ND115-P

Active subwoofer with flexible parameter settings

Portable series

Maximum SPL 128.5 dB/1m

•

Frequency Range 43 – 200 Hz

•

15”, 500 W Woofer (B&C SPEAKERS)
with Neodymium Magnet, Voice Coil 3”

•

Class D Power Amplifier (1000 W RMS)
with Switching Power Supply

•

Built-in DSP Engine with Functions of Filtering, EQ, Amplifier and Speaker Overload Protection

•

2 Line Inputs and Outputs (XLR)

•

Line Outputs Switch: THRU / SAT
(in SAT Mode Processed Signal for Satellite Connection is Applied to Line Output)

•

Input Level Control

•

Output Signal Polarity Switch (Norm / Rev)

•

Signal Delay Switch
(0, 1, 2 Meters)

•

DSP Presets Switch
(1 Factory and 2 User Presets)

•

USB Interface to Connect to Computer
(DSP Setting)

Application:

PA system for multi-purpose spaces, houses of worship, auditoriums, clubs, restaurants, karaoke bars, music bands.

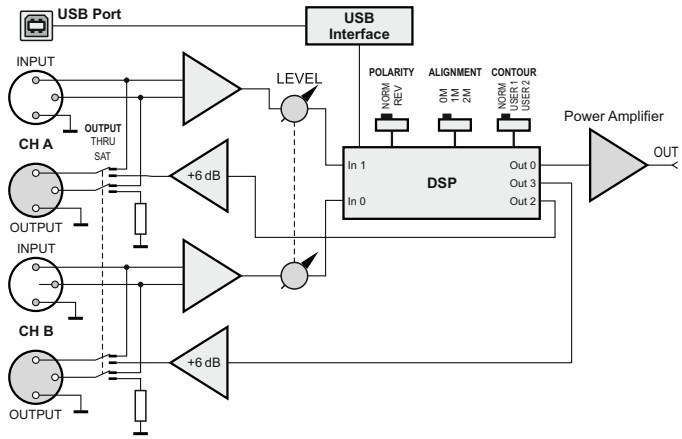
Active subwoofer **ND115-P** is based on 15" woofer (B&C Speakers, Italy), installed into the front panel of the cabinet. The **ND115-P** cabinet is made of birch plywood with black water-polymer coating. Acoustic design - bass reflex. The front panel of the loudspeaker is covered with a decorative protective steel grid. Additional protection against moisture is provided by acoustically transparent foam, glued to the inner surface of the grid. Two ergonomic handles for carrying are located on both sides. The flange for speaker stand is located on the top of the subwoofer. The class D amplifier (1000W) is installed on insulated compartment into rear

The amplifier is equipped with overload, short-circuit and thermal protection. The amplifier has switching power supply and forced cooling system with smoothly variable intensity

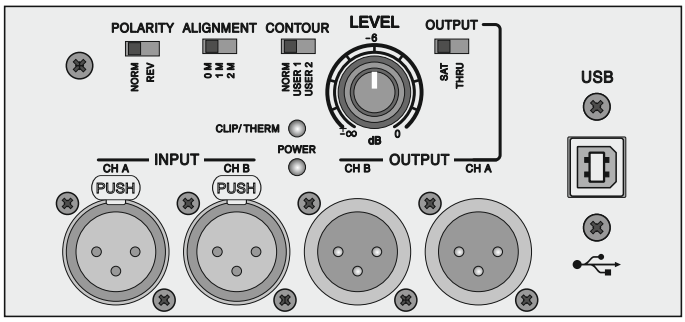
The **DSP** engine provides functions of crossover, optimal EQ, time alignment, limiting and speakers overload protection(by means of peak and RMS limiters). These **DSP** functions also ensure better quality of the “aggressive attack” in the operating range and ensures significant distortion reduction at increased sound pressure levels.

DSP engine also performs the functions of crossover for external full-range loudspeakers (processed signal is applied to line outputs). Line outputs also can be connected parallel to corresponding line inputs via switch. By default the **DSP** engine ensures aligned subwoofer operation with **PARK AUDIO** full-range loudspeakers.

BUILT-IN AMPLIFIER BLOCK DIAGRAM



SETTING AND CONTROL

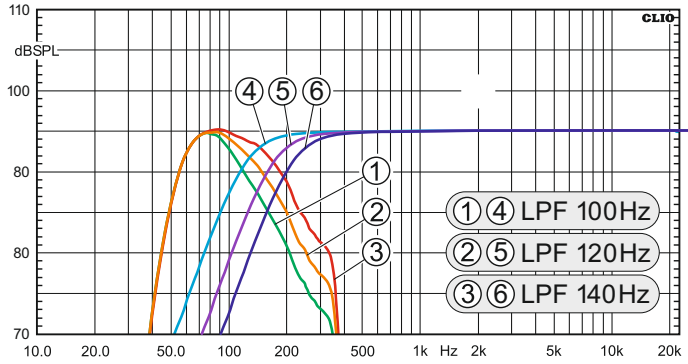


Preset Switch (CONTOUR)

Set frequency response subwoofer and external loudspeakers («tops»), connected to line output:

– **NORM** – factory preset;

– **USER 1**, **USER 2** – user presets (can be changed).



①②③ – subwoofer frequency response (NORM, USER1, USER2);

④⑤⑥ – frequency response on line output after crossover (DSP).

Line Output Switch (OUTPUT)

Line outputs can be connected either parallel to line inputs (THRU), or signal, processed by DSP can be applied to them. (SAT).

Polarity Switch (POLARITY)

Changes the polarity of signal, applied to the subwoofer. The switch used to align the subwoofer and satellite.

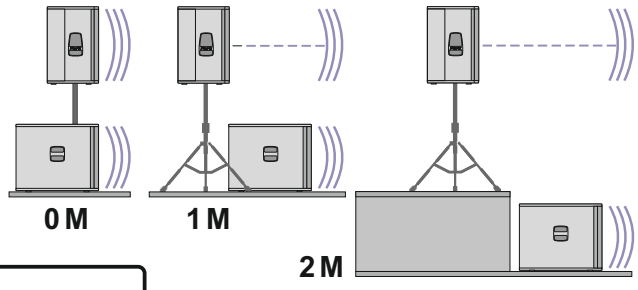
Delay Switch (ALIGNMENT)

Allows to set a signal delay depending on the relative distance between the subwoofer and satellite :

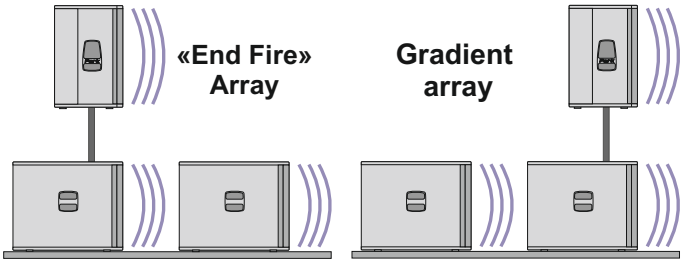
– **0 M** (0 meter) – for loudspeaker, installed on top of the subwoofer;

– **1 M** (1 meter) – for loudspeaker, installed at the speaker stand near subwoofer;

– **2 M** (2 meter) – for loudspeaker, installed at the speaker stand far from the subwoofer, or the subwoofer, installed below the stage.



Delay switch can be used for subwoofer arrays installation



See the manual for details

Due to the acoustic interaction of two or more subwoofers connected with a corresponding delay, it is possible to get a cardioid directivity at low frequencies.

TECHNICAL DATA

Loudspeaker

Configuration
Active Subwoofer

Acoustic Design
Rectangular Cabinet, Bass Reflex
LF Driver: *15"dia B&C SPEAKERS, voice coil 3"*

Nominal Power Handling	500 W
Continuous Power Handling	1000 W
Frequency Range	43 – 200 Hz
Maximum Output SPL (full space)	128.5 dB *
Weight	27 kg
Dimensions	580 (W) x 445 (H) x 510 (D) mm

Built-in Amplifier with DSP engine

Power Rating (RMS)	1000 W, class D
Sensitivity	775 mV
Input Impedance	10 kOhms
Signal-to-Noise Ratio	98 dB (unweighted)
Input/line output	2 x XLR / 2 x XLR
Cooling	forced**
Power Requirements	~220/230 V, 50/60 Hz
DSP engine:	Sampling Rate 48kHz, DAC / ADC 24-bit, Internal Processing 56-bit.

Note.

* 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.

Park Audio II, Ltd, Ukraine, Vinnytsia, tel. +38(0432) 655-366 +38 095 583-77-90 e-mail: park@parkaudio.ua www.parkaudio.ua