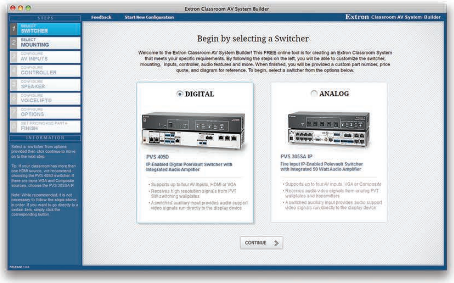
Model	Version	Part Number
WVS 200D	Two Input Digital WallVault, UST	42-209-03
WVS 400D	Four Input Digital WallVault, UST	42-210-03

WallVault Wall Mounted Systems

Digital WallVault Wall Mount, WM, 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. Two input systems support one HDMI and one VGA input. Four input systems support three HDMI and one VGA.

Model	Version	Part Number
WVS 210D	Two Input Digital WallVault, WM	42-211-03
WVS 410D	Four Input Digital WallVault, WM	42-212-03

Online System Customization


Extron Classroom AV System Builder
Feedback
Start New Configuration
Extron Classroom AV System Builder
STEPS
1 SELECT SWITCHER
2 SELECT MOUNTING
3 CONFIGURE AV INPUTS
4 CONFIGURE CONTROLLER
5 CONFIGURE SPEAKER
6 CONFIGURE VOICELIFT®
7 CONFIGURE OPTIONS
8 GET PRICING AND PART # FINISH
INFORMATION
CONTINUE
RELEASE 1.0.0

Begin by selecting a Switcher

Welcome to the Extron Classroom AV System Builder! This FREE online tool is for creating an Extron Classroom System that meets your specific requirements. By following the steps on the left, you will be able to customize the switcher, mounting, inputs, controller, audio features and more. When finished, you will be provided a custom part number, price quote, and diagram for reference. To begin, select a switcher from the options below.

● DIGITAL

PVS 405D
IP-Enabled Digital PoleVault Switcher with Integrated Audio Amplifier

- Supports up to four AV inputs, HDMI or VGA
- Receives high resolution signals from PVT SW switching wallplates
- A switched auxiliary input provides audio support video signals run directly to the display device

○ ANALOG

PVS 305SA IP
Five Input IP-Enabled Polevault Switcher with Integrated 50 Watt Audio Amplifier

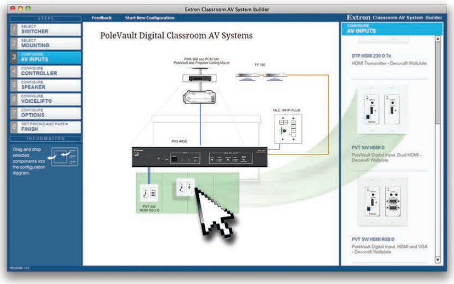
- Supports up to four AV inputs, VGA or Composite
- Receives audio video signals from analog PVT wallplates and transmitters
- A switched auxiliary input provides audio support video signals run directly to the display device

Select a switcher from options provided then click continue to move on to the next step.

Tip: If your classroom has more than one HDMI source, we recommend choosing the PVS 405D switcher. If there are more VGA and Composite sources, choose the PVS 305SA IP.

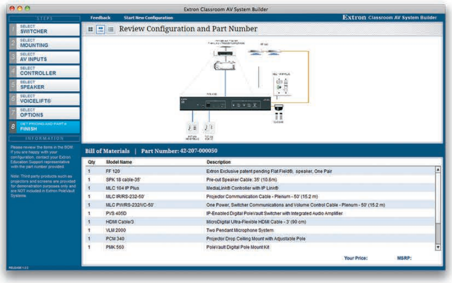
Note: While recommended, it is not necessary to follow the steps above in order. If you want to go directly to a certain item, simply click the corresponding button.

Select the system you want to configure


Extron Classroom AV System Builder
Feedback
Start New Configuration
Extron Classroom AV System Builder
STEPS
1 SELECT SWITCHER
2 SELECT MOUNTING
3 CONFIGURE AV INPUTS
4 CONFIGURE CONTROLLER
5 CONFIGURE SPEAKER
6 CONFIGURE VOICELIFT®
7 CONFIGURE OPTIONS
8 GET PRICING AND PART # FINISH
INFORMATION
PoleVault Digital Classroom AV Systems
PMK 560 and PCM 340
PoleVault and Projector Ceiling Mount
FF 120
MLC 104 IP PLUS
PVS 405D
PVT SW HDMI RBG D
CONFIGURE AV INPUTS
DTP HDMI 230 D Tx
HDMI Transmitter - Decora® Wallplate
PVT SW HDMI D
PoleVault Digital Input, Dual HDMI - Decora® Wallplate
PVT SW HDMI RGB D
PoleVault Digital Input, HDMI and VGA - Decora® Wallplate
RELEASE 1.0.0

Drag and drop selected components into the configuration diagram.

Select the appropriate AV Inputs, Controller, Speakers and other options


Extron Classroom AV System Builder
Feedback
Start New Configuration
Extron Classroom AV System Builder
STEPS
1 SELECT SWITCHER
2 SELECT MOUNTING
3 SELECT AV INPUTS
4 SELECT CONTROLLER
5 SELECT SPEAKER
6 SELECT VOICELIFT®
7 SELECT OPTIONS
8 GET PRICING AND PART # FINISH
INFORMATION
Review Configuration and Part Number
RELEASE 1.2.0

Please review the items in the BOM. If you are happy with your configuration, contact your Extron Education Support representative with the part number provided.

Note: Third party products such as projectors and screens are provided for demonstration purposes only and are NOT included in Extron PoleVault Systems.

Bill of Materials | Part Number: 42-207-000050

Qty	Model Name	Description
1	FF 120	Extron Exclusive patent pending Flat Field®, speaker, One Pair
1	SPK 18 cable-35'	Pre-cut Speaker Cable: 35' (10.6m)
1	MLC 104 IP Plus	MediaLink® Controller with IP Link®
1	MLC IR/RS-232-50'	Projector Communication Cable - Plenum - 50' (15.2 m)
1	MLC PW/RS-232/VC-50'	One Power, Switcher Communications and Volume Control Cable - Plenum - 50' (15.2 m)
1	PVS 405D	IP-Enabled Digital PoleVault Switcher with Integrated Audio Amplifier
1	HDMI Cable/3	MicroDigital Ultra-Flexible HDMI Cable - 3' (90 cm)
1	VLM 2000	Two Pendant Microphone System
1	PCM 340	Projector Drop Ceiling Mount with Adjustable Pole
1	PMK 560	PoleVault Digital Pole Mount Kit

Your Price: MSRP:

When finished, the system builder will provide the custom part number, parts list, and pricing

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. With the Classroom AV System Builder, you'll save 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/CC**

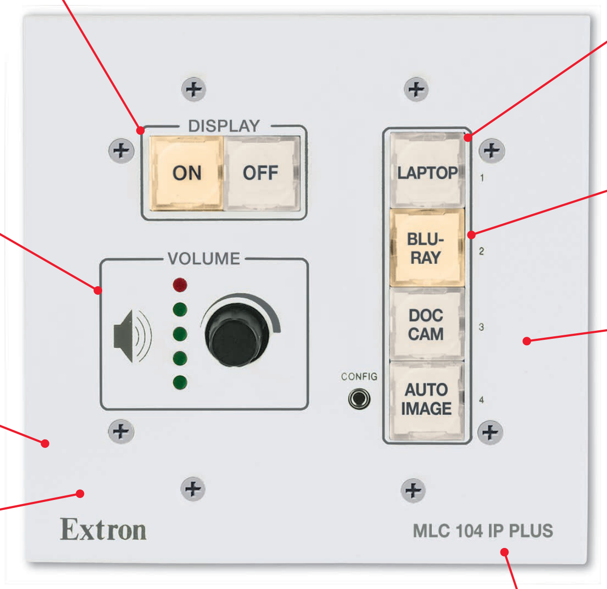
KEY FEATURES

- Free online tool for creating customized systems that meet your requirements
- Select from available options using an intuitive drag-and-drop interface
- View and print the bill of materials, including quantities, product descriptions, model numbers, and total discounted pricing
- Print detailed system diagrams with list of materials for proposals
- Creates custom part number to save time, money, and paperwork
- Export system information to a PDF

System Controller

MLC 104 IP PLUS MEDIALINK CONTROLLER

The Extron MLC 104 IP Plus MediaLink Controller with built-in IP Link® Ethernet Control included in standard PoleVault Systems is an easy-to-use control panel. It is designed to simplify operation of the classroom AV system and enables Web-based remote diagnostics, asset management, and support. When PoleVault Systems are installed in multiple classrooms, the MLC 104 IP Plus standardizes the control interface, making AV systems simple to use for anyone.



Display ON/OFF
Two large, backlit buttons simplify display power operation and eliminate the need for a handheld display remote

Section 508 Compliant
Meets or exceeds accessibility standards for Electronic Information Technology

Tri-color, Backlit Buttons
Helpful for presenters in low light environments

Volume Control
Five level status LEDs provide visual representation of the current volume setting

Removable Button Caps
Make it easy to label each button; labels can be changed quickly without programming or engraving.

Inactivity Timer for Display Shut-Off
Adjustable timer controls automatic shutdown to conserve energy and extend projector lamp life

Front Panel Security Lockout
Four-digit "PIN" prevents unauthorized system tampering

IP Link
Enables remote monitoring, control, and asset management

Faceplate Options
White and black faceplates are standard

FEATURES

- Two bidirectional RS-232 ports for universal display and switcher control
- Three digital I/O ports configurable as a digital input or digital output for sensors, switches, LEDs, and relays
- Dedicated IR port for control of IR-controllable display devices and source equipment, such as VCRs and DVD players
- IR learning capability for capturing IR remote codes from a device’s handheld remote control
- Adjustable timer controls automatic shutdown to preserve energy and extend projector lamp life
- Front panel security lockout prevents unauthorized tampering
- Tri-color, backlit, easy-to-label buttons
- Volume control knob with volume indication
- IP Link Ethernet monitoring and control
- Integrated high performance Web server with 7.25 MB flash memory for storing device drivers, GlobalViewer, and custom user Web pages

PoleVault Switcher

At the heart of each PoleVault Digital Classroom AV System is the PVS 405D. With support for up to four HDMI or VGA video inputs, a switched audio input, and an integrated stereo audio amplifier, it meets the needs of most single display AV environments.

The PVS 405D provides two inputs for PVT SW AV Input wallplates. These dual input wallplates provide connections for common classroom sources including a laptop, Tablet, Apple TV, Blu-ray, document camera, and more. Digital AV signals are transmitted to the switcher over a single CATx shielded twisted pair cable, and employ Extron active twisted pair technology for high reliability and maximum performance.

The PVS 405D features sophisticated audio capabilities. The integrated 50 watt stereo audio amplifier is capable of driving up to four Extron speakers and filling the room with full, rich sound. The VoiceLift® receiver input simplifies VoiceLift microphone installation. Switched and auxiliary line-level inputs support audio only sources such as music players or public address systems. A line level output allows system audio to be used for podcasting or assistive listening.

As an ENERGY STAR qualified AV product, the PVS 405D switcher includes Extron-exclusive power saving modes designed to lower energy usage and reduce operating costs.

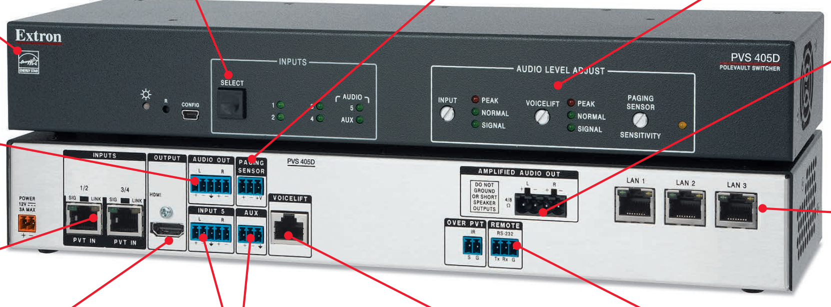
The PVS 405D also provides a three port network switch. This allows two devices in the room to share a single network drop.

Energy Efficiency
Designed to reduce power consumption and lower operating costs

Input Selection
For sequencing through switched inputs

Priority Paging
Mutes audio when an announcement from the public address system is detected

Level and Sensitivity
Adjustments for source audio, aux audio, VoiceLift audio and the paging sensor



Line Level Output
Configurable audio output for podcast recording, assistive listening, or larger amplifiers

Integrated Amplifier
For stereo or dual mono operation providing 25 watts per channel

Network Switch
Allows two devices to share a single network drop

Source Inputs
Switching wallplates connect via a single CATx cable

Video Output
Provides an HDMI signal to drive a projector or flat panel display

Switched and Aux Audio Inputs
Supports audio only sources and integrates PA announcements from 3rd party systems

VoiceLift Receiver Input
Simplifies installation of the VoiceLift microphone

Control Port
Compatible with MediaLink and TouchLink control systems

FEATURES

- Available exclusively as part of PoleVault Digital Classroom Systems
- Receives HDMI and VGA video and audio signals from PVT SW AV Input wallplates over a single CATx shielded twisted pair cable
- Integrated 50 watt rms audio amplifier for stereo or dual mono audio
- Three port network switch allows two devices to share a single network drop
- ENERGY STAR qualified AV product designed to lower energy usage and reduce operating costs
- VoiceLift receiver input simplifies installation of the VoiceLift microphone
- Switched and auxiliary line-level inputs support music players and 3rd party public address systems
- Configurable audio line output for podcast recording, assistive listening systems, or adding an additional amplifier
- AV input wallplates use active twisted pair technology to transmit high resolution digital AV for high reliability and maximum performance

System Components

POLEVAULT DIGITAL

AUDIO IN
HDMI IN
IR OUT
AUDIO IN
HDMI IN
Extron

PVT SW HDMI D

PoleVault Digital Input, Dual HDMI - Decora® Wallplate

- Transmits one of two HDMI video and audio signals over one CATx shielded twisted pair cable
- HDCP compliant
- EDID Minder automatically manages EDID communication between connected devices
- IR pass-through provides control connections for DVD/VCR players, tuners, switchers, or other IR controllable devices

AUDIO IN
HDMI IN
IR OUT
Extron
AUDIO
IN
OUT
VGA IN
LOCAL OUT

PVT SW HDMI RGB D

PoleVault Digital Input, HDMI and VGA - Decora® Wallplate

- Transmits HDMI or VGA computer video and audio signals over one CATx shielded twisted pair cable
- HDCP compliant
- Built-in distribution amplifier provides local monitor output
- Audio pass-through supplies PoleVault audio content for podcasting or assistive listening systems
- EDID Minder automatically manages EDID communication between connected devices

SWITCHER

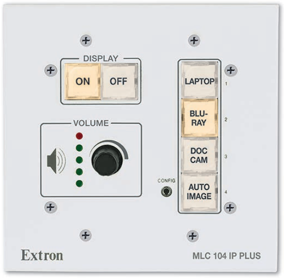
Extron
PVS 405D
INPUTS
AUDIO LEVEL ADJUST

PVS 405D

IP-Enabled Digital PoleVault Switcher with Integrated Audio Amplifier

- Receives high resolution HDMI and VGA video and audio signals from PVT SW AV input wallplates
- AV signals are transmitted over a single CATx cable and use active twisted pair technology for high reliability and maximum performance
- Integrated 50 watt audio amplifier
- Three port network switch rop
- ENERGY STAR qualified AV product

CONTROLLER

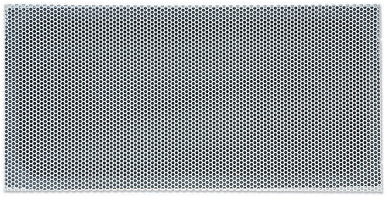


MLC 104 IP Plus

MediaLink Controller with IP Link

- Two bidirectional RS-232 ports for display and switcher control
- IP Link Network monitoring and control
- Front panel security lockout
- Configurable tri-color backlit buttons
- Volume control with indicators
- Support for optional IRCM control modules

AUDIO



FF 120

Extron Exclusive Patented Flat Field Speaker

- Plenum rated ceiling speakers designed for classrooms with a drop ceiling
- 1' x 2' (30.5 cm x 61 cm), 4.7 lb (2.1 kg) drop-in ceiling tile enclosure for suspended ceilings
- Extron patented Flat Field Technology for consistent sound levels across the listening area
- 3" (7.6 cm) horn-loaded, full-range driver provides extended low frequency reproduction
- Wide 170° dispersion
- Designed and manufactured by Extron

VoiceLift Microphone

Infrared Wireless Microphone For Use With PoleVault Systems

- Lightweight pendant microphone can be worn around the neck or clipped onto clothing
- Handheld microphone is ideal for student use, team teaching, or guest speakers
- Advanced DSP suppresses feedback while maximizing sound quality and intelligibility
- System supports up to two microphones for each classroom
- Instant Alert feature on the pendant enables the teacher to request assistance with the push of a button

System Components

MOUNTING HARDWARE

PMK 560

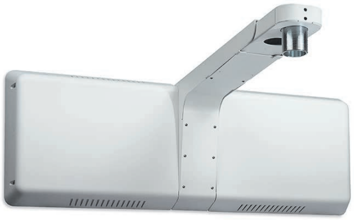
PoleVault Digital Pole Mount Kit

- Securely mounts PoleVault equipment above the projector.
- Provides adequate space for PoleVault equipment with designated locations for the switcher and power supply
- Low profile only requires 3" (7.7 cm) of height between projector and ceiling
- Lightweight design for reduced ceiling structure support requirements
- Built-in cable management with several tie down points for proper strain relief and dressing of excess cable.

PVM 220

PlenumVault Mounting Kit

- Large capacity mounting kit designed to fit in 2' x 2' US style suspended ceilings
- Securely mounts AV system components in the plenum space above a suspended ceiling
- Hinged room-side door for setup and maintenance
- Four integrated AC outlets
- Access door supports a tile insert to match the surrounding ceiling
- Temperature controlled fan provides additional ventilation when required



USFM 100

Ultra Short-Throw Projector Mount and Equipment Enclosure

- Integrated solution for wall-mounting an ultra short-throw projector and AV system components
- Protects AV system components from tampering and theft
- Adjustable arm accommodates projectors with a variety of throw distances up to 30 inches
- Base provides numerous holes to support mounting to wall studs with either 16-inch or 24-inch on center spacing
- Knockouts for conduit and raceway

MOUNTING HARDWARE

WMK 160

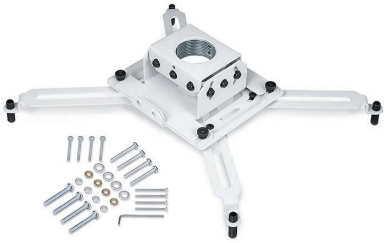
PoleVault Digital Wall Mount Kit

- Securely mounts AV system components to a wall
- Protects components from tampering and theft
- Designed for installations with a flat panel display or wall-mounted, short throw projector
- Large base plate offers a wide variety of mounting and cable management options
- Raceway knockouts are compatible with the most common surface mount systems

PCM 340

Projector Drop Ceiling Mount with Adjustable Pole

- Patent-pending projector drop ceiling mount with adjustable pole for use with suspended ceilings using 2'x2' or 2'x4' tiles
- Provides time- and cost-effective integration of projectors in small boardrooms and classrooms
- Includes single-space and double-space junction box openings
- 25" (63.5 cm) adjustable pole with range from 1.5" to 23" in 0.increments



UPB 25

Universal Projector Bracket

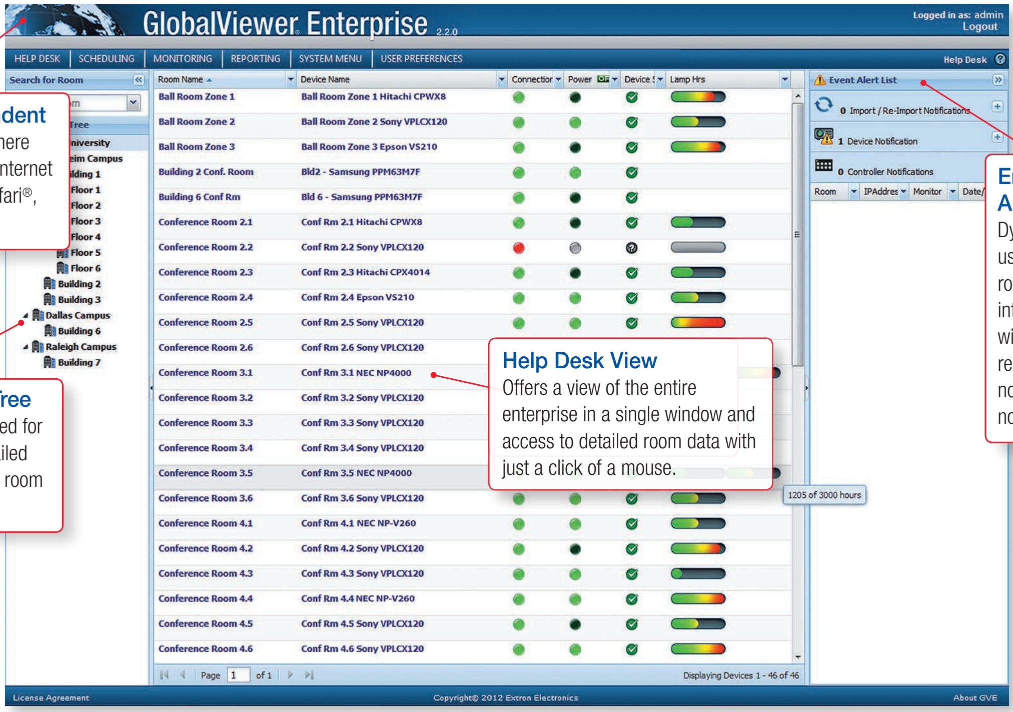
- Universal projector mount compatible with nearly every projector up to 25 pounds
- Independent adjustments of horizontal tilt or roll, vertical angle or pitch, and rotation or yaw
- Precise positioning adjustments are maintained even if projector is removed for service
- Built-in security tabs to prevent theft
- Projector mounting hardware included for attaching projectors to the UPB 25
- Optional security hardware, part # 70-555-01

GlobalViewer Software

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.

GlobalViewer Enterprise

Extron GlobalViewer Enterprise AV asset management software allows administrators and 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.


GlobalViewer Enterprise 2.2.0
Logged in as: admin
Logout
HELP DESK
SCHEDULING
MONITORING
REPORTING
SYSTEM MENU
USER PREFERENCES
Help Desk
Search for Room
Connection
Power
Device S
Lamp Hrs
Event Alert List
0 Import / Re-Import Notifications
1 Device Notification
0 Controller Notifications
Room
IPAddres
Monitor
Date/
1205 of 3000 hours
Page 1 of 1
Displaying Devices 1 - 46 of 46
License Agreement
Copyright© 2012 Extron Electronics
About GVE

Room Name	Device Name
Ball Room Zone 1	Ball Room Zone 1 Hitachi CPWX8
Ball Room Zone 2	Ball Room Zone 2 Sony VPLCX120
Ball Room Zone 3	Ball Room Zone 3 Epson VS210
Building 2 Conf. Room	Bld2 - Samsung PPM63M7F
Building 6 Conf Rm	Bld 6 - Samsung PPM63M7F
Conference Room 2.1	Conf Rm 2.1 Hitachi CPWX8
Conference Room 2.2	Conf Rm 2.2 Sony VPLCX120
Conference Room 2.3	Conf Rm 2.3 Hitachi CPX4014
Conference Room 2.4	Conf Rm 2.4 Epson VS210
Conference Room 2.5	Conf Rm 2.5 Sony VPLCX120
Conference Room 2.6	Conf Rm 2.6 Sony VPLCX120
Conference Room 3.1	Conf Rm 3.1 NEC NP4000
Conference Room 3.2	Conf Rm 3.2 Sony VPLCX120
Conference Room 3.3	Conf Rm 3.3 Sony VPLCX120
Conference Room 3.4	Conf Rm 3.4 Sony VPLCX120
Conference Room 3.5	Conf Rm 3.5 NEC NP4000
Conference Room 3.6	Conf Rm 3.6 Sony VPLCX120
Conference Room 4.1	Conf Rm 4.1 NEC NP-V260
Conference Room 4.2	Conf Rm 4.2 Sony VPLCX120
Conference Room 4.3	Conf Rm 4.3 Sony VPLCX120
Conference Room 4.4	Conf Rm 4.4 NEC NP-V260
Conference Room 4.5	Conf Rm 4.5 Sony VPLCX120
Conference Room 4.6	Conf Rm 4.6 Sony VPLCX120

Browser Independent
Accessible from anywhere on the network using Internet Explorer®, Firefox®, Safari®, and Google® Chrome

Room Location Tree
Rooms can be organized for easy drill down to detailed room data and remote room control Web pages.

Help Desk View
Offers a view of the entire enterprise in a single window and access to detailed room data with just a click of a mouse.

Enhanced Event Alert List
Dynamic view of user-defined critical room events broken out into three collapsible windows: import/re-import, device notification, controller notification

GlobalViewer Enterprise - Help Desk View

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 email 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.

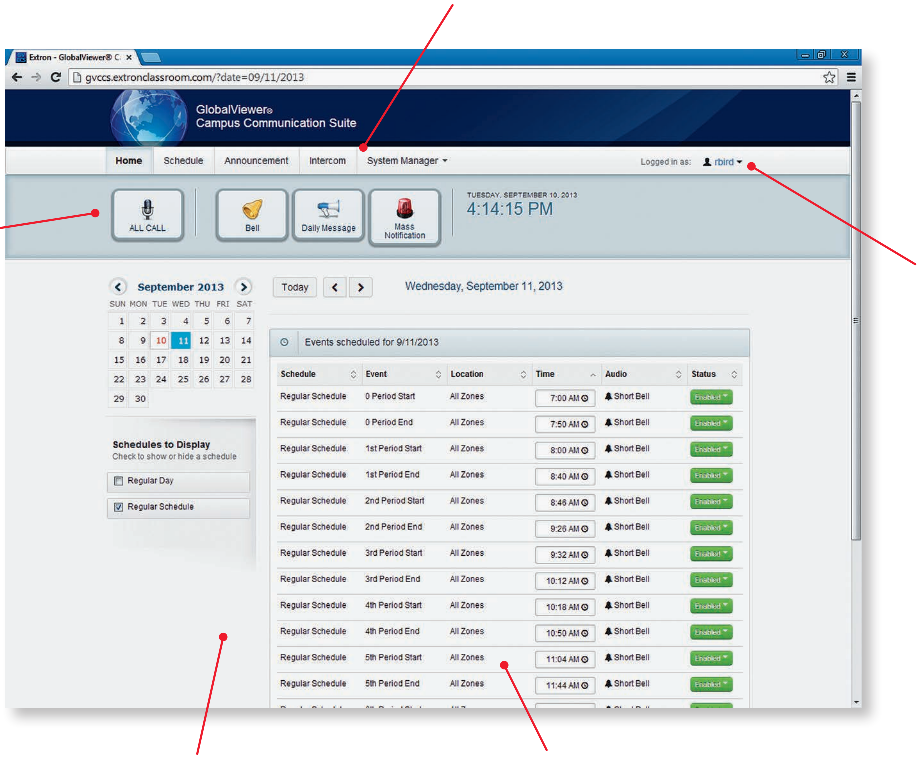
iGVE

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 iPhone and iPod touch devices.

GlobalViewer Campus Communication Suite

Extron GlobalViewer Campus Communication Suite is a complete solution for unifying all campus audio and video 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.

Menu Bar
Easy access to schedules, live/pre-recorded announcements and system configuration


Extron - GlobalViewer® C
gvccs.extronclassroom.com/?date=09/11/2013
GlobalViewer®
Campus Communication Suite
Home
Schedule
Announcement
Intercom
System Manager
Logged in as:
rbird
ALL CALL
Bell
Daily Message
Mass Notification
TUESDAY, SEPTEMBER 10, 2013
4:14:15 PM
September 2013
Today
Wednesday, September 11, 2013
Schedules to Display
Check to show or hide a schedule
☐ Regular Day
☑ Regular Schedule

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Events scheduled for 9/11/2013

Schedule	Event	Location	Time	Audio	Status
Regular Schedule	0 Period Start	All Zones	7:00 AM	Short Bell	Enabled
Regular Schedule	0 Period End	All Zones	7:50 AM	Short Bell	Enabled
Regular Schedule	1st Period Start	All Zones	8:00 AM	Short Bell	Enabled
Regular Schedule	1st Period End	All Zones	8:40 AM	Short Bell	Enabled
Regular Schedule	2nd Period Start	All Zones	8:46 AM	Short Bell	Enabled
Regular Schedule	2nd Period End	All Zones	9:26 AM	Short Bell	Enabled
Regular Schedule	3rd Period Start	All Zones	9:32 AM	Short Bell	Enabled
Regular Schedule	3rd Period End	All Zones	10:12 AM	Short Bell	Enabled
Regular Schedule	4th Period Start	All Zones	10:18 AM	Short Bell	Enabled
Regular Schedule	4th Period End	All Zones	10:50 AM	Short Bell	Enabled
Regular Schedule	5th Period Start	All Zones	11:04 AM	Short Bell	Enabled
Regular Schedule	5th Period End	All Zones	11:44 AM	Short Bell	Enabled

Quick Links
Make an immediate all call live or pre-recorded announcement with the push of a button

User Roles
Grant access to features based on user login

Web-Based
Runs in a standard Web browser from any computer on the network

Home Screen
Shows schedule of events for selected day

Flexible Bell Scheduling

GlobalViewer Campus Communication Suite allows bell schedules to 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 Access to Public Address Announcements

GlobalViewer Campus Communication Suite supports 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. Routine announcements may be pre-recorded and played back at the push of a button.

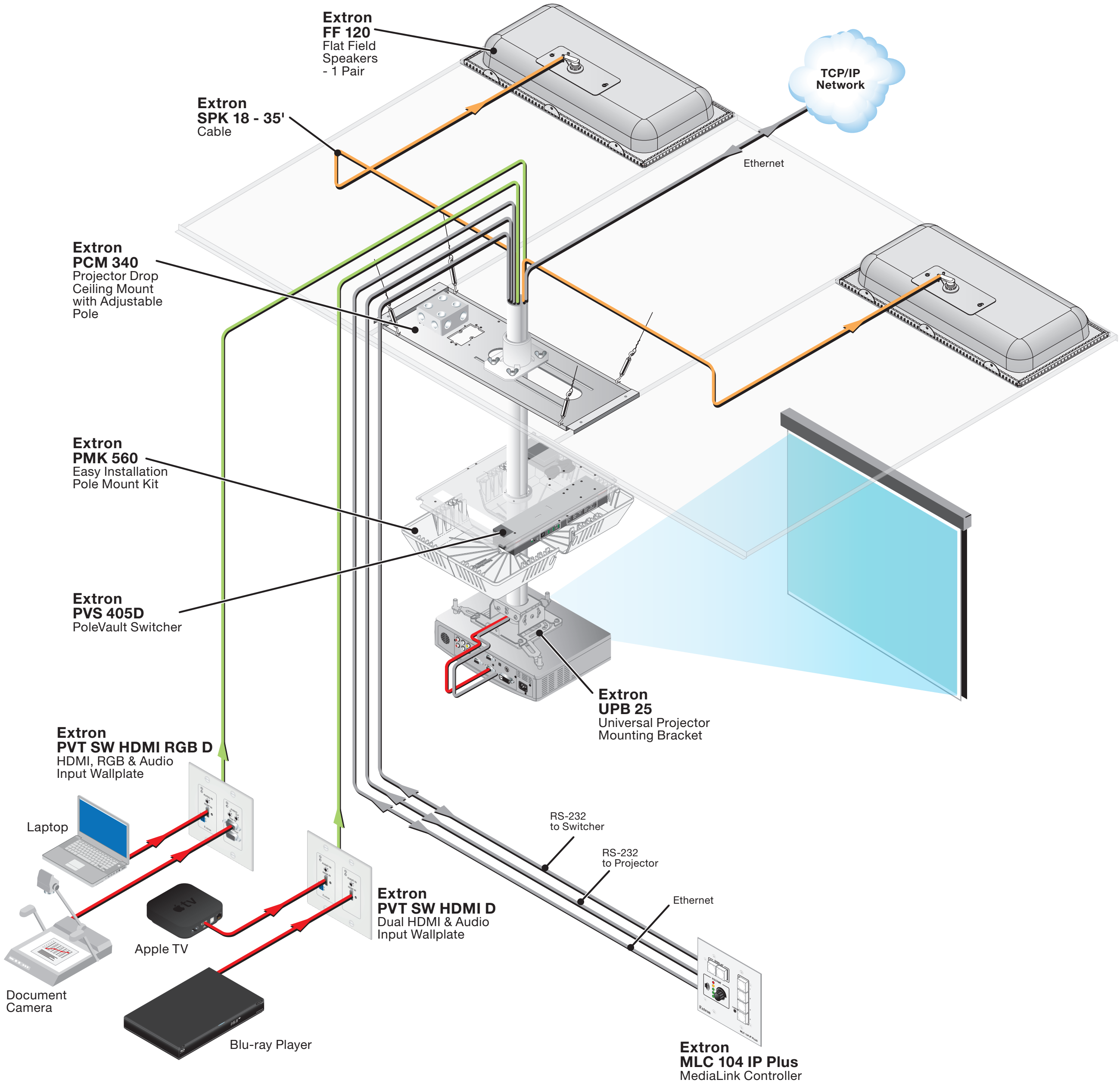
Simplified Control

Managing campus audio systems is easy. GlobalViewer Campus Communication Suite software runs in a standard web browser from any computer on the network. Using the intuitive graphical user interface, office personnel can administer the bell schedule, make announcements, or have two-way communication with classrooms.

Integrated Intercom System

The intercom capability of GlobalViewer Campus Communication Suite provides two-way voice communication over the network. Flexible setup options allow users to be connected with the office or help desk.

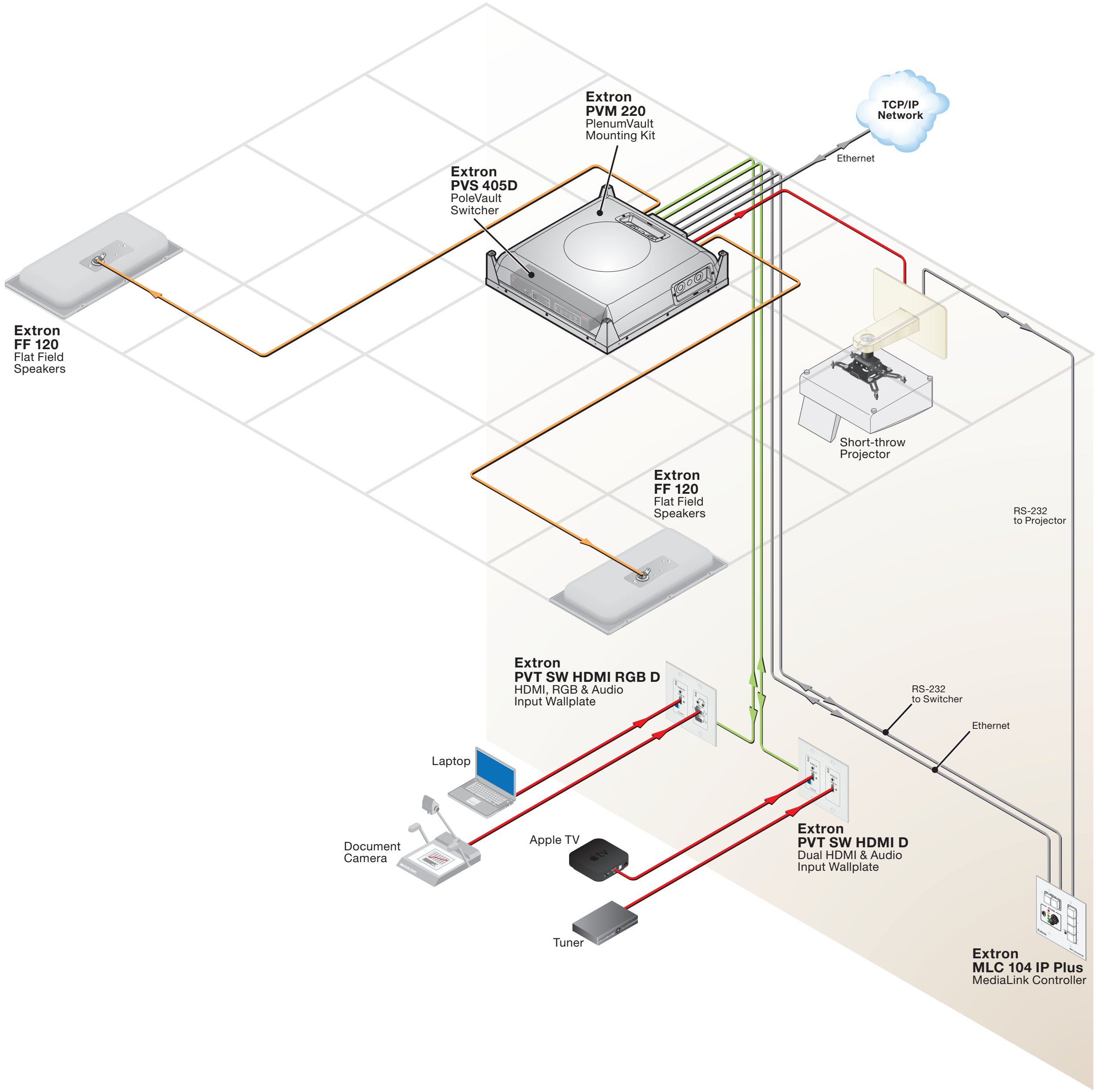
Four Input Digital PoleVault System


Extron
FF 120
Flat Field
Speakers
- 1 Pair
TCP/IP
Network
Extron
SPK 18 - 35'
Cable
Ethernet
Extron
PCM 340
Projector Drop
Ceiling Mount
with Adjustable
Pole
Extron
PMK 560
Easy Installation
Pole Mount Kit
Extron
PVS 405D
PoleVault Switcher
Extron
UPB 25
Universal Projector
Mounting Bracket
Extron
PVT SW HDMI RGB D
HDMI, RGB & Audio
Input Wallplate
Laptop
RS-232
to Switcher
RS-232
to Projector
Ethernet
Extron
PVT SW HDMI D
Dual HDMI & Audio
Input Wallplate
Apple TV
Document
Camera
Blu-ray Player
Extron
MLC 104 IP Plus
MediaLink Controller

PVS 400D

Four Input Digital PoleVault System

Four Input Digital PlenumVault System


Extron
PVM 220
PlenumVault
Mounting Kit
TCP/IP
Network
Ethernet
Extron
PVS 405D
PoleVault
Switcher
Extron
FF 120
Flat Field
Speakers
Short-throw
Projector
Extron
FF 120
Flat Field
Speakers
RS-232
to Projector
Extron
PVT SW HDMI RGB D
HDMI, RGB & Audio
Input Wallplate
RS-232
to Switcher
Ethernet
Laptop
Document
Camera
Apple TV
Extron
PVT SW HDMI D
Dual HDMI & Audio
Input Wallplate
Tuner
Extron
MLC 104 IP Plus
MediaLink Controller

PLS 410D

Four Input Digital PlenumVault PoleVault System

Extron Grant Program and K-12 Web Site

Extron's aggressive Classroom Technology Grant Programs are just one more example of our commitment to enhancing the K-12 learning environment. To date, Extron has granted more than $7.5 million worth of equipment to over 1,200 classrooms in U.S. school districts.

The **Extron Classroom AV and VoiceLift Grant Programs** 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.

The **Extron GlobalViewer Enterprise Grant Program** provides qualifying school districts with our server-based, AV system monitoring and resource management software.

Each grant award includes installation of Extron classroom system technology, along with complete training.

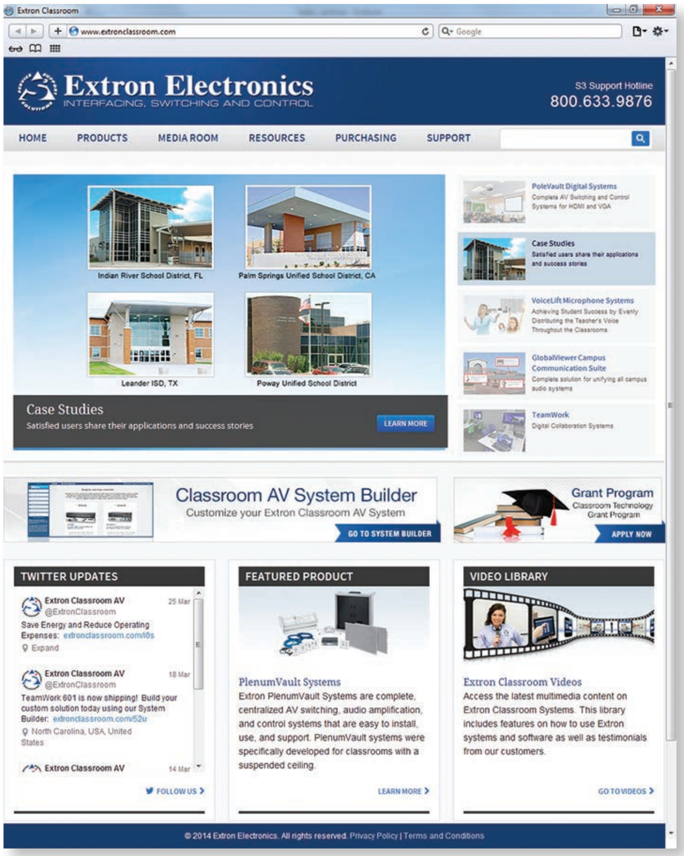
Training and Support Included

Once the grant has been awarded, an authorized Extron integrator will contact you to review the details of the system and schedule installation and training. From that point forward, you will have all the time you need to evaluate the system and its impact on teachers and students. All equipment, installation, and training are provided free of charge, with no required commitment for future purchases. It is important to note that your grant classroom is backed by Extron's industry leading S3 support. We offer 24/7 telephone assistance and have a nationwide network of specialists to ensure the system is optimized for your application.

How to Apply

Applying for an Extron 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.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S3 Support Hotline
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MEDIA ROOM
RESOURCES
PURCHASING
SUPPORT
Indian River School District, FL
Palm Springs Unified School District, CA
Leander ISD, TX
Poway Unified School District
Case Studies
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PoleVault Digital Systems
Case Studies
VoiceLift Microphone Systems
GlobalViewer Campus Communication Suite
TeamWork
Classroom AV System Builder
GO TO SYSTEM BUILDER
Grant Program
Classroom Technology Grant Program
APPLY NOW
TWITTER UPDATES
FEATURED PRODUCT
VIDEO LIBRARY
FOLLOW US
LEARN MORE
GO TO VIDEOS

Case Studies: Satisfied users share their applications and success stories

PoleVault Digital Systems: Complete AV Switching and Control Systems for HDMI and VGA

Case Studies: Satisfied users share their applications and success stories

VoiceLift Microphone Systems: Achieving Student Success by Evenly Distributing the Teacher's Voice Throughout the Classrooms

GlobalViewer Campus Communication Suite: Complete solution for unifying all campus audio systems

TeamWork: Digital Collaboration Systems

Classroom AV System Builder: Customize your Extron Classroom AV System

Extron Classroom AV @ExtronClassroom 25 Mar
Save Energy and Reduce Operating Expenses: extronclassroom.com/i0s
Expand

Extron Classroom AV @ExtronClassroom 18 Mar
TeamWork 601 is now shipping! Build your custom solution today using our System Builder: extronclassroom.com/52u
North Carolina, USA, United States

Extron Classroom AV 14 Mar

PlenumVault Systems
Extron PlenumVault Systems are complete, centralized AV switching, audio amplification, and control systems that are easy to install, use, and support. PlenumVault systems were specifically developed for classrooms with a suspended ceiling.

Extron Classroom Videos
Access the latest multimedia content on Extron Classroom Systems. This library includes features on how to use Extron systems and software as well as testimonials from our customers.

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K-12 Web Site for Education Users

www.extronclassroom.com

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 a Login and gain access to:

- Design guides, white papers, product brochures and a wealth of other AV technology resources
- Education pricing for each product
- Classroom AV System 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

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Toll-free 855.882.0063
info@keyconsult.com

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05-2014
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Letter - English - NP