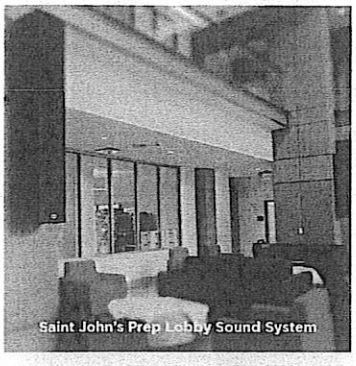
2022 LHS Projector Bids

Date/Time Received	Company	Point of Contact	Phone Number
2/11/2022 10:15 am	Pro AV Systems	Adrienne Blasioli	978-692-5111
2/11/2022 9:00 am Dropbox	One Touch Systems	None listed	None Listed
2/11/2022 11:00 am	RnB Enterprises	Robert Serio	203-426-3679
2/10/2022 3:30 pm	Environmental System Corporation	Bruce Politz	860-953-8800

ORIGINAL

Pro AV Systems

NEW ENGLAND'S LEADING AUDIO VISUAL INTEGRATOR

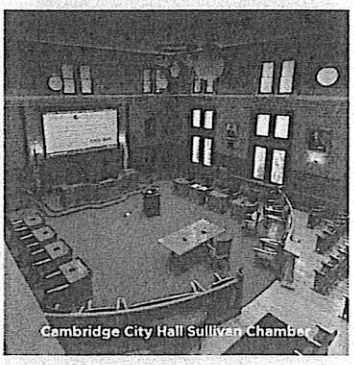

Saint John's Prep Lobby Sound System

Methuen Public Schools TV Studio

Fitchburg State University Conference Room

University of New England Classroom

Boston Children's Hospital Digital Signage


Cambridge City Hall Sullivan Chamber

Berry Talbot Conference Room

Tewksbury Town Hall

Proposal for Audio Visual Services at Ledyard Public Schools

CONTACT INFO:
Adrienne Blasioli
Pro AV Systems
adrienne@proavsi.com
978-692-5111

Pro AV Systems

NEW ENGLAND'S LEADING AUDIO VISUAL INTEGRATOR

Video Displays • Audio Systems • Control Systems • Interactive Systems • Digital Signage • Video Conferencing • IP Streaming • Sound Masking

About Pro AV Systems

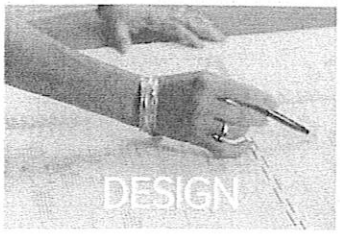
Pro AV Systems is New England's leading audio visual integrator, with offices in Massachusetts, Maine, and Vermont, founded in 1999 by husband-and-wife team Kim and Les Bishop. Now a full-service AV powerhouse, we service all New England today. We treat each project with the same care – and assign a team of professionals to get the job done. From the initial design, engineering and sales process, through installation and training, our team is focused on providing the best service possible to the customer, regardless of the scale or scope of the project.

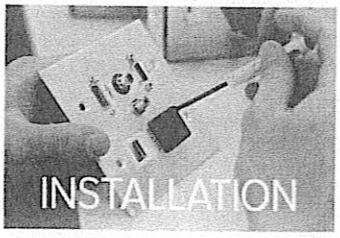
Each year, the team at Pro AV Systems designs, installs and trains on hundreds of systems, and has worked with many different industry partners. From General Contractors and Electrical Contractors, to AV Consultant and End Users, the staff at Pro AV Systems knows that each project is unique and important in its own way. We specialize in design build services, but have about 1/3 of our revenue each year coming from projects that are in new builds or renovation projects. We understand timing, working with other trades and assign Project Managers (onsite) and Project Coordinators (in house) for each project, to make sure that things continue to run smoothly, even if there are hiccups in the building process.

Our team is focused on using technology to make your business more successful and help your days run more smoothly. We provide you with best-of-breed products at an affordable price, while matching functionality and equipment to your specific setting, because each customer is unique. We're educated and trained on industry standards, but we never stop learning. We're constantly trying to expand our knowledge of how things work and why they work – and we've been very successful through this focus. We empower our customers and users by keeping in mind how satisfied we'd be with the quality of our installation work, the capabilities and opportunities each technology presents, and the pricing of our solutions. Our engineers begin each project with a walk-thru of your space, design with your institution's goals and needs in mind, and close your project with in-depth troubleshooting and testing, so you can be assured your system will work when, and how, you need it to. We are proficient users of Crestron, Extron, and Epson products, and have the manufacturer support to back ourselves – and our promise is to make sure that the best possible products are specified into each and every design.

Pro AV's installation staff of highly-qualified and friendly audio visual professionals carries all major industry certifications, employing experts in Crestron, Extron, Biamp, Polycom, Epson, and Cisco. Our installation team's detail-oriented, talented, and always has your best interests in mind on a job site, testing each and every component so you can be assured your system will work when, and how, you need it to. Our engineers and programmers are proficient in multiple control programming languages, and also very skilled with DSP programming, focusing primarily on Biamp, Symetrix, and BSS controls, but understanding how to work within the confines of other systems, integrating and utilizing every piece to deliver the best possible experience.

At Pro AV Systems, our job is only half done when your installation is complete. Our friendly sales and training staff make certain you know, and understand, the capabilities of the new AV system in your space. Ease-of-use and simplicity are of utmost importance, so we can make sure even the most timid users are up and running, in some capacity, on Day 1. We don't expect our users to mold their way of doing things to the technology; rather, they should grow with it and learn the ways it can best enhance their lives.





Pro AV Systems

NEW ENGLAND'S LEADING AUDIO VISUAL INTEGRATOR

Video Displays • Audio Systems • Control Systems • Interactive Systems • Digital Signage • Video Conferencing • IP Streaming • Sound Masking

General Information

Pro AV Systems – Headquarters
275 Billerica Road
Suite 3
Chelmsford MA 01824

Pro AV Systems
17 Patrick Drive
Suite 1
Westbrook ME 04092

Pro AV Systems
74 Cotton Mill Hill
Suite 303
Bratteboro VT 05301

Key Contacts:

David Bishop, CCO
dbishop@proavsi.com
978-674-8733

Adrienne Blasioli, Project Director
adrienne@proavsi.com
978-674-8743

Slade Forni, Project Manager
slade@proavsi.com
978-674-8737

Bjorn Kapsted, Project Manager
Bjorn@proavsi.com
978-674-8741

Lyndsey Baney, Project Coordinator
lyndsey@proavsi.com
978-674-8712

LPS-22-1 Bid Sheet Projectors

Please specify specific models numbers for ancillary equipment

Component	Quantity	Cost	Total
Epson 1485Fi HD projector	10	$2,808.00	$28,080.00
Wall mounted Control panel	10	$57.00	$570.00
Ceiling speakers	10	$479.50	$4,795.00
Cabling	10	$264.00	$2,640.00
Labor		$605.00	$6,050.00
Total			$42,135.00

Please provide pricing for possible future change orders.

Hourly labor rate	$135/HR
Parts discount off list price	Part Dependent
Design	$125/HR

Town bid list is for an apples to apples comparison. Bidders are responsible to ensure that their bids include all equipment, wiring and labor to complete the project. Omissions on the material list provided for the bid are the bidders responsibility. Additional equipment needed should be added to the list and pricing provided. The successful bidder will be required to certify that all employees working on the project do not have any criminal backgrounds or are on a sex offender list. Access to the site during the installation period will be during normal business hours. Other hours can be offered if needed to complete the project on time at the contractors expense.

End of Bid Document

Interactive Projector Bid.
Bid # LPS 22-1

Ledyard Public Schools is seeking bidders for Epson Interactive Projector bid. . Bid packages can be obtained at the Ledyard Public Schools Website at www.Ledyard.net under District/Finance/Bids. Bids are due no later than 11AM on Friday February 11, 2022 at the offices of Ledyard Public Schools 4 Blonders Blvd. Ledyard, CT 06339.

Brightlink

10	**Epson Corporation Brightlink 1485Fi** Brightlink Interactive Ultra-Short Throw, Ultra Wide Laser Display - 1080P Resolution, 5000 Lumens, Wall Mount Not Included		$28,080.00 *
10	Epson Corporation ELPMB62 Ultra-Short Throw Wall Mount	$1,090.00	

Brightlink Total: $28,080.00

Cabling

10	**1 Gang Surface Raceway Kit** Includes 16FT of 1.25" PVC Raceway with Single Gang Surface Box, 90-degree Elbow, Splice Adapter and (2) Drop Ceiling Adapters		$700.00
10	**50FT HDMI and USB Cabling** Cabling to include 50FT of In-Wall Cabling for HDMI and USB to a Wall Plate and provide 10FT Breakout Cables		$1,940.00

Cabling Total: $2,640.00

Wall Mounted Control

10	**Extron Electronics VC 50** Volume Control Wall Plate		$570.00 *
10	Hellermann Tyton TSRFW-JB2 1-Gang Shallow Surface Junction Box - 2"D - Office White	$120.00	
500	Windy City Wire 22/2 Shielded Plenum (Black) 22/2 Shielded Cabling - 22 AWG 2 Conductor Bare Copper, Shielded, Plenum - Black	$125.00	

Wall Mounted Control Total: $570.00

Sound

10	**Classroom Audio System with Ceiling Speakers** Includes (2) Plenum Rated Ceiling Speakers and 40 Watt Amplifier and all Interconnect Cables		$4,795.00

Sound Total: $4,795.00

Pro AV Services

10	**Pro AV Systems Installation** Installation Service for Complete System	$5,400.00
10	**Pro AV Systems Project Management** Project Management & Site Coordination	$650.00

Pro AV Services Total: **$6,050.00**

Project Subtotal: **$42,135.00**

Pro AV Systems

Project Summary

Equipment:	**$36,085.00**
Installation Labor:	**$5,400.00**
Project MNG Labor:	**$650.00**
Grand Total:	**$42,135.00**

Payment Schedule	Amount	Due Date
Upon Purchase Order or Signed Quote (Due Upon Receipt)	$10,533.75	
Equipment Ordered (Due Prior to Install)	$21,067.50	
Upon Completion (NET 30)	$10,533.75	

Acceptance:

I hereby state that I am an authorized representative to approve the purchase and acceptance of the items quoted in the attached documentation along with the above payment terms.

Name: **Title:**

Signature: **Date:**

PRO AV SYSTEMS RESPONSIBILITIES: *The following items are required by Pro AV Systems:*

1. Pro AV Systems will install all equipment in accordance with the manufacturers' specifications, national and local regulation ordinances and codes, including all OSHA guidelines. Unless specifically stated, all work will be performed during the normal working hours of Monday through Friday, between 8:00AM and 5:00PM, except for recognized holidays.

2. Pro AV Systems staff and contractors will conduct themselves in a professional, courteous manner, maintaining a clean- cut appearance and acceptable dress. All Pro AV Systems staff is expected to check in and out with you or an assigned contact at the beginning and end of the workday.

3. Pro AV Systems staff will maintain a clean and safe work environment. All unused materials, containers, tools and equipment will be removed whenever possible. Pro AV Systems will take precautions to protect all floors, walls, windows and other surfaces from stains, marring or other damage.

4. Pro AV Systems cannot be responsible for the operation, performance or warranty of equipment outside this contract. Pro AV Systems does not warrant that equipment supplied by others can be connected or will function properly except as specified by the project documentation.

5. Pro AV Systems will provide customer with all operation manuals and warranty documents.

6. Pro AV Systems will acquire, assemble, deliver and test all specified equipment and components to provide you with a fully functional system.

CUSTOMER RESPONSIBILITIES: *The following items are required by the Customer:*

1. Customer to provide a 120 VAC circuit to all specified equipment locations. These circuits should not be "shared" with other items, such as lighting, phone systems, etc.

2. Customer to provide all computer equipment and peripheral cables (mouse and keyboard cables), designated at OFE or "provided by others" if required.

3. Pro AV Systems strongly recommends that all electrical circuits supplying power to the system originate from the same power panel and phase. Pro AV Systems will take precautions to prevent hum or distortions created by ground differential, electromagnetic or electrostatic fields and to supply adequate ventilation to all equipment as specified by the manufacturer. Pro AV Systems will notify you of any hum or distortions beyond our control caused by interference with the building structure, electrical or existing equipment and advise you of the alternatives to alleviate the problem. Pro AV Systems will advise you of any unsatisfactory operating condition due to temperature, humidity, ventilation, mechanical structure or other safety concern.

4. Pro AV Systems assumes no responsibility for, and will not perform any work related to, electrical wiring

(120 VAC and above).

5. Any additional work not listed in the original scope of work (per customer RFP) will require a Change Order.

6. All network configurations for any equipment connected to the customer network including but not limited to QOS, VLAN, Routing, Firewalls, Multicast, IGMP.

7. All server configrations if required for Active Directory, Exchange, O365, Azure AD, MS Teams, Zoom.

8. Software licenses or accounts required for an operational system including but not limited to Zoom Rooms and Teams Rooms.

TERMS & CONDITIONS:

Section 1 – Proposal Description

1.A. Proposal Description - The project description and specific work to be performed by Pro AV Systems is contained in the document and from herein referred to as the Proposal.

1.B. Proposal Documents - All work covered by this Proposal shall be contained in the Proposal documents including any special provisions, specifications, drawings, addenda, change orders, written interpretations and written orders. Work not covered by contract documents will not be required unless required by reasonable inference as being necessary to produce the intended result. The costs associated with any related work or materials, including, but not limited to electrical, drywall, painting, cabinets etc. are not included unless specifically documented in the Proposal.

1.C. Proposal Changes - The owner may order changes, additions or modifications without invalidating the contract. Such changes must be in writing and signed by the owner. Pro AV Systems will provide the owner in writing the amount of additional costs or reductions resulting from changes ordered within 15 working days unless this requirement is waived in writing by owner. Change Orders shall be paid in full upon acceptance of change and shall not alter the contract's payment schedule. In the case of product unavailability or discontinuation, Pro AV Systems reserves the right to substitute equipment of equal or better quality with owner approval. Pro AV Systems will be held blameless in the case of product unavailability or discontinuation.

Section 2 – General Facility Conditions

2.A. Room Availability - Rooms in which installation is occurring should be made available for the exclusive use of Pro AV Systems during the day(s) of scheduled installation. The room will be available during normal working hours (M-F, 8:00am-5:00pm) in eight (8) continuous hour segments. Any delay in schedule that is due to limited access or client usage that results in a return trip by the technician(s) will be subject to an additional expense charge.

2.B. Electrical Outlets and Pathways - Before audiovisual equipment is installed, the customer will need to provide the following requirements: electrical outlets, floor boxes, conduits and core drills in areas according to specification. Additionally, all power runs are to be clean and properly grounded. All electrical work pertaining to the audiovisual system will need to run on one phase and be installed to code (NEC). Pro AV Systems is not responsible for installing any conduit, floor boxes, trenches or other appurtenances associated with high voltage (120vac and over) equipment.

2.C. Structural Vibrations - Ceiling, walls and floors as well as all other building structures that support audiovisual equipment are to be vibration free. At an additional cost, dampening devices can be made available if needed.

2.D. Furniture – Furniture is to be removed prior to construction. If certain furniture cannot be removed, then it will need to be covered and protected sufficiently by the customer.

2.E. Ceiling Tiles – The customer is to provide extra ceiling tiles of the same pattern and patch number in any room where suspended ceiling tiles are already installed. Ceiling tiles are assumed to be either 2'x2' or 2'x4' in dimension. Other tile sizes may require additional cost for mounting solutions in the form of a change order.

2.F. Merchandise Ownership & Storage – The customer will provide a safe storage area for the equipment sold to or delivered to the job site. Pro AV Systems is not responsible for any loss or damage of merchandise after delivery to the job site except for damage caused by a Pro AV technician (s) during installation.

2.G. Exclusion – The following items are not covered under this agreement and may be subject to additional costs:

1. Acts of Nature: Such as water damage and/or damages caused by fire
2. System abuse or misuse that is determined by Pro AV Systems.
3. User errors – Problems caused by unacceptable connection of equipment, determined by Pro AV Systems.
4. Shipping – Expedited shipping for accelerated time lines or repaired parts.
5. Accessories – Hardware, software and/or accessories not provided or sold by Pro AV Systems.

Section 3 – Existing Equipment

3.A. Documentation – When integrating and/or installing pre-existing equipment into a new system, the customer is asked to provide any documentation that may be required to complete a proper installation. This may include any available source control code or drawings.

3.B. Good Working Order – Pro AV Systems is not responsible for any damage of existing hardware/equipment. The project may be delayed, or a change order may be required if any defective material is found.

3.C. Customer Hardware and Software - Pro AV Systems will not load software of any kind on the customers' computer. Unless stated otherwise, the customer is responsible for all Internet connectivity and computer hardware. In addition, the customer is responsible for the installation of computer software and drivers, all LAN provisioning, switches, network connections, and routers. Customer is required to install all operating systems and systems integration that is needed to run the installed interactive or other hardware devices and display equipment.

3.D. Owner Furnished Equipment – If owner is providing equipment (OFE) that Pro AV Systems is required to install, configure and/or control in order to provide a functional system, Pro AV Systems reserves the right to charge additional

labor hours if the OFE equipment does not perform as originally specified at the time of Proposal acceptance or according to the manufacturer specification.

Section 4 – Schedule, Payments and Business Terms

4.A. Delays and Postponements – Regarding schedule completion of the job, time is of the essence. If Pro AV Systems is delayed at any time in the process of the work by owner change orders, construction delays, delivery delays, fire, project postponement, unavoidable casualties and/or other causes beyond the control of Pro AV Systems, the completion schedule for the Proposal shall be extended at a minimum by the same amount of the time caused by the delay.

4.B. Right of Revision – Pro AV Systems has the right to revise this proposal if information was gained from site visits and other sources that were not available at the time this proposal was created.

4.C. Freight - Shipment fees are ground service only. If the customer requires expedited shipping, the additional fees will be prepaid and added to invoice(s).

4.D. Labor – Labor rates are quoted as regular rates that are non-prevailing wage rates and non-union rates. A change order can be processed for a job that requires the technician to be paid prevailing wage rates or require a union technician(s) to account for the difference in labor expenses.

4.E. Project Initiation Terms and Payments – Payment term details are described in the Proposal. A customer purchase order or signed proposal is required to begin the project. Invoices will be issued according to the terms outlined in the Proposal. For jobs requiring initial deposits, such deposit is due upon receipt of first invoice and no product will be ordered until the required deposit payment is received. All further invoice billing is due Net (30). Owner agrees that the terms outlined in these Contract Terms and Conditions take precedence over any other terms issued such as those that may be issued as part of a customer Purchase Order.

4.F. Credit Card Payments – Please note there will be a processing fee of 3.25% for payments made by credit card.

Section 5 – Warranty and Other

5.A. Warranty - Pro AV Systems warrants installed systems for a period of 90 days from date of acceptance or first beneficial use. During this time, Pro AV Systems will correct any problems at no charge. After the initial 90-day period, any additional service needs will be billed at the current service rate. To provide comprehensive coverage, Pro AV Systems offers extended warranty packages on all installed systems at an additional charge. All warranties do not cover misuse or abuse of the system components or issues caused by owner furnished equipment and interconnected systems provided by others. Interconnected systems include but are not limited to building network infrastructure, telephony (VOIP servers), fire alarms, paging, lighting, security, electrical systems and software. In the event that any of these systems are found to negatively effect the AV system performance, Pro AV Systems shall charge standard service rates on a time and materials basis (minimum 2 hours).

Extended Warranty Package

Pro Care – This warranty covers any and all defects or issues that your system could incur under normal use during the stated warranty period. This includes but is not limited to programming defects, hardware failures, workmanship, warranty processing and exchanges, and any labor required to restore the system to operational order. Hardware warranty replacements are based upon standard manufacturer warranties and replacement policies. Standard ground shipping is included. Standard response times apply.

5.B. Force Majeure – Neither Pro AV Systems or the customer will be responsible for delays that are outside the control of either parties, listed below:

1. Acts of Civil/Military Authorities
2. Floods/Fires/Epidemics or any other acts of God
3. Governmental Rules/Regulations
4. War/Riots
5. Delays in transportation
6. Shortages in raw materials/other products
7. Labor Disputes

5.C. Hours – All services will be provided during normal business hours unless otherwise specified in the proposal: Monday-Friday, 8:00am-5:00pm. National and State Holidays are excluded.

5.D. Suspension of Service Right – If the customer's payment(s) is past due, Pro AV Systems reserves the right to discontinue and/or modify any current or future service either temporarily or permanently.

5.E. Limitation of Liability – Pro AV Systems will not be responsible for any damages from delay of delivery, loss of revenue, data business or goodwill. Pro AV Systems will not be liable for any claim that arose more than one (1) year prior to the institution of suit therein.

AVIXA APEX
AUDIOVISUAL PROVIDER OF EXCELLENCE

Joe Pham, Ph.D., President, AVIXA

Let It Be Known

Pro AV Systems, Inc.

Has been awarded the designation ofAV Provider of Excellence (APEx)from AVIXA by annually demonstrating their commitment to providing quality service to customers, upholding high standards, and advancing industry excellence.

04/03/2018	04/30/2022
Designation Awarded	Expiration/Renewal Date

AVIXA

AUDIOVISUAL AND INTEGRATED EXPERIENCE ASSOCIATION

The Commonwealth of Massachusetts
Executive Office for Administration and Finance
Division of Capital Asset Management and Maintenance
One Ashburton Place
Boston, Massachusetts 02108
Tel. (857) 204-1305
Fax. (617) 727-8284
Email Certification.DCAMM@mass.gov

CHARLES D. BAKER
GOVERNOR

KARYN E. POLITO
LIEUTENANT GOVERNOR

MICHAEL J. HEFFERNAN
SECRETARY
ADMINISTRATION & FINANCE

CAROL W. GLADSTONE
COMMISSIONER

Prime
Certificate of Contractor Eligibility

CONTRACTOR IDENTIFICATION NUMBER: 2715

This Certificate Shall be Used for Submitting Prime Bids Only

1. CERTIFICATION PERIOD:	This Certificate is valid from February 27, 2021 to February 26, 2022*	
2. CONTRACTOR'S NAME:	Pro AV Systems, Inc.	
3. CONTRACTOR'S ADDRESS:	275 Billerica Road Suite 3 Chelmsford, MA 01824	
4. WORK CATEGORIES:	This Contractor is certified to file bids under Massachusetts General Laws Chapter 149, Chapter 149A and Chapter 25A in the following Categories of Work:	
	Telecommunications Systems	
5. EVALUATIONS:	Number of Projects Evaluated:	11
	Average Project Evaluation Rating:	97
	Number of Projects Below Passing:	0
6. PROJECT LIMITS:	Single Project Limit (SPL):	$1,000,000
	Aggregate Work Limit (AWL):	$1,500,000
	General Building Construction Limit:	N/A

7. SUPPLIER DIVERSITY OFFICE CERTIFICATION: N/A

Carol W. Gladstone, Commissioner

1/12/2021
Approval Date

*** NOTICE TO CONTRACTORS:** ***If this contractor becomes uncertified for any reason this Certificate will immediately become void. Complete Applications for Renewal of Contractor Eligibility are due no later than three months PRIOR to the Expiration Date of the Certification Period shown above.***

Reviewer's Initials: MR

OPERATIONAL SERVICES DIVISION
SUPPLIER DIVERSITY OFFICE

THE COMMONWEALTH OF MASSACHUSETTS
Executive Office for Administration and Finance
OPERATIONAL SERVICES DIVISION
One Ashburton Place, Suit 1017
Boston, MA 02108-1552
Charles D. Baker
Governor
Karyn E. Polito
Lieutenant Governor
Michael J. Heffernan
Secretary
Gary J. Lambert
Assistant Secretary for Operational Services Division

October 1, 2020

Ms. Kimberly Bishop
ProAV Systems, Inc.
275 Billerica Road, Suite 3
Chelsmford, MA 01824

Dear Ms. Bishop:

Congratulations! Your firm has been renewed as a minority and woman business enterprise (MBE and WBE) with the Supplier Diversity Office ('SDO') under the business description of **INSTALLATION, INTEGRATION AND SERVICES FOR PROJECTORS, PLASMA & LCD DISPLAYS, AUDIO SYSTEMS, CONTROL SYSTEMS, ELECTRONIC WHITE BOARDS, SCREENS**. Your firm will be listed in the SDO Certified Business Directory and the Massachusetts Central Register under this description. **This letter serves as the sole proof of your SDO certification**. Your designation as a MBE and WBE is valid for three (3) years unless revoked pursuant to 425 CMR 2.00.

Your firm's next renewal date is November 09, 2023. SDO will send written renewal notices to your business and/or e-mail address on file approximately thirty (30) business days prior to your firm's three (3) years certification anniversary. Additionally, every six (6) years, certified companies that wish to remain certified may undergo a substantive review which will require certain updated supporting documentation.

SDO also reserves the right to monitor your firm and to perform random spot checks to ensure the firm continues to meet the certification criteria. Your firm is required to notify the SDO in writing of any material changes. Examples include but are not limited to changes in its business description, as well as business phone number, fax number, business' physical location, webpage and e-mail addresses. Other reportable changes include business structure, ownership (the business is sold or transferred), control and outside employment. You also have a duty to report decertification and debarment notices from this or any other jurisdiction. Failure to abide by the continuing duty requirements shall constitute grounds for the firm's decertification.

We look forward to working with you and your firm to maximize its business opportunities. Should you have any questions, please feel free to contact us via email at wsdo@state.ma.us.

Sincerely,

William M. McAvoy
Deputy Assistant Secretary and
Chief Legal Counsel

References

Balmer Elementary School, Northbridge, MA
Project Description: New school front of classroom rollout with projectors and interactive flat panels on carts in each room, digital signage and large venue projectors on carts
System Consultant: Edvance Technology Group, 300 Brickstone Square, # 201, Andover, MA 01810; (978) 256-9900
Architect: Dore & Whittier Architects, Inc., 260 Merrimac Street, Building 7, Newburyport, MA 01950, (978) 499-2999
General Contractor: Fontaine Brothers, Inc., 510 Cottage Street, Springfield, MA 01104, (413) 781-2020
Owner: Northbridge Public Schools, 87 Linwood Avenue, Whitinsville, MA 01588, (508) 234-8156 [School Contact: Greg Palmer, gpalmer@nps.org]
Contract: OFF40 (Vendor Number 215051)

South Community High School, Worcester, MA
Project Description: New school front of classroom rollout with projectors, digital signage and large venue projectors on carts
System Designer: Edvance Technology Group, 300 Brickstone Square, # 201, Andover, MA 01810; (978) 256-9900
Architect: Lamoureux Pagano Associates Architects, 108 Grove Street, Suite 300, Worcester, MA 01605, (508) 752-2831
General Contractor: Fontaine Brothers, Inc., 510 Cottage Street, Springfield, MA 01104, (413) 781-2020
Owner: Worcester Public Schools, 20 Irving Street, Worcester, MA 01609, (508) 799-3115
Contract: OFF40 (Vendor Number 215051)

Middleborough High School, Middleborough, MA
Project Description: New school front of classroom rollout with interactive flat panels, digital signage and large venue spaces (Auditorium, Gym, Café)
System Designer: 3si Strategic Systems Solutions, Inc., 168 Main Street, Northfield, MA 01360, (413) 498-0069
Architect: Drummey Rosane Anderson Architects, 260 Charles Street, Waltham, MA 02451, (617) 964-1700
General Contractor: Fontaine Brothers, Inc., 510 Cottage Street, Springfield, MA 01104, (413) 781-2020
Owner: Town of Middleborough, 10 Nickerson Avenue, 1st Floor, Middleborough, MA 02346, (508) 947-0928

Beal Elementary School, Shrewsbury, MA
Project Description: New school front of classroom rollout with projectors, media center room, digital signage and large venue projectors on carts
System Designer: Art Engineering Corporation, 38 Front Street, Floor 3, Worcester, MA 01608, (508) 797-0333
Architect: Lamoureux Pagano Associates Architects, 108 Grove Street, Suite 300, Worcester, MA 01605, (508) 752-2831
General Contractor: Fontaine Brothers, Inc., 510 Cottage Street, Springfield, MA 01104, (413) 781-2020
Owner: Town of Shrewsbury, 100 Maple Avenue, Shrewsbury, MA 01545, (508) 841-8507

Ivan G Smith Elementary School, Danvers, MA
Project Description: New school front of classroom rollout with projectors, interactive flat panels and digital signage
System Designer: Edvance Technology Group, 300 Brickstone Square, # 201, Andover, MA 01810; (978) 256-9900
Architect: Tappé Architects, Inc., 6 Edgerly Place, Boston, MA 02116, (617) 451-0200
General Contractor: W.T. Rich Company, Inc., 29 Crafts Street, Suite 300, Newton, MA 02458, (617) 467-6010
Owner: Town of Danvers, 1 Sylvan Street, Danvers, MA 01923, (978) 777-0001

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275 BILLERICA ROAD, SUITE 3
CHELMSFORD, MA 01824
[P] 978.692.5111 [F] 978.692.5252

Video Displays • Audio Systems • Control Systems • Interactive Systems • Digital Signage • Video Conferencing • IP Streaming • Sound Masking

	Certification or Licensure Original Issue Date	Certification or Licensure Issuing Manufacturer or Organization	Certification or Licensure Expiration Date
CORPORATE CERTIFICATIONS			
	DCAMM Certified	Division of Capital Asset Management & Maintenance	2/26/2021
	APEx Certified	AVIXA (formerly Infocomm)	4/3/2021
	SDO Certified	Commonwealth of MA	11/9/2021
	MBE/WBE/MWBE	Commonwealth of MA	11/9/2021
	WOSB Certified	U.S. Women's Chamber of Commerce	10/1/2021
	MA Statewide Contract OFF40	Commonwealth of MA - Audio/Video	12/31/2021
	MHEC Statewide Contract MC15-B11	Massachusetts Higher Educatoin Consortium	9/30/2023
	Certificate of Good Standing and Fully Insured/Bonded	Commonwealth of MA	12/31/2021
	Epson Brightlink Certified Expert	Epson	
	Gold Safety Award	Construct Secure	10/1/2022
KIM BISHOP *President, Owner*			
YEARS OF EXPERIENCE: 20+	CTS Certified	AVIXA (formerly Infocomm International)	4/30/2022
	Digital Signage for Tech Managers Certification	InfoComm International	
	Extron School of Emerging Technology	Extron	
	Brightlink Pro Collaborative Whiteboard Sales Training	Epson	
	OSHA 10 – Construction Safety	OSHA	
LES BISHOP *CFO, Owner*			
YEARS OF EXPERIENCE: 20+	CTS Certified	AVIXA (formerly Infocomm International)	1/31/2024
	Construction Supervisors License #68690 (effective 9/12/1988)	Commonwealth of MA Dept.of Public Safety Board of Bldg.	9/12/2020
	Lift Operation Certification	Construction Equipment Rentals (CER)	
	Crestron Programming Fundamentals 5/2006	Crestron Electronics	
	Radio & TV Master Technician License #9952 (effective 12/31/06)	Division of Professional Licensure, MA	
	Registered Professional Engineer #30574 (effective 6/30/1979)	Division of Professional Licensure, MA	6/30/2022
	School of Emerging Technologies	Extron Electronics	
	Business-to-Gov't Specialist (effective 10/19/2008)	IACET/B2G	
	Construction Supervisor License CE Course	Massachusetts Contractors Academy	9/9/2017
	OSHA 10 – Construction Safety	OSHA	
	Telecom Systems Contractor #6177 (effective 9/30/08)	RI Dept. of Labor	9/30/2022
MARK WOODS *Director of Engineering*			
YEARS OF EXPERIENCE: 14	CTS-D Certified	AVIXA (formerly Infocomm International)	9/1/2023
	Crestron Master Technology Architect	Crestron Electronics	
	NAM – AMX Control Designer	AMX University	
	Biamp Nexia Certified	Biamp Corp	
	Biamp Audia Certified	Biamp Corp	
	Biamp Tesira Certified	Biamp Corp	
	Crestron Programmer	Crestron Electronics	
	Crestron System Design (4/21/2008)	Crestron Electronics	
	Crestron Network Solutions - Design (CNS-D)	Crestron Electronics	
	Dante Level 1 Certification	Audinate	
	DMC-E (Digital/Media Certified Engineer)	Crestron Electronics (Lic.#E-105-110204-1900)	
	DMC-D (Digital Media Certified Designer)	Crestron Electronics (Lic.#D-105-110204-3196)	
	DMC-E/4K – DigitalMedia Certified Engineer 4K	Crestron Electronics (Lic.#E-4K-000-120123-1453)	
	CSD- Commercial Shade Designer	Crestron Electronics (Lic.#CSD-000-140715-2256)	
	Lift Operation Certification	Construction Equipment Rentals (CER)	
	Extron System Design (2/2007)	Extron Electronics	
	Extron – Control Associate ECA License	Extron Electronics	
	Extron School of Configurable Control Systems	Extron Electronics	
	Extron A/V Associate Certificate	Extron Electronics	
	School of Emerging Technologies	Extron Electronics	
	XTP-E (XTP Systems Engineer)	Extron Electronics	
	OSHA 10 – Construction Safety	OSHA	
	Telecommunications #6536 (May 1, 2009)	RI Dept. of Labor	
	Polycom Video Conferencing HDX trainer/installer 3/14/09	Sapphire Marketing	
	Polycom RealPresence Platform	Polycom	
	Polycom RealPresence Environment	Polycom	
	Shure Microflex Advance Training	Shure Audio Institute	
	SymNet Certification	Symetrix Engineering	
	Elementi Certified	Spinetix	

DAVID BISHOP — *Chief Commercial Officer*

YEARS OF EXPERIENCE: 14

CTS Certified	AVIXA (formerly Infocomm International)	5/31/2023
Biamp Audio Certified	Biamp Corp.	
Lift Operation Certification	Construction Equipment Rentals (CER)	
Crestron Programmer	Crestron Electronics	
Crestron System Design (4/21/2008)	Crestron Electronics	
Crestron Roomview Designer (4/21/08)	Crestron Electronics	
Crestron Communication System Design (11/11/08)	Crestron Electronics	
Dante Level 1 Certification	Audinate	
DMC-D/4K DigitalMedia Certified Desigher 4K	Crestron Electronics (Lic.#D-4K-000-110204-1954)	
DMC-E (Digital Media Certified Engineer)	Crestron Electronics (Lic.#E-105-110204-1892)	
DMC-D (Digital Media Certified Designer)	Crestron Electronics (Lic.#D-105-110204-3195)	
Epson BrightLink Pro Collaborative Whiteboard Sales Training	Epson	
Epson Large Venue Projectors Course	Epson	
Extron System Design (2/2007)	Extron Electronics	
School of Emerging Technologies	Extron Electronics	
Business –to-Gov't Specialist (effective 10/19/2008)	IACET/B2G	
OSHA 10 – Construction Safety	OSHA	
OSHA 10 – Construction Safety	OSHA	
RM Easiteach Advanced and Math Frameworks Trainer	RM Educational Software	
Polycom Video Conferencing HDX trainer/installer 3/14/09	Sapphire Marketing	
Shure Microflex Advance Training	Shure Audio Institute	

ADRIENNE BLASIOLI — *Director of Bid Desk*

YEARS OF EXPERIENCE: 10

CTS Certified	AVIXA (formerly Infocomm International)	2/28/2022
Crestron Master Sales Associate	Crestron Electronics	
OSHA 10 - Construction Safety	OSHA	
OSHA 30 – Construction Safety	OSHA	
Epson BrightLink Pro Collaborative Whiteboard Sales Training	Epson	
Epson Brightlink Certified Expert: Sales, Installation	Epson	
Topcat Access Installation	Lightspeed	
Lightspeed Access Troubleshooting	Lightspeed	
Top 40 Under 40	Commercial Integrator Magazine 2021	

SLADE FORNI — *Project Manager*

YEARS OF EXPERIENCE: 6

CTS Certified 2016	AVIXA (formerly Infocomm International)	11/30/2021
Project Management Professional, PMP	Project Management Institute; PMP Number: 2757388	3/10/2023
OSHA 10 - Construction Safety	OSHA	
OSHA 30 – Construction Safety	OSHA	

SEAN HAMMOND — *Technician*

YEARS OF EXPERIENCE: 12

CTS Certified 2/2012	AVIXA (formerly Infocomm International)	12/31/2023
CTS AV Installation Test: Cable Termination, Cable Handling,	InfoComm Academy Professional Education & Training	
OSHA Safety Course June 2, 2008	AGC-Massachusetts	
Biamp Mix-Minus Certified	Biamp	
AVD	Biamp	
Lift Operation Certification	Construction Equipment Rentals (CER)	
Crestron Programmer	Crestron Electronics	
DMC-D-4K	Crestron Electronics	
DMC-D DigiMedia Certified Designer	Creston Electronics (Lic. #D000-140228-9837	
Configuring for Control	Extron Electronics	
Extron School of Global Configurator 4/24/2008	Extron Electronics	
Extron Certified AV Associate	Extron Electronics	
School of Configurable Control	Extron Electronics	
Project Management for AV	AVIXA (formerly Infocomm International)	
Authorized Service Center Training – Infocus IN series and Ask	Infocus University	
OSHA 10 – Construction Safety	OSHA	

ANDREW CLARK — *Field Service Engineer*

YEARS OF EXPERIENCE: 11

CTS-I Certified 11/30/2015	AVIXA (formerly Infocomm International)	11/30/2022
A/V Technician Certified 11/25/2015	AVIXA (formerly Infocomm International)	
Biamp Mix-Minus Certified	Biamp	
Biamp Tesira Forte Certified Installer	Biamp	
Lift Operation Certification	Construction Equipment Rentals (CER)	
Crestron Programmer	Crestron Electronics	
Crestron DMC-D	Crestron Electronics	
Crestron Certified Designer 4K	Crestron Electronics	
Crestron CTI-P101 Foundatations of Crestron Programming	Crestron Electronics	
Dante Level 1 Certification	Audinate	
Extron Certified A/V Associate	Extron Electronics	
Extron Control Specialist	Extron Electronics	
OSHA 10 – Construction Safety	OSHA	
Shure Microflex Advance Training	Shure Audio Institute	

KENNY SOULEOTIS — *Warehouse Manager*

YEARS OF EXPERIENCE: 11

CTS Certified 2/2012	AVIXA (formerly Infocomm International)	2/28/2021
Lift Operation Certification	Construction Equipment Rentals (CER)	
School of Audio Visual Technologies for System Design	Extron Electronics	
OSHA 10 – Construction Safety	OSHA	

NATE HUBBARD *Technician*			
YEARS OF EXPERIENCE: 3	CTS Certified 9/2020	AVIXA (formerly Infocomm International)	10/31/2023
	OSHA 10 – Construction Safety	OSHA	
ALISHA LEBLANC *Project Manager*			
YEARS OF EXPERIENCE: 3	CTS Certified 10/2020	AVIXA (formerly Infocomm International)	11/30/2023
	Project Management for AV	AVIXA (formerly Infocomm International)	
	OSHA 10-Construction Safety	OSHA	
	OSHA 30-Construction Safety	OSHA	
JEFF TAYLOR *Technician*			
YEARS OF EXPERIENCE: 6	OSHA 10-Construction Safety	OSHA	
	Safari Montage Technician Certified	Safari Montage	
RYAN ACKLEY *Field Engineer*			
YEARS OF EXPERIENCE: 9	CTS-I Certified	AVIXA (formerly Infocomm International)	6/30/2023
	Biamp VoIP Certification - Level 1	Biamp	
	Biamp Tesira Forte Certified Installer	Biamp	
	Biamp TesiraSERVER/SERVER-IO Training	Biamp 1/30/19	
	C2G "The 5 A/V Technologies That Will Define the Next 5	C2G	
	C2G "Digital Video at Length"	C2G	
	Chief Mfg. Certified Installer	Chief	
	Crestron DMC-D Certified Digital Media Designer	Crestron Electronics	
	Crown I-Tech HD Certified User	Crown	
	Dante Level 1 Certification	Audinate	
	Dante Level 2 Certification	Audinate 1/3/2019	
	Foundations of Crestron Programming CTI-P101	Crestron Electronics	
	Extron School of Audio Visual Technologies for System Designers	Extron Electronics	
	Extron "Configuring for Control"	Extron Electronics	
	Extron Certified Control Professional	Extron Electronics	
	Listen Technologies Hearing Loop Certification - Level 1	Listen Technologies	
	OSHA 10-Construction Safety	OSHA	
	Shure Microflex Advance Training	Shure Audio Institute	
SCOTT JORDAN *Design Engineer*			
YEARS OF EXPERIENCE: 25	CTS Certified 10/2020	AVIXA (formerly Infocomm International)	11/30/2023
	Avixa Academy Essentials of AV Technology	AVIXA (formerly Infocomm International)	
	Avixa Academy Front Work for Live Events	AVIXA (formerly Infocomm International)	
	Tesira Training Certification	Biamp (Certification Number 8327)	
	Chief Mfg. Certified Installer	Chief	
	Foundations of Crestron Programming CTI-P101	Crestron Electronics	
	Crestron Digital Media Streaming, DMC-S Certified	Crestron Electronics (Certification Number S-366-161103-1300)	
	Crestron Digital Media NVX Design and Application, NVX-N Cerified	Crestron Electronics (Certification Number NVXN-366-190226-1249)	
	Crestron Digital Media Certified Designer, DMC-D Certified	Crestron Electronics (Certification Number D-149-110322-4597)	
	DNH Commercial Loudspeaker Course	DNH	
	Extron Consultant School of Emerging Technologies	Extron Electronics	
	Extron Fiber Optic Systems Advanced Training	Extron Electronics	
	Extron Videowall Systems Advanced Training	Extron Electronics	
	Extron XTP Systems Online Training	Extron Electronics	
	Extron XTP-E Certified	Extron Electronics	
	Extron Video Signal Processing Advanced Training	Extron Electronics	
	Extron AV Streaming Technology Advanced Training	Extron Electronics	
	OSHA 10-Construction Safety	OSHA	
	QSC Q-SYS Level 1 and Level 2 Certification	QSC	
	SIA Software / EAW SMAART School Certified	EAW	
	Yamaha Digital System Clinic, Dante for Sound Reinfocement and Distribution	Yamaha	
JACOB AUDET *Installation Manager*			
YEARS OF EXPERIENCE: 5	CTS Certified 2017	AVIXA (formerly Infocomm International)	1/31/2023
	OSHA 10-Construction Safety	OSHA	
ANDREW DOLZANI *Field Engineer*			
YEARS OF EXPERIENCE: 9	CTS Certified	AVIXA (formerly Infocomm International)	6/30/2022
PHILLIP BOISVERT *Technician*			
YEARS OF EXPERIENCE: 3	CTS Certified	AVIXA (formerly Infocomm International)	9/30/2023
GARY BORDELEAU *Project Manager*			
	OSHA 10-Construction Safety	OSHA	
	Commonwealth of MA – Div of Prof. Licensure	Electricians License – Lic#1960D	7/10/2022
BRENDA DESHAIES *Operations Manager*			
YEARS OF EXPERIENCE: 9	Epson BrightLink Pro Collaborative Whiteboard Sales Training	Epson	
	RM Easiteach trainer and Math Frameworks Trainer	RM Educational Software	

STEVEN LEBLANC — *Sales Account Manager*

YEARS OF EXPERIENCE: 2

CTS	AVIXA (formerly Infocomm International)	1/31/2022
Epson Master Brightlink Sales Certification	Epson	

NICOLE GUINTA — *Project Engineer*

YEARS OF EXPERIENCE: 10

CompTIA Security+ Certification	Certification Number - COMP001021414187	12/10/2024
OSHA 10 – Construction Safety	OSHA	
Dante Certification Level 1	Audinate	
Dante Certification Level 2	Audinate	
Dante Certification Level 3	Audinate	
Crestron DigitalMedia Certified Designer – 4K	Crestron Electronics	
Crestron RL-C	Crestron Electronics	
Advanced Residential Certification	Lutron Electronics	
Biamp Tesira Forte	Biamp	
Project Management for AV	AVIXA (formerly Infocomm International)	
AV Design for the Enviornment	AVIXA (formerly Infocomm International)	
Networking Essentials I	AVIXA (formerly Infocomm International)	
Extron School of Audio Visual Technologies for System Designers	Extron Electronics	
Microsoft Lync Technical	Polycom	
Extron Networking Principals	Extron Electronics	
Extron Streaming Principals	Extron Electronics	

MATT CLARKE — *Project Engineer*

YEARS OF EXPERIENCE: 10

Wireless Best Practices & Techniques	Shure Wireless	8/28/2021
Design	Shure Wireless	8/26/2021
Audio Basics for Meetings and Conferences	Shure Wireless	8/20/2021
Chief Certified Partner	Chief Manufacturing	
Certified Product Specialist	ClearOne	
Certified Technical Specialist	ClearOne	
Audio Basics for Conference Rooms	ClearOne	
Da-Lite Academy	Da-Lite	
Extron AV Associate	Extron	
Audio Equalization	AVIXA (formerly Infocomm International)	
AV 101 for Architects	AVIXA (formerly Infocomm International)	
Cable Termination	AVIXA (formerly Infocomm International)	
Economic Snapshot Survey Results	AVIXA (formerly Infocomm International)	
Biamp Tesira Forte	Biamp	
Desco ESD Basics	Desco	
Vidyo Certified Deployment & Support Engineer (VC-DSE)	Vidyo	
Dante Certification Level 1	Audinate	
OSHA 10 - Construction Safety	OSHA	

MARK CRISTOFFELS — *Service Manager*

YEARS OF EXPERIENCE: 16

CTS Certified	AVIXA (formerly Infocomm International)	7/31/2023
Biamp Tesira Forte	Biamp	
Biamp VoIP	Biamp	
TelePresence Video Sales Specialist	Cisco	
ClearOne Specialist	ClearOne	
Crestron DMC-S	Crestron Electronics	
Crestron DigitalMedia Certified Designer – 4K	Crestron Electronics (D-4K-000-140603-2692)	
Crestron RL	Crestron Electronics (Lic RLC-000-140604-1058)	
CTI-P101 - Foundations of Crestron Programming	Crestron Electronics	
Extron School of Audio Visual Technologies for System Designers	Extron Electronics	
Extron IP config	Extron Electronics	
Hilti power tools certified operator	Hilti	
OSHA 10 – Construction Safety	OSHA	
Polycom RealPresence Clariti	Polycom	
Polycom RealPresence Platform	Polycom	
Polycom RealPresence Environment	Polycom	
Polycom Immersive Telepresence	Polycom	
Revolabs Certified Specialist	Revolabs	
SynAudCon Digital	SynAudCon	
Dante Certification Level 1	Audinate	
Microflex Advanced Training	Shure	

BJORN KAPSTAD — *Project Manager*

YEARS OF EXPERIENCE: 6

CTS Certified 11/2020	AVIXA (formerly Infocomm International)	12/31/2023
OSHA 10 – Construction Safety	OSHA	
OSHA 30 – Construction Safety	OSHA	
AV Technology Certificate	AVIXA - Infocomm	

ROBERT O'SHEA — *Service Technician*

YEARS OF EXPERIENCE: 5

CTS Certified 12/2020	AVIXA (formerly Infocomm International)	12/31/2023
OSHA 10 – Construction Safety	OSHA	
OSHA 30 – Construction Safety	OSHA	

MATT BELANGER *Programmer*

YEARS OF EXPERIENCE: 15	Certified Master Programmer - Silver Level	Crestron Electronics	None
	DMC-D/4K DigitalMedia Certified Desigher 4K	Crestron Electronics	None

JAY WHITE Sales *Account Manager*

YEARS OF EXPERIENCE: 35+	Essentials of Crestron Programming	Crestron Electronics	None
	DMC-D/4K DigitalMedia Certified Desigher 4K	Crestron Electronics	None
	Extron Advanced School of AV Technologies I	Extron Electronics	None
	Extron Advanced School of AV Technologies II	Extron Electronics	None
	Extron School of Emerging Technologies	Extron Electronics	None

MIKE LIBBY *Project Manager*

YEARS OF EXPERIENCE: 10	OSHA 10 – Construction Safety	OSHA	
	OSHA 30 – Construction Safety	OSHA	
	Lift Operation Certification	Construction Equipment Rentals (CER)	
	Shure Microflex Advanced Training	Shure	None
	Dante Certification Level 1	Audinate	

TYLER LOGAN *Technician*

YEARS OF EXPERIENCE: 5	CTS	AVIXA (formerly Infocomm International)	7/31/2023
	OSHA 10 – Construction Safety	OSHA	

NICHOLAS CAMELIO *Technician*

YEARS OF EXPERIENCE: 3	CTS	AVIXA (formerly Infocomm International)	10/31/2023
	OSHA 10 – Construction Safety	OSHA	

LINDA IVERS *Strategic Accounts Coordinator, Safety Officer*

YEARS OF EXPERIENCE: 12	OSHA 10 – Construction Safety	OSHA	
	OSHA 30 – Construction Safety	OSHA	

RICH PETERSON *Account Manager*

YEARS OF EXPERIENCE: 5	Selling Newtek Technology	Newtek	
	Newtek Training 3Play Operation	Newtek	
	Newtek Live Production with Tricaster	Newtek	
	Microsoft Teams Room Solution Sales Professional	Microsoft 365	

Estimate

Number: LED 021022

One Touch Systems, LLC
117 Hamilton Avenue
1st Floor
Greenwich, CT 06830

Ledyard Public Schools
4 Blonders Blvd.
Ledyard, CT 06339
Attention: Wayne Donaldson

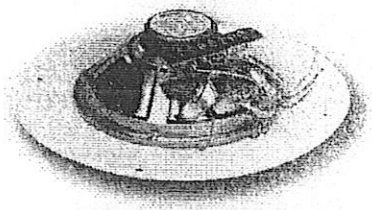
Date:2/10/22

This proposal is valid for 90 days, 75% Deposit Required

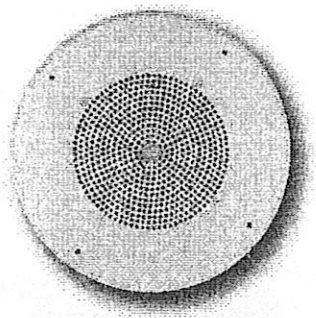
Bid #LPS 22-1 LHS 10 Projectors- Ledyard High School

Component	Quantity	Price	Total
Epson 1485 Fi HD projector-includes control panel	10	$2,739.00	$27,390.00
Epson ELPMB62 Wall Mount	10	$120.00	$1,200.00
Ceiling speakers, each	20	$37.99	$759.80
Speaker tile bridge, each	20	$12.00	$240.00
Amplifier, each	10	$99.99	$999.90
Misc. cabling, wiremould, hardware	10	$140.00	$1,400.00
2 year warranty on parts and labor from date of completion			
Labor @$62.50 per hour	12	$750.00	$9,000.00
		sub total	$40,989.70
Rate	6.350%	sales tax	
		total	$40,989.70

Ceiling Speaker Grille Assemblies



S86T725PG8WBR



S86T725PG8WVK

Description

Bogen's Ceiling Speaker Assemblies consist of an 8" Cone Speaker (S86 or S810) pre-assembled onto a 13" steel ceiling grille painted with off-white (PG8W) or bright white (PG8U) enamel. Options for these assemblies are recessed volume control (VR), volume control with knob (VK), and rear-mounted screw terminal strip for power taps (BR).

Features

- 4-watt capacity
- 8" cone speaker for excellent audio quality
- 6 different power taps available (4, 2, 1, 1/2, 1/4, 1/8 W)
- T725 4-watt transformer
- Off-white enamel over steel grille ("W" versions)
- Bright white enamel over steel grille ("U" versions)
- Pre-assembled for faster installation
- Works with both 70V and 25V amplifier outputs
- Available with volume control – recessed or with knob (VR and VK models only)
- Screw terminals (BR models only)
- 6 oz. or 10 oz. magnet weights

Technical Specifications

Model	Power Taps (in Watts)	Frequency Response	Sensitivity (4 ft./1W)	Magnet Weight	No Volume Control	Recessed Volume Control (VR)	Volume Control w/Knob (VK)	Screw Terminals (BR)	Off-White (W)	Bright White (U)	Shipping Weight (6/Carton)	Dimensions
S86T725PG8W	4, 2, 1, 1/2, 1/4, 1/8 @ 25 & 70V	50 Hz-12 kHz	95 dBspl	6 oz.	●				●		27 lb./carton	13" Dia x 3-1/4" D
S86T725PG8WVR						●			●			
S86T725PG8WVK							●		●			
S86T725PG8WBR					●			●	●		28 lb./carton	
S86T725PG8WBRVR						●		●	●			
S86T725PG8WBRVK							●	●	●			
S86T725PG8U					●					●	27 lb./carton	
S86T725PG8UVR						●				●		
S86T725PG8UVK							●			●		
S86T725PG8UBR					●			●		●	28 lb./carton	
S86T725PG8UBRVR						●		●		●		
S86T725PG8UBRVK							●	●		●		
S810T725PG8W		70 Hz-15 kHz	96 dBspl	10 oz.	●				●		30 lb./carton	
S810T725PG8WVR						●			●			
S810T725PG8WVK							●		●			
S810T725PG8U					●					●		
S810T725PG8UVR						●				●		
S810T725PG8UVK							●			●		

Specifications subject to change without notice.

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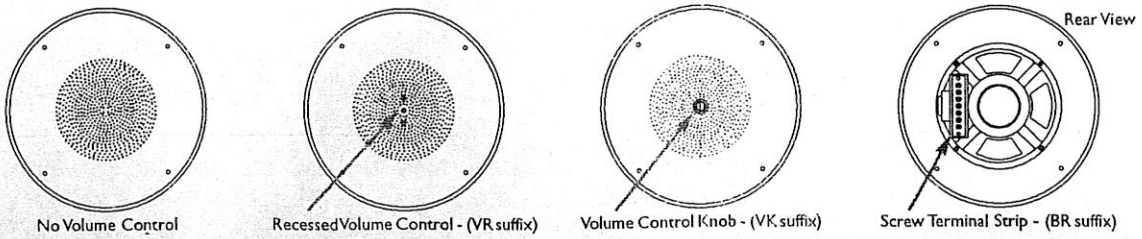
54-7777-08A 0808

BOGEN®

Ceiling Speaker Assembly Variations



Architect and Engineer Specifications

S86T725PG8W & Variations The loudspeaker assembly shall be a Bogen model **S86T725PG8W** (or **S86T725PG8WVR, S86T725PG8WVK, S86T725PG8WBR, S86T725PG8WBRVR,** or **S86T725PG8WBRVK**), or equivalent, 8" cone-type loudspeaker, having a frequency response of at least 50 Hz to 12 kHz. Axial sensitivity shall be 95 dB, measured at 1-watt/4 feet. The loudspeaker shall have a 6 oz. ceramic magnet and a 3/4" voice coil. A transformer, capable of matching an 8-ohm loudspeaker to a 25-volt or 70-volt line, and providing power taps of 4, 2, 1, 1/2, 1/4, and 1/8 watts shall be included. The loudspeaker shall be assembled on a 13" steel ceiling grille, finished in off-white semi-gloss enamel. Assembly depth shall be 3-1/4".

(For **S86T725PG8WVR** add) A recessed volume control shall be included.

(For **S86T725PG8WVK** add) A volume control knob shall be accessible from the front of the grille.

(For **S86T725PG8WBR** add) A terminal strip shall be included for connection of the audio line.

(For **S86T725PG8WBRVR** add) A terminal strip shall be included for connection of the audio line. A recessed volume control shall be included.

(For **S86T725PG8WBRVK** add) A terminal strip shall be included for connection of the audio line. A volume control knob shall be accessible from the front of the grille.

S86T725PG8U & Variations The loudspeaker assembly shall be a Bogen model **S86T725PG8U** (or **S86T725PG8UVR, S86T725PG8UVK, S86T725PG8UBR, S86T725PG8UBRVR,** or **S86T725PG8UBRVK**), or equivalent, 8" cone-type loudspeaker, having a frequency response of at least 50 Hz to 12 kHz. Axial sensitivity shall be 95 dB, measured at 1-watt/4 feet. The loudspeaker shall have a 6 oz. ceramic magnet and a 3/4" voice coil. A transformer, capable of matching an 8-ohm loudspeaker to a 25-volt or 70-volt line, and providing power taps of 4, 2, 1, 1/2, 1/4, and 1/8 watts shall be included. The loudspeaker shall be assembled on a 13" steel ceiling grille, finished in bright white semi-gloss enamel. Assembly depth shall be 3-1/4".

(For **S86T725PG8UVR** add) A recessed volume control shall be included.

(For **S86T725PG8UVK** add) A volume control knob shall be accessible from the front of the grille.

(For **S86T725PG8UBR** add) A terminal strip shall be included for connection of the audio line.

(For **S86T725PG8UBRVR** add) A terminal strip shall be included for connection of the audio line. A recessed volume control shall be included.

(For **S86T725PG8UBRVK** add) A terminal strip shall be included for connection of the audio line. A volume control knob shall be accessible from the front of the grille.

S810T725PG8W & Variations The loudspeaker shall be a Bogen model **S810T725PG8W** (or **S810T725PG8WVR**, or **S810T725PG8WVK**), or equivalent, 8" cone-type loudspeaker, having a frequency response of at least 70 Hz to 15 kHz. Axial sensitivity shall be 96 dB, measured at 1-watt/4 feet. The loudspeaker shall have a 10 oz. ceramic magnet and a 1" voice coil. A transformer, capable of matching an 8-ohm loudspeaker to a 25-volt or 70-volt line, and providing power taps of 4, 2, 1, 1/2, 1/4, and 1/8 watts shall be included. The loudspeaker shall be assembled on a 13" steel ceiling grille, finished in off-white semi-gloss enamel. Assembly depth shall be 3-1/4".

(For **S810T725PG8WVR** add) A recessed volume control shall be included.

(For **S810T725PG8WVK** add) A volume control knob shall be accessible from the front of the grille.

S810T725PG8U & Variations The loudspeaker shall be a Bogen model **S810T725PG8U** (or **S810T725PG8UVR**, or **S810T725PG8UVK**), or equivalent, 8" cone-type loudspeaker, having a frequency response of at least 70 Hz to 15 kHz. Axial sensitivity shall be 96 dB, measured at 1-watt/4 feet. The loudspeaker shall have a 10 oz. ceramic magnet and a 1" voice coil. A transformer, capable of matching an 8-ohm loudspeaker to a 25-volt or 70-volt line, and providing power taps of 4, 2, 1, 1/2, 1/4, and 1/8 watts shall be included. The loudspeaker shall be assembled on a 13" steel ceiling grille, finished in bright white semi-gloss enamel. Assembly depth shall be 3-1/4".

(For **S810T725PG8UVR** add) A recessed volume control shall be included.

(For **S810T725PG8UVK** add) A volume control knob shall be accessible from the front of the grille.

BOGEN®
COMMUNICATIONS, INC.
www.bogen.com

EPSON®
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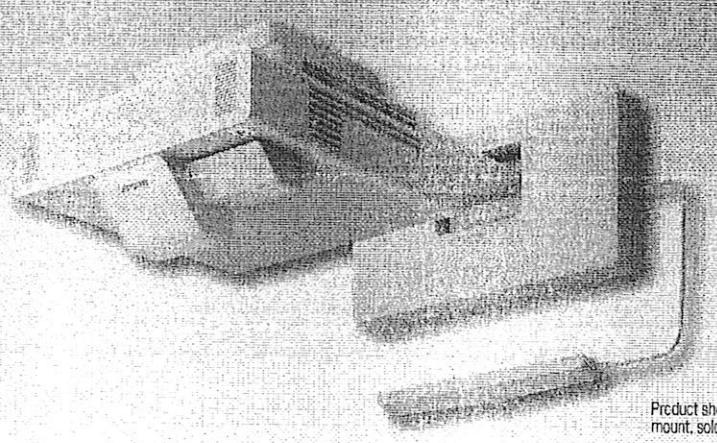
SPECIFICATION SHEET

BrightLink® 1485Fi 1080p 3LCD Interactive Laser Display

Projectors
Education



Product shown with mount, sold separately.

Bring collaboration to classrooms and meeting spaces with this interactive HD 1080p laser display[1].

Super bright — 5,000 lumens color/white brightness[2]; 1080p Full HD laser display[1]

Flexible image sizes — projects large, 100", 16:9 or super-wide 120", 16:6 images — up to 95 percent more interactive space vs. a 75" flat panel

Solid-state laser light source — virtually maintenance-free 20,000-hour laser light source with no lamps[3]

Easy installation — automatic image adjustment and simplified calibration makes installation easier than ever before

Digital whiteboard — draw, save, print and email without a PC; share whiteboard content to other network-connected BrightLink projectors[4]

Easy operation — touch and pen-enabled interactivity[5] allows up to eight users to collaborate at once

Improved cable management — HDBaseT control pad supports, video, audio and interactive functions, reducing the number of cables and making installation a snap[6]

Built-in wireless — use free Epson iProjection™ software to connect, display and share content simultaneously to/from up to 50 connected devices[7]

Connect with Miracast® — supports software-free, peer-to-peer wireless connectivity

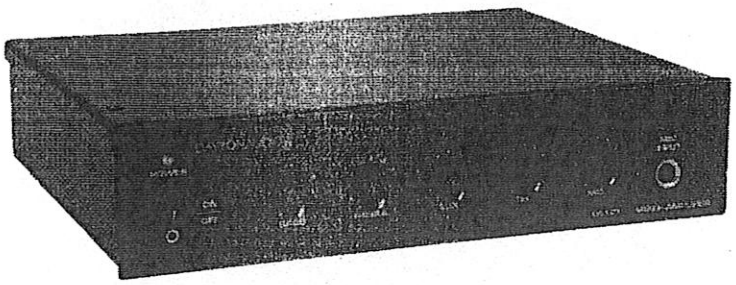
SMART Learning Suite — includes 1-year subscription and support for SMART Notebook®, SMART amp™, SMART lab™, SMART Learning Suite Online and more

DAYTON AUDIO

Your path to great sound.™

10W TABLETOP MIXER-AMPLIFIER 70V/100V

Model: DA10T



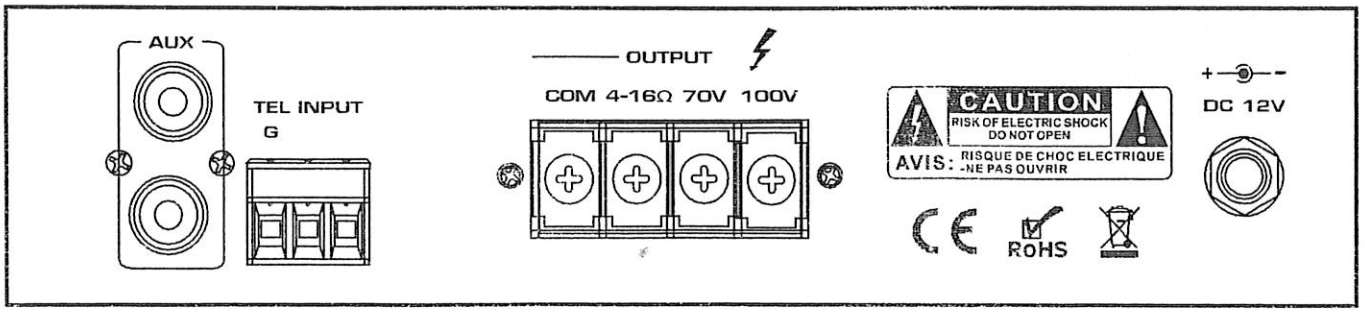
Description: The DA10T provides 10 watts of power for speakers which can be 70V, 100V, or 4 - 16 ohm speakers. Three inputs allow for microphone, line level (BGM), and telephone paging with level controls for each input on the front panel. Bass and treble controls are also present, so you can tailor the response to suit your specific needs.

For added flexibility, the DA10T operates on 12 VDC, and includes a 120 VAC 2A power adapter. For DC operation, simply supply 12V power via the 2.1 x 5.5 mm power jack (plug not included).

Dayton Audio's new commercial mixer-amps have a no-nonsense design for easy installation and use, and several power levels to choose from, so you're sure to find one that meets your needs. Features like 70V/100V or 4 - 16 ohm output and mic/telephone priority muting provide maximum flexibility. And, with the same uncompromising standards of quality and value you've come to expect from Dayton Audio, you know it will be sounding great for years to come.

Features:

- Rated Power: 10W
- 70V, 100V constant voltage outputs and 4-16 ohms constant resistance output.
- 1 channel MIC one-port input (55 mV/500 ohms) and 1 channel (300 mV/500 ohms) AUX input.
- 1 channel TEL input (sensitivity: 1V/500 ohms).
- Built-in treble and bass adjustment (bass: 10 dB at 100 Hz, treble: 10 dB at 10,000 Hz).
- Built-in priority functions, including priority level as follow: TEL override AUX and MIC, MIC is second priority, override AUX signal except TEL signal.



EPSON
EXCEED YOUR VISION

BrightLink® 1485Fi 1080p 3LCD Interactive Laser Display

Projectors | Education

Specifications

Display System Epson® 3LCD, 3-chip technology
Display Method Ceiling/wall mount/table mount
Driving Method Epson Poly-silicon TFT Active Matrix
Native Resolution 1080p[1] (1366 x 768 x 2)
Resolution on Screen 1080p[1] (2.1 million pixels)
Pixel Number 1,049,000 pixels (1366 x 768) x 3 chips
Color Brightness[2] Color Light Output: 5,000 lumens
White Brightness[2] White Light Output: 5,000 lumens
Aspect Ratio 16:9 (native), supports 4:3, 16:10, 16:6, 21:9
Size (Projected Distance) Area (16:9) 65" – 100"
Keystone Correction (Manual)
Horizontal: ± 3 degrees
Vertical: ± 3 degrees
USB Plug 'n Play Mac® 10.7 or later; Windows Vista® or later
Contrast Ratio Up to 2,500,000:1
Color Reproduction Up to 1.07 billion colors
Illumination Technology Laser Diode
Light Source Life[3] 20,000 hours (Normal)
30,000 hours (Extended)

Wireless Specifications

Supported Security Mode
OPEN, WPA2/WPA3-PSK, WPA2/WPA3-EAP
Supported EAP Type PEAP, PEAP-TLS, EAP-TLS, EAP-Fast
Supported Speeds:
IEEE 802.11b: 11 Mbps* (2.4 GHz)
IEEE 802.11g: 54 Mbps* (2.4 GHz)
IEEE 802.11n: 72.2 Mbps* (2.4 GHz)
IEEE 802.11a: 54 Mbps* (5 GHz)
IEEE 802.11n: 150 Mbps* (5 GHz)
IEEE 802.11ac: 325 Mbps* (5 GHz)
*Maximum speed and range is achievable when used with the same Enhanced Mode technology. Actual data rates, features and performance may vary depending on your computer system, the environment and other factors.

Projection Lens

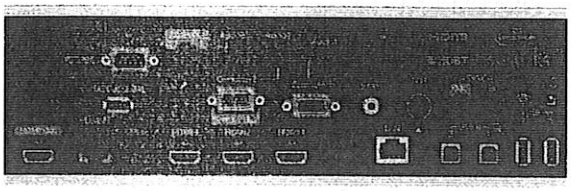
Type Manual focus
F-number 1.50
Focal Length 3.9 mm
Throw Ratio Range (16:9) 0.27 – 0.37, (4:3) 0.37 – 0.50, (16:10) 0.30 – 0.42
Zoom Ratio Digital zoom 1.0 – 1.35x

Other

Speaker 8 W x 2 stereo
Operating Temperature 41° to 104°F (0° to 40°C)
Power Supply Voltage 100 – 240 V ± 10%, 50/60 Hz
Power Consumption
ECO Mode: 270 W
Normal Mode: 381 W
Standby (Communication On): 2.0 W
Standby (Communication Off): 0.5 W
Fan Noise
Quiet Mode: 27 dB, Normal Mode: 36 dB
Security Kensington lock provision, security anchor bar, password-protect function

Interfaces

HDMI®: 3
HDBaseT HDMI out: DS 1
Computer/Component Video: 2x D-sub 15 pin
Composite Video: 1x RCA (Yellow)
Audio In: 3x Mini stereo
Audio Out: 1x Mini stereo
Microphone in: 1
USB Connector: 2x Type B (USB display, audio and mouse, k/b control interactivity)
USB Connector: 2x Type A (USB memory/ document camera)
1x RJ-45
Serial: 1x RS-232c
Monitor Out/Computer: 1x D-sub 15 pin
Integrated Wireless LAN: 802.11 b/g/n/ac
Interactive Synchronization Mini stereo In
Interactive Synchronization Mini stereo Out
Touch Unit Connection Port



Interactivity

Interactive Technology Infrared, 850 nm
Interactive Area (Image Size) 65" – 100" diagonal (16:9, 1080p[1])
Input Device Digital pen or finger
Number of Pens Two
Number of Pen Tips Six (4x Felt/Soft Tip, 2x Teflon™ Hard Tip)
Pen Functions Mouse functions (left and right click), Electronic pen. LED battery status indicator
Pen Specifications Size: 6.3" (L) x 0.95" (W); Weight: 1.1 oz (without battery), Power: AA battery, Compatible Battery Types: AA x 1. Manganese dry cell, Alkaline dry cell, Panasonic eneloop® BK-3MCCx (The suffix "x" can be blank or A-Z), Calibration Method: Automatic or Manual
Interactive Modes
Whiteboard Mode: 2x pens and 6x fingers, PC-free Annotation Mode: 2x pens and 6x fingers, Computer Interactivity Mode, Easy Interactive Tools: 2x pens and 6x fingers
Requirements for Computer Interactivity
Connection to the Computer: Via USB cable or wired/wireless LAN
Software System Compatibility: Epson Easy Interactive Driver for Mac only; Windows® driver for Multi Projection; Windows (single projector) and Linux: No driver required
Mac: Mac OS X® 10.7.x or later
Interactive Software Requirements Epson Easy Interactive Driver (Mac and PC — required for DuoLink); Windows and Linux: driver not required Mac: Mac OS X 10.7/10.8/10.9/10.10/10.11/ macOS 10.12.x Epson Easy Interactive Tools for Windows and Mac
System Compatibility Microsoft® Windows Vista SP2 (All editions except for Starter), Windows 8/8.1, Windows 10, Windows 7 SP1 (All editions except for Starter) macOS® 10.7/10.8/10.9/10.10/10.11/macOS 10.12.x, UBUNTU 15.10, 16.04 LTX, 16.04, 18.04, 19.04

Dimensions (W x D x H)

Including Feet 18.1" x 14.3" x 8.3"
Weight 21.4 lbs with cable cover (9.7 kg)

Remote Control

Features Source search, HDMI, Computer, LAN, USB, Power, Aspect, Color mode, Volume, E-zoom, A/V Mute, Freeze, Menu, Home, Auto, Enter, Esc, Pointer, User, Pen Mode, Split, Home, ID
Operating Angle
Rear: Right/left: -55 to +55 degrees, Upper/lower: +75 to +15 degrees. Front: Right/left: -30 to +30 degrees, Upper/lower: 0 to +60 degrees
Operating Distance 19.7 ft (6 m)

HDBaseT Control Box

Functions Projector On/Off, HDMI source switching, audio/ video/interactivity via CAT6, USB for PC-free saving
Dimensions 7.75" H x 6.9" W x 1.5" D
Power DC 12 V power supply
Supported Distance 40 m (4k 30 fps) or 70 m (1080p[1] 60 fps) via CAT6 cable

Eco Features

Energy-efficient 3LCD light engine
RoHS compliant
Recyclable product[9]
Epson America, Inc. is a SmartWay® Transport Partner[9]

Support

Service Programs Two-year projector limited warranty, Epson Road Service program, PrivateLine® dedicated toll-free support

What's in the Box

BrightLink Pro 1485Fi, lens cover, rear cable cover, interactive touch module and cable, Quick Setup Guide, 6' power cable, USB A/B cable (x1), projector remote control with two AA batteries, HDBaseT control pad with power supply, pen holder, four (4) markers for auto screen adjustment, IR reflectors, two (2) interactive pens, battery charger and two (2) AA rechargeable batteries (for interactive pens), Warranty statement, SMART SLS redemption code

Ordering Information

BrightLink 1485Fi	V11H919520
Air Filter	V13H134A56
PowerLite® Pilot™ 3 (ELPCB03)	V12H927020
Pixie Plus (ELPSP10)	
Document Camera (DC21)	V12H758020
External Speakers (ELPSP02)	V12H467020
Wireless 802.11b/g/n LAN Unit (ELPAP11)	V12H005A02
100" Whiteboard 16:9 Aspect Ratio	V12H006A02
DaLite 100" IDEA Screen	V12H006A01
Interactive Pen A (Orange)	V12H773010
Interactive Pen B (Blue)	V12H774010
Replacement Pen Tips (Hard/Teflon)	V12H775010
Replacement Pen Tips (Soft/Felt)	V12H776020
Ultra Short-throw Wall Mount (ELPMB62)	V12HA06A05
Finger Touch Module	V12H007A23
Touch Module Bracket	V12HA05A09
USB Extension Cable (ELPKC31)	V12H525001

1 Pixel shifting technology achieves Full HD resolution on screen. | **2** Color brightness (color light output) and white brightness (white light output) will vary depending on usage conditions. Color light output measured in accordance with IDMS 15.4; white light output measured in accordance with ISO 21118. | **3** No required maintenance for the light source for up to 20,000 hours. Approximate time until brightness decreases 50% from first usage. Measured by acceleration test assuming use of 0.04 - 0.20 mg/m³ of particulate matter. Time varies depending on usage conditions and environment. Replacement of parts other than the light source may be required in a shorter period. | **4** BL1485Fi and 1480Fi projectors only. Cannot share to earlier models. | **5** Requires Windows 7, Windows 8 or Mac OS X or later to recognize finger gestures. | **6** Supports maximum distance up to 229 feet (Cat6A/7; 1080p) and up to 131 feet (Cat6A/7; 4K content) | **7** For wireless functionality, including via the Epson iProjection App, the projector must be configured on a network, either through the Ethernet port on the projector (check model specifications for availability) or via a wireless connection. Check your owner's manual to determine if a wireless LAN module must be purchased separately to enable a wireless connection. Not all Epson projectors are able to be networked. The Epson iProjection App does not support all files and formats. See www.epson.com for details. | **8** For convenient and reasonable recycling options, visit www.epson.com/recycle | **9** SmartWay is an innovative partnership of the U.S. Environmental Protection Agency that reduces greenhouse gases and other air pollutants and improves fuel efficiency.

Learn more about how our products can empower your institution. Visit us at **www.epson.com/foreducation**

Better Products for a Better Future
eco.epson.com

SmartWay Transport Partner

Contact:

Epson America, Inc.
3840 Kilroy Airport Way, Long Beach, CA 90806

Epson Canada Limited
185 Renfrew Drive, Markham, Ontario L3R 6G3

www.epson.com
www.epson.ca

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Technical Specifications:

Model	DA10T
Speaker output	4~16 ohms, 70V, 100V
Power source	12 VDC
Power consumption	15W
Tone control (Bass: 100 Hz, Treble: 10 kHz)	± 10 dB
Weight	3.97 lbs.
Dimensions	7.87" W x 5.91" D x 1.73" H
Amplifier section (Amp in @ 1 kHz, 8 ohm load output)	
Rated power output (THD 1%)	10W
Input sensitivity/impedance	1V/20,000 ohms
Frequency response (@ 1 kHz half-power output)	80 - 16,000 Hz (+1 dB/-3 dB)
MIC input section (MIC in @ 1 kHz, preamp out)	
Input sensitivity/impedance	55mV/500 ohms
AUX input section (AUX in @ 1 kHz, preamp out)	
Input sensitivity/impedance	300mV/500 ohms
TEL input section (AUX in @ 1 kHz, preamp out)	
Input sensitivity/impedance	1V/500 ohms

Architect & Engineer Specifications:

The amplifier shall be a Dayton Audio DA10T. The amplifier shall provide 70V or 100V constant voltage output with the ability to produce 10 watts. The amplifier shall also provide 4 - 16 ohms constant resistant output. The amplifier shall have an input impedance of 1V, 20,000 ohms at 1 kHz, 8 ohm load output.

The amplifier shall provide three inputs including a 1/4" microphone line level (BMG), balanced AUX (RCA), and a telephone phoenix connector input. The MIC input selection shall provide 55mV, 500 ohm input impedance. The AUX input shall provide 300mV, 500 ohms input impedance. The TEL input shall provide 1V, 500 ohms input impedance. Each input shall have a continuously adjustable input level control mounted on the front panel of the amplifier.

A power indicator on the front panel of the amplifier shall provide the amplifier's power status. The indicator shall illuminate when power is being supplied to the amplifier and the amplifier is turned to the "On" position. The amplifier shall provide an alarm sound when powered on if the amplifier is overloaded, short circuiting, or the input voltage is not stable, too high or too low.

The amplifier shall drive ether the 70V, 100V, or 4-16 ohm output at a single time. If 70V/100V voltage is used the speakers must use a transformer. The total power wattage of the speakers must be 15% less than the power wattage of the amplifier. The total load impedance of the speaker system shall be 490 ohms in 70V configuration and 1,000 ohms in 100V configuration.

The front panel shall provide adjustable bass and treble controls for the output of the amplifier. The bass control shall provide an adjustable boost or cut of 10 dB at 100 Hz, the treble control shall provide an adjustable boost or cut of 10 dB at 10,000 Hz. The amplifier shall provide a frequency response of 80 - 16,000 Hz (+1 dB/-3 dB) at 1 kHz, half power output.

The amplifier shall provide a priority mute function where TEL has priority over all other inputs. MIC is secondary priority, adjusting the mute level shall override all other input signals except for the TEL input.

The amplifier shall operate on 12 VDC via 2.1 x 5.5 mm power jack (not included). The amplifier shall include a 120 VAC 2A power adapter. The amplifier shall consume 15 watts of power while in operation.

The amplifier shall have a compact, lightweight size. The amplifier shall have dimensions of 7.87" W x 5.91" D x 1.73" H. The amplifier shall have a weight of 3.97 lbs.

DAYTONAUDIO

daytonaudio.com
tel + 937.743.8248
info@daytonaudio.com

705 Pleasant Valley Dr.
Springboro, OH 45066
USA

RnB Enterprises, Inc.

115 Hurley Road, #4B/C, Oxford, CT 06478
Telephone: (800) 998-8865 or (203) 426-3679 Fax: (203) 426-1691
www.RnBEnterprises.com
State of CT A/V Contract Holder - #13PSX0090
State of Connecticut Certified Small Business Enterprise
Affirmative Action * Equal Opportunity Employer

February 8, 2022

Ledyard Public Schools
4 Blonders Blvd
Ledyard, CT 06339

Re: Bid# LPS 22-1

Dear Ledyard Public Schools,

Please accept this letter as certification that RnB Enterprises, Inc. will hold our warranty on labor for two years from the date of completion to cover installation issues or service under the length under the manufacturer's warranty.

In addition, we certify that the pricing is valid for a minimum of 90 days.

RnB will begin work in July and complete prior to August 10. Please complete PO process to RnB well in advance of installation so any possible back ordered merchandise is accounted for.

Sincerely,

Robert Serio, Chairman
RnB Enterprises, Inc.

RnB Enterprises, Inc.

115 Hurley Rd #4B/C
Oxford, CT 06478

LPS-22-1 Bid Sheet Projectors

Please specify specific models numbers for ancillary equipment

Component	Quantity	Cost each	Total
Epson 1485 fii HD projector	10	$2,969.00	$29,690.00
*Wall mounted Control panel	10	Included above	$0
Ceiling speakers	10	$307.00	$3,070.00
Epson ELPMB62 Wall Mounts	10	$121.00	$1,210.00
2400BC-FW base and cover fog white wiremold surface raceways	10	$189.00	$1,890.00
Legrand AV/Wiremold Non-Metallic Raceway Package	10	$139.00	$1,390.00
Comprehensive Pro AV/IT Active USB A Male to B Male 50ft	10	$63.00	$630.00
Comprehensive Cat6 Snagless Patch Cable 50ft Black	10	$21.49	$214.90
Comprehensive/Liberty 6 FT HDMI & USB Cable Package External package from Epson control to teachers computer	10	$52.81	$528.10
Misc Cables and installation supplies	10	$69.00	$690.00

Labor/Installation Services	10	$739.00	$7,390.00
Total	10	$4,481.30/room	$44,813.00

*wall mounted control panel = HDBaseT control pad which comes with the Epson 1485Fi

Please provide pricing for possible future change orders.

Hourly labor rate per person	$139.00/hour
Parts discount off list price	12%
Design per person	$139.00/hour

Town bid list is for an apples to apples comparison. Bidders are responsible to ensure that their bids include all equipment, wiring and labor to complete the project. Omissions on the material list provided for the bid are the bidders responsibility. Additional equipment needed should be added to the list and pricing provided. The successful bidder will be required to certify that all employees working on the project do not have any criminal backgrounds or are on a sex offender list. Access to the site during the installation period will be during normal business hours. Other hours can be offered if needed to complete the project on time at the contractors expense.

End of Bid Document

RnB Enterprises, Inc.

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EPSON
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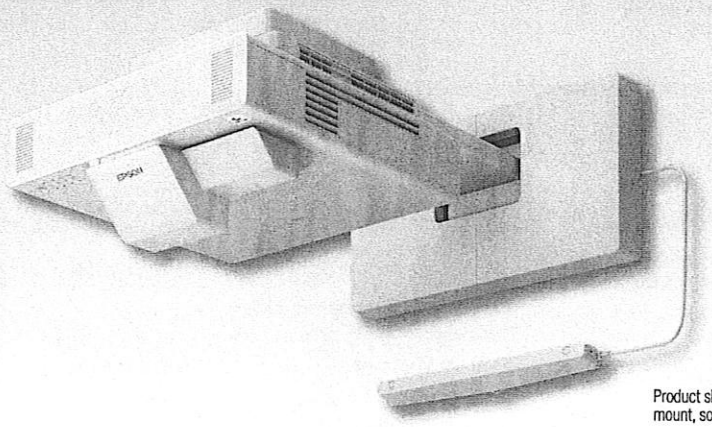
SPECIFICATION SHEET

BrightLink® 1485Fi 1080p 3LCD Interactive Laser Display

Projectors

Education



Product shown with mount, sold separately.

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Flexible image sizes — projects large, 100", 16:9 or super-wide 120", 16:6 images — up to 95 percent more interactive space vs. a 75" flat panel

Solid-state laser light source — virtually maintenance-free 20,000-hour laser light source with no lamps[3]

Easy installation — automatic image adjustment and simplified calibration makes installation easier than ever before

Digital whiteboard — draw, save, print and email without a PC; share whiteboard content to other network-connected BrightLink projectors[4]

Easy operation — touch and pen-enabled interactivity[5] allows up to eight users to collaborate at once

Improved cable management — HDBaseT control pad supports, video, audio and interactive functions, reducing the number of cables and making installation a snap[6]

Built-in wireless — use free Epson iProjection™ software to connect, display and share content simultaneously to/from up to 50 connected devices[7]

Connect with Miracast® — supports software-free, peer-to-peer wireless connectivity

SMART Learning Suite — includes 1-year subscription and support for SMART Notebook®, SMART amp™, SMART lab™, SMART Learning Suite Online and more

EPSON
EXCEED YOUR VISION

BrightLink® 1485Fi 1080p 3LCD Interactive Laser Display

Projectors | Education

Specifications

Display System Epson® 3LCD, 3-chip technology
Display Method Ceiling/wall mount/table mount
Driving Method Epson Poly-silicon TFT Active Matrix
Native Resolution 1080p[1] (1366 x 768 x 2)
Resolution on Screen 1080p[1] (2.1 million pixels)
Pixel Number 1,049,000 pixels (1366 x 768) x 3 chips
Color Brightness[2] Color Light Output: 5,000 lumens
White Brightness[2] White Light Output: 5,000 lumens
Aspect Ratio 16:9 (native), supports 4:3, 16:10, 16:6, 21:9
Size (Projected Distance) Area (16:9) 65" – 100"
Keystone Correction (Manual)
Horizontal: ± 3 degrees
Vertical: ± 3 degrees
USB Plug 'n Play Mac® 10.7 or later; Windows Vista® or later
Contrast Ratio Up to 2,500,000:1
Color Reproduction Up to 1.07 billion colors
Illumination Technology Laser Diode
Light Source Life[3] 20,000 hours (Normal)
30,000 hours (Extended)

Wireless Specifications

Supported Security Mode
OPEN, WPA2/WPA3-PSK, WPA2/WPA3-EAP
Supported EAP Type PEAP, PEAP-TLS, EAP-TLS, EAP-Fast
Supported Speeds:
IEEE 802.11b: 11 Mbps* (2.4 GHz)
IEEE 802.11g: 54 Mbps* (2.4 GHz)
IEEE 802.11n: 72.2 Mbps* (2.4 GHz)
IEEE 802.11a: 54 Mbps* (5 GHz)
IEEE 802.11n: 150 Mbps* (5 GHz)
IEEE 802.11ac: 325 Mbps* (5 GHz)
*Maximum speed and range is achievable when used with the same Enhanced Mode technology. Actual data rates, features and performance may vary depending on your computer system, the environment and other factors.

Projection Lens

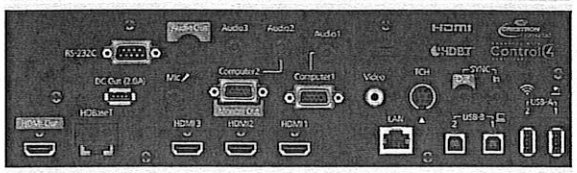
Type Manual focus
F-number 1.50
Focal Length 3.9 mm
Throw Ratio Range (16:9) 0.27 – 0.37, (4:3) 0.37 – 0.50, (16:10) 0.30 – 0.42
Zoom Ratio Digital zoom 1.0 – 1.35x

Other

Speaker 8 W x 2 stereo
Operating Temperature 41° to 104°F (0° to 40°C)
Power Supply Voltage 100 – 240 V ± 10%, 50/60 Hz
Power Consumption
ECO Mode: 270 W
Normal Mode: 381 W
Standby (Communication On): 2.0 W
Standby (Communication Off): 0.5 W
Fan Noise
Quiet Mode: 27 dB, Normal Mode: 36 dB
Security Kensington lock provision, security anchor bar, password-protect function

Interfaces

HDMI®: 3
HDBaseT HDMI out: DS 1
Computer/Component Video: 2x D-sub 15 pin
Composite Video: 1x RCA (Yellow)
Audio In: 3x Mini stereo
Audio Out: 1x Mini stereo
Microphone in: 1
USB Connector: 2x Type B (USB display, audio and mouse, k/b control interactivity)
USB Connector: 2x Type A (USB memory/ document camera)
1x RJ-45
Serial: 1x RS-232c
Monitor Out/Computer: 1x D-sub 15 pin
Integrated Wireless LAN: 802.11 b/g/n/ac
Interactive Synchronization Mini stereo In
Interactive Synchronization Mini stereo Out
Touch Unit Connection Port



Interactivity

Interactive Technology Infrared, 850 nm
Interactive Area (Image Size) 65" – 100" diagonal (16:9, 1080p[1])
Input Device Digital pen or finger
Number of Pens Two
Number of Pen Tips Six (4x Felt/Soft Tip, 2x Teflon™ Hard Tip)
Pen Functions Mouse functions (left and right click), Electronic pen, LED battery status indicator
Pen Specifications Size: 6.3" (L) x 0.95" (W); Weight: 1.1 oz (without battery), Power: AA battery, Compatible Battery Types: AA x 1, Manganese dry cell, Alkaline dry cell, Panasonic eneloop® BK-3MCCx (The suffix "x" can be blank or A-Z), Calibration Method: Automatic or Manual
Interactive Modes
Whiteboard Mode: 2x pens and 6x fingers, PC-free Annotation Mode: 2x pens and 6x fingers, Computer Interactivity Mode, Easy Interactive Tools: 2x pens and 6x fingers
Requirements for Computer Interactivity
Connection to the Computer: Via USB cable or wired/wireless LAN
Software System Compatibility: Epson Easy Interactive Driver for Mac only; Windows® driver for Multi Projection; Windows (single projector) and Linux: No driver required
Mac: Mac OS X® 10.7.x or later
Interactive Software Requirements Epson Easy Interactive Driver (Mac and PC — required for DuoLink); Windows and Linux: driver not required Mac: Mac OS X 10.7/10.8/10.9/10.10/10.11/ macOS 10.12.x Epson Easy Interactive Tools for Windows and Mac
System Compatibility Microsoft® Windows Vista SP2 (All editions except for Starter), Windows 8/8.1, Windows 10, Windows 7 SP1 (All editions except for Starter) macOS® 10.7/10.8/10.9/10.10/10.11/macOS 10.12.x, UBUNTU 15.10, 16.04 LTX, 16.04, 18.04, 19.04

Dimensions (W x D x H)

Including Feet 18.1" x 14.3" x 8.3"
Weight 21.4 lbs with cable cover (9.7 kg)

Remote Control

Features Source search, HDMI, Computer, LAN, USB, Power, Aspect, Color mode, Volume, E-zoom, A/V Mute, Freeze, Menu, Home, Auto, Enter, Esc, Pointer, User, Pen Mode, Split, Home, ID
Operating Angle
Rear: Right/left: -55 to +55 degrees, Upper/lower: +75 to +15 degrees, Front: Right/left: -30 to +30 degrees, Upper/lower: 0 to +60 degrees
Operating Distance 19.7 ft (6 m)

HDBaseT Control Box

Functions Projector On/Off, HDMI source switching, audio/ video/interactivity via CAT6, USB for PC-free saving
Dimensions 7.75" H x 6.9" W x 1.5" D
Power DC 12 V power supply
Supported Distance 40 m (4k 30 fps) or 70 m (1080p[1] 60 fps) via CAT6 cable

Eco Features

Energy-efficient 3LCD light engine
RoHS compliant
Recyclable product[8]
Epson America, Inc. is a SmartWay® Transport Partner[9]

Support

Service Programs Two-year projector limited warranty, Epson Road Service program, PrivateLine® dedicated toll-free support

What's in the Box

BrightLink Pro 1485Fi, lens cover, rear cable cover, interactive touch module and cable, Quick Setup Guide, 6' power cable, USB A/B cable (x1), projector remote control with two AA batteries, HDBaseT control pad with power supply, pen holder, four (4) markers for auto screen adjustment, IR reflectors, two (2) interactive pens, battery charger and two (2) AA rechargeable batteries (for interactive pens), Warranty statement, SMART SLS redemption code

Ordering Information

BrightLink 1485Fi	V11H919520
Air Filter	V13H134A56
PowerLite® Pilot™ 3 (ELPCB03)	V12H927020
Pixie Plus (ELPSP10)	
Document Camera (DC21)	V12H758020
External Speakers (ELPSP02)	V12H467020
Wireless 802.11b/g/n LAN Unit (ELPAP11)	V12H005A02
100" Whiteboard 16:9 Aspect Ratio	V12H006A02
DaLite 100" IDEA Screen	V12H006A01
Interactive Pen A (Orange)	V12H773010
Interactive Pen B (Blue)	V12H774010
Replacement Pen Tips (Hard/Teflon)	V12H775010
Replacement Pen Tips (Soft/Felt)	V12H776020
Ultra Short-throw Wall Mount (ELPMB62)	V12HA06A05
Finger Touch Module	V12H007A23
Touch Module Bracket	V12HA05A09
USB Extension Cable (ELPKC31)	V12H525001

1 Pixel shifting technology achieves Full HD resolution on screen. | **2** Color brightness (color light output) and white brightness (white light output) will vary depending on usage conditions. Color light output measured in accordance with IDMS 15.4; white light output measured in accordance with ISO 21118. | **3** No required maintenance for the light source for up to 20,000 hours. Approximate time until brightness decreases 50% from first usage. Measured by acceleration test assuming use of 0.04 - 0.20 mg/m³ of particulate matter. Time varies depending on usage conditions and environment. Replacement of parts other than the light source may be required in a shorter period. | **4** BL1485Fi and 1480Fi projectors only. Cannot share to earlier models. | **5** Requires Windows 7, Windows 8 or Mac OS X or later to recognize finger gestures. | **6** Supports maximum distance up to 229 feet (Cat6A/7; 1080p) and up to 131 feet (Cat6A/7; 4K content) | **7** For wireless functionality, including via the Epson iProjection App, the projector must be configured on a network, either through the Ethernet port on the projector (check model specifications for availability) or via a wireless connection. Check your owner's manual to determine if a wireless LAN module must be purchased separately to enable a wireless connection. Not all Epson projectors are able to be networked. The Epson iProjection App does not support all files and formats. See www.epson.com for details. | **8** For convenient and reasonable recycling options, visit www.epson.com/recycle | **9** SmartWay is an innovative partnership of the U.S. Environmental Protection Agency that reduces greenhouse gases and other air pollutants and improves fuel efficiency.

Learn more about how our products can empower your institution. Visit us at **www.epson.com/foreducation**

Contact:

Better Products for a Better Future®
eco.epson.com

SmartWay Transport Partner

Epson America, Inc.
3840 Kilroy Airport Way, Long Beach, CA 90806

Epson Canada Limited
185 Renfrew Drive, Markham, Ontario L3R 6G3

www.epson.com
www.epson.ca

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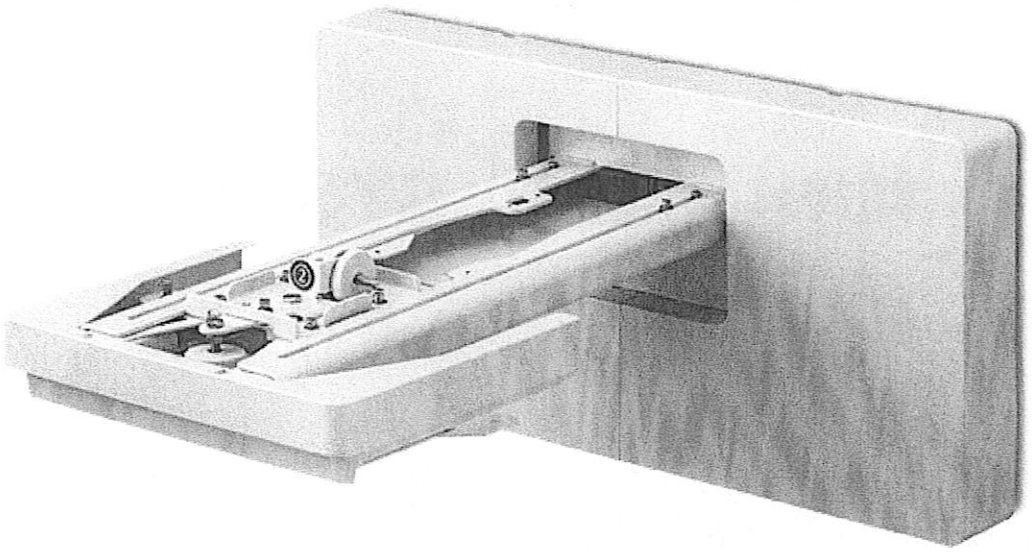
Ultra-Short Throw Wall Mount ELPMB62



Adjustable Wall Mount for Epson Ultra-Short Throw Laser Displays

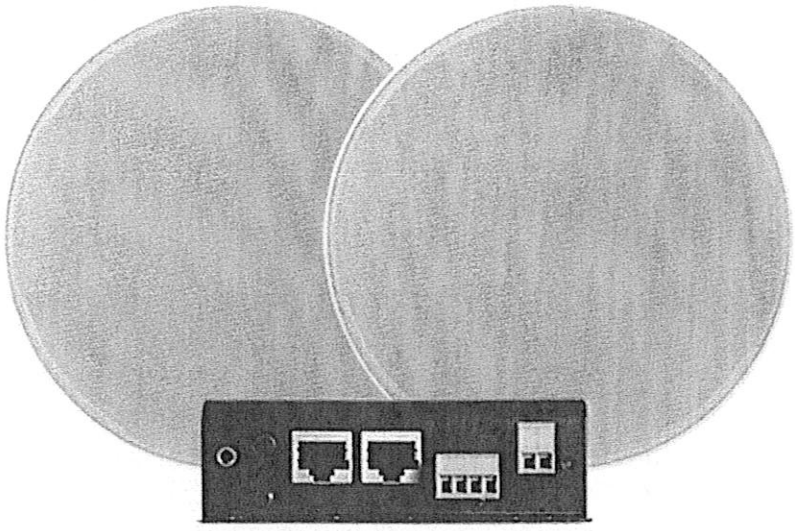
Designed for use with select BrightLink/PowerLite Ultra-short throw displays, this ultra-short throw wall mount offers an easy, affordable solution for wall mounted displays. The wide mounting plate and telescopic extension arm offer convenient and flexible installation from 65 – 120" (varies by model). It's ultra-short throw design assures there is less shadow interference and glare, which ensures a more optimal presenting and viewing experience. It also features storage space inside the mount cover to allow for mounting of a mini-PC. See complete list of compatible displays below.

- **Model:** V12HA06A05
- **Easily adjustable** — two-position mount arm for projecting 16:9 content from 65 to 100 inches, or 16:6 content up to 120 inches (BrightLink 1485Fi)
- **Everything you need** — includes all necessary tools and screws for assembly

AUDIO ENHANCEMENT®

MINI MEDIA SYSTEM

Compatible with



The Mini Media System is designed to complement projectors or flat panel displays by providing high quality playback of multimedia audio. The CA-30A amplifier distributes music and other auxiliary sound throughout a classroom at an affordable price.

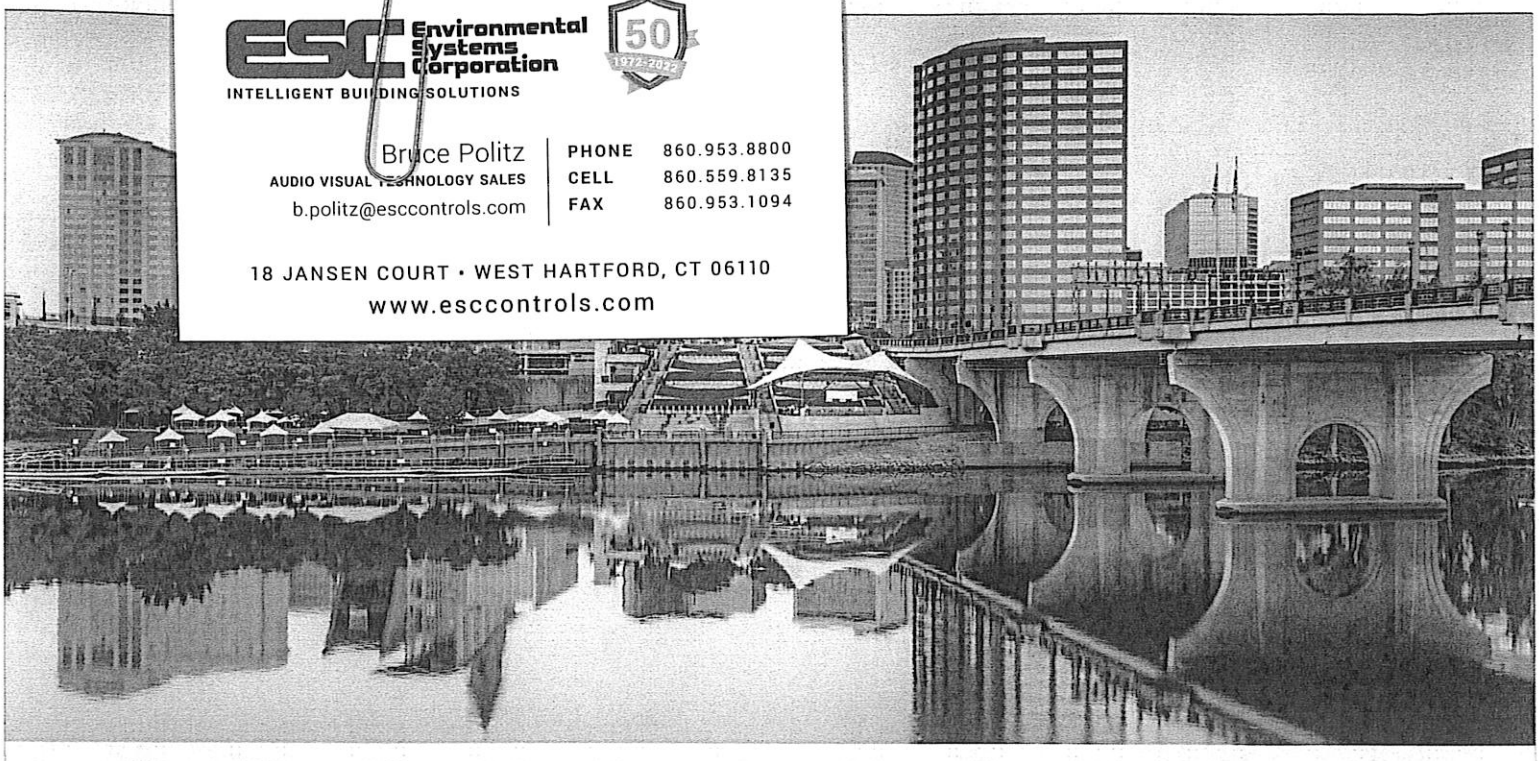
With the Mini Media System's small design, the CA-30A and CS-12 speakers leave the classroom clear of wires. Once added to your classroom, upgrading your classroom to get all the benefits of Audio Enhancement is quick and simple. Just plug in the Audio Enhancement XD Receiver to the CA-30A Amplifier, turn on the microphone, and talk!

ESC Environmental Systems Corporation
INTELLIGENT BUILDING SOLUTIONS

Bruce Politz
AUDIO VISUAL TECHNOLOGY SALES
b.politz@esccontrols.com

PHONE 860.953.8800
CELL 860.559.8135
FAX 860.953.1094

18 JANSEN COURT • WEST HARTFORD, CT 06110
www.esccontrols.com



PROPOSAL

The Town of Ledyard Connecticut

Ledyard Public Schools
Interactive Projector Bid LPS 22-1

PRESENTED TO:
Wayne Donaldson
Ledyard Public Schools
4 Blonders Blvd
Ledyard CT 06339

PREPARED BY:
Bruce Politz
Audio Visual Technology Sales
860-953-8800
860-559-8135 (cell)
b.politz@esccontrols.com

DATE:
February 10, 2022

ESC Environmental Systems Corporation
18 JANSEN COURT • WEST HARTFORD, CT 06110
www.esccontrols.com

BUILDING AUTOMATION | SECURITY | LIFE SAFETY | ENERGY SOLUTIONS | AUDIO VISUAL | MECHANICAL SERVICES

Environmental Systems Corporation

February 10, 2022

RE: Bid LPS 22-1 Interactive Projector/TV Bid

Please find the attached bid forms for our proposal for bid # LPS 22-1. This bid is good for 90 Days from Bid opening on February 11, 2022.

Our total proposal is for $50,088.00

Sincerely,

Bruce Politz
Audio Visual Technology Sales
Environmental Systems Corporation
18 Jansen Court, West Hartford, CT 06110
Cell: 860-559-8135| Work: 860-953-8800

Environmental Systems Corporation

Exclusions

1. Price does not include tax, bond, permit fees or special shipping
2. Price is valid for 30 days
3. Material price increases after order but prior to material release may be an additional cost

Terms & Conditions

The information contained in this proposal is proprietary and confidential to Environmental Systems Corporation, (ESC) and is offered solely for your own use and evaluation. We intend to maintain the confidentiality of any information you have provided us, and we require that this proposal be kept in strict confidence and that it not be disclosed to any outside party for any other purpose.

1. Project or Repair services provided under this agreement will be performed during normal working hours unless otherwise noted. Normal working hours are defined as 7:00am to 3:30pm, Monday through Friday inclusive, excluding holidays.
2. Reasonable and safe means of access to the equipment being serviced shall be provided to ESC. ESC shall be permitted to start and stop all equipment necessary to perform its services. If any of the equipment requiring service is considered unsafe, the client will be required to properly correct the unsafe condition before ESC will proceed with the service. ESC shall be permitted to the use of the buildings fixed ladders, mops etc.
3. The guarantees and services provided under the scope of this agreement are conditioned upon the Client properly operating and maintaining the system. Client will do so in accordance with industry accepted practices. This proposal does not include responsibility for poor system design, undeclared or hidden conditions, system obsolescence or equipment beyond its reasonable life.
4. Client agrees to pay invoices within thirty (30) days of receipt. ESC reserves the right to cancel this and/or stop work under this agreement without notice, should payment become sixty (60) days or more delinquent.
5. Client agrees to pay in advance for material, equipment and engineering costs necessary for the start of the project.
6. ESC shall not be liable for any loss, delay, injury or damage that may be caused by circumstances beyond its control including, but not restricted to acts of God, war, civil commotion, acts of government, fire, theft, corrosion, flood, lightning, power fluctuation, freeze-ups, strikes, lockouts, differences with workmen, riots, explosions, quarantine restrictions, delays in transportation, fuel, labor or materials, or malicious mischief.
7. In no event shall ESC be liable for business interruption losses or consequential or speculative damages, but this sentence shall not relieve ESC of liability for damage to property or injury to persons resulting from accidents caused directly by the negligence of ESC in performance or failure of its obligations under this agreement.
8. In the unlikely event of failure to perform its obligations, ESC's liability is limited to repair or replacement at its option and such shall be Client's sole remedy. Under no circumstances will ESC be responsible for loss of use, loss of profits, increased maintenance or operating costs, claims of clients or client's tenants, or any special, indirect or consequential damages.
9. ESC shall warranty all workmanship and labor for one year after the project's completion date and all parts and material shall be covered by manufactures warranties.
10. Any alteration or deviation from specifications above involving extra cost will be executed only by written orders and will become an extra charge over and above the estimate. This proposal may be withdrawn by Environmental Systems Corporation if not accepted within 30 days.
11. ESC is not responsible for the Identification, Abatement or the removal of asbestos or any other toxic or hazardous substances, waste or materials. In the event such hazardous conditions are found, the sole obligation of ESC is to notify the customer or owner of the hazards. ESC shall have the right to suspend its work until such hazards are removed. The completion time of the work shall be extended and the contract price be equitably adjusted as necessary.
12. In the event either party must commence a legal action in order to enforce any right under this contract, the successful party shall be entitled to all court costs and reasonable attorney's fees as determined by the court for prosecuting and defending the claim.
13. If required, customer shall be responsible for paying all applicable taxes both state, local and permit fees.
14. ESC requests to be notified of any alterations, additions, adjustments, or repairs that are made by others.
15. Work necessitated by present or future requirements by governments or insurance companies are not included.

LPS-22-1 Bid Sheet Projectors

Please specify specific models numbers for ancillary equipment

Component	Quantity	Cost	Total
Epson 1485 fii HD projector	10	2,850	28,500.00
Wall mounted Control panel	10	included	—
Ceiling speakers 2 per Proj	10 pair	370.00	3,700.00
EPSON Proj mount	10	109.00	1,090.00
Installation Equipment	10	149	1,490.00
Cable, wiremold, bolts etc			
Labor	1	15,308.00	15,308.00
Total			$50,088.00

Bid good for 90 Days

Bid by Environmental Systems Corporation

Bruce Politz
860-559-8135

Bruce Politz

Please provide pricing for possible future change orders.

Hourly labor rate	$89.00 hr
Parts discount off list price	
Design	89.00 hr

Town bid list is for an apples to apples comparison. Bidders are responsible to ensure that their bids include all equipment, wiring and labor to complete the project. Omissions on the material list provided for the bid are the bidders responsibility. Additional equipment needed should be added to the list and pricing provided. The successful bidder will be required to certify that all employees working on the project do not have any criminal backgrounds or are on a sex offender list. Access to the site during the installation period will be during normal business hours. Other hours can be offered if needed to complete the project on time at the contractors expense.

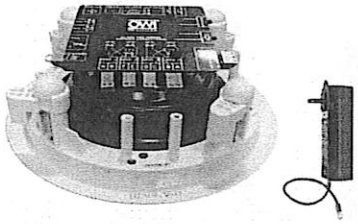
End of Bid Document

Bid by ESC
Bruce Politz

SELF POWERED SPEAKER/AMPLIFIER

3 Source, 6", Integratable

ARCHITECTS AND ENGINEERS
SPECIFICATIONS / TECHNICAL DATA



GENERAL SPECIFICATIONS

MODEL NUMBER:	AMP-HD2SIC6
ELECTRICAL AMPLIFIER:	
Input voltage, nominal	(25 watts) 15 volts DC
Input current, operating (15VDC)	1.45 amperes peak
Input volt-amperes, peak (15VDC)	22 volt-amperes
Input voltage, maximum	16.5 volts, DC
Frequency Response,	
EQ set to flat	20Hz to 20 kHz
Bass	±10dB@50Hz
Treble	±10dB@10kHz
THD + Noise	<1% at 13.5 watts, "A" weighted
S/N	>82 dB
Max Power Output (28V in)	40 watts
DC Power, Standby	1.4 watts
AC Power, Sleep Mode	1.4 watts
DC Power,	
Short Circuit protected	Yes
Over current protected	Yes
Over voltage protected	Yes
Over temperature protected	Yes
Minimum Load Impedance	4.0 Ω (Two 8 Ω Speakers in parallel)
Minimum Input impedance, Priority in	10,000 Ω
Minimum Input impedance, RJ45 in	150,000 Ω
Minimum Input impedance, mini-jack	37,000 Ω
Min. Input Impedance, Mini-Jack:	2300 Ω
Woofer Size:	6.5 Inches
Weight of Amplifier/Speaker:	3.15 Lbs.
Height of Amplifier/Speaker:	4.5 Inches
Backcan:	UL Listed Enclosure (Available)
Tile Bridge:	UL Listed Support Truss (Available)
Warranty:	1 Year

**Mechanical "UL Rating" is dependent upon use of the Backcan and Tile Bridge.

Note: Maximum power requires the replacement of the 15 Volt supply with a 22 Volt supply and Energy Star and UL approvals no longer apply.

OWI Incorporated
17141 Kingsview Avenue, Carson, CA 90746 USA
Tel: 310.515.1900
Toll Free: 800.638.1694
Fax: 310.515.1606
Web: www.owi-inc.com
E-mail: info@owi-inc.com

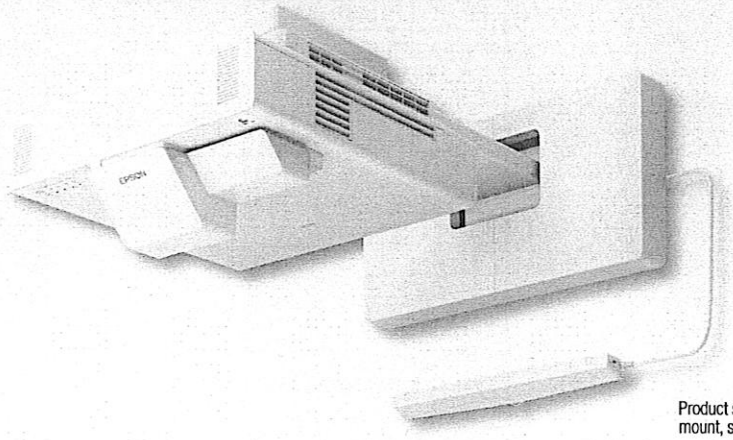
EPSON®
EXCEED YOUR VISION

SPECIFICATION SHEET

BrightLink® 1485Fi 1080p 3LCD Interactive Laser Display

Projectors

Education



Product shown with mount, sold separately.

Bring collaboration to classrooms and meeting spaces with this interactive HD 1080p laser display[1].

Super bright — 5,000 lumens color/white brightness[2]; 1080p Full HD laser display[1]

Flexible image sizes — projects large, 100", 16:9 or super-wide 120", 16:6 images — up to 95 percent more interactive space vs. a 75" flat panel

Solid-state laser light source — virtually maintenance-free 20,000-hour laser light source with no lamps[3]

Easy installation — automatic image adjustment and simplified calibration makes installation easier than ever before

Digital whiteboard — draw, save, print and email without a PC; share whiteboard content to other network-connected BrightLink projectors[4]

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BrightLink® 1485Fi 1080p 3LCD Interactive Laser Display

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Driving Method Epson Poly-silicon TFT Active Matrix
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Resolution on Screen 1080p[1] (2.1 million pixels)
Pixel Number 1,049,000 pixels (1366 x 768) x 3 chips
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White Brightness[2] White Light Output: 5,000 lumens
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Size (Projected Distance) Area (16:9) 65" – 100"
Keystone Correction (Manual)
Horizontal: ± 3 degrees
Vertical: ± 3 degrees
USB Plug 'n Play Mac® 10.7 or later; Windows Vista® or later
Contrast Ratio Up to 2,500,000:1
Color Reproduction Up to 1.07 billion colors
Illumination Technology Laser Diode
Light Source Life[3] 20,000 hours (Normal)
30,000 hours (Extended)

Wireless Specifications

Supported Security Mode
OPEN, WPA2/WPA3-PSK, WPA2/WPA3-EAP
Supported EAP Type PEAP, PEAP-TLS, EAP-TLS, EAP-Fast
Supported Speeds:
IEEE 802.11b: 11 Mbps* (2.4 GHz)
IEEE 802.11g: 54 Mbps* (2.4 GHz)
IEEE 802.11n: 72.2 Mbps* (2.4 GHz)
IEEE 802.11a: 54 Mbps* (5 GHz)
IEEE 802.11n: 150 Mbps* (5 GHz)
IEEE 802.11ac: 325 Mbps* (5 GHz)
*Maximum speed and range is achievable when used with the same Enhanced Mode technology. Actual data rates, features and performance may vary depending on your computer system, the environment and other factors.

Projection Lens

Type Manual focus
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Zoom Ratio Digital zoom 1.0 – 1.35x

Other

Speaker 8 W x 2 stereo
Operating Temperature 41° to 104 °F (0 ° to 40 °C)
Power Supply Voltage 100 – 240 V ± 10%, 50/60 Hz
Power Consumption
ECO Mode: 270 W
Normal Mode: 381 W
Standby (Communication On): 2.0 W
Standby (Communication Off): 0.5 W
Fan Noise
Quiet Mode: 27 dB, Normal Mode: 36 dB
Security Kensington lock provision, security anchor bar, password-protect function

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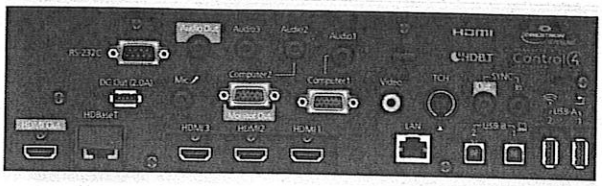
HDBaseT HDMI out: DS 1
Computer/Component Video: 2x D-sub 15 pin
Composite Video: 1x RCA (Yellow)
Audio In: 3x Mini stereo
Audio Out: 1x Mini stereo
Microphone in: 1
USB Connector: 2x Type B (USB display, audio and mouse, k/b control interactivity)
USB Connector: 2x Type A (USB memory/ document camera)
1x RJ-45
Serial: 1x RS-232c
Monitor Out/Computer: 1x D-sub 15 pin
Integrated Wireless LAN: 802.11 b/g/n/ac
Interactive Synchronization Mini stereo In
Interactive Synchronization Mini stereo Out
Touch Unit Connection Port



Interactivity

Interactive Technology Infrared, 850 nm
Interactive Area (Image Size) 65" – 100" diagonal (16:9, 1080p[1])
Input Device Digital pen or finger
Number of Pens Two
Number of Pen Tips Six (4x Felt/Soft Tip, 2x Teflon™ Hard Tip)
Pen Functions Mouse functions (left and right click), Electronic pen, LED battery status indicator
Pen Specifications Size: 6.3" (L) x 0.95" (W); Weight: 1.1 oz (without battery), Power: AA battery, Compatible Battery Types: AA x 1, Manganese dry cell, Alkaline dry cell, Panasonic eneloop® BK-3MCCx (The suffix "x" can be blank or A-Z), Calibration Method: Automatic or Manual
Interactive Modes
Whiteboard Mode: 2x pens and 6x fingers, PC-free Annotation Mode: 2x pens and 6x fingers, Computer Interactivity Mode, Easy Interactive Tools: 2x pens and 6x fingers
Requirements for Computer Interactivity
Connection to the Computer: Via USB cable or wired/wireless LAN
Software System Compatibility: Epson Easy Interactive Driver for Mac only; Windows® driver for Multi Projection; Windows (single projector) and Linux: No driver required
Mac: Mac OS X® 10.7.x or later
Interactive Software Requirements Epson Easy Interactive Driver (Mac and PC — required for DuoLink); Windows and Linux: driver not required Mac: Mac OS X 10.7/10.8/10.9/10.10/10.11/ macOS 10.12.x Epson Easy Interactive Tools for Windows and Mac
System Compatibility Microsoft® Windows Vista SP2 (All editions except for Starter), Windows 8/8.1, Windows 10, Windows 7 SP1 (All editions except for Starter) macOS® 10.7/10.8/10.9/10.10/10.11/macOS 10.12.x, UBUNTU 15.10, 16.04 LTX, 16.04, 18.04, 19.04

Dimensions (W x D x H)

Including Feet 18.1" x 14.3" x 8.3"
Weight 21.4 lbs with cable cover (9.7 kg)

Remote Control

Features Source search, HDMI, Computer, LAN, USB, Power, Aspect, Color mode, Volume, E-zoom, A/V Mute, Freeze, Menu, Home, Auto, Enter, Esc, Pointer, User, Pen Mode, Split, Home, ID
Operating Angle
Rear: Right/left: -55 to +55 degrees, Upper/lower: +75 to +15 degrees, Front: Right/left: -30 to +30 degrees, Upper/lower: 0 to +60 degrees
Operating Distance 19.7 ft (6 m)

HDBaseT Control Box

Functions Projector On/Off, HDMI source switching, audio/ video/interactivity via CAT6, USB for PC-free saving
Dimensions 7.75" H x 6.9" W x 1.5" D
Power DC 12 V power supply
Supported Distance 40 m (4k 30 fps) or 70 m (1080p[1] 60 fps) via CAT6 cable

Eco Features

Energy-efficient 3LCD light engine
RoHS compliant
Recyclable product[3]
Epson America, Inc. is a SmartWay® Transport Partner[9]

Support

Service Programs Two-year projector limited warranty, Epson Road Service program, PrivateLine® dedicated toll-free support

What's in the Box

BrightLink Pro 1485Fi, lens cover, rear cable cover, interactive touch module and cable, Quick Setup Guide, 6' power cable, USB A/B cable (x1), projector remote control with two AA batteries, HDBaseT control pad with power supply, pen holder, four (4) markers for auto screen adjustment, IR reflectors, two (2) interactive pens, battery charger and two (2) AA rechargeable batteries (for interactive pens), Warranty statement, SMART SLS redemption code

Ordering Information

BrightLink 1485Fi	V11H919520
Air Filter	V13H134A56
PowerLite® Pilot™ 3 (ELPCB03)	V12H927020
Pixie Plus (ELPSP10)	
Document Camera (DC21)	V12H758020
External Speakers (ELPSP02)	V12H467020
Wireless 802.11b/g/n LAN Unit (ELPAP11)	V12H005A02
100" Whiteboard 16:9 Aspect Ratio	V12H006A02
DaLite 100" IDEA Screen	V12H006A01
Interactive Pen A (Orange)	V12H773010
Interactive Pen B (Blue)	V12H774010
Replacement Pen Tips (Hard/Teflon)	V12H775010
Replacement Pen Tips (Soft/Felt)	V12H776020
Ultra Short-throw Wall Mount (ELPMB62)	V12HA06A05
Finger Touch Module	V12H007A23
Touch Module Bracket	V12HA05A09
USB Extension Cable (ELPKC31)	V12H525001

1 Pixel shifting technology achieves Full HD resolution on screen. | **2** Color brightness (color light output) and white brightness (white light output) will vary depending on usage conditions. Color light output measured in accordance with IDMS 15.4; white light output measured in accordance with ISO 21118. | **3** No required maintenance for the light source for up to 20,000 hours. Approximate time until brightness decreases 50% from first usage. Measured by acceleration test assuming use of 0.04 - 0.20 mg/m³ of particulate matter. Time varies depending on usage conditions and environment. Replacement of parts other than the light source may be required in a shorter period. | **4** BL1485Fi and 1480Fi projectors only. Cannot share to earlier models. | **5** Requires Windows 7, Windows 8 or Mac OS X or later to recognize finger gestures. | **6** Supports maximum distance up to 229 feet (Cat6A/7; 1080p) and up to 131 feet (Cat6A/7; 4K content) | **7** For wireless functionality, including via the Epson iProjection App, the projector must be configured on a network, either through the Ethernet port on the projector (check model specifications for availability) or via a wireless connection. Check your owner's manual to determine if a wireless LAN module must be purchased separately to enable a wireless connection. Not all Epson projectors are able to be networked. The Epson iProjection App does not support all files and formats. See www.epson.com for details. | **8** For convenient and reasonable recycling options, visit www.epson.com/recycle | **9** SmartWay is an innovative partnership of the U.S. Environmental Protection Agency that reduces greenhouse gases and other air pollutants and improves fuel efficiency.

Learn more about how our products can empower your institution. Visit us at **www.epson.com/foreducation**

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eco.epson.com

SmartWay Transport Partner

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