

# Nexus 6

## Key features:

- Two-way bi-amped sculpted loudspeaker array
- Virtual Arc technology
- Unified dispersion, phase and timing
- 20 discrete proprietary drivers
- Stack mounted or proprietary flying system
- Fibreglass composite construction
- Smooth cellulose finish

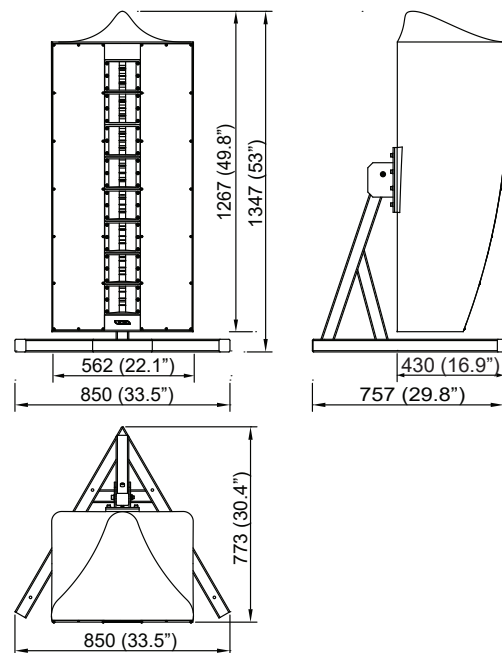


Ideal for larger venues, the four-way Nexus 6 has an innovative internal transducer layout and 20 high power drivers, housed in a sculpted fibreglass enclosure. Virtual Arc technology forms a common acoustic centre at the back of the array, overcoming all the disadvantages of a traditional array where multiple sound sources emit from different locations. Instead, dispersion, phase, coherency and timing are all controlled and unified, ensuring the same sound is experienced by the audience, regardless of where they are standing. Whether placed on low frequency enclosures to form a dance stack or flown independently, the Nexus 6 provides intelligent performance and styling.

## Specifications

|                             |  |
|-----------------------------|--|
| Frequency Response          | 78 Hz - 21 kHz $\pm 3$ dB                      |
| Efficiency <sup>1</sup>     | LF: 105 dB 1W/1m, HF: 110 dB 1W/1m             |
| Crossover Points            | 1.6 kHz active                                 |
| Nominal Impedance           | LF: 2 x 5.3 $\Omega$ , HF: 2 x 4 $\Omega$      |
| Power Handling <sup>2</sup> | LF: 2 x 1350 W AES, HF: 2 x 160 W AES          |
| Maximum Output <sup>3</sup> | 137 dB cont, 140 dB peak                       |
| Driver Configuration        | 12 x 6.5" LF, 8 x 1" HF compression driver     |
| Dispersion                  | 110°H x 50°V                                   |
| Connectors                  | 1 x 8-pole speakON™ NL8                        |
| Weight                      | 75.5 kg (166.5 lbs)                            |
| Enclosure                   | Fibreglass composite                           |
| Rigging                     | Stack mounted or proprietary suspension system |
| Finish                      | Smooth cellulose                               |

<sup>1</sup> Measured in half space <sup>2</sup> AES2 - 1984 compliant <sup>3</sup> Calculated



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## Architectural specifications

The loudspeaker shall be an active two way bi-amped system consisting of 12 high power 6.5" (165.1 mm) direct radiating low frequency (LF) transducers, and eight 1" (25.4 mm) high frequency (HF) compression drivers, each mounted on a dedicated waveguide.

With 20 discrete proprietary drive units, Virtual Arc technology is implemented on every component to form a common virtual point source rearwards of the array, resulting in a better and more controlled directivity, coherence, phase and time alignment between all components.

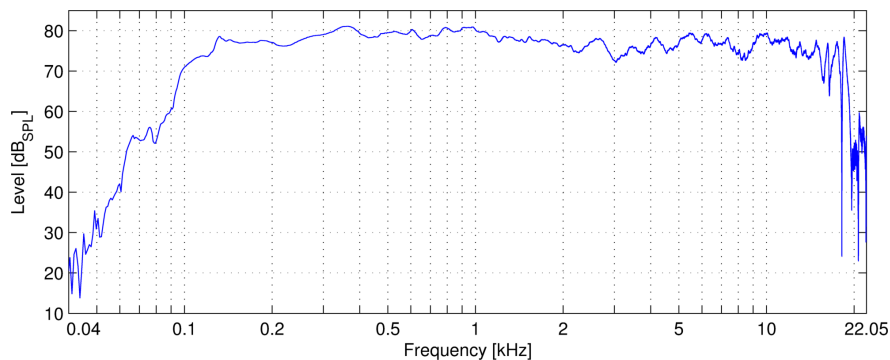
The LF transducers shall be constructed on a cast aluminium frame, with a treated paper cone, 44 mm (1.7") voice coil, wound with copper wires on a high quality voice coil former and neodymium magnets, for high power handling and long term-reliability. The HF transducers shall project their sound through a high precision constant directivity waveguide, with a 76.2 mm (3") baffle diameter, to achieve directivity pattern control between the different drivers with no cancellations and low distortion.

Performance specifications for a typical production

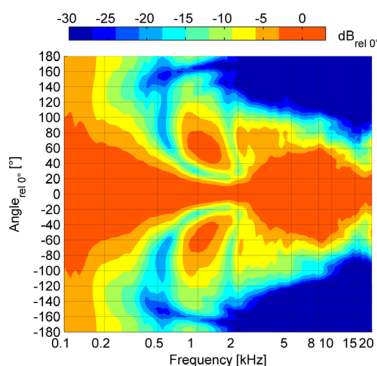
unit shall be as follows: the usable on-axis bandwidth shall be 78 Hz to 21 kHz ( $\pm 3$  dB) and shall average 50° directivity pattern on the vertical axis and 110° on the horizontal one (-6 dB down from on-axis level) from 1 kHz to 12 kHz; and a maximum SPL of 140 dB peak measured at 1 m using IEC268-5 pink noise. Power handling shall be 2 x 1350 W AES for the LF section at a rated impedance of 2 x 5.3  $\Omega$  and 2 x 160 W AES for the HF section at a rated impedance 2 x 4  $\Omega$ . The system shall be powered by its own dedicated power amplification modules with DSP management, from which crossover points will also be set, with the wiring connection via one Neutrik speakON™ NL8.

The enclosure shall be of a special fibreglass composite with a smooth cellulose finish of any RAL colour. The system shall be stack mounted with a dedicated stand or can also be suspended with a load tested suspension system. The external dimensions of the enclosure shall be (W) 562 mm x (H) 1267 mm x (D) 430 mm (22.1" x 49.8" x 16.9"). Weight shall be 75.5 kg (166.5 lbs) including stand.

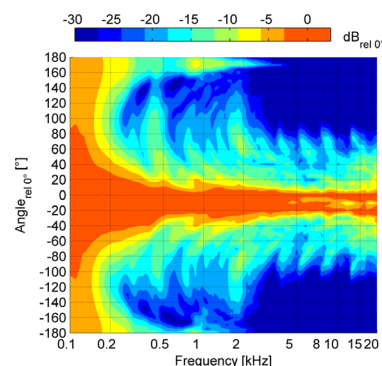
The loudspeaker shall be the Void Acoustics Nexus 6.



Frequency response (Anechoic measurement)



Horizontal directivity isobars



Vertical directivity isobars