

# **USER MANUAL**



revision 2023-08-04



# **IMPORTANT SAFETY INSTRUCTIONS**

#### Watch for these symbols:



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure, that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. Warning: to reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- 16. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.
- 17. To completely disconnect this apparatus from the ac mains, disconnect the power supply cord plug from the ac receptacle.
- 18. The mains plug of the power supply cord shall remain readily operable.
- 19. This apparatus contains potentially lethal voltages. To prevent electric shock or hazard, do not remove the chassis, input module or ac input covers. No user serviceable parts inside. Refer servicing to qualified service personnel.
- 20. The loudspeakers covered by this manual are not intended for high moisture outdoor environments. Moisture can damage the speaker cone and surround and cause corrosion of electrical contacts and metal parts. Avoid exposing the speakers to direct moisture.
- 21. Keep loudspeakers out of extended or intense direct sunlight. The driver suspension will prematurely dry out and finished surfaces may be degraded by long-term exposure to intense ultra-violet (UV) light.
- 22. The loudspeakers can generate considerable energy. When placed on a slippery surface such as polished wood or linoleum, the speaker may move due to its acoustical energy output.
- 23. Precautions should be taken to assure that the speaker does not fall off a stage or table on which it is placed.
- 24. The loudspeakers are easily capable of generating sound pressure levels (SPL) sufficient to cause permanent hearing damage to performers, production crew and audience members. Caution should be taken to avoid prolonged exposure to SPL in excess of 90 dB.





This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.







# **DECLARATION OF CONFORMITY**

**C E** The product is in compliance with: *RoHS* Directive 2011/65/EU and 2015/863/EU, WEEE Directive 2012/19/EU.

**UK** The product is in compliance with: S.I. 2012/3032 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012.

### 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.

### **CONDITIONS OF USE**

Proel do not accept any liability for damage caused to third parties due to improper installation, use of non-original spare parts, lack of maintenance, tampering or improper use of this product, including disregard of acceptable and applicable safety standards. Proel strongly recommends that this loudspeaker cabinet be suspended taking into consideration all current National, Federal, State and Local regulations. The product must be installed be qualified personal. Please contact the manufacturer for further information.





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#### INTRODUCTION

The SW2100P is a very compact Band-Pass/Bass-Reflex subwoofer providing high output and extended low frequency response. It is equipped with a single 21" neodymium transducer with a 4" ISV voice coil, large displacement suspension system, and composite reinforced, water repellent cone, able to provide clean and undistorted LF reproduction at very high SPL.

The loudspeaker is designed with a unique motor featuring a high grade neodymium magnet assembly in a structure optimized for thermal and magnetic efficiency. Its features include a large displacement suspension system which, in conjunction with a composite reinforced, straight ribbed cone and the proprietary Double Silicon Spider (DSS) technology, allows an ultra-linear piston action and provides full mechanical control across the entire working range. The 100mm (4 in) state-of-the-art voice-coil utilizing Interleaved Sandwich Voice coil (ISV) technology, provides high levels of thermal stability and durability. The ISV technology achieves a balanced linear motor unit exerting an exceptionally high force factor.

The phenolic birch plywood cabinet is equipped with pole mount socket, stacking feet, flush handles, and heavy duty wheels to enable easy handling and transportation.

It will deliver high level and extended low bass performance from a very compact cabinet, and thanks to the integral pole mount socket partners well with any of the ED point source and AXIOM line array loudspeakers in any audio applications, while its small size enables it to be easily fitted into tight venue spaces.

**POWER HANDLING** 

#### **TECHNICAL SPECIFICATION**

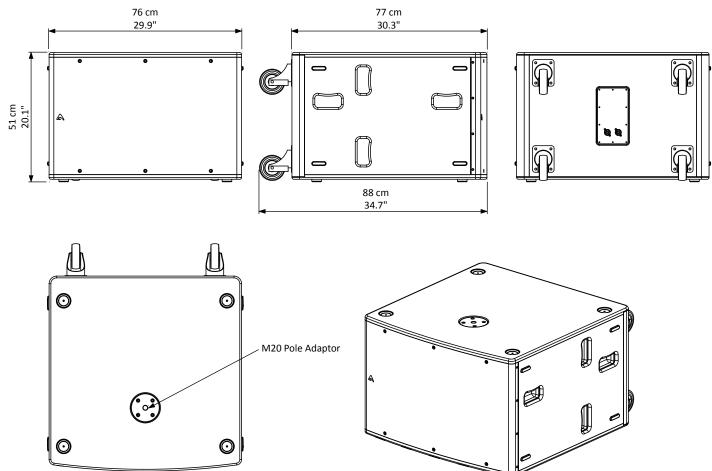
#### SYSTEM

System's Acoustic Principle	Band-pass / bass-reflex	Power Handling Continuous*	1600 W
Frequency response (-6 dB)	34 Hz - 180 Hz (Processed)	Power Handling Program	3200 W
Nominal Impedance	4 Ω	Power Handling Peak	7200 W
Minimum Impedance	3 Ω @ 30 Hz		@ -10 dB Power (320 W) = 0.62 dB
Sensitivity (1.41V @ 1m, 2Pi)	94 dB	Power Compression	@ -3 dB Power (1600 W) = 2.18 dB
Maximum Peak SPL @ 1m	138 dB		@ 0 dB Power (3200 W) = 3.57 dB
TRANSDUCERS		ENCLOSURE & CONSTRUCTIO	N
Туре	21" Neodymium magnet woofer, 4" (100mm) VC	Dimensions (W x H x D)	760 mm (29.9") x 511 mm (20.1") x 770 mm (30.3")
Cono	High stiffness (Complex Composite),	Depth Including Wheels	881 mm (34.6")
Cone	water repellent	Enclosure Material	18mm, reinforced phenolic birch
Voice Coil Type	Interleaved Sandwich Voice coil (ISV)	Paint	Black High resistance, water based paint
Suspension	Triple-roll	Transport	4 x heavy duty 100mm (4") castors,
INPUT CONNECTIONS		nansport	8 handles
Connector Type	Neutrik <sup>®</sup> Speakon <sup>®</sup> NL4 x 2	Not Moight	56 Kg (123.5 lbs)
Input Wiring	Pin 1+/1-; (Pin 2+/2- pass thru)	Net Weight	60 Kg (132.3 lbs) including wheels
* AES Pink Noise Power			





#### **MECHANICAL DRAWING**



#### **OPTIONAL ACCESSORIES**

NL4FXX-W-L	Neutrik Speakon <sup>®</sup> PLUG for OD 10-16mm		
DHSS10M20	Sub-Speaker ø35mm 1-1.7m Pole with Handle and M20 screw		
KP210S	Sub-Speaker ø35mm 0.7-1.2m Pole with M20 screw		
COVERSW2100	Cover for SW2100A		
see http://www.axiomproaudio.com/ for detailed description and other available accessories.			

#### **SPARE PARTS**

AC103GS	100 mm Swivel castor without brake
98SW2100WZ4	21'' woofer - 4" VC - 4 ohm
NL4MP	Neutrik Speakon <sup>®</sup> panel socket



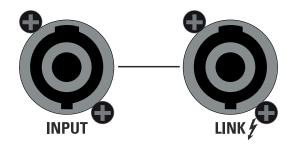


#### **REAR PANEL**

#### INPUT

Power input for the external amplifier. The SW2100P does not include a passive crossover for filtering the signal. The connections are the following:

INPUT - LINK			
NL4 pin number	internal connection		
1+	LF+		
1-	LF-		
2+	+ pass thru		
2-	- pass thru		



#### LINK

Power output in parallel with the INPUT socket for connecting the unit to another speaker. The number of SW2100P cabinets that can be connected in parallel depends on the amplifier load capacity.









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