



FEATURES

- Three-way, High output Line Array design
- Extremely Scalable System with CST™ – combine al-12 acoustic elements with al-8s and al-4s to build complex hybrid arrays.
- New State-of the Art transducer technology
- Integrated VueDrive™ System Engines with SystemVUE control and Dante Audio networking
- Fully compatible with VUEPoint beam steering technology
- Integrated flying hardware allows quick assembly of arrays.
- Various subwoofer pairing options including the flyable al-12SB, arraying and transport accessories.

DESCRIPTION

VUE's al-Class line array systems have achieved international recognition for raising the bar for sonic definition, through a combination of advanced transducer design and tightly integrated dsp. The al-12 expands the scale of applications that can benefit from the al-Class' pristine sonic performance.

The al-12 was designed from the ground up to cover large-scale applications while preserving the unique ability to integrate with all of the al-Class members in hybrid arrays that do not 'break the line'.

Like the al-Class' al-4 and al-8, the al-12 line array system utilizes VUE's most advanced technologies and innovative designs to deliver superior sonic performance and unparalleled versatility. Cutting-edge technologies such as the new purpose-built 3-in beryllium compression driver, Kevlar/ Neodymium transducers, precision amplification and DSP, as well as on board SystemVUE networking and full compatibility with the VUEPoint beam steering technology, allow the highly-scalable al-12 to deliver unprecedented performance to an even broader range of sound reinforcement applications.

The al-12 Line Array 'System' is made up of the al-12 Acoustic Element and the rack-mount VUEDrive™ V3 Systems Engine. The V3 combines a highly-refined DSP architecture and on board SystemVUE networking capabilities, allowing easy assembly of sophisticated networks with remote management and control, managed via the intuitive SystemVUE software.

The system is powered in 'blocks' consisting of two al-12 elements and a single V3 amplifier. The V3 provides 1600 watts sine wave or 4000 watts burst for each of the low and mid frequency channels, and 500 watts sine wave / 1000 watts burst for the high frequencies. The V3 is equipped with analogue, AES and Dante™ inputs and full Ethernet based SystemVUE remote control.

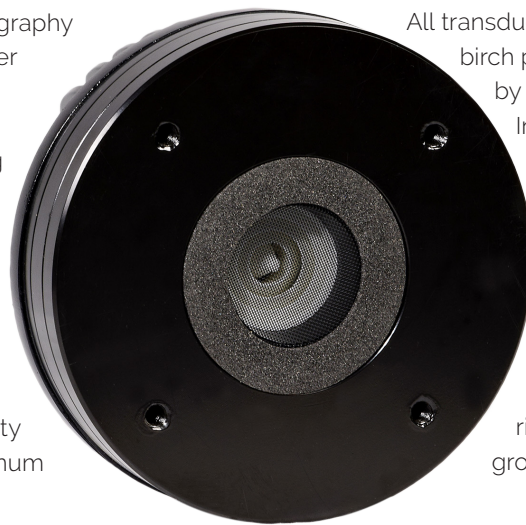
DESIGN NOTES

The al-12 Acoustic Element features a full complement transducers designed and engineered specifically by VUE for exclusive use in the al-12.

A pair of precision-engineered 12-inch low frequency neo transducers flank six new 4-inch, Kevlar-coned Neodymium drivers for the mid-range. The MF driver design is optimized to enable the al-12 to produce 10dB greater output than the al-8, without changing the HF and MF section topography or cone-size enabling both systems to work together without breaking the true line when combined in an array. These drivers were engineered from the ground-up for higher efficiency and power handling with less power compression.

For the high frequency, the al-12 utilizes a pair of 1.4-inch exit, neodymium compression drivers with 75 mm (3-in) Truextent® beryllium diaphragms. 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.

These drivers also incorporate an entirely new phase plug design that fully complements the extended response of the Beryllium diaphragm enabling high frequency output to well beyond human hearing (-10 dB @ 28k) The beryllium compression drivers are mounted to a tightly coupled, precision waveguide which reduces acoustic lobing and provides ideal line array consistency.



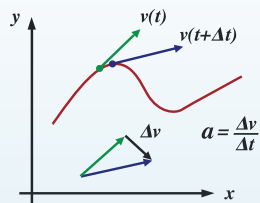
All transducers are housed in a rugged birch plywood enclosure protected by a 12-step Dura-Coat LX finish. Integrated flying hardware allows quick assembly of arrays of up to 16 elements per flybar.

Rear panel I/O includes NL8 Input and Loop connections for easy daisy-chaining of line array elements. Flexible rigging options allow flying and ground stacking.

THE TRUEXTENT® BERYLLIUM ADVANTAGE

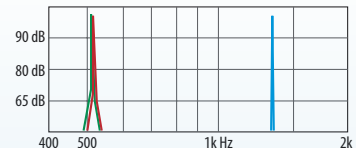
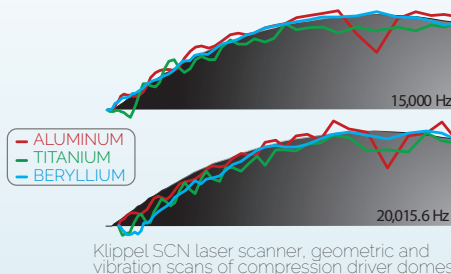
LOWER MASS EQUALS GREATER ACCELERATION

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.



Aluminium fork 55.7 g - 510 Hz

Titanium fork 93.7 g 505 Hz

Beryllium fork 38.5 g 1340 Hz

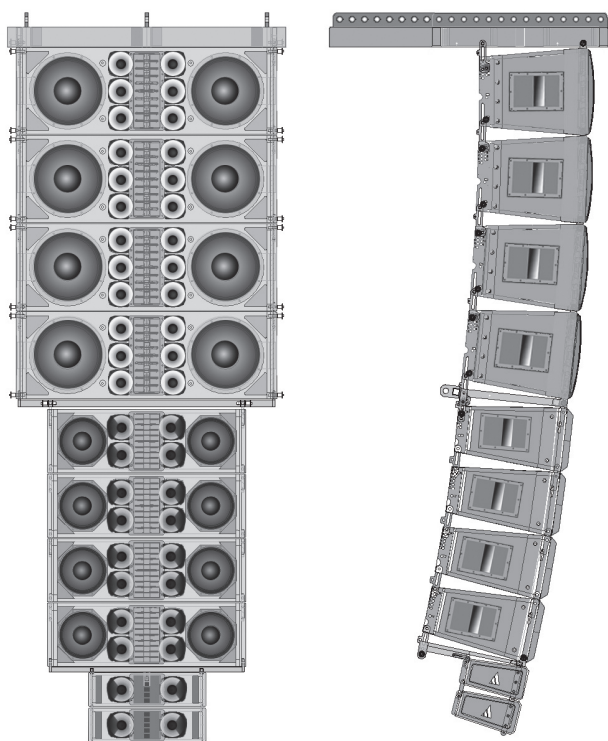
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FOR MORE INFORMATION ON HOW BERYLLIUM MAKES VUE PRODUCTS BETTER VISIT: VUEAUDIO.COM/ABOUT/BERYLLIUM

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 an unparalleled level of system versatility. One can create virtually seamless arrays by addressing 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 carefully designed and tested for their respective element size to performance expectations, including system specific 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.



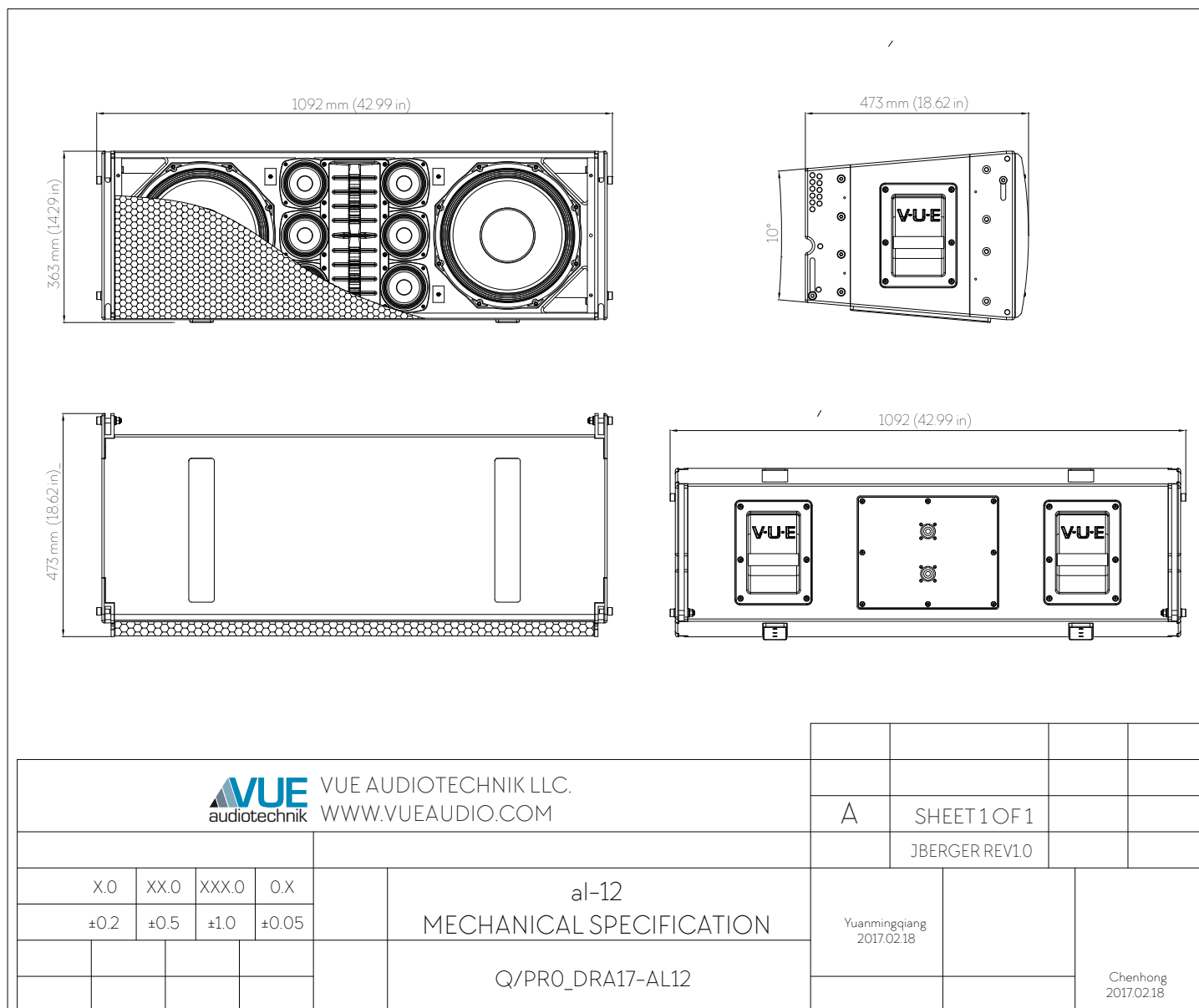
SYSTEMVUE NETWORK

The al-12 Line Array System is made up of the al-12 Acoustic Elements and rack-mount V3 Systems Engines. The V3 combines a refined DSP architecture and on-board SystemVUE networking capabilities allow easy assembly of sophisticated networks with remote management and control available via the intuitive SystemVUE control software. The system is powered in blocks of two al-12 enclosures, and a single V3 rack mount amplifier/DSP unit. The V3 provides 1600 watts sine wave or 4000 watts burst for each of the low and mid frequency channels, and 500 watts sine wave / 1000 watts burst for the high frequencies. The V3 is equipped with analogue, AES and Dante inputs and full ethernet based SystemVUE remote control.

VUE is developing a modular amplifier system capable of flying with the al-12 which will incorporate identical dsp and amplification of the V3 in a higher density configuration. The system will be sold in standard blocks, with sixteen al-12 Acoustic Elements and an eight VUEDrive™ V3 Systems Engines comprising a single block. Multiple al-12 blocks will be combined to address larger applications.

For applications where extended low-frequency is required, the al-12SB is a companion subwoofer system with two 18-inch Neodymium woofers optimized to provide solid low-frequency response down to below 40Hz in a very compact enclosure that can be flown in arrays along with the al-12s, in sub only adjacent arrays or ground stacked. The al-12 is fully compatible with a variety of VUE subwoofers, including the large format h-Class subwoofers.

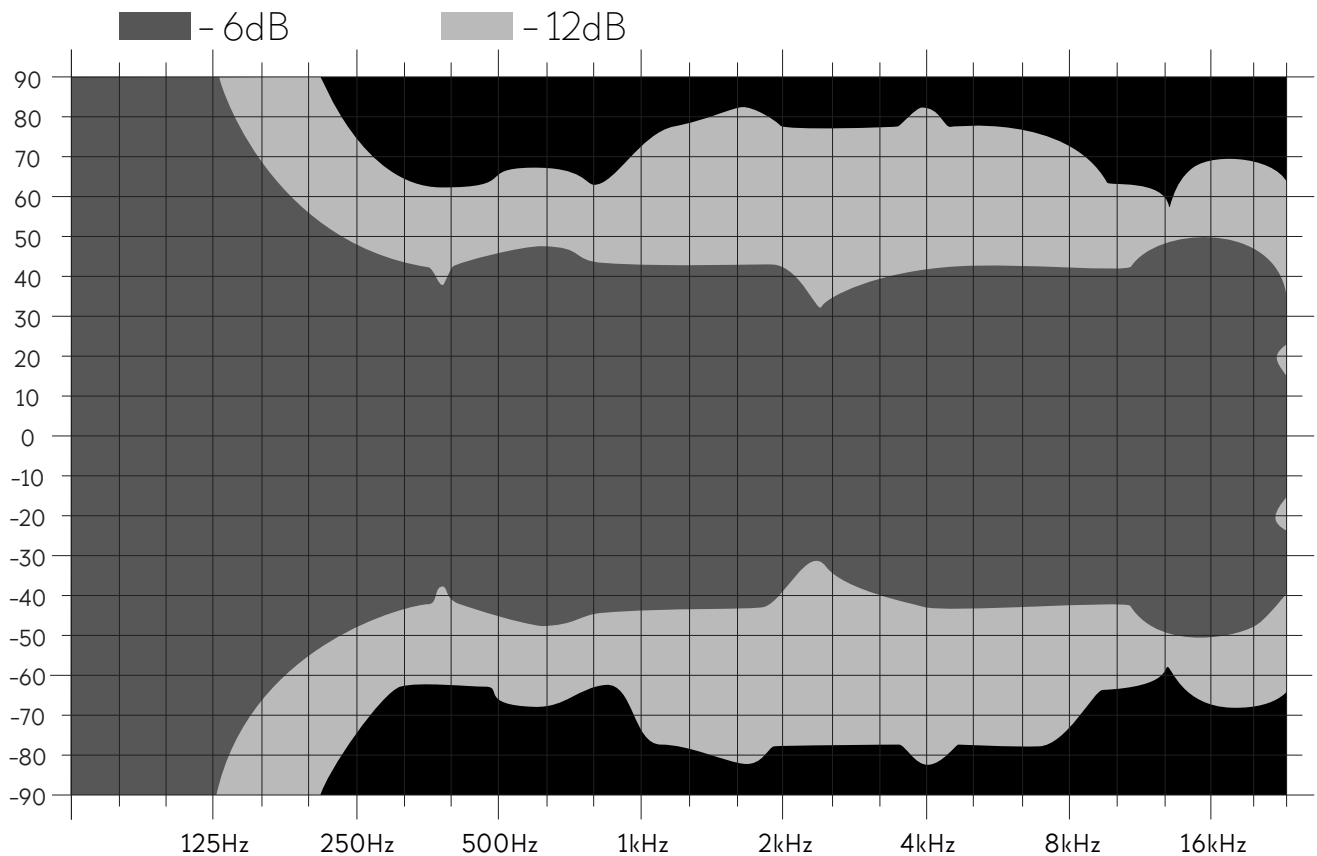
al-12 DIMENSIONAL DRAWING



SPECIFICATIONS

DUAL 12-INCH HIGH OUTPUT ACOUSTIC LINEARITY SYSTEM

HORIZONTAL DISPERSION MAP



Horizontal Dispersion

VUE al-Class | al-12

SPECIFICATIONS

DUAL 12-INCH HIGH OUTPUT ACOUSTIC LINEARITY SYSTEM

| | AL-12 | 2 X AL-12 & V3 |
|--|--|---------------------------------------|
| DESCRIPTION | High Output Line Array Element | Mid-sized Line Array System |
| ACOUSTIC DATA | | |
| Frequency Response (+/-2.5 dB) | 62 Hz to 19 kHz | 62 Hz to 18 kHz |
| Frequency Range (-10 dB) | 47 Hz - 28 kHz | 47 Hz - 26 kHz |
| Sensitivity (1W/1m) | 102 dB SPL | 105 dB SPL |
| Power Long Term Sine Wave Before Protection LF: Before Protection MF: Before Protection HF: | 800 watts 830 watts 120 watts | 1600 watts 1600 watts 240 watts |
| Power Burst (6 dB Crest before clip) LF: MF: HF: | 2000 watts 2000 watts 800 watts | 4000 watts 4000 watts 800 watts |
| Max Peak SPL † Measured (band limited pink noise 6 dB crest factor) | 144 dB SPL | 150 dB SPL |
| Max SPL Long Term (AVG SPL @1M before protection band limited pink noise) | 131.5 dB SPL | 137.5 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 12-inch drivers, 3-inch voice coils, neodymium magnets | |
| MF Driver Description | Six 4-inch drivers, Kevlar cones, impregnated linen surrounds, neodymium magnets | |
| HF Driver Description | Two 1.4-inch exit 34 mm (3") voice coils, Pure Truextent® beryllium diaphragm | |
| Impedance | 8/8/8 Ω (L/M/H) | 4/4/4 Ωs net 2x 8/8/8 Ω |
| PHYSICAL DATA | | |
| Rigging: | Four-point rigging system, angles between elements: 0°, 0.5°, 1°, 2°, 2.5°, 3°, 4.5°, 5°, 6°, 6.5°, 7°, 8°, 8.5°, 9°, 10° | |
| Connectors | Neutrik NL8 Speakon | |
| Cabinet Material | Multi-ply birch hardwood | |
| Cabinet Surface | Dura-Coat LX - an elastomer synthetic resin chemical coating | |
| Handles | Recessed Metal Side & Rear | |
| Dimensions (H x W x D) | 14.05 x 42.13 x 16.85 in (44.37 in wide with fly pins) 357 x 1070 x 428 mm (1127 mm wide with fly pins) | |
| Weight (per element) | Net: 124.3 lbs (56.38 kg) / Shipped: 141.5 lbs (64.18 kg) | |
| ACCESSORIES | | |
| al-12FB | Fly bar for al-12 acoustic elements | |
| al-12UFB | Transition fly bar from al-12's to al-8's | |
| al-12-4XTR | Transport rack for up to 4x al-12 acoustic elements | |
| fc-al12FB-2x | Flight case for 2x al-12FB and 2x al-12UFB | |

† 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.