



SPIKE 3812

Compact Line Source Speaker

Application

*Well-suited for indoor and outdoor usage:
multi-purpose spaces, bands, restaurants,
churches, malls and gymnasiums.*

Kit contents:

- **VA308** Sound Column 2 pcs.
- **ND 112-P** Active Subwoofer 2 pcs.
- Adjustable Speaker Stand **König and Meyer** 2 pcs.

VA308 Compact Speaker

VA308 compact loudspeaker is a system composed of 8 full-range speakers, installed in a vertical line.

The 8 transducers are placed as a line array system to create a cylindrical dispersion (waveform). The sound pressure level only decreases by 3 dB (instead of 6 dB) each time the distance doubles (minimum loss). As a consequence, it is possible to double coverage for the same acoustic pressure. It also gives a more targeted sound transmission to audience areas.

By focusing the speaker sound to the audience, **VA308** guarantees excellent results in reverberant acoustic conditions and so perfect speech intelligibility.

This system is perfect for location with complex acoustics: it avoids potential reflections from ceilings and walls to make the sound more pleasant for the audience, with an outstanding reproduction of vocal and instruments. It is also very interesting for musicians on stage, because they are not affected by sound reflections.

Speaker, consisting of full-range speaker group, has a high linear phase response, which together with their very low harmonic distortion gives a very clear sound reproduction in the vocal range.

High resistance to acoustic feedback makes it possible to use in a karaoke bars, where the nonprofessional performers enjoy the microphone.

The **VA308** cabinet is made of birch plywood with Warnex black water-polymer paint finish (other colors available). Speakers are protected by a steel grid. Additional protection against moisture is provided by acoustically transparent foam, glued to the inner surface of the grid.

Input connector, NL4 speakon, is located on the bottom of **VA308**. Threaded (M5) mounting holes for mounting brackets (wall mount, mount for installation on the flange, etc.) are located on the rear of the cabinet.

Portable series



•
Line source loudspeaker - sound column
composed of 8 x 3" full range speakers

•
Adjustable vertical tilt from -5° to +5°

•
The active subwoofer with 12" loudspeaker
(neodymium magnet)

•
Integrated in subwoofer amplifier 2 x 700 W RMS
with powerful DSP engine

•
Three preset equalization settings

•
Frequency range 46 Hz - 17 kHz

•
Coverage 140°H x 15°V

•
Maximum SPL 102 dB SPL/12 m

•
Adjustable speaker stand
with vibration-free connection

ND112-P Active Subwoofer

The **ND112-P** is a powered 12" subwoofer in the **SPIKE**-series loudspeaker line. It is designed to compliment **SPIKE**-series sound column. Acoustic design – bass reflex.

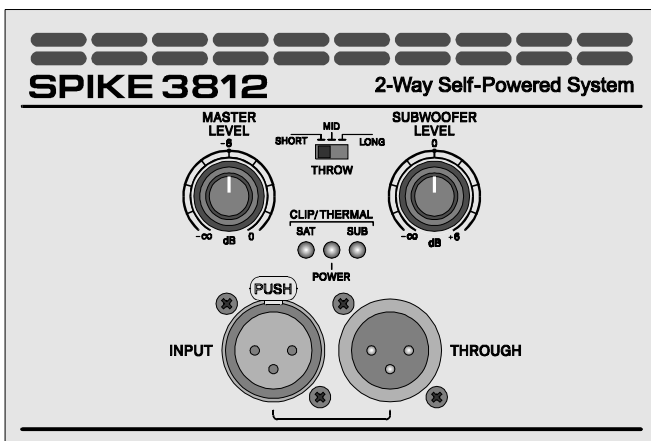
The **ND112-P** cabinet is made of 15mm birch plywood with Warnex black water-polymer paint finish. The front panel of the loudspeaker is covered with a decorative protective steel grid. Additional protection against moisture is provided by acoustically transparent foam, glued to the inner surface of the grid.

Two ergonomic handles are located on the sides, stand flange is located on the top of the subwoofer.

Two-channel D class amp (2x700W) is installed on insulated compartment to the rear. The amplifier is equipped with powerful DSP engine, acting as crossovers, optimal EQ, time alignment, limiting and speakers overload protection.

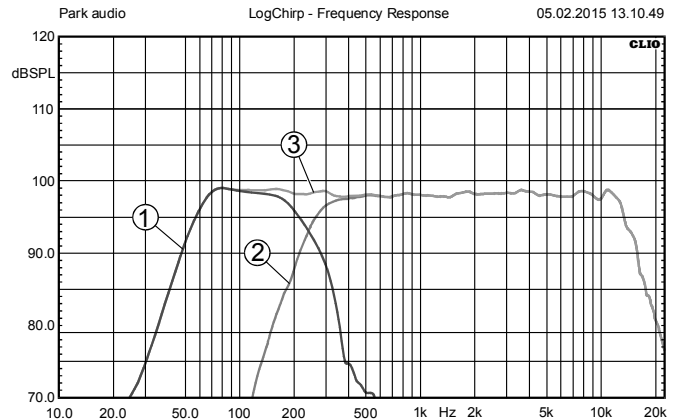
DSP accurately handles the audio signal thanks to its functions of equalization, filtering, delay, limiter and protection. Thanks to the technology of FIR filters the speaker has a high linear phase and amplitude response.

DSP enables users to choose between three preset equalization settings, in order to adapt the system output in various situations.



SPL curves are shown below (the THROW switch is in the MID position):

- ① – **ND112-P** SPL curve;
- ② – **VA308** SPL curve;
- ③ – overall SPL curve.



Operation mode

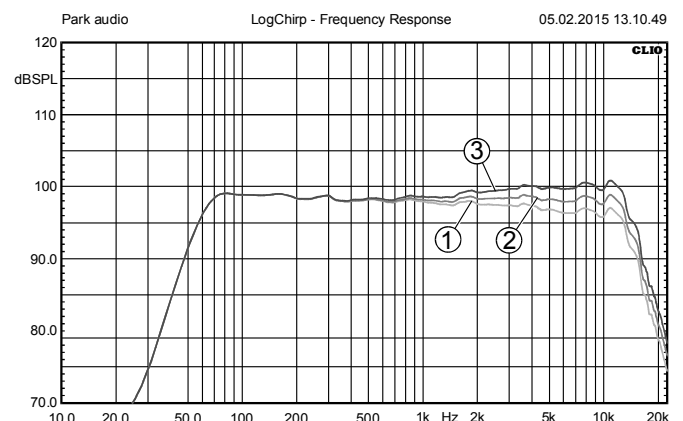
SHORT Throw – optimized for near field reproduction.

MID Throw – balanced response for most applications.

LONG Throw – optimized for far field reproduction or the need to compensate for increased low frequencies level.

SPL curves are shown below:

- ① – **SHORT**;
- ② – **MID**;
- ③ – **LONG**.



TECHNICAL DATA

VA 308 Speaker

Configuration

Line source loudspeaker - sound column.

Transducers:

8 x 3" dia full range speaker

Acoustic design

Trapezoid cabinet, sealed box.

Acoustical performance

Power Handling (nominal/cont.)	160 / 320 W
Impedance	8 Ohms
Frequency Response*	190 Hz - 17 kHz
Axial Sensitivity	98 dB
Maximum Output **	102 dB / 12 m
Coverage:	
– horizontal	140°
– vertical	15° (array effect)
Weight	7.7 kg
Dimensions:	
– width	110 mm
– height (front/ rear)	710 mm
– depth	135 mm

ND112-P Subwoofer

Configuration

Active subwoofer.

LF Driver:

12" dia **B&C SPEAKERS**, voice coil 3"

Acoustic design

Rectangular cabinet, bass reflex.

Acoustical performance

Power Handling (nominal)	400 W
Power Handling (continuous)	800 W
Frequency Response *	46 - 250 Hz
Sensitivity	95 dB
Max. Output SPL (half space) **	127 dB / 1 m
Weight	21 kg
Dimensions:	
– width	480 mm
– height	390 mm
– depth	460 mm

Electrical Performance

Power Rating (RMS)	2x 700 W, D class
Sensitivity	775 mV
Impedance	10 kOhms
Signal-to-Noise Ratio	98 dB (unweighted)
Input / Line Output	XLR / XLR
Cooling System	forced ***
Power Requirements	~220 V, 50/60 Hz
DSP engine:	Sampling rate – 48 kHz, DAC/ADC – 24-bit, internal processing – 56-bit

Note.

* **VA308 + ND112-P** Frequency response: 46 Hz - 17 kHz.

** For comparison purposes and in accordance with common industry practice, maximum SPL specifications are calculations based upon transducer sensitivity, amplifier output voltage and speaker impedance.

*** With smoothly variable intensity. At a normal temperature and low output level the fan is OFF.

