

AX16CL



### **KEY FEATURES**

- High Power passive portable Line Array element
- 16 x 2.5" neodymium transducers with waterproof cones
- 320W continuous power 640W program power
- Line Array dispersion characteristics
- Acoustic transmission line back loading design, resulting in clean mid-bass reproduction and natural cardioid behavior
- Wide horizontal dispersion
- Fast, easy-to-use integrated suspension system
- Aluminium frame structure
- Designed for mobile and installed applications
- Black or white finish

#### **APPLICATIONS**

OVETEN

- Portable system for live bands
- Installed system for theatres, clubs, houses of worship, conference rooms
- Portable AV system for corporate events, exhibitions, fashion events, show rooms
- High performance mobile DJ system

## **TECHNICAL SPECIFICATIONS**

SYSTEM	
System's Acoustic Principle	Line Array Element
· · · ·	Short Transmission Line Back Loading
Frequency Response (±3dB)	200 Hz - 16 kHz (Processed)
Nominal Impedance	32 Ohm
Horizontal Coverage Angle (-6dB)	80°
Sensitivity (4V)	103 dB SPL @ 1m*
Maximum (peak) SPL	128 dB SPL @ 1m*
TRANSDUCERS	
Туре	16 x 2.5" (66mm) Neodymium magnet woofers, 0.8"(20mm)VC
Cone	Waterproof Cone
Voice Coil Type	Ventilated voice coil
INPUT CONNECTIONS	
Connector Type	Neutrik <sup>®</sup> speakON <sup>®</sup> NL4 x 2 (1+/1- signal IN & LINK ; 2+/2- thru)
POWER HANDLING	
Continuous AES Pink Noise Power	320 W
Program Power	640 W
ENCLOSURE & CONSTRUCTION	
Dimensions (WxHxD)	90 mm (3.54") x 1190 mm (46.85") x 154 mm (6.06")
Enclosure Material	Aluminium
Paint	High resistance, water based paint
Flying system	Aluminum Fast Link structure with dedicated pins
Net Weight	11.5 Kg (25.4 lbs.)
*measured @4 m and scaled @1 m	





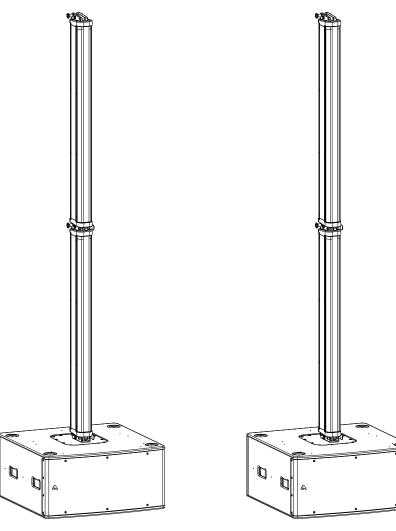
## DESCRIPTION

The AX16CL Line Array is a passive system equipped with sixteen 2.5" neodymium transducers with waterproof cones, designed for portable and permanently installed applications where high power and clarity are needed. The aluminum frame box structure ensures lightweight and strength, while the shape features a back-loaded transmission line design with clean mid-bass reproduction and natural cardioid behavior. The wide horizontal dispersion make the system flexible and adaptable to many different applications.

### THE SYSTEM

The AX16CL line array module has been designed to be combined with the SW212A, a compact and lightweight 2x12" Band-Pass/Bass-Reflex subwoofer, equipped with a 2800W Class D amplifier with Power Factor Correction and PROEL's proprietary 40bit floating point CORE2 DSP. Up to four AX16CL modules can be driven by one amplifier channel of the SW212A subwoofer. The built-in CORE2 DSP, which can be also remotely controlled using PRONET AX software, provides 4 presets for different combinations: 2, 4 or 1 columns plus 1 user preset.

The standard system, composed of four AX16CL line array modules and two SW212A subwoofers, features 5600W of total power and a line-array dispersion pattern, making it the perfect solution for high-performance portable sound reinforcement applications.



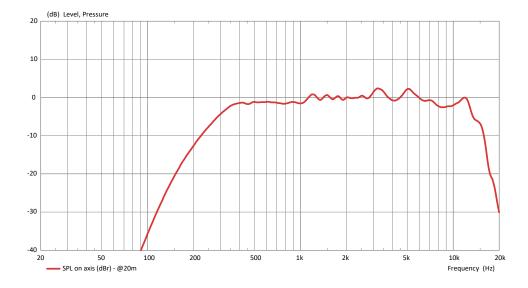


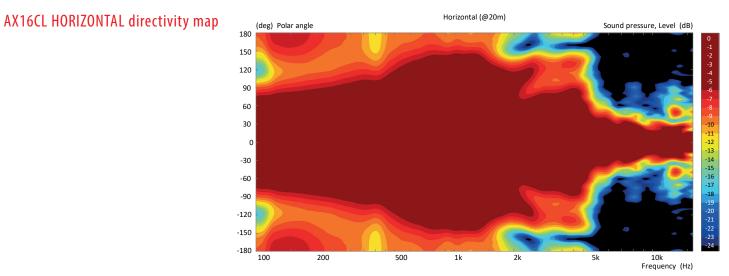


# 16 x 2.5" (66mm), High Power, Passive, Portable Line Array Element

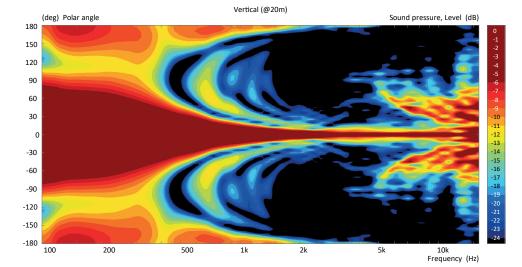
AX16CL

# AX16CL frequency response





# AX16CL VERTICAL directivity map

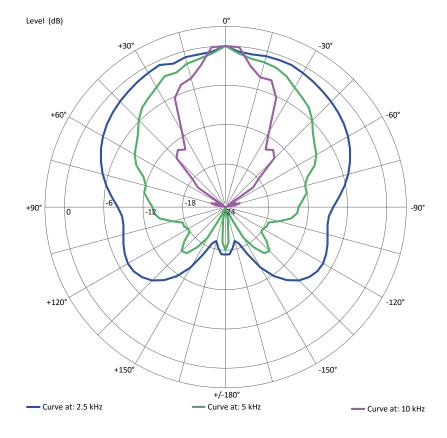




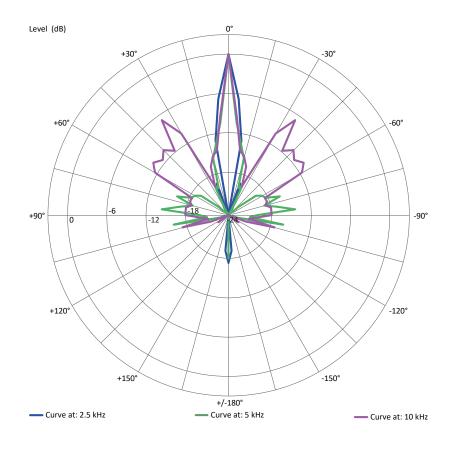
# 16 x 2.5" (66mm), High Power, Passive, Portable Line Array Element

AX16CL

# AX16CL HF HORIZONTAL polar diagram



# AX16CL HF VERTICAL polar diagram



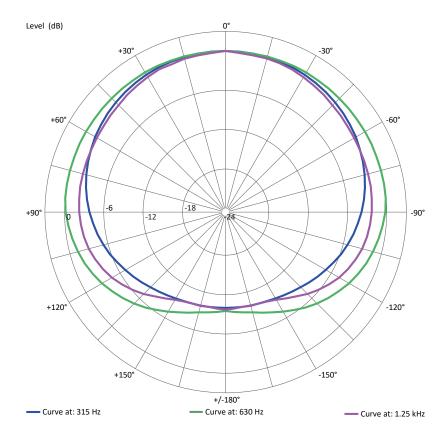




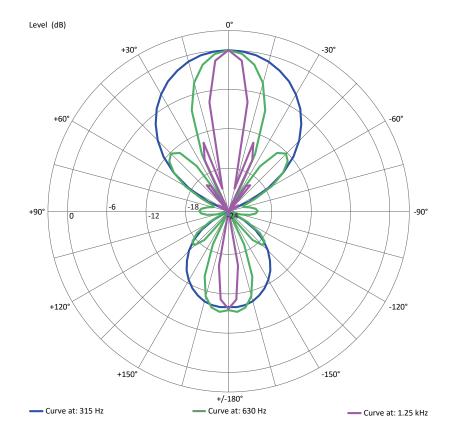
# 16 x 2.5" (66mm), High Power, Passive, Portable Line Array Element

AX16CL

# AX16CL LF HORIZONTAL polar diagram



## AX16CL LF VERTICAL polar diagram





Thanks to its elegant mechanical design the AX16CL can be easily transported, while the integrated suspension system makes its deployment very fast and simple. Each unit comes with two aluminum brackets and two pins that allows multiple array elements to be easily combined either together or with the matching SW212A subwoofer. The brackets allow inter-cabinet angles of 0°, 2° and 4°.

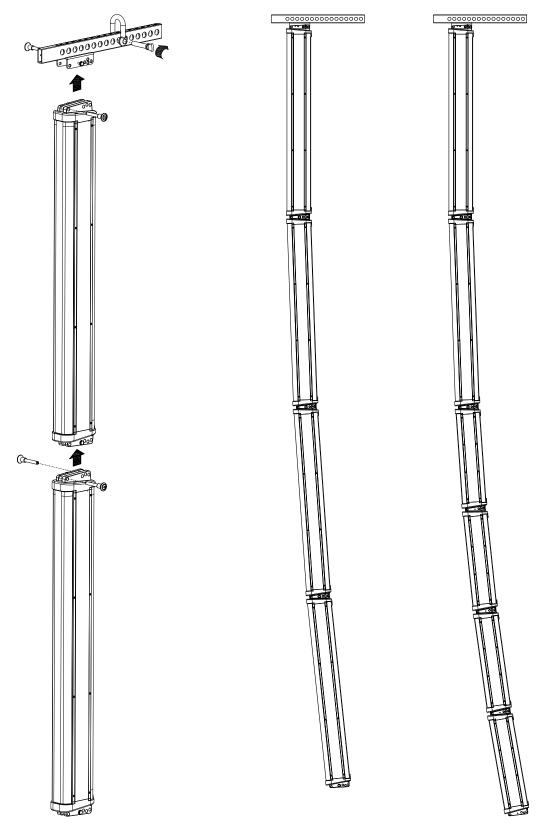
A complete range of accessories for transport, installation and connections are available.

KPTAX16CL	Flybar for suspending up to 6 units
KPTWAX16CL	Wall bracket for up to 4 units
KPTWAX16CLL	Wall bracket for 1 unit
KPTFAX16CL	Floor stand
KPTTSTANDAX16CL	Floor stand
KPTPOLEAX16CL	Pole adapter
KPTFAXCL	Foam adapters for stage monitor or frontfill applications
COVERAX16CL	Cover / carrying bag for single AX16CL
DHSS10M20	ø35mm 1-1.7m Pole with Handle and M20 screw
KP210S	ø35mm 0.7-1.2m Pole with M20 screw
PLG716	Galvanized steel shackle
ESO2500LU025	25cm 4x4mm SPEAKON linking cable





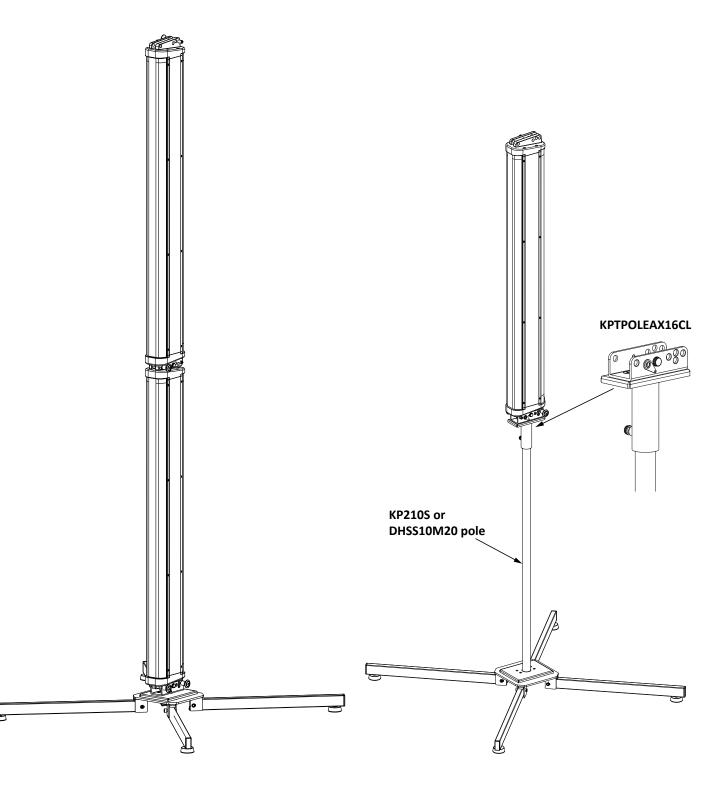
The AX16CL column can be flown using the **KPTAX16CL** flybar with inter-cabinet angles of up to 2°. It can also be combined with the AX8CL.





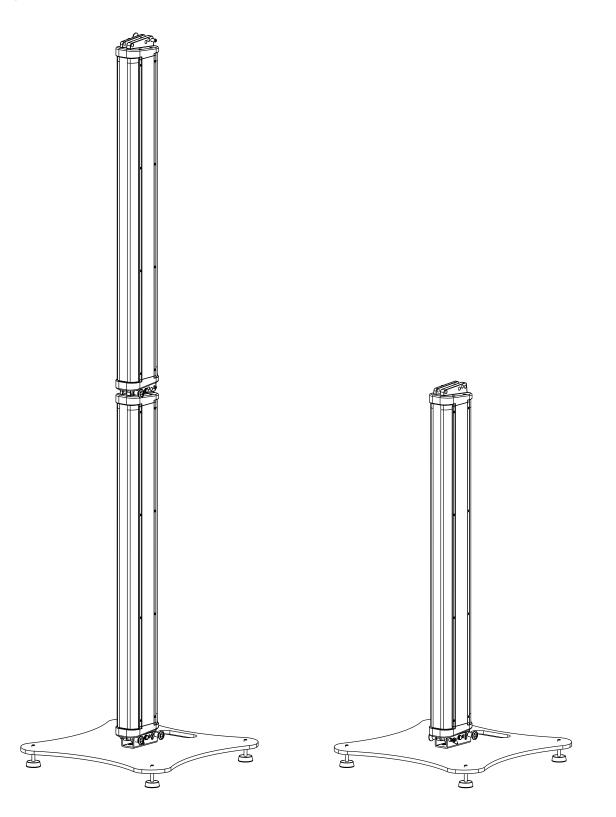


The **KPTFAX16CL** floor stand enables AX16CL columns to be floor mounted either as two vertically orientated units, or one single unit using DHSS10M20 or KP210S extenders with a **KPTPOLEAX16CL** pole adapter.





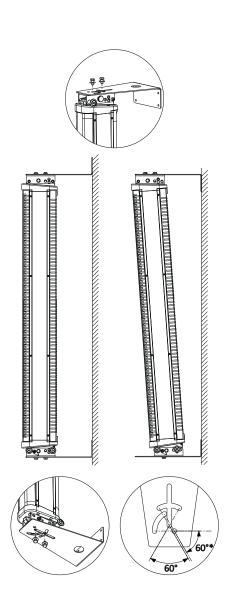
The **KPTSTANDAX16CL** represents a more elegant solution when the AX16CL columns must be floor mounted and used as AV system for corporate events, exhibitions, fashion events and show rooms.

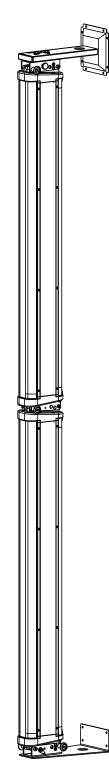


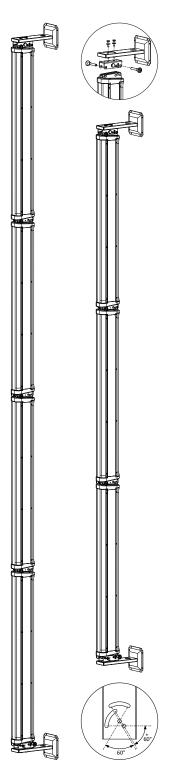


One unit of AX16CL can be easily wall mounted using the **KPTWAX16CLL** wall bracket. Horizontal aiming angles of up to 30° either side of central can be applied (with the column in vertical position). The column can be also tilted downward by 4°.

Up to two AX16CL columns can be wall mounted using a combination of **KPTWAX16CLL** and **KPTWAX16CL**, while for installing three or four columns two **KPTWAX16CL** can be used.



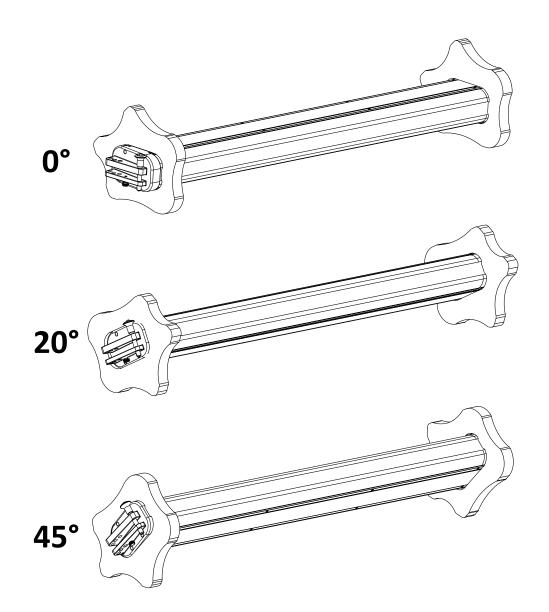








**KPTFAXCL** includes two foam adapter and it can be used in front-fill or monitor applications on stage. It has three different angles of inclination to orient the sound where necessary.







## **ENGINEERING DRAWING**

