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ELLA, the ELegant Line Array, combines the slim form factor of a column with the flexibility of a line array as well as built in passive cardioid technology.

Behind its well-designed front panel ELLA6 offers a newly developed feature - a specially engineered waveguide with five 1" dome tweeters which reproduce silky smooth and precise high frequencies up to 20 kHz, matched with a custom designed high performance 6.5" driver. A new outstandingly acoustical listening experience ensuring astonishment among the audience, without compromise, even at high SPL.

Another unique feature of ELLA: Due to the special acoustical resistors at the back of the enclosure, ELLA has a cardioid directivity pattern over the entire frequency range.

ELLA6 has a nominal impedance of 24 ohms – so it is possible to connect multiple speakers in parallel, there is no additional amp channel required for the cardioid effect.

The optically refined, almost invisible integrated rigging hardware, which can easily transform a multi-element column into a true line array. There are no pins or striking company logos on the front grille to disturb the timelessly simple appearance.

#### Key Features

- >> Ultra-compact symmetrical line array enclosure with a 6.5" high performance driver
- » Waveguide with five 1" dome tweeters for silky smooth and crisp HF
- Passive cardioid polar pattern with 120° × 10° (h × v) coverage angle
- Fully integrated and invisible rigging system
- » 20 cm (7.9 in) wide, 20 cm (7.9 in) high
- Passive operation of multiple ELLA6 units in parallel no additional amp channel required for achieving the cardioid effect.
- >> Coherent phase response with all TWAUDiO subwoofers
- » Operation with dedicated TWAUDiO presets on Lab.gruppen, Powersoft or Dynacord TGX and IPX amplifiers

#### Applications

- » Galas, events and shows
- >> Churches, houses of worship, religious places
- » Theatres and cultural places
- » Bars and restaurants

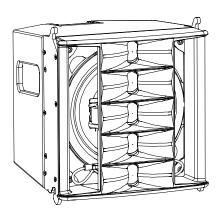
- » Arenas and sports venues
- Concerts and touring







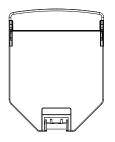
### Technical Data



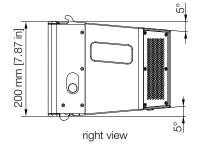
Drivers Frequency range Power capacity program/peak Impedance Coverage (h×v) Sensitivity 1 W/1 m SPL max / 1 m Connection Dimensions (H × W × D)

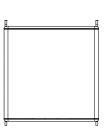
Weight Finish Accessories 1 × 6.5" LF | 5 × 1" HF 90 - 20000 Hz 400/800 W 24 Ω 120° × 10° 99 dB 129 dB speakON™ NL4 1± ) 200 × 200 × 260 mm | 7.87 × 7.87 × 10.24 in 5,5 kg | 12 lbs Warnex textured paint (RAL colors optional) see twaudio.com

#### **Technical Drawing**

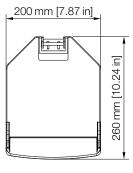


bottom view

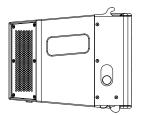




front view



top view



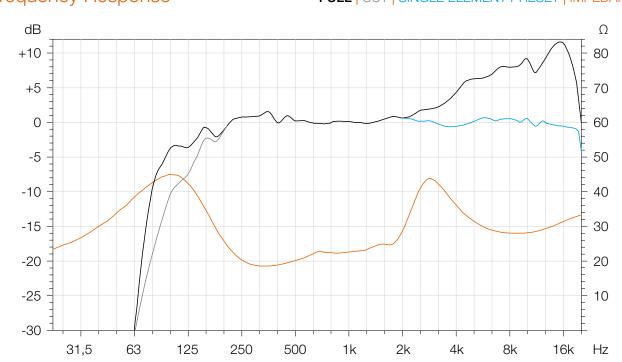
left view



rear view





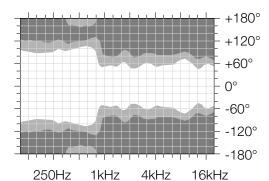


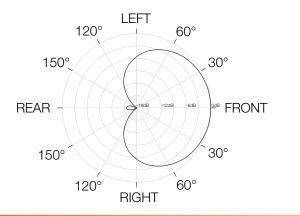
#### Frequency Response

#### FULL | CUT | SINGLE ELEMENT PRESET | IMPEDANZ

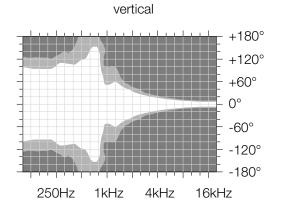
## Radiation Pattern

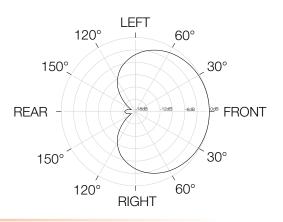
horizontal





-6dB -12dB







isobar

polar

pattern -250 Hz

diagram



#### Architect Specifications

The loudspeaker shall consist of a 2-way passive enclosure utilizing specialized passive cardioid directivity by acoustic resistance incorporated in the enclosure and driven and protected by a dedicated powered amplified controller.

The enclosure shall feature one 6.5" neodymium LF transducer mounted behind the waveguide consisting of five 1" neodymium HF, high performance soft-dome tweeters coupled to the waveguide.

The usable system bandwidth shall be 90Hz to 20 kHz. The driver configuration shall generate a polar pattern coverage of 120° horizontally (-6 dB), independently of the number of vertically arrayed elements. In line source mode, the system shall be curved up to a maximum of 10° for each element without breaking the wavefront.

Maximum peak SPL shall be 129dB. The long-term handling capacity shall be 400W program and 800W peak. The nominal impedance of the loudspeaker shall be  $24 \Omega$ .

The enclosure cabinet construction shall consist of first grade birch plywood. The front of the enclosure shall be protected by a perforated, powder-coated steel with flame retardant, black fabric to the rear. The dimensions shall be 200mm (7.87 in) in width, 200mm (7.87 in) in height and 260mm (10.24 in) in depth and the enclosure weight shall be 5.5 kg (12 lbs).

The enclosure shall include carefully concealed internal hardware for rigging and shall be used in conjunction with dedicated rigging accessories. The enclosure shall be connected via two parallel 4-pole speakON® sockets.

The loudspeaker shall be the TWAUDiO ELLA6.

References

The response curves of the system are available upon request – support@twaudio.com

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MADE IN GERMANY

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