

PROPHON

SOUND SYSTEMS

AX

Groundstacked line array system with cardioid subwoofer technology



MADE IN SWEDEN
SINCE 1985



AX Groundstacked PA system

The AX system consists of two B318HPC; high power cardioid subwoofers, and six PLA21021 line array modules, groundstacked in a powerful PA system, with Powersoft X4 DSP-amplifiers integrated.

Developed for live performance, and club events, with a total amplified power of 41,600W, the system can be expanded and scaled up into a full sized line array concert system, with 4 cardioid subwoofers and 16 line array modules.

The **B318HPC** cardioid subwoofers houses 3 pcs. of 18" woofers with a total of 10,200W cont. power handling, with double spider, neodymium magnet assembly and split voice-coil technology.

The **PLA21021** line array module encompasses two 10" woofers and two 1" drivers, mounted on waveguides, with a controlled dispersion pattern of 110x15 degrees. The **Powersoft X4** amplifier is housed in the middle cabinet, stacked on top of the subwoofer, with XLR analogue and digital AES input, Ethernet input, Powercon True input and 2 x Speakon output.

The AX system is perfect for events and live performances indoor or outdoor, where the possibility to hang a line array is limited, but the features and power of such a system is needed.

FEATURES

- B318HPC, cardioid subwoofer 3 x 18" woofers with Neodymium magnets and 4,5" voice coil
- 10,200W cont. power handling in each subwoofer
- Advances FIR filters for a linear time-coherent sound.
- Each subwoofer uses two amplifier channels with advanced mathematical DSP algorithms for true cardioid dispersion pattern
- PLA21021, Line array module with 2x10"/2x1" drivers mounted on line source waveguide
- Powersoft X4 DSP-amplifiers with FIR-filters and 4 x 5200W power in each stack
- Groundstacked for portable use and easy rigging
- Total amplifier power 41,600W
- Cases available for PLA21021 line array modules
- Castor-plates / protection-plates and soft cover available for the subwoofers
- The AX system can be expanded to support 4 x B318HPC and 16 x PLA21021

APPLICATIONS

- Live performances
- Festivals
- Installation in large nightclubs
- Outdoor events
- Indoor events
- Live stages



B318HPC Cardioid subwoofer

High Power 3 x 18" subwoofer for live performances and recorded music

The **PROPHON B318HPC**, cardioid high power subwoofer was designed for live performance stages, festivals, and for the tour and rental industry, but also for recorded music such as club events, fixed installations in nightclubs etc. The very special cardioid design allows for extreme control in the LF-frequencies, compared to regular 18" subwoofer where the dispersion pattern is almost completely omnidirectional.

The sound engineer can design, aim and steer the sound to where it is wanted, and also omit it where it is unwanted.

When placed besides stages in live performances the cardioid dispersion pattern really play out its role, lowering the SPL on stage from the subwoofers compared to "standard" subwoofers with up to 20 dB from each side, also very often a live stage have a width that allows for standard subwoofers to peak at a certain frequency because of wavelength compared to distance between subwoofers.

The B318HPC have several more advantages compared to regular front-loaded subwoofers, one being that it has a linear behavior, meaning they only loose -3 dB for each doubling of distance, compared to -6 dB when using front-loaded subwoofers (this will increase the SPL with about 12 dB on 16m. when comparing front-loaded subwoofers and the B318HPC, if both have a 100dB SPL at 1m.)

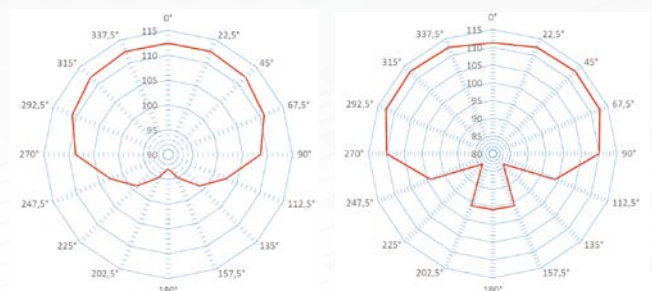
Another feature is that the backward facing woofer actually raises the sensitivity forwards with 2 dB 1W/1m.

FEATURES

- 3 x 18" woofers with Neodymium magnets and 4,5" voice coil
- Cardioid dispersion pattern
- High sensitivity (103 dB @ 1W/1m.)
- Extremely high max SPL (149 dB, calc. peak)
- Compact size compared to SPL and function
- Relatively light weight using Neodymium magnets
- Low distortion levels
- Easy to use, with presets for downloading from our website
- Perfect for both live music and recorded music
- B318HPC is the perfect match to any Line array system
- High Power handling (10,200W cont.)
- Versatile usage, either stacked or stand alone
- Pre-programmed presets for download
- Uses 2 amplifier channels with individual DSP settings

APPLICATIONS

- Live performances
- Festivals
- Installation in large nightclubs
- Outdoor events
- Indoor events
- Live stages



Actual measured cardioid behavior 50Hz, and 63Hz



PLA21021 High Power passive line array module

Compact line array module for installation and tour

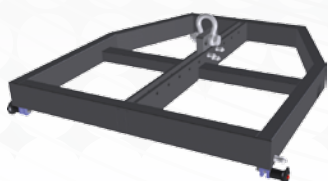
The PLA21021 houses two 10" Neodymium woofers and two 1" neodymium drivers mounted on waveguides. The passive 8 ohm design allows for connecting four modules on a single amplifier channel with 2 ohm load. Designed for full scale line array applications such as festivals, live performances, FOH, and for "clubs", rigging 2-4 pcs. groundstacked on subwoofers, perfect for large bands, events and portable sound system.

FEATURES

- Compact size (W600 x H310 x D400)
- High sensitivity (102 dB)
- Max SPL 135dB single speaker (147dB, 8 speakers in stereo array)
- 2 x 10" Neodymium woofers mounted on soundguides
- 2 x 1" Neodymium drivers mounted on waveguides
- Controlled dispersion pattern of H110 x V15
- Hardware and array splay flightware integrated in the speaker
- Painted with a 2-component lacque
- Fullrange passive construction, with advanced dedicated passive crossover network inside.
- 8 Ohm input impedance
- Easy to use, easy and fast to rig.
- Two handles
- Closed cabinet design for optimum cone control
- Light weight (only 20 kg.)

APPLICATIONS

- Installation
- Portable use
- The rental industry
- The event industry
- Stage monitor amps.
- Small PA systems
- Bands
- Full scale line array
- Groundstacked club-rigg



BUMPER FRAME



TRANSPORTATION CASES



ARRAY CONFIGURATION

