■ AVANDA Family Specifications

SPECIFICATIONS		AVANDA 212A	AVANDA 210A	AVANDA 28A	AVANDA 218A	AVANDA 715A	AVANDA 712A
Frequency Response(-10dB)		60Hz-20kHz	67Hz-20kHz	70Hz-20kHz	27Hz-110Hz	40Hz-20kHz	42Hz-20kHz
Horizontal Coverage		90°			/	100°	100°
Vertical Coverage		Splay angle dependent			/	60°	60°
Maximum Calculated SPL/1M	Continuous	136dB	132dB	127dB	138dB	129dB	126dB
	Program	139dB	135dB	130dB	141dB	132dB	129dB
	Peak	142dB	138dB	133dB	144dB	135dB	132dB
Drivers	HF	Customized Neodymium driver, 2x3" voice coil,1.4" exit		Customized Neodymium driver,1x3" voice coil, 1.4" exit	/	Customized Neodymium driver,1x3" voice coil, 1.4" exit	Customized Neodymium driver,1x3" voice coil, 1.4" exit
	MF	Customized 4x6" driver,1.75" voice coil	/	/	/	/	/
	LF	Customized 2x12" driver,3.0" voice coil	Customized 2x10" driver, 2.5" voice coil	Customized 2x8" driver, 2.0" voice coil	Customized 2x18" Neodymium driver, 4.0" voice coil	Customized 1x15" Neodymium driver, 3.0" voice coil	Customized 1x12" Neodymium driver, 3.0" voice coil

DSP						
Processor	96kHz signal sampling frequency, FIR filtering			96kHz signal sampling frequency	96kHz signal sampling frequency	
Presets	4 Units, 8 Units, 12 Units			80Hz,100Hz,Cardioid	MAIN, LF BOOST, W/SUB	

AMPLIFIER						
Amplifier	Class D					
Power(RMS standards)	2600W	1600W	1000W	4000W	1500W	1500W
Peak Power	5200W	3200W	2000W	8000W	3000W	3000W
Frequency Response(1W 8Ω 2ch)	20Hz-20kHz(±0.5dB)			20Hz-20kHz(±1dB)	20Hz-20kHz(±0.5dB)	20Hz-20kHz(±0.5dB)
Intermodulation Distortion (20Hz-20kHz, half power)	<0.05%			<0.1%	<0.05%	<0.05%
Total Harmonic Distortion (20Hz-20kHz, half power)	<0.05%			<0.1%	<0.05%	<0.05%
Cooling	Cooling with fans，air convection					
Protection	DC protection,Short circuit protection,Overheat protection,Output overload protection,Soft startup protection,Overvoltage protection,Undervoltage protection					
Signal Input/Output Connectors	Female XLR input, male XLR output				Female XLR(Mono jack 6.35), male XLR output	
Power Input Connectors	Power connector					
Power Output Connectors	Power connector			/	Power connector	Power connector
AC Power Operating Range	100V-130V~ or 220V-240V~(±10%,50/60Hz)				100--240V~(±10%,50/60Hz)	
Power consumption(1/8 output power)	300W	142W	95W	500W	100W	100W

CABINET						
Cabinet Material	Multilayer baltic birch plywood					
Angle Adjustment	0°, 1°, 2°, 4°, 6°, 8°, 10°		0°,1°,2°,4°,6°,8°,10°,12°	/	/	/
Coating	Durable Polyurea Coating					
Cabinet Color	Black is the default color. Contact Audiocenter for customization					
Grille	Iron mesh					
Handles	2 side,2 rear	2 side	2 side	4 side	2 side	2 side
Monitor Angle	/				Symmetrical 45° monitoring Angle	
Pole Mount	/			M20 base Φ35mm	Base hole Φ35mm, 0° or 10° optional	
Speaker Dimension(W×H×D)	1220×344×464mm	830×293×420mm	774×240×406mm	1252×556×749mm	421×700×427mm	366×610×385mm
Carton Dimensions (W×H×D)	1322×568×443mm	936×526×393mm	868×501×346mm	1348×655×845mm	516×795×526mm	456×705×481mm
Net Weight	67.0 kg	39.0 kg	24.0 kg	99.0 kg	23.0 kg	20.0 kg
Shipping Weight	70.0 kg	42.0 kg	27.0 kg	107.0 kg	26.0 kg	23.0 kg
Global application support team，EASE GLL files available						

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AUDIOCENTER

Dynamic Audio Solutions

BrainCore™ Technology Inside

Technology for Music & Arts

Designed & Engineered in Europe



AVANDA Family

Designed for global mid-to-high-end professional sound reinforcement applications, the AVANDA family offers a one-stop system solution. The comprehensive product range includes active line array loudspeakers, active point source loudspeakers, subwoofers, and upcoming wedge monitors.

Building upon top-tier European professional audio R&D philosophy, AVANDA maintains stringent acoustic precision standards. Leveraging unified acoustic calibration, DSP architecture, and engineering aesthetic design, the entire product family achieves seamless synergy.

Serving both fixed installation and live touring applications, AVANDA is ideally suited for medium to large theaters, stadiums, convention centers, multi-function halls, concert halls, museums, houses of worship, and premium performance venues. With precise acoustic performance and a refined, minimalist industrial aesthetic, AVANDA delivers stable, highly consistent, premium-quality sound fields for even the most complex acoustic environments.

www.audiocenter.com

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www.facebook.com/Audiocenter.Globe

AUDIOCENTER INTERNATIONAL

AUDIOCENTER

Dynamic Audio Solutions



Joan La Roda

Audiocenter R&D Director

Joan La Roda is an European electro-acoustic engineer, graduated from the Polytechnic University of Valencia (Spain), began his career in the audio industry since 1990 and has held various positions since then. During these 33 years, he first worked as a touring sound engineer, gaining experience in real-life situations. Then successfully designed sound systems for the largest Spanish audio manufacturer, including a top-selling stage monitor which is with linear phase response using FIR filters. After this period, he continued his career as a loudspeaker designer for several companies.

He has published educational articles in Spanish and English on phase alignment and tuning of cardioid subwoofers and has given educational seminars in Southeast Asia, Europe, Oceania and Latin America. Recently he published a book in Spanish to help people make the right choice when buying a sound system. He now uses BEM (Boundary Element Method) techniques to design horns and line array waveguides for Audiocenter.

Design Concept

- **With global unique and pioneering ARROWHEAD™ waveguide technology, FIR BrainCore™ processing technology and patents**
  Adhering to the principle of standing on the shoulders of giants, Audiocenter integrates top European R&D teams and top European loudspeaker and electronic suppliers.
- **The most stylish and compact design of active line array loudspeaker , with exquisite workmanship, and a maximum SPL up to 142dB**
- **Serving the largest customer base with the best products**
- **Allow more people to enjoy the latest and most advanced technology**
- **Durable and suited to all weather conditions and scenarios**

BrainCore™

BrainCore™ is an innovative core application technology researched and developed by Audiocenter, devoted to Audiocenter active DSP-controlled loudspeakers with supreme performance and high reliability.

With its advanced technology and scientific methodology, BrainCore™ analyses and processes the input signal, DSP module, Class D amplifier and loudspeaker optimally, achieving excellent frequency response and audio reproduction even at high levels of SPL.

Main Features

Innovative BrainCore™ technology to improve the audio performance of the system
The innovative BrainCore™ technology and built-in powerful DSP improve the performance of the loudspeaker. With Cort™ correction technology and Limita™ processing technology, the system works with safety and reliability and achieves supreme performance.

Advanced Digital FIR Filter Technology
FIR filtering enhances the audio's attack, ensuring a dynamic and impactful sound experience. The linear phase response preserves the original transient characteristics of the audio signal, resulting in a sharper, more defined attack.

Class D Amplifier
The power amplifier module and DSP module have been designed by Audiocenter's R&D team in Europe and manufactured according to Europe engineering standards. The system operates stably and efficiently, ensuring high-quality audio output.

Global Unique ARROWHEAD™ Waveguide Technology
The global unique ARROWHEAD™ waveguide technology is developed by using the most advanced and complex Boundary Element Method (BEM).

3 Presets
Three presets are available in the Avanda Series, for 4, 8 and 12 units. The presets can be selected via a switch on the back panel.

Stylish, Sturdy, and Compact Cabinet Structure
The cabinet is built using high-quality birch plywood and molded parts to minimize resonance. The cabinet is compact, sturdy and has a professional and stylish appearance.

Advanced Cooling System
Moulded large heatsink improves cooling , resulting in higher reliability.

Durable Polyurea Coating
The polyurea coating is waterproof, wear resistance, impact resistance and aging resistance.

Sleep mode
To save power, the system will enter into sleep mode automatically if without signal input for 45 mins.

Customized ProDriver
Latest driver technology and customized drivers ensure a clean sound and impressive dynamics.

Integrated Flyware
Built-in flying hardware

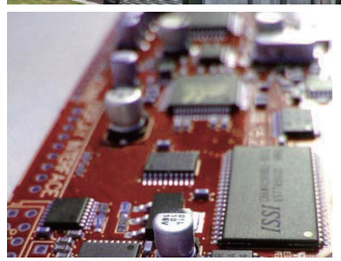
EASE GLL
EASE GLL file available

Dynamic Audio Solutions

European R&D design, German standard engineering

The power amplifier module and DSP module were designed by Audiocenter's R&D team in Europe and manufactured according to German standard engineering. The system operates stably and efficiently, ensuring high-quality audio output.







Advanced Digital FIR Filter Technology
FIR filtering enhances the audio's attack, ensuring a dynamic and impactful sound experience. The linear phase response preserves the original transient characteristics of the audio signal, resulting in a sharper, more defined attack.

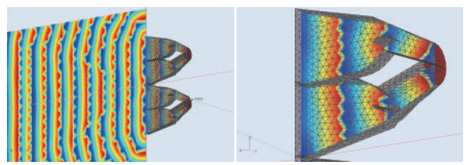
The power amplifier modules and DSP modules used in AVANDA have been sold over 500,000 units worldwide and have proven to be of very stable and reliable quality.

High-efficiency Class D Amplifier Module
The high-efficiency amplifier module can provide the highest sound output power among similar products. A single module has a peak power of up to 2200W and can provide excellent dynamic and transient response, greatly improving the audio performance of the speakers.

Modular Power Amplifier Module
The modular power amplifier module adopts a sturdy mechanical structure, which can better protect the power amplifier. The tunnel-type heat dissipation also provides optimal heat dissipation efficiency (The maximum temperature rise is 30˚C).

Global Unique ARROWHEAD™ Waveguide Technology





The global unique ARROWHEAD™ waveguide patent technology has been developed in house by AUDIOCENTER R&D team, by using the extremely advanced and sophisticated Boundary Element Method (BEM), integrating Audiocenter's extensive experience in audio industry. We have spent more than 3 years to design this ARROWHEAD™ waveguide technology.

The Arrowhead family of waveguides for the new Avanda line array series has been developed using Boundary Element Method (BEM) techniques. BEM is a numerical computational method used in acoustics to model sound wave propagation in acoustic devices such as horns or waveguides using surface-based calculations and boundary conditions.

The entry (throat) of a line array waveguide is round, while the exit (mouth) is rectangular. The role of a line array waveguide is to guide the sound wave from the circular entry to the rectangular exit while providing a narrow vertical coverage. This is achieved by shaping the interior of the waveguide in such a way that an isophasic wavefront is produced at the exit.

Each waveguide design has its own advantages and disadvantages, and challenges to overcome depending on the design strategy chosen. In our case, the arrowhead shape already provided the desired isophasic wavefront, but could be further improved by adding an acoustic impedance adapter,teardrop shaped, to facilitate the propagation of the soundwave within the device.

Advanced Digital FIR Filter Technology

FIR filters ensure that all frequencies within the audio signal experience equal delay, preserving the natural timing and phase relationships. This remarkable feature allows for seamless integration of audio systems. Two different systems featuring linear phase response can be put in phase in the whole frequency range simply by using a delay line.

FIR filtering enhances the audio's attack, ensuring a dynamic and impactful sound experience. The linear phase response preserves the original transient characteristics of the audio signal, resulting in a sharper, more defined attack. This means that every drum hit, guitar strum, or vocal emphasis retains its full impact, allowing the audience to immerse themselves in the intricate details and nuances of the sound.

PRESET,FIR Filter Technology

AVANDA line array system comes with 3 default presets--4 Units, 8 Units, 12 Units. Users can directly call the corresponding preset program through the switch on the back panel.

Using a 96kHz signal sampling frequency and FIR filtering technology,it enhances the audio's attack, ensuring a dynamic and impactful sound experience. The linear phase response preserves the original transient characteristics of the audio signal, resulting in a sharper, more defined attack.With excellent phase consistency, it can bring the performance of the loudspeaker system to its fullest potential.

EASE GLL files

IFAA laboratory in Germany provides EASE GLL files to help the system engineers do the preliminary system designs.

Compact and light weight cabinet design

The symmetrical cabinet design helps to provide a uniform horizontal coverage.

AVANDA 212A
Dimention(W×H×D)：1220×344×464mm
Net Weight：67.0 kg

AVANDA 210A
Dimention(W×H×D)：830×293×420mm
Net Weight：39.0 kg

AVANDA 28A
Dimention(W×H×D)：774×240×406mm
Net Weight：24.0 kg



Visual Aesthetic Revolution of Professional Audio

AVANDA has started a visual aesthetic revolution in the professional audio field. AVANDA breaks through traditional design methods. The product appearance adopts an embedded design, and the custom-made cabinet protection parts hide the pins, fully enhancing the neatness and beauty of the product.

The cabinet is treated with polyurea spraying. The polyurea coating is waterproof, wear resistance, impact resistance and aging resistance.



Dynamic Audio Solutions

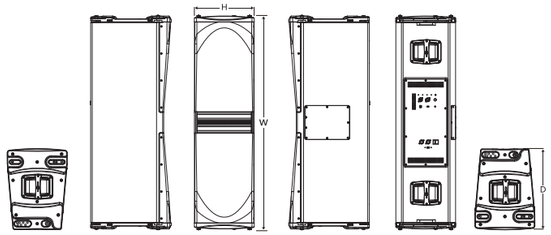
AVANDA 212A

AVANDA 212A is a dual 12” three-way active DSP controlled line array loudspeaker. Designed for medium to large-scale sound reinforcement applications and mid-to-high-end fixed installations, it provides a high quality and poweful sound, meeting the requirements of any sound reinforcement application, indoors or outdoors.

The AVANDA 212A achieves a narrow vertical coverage in the high frequency range through the innovative ARROWHEAD™ waveguide technology, providing a clearer sound performance.The 90° horn provides a precise horizontal coverage and ensures that the system delivers an even and smooth sound.

CNC machined birch plywood cabinet, coated with polyurea, is waterproof, wear and high temperature resistant.





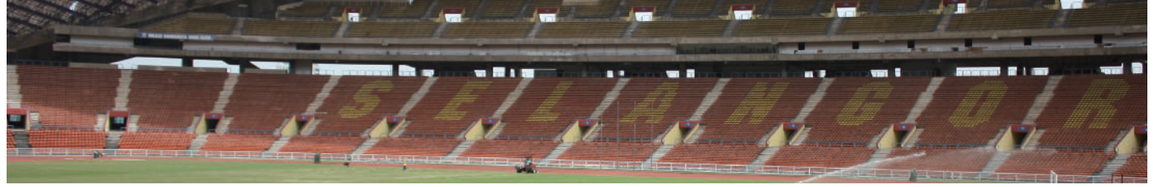
Dimension(W×H×D)：1220×344×464 mm

Key Features

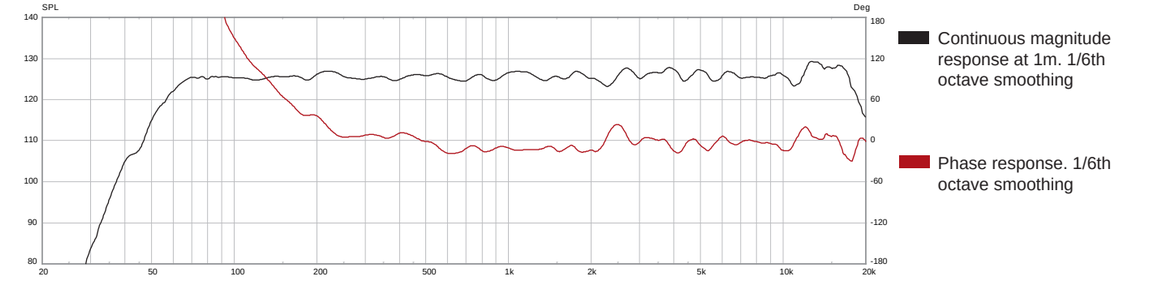
- **BrainCore™ Integration:** Seamless implementation of BrainCore™ technology for optimized system performance and supreme sonic fidelity.
- **ARROWHEAD™ Waveguide:** Advanced waveguide technology provides precise high-frequency directivity and enhanced clarity.
- **High-End Digital Processing:** State-of-the-art DSP featuring a 96kHz sampling frequency and FIR filtering for superior signal accuracy.
- **Efficient Class D Amplification:** High-output, integrated Class D amplifier delivers consistent power with maximum efficiency.
- **Versatile Performance Presets:** Three factory-optimized presets for quick and reliable setup in various acoustic environments.
- **Intelligent Power Management:** Automatic "sleep mode" activates after 45 minutes of signal inactivity to conserve energy.
- **Customized Transducers:** Precision-engineered drivers designed specifically to maximize the system’s acoustic potential.
- **Thermal Protection:** Advanced temperature control system ensures stable operation and long-term reliability during demanding use.
- **Pro-Grade Construction:** CNC-machined birch plywood cabinet with a compact, optimized design for ease of deployment.
- **Rugged Polyurea Finish:** Ultra-durable, waterproof, and heat-resistant polyurea coating provides superior protection against wear and environmental factors.

Specification

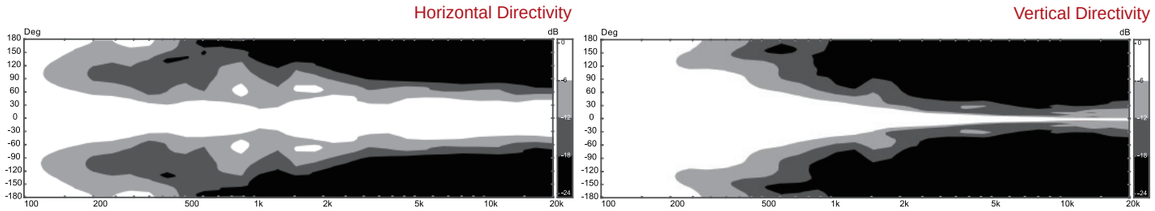
Frequency Response(-10dB)	60Hz-20kHz
Maximum Calculated SPL/1M(Continuous/Peak)	136dB/142dB
Horizontal Coverage	90°
Vertical Coverage	Splay angle dependent
HF	Customized Neodymium driver, 2x3”voice coil, 1.4”exit
MF	Customized 4x6” driver, 1.75”voice coil
LF	Customized 2x12” driver, 3”voice coil
DSP	
Processor	96kHz signal sampling frequency, FIR filtering
Presets	4 Units,8 Units,12 Units
AMPLIFIER	
Amplifier Circuitry	Class D
Power(RMS standards)	2600W
Peak Power	5200W
Frequency Response (1W 8Ω 2ch)	20Hz-20kHz(±0.5dB)
Intermodulation Distortion	＜0.05%
Total Harmonic Distortion	＜0.05%
Cooling System	Cooling with fans,air convection
Protection	DC protection, short circuit protection, overheat protection, input overload protection, output overload protection, soft startup protection, overvoltage protection, undervoltage protection
Output/Input	
Signal Input	Female XLR
Signal Output	Male XLR
Power Input	Power connector
Power Output	Power connector
AC Power Operating Range	100V-130V~ or 220V-240V~(±10%,50/60Hz)
Power consumption (1/8 output power)	300W
Cabinet	
Cabinet Material	Multilayer baltic birch plywood
Angle Adjustment	0°，1°，2°，4°，6°，8°，10°
Coating	Durable Polyurea Coating
Cabinet Color	Black is the default color. Contact Audiocenter for customization
Grille	Iron mesh
Handles	2 side,2 rear
Speaker Dimension(W×H×D)	1220×344×464mm
Carton Dimensions (W×H×D)	1322×568×443mm
Net Weight	67.0 kg
Shipping Weight	70.0 kg



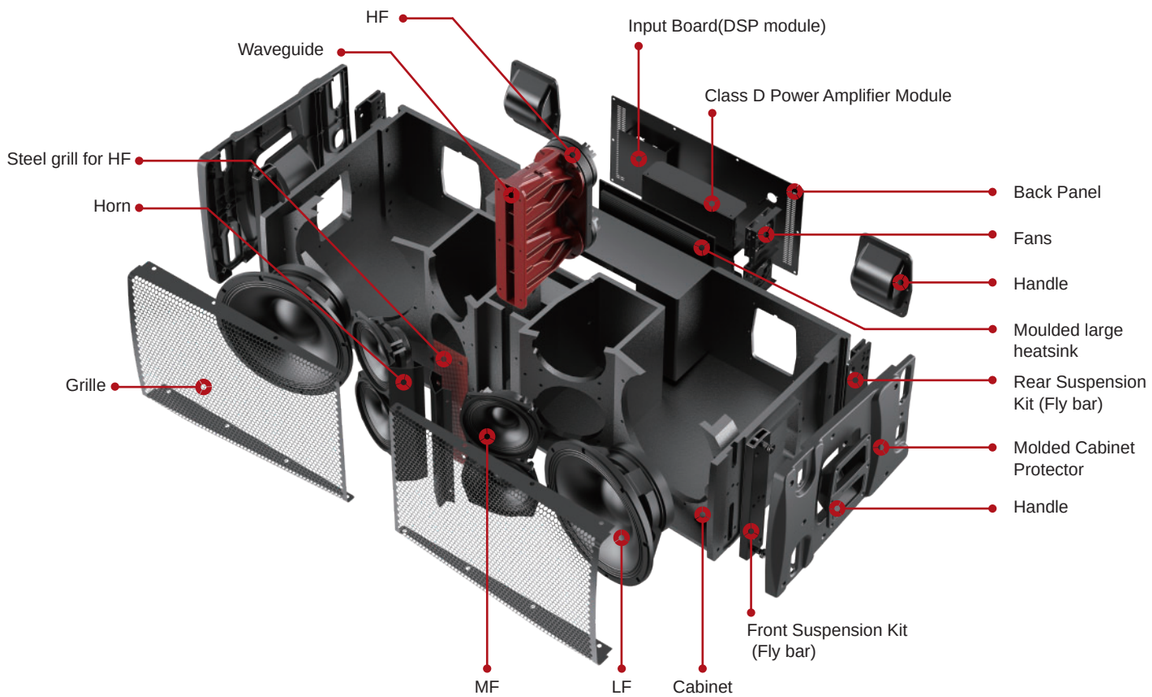
Frequency Response Graphs



Normalized Isobar Plot



Internal Structure



Dynamic Audio Solutions

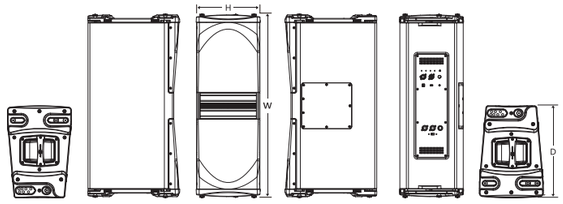
AVANDA 210A

AVANDA 210A is a dual 10” two-way active DSP controlled line array loudspeaker. Designed for medium to large-scale sound reinforcement applications and mid-to-high-end fixed installations, it provides a high quality and poweful sound, meeting the requirements of any sound reinforcement application, indoors or outdoors.

The AVANDA 210A achieves a narrow vertical coverage in the high frequency range through the innovative ARROWHEAD™ waveguide technology, providing a clearer sound performance.The 90° horn provides a precise horizontal coverage and ensures that the system delivers an even and smooth sound.

CNC machined birch plywood cabinet, coated with polyurea, is waterproof, wear and high temperature resistant.





Dimension(W×H×D)：830×293×420mm

Key Features

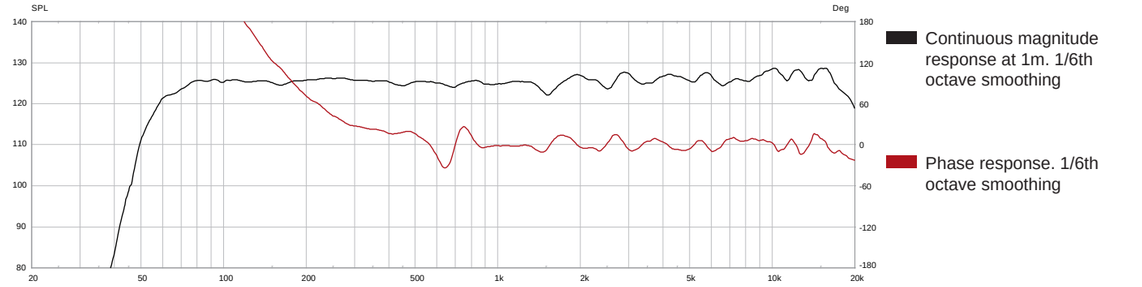
- **BrainCore™ Integration:** Seamless implementation of BrainCore™ technology for optimized system performance and supreme sonic fidelity.
- **ARROWHEAD™ Waveguide:** Advanced waveguide technology provides precise high-frequency directivity and enhanced clarity.
- **High-End Digital Processing:** State-of-the-art DSP featuring a 96kHz sampling frequency and FIR filtering for superior signal accuracy.
- **Efficient Class D Amplification:** High-output, integrated Class D amplifier delivers consistent power with maximum efficiency.
- **Versatile Performance Presets:** Three factory-optimized presets for quick and reliable setup in various acoustic environments.
- **Intelligent Power Management:** Automatic "sleep mode" activates after 45 minutes of signal inactivity to conserve energy.
- **Customized Transducers:** Precision-engineered drivers designed specifically to maximize the system's acoustic potential.
- **Thermal Protection:** Advanced temperature control system ensures stable operation and long-term reliability during demanding use.
- **Pro-Grade Construction:** CNC-machined birch plywood cabinet with a compact, optimized design for ease of deployment.
- **Rugged Polyurea Finish:** Ultra-durable, waterproof, and heat-resistant polyurea coating provides superior protection against wear and environmental factors.

Specification

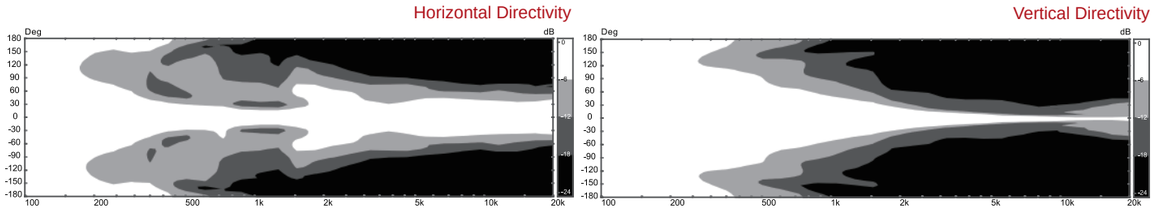
Frequency Response(-10dB)	67Hz-20kHz
Maximum Calculated SPL/1M(Continuous/Peak)	132dB/138dB
Horizontal Coverage	90°
Vertical Coverage	Splay angle dependent
HF	Customized Neodymium driver,2x3” voice coil, 1.4”exit
LF	Customized 2x10” driver, 2.5”voice coil
DSP	
Processor	96kHz signal sampling frequency, FIR filtering
Presets	4 Units,8 Units,12 Units
AMPLIFIER	
Amplifier Circuitry	Class D
Power(RMS standards)	1600W
Peak Power	3200W
Frequency Response (1W 8Ω 2ch)	20Hz-20kHz(±0.5dB)
Intermodulation Distortion	＜0.05%
Total Harmonic Distortion	＜0.05%
Cooling System	Cooling with fans,air convection
Protection	DC protection, short circuit protection, overheat protection, input overload protection, output overload protection, soft startup protection, overvoltage protection, undervoltage protection
Output/Input	
Signal Input	Female XLR
Signal Output	Male XLR
Power Input	Power connector
Power Output	Power connector
AC Power Operating Range	100V-130V~ or 220V-240V~(±10%,50/60Hz)
Power consumption (1/8 output power)	142W
Cabinet	
Cabinet Material	Multilayer baltic birch plywood
Angle Adjustment	0°, 1°, 2°, 4°, 6°, 8°, 10°
Coating	Durable Polyurea Coating
Cabinet Color	Black is the default color. Contact Audiocenter for customization
Grille	Iron mesh
Handles	2 side
Speaker Dimension(W×H×D)	830×293×420mm
Carton Dimensions (W×H×D)	936×526×393mm
Net Weight	39.0 kg
Shipping Weight	42.0 kg



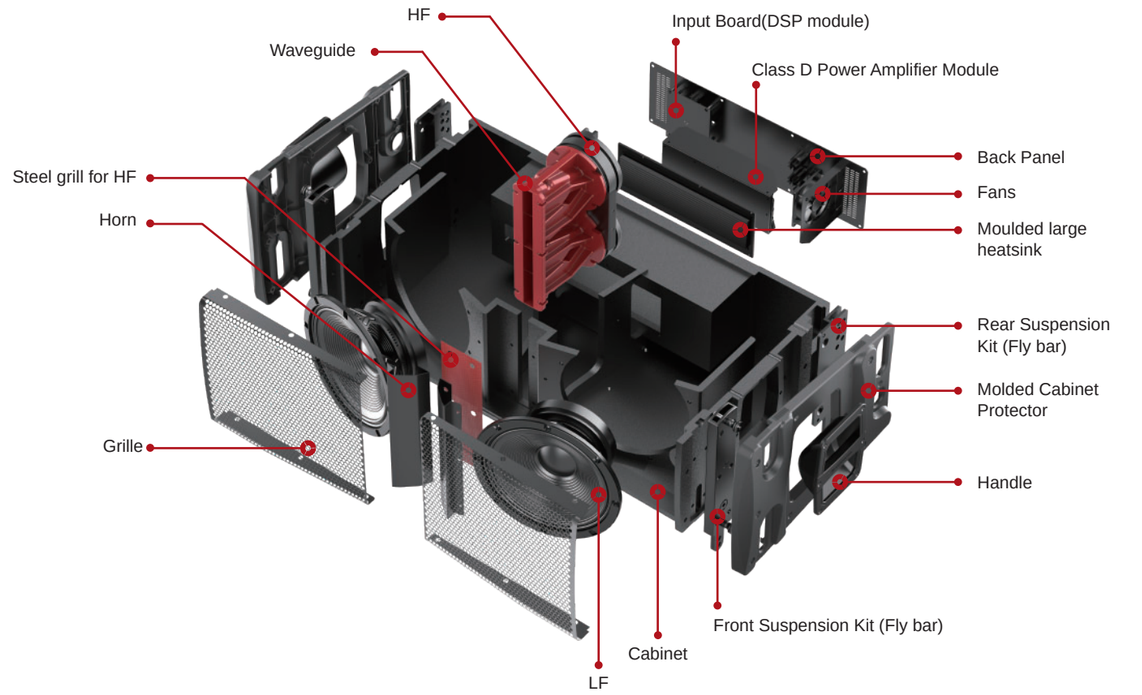
Frequency Response Graphs



Normalized Isobar Plot



Internal Structure



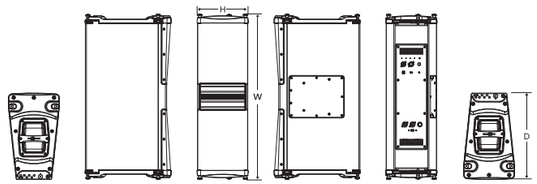
Dynamic Audio Solutions

AVANDA 28A

The AVANDA 28A is a compact, dual 8” two-way active line array system engineered for high-performance sound reinforcement in small to medium-scale applications and premium fixed installations. Delivering exceptional clarity and power, it is designed to meet the rigorous demands of professional audio environments, both indoors and outdoors.

Featuring innovative ARROWHEAD™ waveguide technology, the AVANDA 28A achieves precise vertical directivity in the high-frequency range for superior sonic detail. An integrated 90° horn ensures consistent horizontal coverage, delivering a smooth, uniform sound field across the entire listening area. Built-in DSP provides sophisticated system management, allowing for seamless integration and peak performance in any venue.

The enclosure is CNC-machined from premium birch plywood for maximum structural integrity. To ensure longevity in challenging environments, it is finished with a high-durability polyurea coating—offering excellent waterproof, wear-resistant, and high-temperature properties.



Dimension(W×H×D)：774×240×406mm

Key Features

- **BrainCore™ Integration:** Seamless implementation of BrainCore™ technology for optimized system performance and supreme sonic fidelity.
- **ARROWHEAD™ Waveguide:** Advanced waveguide technology provides precise high-frequency directivity and enhanced clarity.
- **High-End Digital Processing:** State-of-the-art DSP featuring a 96kHz sampling frequency and FIR filtering for superior signal accuracy.
- **Efficient Class D Amplification:** High-output, integrated Class D amplifier delivers consistent power with maximum efficiency.
- **Versatile Performance Presets:** Three factory-optimized presets for quick and reliable setup in various acoustic environments.
- **Intelligent Power Management:** Automatic "sleep mode" activates after 45 minutes of signal inactivity to conserve energy.
- **Customized Transducers:** Precision-engineered drivers designed specifically to maximize the system's acoustic potential.
- **Thermal Protection:** Advanced temperature control system ensures stable operation and long-term reliability during demanding use.
- **Pro-Grade Construction:** CNC-machined birch plywood cabinet with a compact, optimized design for ease of deployment.
- **Rugged Polyurea Finish:** Ultra-durable, waterproof, and heat-resistant polyurea coating provides superior protection against wear and environmental factors.

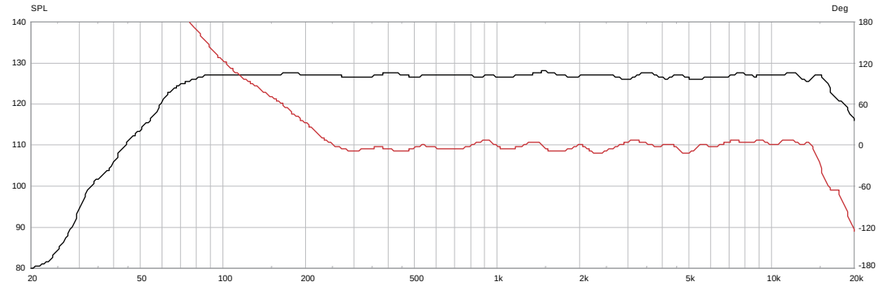


Specification

Frequency Response(-10dB)	70Hz-20kHz
Maximum Calculated SPL/1M(Continuous/Peak)	127dB/133dB
Horizontal Coverage	90°
Vertical Coverage	Splay angle dependent
HF	Customized Neodymium driver,1x3” voice coil, 1.4”exit
LF	Customized 2x8” driver, 2.0”voice coil
DSP	
Processor	96kHz signal sampling frequency, FIR filtering
Presets	4 Units,8 Units,12 Units
AMPLIFIER	
Amplifier Circuitry	Class D
Power(RMS standards)	1000W
Peak Power	2000W
Frequency Response (1W 8Ω 2ch)	20Hz-20kHz(±0.5dB)
Intermodulation Distortion	＜0.05%
Total Harmonic Distortion	＜0.05%
Cooling System	Cooling with fans,air convection
Protection	DC protection, short circuit protection, overheat protection, input overload protection, output overload protection, soft startup protection, overvoltage protection, undervoltage protection
Output/Input	
Signal Input	Female XLR
Signal Output	Male XLR
Power Input	Power connector
Power Output	Power connector
AC Power Operating Range	100V-130V~ or 220V-240V~(±10%,50/60Hz)
Power consumption (1/8 output power)	95W
Cabinet	
Cabinet Material	Multilayer baltic birch plywood
Angle Adjustment	0°, 1°, 2°, 4°, 6°, 8°, 10°, 12°
Coating	Durable Polyurea Coating
Cabinet Color	Black is the default color. Contact Audiocenter for customization
Grille	Iron mesh
Handles	2 side
Speaker Dimension (W×H×D)	774×240×406mm
Carton Dimension (W×H×D)	868×501×346mm
Net Weight	24.0 kg
Shipping Weight	27.0 kg



Frequency Response Graphs

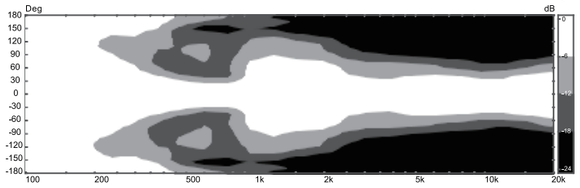


Continuous magnitude response at 1m. 1/6th octave smoothing

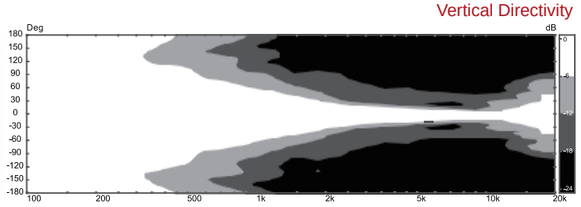
Phase response. 1/6th octave smoothing

Normalized Isobar Plot

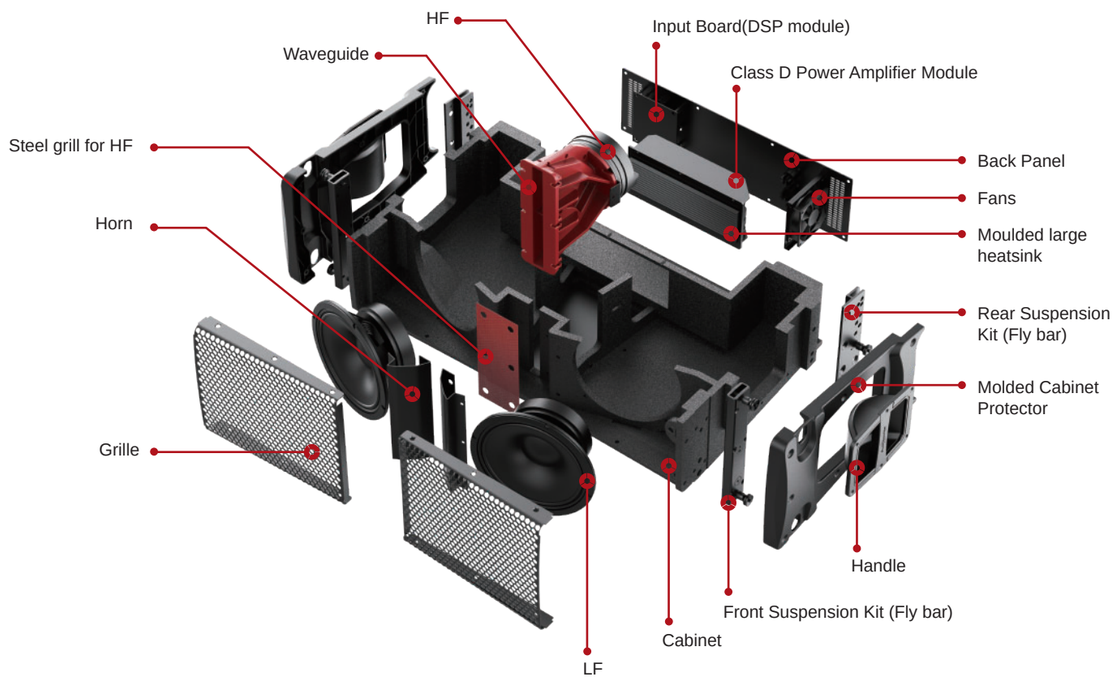
Horizontal Directivity



Vertical Directivity



Internal Structure



Dynamic Audio Solutions

AVANDA 218A

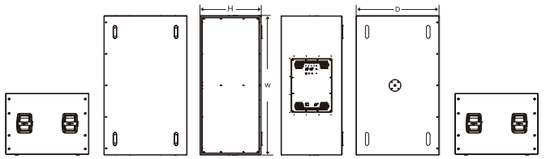
The AVANDA 218A is an active subwoofer specifically designed for mobile applications, rental companies and fixed installations; wherever exceptional sound quality is needed.

It features two custom-designed 18-inch neodymium drivers with 4-inch voice coil.

The AVANDA 218A seamlessly complements Audiocenter's full-range loudspeakers, expanding the frequency response range. They deliver powerful, impactful low-end reinforcement.

With its modular design, the AVANDA 218A offers high flexibility, allowing a cardioid subwoofer pattern and large-scale speaker array configurations. It allows for suspension of up to 12 speakers, providing sound engineers with great convenience and flexibility for installation.





Dimension(W×H×D)：1252×556×749mm

Key Features

- Long Excursion
- High power handling
- Low distortion
- 3 presets
- High end DSP, with 96KHz signal sampling frequency
- Sleep mode automatically if without signal input for 45mins
- Class D amplifier
- Advanced cooling system in the driver
- Multilayer baltic birch plywood
- Durable polyurea coating
- Support hanging installation

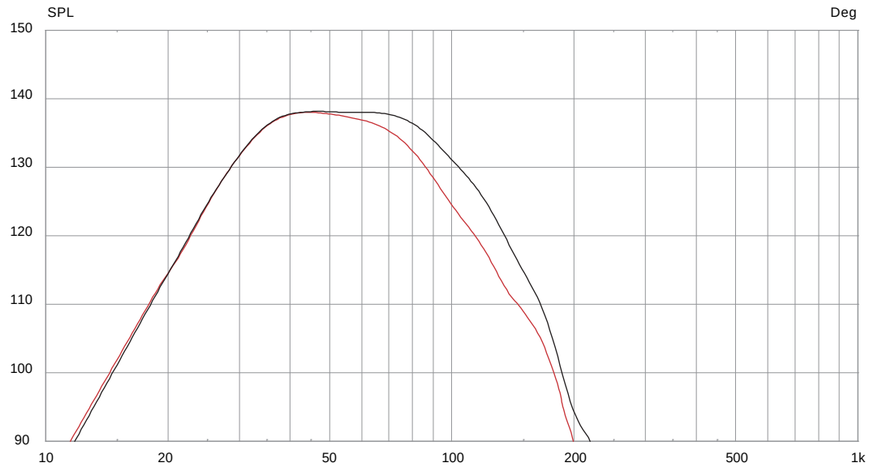
BrainCore Technology Inside · ActiveSpeaker DSP3 · Amp Technology CLASS D · advanced cooling system · CUSTOMIZED PRODUCT · SOLID WOOD CONSTRUCTION · EASE Focus3 licenced · SLEEP

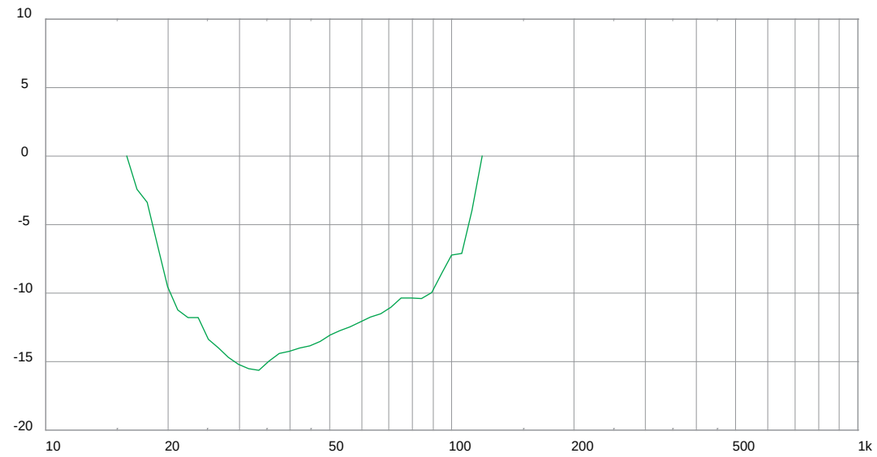
SPECIFICATION

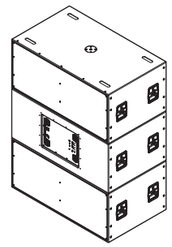
Type	Active DSP-controlled subwoofer
Frequency Response(-10dB)	27Hz-110Hz
Maximum Calculated SPL/1M(Continuous/Peak)	138dB/144dB
LF Driver	Customized 2x18" Neodymium driver, 4.0"voice coil
DSP	
Processor	96kHz signal sampling frequency
Presets	80Hz,100Hz,Cardioid
AMPLIFIER	
Amplifier Circuitry	Class D
Power(RMS standards)	4000W
Peak Power	8000W
Frequency Response (1W 8Ω 2ch)	20Hz-20kHz(±1dB)
Intermodulation Distortion	＜0.1%
Total Harmonic Distortion	＜0.1%
Cooling	Cooling with fans,air convection
Protection	DC protection, short circuit protection, overheat protection, input overload protection, output overload protection, soft startup protection, overvoltage protection, undervoltage protection
Signal Input	Female XLR
Signal Output	Male XLR
Power Input	Power connector
AC Power Operating Range	100V-130V~ or 220V-240V~(±10%,50/60Hz)
Power consumption (1/8 output power)	500W
CABINET	
Cabinet Material	Multilayer baltic birch plywood
Coating	Durable Polyurea Coating
Cabinet Color	Black is the default color. Contact Audiocenter for customization
Grille	Iron mesh
Handles	4 side
Pole Mount	M20 base Φ35mm
Speaker Dimension(W×H×D)	1252×556×749mm
Carton Dimensions (W×H×D)	1348×655×845mm
Net Weight	99.0 kg
Shipping Weight	107.0 kg



Frequency Response Graphs







Cardioid configuration

Dynamic Audio Solutions

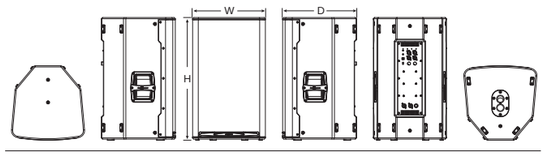
AVANDA 715A

The AVANDA 715A is a professional 15-inch two-way active point-source loudspeaker with excellent sound quality and reliable performance, perfectly suited for high-quality live sound reinforcement scenarios.

It is equipped with a 3.0-inch voice coil, 1.4-inch exit neodymium driver and 15-inch neodymium woofer.The horn provides uniform sound coverage of 100 x 60°, achieving a maximum sound pressure level of 135dB for premium and pristine audio output.

Built around precision-tuned FIR DSP, AVANDA 715A achieves optimized transient response, explosive dynamics and crystalline detail - all anchored by deep, tightly controlled bass that honors the integrity of the original signal.

CNC machined birch plywood cabinet, coated with polyurea, is waterproof, wear and high temperature resistant. Its compact, symmetrical design ensures structural stability and practical deployment, while the base supports 0° or 10° mounting angles to accommodate a wide range of sound reinforcement applications.



Dimension(W×H×D)：421×700×427mm

Key Features

- **BrainCore™ Integration:** Seamless implementation of BrainCore™ technology for optimized system performance and supreme sonic fidelity.
- **Versatile Performance Presets:** Three factory-optimized presets for quick and reliable setup in various acoustic environments.
- **High-End Digital Processing:** State-of-the-art DSP featuring a 96kHz sampling frequency and FIR filtering for superior signal accuracy.
- **Efficient Class D Amplification:** High-output, integrated Class D amplifier delivers consistent power with maximum efficiency.
- **Intelligent Power Management:** Automatic "sleep mode" activates after 45 minutes of signal inactivity to conserve energy.
- **Customized Transducers:** Precision-engineered Neodymium drivers designed specifically to maximize the system's acoustic potential.
- **Thermal Protection:** Advanced temperature control system ensures stable operation and long-term reliability during demanding use.
- **Double Pole Mount:** Adopts 0° or 10° optional pole mount.
- **Rugged Polyurea Finish:** Ultra-durable, waterproof, and heat-resistant polyurea coating provides superior protection against wear and environmental factors.
- **Pro-Grade Construction:** CNC-machined birch plywood cabinet with a compact, optimized design for ease of deployment.

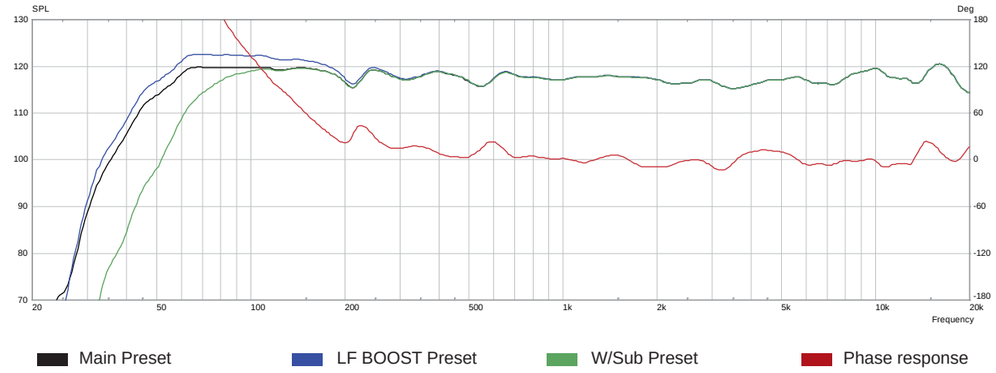


Specification

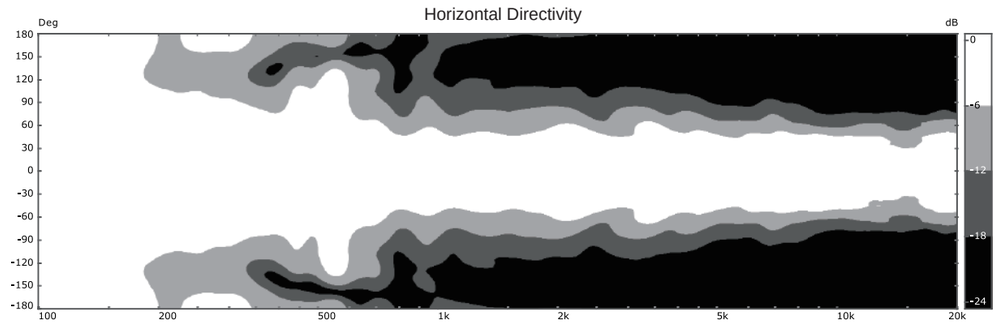
Type	Active DSP-controlled full range loudspeaker
Frequency Response(-10dB)	40Hz-20kHz
Maximum Calculated SPL/1M(Continuous/Peak)	129dB/135dB
HF	Customized Neodymium driver, 3.0” voice coil, 1.4” exit
LF	Customized 15” Neodymium driver, 3.0” voice coil
Horizontal Coverage	100°
Vertical Coverage	60°
DSP	
Processor	96kHz signal sampling frequency, FIR filtering
Presets	MAIN, LF BOOST, W/SUB
AMPLIFIER	
Amplifier Circuitry	Class D
Power (RMS standards)	1500W
Peak Power	3000W
Frequency Response (1W 8Ω 2ch)	20Hz-20kHz(±0.5dB)
Intermodulation Distortion	＜0.05%
Total Harmonic Distortion	＜0.05%
Cooling System	Cooling with fans, air convection
Protection	DC protection, short circuit protection, overheat protection, input overload protection, output overload protection, soft startup protection, overvoltage protection, undervoltage protection
Output / Input	
Signal Input	Female XLR(Mono jack 6.35)
Signal Output	Male XLR
Power Input	Power connector
Power Output	Power connector
Working Voltage	100V--240V~(±10%,50/60Hz)
Power consumption (1/8 output power)	100W
Cabinet	
Cabinet Material	Multilayer baltic birch plywood
Coating	Durable Polyurea Coating
Cabinet Color	Black is the default color. Contact Audiocenter for customization
Grille	Iron mesh
Handles	2 side
Monitor Angle	Symmetrical 45° monitoring Angle
Hanging Hardwares	M8 screw
Pole Mount	Base hole Φ35mm, 0° or 10° optional
Speaker Dimension (W×H×D)	421×700×427mm
Carton Dimension (W×H×D)	516×795×526mm
Net Weight	23.0 kg
Shipping Weight	26.0 kg

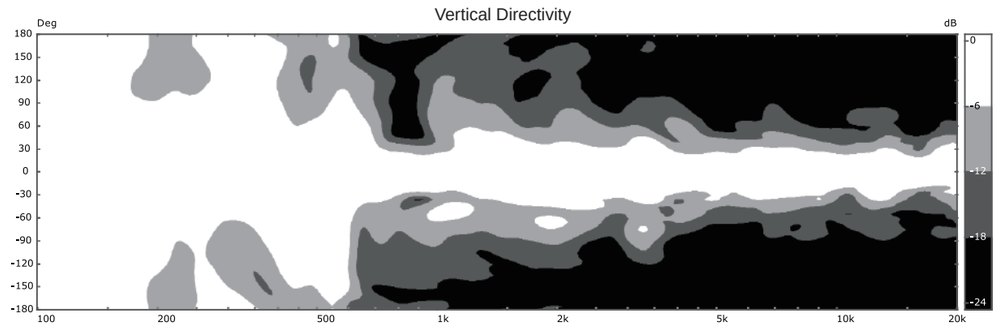


Frequency Response Graphs



Normalized Isobar Plot





Dynamic Audio Solutions

AVANDA 712A

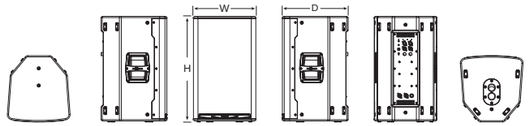
The AVANDA 712A is a professional 12-inch two-way active point-source loudspeaker with excellent sound quality and reliable performance, perfectly suited for high-quality live sound reinforcement scenarios.

It is equipped with a 3.0-inch voice coil, 1.4-inch exit neodymium driver and 12-inch neodymium woofer.The horn provides uniform sound coverage of 100°x 60°, achieving a maximum sound pressure level of 132dB for premium and pristine audio output.

Built around precision-tuned FIR DSP, AVANDA 712A achieves optimized transient response, explosive dynamics and crystalline detail - all anchored by deep, tightly controlled bass that honors the integrity of the original signal.

CNC machined birch plywood cabinet, coated with polyurea, is waterproof, wear and high temperature resistant. Its compact, symmetrical design ensures structural stability and practical deployment, while the base supports 0° or 10° mounting angles to accommodate a wide range of sound reinforcement applications.





Dimension(W×H×D)：366×610×385mm

Key Features

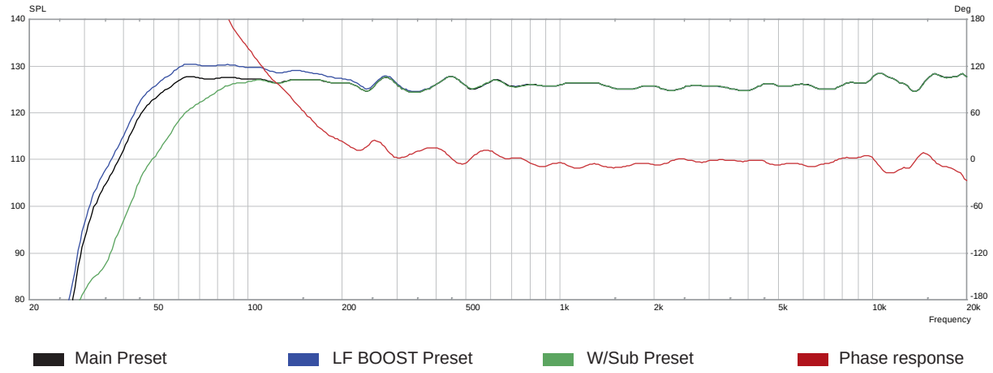
- **BrainCore™ Integration:** Seamless implementation of BrainCore™ technology for optimized system performance and supreme sonic fidelity.
- **Versatile Performance Presets:** Three factory-optimized presets for quick and reliable setup in various acoustic environments.
- **High-End Digital Processing:** State-of-the-art DSP featuring a 96kHz sampling frequency and FIR filtering for superior signal accuracy.
- **Efficient Class D Amplification:** High-output, integrated Class D amplifier delivers consistent power with maximum efficiency.
- **Intelligent Power Management:** Automatic "sleep mode" activates after 45 minutes of signal inactivity to conserve energy.
- **Customized Transducers:** Precision-engineered Neodymium drivers designed specifically to maximize the system's acoustic potential.
- **Thermal Protection:** Advanced temperature control system ensures stable operation and long-term reliability during demanding use.
- **Double Pole Mount:** Adopts 0° or 10° optional pole mount.
- **Rugged Polyurea Finish:** Ultra-durable, waterproof, and heat-resistant polyurea coating provides superior protection against wear and environmental factors.
- **Pro-Grade Construction:** CNC-machined birch plywood cabinet with a compact, optimized design for ease of deployment.

Specification

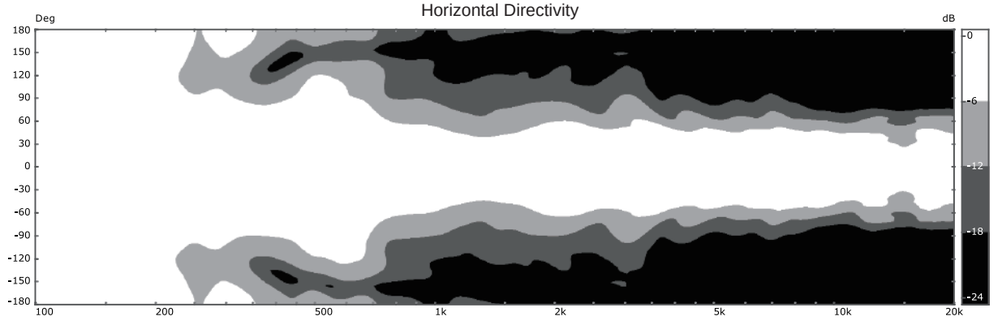
Type	Active DSP-controlled full range loudspeaker
Frequency Response(-10dB)	42Hz-20kHz
Maximum Calculated SPL/1M(Continuous/Peak)	126dB/132dB
HF	Customized Neodymium driver, 3.0” voice coil, 1.4” exit
LF	Customized 12” Neodymium driver, 3.0” voice coil
Horizontal Coverage	100°
Vertical Coverage	60°
DSP	
Processor	96kHz signal sampling frequency, FIR filtering
Presets	MAIN, LF BOOST, W/SUB
AMPLIFIER	
Amplifier Circuitry	Class D
Power (RMS standards)	1500W
Peak Power	3000W
Frequency Response (1W 8Ω 2ch)	20Hz-20kHz(±0.5dB)
Intermodulation Distortion	＜0.05%
Total Harmonic Distortion	＜0.05%
Cooling System	Cooling with fans, air convection
Protection	DC protection, short circuit protection, overheat protection, input overload protection, output overload protection, soft startup protection, overvoltage protection, undervoltage protection
Output / Input	
Signal Input	Female XLR(Mono jack 6.35)
Signal Output	Male XLR
Power Input	Power connector
Power Output	Power connector
Working Voltage	100V--240V~(±10%,50/60Hz)
Power consumption (1/8 output power)	100W
Cabinet	
Cabinet Material	Multilayer baltic birch plywood
Coating	Durable Polyurea Coating
Cabinet Color	Black is the default color. Contact Audiocenter for customization
Grille	Iron mesh
Handles	2 side
Monitor Angle	Symmetrical 45° monitoring Angle
Hanging Hardwares	M8 screw
Pole Mount	Base hole Φ35mm, 0° or 10° optional
Speaker Dimension (W×H×D)	366×610×385mm
Carton Dimension (W×H×D)	456×705×481mm
Net Weight	20.0 kg
Shipping Weight	23.0 kg

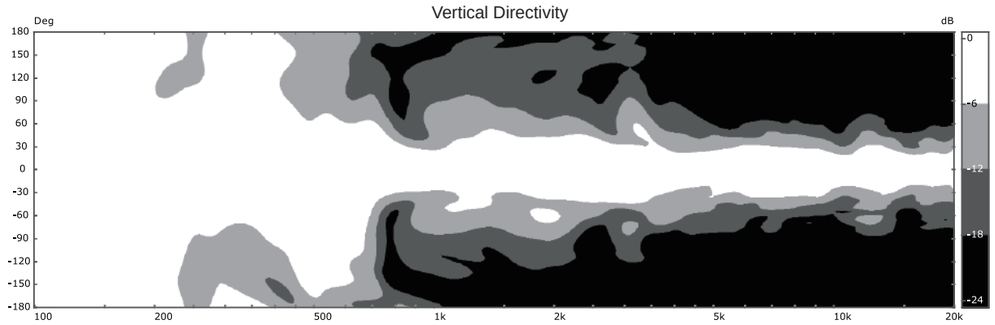


Frequency Response Graphs



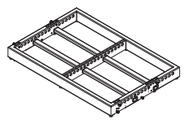
Normalized Isobar Plot



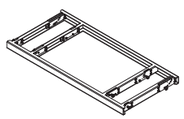


Dynamic Audio Solutions

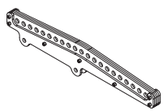
Line Array System Accessories



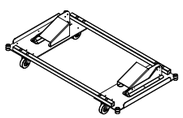
FGF-AVANDA 212A
FGF-AVANDA 210A
FGF-AVANDA 28A
Flying and Groud Stack Frame



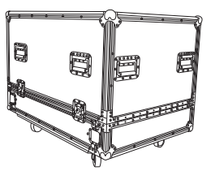
CF-AV212A-210A
CF-AV212A-28A
CF-AV210A-28A
Coupling Frame



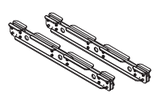
EB-AVD212
extension bar



AVANDA 212A/210A/28A
dolly +protective cover
(for 4 cabinets)



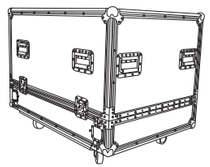
AVANDA 212A/210A/28A Flightcase
For 2 cabinets,with 100mm wheels



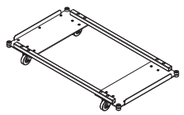
FB-218-KIT
Flying frame set



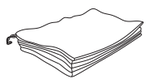
HSB-18-KIT
Hanging side-brackets kit



AVANDA 218A Flightcase
For 1 cabinet,with 100mm wheels

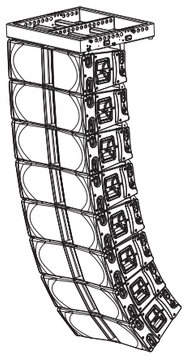


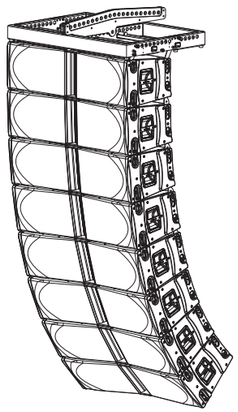
AVANDA 218A dolly +
protective cover
(for 3 cabinets)

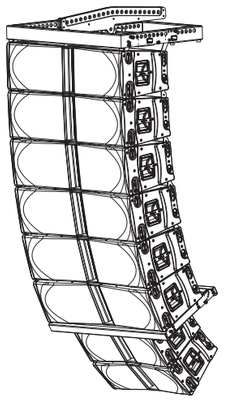


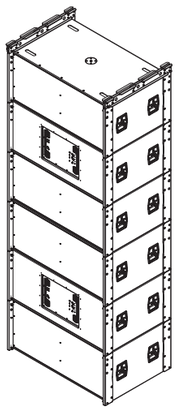
Rain bag
(customized)

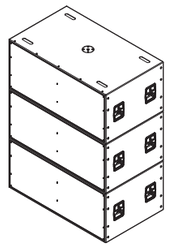
Line Array System Installations

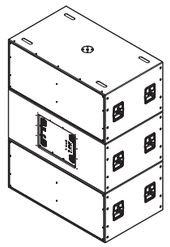


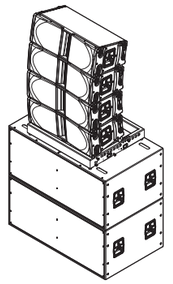




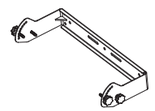




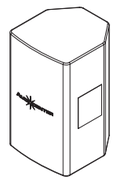




Full Range Loudspeaker Accessories



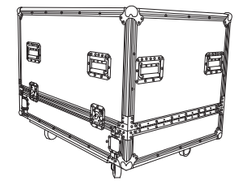
WM-AVD712
WM-AVD715
Horizontal U bracket
Bearing 60KG



Cover



Pole bar
Bearing 50KG



Flightcase
For 2 cabinets,
with 100mm wheels

Full Range Loudspeaker Installations

