



LS123-P

12" ACTIVE SUBWOOFER

Application:

PA systems for clubs, bars, restaurants, music bands, indoor and outdoor usage



Maximum SPL 122 dB/1 m

Frequency Range 42 Hz - 350 Hz

12", 400 W Woofer (LAVOCE Italiana)
with 2.5" Voice Coil

Built-in D Class Amplifier (350 W RMS)
with Switching Power Supply

Analog Input Circuits, Acting as Crossovers,
EQ, Limiting and Speakers Overload
Protection

Line inputs and outputs LEFT и RIGHT
(line outputs are connected in parallel to line
inputs)

Adder of the Signal, Sent to Built-in Amplifier

Input Level Control

Polarity Switch (Norm/Rev)

Cutoff Frequency Control (LPF)

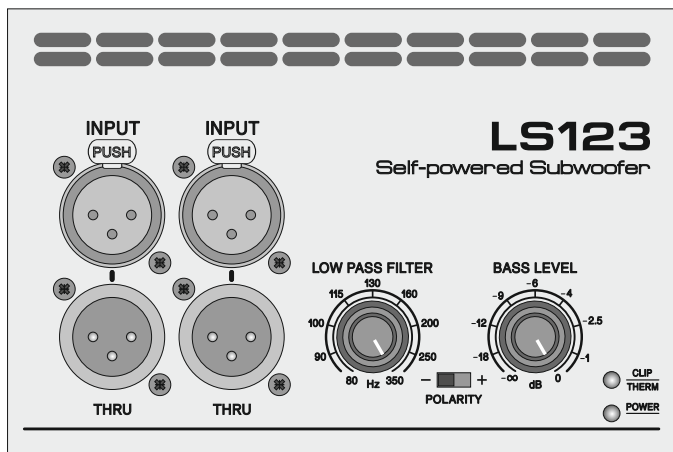
The **LS123-P** subwoofer contains one 12" speaker (LAVOCE Italiana, 2,5" voice coil, 400 W), mounted to the front panel. Acoustic design – bass reflex. The **LS123-P** rectangular cabinet is made of 15 mm birch plywood with black water-polymer paint finish (other colours available).

The front panel of the loudspeaker is covered with a decorative protective steel grid. Two ergonomic handles on the side walls of the subwoofer provide the convenience of carrying. The flange for speaker stand is mounted on the upper wall.

Class **D** amplifier (350 W) is installed on insulated compartment to the rear. The amplifier is equipped with analog input circuits, performs the functions of crossovers, EQ, limiting and speakers overload protection.

The subwoofer has left and right channels input XLR connectors. The signal, added from both inputs, is applied to the amplifier. Input and output XLR are connected in parallel and are used to route the input signal to other loudspeakers.

To align the subwoofer with full-range speakers, built-in amplifier is equipped with signal polarity switch and adjustable low-pass filter (LPF).



SUBWOOFER OPERATION MODE

Setting operation modes is performed by using the controls and switches, located on the front panel of the built-in amplifier.

Polarity Switch (POLARITY)

Changes the polarity, applied to the subwoofer signal. The switch is used to align the subwoofer and full-range systems.

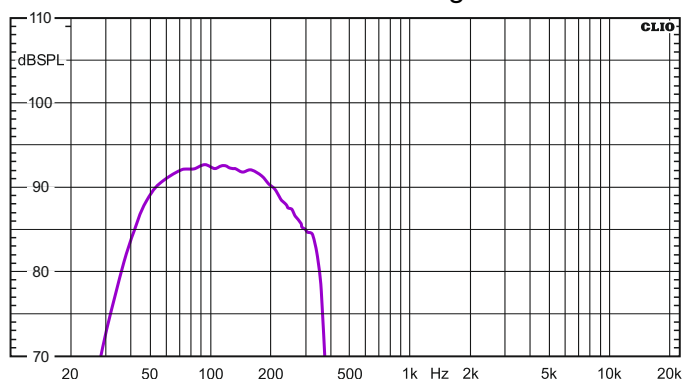
Cutoff Frequency Control (LOW PASS FILTER)

Is used to set the upper frequency of the subwoofer.

The control is used to align the subwoofer and full-range systems.

SPL curves are shown below (cutoff frequency control is shown in 160 Hz position).

The measurements are made using **CLIO Fw11**.



TECHNICAL DATA

Loudspeaker

Configuration

Active subwoofer.

Acoustic Design

Rectangular cabinet, bass reflex.

LF Driver:

12" dia LAVOCE Italiana, voice coil 2.5"

Specifications

Power Handling (nominal)	400 W
Power Handling (continuous)	800 W
Frequency Range	42 - 350 Hz
Cutoff Frequency Control Range (LOW PASS Filter)	80 - 350 Hz (12dB/oct.)
Max. Output SPL (half space):	122 dB / 1m*
Weight	24.5 kg
Dimensions:	
– width	480 mm
– height	390 mm
– depth	485 mm

Built-in Amplifier

Power Rating (RMS)	350 W, D class
Sensitivity	775 mV
Input Impedance	10 kOhms
Signal-to-Noise Ratio	98 dB (unweighted)
Input / Line Output	2 x XLR / 2 x XLR
Cooling System	forced**
Power Requirements	~220 / 230 V, 50 / 60 Hz

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.

