

Amplify Clarity, Simplify Integration

ATEN Amplifier and Speaker Series



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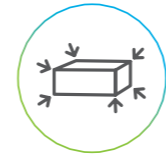
Amplify Your Experience with ATEN Audio Systems

ATEN's AP power amplifier, alongside its AS speaker series, offers an unrivalled professional AV audio experience. These systems produce impeccably clear sound and boast a quick, effortless setup with intuitive functionality. Expertly designed for seamless integration with professional AV products, they provide an ideal solution for various applications. With ATEN's comprehensive audio solution, bringing educational and commercial environments to life is now simpler than ever.



Power Amplifier

The ATEN amplifier series seamlessly blends robust output with outstanding efficiency, catering to a broad spectrum of professional audio applications. They are designed to deliver ultra-high performance while maintaining a focus on cost-effectiveness.



Compact Size

Dedicated and compact in design, able to fit into any ventilation space.



Thermal Protection

Prevents overheating and over-level input, automatic detection function avoids over-protected shutdown.



Auto Activated

Compatible with ATEN VK Control Units for an integrated workspace solution



Audio DSP

Built-in audio DSP delivers professional audio signal processing, and ATEN VK controls its preset functions.



Speakers

The ATEN speaker series is skillfully engineered to enhance speech clarity and amplify music quality, making it an ideal choice for commercial applications. Its robust construction paired with straightforward installation processes further accentuates its appeal.



High Sensitivity

High sensitivity of 86dB SPL (AS104) / 90dB SPL (AS106) / 90dB SPL (AS108) for seamless power and loudness transition.



Customized Outer Surface

Paintable magnetic grills allow organizations to customize the interior design to fit the room decor.



Easy Installation

Designed with a magnetic grill, dog leg mounting system, and cutout template for easy installation.



AS104

AS106

AS108

Elevating Education Engagement with ATEN Audio Systems

Audiovisual technology plays a crucial role in modern education, enabling students to learn more effectively. For years, audiovisual aids have been employed in teaching, learning, and research due to their ability to enhance comprehension and facilitate information sharing. With the rapid advancement of technology, students now have instant access to information and can grasp concepts and ideas more efficiently. As a result, audio has become an indispensable component of education. ATEN Audio APAS series offers tailored, crystal-clear audio solutions that cater to diverse needs, further enhancing the overall quality of education.

Basic K-12 Classroom

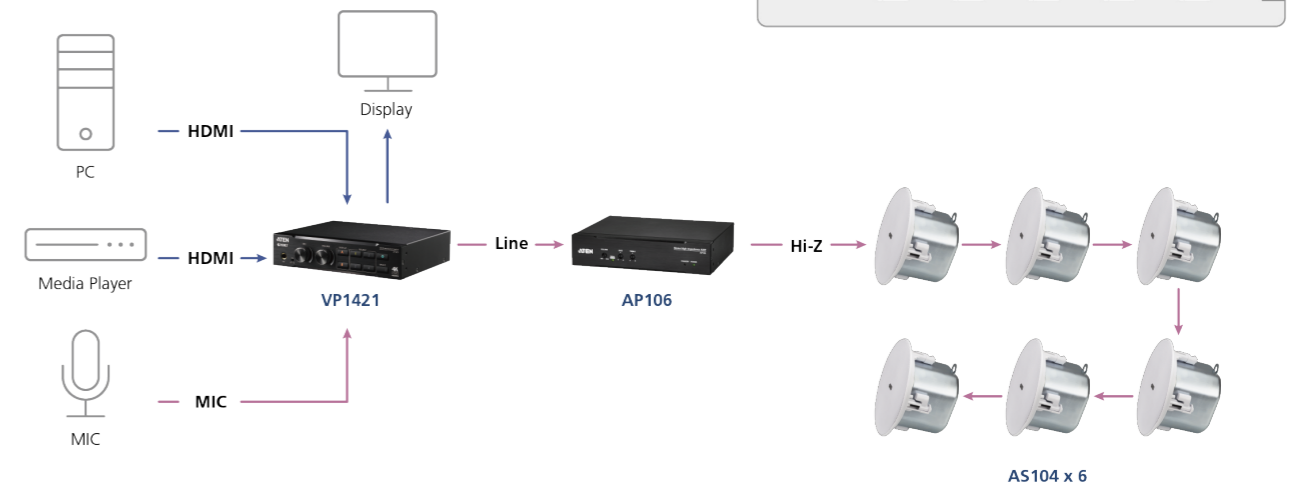


Application Enhance audio experience in basic classroom setups.

ATEN Solution

- ① Seamless Multi-Source Switching: With the ATEN VP1421, effortlessly switch between computers, media players, and teachers' microphones, enhancing versatility in the classroom.
- ② Audio Distribution: Integrated with the AP106 and 104, the VP1421 amplifies and evenly distributes audio sources, ensuring a balanced and immersive audio experience.

ATEN Solution Diagram



60W Mono Hi-Z Power Amplifier

AP106



- A Class D power amp offering 60W power to 70V or 100V audio systems.
- Inbuilt 2-band shelf EQ for 6 dB treble and bass control.
- Power Saving Mode – shuts down with -50 dBu or less audio input for 30 mins and reactivates at -30 dBu.
- Integrated protection – safeguards against amp shortcuts, output voltage variations, high-frequency overload, and overheating.

4" Coaxial Ceiling Loudspeaker

AS104



- Coaxial design using premium components: 4" high-output driver and a 20 mm dome tweeter.
- 100 – 20 kHz bandwidth for consistent, full-range space coverage, reducing speaker count.
- Switchable between 8 Ω low-impedance speaker or a 70V/100V distributed system.
- Effortless installation with magnetic grille, dog leg mount, and cutout template.

Advanced K-12 Classroom



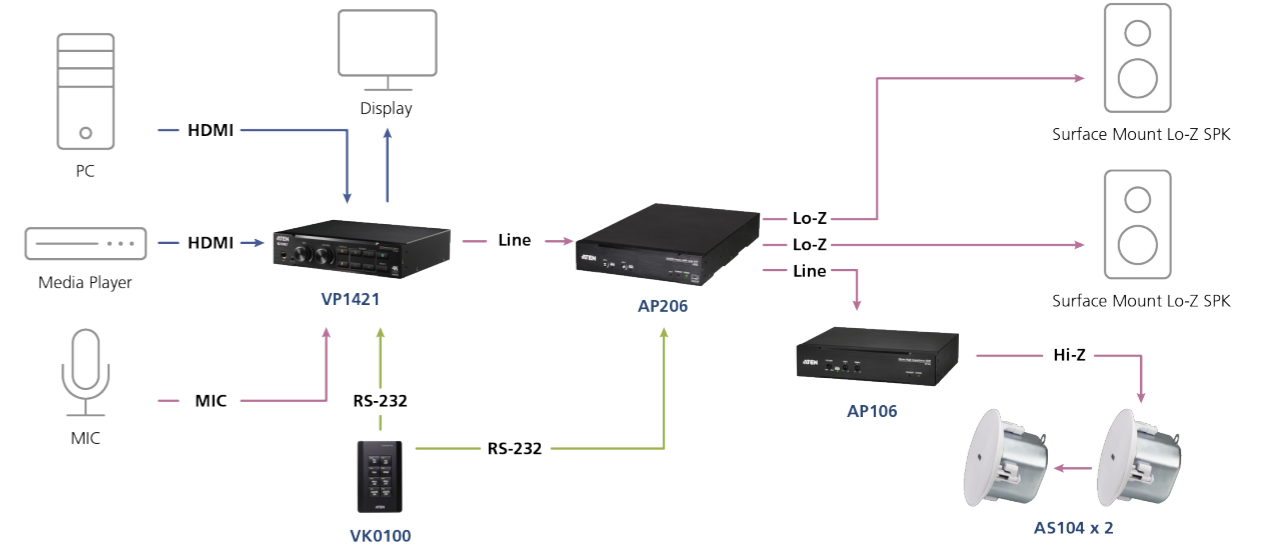
Application

Ideal for acoustically-oriented classrooms, including audio-visual classrooms.

ATEN Solution

- ① Seamless Multi-Source Switching: The ATEN VP1421 enables smooth switching between computers, media players, and the teacher's microphone, allowing for efficient multi-source management.
- ② Optimization of Existing Audio Equipment: Utilize the AP206 amplifier with low impedance output to power the existing high-quality cabinet speakers in the classroom, delivering a layered sound effect.
- ③ Comprehensive Sound Quality Enhancement: To address insufficient sound pressure at the rear of the classroom, arrange AS104 ceiling speakers and utilize the AP2's DSP Delay function to synchronize the sound of the front and rear speakers, resulting in amplified sound pressure.
- ④ Simplified Operation: Easily switch between different DSP Presets using VK control, ensuring the entire system can be used without requiring professional audio and video knowledge.

ATEN Solution Diagram



2x60W Power Amplifier with DSP

AP206



- 2x60W Class D Power Amplifier with integrated professional DSP.
- Intuitive Web GUI simplifies DSP configuration, no audio expertise required.
- Power supply with PFC for enhanced efficiency, compatible with ATEN VK control units for energy-saving and automation.
- Flexible expansion slot design for versatile application scenarios.

4" Coaxial Ceiling Loudspeaker

AS104



- Coaxial design using premium components: 4" high-output driver and a 20 mm dome tweeter.
- 100 – 20 kHz bandwidth for consistent, full-range space coverage, reducing speaker count.
- Switchable between 8 Ω low-impedance speaker or a 70V/100V distributed system.
- Effortless installation with magnetic grille, dog leg mount, and cutout template.

Empowering Corporate Collaboration with Audio Systems

Corporate audio systems are instrumental in fostering a seamless communication and collaboration environment within organizations. Equipped with advanced technology and innovative solutions, these systems deliver superior audio quality, improved intelligibility, and intuitive controls. Addressing a wide range of corporate requirements, the ATEN Audio APAS Series offers customized audio solutions that seamlessly integrate with AV equipment, resulting in heightened productivity and increased output.

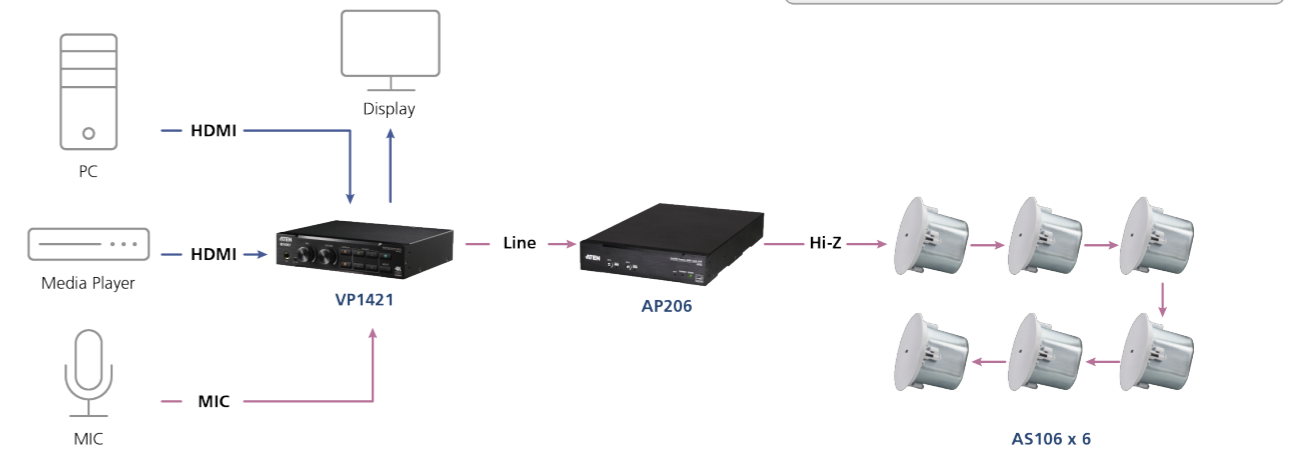
Midsize meeting room



Application Ideal for small and mid-sized multi-purpose meeting rooms accommodating 6-12 people.

- ATEN Solution**
- ① Clear and Crisp Audio: Enhance audio distribution with the AP206 and AS106 combination. The AP206 provides low impedance output for improved sound quality and higher wattage for multimedia video playback.
 - ② Scalability and Flexibility: The AP206 can be seamlessly replaced with the AP106 for general conference use, offering scalability and flexibility.
 - ③ Seamless Integration: Achieve multi-source audio and video switching by pairing the VP1421 with the AP206.

ATEN Solution Diagram



2x60W Power Amplifier with DSP

AP206



- 2x60W Class D Power Amplifier with integrated professional DSP.
- Intuitive Web GUI simplifies DSP configuration, no audio expertise required.
- Power supply with PFC for enhanced efficiency, compatible with ATEN VK control units for energy-saving and automation.
- Flexible expansion slot design for versatile application scenarios.

6.5" Coaxial Ceiling Loudspeaker

AS106



- Coaxial design with top-tier components: 6.5" high-output driver and a 20 mm dome tweeter.
- 80 – 20 kHz bandwidth offers consistent full-range coverage, minimizing speaker requirement.
- Versatile use as either 8 Ω low-impedance speaker or as part of a 70V/100V system.
- Simple installation assured with magnetic grille, dog leg mount, and cutout template.

Lecture Hall

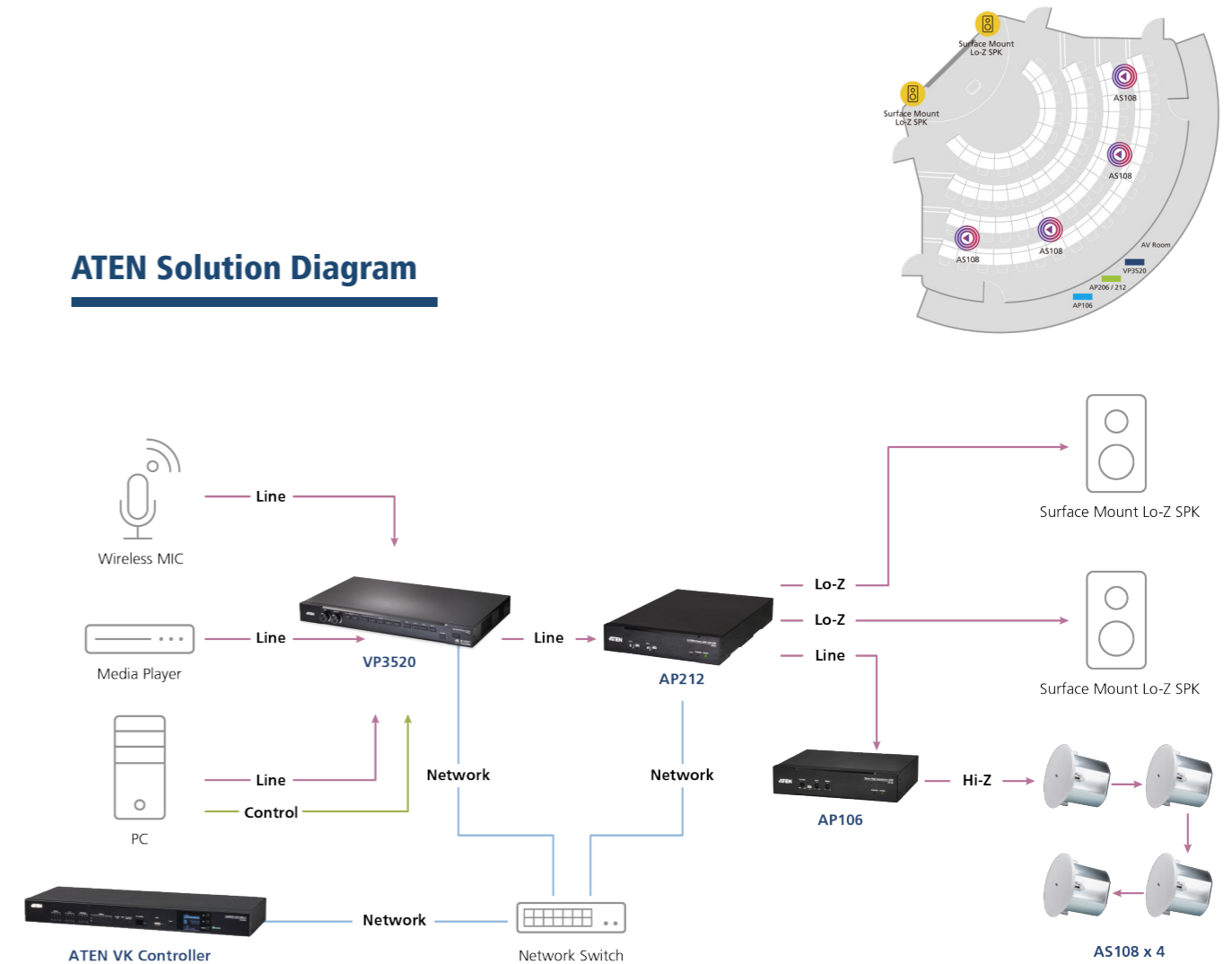


Application Ideal for large lecture halls, seminars, or educational training venues.

ATEN Solution

- ① Seamless Multi-Source Switching: The VP3520 enables seamless switching between computers, media players, and the presenter's wireless microphone, facilitating efficient multi-source management.
- ② Optimization of Existing Audio Equipment: Enhance audio performance by utilizing the AP212 amplifier with low impedance output to power the existing high-quality cabinet speakers on the stage, delivering a layered and immersive sound experience.
- ③ Comprehensive Sound Quality Enhancement: Addressing sound pressure issues at the rear of the lecture hall, deploy AS108 ceiling speakers strategically and utilize the AP2's DSP Delay function to synchronize the sound of the front and rear speakers, resulting in amplified sound pressure and uniform audio coverage.

ATEN Solution Diagram



2x120W Power Amplifier with DSP

AP212



- 2x120W Class D Power Amplifier with integrated professional DSP.
- Intuitive Web GUI simplifies DSP configuration.
- Power supply with PFC for enhanced efficiency, compatible with ATEN VK control units for energy-saving and automation.
- Flexible expansion slot design for versatile application scenarios.

8" Coaxial Ceiling Loudspeaker

AS108



- Coaxial design with top-tier components: 8" high-output driver and a 20 mm dome tweeter.
- 65 – 20 kHz bandwidth offers consistent full-range coverage, minimizing speaker requirement.
- Versatile use as either 8 Ω low-impedance speaker or as part of a 70V/100V system.
- Simple installation assured with magnetic grille, dog leg mount, and cutout template.

Unleashing the Full Potential of Retail with ATEN Audio Systems

Enhancing the overall customer experience and creating an immersive atmosphere in retail environments, ATEN Audio Systems take center stage. With state-of-the-art technology and innovative solutions, our audio systems offer a diverse range of applications that shape customer perception, elevate brand identity, and drive sales in the fiercely competitive retail industry. Whether it's captivating background music, impactful in-store messaging, or area-based audio, our cutting-edge solutions contribute to the success of retail businesses, setting them apart in the retail landscape.

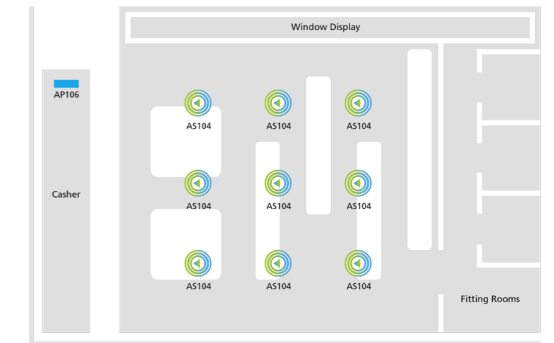
Basic Clothing Store (BGM)



Application Ideal for a variety of general retail stores, including restaurants, clothing, and service stores.

- ATEN Solution**
- ① Captivating Background Music: Enhance the retail experience with 9 AS104 speakers, powered by AP106 at 5W output, delivering balanced volume to avoid interfering with store personnel communication. Create an inviting atmosphere and pleasant shopping environment with carefully curated background music.
 - ② Hassle-Free Installation: The compact and fully sealed design of the AP106 allows for easy installation in hidden areas like behind TVs or in dusty environments such as ceilings.

ATEN Solution Diagram



60W Mono Hi-Z Power Amplifier

AP106



- A Class D power amp offering 60W power to 70V or 100V audio systems.
- Inbuilt 2-band shelf EQ for 6 dB treble and bass control.
- Power Saving Mode – shuts down with -50 dBu or less audio input for 30 mins and reactivates at -30 dBu.
- Integrated protection – safeguards against amp shortcuts, output voltage variations, high-frequency overload, and overheating.

4" Coaxial Ceiling Loudspeaker

AS104



- Coaxial design using premium components: 4" high-output driver and a 20 mm dome tweeter.
- 100 – 20 kHz bandwidth for consistent, full-range space coverage, reducing speaker count.
- Switchable between 8 Ω low-impedance speaker or a 70V/100V distributed system.
- Effortless installation with magnetic grille, dog leg mount, and cutout template.

Advanced Clothing Store (BGM / Paging)

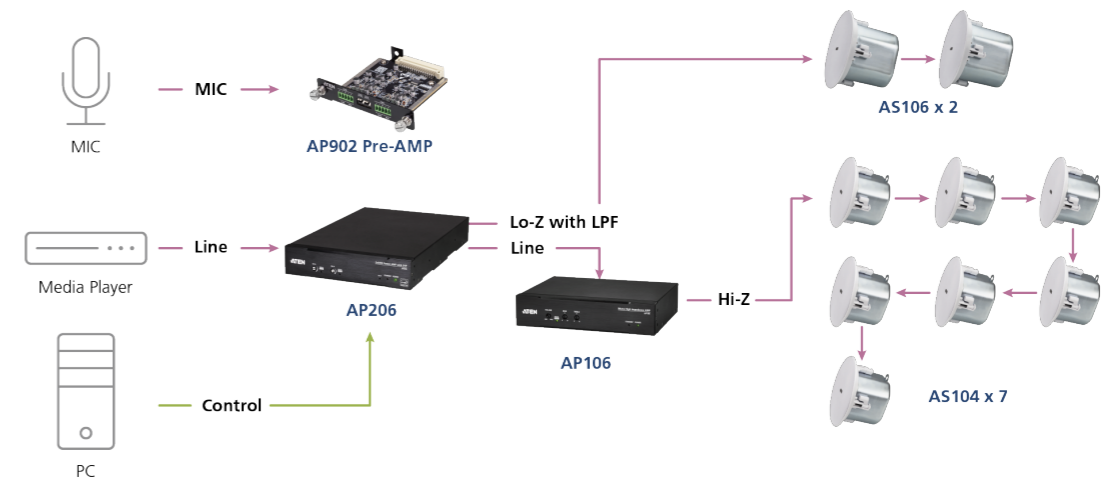


Application Ideal for retail stores that prioritize exceptional background music performance.

ATEN Solution

- ① Immersive Background Music: Elevate the music experience with 7 AS104 speakers and 2 AS106, powered by AP206. The DSP-filtered high frequency is output in low impedance mode, ensuring optimal sound quality and creating a layered music atmosphere that enhances the overall ambiance and elevates the customer experience.
- ② Versatile Functionality: The AP902, when integrated with AP206, offers versatile capabilities. It can be utilized as a broadcasting tool, enabling space events, promotions, and live performances to be supported with clear and immersive sound.

ATEN Solution Diagram



2 Channel Mic/Line Preamp Card

AP902 Pre-AMP



- Expand AP2 Series AMP with two additional input channels.
- Dynamic microphone support for versatile input options.
- Adjustable preamp gain ranging from -6dB to +36dB.

2x60W Power Amplifier with DSP

AP206



- 2x60W Class D Power Amplifier with integrated professional DSP.
- Intuitive Web GUI simplifies DSP configuration.
- Power supply with PFC for enhanced efficiency, compatible with ATEN VK control units for energy-saving and automation.
- Flexible expansion slot design for versatile application scenarios.

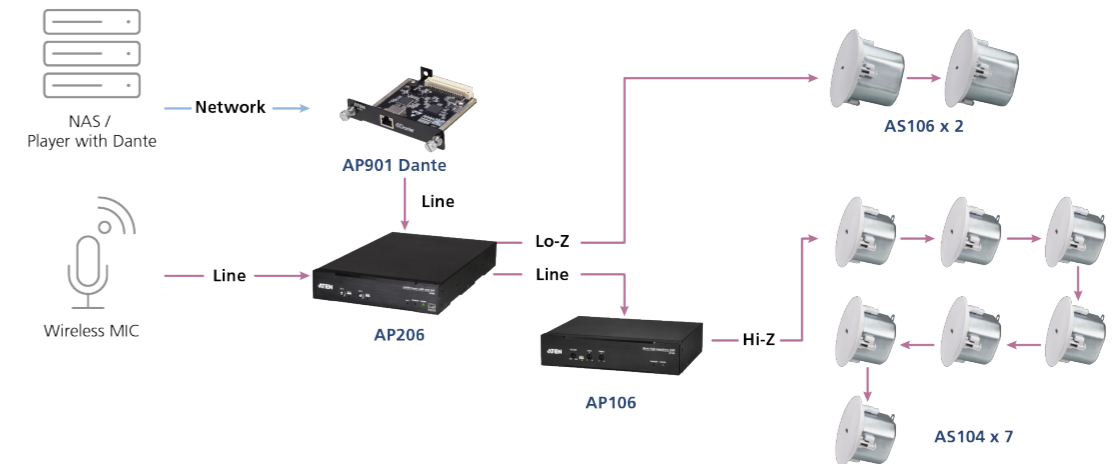
Dante Over IP Clothing Store (BGM with Network Player / Paging)



Application Ideal for audio management of retail stores in shopping center.

- ATEN Solution**
- ① Immersive Background Music: Elevate the music experience with 7 AS104 speakers and 2 AS106, powered by AP206. The DSP-filtered high frequency is output in low impedance mode, ensuring optimal sound quality and creating a layered music atmosphere that enhances the overall ambiance and elevates the customer experience.
 - ② Centralized Management: Integrate AP901 with AP206 to receive audio from Dante Over IP devices. This allows the shopping center's control center to centrally manage audio across retail stores, maximizing cost-effectiveness and simplifying audio management operations. Enjoy seamless audio control and enhanced efficiency.

ATEN Solution Diagram



Dante Expansion Card

AP901 Dante



- Enhance AP2 Series AMP with Dante compatibility.
- Supports 44.1k / 48kHz Sampling Rate.
- Offering a straightforward and dependable AoIP solution.

2x60W Power Amplifier with DSP

AP206



- 2x60W Class D Power Amplifier with integrated professional DSP.
- Intuitive Web GUI simplifies DSP configuration.
- Power supply with PFC for enhanced efficiency, compatible with ATEN VK control units for energy-saving and automation.
- Flexible expansion slot design for versatile application scenarios.




60W Mono Hi-Z Power Amplifier

AP106






- A Class D power amp offering 60W power to 70V or 100V audio systems.
- Inbuilt 2-band shelf EQ for 6 dB treble and bass control.
- Power Saving Mode – shuts down with -50 dBu or less audio input for 30 mins and reactivates at -30 dBu.
- Integrated protection – safeguards against amp shortcuts, output voltage variations, high-frequency overload, and overheating.

Product Comparison – Power Amplifiers

	AP106	AP206	AP212
Product photo			
AMP Type	Class D	Class D	Class D
Lo-Z Power Rated	N/A	2x60W	2x120W
Hi-Z Power Rated	60W	120W	240W
Protection Circuit	Y	Y	Y
THD+N	<0.1%, 3dB before clipping	<0.1%, 3dB before clipping	<0.1%, 3dB before clipping
AC IN	100-240V~, 50/60Hz	100-240V~, 50/60Hz	100-240V~, 50/60Hz
Standby Mode	Y	Y	Y
Built-In DSP	N/A	Y	Y
WebGUI Control	N/A	Y	Y
LAN Control	N/A	Y	Y
Line Output	N/A	Y	Y
Rack Size	1/2U	1/2U	1/2U
Dante Compatibility	N/A	Y, with AP901	Y, with AP901
MIC Input	N/A	Y, with AP902	Y, with AP902
Control	RS-232	RS-232, LAN	RS-232, LAN

Product Comparison – Speakers

	AS104	AS106	AS108
Product photo			
System Specification			
LF Driver	4" Paper Cone with Rubber Suspension	6.5" Paper Cone with Rubber Suspension	8" Paper Cone with Rubber Suspension
HF Driver	20 mm PEI Dome Tweeter	20 mm PEI Dome Tweeter	20 mm PEI Dome Tweeter
Frequency Response	100 ~ 20 kHz (-10 dB)	80 ~20 kHz (-10 dB)	65 ~ 20 kHz (-10 dB)
Distortion	<=5 %	<=5 %	<=5 %
Rated Power	30 W RMS / 60 W Peak	60 W RMS / 120 W Peak	80 W RMS / 160W Peak
Sensitivity	86 dB SPL, @1 m, 1 W, 1 kHz	90 dB SPL, @1 m, 1 W, 1 kHz	90 dB SPL, @1 m, 1 W, 1 kHz
Transformer Taps	70 V (2.5 W, 5 W, 10 W, 20 W) 100 V (*, 5 W, 10 W, 20 W)	70 V (7.5 W, 15 W, 30 W, 60 W) 100 V (*, 15 W, 30 W, 60 W)	70V(10W, 20W, 40W, 80W) 100V(*, 20W, 40W, 80W)
Compliance			
Certification	CE, WEEE, RoHs	CE, WEEE, RoHs	CE, WEEE, RoHs
Connectors			
Audio Inputs	5.08 mm Euroblock Connector	5.08 mm Euroblock Connector	5.08 mm Euroblock Connector
Environmental			
Operating Temperature	0 – 40 °C	0 – 40 °C	0 – 40 °C
Humidity	0 – 80 % RH, Non-Condensing	0 – 80 % RH, Non-Condensing	0 – 80 % RH, Non-Condensing
Storage Temperature	-20 – 60 °C	-20 – 60 °C	-20 – 60 °C
Physical Properties			
Weight	2.20 kg	3.70 kg	5.70 kg
Housing	UL94-V0 ABS Plastic Baffle Zinc-coated Steel Backcan	UL94-V0 ABS Plastic Baffle Zinc-coated Steel Backcan	UL94-V0 ABS Plastic Baffle Zinc-coated Steel Backcan
Dimensions (L x W x H)	21.80 x 21.80 x 13.00 cm	25.72 x 25.72 x 19.75 cm	30.9 x 30.9 x 24.8 cm
Color	White Speaker Grille (Paintable) White Speaker Baffle	White Speaker Grille (Paintable) White Speaker Baffle	White Speaker Grille (Paintable) White Speaker Baffle
Cut-out Diameter	182 mm	221 mm	271 mm
In-ceiling Clearance Height	125 mm	195 mm	243 mm
Carton Lot	2 pcs	2 pcs	2 pcs
Included Accessories	2x Euroblock Connectors; 2x Ceiling Reinforcement Kits; 2x Cutout Templates; 2 x Speaker Grilles	2x Euroblock Connectors; 2x Ceiling Reinforcement Kits; 2x Cutout Templates; 2 x Speaker Grilles	2x Euroblock Connectors; 2x Ceiling Reinforcement Kits; 2x Cutout Templates; 2 x Speaker Grilles



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Showrooms



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