CLARITY
MEETS
POWER

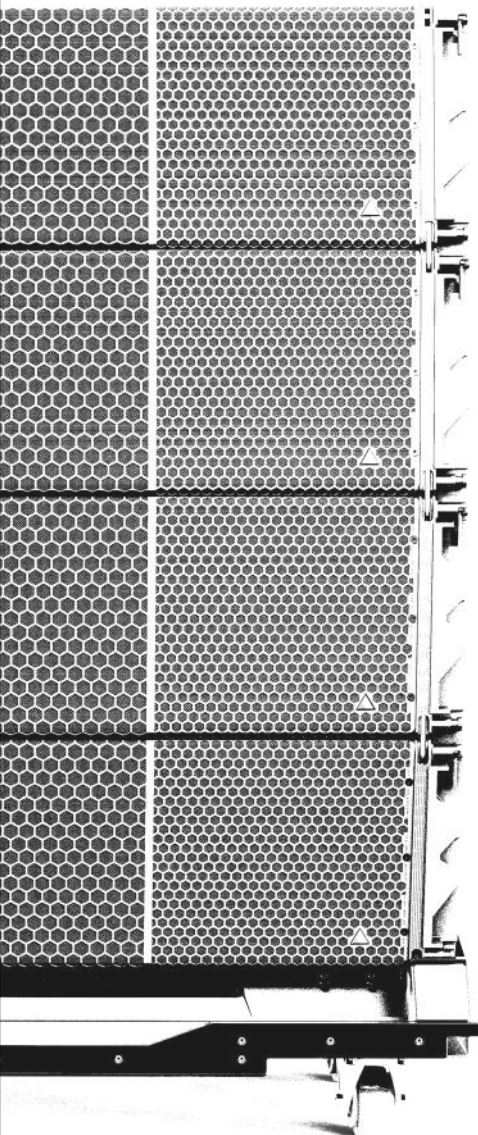# ADAMSON

For more than 40 years, Adamson has focused on innovation. We set ourselves apart by our insistence on building everything in-house and building teams passionate about the technology that sets us apart.

Vertical integration of design and production gives our engineering team the biggest playground in pro audio. Decades of building performance systems without compromise has cemented our position as an industry driver. We've mastered every level of loudspeaker design as we manufacture components from raw material.

Today, Adamson is available in all corners of the world and is used with some of the biggest touring acts, including Drake, Imagine Dragons, The Who and Martin Garrix. It is installed in some of the world's most revered performance spaces, such as Hillsong Church's main campus in Sydney, Australia, Maison de Radio in Paris, France, Elvis Presley's Graceland in Memphis, Tennessee, Paradiso in Amsterdam, or the Meridian Hall for Performing Arts in Toronto.

$\blacktriangle VG_t$

VGt is a large-format line array system that combines state-of-the-art transducer technologies with intelligent electronics to deliver breathtaking quality and unprecedented SPL capabilities for arenas, stadiums, festivals, performance halls, or virtually any large-audience environment where coverage, output and quality cannot be compromised.

With VGt, we're ***not just changing the game,*** we're ***redefining*** it.

COMPACT, POWER EFFICIENT, EASY TO RIG

NO COMPROMISES FROM ENGINEERING TO MANUFACTURING

VGt is the culmination of a no-compromises product development initiative that improves upon every aspect of the modern loudspeaker ecosystem. Inside VGt, Adamson's most advanced technologies converge. With it's powerful Class D amplification, cutting-edge transducers, networked DSP endpoint, and versatile Autolock™ rigging system, every VGt component is purpose-engineered and manufactured at Adamson's Port Perry, Ontario headquarters for exacting accuracy and optimal performance.

VGs is the companion subwoofer which can be rigged alongside a VGt array for an even more impactful performance. Common rigging and connectivity means it is easy to integrate as part of a complete touring package.

❯ VGt Rigging Frame

Deploys up to 24 VGt. Includes extended beam for greater array articulation. Both can remain on the array when travelling.

❯ Two Motor Adaptor

Allows for horizontal aiming using two motors on the back or front of the array.
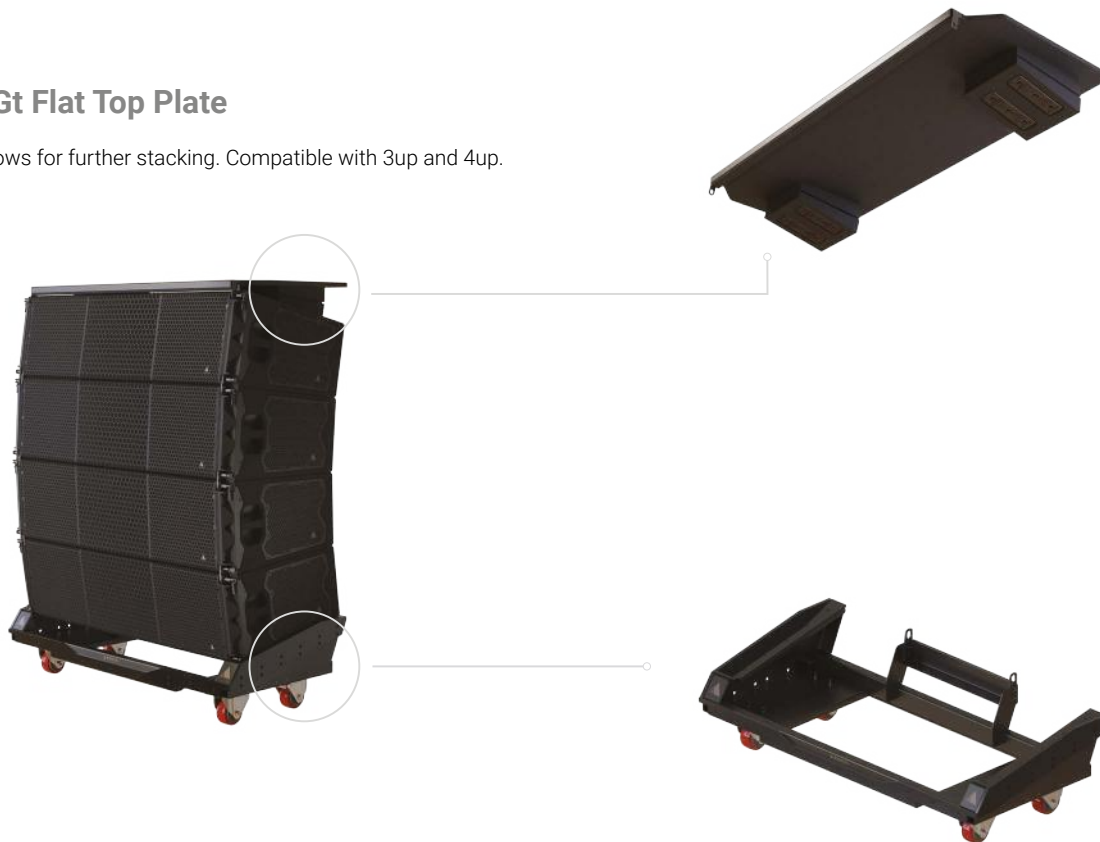
❯ VGt to CS10 Underhang

Rigs CS1 0 under VGt, can remain below the array on the dolly when travelling. Offers points for pullback and to attach windload bars.

❯ VGt Flat Top Plate

Allows for further stacking. Compatible with 3up and 4up.

❯ VGt Dolly

Carries up to 4 VGt. Allows for efficient 4 wide truckpack. Stacks easy and safe when not in use.

❯ VGt Cover

Protective covers, available in 3up or 4up.

❯ Dolly Stacking Legs

Set of 4 legs to support one VGt Dolly for ground stacking.

❯ Network Distribution System (NDS)

Combines redundant network into 6 etherCON® speaker outputs. Primary and secondary opticalCON® and etherCON® in and through. External switches required.

❯ Power Distribution System (PDS)

6 Circuits of 208V (120V version) or 230V (230V version) with RCBO breakers available in parallel on powerCON® TRUE1 and Socapex 19-Pin.

❯ VG Power Fanout

PDS Socapex 19-Pin to 6x PowerCON TRUE1 fanout with sufficient cable length for up to 18 VGt.

❯ CS Rack

6 units rolling rack including 1x PDS, 1x NDS and 2x Luminex Gigacore 10.

❯ Bridge

The Bridge is designed to seamlessly integrate existing inventories into ArrayIntelligence by converting redundant Milan AVB signal to AES/EBU to connect to existing amplifiers. Offering six channels of user controllable DSP per unit.

❯ Gateway

The Gateway is a 16x16 matrix with 16 channels of user accessible DSP, containing redundant network (3x etherCON® primary and secondary, 1 x opticalCON® primary and secondary), Milan® AVB, AES/EBU and analog connections.

❯ VGt Specifications

Frequency Range(+/- 3dB)	50 Hz - 20 kHz
Nominal Directivity (-6 dB) H x V	90° x 6°
Maximum Peak SPL*	151 dB
LF Component	2x ND13-S 13" Kevlar Neodymium Driver
Directional Component	2x ND10-LM 10" Kevlar Neodymium Driver
MF Component	2x M140 Kevlar Compression Driver
HF Component	2x 3" Compression Driver
Rigging	Autolock'" Rigging
Connection	2x etherCON® - passive continuity when powerless, Analog XLR3 in & thru, powerCON® TRUE1 TOP in & thru
Height Front (mm/ in)	338 / 13.3
Height Back (mm / in)	286 / 11.25
Width (mm / in)	1306 / 51.4
Depth (mm / in)	562 / 22.1
Weight (kg/ lbs)	85 / 188
Color	Black & White (Standard), RAL Colors (On Demand)
Amplification	5 channel Onboard Class-D, SMPS
Processing	Onboard, controllable through proprietary software

*12 dB crest factor pink noise at 1 m, free field, using specified processing and amplification
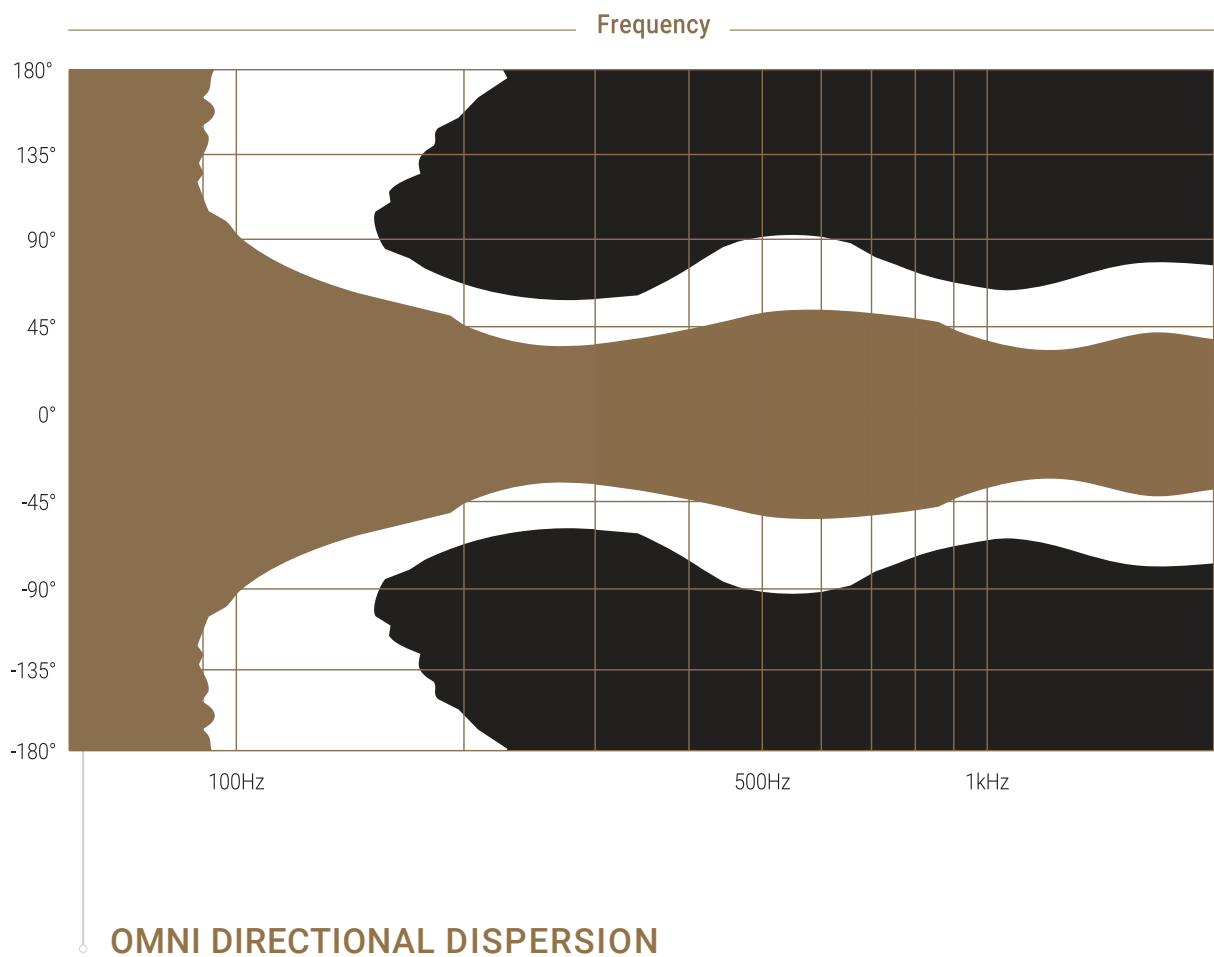
YOUR
CHOICE OF
DISPERSION
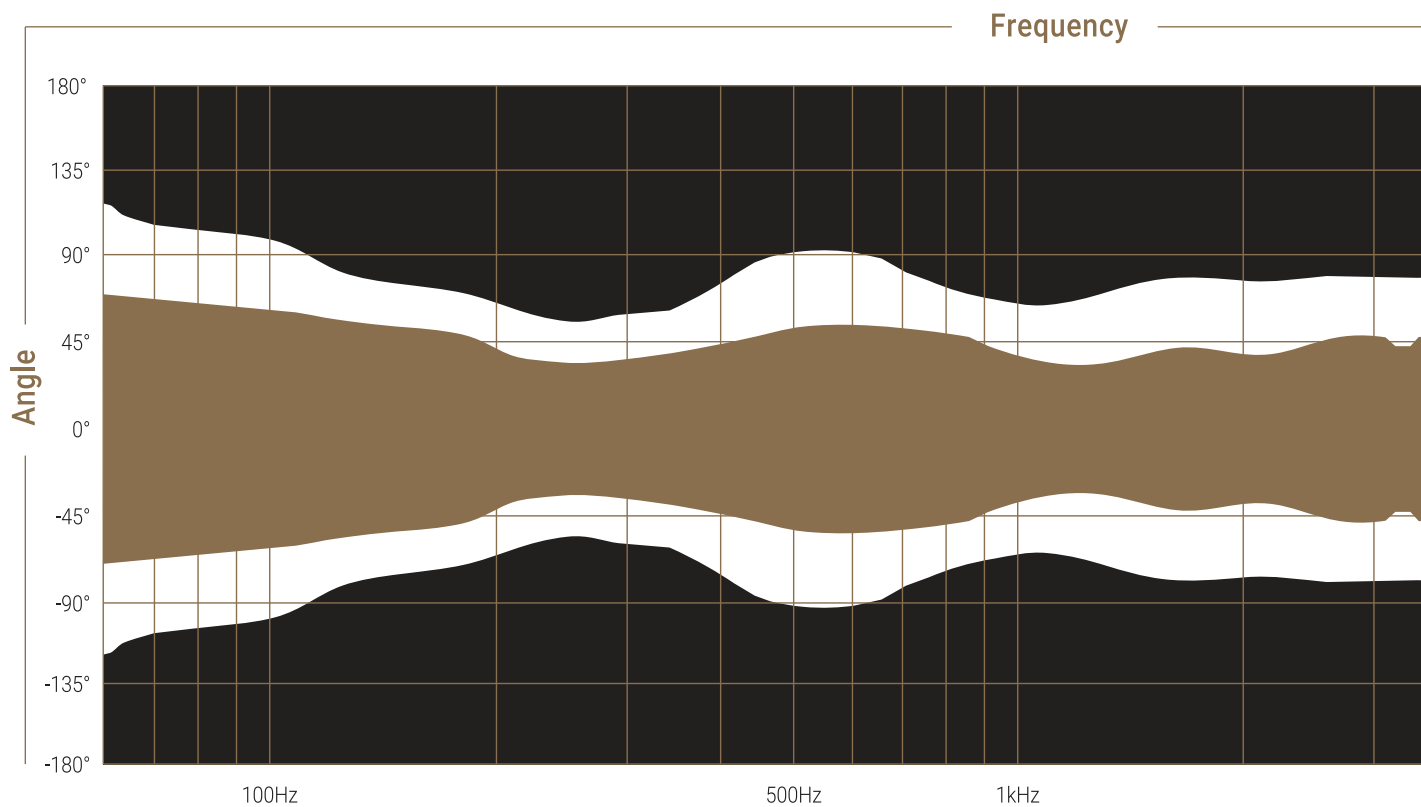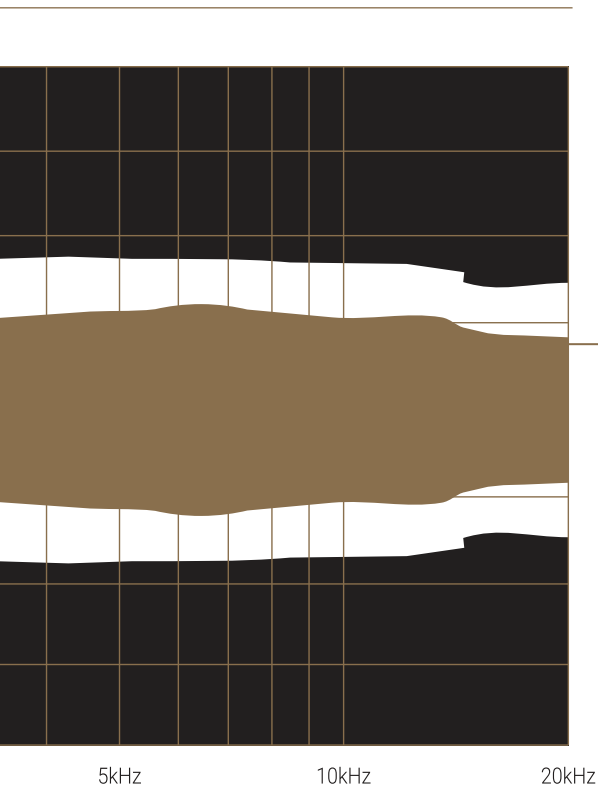
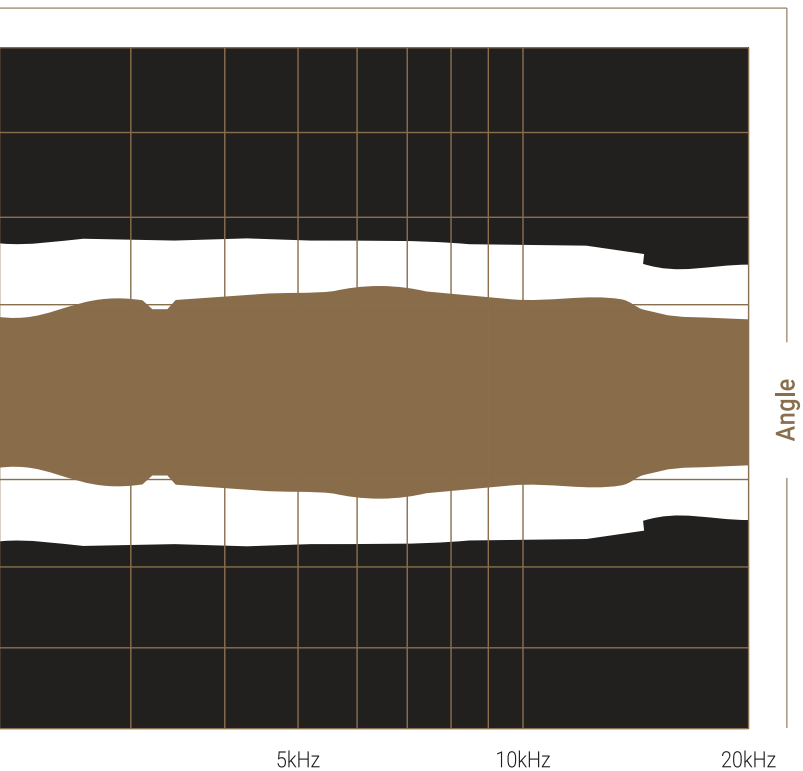## CARDIOID DIRECTIONAL DISPERSION

❱ **Custom Low Frequency Control**

To custom tailor the low frequency radiation pattern, users can select cardioid and omnidirectional dispersion. This allows for maximum low-frequency control in any situation.
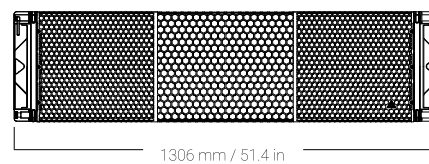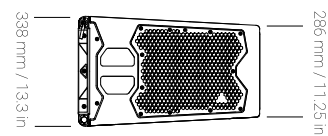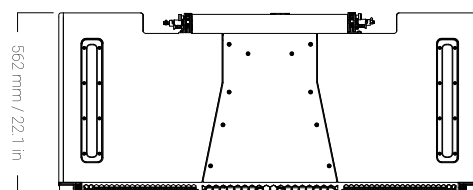
VGt achieves uniform 90-degree horizontal coverage with the cardioid preset across its entire frequency range, while achieving a maximum peak SPL greater than 150 dB.
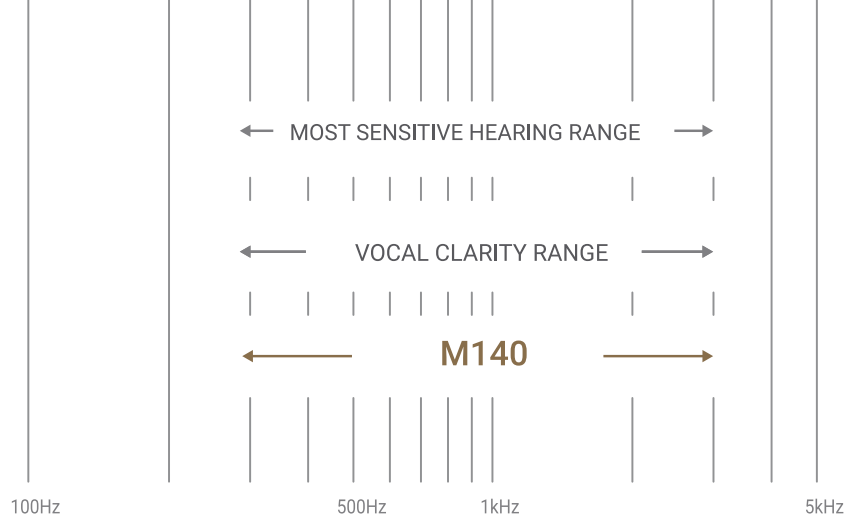
5kHz   10kHz   20kHz

HORIZONTAL DISPERSION

Frequency

180°
135°
90°
45°
0°
-45°
-90°
-135°
-180°

100Hz   500Hz   1kHz

OMNI DIRECTIONAL DISPERSION

Angle

5kHz   10kHz   20kHz

❯ Dimensions ———————————

562 mm / 22.1 in

338 mm / 13.3 in

286 mm / 11.25 in

1306 mm / 51.4 in

MOST SENSITIVE HEARING RANGE

VOCAL CLARITY RANGE

M140

100Hz   500Hz   1kHz   5kHz

ULTRA LOW DISTORTION

Over the entire vocal clarity range, where human hearing is the most sensitive

The heart of VGt is the patent-pending M140 compression driver—a revolutionary surround-free design that virtually eliminates distortion in the audible range with low-mass performance advantages. The diaphragm is energized by a powerful neodymium magnet that maximizes movement, speed, and efficiency.

❱ A NEW BENCHMARK IN MID FREQUENCY PERFORMANCE

M140 is a state-of-the-art midrange compression driver that benefits from a revolutionary surround-free design that eliminates mechanical drag and deformation. From there Adamson utilized a propriety development process to engineer a custom Kevlar cone design, further enhancing M140's rigidity and low-mass performance advantages.

As a result, the M140 offers unfettered pistonic motion throughout its entire range of excursion, delivering exceptional transient response and ultra-low distortion throughout an incredibly broad midrange band from below 300 Hz to well above 3 kHz. All of this is accomplished without the need for a crossover splitting the critical vocal clarity range.

❯ PURPOSE BUILT DSP AND CLASS D AMPLIFICATION

Lightweight, powerful, and fully user-swappable for easy field maintenance, VGt's sophisticated electronics module begins with a purpose-built 5-channel Class-D amplifier capable of delivering up to 12 kW of peak power. A new highly efficient switched-mode power supply with power factor correction, superior protection circuitry, and SiC FET technology ensures ample horsepower is available under the most demanding conditions. An intelligent networked endpoint provides powerful floating-point DSP for handling preset data, optimization and user-accessible EQ, level and delay. For efficient cabling and easy setup, all connections can be daisy-chained, including power, and a redundant network containing Milan AVB and AES70 control data. Rugged and fully weatherized powerCON® True 1 TOP connectors ensure industry-standard connectivity.

VG$_s$
POWERED SUBWOOFER.

VGs is the first powered subwoofer in the Vergence Group. Built upon the foundation of the trusted low-end impact and versatility of Adamson's E-Series E119 subwoofer combined with a custom-designed, in-house manufactured, single-channel 6kW Class-D Amplifier with on-board DSP. All features of the VGs are controlled and monitored through Adamson's proprietary ArrayIntelligence software.

❯ CONNECTIONS

The VGs includes analog audio connectivity as well as redundant and daisy-chainable Milan AVB. The comprehensive DSP can be assigned and modified seamlessly via Adamson's ArrayIntelligence software. Critically tuned presets allow the VGs to be deployed in a multitude of often-used cardioid arrangements including Front-Back, Front-Back-Front, and End Fire.

❯ DRIVERS

The enclosure is loaded with a light weight, long excursion, 19" SD19 Kevlar® Neodymium driver utilizing Adamson's Advanced Cone Architecture and Symmetrical Drive Technology. The driver employs a dual 5" voice coil for exceptional power handling, with a dual-spider suspension system for extra stability even under extreme excursion. It is mounted in an ultra-efficient front-loaded enclosure, designed to reproduce clean, musical low frequency information. Users will appreciate the lower fundamental notes of this design.

❯ CABINET CONSTRUCTION

The cabinet construction uses marine grade birch plywood as well as aircraft grade steel and aluminum, and is equipped with custom made onboard Class-D amplification, as well as an intelligent networked DSP endpoint. For efficient cabling, all necessary connections can be daisy-chained, including power, analog audio and redundant network containing Milan® digital audio and AES70 control data. Paired with the VGs Sub Frame, the integrated rigging system allows for either 0° or 3° splay between adjacent cabinets.The VGs can travel on installed casters, or on a 3-high covered dolly.

❯ UPGRADE

Purchase the E119 upgrade kit to convert it from a passive loudspeaker to VGs, for complete integration with a VGt system. An environmentally -friendly way of prolonging the life of your system with more control, more features and better integration.

❯ Dimensions

749 mm / 29.5 in

889 mm / 35 in

572 mm / 22.5 in
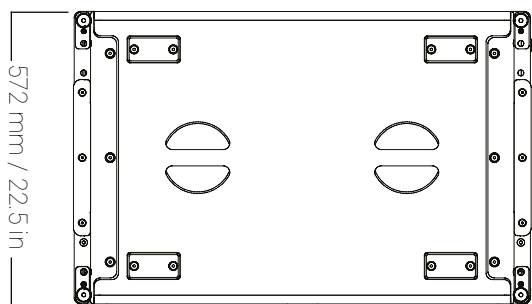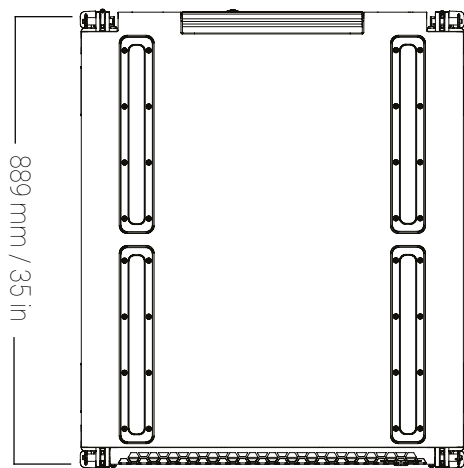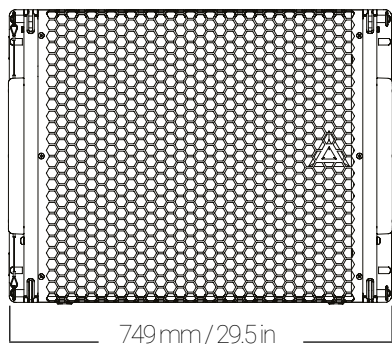
❯ VGs Specifications

Frequency Range(+/- 3dB)	29 Hz - 100 Hz
Maximum Peak SPL *	139 dB
LF Component	SD19 19" Kevlar® Neodymium Driver
Rigging	Integrated Rigging System
Connection	2x etherCON™ - passive continuity when powerless, Analog XLR3 in & thru powerCON® TRUE1 TOP in & thru
Height Front (mm/ in)	572 / 22.5
Width (mm / in)	749 / 29.5
Depth (mm / in)	889 / 35
Weight (kg/ lbs)	72.5 kg (160 lbs)
Color	Black & White (Standard), RAL Colors (On Demand)
Amplification	6 kW Single Channel Onboard Class-D, SMPS
Processing	Onboard, controllable through proprietary software

*12 dB crest factor pink noise at 1 m, free field, using specified processing and amplification

DESIGN
DEPLOY
CONTROL
MONITOR

Adamson's AI software upgrades your ability to design, deploy, control and monitor in mobile and installation environments. The user experience was created with a professional audio workflow in mind: move from design and simulation, through patch, optimization, control, metering and system diagnostics.

Using the ArrayIntelligence software allows for seamless combination of VGt/VGs with CS-Series, while the Adamson Bridge closes the gap to integrate all legacy ground-amplified systems.

Home

The MENU page allows for file management including export and import functions as well as software settings. Additionally there is a device browser to monitor, identify and reset all connected components.

Blueprint

Powerful and accurate simulation of systems known from Blueprint AV in a renewed design. Adamson's proprietary Optimization algorithm gives you the ability to fine tune line array performance and get incredibly accurate and uniform response across the performance area.
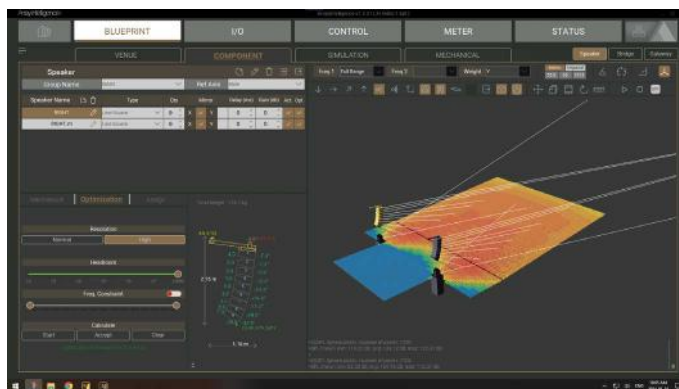
Component I/O

Control input and output mixing and patching of rack devices and loudspeakers, determine control zoning and Milan® AVB routing to ensure complete control over your performance environment.

Control

Gain, mute, delay, EQ and grouping are all controlled on a single page, allowing you to build and fine-tune your system. Implement your changes in control zones down to a per-box level, or use control groups to shape the performance of multiple zones simultaneously.
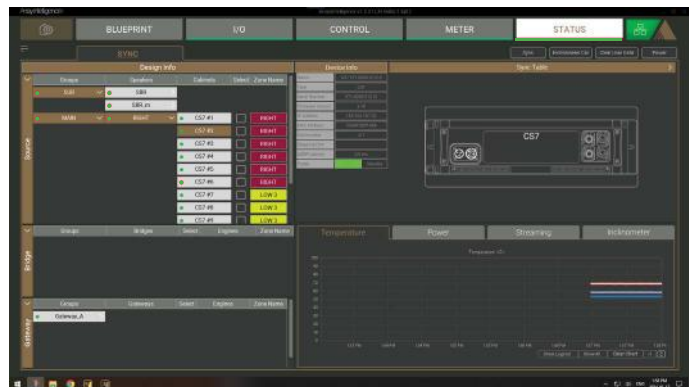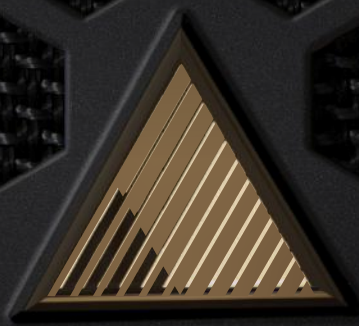
Metering

Access input and output metering for all online devices on one page, so you can reliably determine headroom for your entire system.
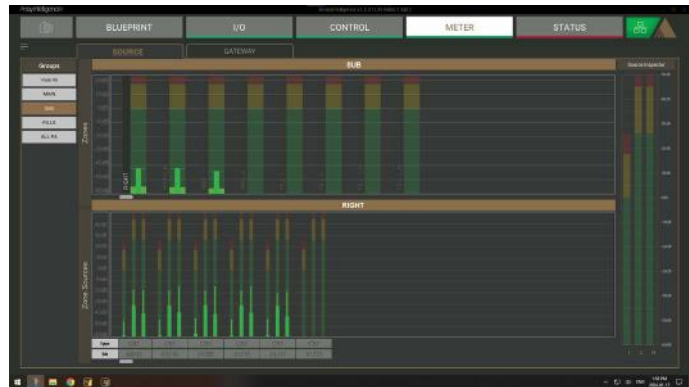
Status

Monitor your system with a comprehensive set of system insight tools, including inclinometer, temperature and Milan® AVB stream monitoring. Access sync analysis and conflict solving.

adamson.ai

ADAMSON

For more info please contact sales@adamson.ai