

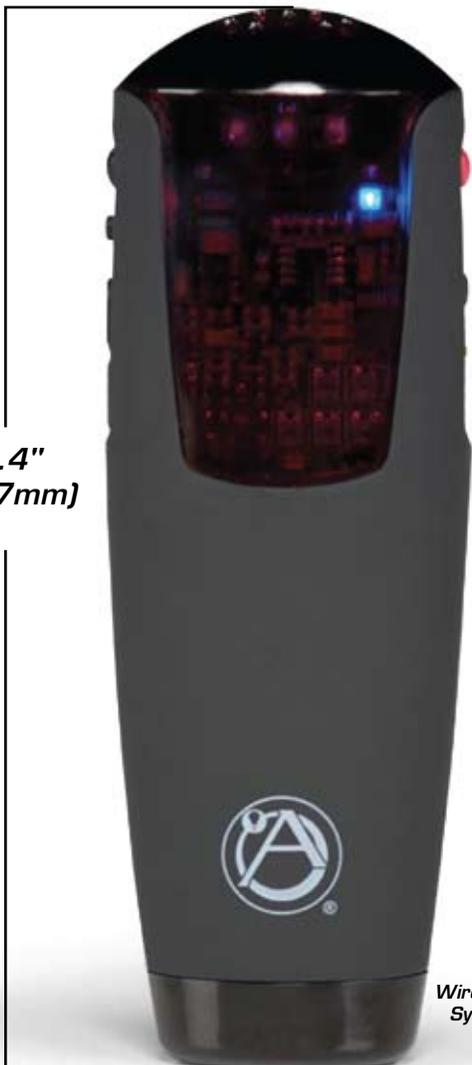


Atlas Learn

Classroom Security & Sound Reinforcement System

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5.4"
(137mm)



AL-PH
*Wireless Microphone /
System Control Unit*

Features

- Works in Conjunction with Secondary Systems to Provide Enhanced Classroom Security
- Provides Excellent Infrared Wireless Sound Reinforcement
- Easily Integrates Into Any Classroom
- Keeps Teachers' Voices Healthy and Sustainable

General Description

The Atlas Learn Amplified Learning™ AL2430 system is an in-classroom sound reinforcement solution designed for use in K-12 and higher education facilities or where a room constrained public address system is required. This complete audio enrichment package consists of amplifier / receiver, wireless microphones, and docking station designed to allow the teacher and students to walk freely around the room with the infrared microphones / system control units and project their voices through installed speakers.

Classrooms equipped with sound reinforcement benefit teachers, students, and the education system as a whole. With even sound distribution, lessons are easily heard no matter where students are seated. Attention and concentration are raised, especially in the back of the room, through this added involvement. Teachers no longer strain their voice and they can easily integrate with multimedia teaching tools such as computers and DVD players by controlling audio from a single source. And with priority paging and emergency notification to inform another location of the need for outside assistance, Atlas Learn fulfills the needs of any education facility.



AL-2430
IR Receiver / Amplifier Front



AL-2430
IR Receiver / Amplifier Back

AL2430 Receiver / Amplifier

The compact, ergonomically designed AL2430 receiver / amplifier provides intuitive control of all system components, visual indication of system status and interface for “panic” condition feedback to secondary security systems. With 5 separate inputs included to accommodate almost any multimedia source, dedicated AV systems are no longer needed – saving valuable space in the classroom.

AL-PH

The versatile and ergonomic AL-PH pendant / handheld microphone transmitter allows both teachers and students freedom of movement without bulky electronics or cumbersome wires. The dual mode transmitter allows teachers to control microphone volume, overall system volume and mute settings via side mounted soft touch controls. In addition, when “PANIC” and “MODE” controls are pressed simultaneously a contact closure is triggered on the AL2430 receiver. This contact closure may be integrated with almost any intercom or IP based notification system to signal an emergency condition in the classroom. When transmitter is configured for “student” mode operation, all controls are bypassed restricting the device’s functionality for use as a wireless microphone only.

Two AL-PH transmitters are included with each AL-2430 system. For most classroom applications, one transmitter is configured for teacher’s voice reinforcement with the second transmitter dedicated for student’s use.

- Handheld** Separate LED clusters located on top and bottom of unit guarantee optimum line of sight operation when the unit is handheld.
- Lanyard** Secure connection features a safety breakaway function for easy release in an emergency and includes an innovative ID badge clip system.
- Body Pack** Allows hands free use with optional Atlas Sound AL-HSM headset mic set.

AL-DOCK

AL2430 charging station includes a dock section to charge two pendant transmitters and four additional AA rechargeable batteries simultaneously. Unit may be wall mounted via integral key hole slots or shelf mounted for easy accessibility.

AL-IRDS

Up to three infrared dome sensors may be utilized with the AL2430 receiver/amplifier. Two are included with the system along with two 10 meter sections of UL listed RG6 coaxial cable terminated with professional “F” connectors.

AL2430-RMK

Optional rack ears (AL2430-RMK) may be used for rack mounting the receiver / amplifier.

General System Characteristics

Teacher Mic with Remote Control	Yes
Intercom Announcement	
Mutes Sound Field	Yes / Built In
Media Volume Automatically Lowers when Teachers Speak	Yes
Teachers Mic Gain Adjustment	Yes
Student Mic with Media Input & VC	Yes
Typical Speakers Per Classroom	4*

Energy Use/Environmental Overview

RoHS Compliant	Yes
Energy Star Rated	No
Power Saver Mode	No
Digital	No
Number of Batteries in AL-PH Mic	2 AA Rechargeable
Smart Sensor in Charger	Yes

* Contact Atlas Sound for Recommended Speaker Placement and Quantities.

Specifications

AL2430 Receiver / Amplifier

Amp Controls - Front Panel	Channel A, Channel B, Computer, TV/VCR, CD/DVD, AUX
Amp Controls - Rear Panel	Three Band Mic EQ, Priority Page Gain, Priority Page Sensitivity
Multimedia Input Connector Type	4 Stereo Summing RCAs
Multimedia Input Sensitivity	-10dBm**
Priority Page Input Connector Type	Two Pole Phoenix Connector
Priority Page Input Sensitivity	14dBm**
Computer Input Impedance	56k Ω
Multimedia Input Impedance	22k Ω
AUX4 Front Input Connector Type	3.5mm
Line Output Impedance	1k Ω
Line Output Voltage	1.3V
Line Output Connector Type	Dual RCA
Mic EQ Adjustment	\pm 10dB (100Hz, 3kHz, & 10kHz)
IR Input Impedance	75 Ω
IR Connector Type	F Connectors (x3)
Panic Output Connector Type	Two Pole Phoenix Connector
Panic Output Contact Rating	5A@36V
Speaker Connector Type	Four Pole Phoenix Connector
Speaker Output	30W RMS @ 8 Ω , 25V, or 70.7V
In Line PSU Type	100V-240V Input, 24VDC / 2.5A Output
Frequency Response	40Hz - 15kHz (\pm 3dB)
Signal to Noise Ratio	75dB
Height	1 $\frac{3}{4}$ " (45mm)
Width	8 $\frac{1}{2}$ " (216mm)
Depth	13 $\frac{1}{2}$ " (343mm)
Weight	5.75lbs (2.6kg)
Optional Rack Mount Kit	PA702-RMK

AL-PH Pendant Handheld Transmitter / Wireless Microphone

IR Transmitting LED	6 Total in 2 Groups
Aux Input	3.5mm, 2k Ω
Controls	Power, Mic Volume, Master Volume, Mic Mute, Master Mute, Panic Button
Internal Adjustments	Channel A / B & Student "Lock Out"
Indicator LEDs	Mode (2 Blue), Lockout (1 Red), Power / Battery (1 Green / Red)
Dimensions	5.187" (131.7mm) 1.8" (45.7mm) 1.31" (33.3mm)
Weight with Batteries	4.23oz (120g)
Weight without Batteries	2.1oz (60g)

AL-IRDS IR Receiver Dome

Receiver LEDs	6
Mounting	Screw Type
Cable	32.8' (10m) UL Listed, "F" Style Termination, RG6 Type
Receiving Distance	150' - Line of Sight (Depending on Ambient Light)
Receiving Angle	120 $^{\circ}$
Typical Coverage Area Recommended for System with (2) AL-IRDS Receiver Domes	2000 ft ²
AL-DOCK Charging Station	
AL-PH Ports	2
Charge Indicator LEDs	4 (Red - Charging, Green - Charged)
PSU Type	120V Input, 9VDC, 1A Output
Height	4.17" (106mm)
Width	7.44" (189mm)
Depth	2.75" (70mm)

Architect & Engineer Specifications

The Amplified Learning™ System shall be the Atlas Learn Model AL2430-2PH.

The Amplified Learning System shall be a self contained sound reinforcement apparatus (speakers and wiring not included) for use in K-12 and higher education facilities or where a room constrained public address system shall be required.

The Amplified Learning System shall be a 3 part construct.

Part 1 of the Amplified Learning System shall consist of an integrated mixer amplifier with a minimum of 30 watt output available as 8Ω, 25V, and 70.7V outputs to local loudspeaker systems. The dimensions of the unit shall not exceed ½ rack width and 1RU tall. The CRS Metal enclosure shall be powder coated and be capable of rack mounting or mounting by way of a through chassis hole and included mounting bracket 3" x 3" (76.2mm x 76.2mm). The included adaptor bracket shall accommodate a standard projector ceiling mounting pole.

The audio input section of the Amplified Learning System shall have the ability to support 5 separate line level, audio only, input devices labeled Computer, TV/VCR, CD/DVD, Aux, and Priority Page. Each input shall be comprised of dual summed RCA inputs that feature an independent level control feeding a common bus. The Aux input shall be dual summed RCA connectors and also include a front panel mounted 3.5mm TRS input that bypasses the Aux RCA inputs if used. A level control is included on the AUX input in order to set the level relative to the other sources. The ALS shall include a page priority override that shall be capable of muting all local audio inputs when a page is detected via a connection to the paging system and by converting the speaker level of 8Ω, 25V, or 70.7V into an input on the integrated mixer amplifier to drive the local speakers connected to the ALS. The priority page input shall include a level control and a separate input trim control labeled from 1V – 100V for proper matching to the distributed speaker line. The ALS rear panel shall have 3 coaxial inputs marked "Infrared" for connection to Infrared Sensors (2 are included with the ALS) to energize two separate input channels (A & B) that provide the ability to deploy a teacher microphone and a second classroom microphone for student response (if required). Channels A & B each are configured with separate level controls and a common feedback suppression filter set with individually adjustable frequencies of 100Hz (LF), 3kHz(MF), and 10kHz (HF). The rear panel shall provide a Phoenix type plug in connector which is the access point to the internal relay output which shall be configured as normally open or normally closed switch contacts suitable for connection to an emergency or panic enunciator.

The integrated mixer amplifier will also be equipped with a line output to drive an optional slave amplifier. The ALS will be powered by an external 24VDC UL listed power supply.

Part 2 of the Amplified Learning System shall consist of an infrared Microphone / System Control Unit with safety breakaway lanyard and ID mounting clip. The Microphone / Control Module will have provision for an external microphone to be used with the system. The Microphone / Control Unit shall be capable of transmitting on one of two dedicated IR channels to allow two Microphone / Control Units to be deployed in the same user space without interference. Channel selection shall be via internally mounted A / B switch concealed in the battery compartment along with a separate lockout control switch to disable the external control functions on the Microphone/System Control unit. Lockout Mode is indicated by a single red illuminated LED. The ALS microphone control interface is to be equipped with user selectable functions to include Unit On / Off switch, Microphone Level Up / Down, and Mute Microphone control. The Control Unit Interface functions shall consist of a separate mode selection switch with a provision to allow for multiple functions to be accomplished from a single control. A single push on shall engage a single blue LED indicating the default operation mode where the volume control sets the teacher's microphone level. A double push of the Mode button shall illuminate two blue LED indicators engaging the secondary control mode where by all other inputs (other than the teacher's microphone) can be adjusted as a group to control overall system volume. In the event of a situation requiring outside assistance, a simultaneous engagement of the Mode and Panic buttons will send a signal to engage a relay that alerts a predetermined location to a need for attention.

Part 3 of the Amplified Learning System shall be comprised of a combination docking and automatic charging station that can be orientated vertically or horizontally and accommodate two infrared Microphone / System Control Units. The docking and recharging station will automatically recharge and maintain batteries in the microphone / system control units and accommodate up to 4 additional AA rechargeable batteries as spares. The docking and recharging appliance shall be powered by an external UL listed power supply appropriate for the country of use.

