



FEATURES

- VUE-designed 1-inch exit neodymium compression driver with 34mm Truextent® beryllium diaphragm
- VUE-designed dual 4-inch Kevlar cone neodymium woofers
- Compact and lightweight – 18.9 x 5.5 x 10.3 inches (W x H x D) and 18 lbs.
- 90° horizontal coverage angle per al-4 element
- Each al-4 Subcompact Line Array System "block" includes eight al-4 acoustic elements powered by a single VUEDrive™ V4 Systems Engine
- Fly up to 16 x al-4 elements from a single flybar
- Features CST™ (Continuous Source Topology™) Can be arrayed with the al-8 and al-12 for down fill applications keeping with Acoustic Linearity Principles
- Optional flying, ground stack and pole-mount accessories available

APPLICATIONS

- Portable applications and installed live performance venues: Performing Arts Centres, Clubs, Theatres, Bars and Houses of Worship
- Theatrical Sound Design
- Corporate Applications
- Theme Parks and Entertainment Facilities

DESCRIPTION

The al-4 Subcompact Line Array System utilizes advanced technologies to extract unparalleled performance from an ultra-compact, highly scalable package. With cutting-edge technologies such as beryllium compression drivers, Kevlar/Neo low-frequency transducers, and precision amplification and DSP, the al-4 system brings VUE's pristine sound quality and line array performance to more applications than ever before.

The al-4 Line Array System is made up of the al-4 Acoustic Elements and a rack mount VUEDrive™ V4 Systems Engine which provides amplification, DSP and system control via SystemVUE software. The system is sold in standard blocks, with eight al-4 Acoustic Elements and a single V4 Systems Engine comprising a single block. Multiple al-4 blocks can be combined to address larger applications.

Unlike other compact line array systems that have fixed vertical coverage, the al-4 functions more like full-scale line array systems, with the vertical coverage limited only by the number of elements in the array rather than by the physical limitations of the cabinet design. This flexibility allows al-4 rental inventory to serve a variety of uses. From small "one-man" shows to more demanding productions, scaling up is simply a matter of adding more elements to the array.

For applications where extended low frequency is required, the al-4 is fully compatible with a variety of VUE subwoofers. The al-4SB was designed to compliment the al-4 System, and is flyable in the same array with the al-4 elements. Flexible rigging options allow ground stacking and pole mounting on stands or atop many other VUE subwoofers.

DESIGN NOTES

The ultra-compact al-4 element utilizes an M-T-M (LF HF-LF) driver configuration for symmetrical horizontal consistency. Each element houses two 4-inch, low distortion Kevlar cone neodymium woofers with isobutylene isoprene rubber surrounds. The woofers flank a precision-engineered, 1-inch exit neodymium compression driver featuring a Truextent® beryllium diaphragm. Beryllium technology allows the compression driver to deliver dramatic improvements in HF extension and response linearity that simply cannot be matched by traditional aluminum or titanium designs. The beryllium compression driver is mounted to a precision waveguide delivering 90° of horizontal coverage and 10° vertical coverage when measured as a single unit.

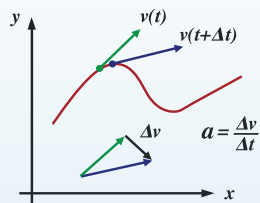
The al-4's rugged birch plywood enclosure is protected by a 12-step Dura-Coat LX finish. Integrated flying hardware allows quick assembly of arrays of up to 16 elements per flybar. Rear panel I/O includes NL4 Input and Loop connections for easy daisy-chaining of line array elements.



THE TRUEXTENT® BERYLLIUM ADVANTAGE

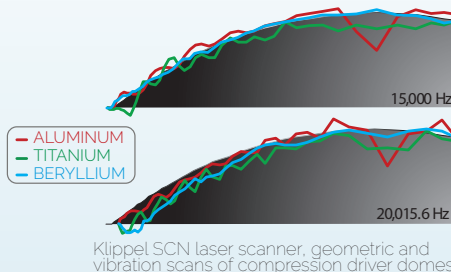
LOWER MASS EQUALS GREATER ACCELERATION

Beryllium has the lowest density-to-mass ratio of any metal used for compression driver diaphragms.



Acceleration is the rate of change of velocity. Density measures mass-per-unit volume. A lower overall mass allows for greater acceleration, which increases both efficiency and frequency extension.

Beryllium's near-perfect pistonic motion results from its extremely high stiffness-to-mass ratio, dramatically reducing mechanical deformation (breakup) and shifting resonant frequencies outside the audible range.



Klippel SCN laser scanner, geometric and vibration scans of compression driver domes



Aluminium fork 55.7 g - 510 Hz

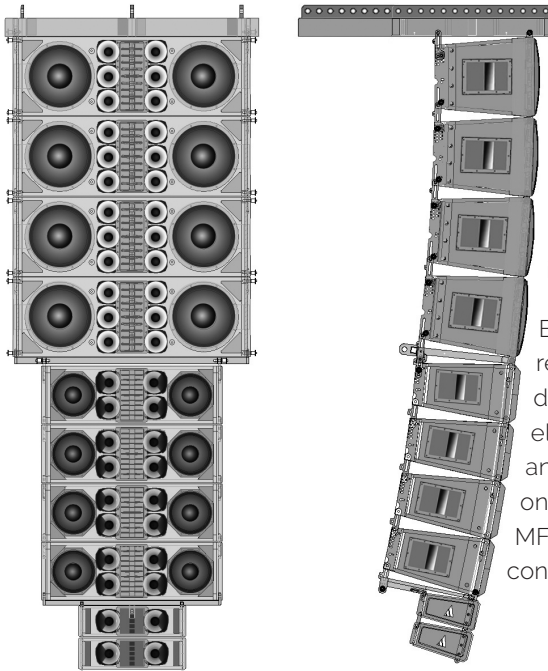
Titanium fork 93.7 g 505 Hz

Beryllium fork 38.5 g 1340 Hz

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FOR MORE INFORMATION ON HOW BERYLLIUM MAKES VUE PRODUCTS BETTER VISIT: VUEAUDIO.COM/ABOUT/BERYLLIUM

CONTINUOUS SOURCE TOPOLOGY™



The VUE al-Class line arrays are the only system that can combine various al-Class Line Array Systems (al-4, al-8, and al-12) into a single coherent array without compromising the continuous line in the mid and high frequency topography. This design feature enables a level of unparalleled system versatility. One can create virtually seamless arrays fully optimized for every parameter including coverage, sound pressure level, size and weight. This also expands the capitalization of a rental inventory for all portable applications.

Both MF drivers and HF compression drivers are optimized for their respective element size to performance expectations, including carefully designed cross-over points through system DSP. Each line array system element has unique HF/MF/LF driver architecture, particular materials and component designs which have been modified and enhanced based on the demands of their expected performance requirements. Yet the HF/MF driver topology across the al-Class elements is identical, resulting in continuous acoustic linearity.

SYSTEMVUE NETWORK

The VUEDrive™ V4 Systems Engine ships with networking and remote management capabilities as standard, allowing easy assembly of expanded networks and easy access to each element and/or device on the network through our intuitive SystemVUE software.

Front and rear panel Ethernet ports are fully compatible with standard IP networks. Simply plug in, and the product will automatically be recognized and connect to virtually any kind of IP configuration including DHCP based networks, a fixed IP network, or even an ad hoc network (directly connecting to a computer via Ethernet cable). Whatever the configuration, it just works.

The V4 provides an Ethernet "Input" on the front panel and both "Input" and "Loop" connections on back. The loop option allows users to daisy-chain additional devices into the network without the need for individual runs from the system switch to each device.

To ensure network reliability, the Ethernet ports on the V4 can detect power interruptions and automatically switch to a pass-through position in the event of a local failure. This ensures that the larger network remains functional even if a single node fails or loses power.



SYSTEMVUE
SOFTWARE
MONITORING AND CONTROL

SystemVUE software connects VUE devices and networks to Windows or Macintosh computers, and iOS devices via a wired or wireless Ethernet connection. Users can then access and monitor network and device-level parameters through our SystemVUE™ software. The Ethernet connection also allows the use of Dante® for audio transport.

SystemVUE software provides access to entire networks, as well as individual elements, for the purpose of optimizing key parameters such as speaker protection, input/output levels, volume, mute, delay and even input sources.



ARRAY CONFIGURATION EXAMPLES

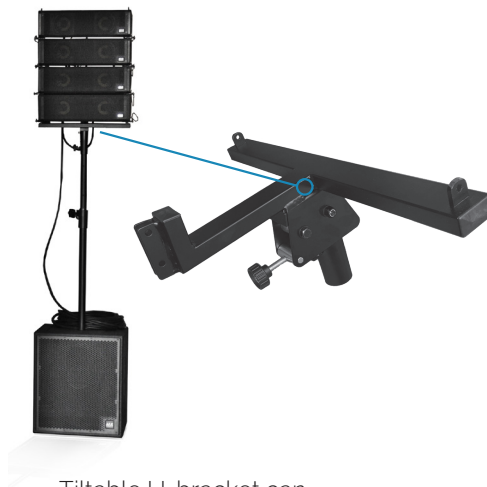


ACCESSORIES FOR EVERY APPLICATION

Optional road case for touring or portable applications holds four al-4 elements and a single flybar



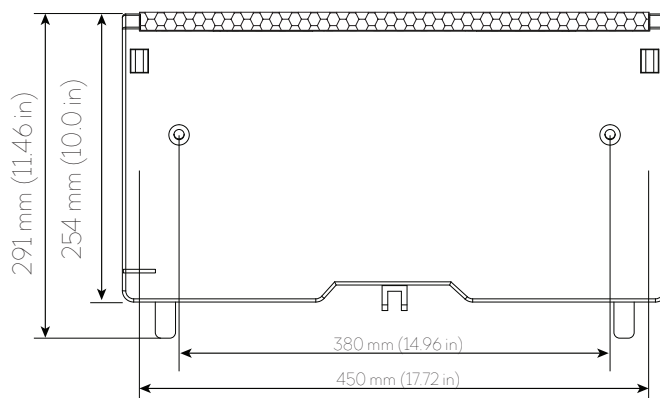
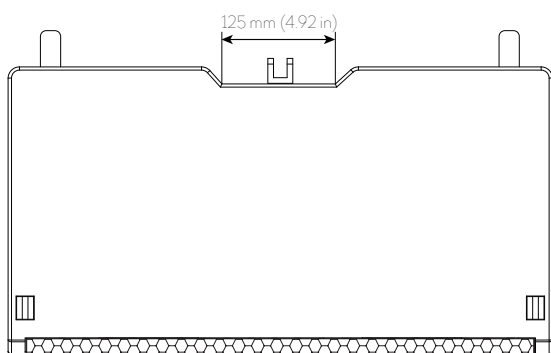
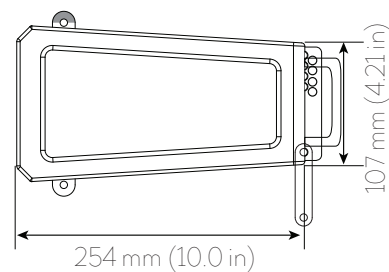
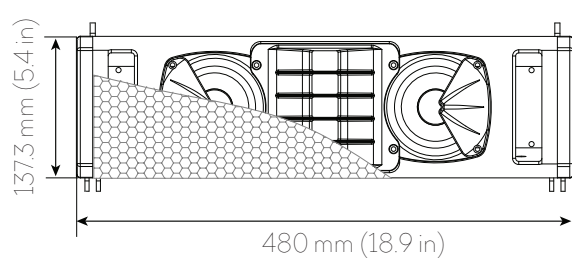
Ground stacking kit enables ground-based arrays built using VUE subwoofers.



Tilttable U-bracket can accommodate up to four al-4 elements mounted on stands or pole-mounted on top of VUE subwoofers



al-4 DIMENSIONAL DRAWING



VUE AUDIOTECHNIK LLC.
WWW.VUEAUDIO.COM

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SHEET 1 OF 1

JBERGER REV1.0

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±0.2	±0.5	±1.0	±0.05

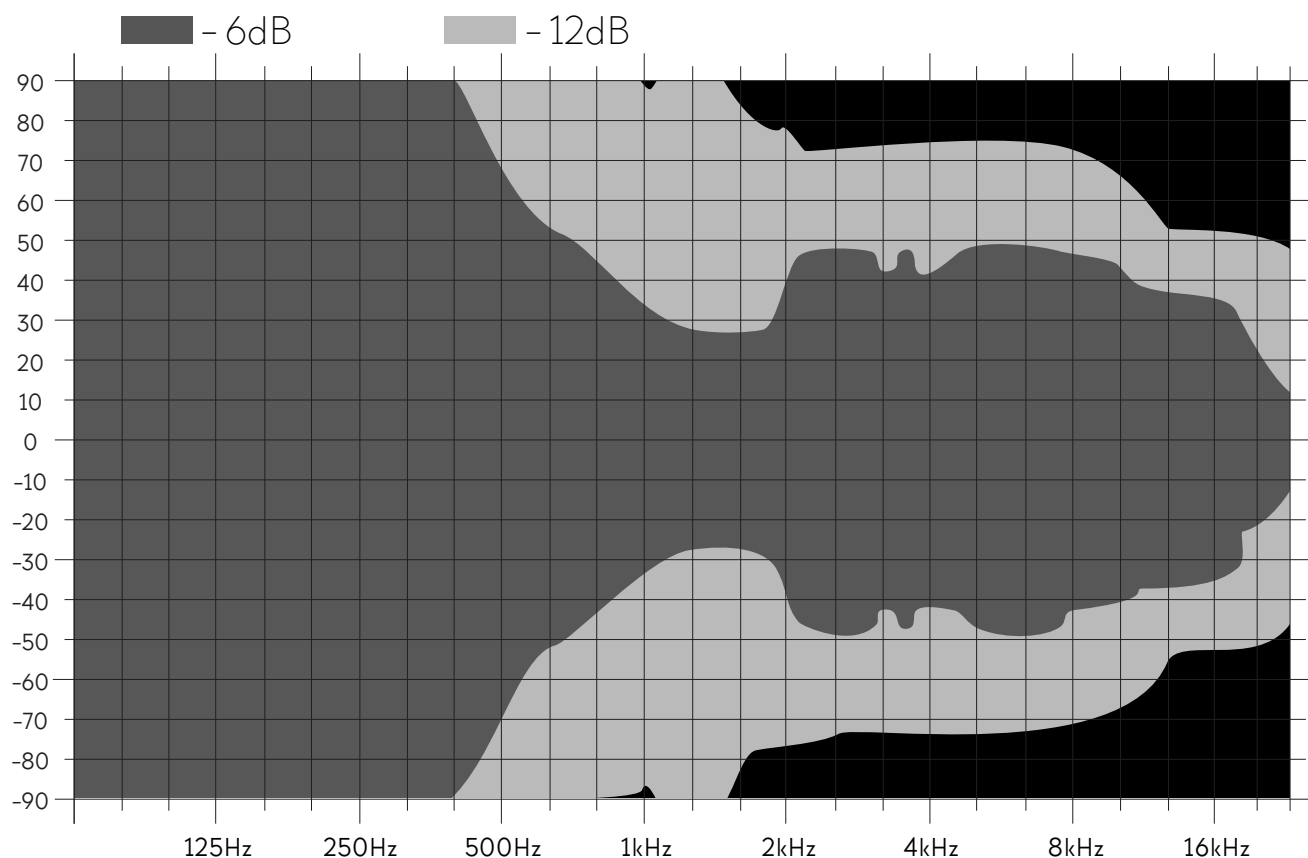
al-4
MECHANICAL SPECIFICATION

Q/PRO_DRA17-AL04

Yuanmingqiang
2017.02.18

Chenhong
2017.02.18

HORIZONTAL DISPERSION MAP



Horizontal Dispersion

VUE al-Class | al-4

SPECIFICATIONS DUAL 4-INCH 2-WAY SUBCOMPACT ACOUSTIC LINEARITY SYSTEM

	AL-4	4 X AL-4 & 1 X VUEDRIVE™ V4
DESCRIPTION	Subcompact Line Array Element	Subcompact Line Array System
ACOUSTIC DATA		
Frequency Response (+/-2.5 dB)	90 Hz to 20 kHz	90 Hz to 20k Hz
Frequency Range (-10 dB)	78 Hz - 26 kHz	70 Hz - 26 kHz
Sensitivity (1W/1m)	93 dB SPL	99 dB SPL
Power Long Term Sine Wave Before Protection LF: Before Protection HF:	100 watts 28 watts	400 watts 112 watts
Power Burst (6 dB Crest before clip) LF: HF:	400 watts 137 watts	2400 watts 550 watts
Max Peak SPL † (band limited pink noise 6 dB crest factor)	119 dB SPL	131 dB SPL
Max SPL Long Term (AVG SPL @1M before protection band limited pink noise)	113 dB SPL	125 dB SPL
Coverage Horizontal	90 degrees - 6 dB	90 degrees - 6 dB
Coverage Vertical	10 degrees - 6 dB	Dependent on array configuration
TRANSDUCER DATA		
LF Driver Description	Two 4-inch drivers, Kevlar cones, isobutylene isoprene rubber surrounds, neodymium magnets	
HF Driver Description	1-inch exit 34 mm voice coil Pure Truextent® beryllium diaphragm	
Impedance	16 Ohms	4 Ohms net 4x 16 ohms
PHYSICAL DATA		
Rigging:	Three-point rigging system, provides 0°, 1°, 2.5°, 3.5°, 5°, 6°, and 7.5° between array elements.	
Connectors	Neutrik NL4 Speakon In and Loop	
Cabinet Material	Multi-ply birch hardwood	
Cabinet Surface	12 Step Dura-Coat LX - an elastomer synthetic resin chemical coating	
Handles	Rear Metal	
Dimensions (H x W x D)	5.47 x 19.90 x 10.28 in (139 x 480 x 261 mm)	
Weight (per element)	Net: 19.2 lbs (8.7 kg) / Shipped: 23.3 lbs (10.56 kg)	
ACCESSORIES		
al-4fbl	Long Fly bar for greater down angle and use with al-4SB	
al-4PB	Compact Pole Mount bracket holds 4x al-4 acoustic elements	
al-4-pin-4x	Extra al-4 Fly Pins (set of four pins)	
al-4-fc4x	Flight case holds 4x al-4 acoustic elements and fly bar	

† Measured Max SPL is recommended for system design purposes and represents the average peak output before protection and after power compression. In accordance with common industry practice, calculated data is provided for comparison purposes, and is a theoretical calculation.