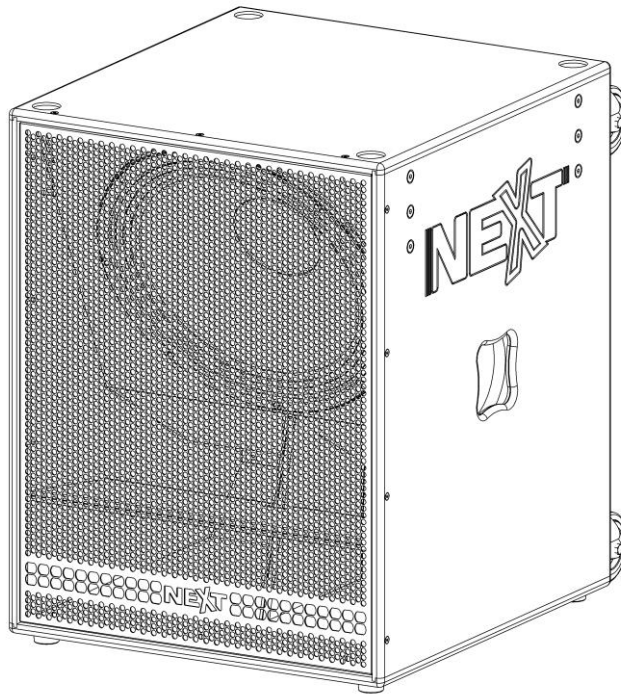


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USER MANUAL

PXL118

PX System Professional Subwoofer

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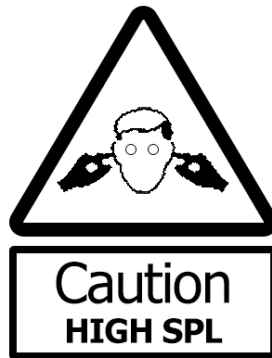
INTRODUCTION

Thank you for purchasing a NEXT PXL118 subwoofer. This manual will provide you with important information about your NEXT PXL118 Sub 1 and NEXT PXL118 Sub 2. Please devote some time reading this manual, and keep it close for future reference. NEXT-Proaudio is concerned with your safety and well-being, so please follow all instructions and heed all warnings. Also, a better understanding of some specific features of the PXL118 Subwoofer will help you to operate your system to its full potential.

SAFETY FIRST

It's important that loudspeaker systems are used in a safe manner. Please take some time to review the following points concerning safe use of the NEXT PXL118 Subwoofer.

DANGER – HEARING DAMAGE



NEXT PXL118 subwoofers are capable of producing extremely high sound pressure levels and should be used with care. Hearing loss is cumulative and can result from levels above 90dB if people are exposed for a long period. Never stand close to loudspeakers driven at high levels.

Stacking

Always ensure that the floor or structure where the stack will take place is even and can withstand the weight of the complete stack. Do not stack speakers too high, especially outdoors where winds could topple the stack. Be aware that speakers working at very high power levels generate vibrations that can creep the systems. Take additional measures to prevent this if needed. Place cables in a way that they do not present a trip hazard. Don't place any objects on top of the stack, they can fall accidentally and cause injuries. Do not attempt to move the enclosures while connected. Try not to operate the PXL118 under heavy rain or moisture, it is weather-resistant but not completely "weather-proof". Also do not expose the systems to extreme heat or cold conditions to prevent component damage.

Rigging and suspension

WARNING: DO NOT SUSPEND PXL118 Sub1. In the NEXT PX system only the PXL118 Sub 2, PXH64 and PXA8000 are designed to be suspended, PXL118 Sub 1 was not designed having suspended use in mind.

Before rigging or suspending any NEXT PX system component, inspect all components and all hardware for any signs of damage or missing parts. If you find any damaged, corroded or deformed parts, do not use them, replace them immediately. Do not use hardware that isn't load rated or that its rating is not enough to handle the system's weight with a good safety factor. Don't forget that the hardware won't just hold the systems weight. It has to be sturdy enough to handle dynamic forces like winds without any part deformation.

NEXT PX system installation should only be carried out by qualified personnel. Always use adequate protective clothing and equipment to prevent possible injuries. Isolate the surrounding area during installation and operation, to prevent general public presence near the systems. Also, be sure you understand all local and national regulations regarding equipment installation. Failure to comply with these instructions may result on injury or death.

UNPACKING

Each NEXT PX system component is built in Europe (Portugal) by NEXT-Proaudio, to the highest standard and thoroughly inspected before it leaves the factory. When unpacking the NEXT PXL118, examine it carefully for any signs of possible transit damage and inform your dealer immediately if any such damage is found.

It is suggested that you retain the original packaging so that the system can be repacked in the future if necessary. Please note that NEXT-Proaudio and its authorized distributors cannot accept any responsibility for damage to any returned product through the use of non-approved packaging.

PXL118 OVERVIEW

The NEXT PXL118 subwoofer element is part of the PX system¹. There are two different enclosures named PXL118 Sub 1 and PXL118 Sub 2. This is because of their configuration within the system. PXL118 Sub 1 is placed directly on the floor, and Sub 2 is placed on top of Sub 1.

The PXL118 makes use of a hybrid design to achieve a high maximum sound pressure while producing a deep low bass well below 50 Hz. Even under maximum load the impulse response accuracy is striking. It has a rich and punchy sound and was specifically designed to match the PXH64 mid/hi element extending its' frequency response down to 50Hz. It's cabinet shape, size and rigging arrangements are totally compatible with the PXH64. To achieve the highest possible sound pressure levels, the PXL118 was conceived with a hybrid bass horn

¹ Refer to PXH64 user manual for a full description of PX System.

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driven by a very powerful long excursion 18" driver with a 100mm voice coil, for precise and powerful bass without any dynamic loss even under high SPL output.

CABLE SELECTING

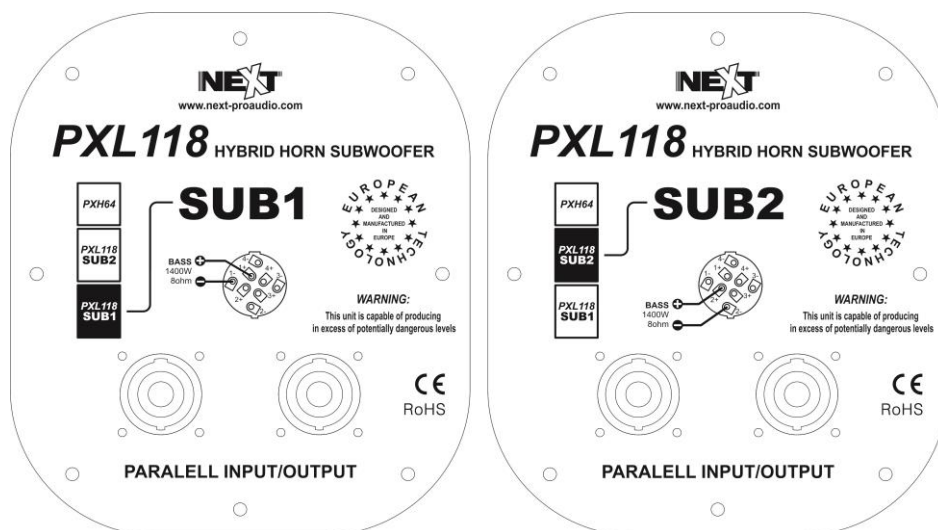
Selecting a cable consists of calculating the correct cable section (size) in relation to the load impedance and the required cable length. A small cable section will increase its serial resistance, which will induce power-loss and response variations (damping factor).

The following table indicates, for 3 common sizes, a cable length with a maximum serial resistance equal to 4% of the load impedance (damping factor = 25):

Cable section	Maximum Length related to load impedance	
	8 Ω	4Ω
1.5 mm ²	12 m [40 ft]	6 m [20 ft]
2.5 mm ²	20 m [64 ft]	10 m [32 ft]
4 mm ²	32 m [104 ft]	16 m [52 ft]

CONNECTION AND ELECTRIC DIAGRAM

The PXL118 is connected through Neutrik® Speakon® NL8FC plugs (not supplied). A wiring description is printed on the connections panels located on back of the cabinet.



The 8 pins of the 2 NL8 Speakon sockets are wired in parallel within the enclosure. Either connector can be used to connect to the amplifier or another Sub.

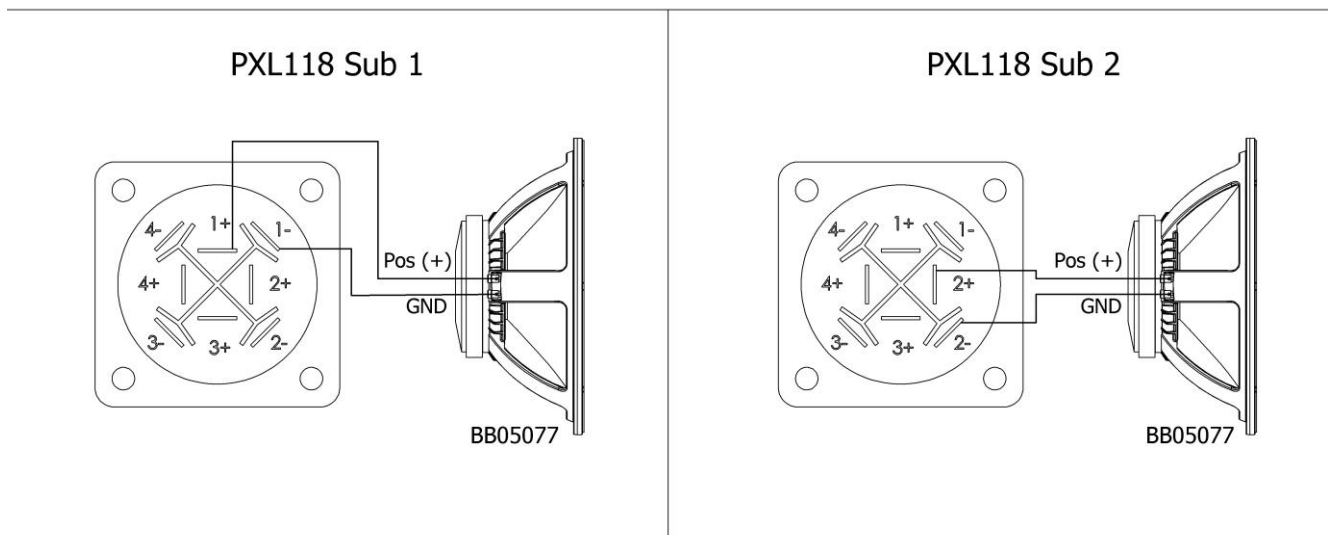
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See the table and the diagram below:

NL8 PIN	Description
1+	Sub 1 POS
1-	Sub 1 GND
2+	Sub 2 POS
2-	Sub 2 GND
3+	PXH64 Reserved
3-	PXH64 Reserved
4+	PXH64 Reserved
4-	PXH64 Reserved

Electric Diagram



AMPLIFICATION

The PXL118 sub-woofers are designed to be used with professional power amplifiers capable of producing 1000W to 1400W into 8 ohms. When used in the PX system standard configuration, all processing and powering needs are taken care of by the PXA8000² element.

Care should be taken to avoid amplifier clipping. It is important to understand that a low power amplifier driven into clipping is more likely to damage a loudspeaker than a higher power amplifier used within its ratings. This is because music signals have a high peak-to-average "crest" factor. When an amplifier is severely overdriven, its output waveform is

² Refer to PXA8000 manual for more information.

“clipped” (its peaks are squared off) – reducing the crest factor. In extreme cases, the waveform can approach that of a square wave. An amplifier is normally capable of producing far more power under these conditions than its undistorted rated power output. The use of very high power amplifiers with outputs much greater than those recommended is discouraged.

Care should also be taken to avoid switch-on surges, which can result in momentary power peaks in excess of specified ratings. The PXA8000 element has a protection circuit to avoid this between the integrated processor and amplifier. Nevertheless, this circuit only works within the PXA8000 components, if you switch off your mixer or any other exterior component the power surge will occur. When powering up a sound system it is important to switch on the amplifiers last, after the mixer and control electronics have stabilised. When powering down the system, reverse the sequence and switch off the amplifiers first.

TROUBLESHOOTING

Simple troubleshooting does not require sophisticated measurement equipment and can be easily undertaken by users. The technique should be to segment the system in order to identify the faulty system component: signal source, controller, amplifier, loudspeaker or cables. Most installations are multi-channel. It is often the case that one channel works and others do not. Trying different combinations of system elements can usually help to isolate and locate the fault.

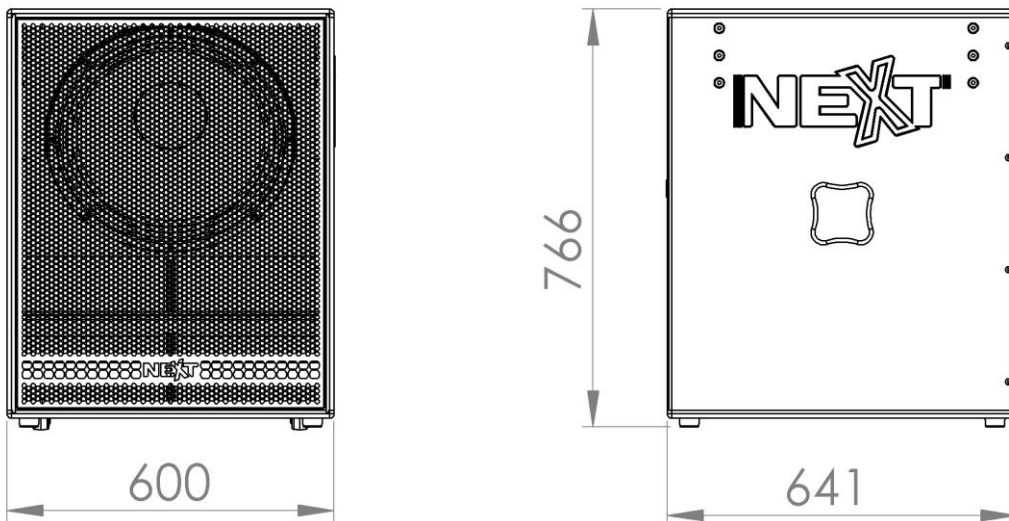
Some cabinet faults can be quite easily identified and corrected by the user. A simple sweep with a sine wave generator can be very helpful though it MUST be made at a fairly low level to prevent damage to the components. A sine wave sweep can help find:

- Vibrations due to loose screws.
- Air-leak noises: check that no screws are missing, particularly where the accessories attach to the cabinet.
- Vibrations due to a front grille badly positioned on the quick release fixings.
- Foreign object that has fallen into the cabinet after repair or through the ports.
- Internal connection wires or absorbing material touching the loudspeaker diaphragm: check by removing the bass loudspeaker.
- Loudspeaker not connected or phase reversed following a previous inspection, test or repair.

TECHNICAL SPECIFICATIONS

PXL118 TECHNICAL SPECIFICATIONS	
Design	Hybrid Horn
Nominal Impedance	8Ω
Continuous Power Handling	1400W
Sensitivity (1W/1m Half-Space)	104dB
Maximum SPL (calculated)	135dB
Frequency Response (-10dB)	32Hz - 180Hz
Crossover Frequency (active)	LP 150Hz (24dB/Oct. L/R)
Components	1 x 18" Subwoofer
Connectors	2 x Parallel Neutrik® NL8
Enclosure Material	15mm Birch Plywood
Finish	Black Textured Water-based paint
Grille	Metal grille with black acoustically-invisible foam
Castors	4 (Optional)
Rigging Tracks	4 (Optional - only Sub 2)
Dimensions	600 x 750 x 641
Weight	47 Kg

Dimensions



WARRANTY

NEXT products are warranted, by NEXT-proaudio, against **manufacturing defects** in materials or craftsmanship over a period of 5 years for the loudspeakers, and 2 years for the other components, counting from the date of original purchase. The original receipt of purchase is mandatory for warranty validation purposes, and the product must have been bought from a NEXT-proaudio authorized dealer. During the warranty period NEXT-proaudio will, at its own discretion, either repair or replace a product which prove to be defective provided that the product is returned in its original packaging, shipping prepaid, to an authorized NEXT-proaudio service agent or distributor.

NEXT-proaudio cannot be held responsible for defects caused by unauthorized modifications, improper use, negligence, exposure to inclement weather conditions, act of God or accident, or any use of this product that is not in accordance with the instructions provided by this manual and/or NEXT-proaudio. NEXT-proaudio is not liable for consequential damages.

This warranty is exclusive and no other warranty is expressed or implied. This warranty does not affect your statutory rights.

SPARE PARTS

Reference		Description
Sub 1	Sub 2	
BB05077	BB05077	Next 18" Sub-Woofer Speaker BB05077
NC01811	NC01813	Next PXL118 Grille
NCS05811	NCS05813	Next PXL Connections Back Panel

ACCESSORIES

Reference	Description
	Wheel Kit
Rigging accessories for Sub 2 are described on the system manual that accompanies PXH64 element.	

CONTACTS

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