



# USER MANUAL

# NEOS10PX

## passive loudspeaker

### KEY FEATURES

- Premium transducers
- Rotatable asymmetric HF horn
- HF driver protection
- Plywood cabinets with die-cast handles, dual-angle pole holder and multiple flying points

### INTRODUCTION

NEOS PX series represents the highest expression of PROEL GROUP Research & Development applied in loudspeaker systems. A natural evolution of the NEOS Series, it incorporates the latest technologies developed by PROEL in advanced sound reinforcement systems able to provide premium sound, maximum performance and up-to-date features.

The NEOS PX are designed for the use both as high-performance mobile systems for live applications and for advanced fixed installations.

The NEOS PX are able to provide an exceptional sound definition together with very high dynamics and low distortion in an ultra-compact package.

The NEOS PX passive filters are provided with a protection on circuit for the HF driver, which has a two-step operation: the first step reduces the power accordingly to the music content and without an audible effect; if a too high power level is present for a long period of time, the second step shut the HF driver off.

### TECHNICAL SPECIFICATION

#### Acoustical

System type	Full range 2-way, vented
Low frequency driver	10" woofer - 2" VC
High frequency driver	1" compression driver - titanium diaphragm
Frequency response	70 Hz - 20 kHz
Horn type	Asymmetrical rotatable horn
Coverage	100°>80° H x 60° V
Max SPL	124 dB

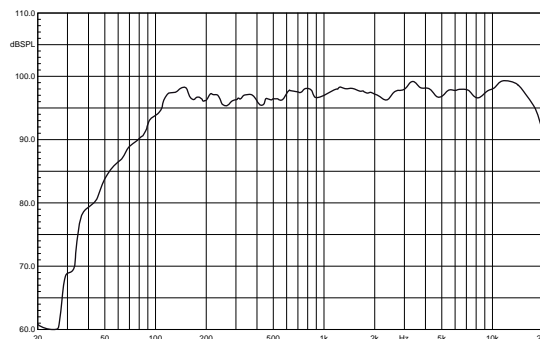
#### Electrical

Nominal Impedance	8 ohm
Power Handling Continuous	250 W
Power Handling Peak	500 W
Sensitivity	97 dBspl @ 1W / 1m
Passive Crossover Frequency	2500 Hz
Connectors	IN - LINK: Speakon® (NL4MP)
Controls	FULL-RANGE / BI-AMP operation (internal jumper)

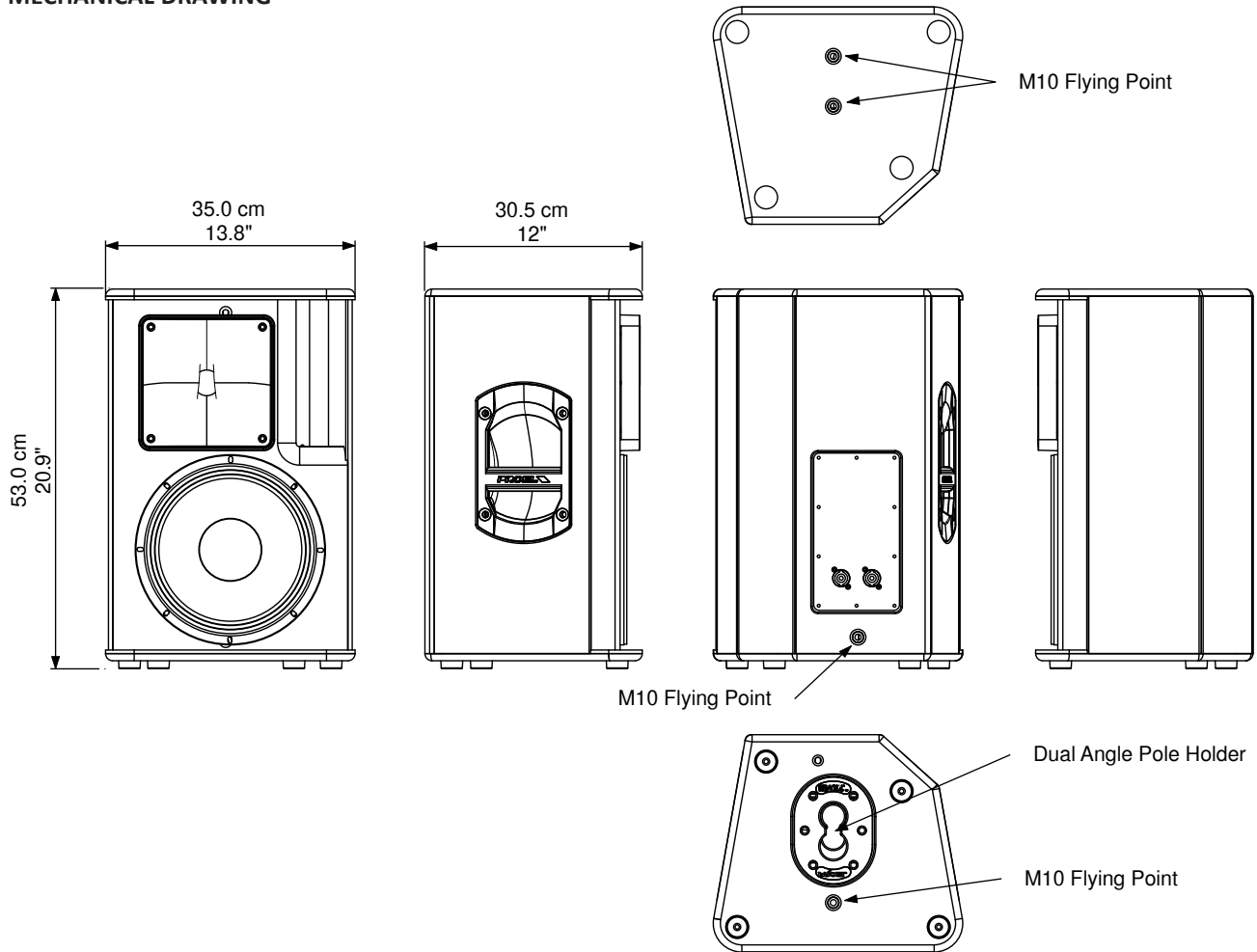
#### Mechanical

Construction	15 and 18 mm birch plywood
Finish	Anti-scratch black paint
Flying hardware	4 x M10 - top, bottom, rear
Trapezoidal taper	10°
Monitor taper	42°
Pole holder	1 bottom dual angle (0° / 7.5°)
Dimensions (W x H x D)	355 x 520 x 310 mm
Weight	16 kg (35.2 lbs)

Frequency Response Diagram



## MECHANICAL DRAWING



## OPTIONAL ACCESSORIES

<b>ASO25</b>	2 in 4 out analog loudspeaker processor
<b>PC240</b>	2 in 4 out digital loudspeaker processor
<b>PC260</b>	2 in 6 out digital loudspeaker processor
<b>COVERNE10</b>	Loudspeaker soft bag
<b>FRE300BK</b>	Loudspeaker ground stand
<b>KP210BK</b>	Sub-Speaker pole
<b>KPPTL10</b>	Loudspeaker wall stand
<b>KPTFL10PB</b>	Loudspeaker free aiming ground stand
<b>NL4FX</b>	Neutrik Speakon® PLUG

see [www.proel.com](http://www.proel.com) for detailed description and other available accessories.

for speaker suspending:

<b>PLH295</b>	M10 Ø 50 mm Truss mount coupler
<b>AC169A</b>	M10 black shoulder eyebolt
<b>AC171</b>	L = 75 cm / 30 inch Aircraft cable sling
<b>AC172</b>	L = 1.5 m / 4.9 ft Aircraft cable sling
<b>AC173</b>	Screw pin anchor shackle

## SPARE PARTS

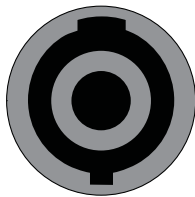
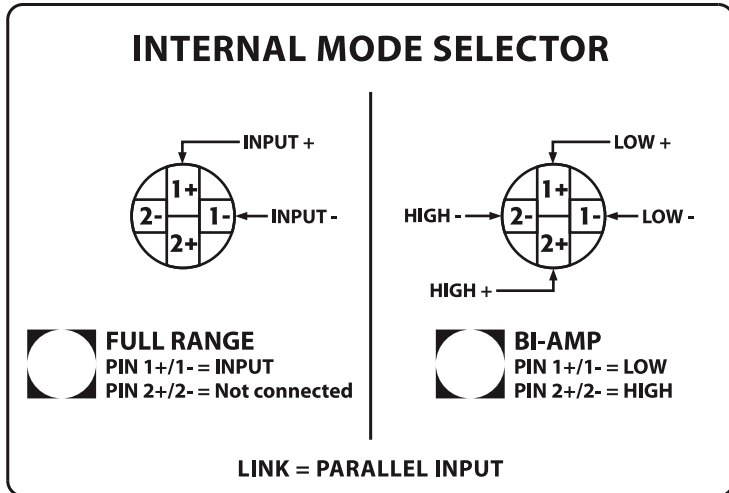
<b>NL4MP</b>	Neutrik Speakon® panel socket
<b>91CR0062</b>	Crossover module
<b>98NEOS10WZ8</b>	10" woofer - 2" VC
<b>98DRICN8</b>	1" compression driver - titanium diaphragm

REAR PANEL

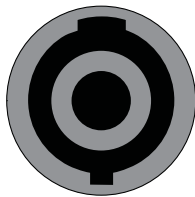
**NEOSxxPX**  
 POWER:    xxW AES  
 IMPEDANCE: 8 OHM  
 S/N:       00001



**NEOS PX**



**INPUT**



**LINK**

DESIGNED & ENGINEERED IN ITALY - MADE IN ITALY

**INPUT** - External amplifier power input. The signal is filtered by a passive crossover. The connections depend by the configuration settings accordingly the following table:

INPUT	
<b>FULL RANGE</b>	<b>BI-AMP</b>
<b>1+ / 1- INPUT</b>	<b>1+ / 1- LOW</b>
<b>2+ / 2- INTERNALLY N.C.</b>	<b>2+ / 2- HIGH</b>

**LINK** - Power signal output, to connect the unit to another speaker. The INPUT and LINK connectors are parallel to each other.

**PRODUCT LABEL** - In this label are written the most important data information about the passive loudspeaker, model, impedance, maximum applicable continuous power, serial number.

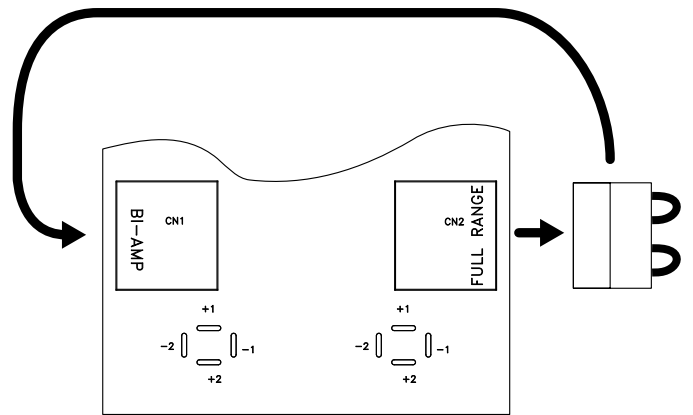
**FULL RANGE / BI-AMP MODE** - The speaker system can operate both in FULL RANGE and BI-AMP mode:

In FULL RANGE mode a built-in crossover filter allows the loudspeaker to be powered by a single amplifier.

The BI-AMP mode requires a dedicated amplifier for each speaker (woofer and HF driver), even if the internal crossover is not excluded we recommend the use of an external crossover or processor before the amplifiers.

The mode selection can be done by an internal jumper (see figure 1), which can be accessible by removing the rear connection plate. The factory setting is FULL-RANGE mode.

**FIGURE 1:** TO SET THE LOUDSPEAKER AS BI-AMP, REMOVE THE REAR PANEL, LOCATE THE JUMPER AND MOVE IT IN THE OTHER SIDE OF THE CROSSOVER CIRCUIT.





### LIMITED WARRANTY

Proel warrants all materials, workmanship and proper operation of this product for a period of two years from the original date of purchase. If any defects are found in the materials or workmanship or if the product fails to function properly during the applicable warranty period, the owner should inform about these defects the dealer or the distributor, providing receipt or invoice of date of purchase and defect detailed description. This warranty does not extend to damage resulting from improper installation, misuse, neglect or abuse. Proel S.p.A. will verify damage on returned units, and when the unit has been properly used and warranty is still valid, then the unit will be replaced or repaired. Proel S.p.A. is not responsible for any "direct damage" or "indirect damage" caused by product defectiveness.

- This unit package has been submitted to ISTA 1A integrity tests. We suggest you control the unit conditions immediately after unpacking it.
- If any damage is found, immediately advise the dealer. Keep all unit packaging parts to allow inspection.
- Proel is not responsible for any damage that occurs during shipment.
- Products are sold "delivered ex warehouse" and shipment is at charge and risk of the buyer.
- Possible damages to unit should be immediately notified to forwarder. Each complaint for package tampered with should be done within eight days from product receipt.

### SAFETY INSTRUCTIONS

- To reduce the risk, close supervision is necessary when the product is used near children.
- Protect the apparatus from atmospheric agents and keep it away from water, rain and high humidity places.
- This product should be site away from heat sources such as radiators, lamps and any other device that generate heat.
- This product should be located so that its location or position does not interfere with its proper ventilation and heating dissipation.
- Care should be taken so that objects and liquids do not go inside the product.
- The product should be connected to a power supply mains line only of the type described on the operating instructions or as marked on the product. Connect the apparatus to a power supply using only power cord included making always sure it is in good conditions.
- WARNING: The mains plug is used as disconnect device, the disconnect device shall remain readily operable.
- Do not cancel the safety feature assured by means of a polarized line plug (one blade wider than the other) or with a earth connection.
- Make sure that power supply mains line has a proper earth connection.
- Power supply cord should be unplugged from the outlet during strong thunderstorm or when left unused for a long period of time.

### CE CONFORMITY

Proel products comply with directive 2004/108/EC (EMC), as stated in EN 55103-1 and EN 55103-2 standards and with directive 2006/95/CE (LVD), as stated in EN 60065 standard.

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