

# PSR PASSIVE SERIES

PROFESSIONAL SOUND REINFORCEMENT



**Order Code: SPEA30 - PSR-8**  
**Order Code: SPEA31 - PSR-10**  
**Order Code: SPEA32 - PSR-12**  
**Order Code: SPEA33 - PSR-15**

[www.prolight.co.uk](http://www.prolight.co.uk)

USER MANUAL

ENGLISH

## WARNING

**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY  
BEFORE YOUR INITIAL START-UP!**

### Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all the parts are present, and have been received in good condition. Notify the dealer immediately and retain the packaging material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packaging materials. In the event that a product must be returned to the supplier, it is important that the equipment is returned in the original carton and packaging.



### CAUTION!

**Keep this equipment away from rain,  
moisture and liquids.**



### SAFETY INSTRUCTIONS

Every person involved with the installation, operation & maintenance of this equipment should:

- Be competent
- Follow the instructions of this manual



### DANGER OF BURNING!

**The materials used in this speaker system are easily flammable.  
If B1 is required at the installation place, the surface must be treated with an  
appropriate fire retardant at regular intervals.**



### DANGER TO LIFE!

**A falling speaker system can cause deadly accidents. All safety instructions  
given in this manual must be observed.**



## **IMPORTANT:**

**The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.**

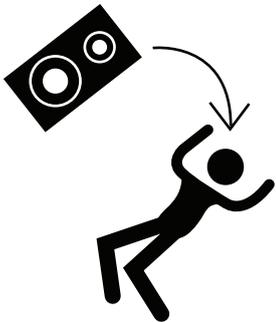
- Never remove warning or informative labels from the equipment.
- Do not open the equipment and do not modify the equipment.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- If your product fails to function correctly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Prolight dealer for service.
- Repairs and servicing must only be carried out by a qualified technician.  
THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.
- WARRANTY; One year from date of purchase.

## **OPERATING DETERMINATIONS**

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void.

Do not endanger your own safety and the safety of others!  
Incorrect installation or use can cause serious damage to people and property.

Please note that speaker systems can move due to bass beats and vibrations. Furthermore, unintended pushing on the speakers present a further risk. The speaker system must always be secured against moving or the respective area has to be blocked.

	 <b>DANGER</b>
	<b>IMPACT HAZARD</b> Secondary attachment for over head installation! Danger to life due to falling speaker systems.

	 <b>WARNING</b>	
	<b>LOUD NOISE HAZARD</b> EAR PROTECTION MUST BE WORN	

	 <b>CAUTION</b>
	<b>FIRE HAZARD</b> Keep away from cigarettes, fire and heaters etc. Treat the surface with a fire retardant at regular intervals.

The given maximum power of the speaker system describes short term peaks the system can handle as a maximum. The corresponding RMS power is - as of all comparable systems (also from other manufactures) - significantly lower. The maximum power of the speaker system must never be exceeded. When operating the speaker system, please make sure that the system always sounds clear. When distortion can be heard, either the amplifier or the loud speaker is being overdriven. Overloads can quickly lead to amplifier or speaker damage. In order to avoid damage, please reduce the volume immediately when distortion can be heard. When speaker systems are damaged by overdriving, the guarantee becomes void.

The ambient temperature must always be between  $-5^{\circ}\text{C}$  and  $+45^{\circ}\text{C}$ . Keep away from direct sunlight (particularly in cars) and from heaters.

The relative humidity must not exceed 50% with an ambient temperature of  $+45^{\circ}\text{C}$ .

This speaker system must only be installed at a solid, horizontal, anti-slip, vibration and oscillation free fire resistant location.

**Please note:** When using this speaker system in public or industrial areas, a series of safety instructions have to be followed that this manual can only give in part. The operator must therefore inform himself on the current safety regulations.

Before installing the system, make sure that the installation area can hold a minimum point load of 5 times the systems weight (e.g. weight 20kg - point load 100kg).

The speaker system must never be installed higher than 100cm with out a secondary attachment.

For over head installations (mounting height  $>100\text{cm}$ ), always fix the speaker system with an appropriate safety cable.

The installation area of the speaker system has to be built and constructed in a way that it can hold 10 times the weight of the speaker for 1 hour without any deformation.

	<b>DANGER TO LIFE!</b> The subwoofer must never be suspended - Danger to life due to falling speaker systems.	
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	<b>DANGER TO LIFE!</b> The top speaker must only be suspended by experienced and trained persons - Danger to life due to falling speakers systems.	
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The top speaker system can be installed on top of a subwoofer (satellite system), on a speaker stand or an appropriate wall mounting. The carrying capacity of the extension pole, the speaker stand, or wall mounting bracket must never be exceeded.

The PSR series must always be provided with enough stability. The speaker(S) base surface must always be sufficiently dimensioned in relation to the other speaker(s) in order to prevent the cabinets tilting over.

Make sure that the area below the installation place is blocked when rigging, derigging or servicing the system.

**Please note:** W Audio cannot be made liable for damages caused by incorrect installations and excessive noise levels.

**Features:**

- High Impact Moulded Polypropylene Enclosure
- 1.5" Voice Coil, 1 inch Exit Aluminium Compression Driver
- 5 Integral Suspension Points
- Complete Mounting Solutions
- Smooth Response With High Power Handling Capacity
- 90 x 60 degree Coverage Pattern
- Ideal for entertainers, mobile discos and small bands.
- Constant directivity horn.
- Passive 2 way crossover.
- Balanced frequency range with high sound pressure levels.
- Very high durability.
- Speaker connection via lockable speaker plugs.
- Stand adaptor for speaker stand installation etc.

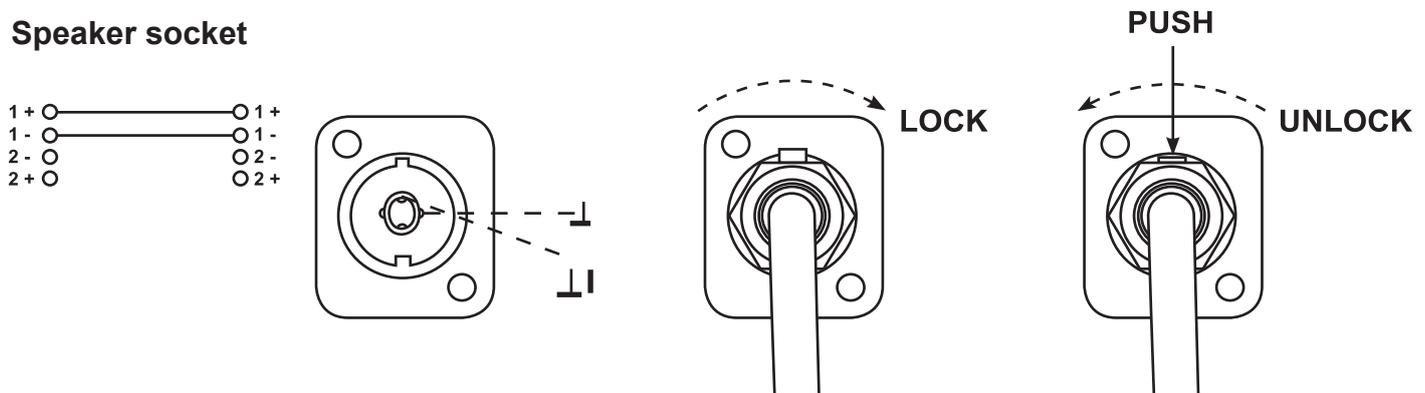
**Unpacking and transportation:**

The PSR series are packed in single cartons except from the PSR-8 (boxed in 2s). Unpack the units and examine them for transport damage.s

## Connections

This PSR series are equipped with 4 pole, lockable speaker sockets. For locking the connection turn the plug to the right. For unlocking pull the unlock button and turn the plug to the left and pull it out of the socket.

### Speaker socket



### Installing the speaker cables

Connect your amplifier to the left and right speaker sockets. The signal will be transmitted to the individual speakers.

Always treat the cables carefully and protect them from damage during transportation.

Always install the cables in a structured way and protect them from damage.

The cables must be installed in a way that no person can trip over them. Always fix the cables with an appropriate tape etc.

## Installation

### Stacking

The PSR speakers may only be installed on top of another speaker system if both systems are clamped up to each other via appropriate clamping belts and protected against tilting over.

### Satellite System

The satellite system must always provide enough stability. The subwoofer's base surface must always be sufficiently dimensioned in relation to the top speaker in order to prevent tilting over.

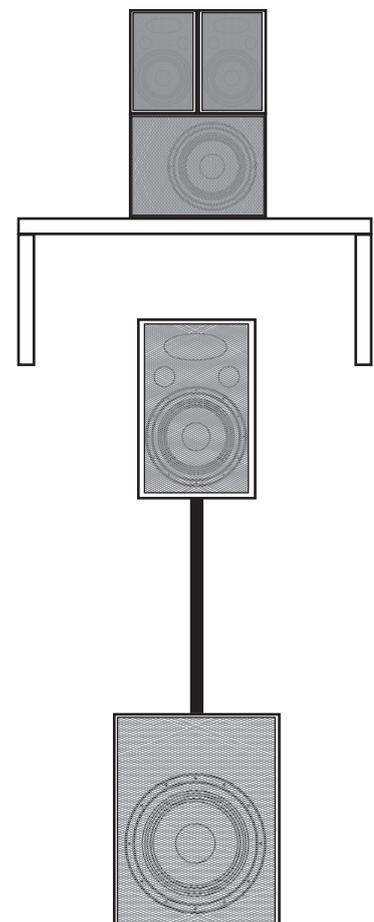
The subwoofer and the top speaker must only be connected via an appropriate extension pole and stand adaptor.

The carrying capacity of the distance tube must never be exceeded.

When choosing the installation location, please make sure no person can enter the area below the system! Make sure that the respective area is blocked.

An unintended movement of the load has to be avoided - also in case of fire!

The system must never be moved before the top speaker has been removed.



## Installation on a Speaker Stand

The speaker system may only be installed on a speaker stand if the original speaker system is equipped with an appropriate stand adaptor.

Stands or satellite systems must only be installed on a plane area with a maximum inclination angle of 5°.

**CAUTION:** Speaker systems installed under the influence of horizontal forces, e.g. wind, can be impaired. This is why additional safety measures like attaching ballast weights have to be taken.

If inclined tension cables or prolonged outriggers are used, the area of danger has to be marked or blocked.

Before lifting or lowering the telescopic tubes, you must always block a safety area around the stand or satellite system. This safety area must have a diameter of 1.5 times the maximum height.

Lifted telescopic tubes always have to be secured with a secondary securing attachment.

The total weight of the installation (total weight of system including individual parts) must never exceed the maximum load of the installation area.

Unintended movement of the load has to be avoided - also in case of fire!

Loosen the fixing screws of the legs, pull the legs out until the cross struts are at a 90° angle to the legs. Tighten the fixing screws of the legs.

## Installation Of The Speaker System

**CAUTION:** The loads have to be installed in a balanced way.

**CAUTION:** The carrying capacity of the stand or speaker stand must never be exceeded.



## Overhead Installation

If the speaker system is to be installed with a mounting height of more than 1 meter (e.g. on a stage or framework), the speaker system must always be secured with an appropriate secondary securing attachment.

The installation must always be secured with a secondary safety attachment. e.g. an appropriate catch net. The secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.

When rigging, derigging, or servicing the speaker system standing in the area below the installation place, on bridges or other endangered areas are forbidden.

The operator has to make sure that the safety data is approved by an expert before operation for the first time and after any changes are made.

The operator has to make sure that the safety data is approved by an expert after every four years in the course of an acceptance test.

The operator has to make sure that the safety installation data is approved by a skilled person once a year.

### Procedure

The speaker system should be installed outside areas where persons may walk by or seated.

**IMPORTANT! OVER HEAD RIGGING REQUIRES EXTENSIVE EXPERIANCE**, including (but not limited to) calculating working limits, installation materials used, and periodic safety inspection of all installation materials and the speaker system. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury and damage to your property.

The speaker system has to be installed out of the reach of people.

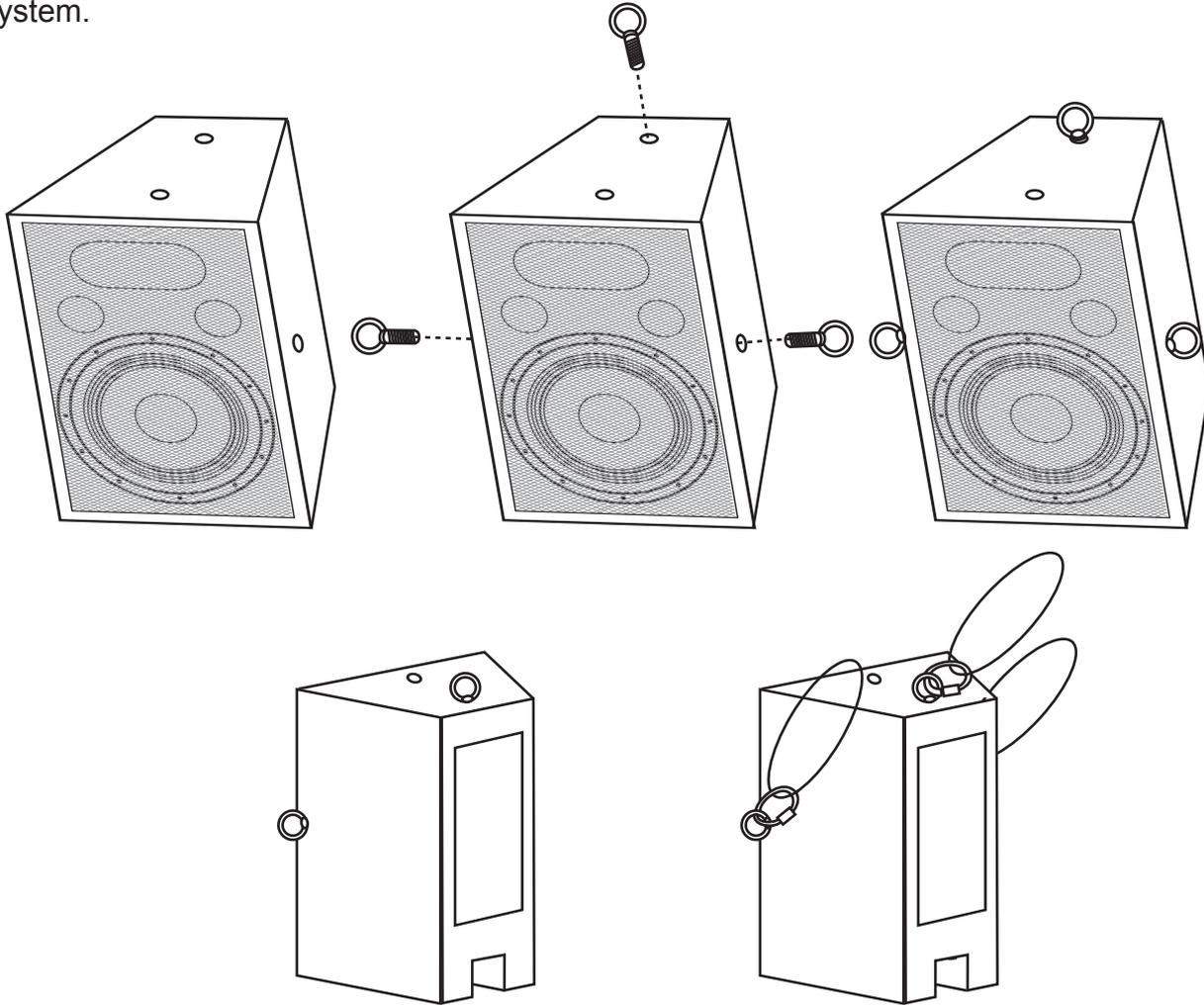
**CAUTION:** Speaker systems in overhead installations may cause severe injuries when falling! If you have doubts concerning the safety of a possible installation, do not install the speaker system!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the speaker systems weight.

## Secondary Attachment

Please note: The Speaker system must always be secured with three appropriate eye bolts and three appropriate safety ropes.

The eyelets and the safety ropes must always hold at least 12 times the weight of the speaker system.



**Please note:** Before installing the eye bolts, make sure that the thread is always in perfect condition and free from dirt.

Install the eye bolts in the threaded holes on the speaker system. The eye bolts must be tightened until the stop position, hand tight with out any tools.

Insert the quick links of the safety ropes in the eye bolts of the speaker system. Pull the safety ropes over a safe fixing spot. Insert the end into the quick link and tighten the safety screw.

The maximum drop distance must never exceed 20cm.

A safety rope which has already held the strain of a fall and is defective must not be used again.



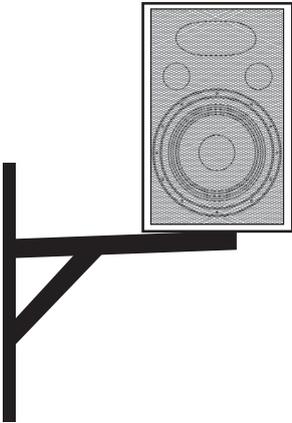
### DANGER TO LIFE!

Before putting the speaker system into operation for the first time, the installation has to be approved by an expert!



## Wall Installation

The speaker system can only be installed on a wall, if the original speaker system is equipped with an appropriate mounting point.



Before attaching the speaker system, make sure that the installation area can hold a minimum point load of 10 times the installations weight. (e.g. 13Kgs - 130Kgs point load).

The durability of the installation depends very much on the material used at the installation area (building material), such as wood, concrete and brick etc. This is why the fixing material must be chosen to suit the wall material. Always ask a specialist for the correct plug/screw combination indicating the maximum load and building material.

## Suspended Installation

	<b>DANGER TO LIFE!</b> The subwoofer must never be suspended! Danger to life due to falling speaker systems.	
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	<b>DANGER TO LIFE!</b> The top speaker must only be suspended by an experienced and trained persons! Danger to life due to falling speakers.	
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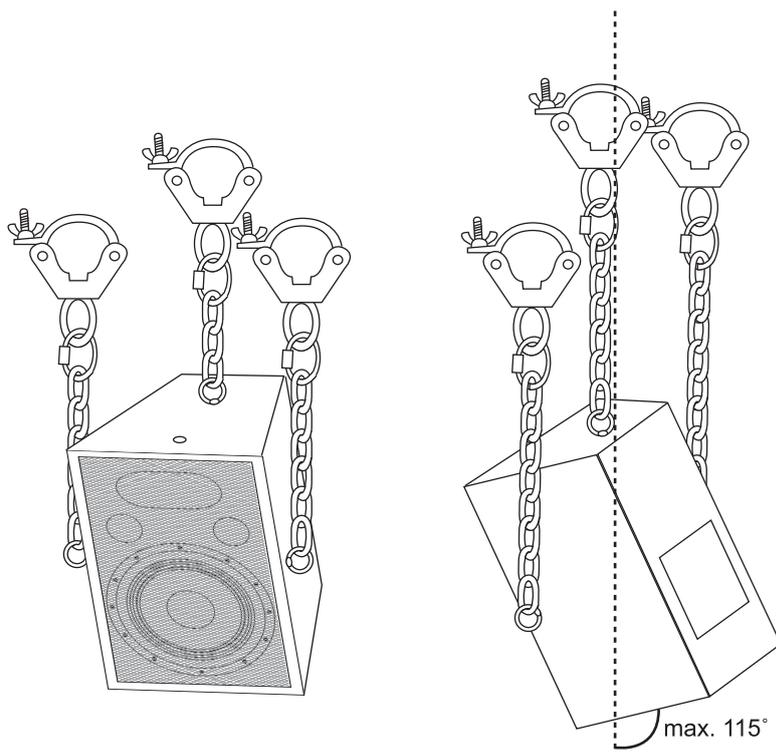
## Suspended Installation

The speaker system has to be installed out of the reach of people.

The installation material must always hold at least 12 times the weight of the speaker system.

Please note: The installation must always be carried out via two eye bolts on top of the and one at the rear. The speaker system can be tilted in a maximum vertical angle of 115° or maximum horizontal angle of 25°.

## Suspended Installation (cont...)



### Procedure

**Step 1:** Remove the plastic bolt covers.

**Step 2:** Install the eye bolts in the threaded holes on the speaker system.

The eye bolts must be tightened until the stop position, hand tight without any tools.

**Step 3:** Install the bolt on chain link in the first and last links and tighten the fixation screw.

**Step 4:** Install the chain with the bolt on chain link at the installation eyelet of the ring coupler and tighten the fixation bolt.

**Step 5:** Install the chain with the lower bolt on chain link at the eye bolt on the speaker system and tighten the fixation bolt.

**Step 6:** install the speaker system on the trussing.

**PSR-8 Specifications:**

Freq. Range (-10dB): .....60Hz - 20kHz  
Max Calculated SPL: .....120dB  
Rated System Power (Peak): .....480W  
Rated System Power (Continuous): .....120W  
Nominal Impedance: .....8 Ohms  
Connector: .....2 x NL4 Speakon®  
Horizontal Coverage: .....90 degrees  
Vertical Coverage: .....60 degrees  
Dimensions: .....435 x 255 x 245mm  
Weight: .....8Kgs

**PSR-10 Specifications:**

Freq. Range (-10dB): .....60Hz - 20kHz  
Max Calculated SPL: .....125dB  
Rated System Power (Peak): .....1000W  
Rated System Power (Continuous): .....250W  
Crossover Frequency: .....2.0kHz  
Nominal Impedance: .....8 Ohms  
Connector: .....2 x NL4 Speakon®  
Horizontal Coverage: .....80 degrees  
Vertical Coverage: .....60 degrees  
Dimensions: .....557 x 332 x 313mm  
Weight: .....16Kgs

**PSR-12 Specifications:**

Freq. Range (-10dB): .....40Hz - 20kHz  
Max Calculated SPL: .....127dB  
Rated System Power (Peak): .....1200W  
Rated System Power (Continuous): .....300W  
Crossover Frequency: .....2.0kHz  
Nominal Impedance: .....8 Ohms  
Connector: .....2 x NL4 Speakon®  
Horizontal Coverage: .....80 degrees  
Vertical Coverage: .....60 degrees  
Dimensions: .....615 x 416 x 356mm  
Weight: .....21Kgs

**PSR-15 Specifications:**

Freq. Range (-10dB): .....40Hz - 20kHz  
Max Calculated SPL: .....129.5dB  
Rated System Power (Peak): .....1400W  
Rated System Power (Continuous): .....350W  
Crossover Frequency: .....1.7kHz  
Nominal Impedance: .....8 Ohms  
Connector: .....2 x NL4 Speakon®  
Horizontal Coverage: .....80 degrees  
Vertical Coverage: .....60 degrees  
Dimensions: .....740 x 475 x 400mm  
Weight: .....25Kgs







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