

# PLA21021

Compact high power line array module



# PROPHON

SOUND SYSTEMS



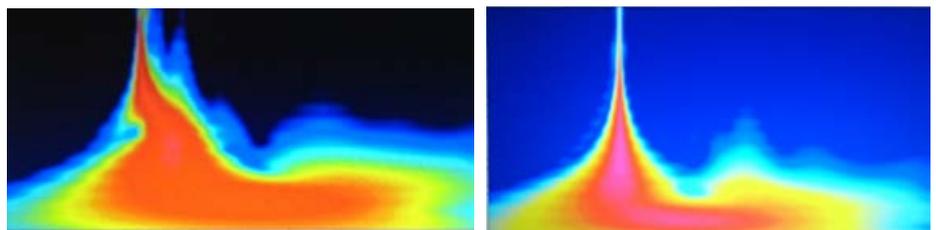
MADE IN SWEDEN  
SINCE 1985



**The PLA21021** is a 2-way true line source enclosure, with a controlled dispersion pattern of  $110^{\circ} \times 15^{\circ}$ , using advanced waveguides for the  $2 \times 1"$  Neodymium drivers, and  $110^{\circ}$  soundguides for the two High-power neodymium  $10"$  woofers, controlled dispersion is achieved over a very impressive frequency range.

Using the very latest in FIR technology, a truly remarkable linear phase response is achieved, with numerous advantages compared to regular line array speakers. The hardware and flightware are incorporated in the metal front-grille construction, engineered so that there is no external parts when transported, you simply push the connection splay hardware out when rigging.

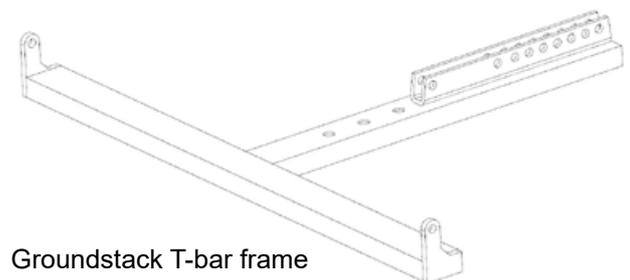
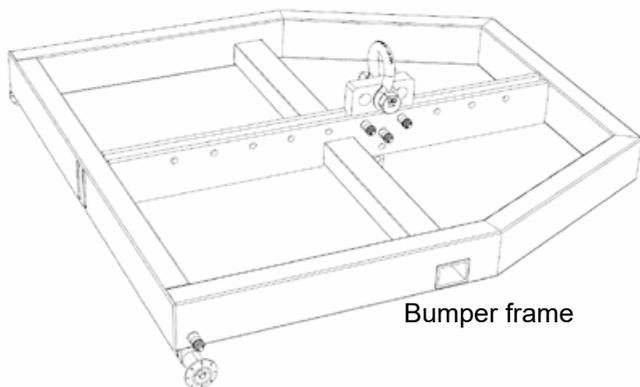
Passive design with 8 ohm fullrange input, allows for economic use of amplifiers and DSP channels, saving, space, time and money.



FIR filters (Finite Impulse Response) are basically advanced coefficients, that regulates the linearity of the phase, over frequency, see measurements above of the PLA21021, where left measurement is without FIR and right measurement is with FIR.

## Key features

- Flexible system, for use in smaller clubs, live performance stages, and for fixed installations with 2-4 pcs. in a cluster array with subwoofers, up to full-scale line array system for festivals and the tour industry.
- Passive, with built in crossover, 8 ohm, for easy setup and an economic use of amplifiers and DSP-processors.
- The latest in FIR technology for Linear phase response.
- Possibility to use amplifiers and DSP-processors from Prophon and other brands,
- Easy and quick to setup and install, with the 3-point lifting system.
- Neodymium light-weight components, resulting in a 20 kg. line array module
- Integrated hardware, without extra parts.
- Easy to ground-stack, the bumper frame are used for both, line array and for ground-stacking, no extra parts needed,
- Compact format for easy handling and rigging, 600 in width, 300 in height and 400 in depth
- Fullrange frequency response.
- Closed cabinet construction for best cone control.
- Smart, safe and easy to use rigging-hardware, with folding parts.
- Standard Speakon connectors, using 1+/- for fullrange input
- 8 ohm impedance, enabling four enclosures to be amplified on each amplifier channel, running in 2 ohm load, Also reducing the amount of amplifier channels needed when touring, saving space and money.
- 3-point lifting hardware.
- Rigging hardware integrated, no external parts needed.
- 2 x 10" powerful neodymium woofers
- 2 x 1" drivers mounted on waveguide and horn
- V15 x H110 dispersion pattern
- Light-weight design, weighing only 20 kg. incl. flightware.
- Built-in dedicated advanced passive crossover network
- 102 dB sensitivity
- FIR filter available for downloading and using in several amplifier- and DSP- manufacturers software.
- Designed, engineered, manufactured and assembled in Sweden



The PLA21021 and the B318HPC - Cardioid 3x18" high-power subwoofer makes up the perfect high-power ground-stacked PA systems for events, live performance, club.

We call it "The AX"

Featuring Powersoft X4 amplifiers with 4x5200W, with dedicated FIR-filters, and DSP-settings mounted in the middle "dummies", not only shortens the cable length and hides the amplifier cases, it also functions as a speaker stand, elevating the PLA21021 line array modules to just the right height.

Using the groundstack T-bar array frame instead of the more expensive and heavy Bumper frame, saves time, space and money.

The X4 amplifiers are mounted from the back, with air-flow current running from back to front, out through the front-grille of the "dummie"

With connector panels for Power input, 2 x RJ485 for network and/or Dante, XLR input for analogue and AES input, 2 x Speakon output for connecting the speakers.

## Technical specifications PLA21021, Line array module

Construction	Closed cabinet, V-baffle, waveguides, soundguides, with dedicated built-in passive crossover network
Components Low frequency	2 x 10" Neodymium light weight cone speakers
Components High frequency	2 x 1" Neodymium drivers mounted on waveguides
Sensitivity	102dB, 1W/1m.
Nominal impedance	8 ohm
Power handling RMS	500W
Power handling cont.	1000W
Power handling peak	2000W
Max SPL peak (calc.)	135dB peak 144dB peak for Array with 4 pcs on each side 147dB peak for array with 8 pcs on each side
Dispersion	H110 x V15
Frequency response	50Hz - 19kHz (-6dB)
Measurements	H310 x W600 x D400
Weight	20 kg.
Applications	<ul style="list-style-type: none"><li>• Line array for tour application</li><li>• Line array in fixed installation</li><li>• Fixed installation 1-4 modules in cluster</li><li>• Portable sound system 1-3 pcs. with subwoofers</li></ul>
Hardware	3-point fly-ware, with adjustable splay angle, and kick-out spring
External hardware	Bumper frame for line array, ground-stack and club-stacking, brackets for fixed installations
Input connections	Neutrik NL4MP 1+/1- input 2+/2- Link
Recommended DSP amplifiers Tour / Installation	Prophon P3000DSP, Prophon P3000, Prophon P10000 Powersoft X4, Powersoft X8, Powersoft Quattrocanali and Ottocannali series Powersoft K8, K10, K20 with DSP

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