

ELLA L18 is a low-mid extension unit for the ELLA6 ELegant Line Array system. Especially in ELLA6 arrays of only two to six elements ELLA L18 significantly enhances the low-mid performance in terms of SPL and directivity control in the frequency range from 90 to 1000 Hz.

The ELLA L18 enclosure has the size of three coupled ELLA6 modules and is equipped with three of the same 6.5“ low-mid drivers used in ELLA6. Due to the special acoustical resistors in the back of the enclosure, ELLA L18 creates the same cardioid dispersion pattern like ELLA6 with greatly reduced low-mid emissions at the back of the system. As ELLA L18 uses the same fully integrated ELLA6 rigging system, it can be simply stacked or flown below and above ELLA6 elements without additional parts.

Due to its internal passive lowpass filter, the ELLA L18 frequency response smoothly rolls off above 1000 Hz and exactly matches to ELLA6 phase and frequency response in its working range. Therefore ELLA L18 and ELLA6 can be connected to the same amplifier channel and generally use the same ELLA6 preset. The low-mid built-up generated by the coupling effect within the array will be simply compensated by dedicated low shelf EQ.

Thanks to ELLA6‘ high-impedance concept, there can be coupled and driven up to three ELLA L18 or the combination of one ELLA L18 plus up to seven ELLA6 in parallel on one amplifier channel (2 ohms operation).

Key Features

- Passive cardioid dispersion pattern over the whole frequency range
- Enclosure size identical to three vertically coupled ELLA6 elements
- Three 6.5“ speakers with phase plug for enhanced performance from 90 to 1000 Hz
- Operate three ELLA L18 or the combination of one ELLA L18 and up to seven ELLA6 in parallel on one amplifier channel.
- Fully compatible with ELLA6 rigging and accessories.
- Coherent phase response with ELLA6 and all TW AUDiO subwoofers
- Operation with dedicated TW AUDiO presets on Lab.gruppen, Powersoft or Dynacord TGX and IPX amplifiers

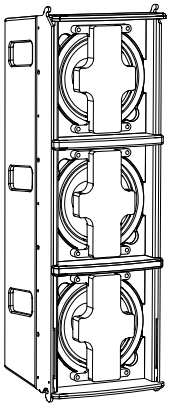
Applications

- Galas, events and shows
- Churches, houses of worship, religious places
- Theatres and cultural places
- Bars and restaurants
- Arenas and sports venues
- Concerts and touring

ELLA L18

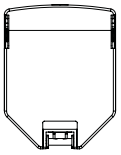
DATASHEET

Technical Data

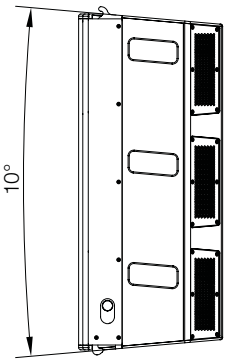


Drivers	3 × 6.5“ LF
Frequency range	90 - 1000 Hz
Power capacity program / peak	1200 / 2400 W
Impedance	8 Ω
Sensitivity 1 W / 1 m	95 dB
SPL max / 1 m	129 dB
Connection	speakON™ NL4 1±
Dimensions (H × W × D)	604 × 200 × 260 mm | 23.8 × 7.9 × 10.2 in
Weight	14.2 kg | 31.3 lbs
Finish	Warnex texture paint (RAL colors optional)
Accessories	see twaudio.com

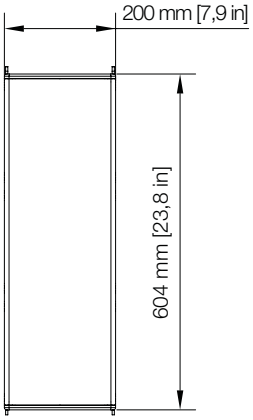
Technical Drawing



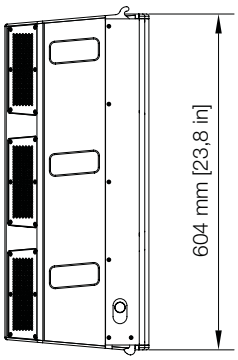
bottom view



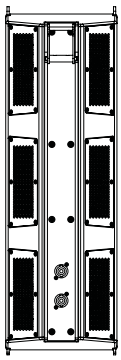
right view



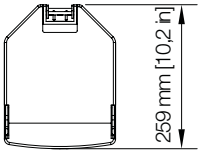
front view



left view



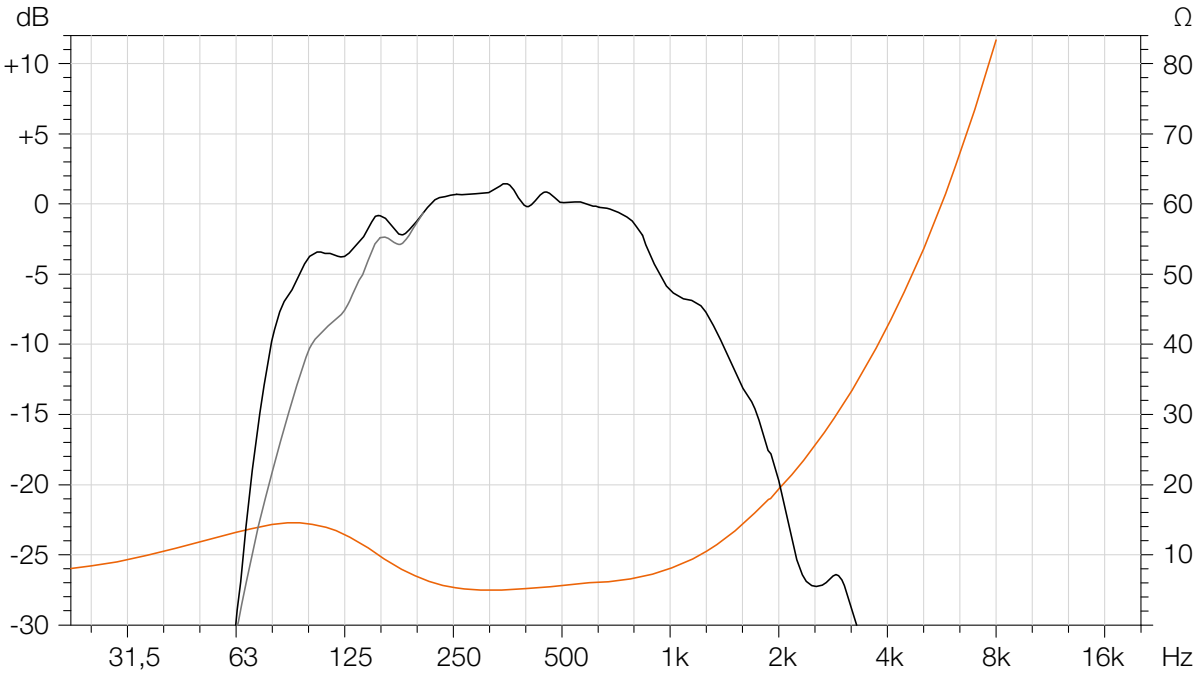
rear view



top view

Frequency Response

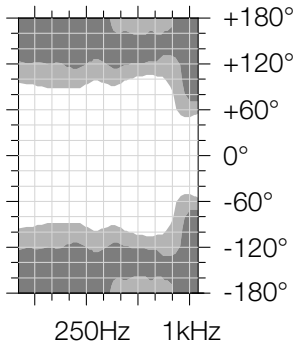
FULL | CUT | IMPEDANZ



Radiation Pattern

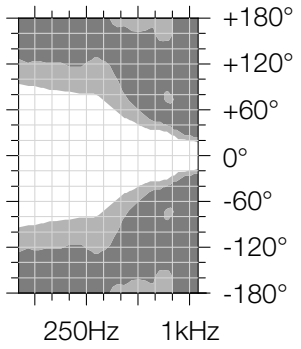
-6 dB | -12 dB

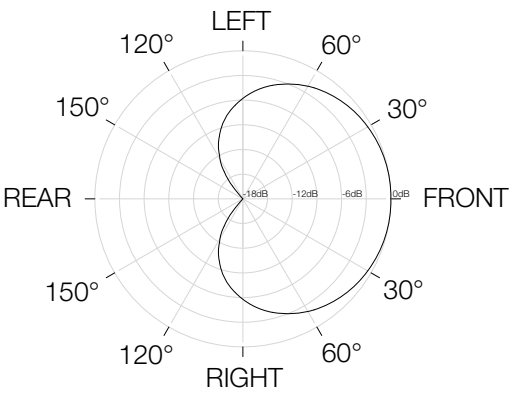
horizontal



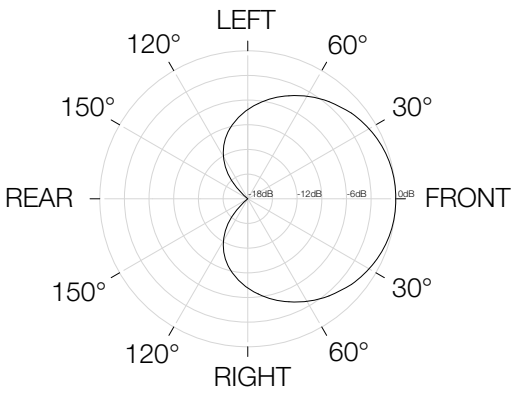
isobar diagram

vertical





polar pattern



Architect Specifications

The loudspeaker shall consist of a vented 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 three 6.5“ neodymium LF transducers.

The usable system bandwidth shall be 90 Hz to 1000 Hz. 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 129 dB. The long-term handling capacity shall be 1200 W program and 2400 W peak. The nominal impedance of the loudspeaker shall be 8 Ω.

The enclosure cabinet construction first grade birch plywood. The front of the shall be protected by a perforated, powder-coated steel with flame retardant, black fabric to the rear. The dimensions shall be 200 mm (7.87 in) in width, 604 mm (23.78 in) in height and 260 mm (10.24 in) in depth and the enclosure weight shall be 14.2 kg (31 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 TW AUDiO ELLA L18.

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

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