



# *Line Array system*



***GL-210-P***

***User manual***

This manual has been designed to help GL-210-P users from Pro DG Systems to its correctly use and understand its benefits and versatility.

**Before using the product, carefully read “Precautions” section of this manual (pages 3 - 4).** Please keep this document in a safe place for future reference.



**Before flying the system, carefully read “Flight hardware. Safety instructions” section (pages 15 - 16).**

The information included in this document may be changed without prior notice. To stay up to date with the latest version of this document, we recommend that you periodically consult Pro DG Systems website.

When reselling this product, give this document to the new owner. If you supply Pro DG Systems products, please inform your customers about this document.


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# Precautions

Please read, keep and follow all safety and use instructions.

Important Safety Instructions.

1. Heed all warnings.
2. Do not overload the box to avoid damage to the speakers.
3. Do not use this product near water. If the box is used outdoors, make sure that no humidity can enter the box.
4. Clean only with a dry cloth.
5. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
6. Do not install near any heat sources such as radiators, heat registers, stoves or similar (including amplifiers).
7. 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 wider blade or third prong is provided for your safety. If the provided plug does not fit in your outlet, consult an electrician for replacement of the obsolete outlet.
8. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where it exits from this product.
9. Only use attachments/accessories specified by the manufacturer.
-  10. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the product. When a cart is used, use caution when moving the cart/product combination to avoid injury from tip-over.
11. Unplug this product during lightning storms or when unused for long periods of time.
12. Refer all servicing to qualified personnel. Servicing is required when the product 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 product, the product has been exposed to rain or moisture, does not operate normally, or has been dropped.

## WARNINGS / CAUTIONS:



This symbol on the product means there is uninsulated, dangerous voltage within the product enclosure that may present a risk of electrical shock.



This symbol on the product means there are important operating and maintenance instructions in this guide.



This symbol indicates that the product cannot be treated as ordinary household waste, it must be deposited at the corresponding collection point for electrical and electronic equipment.



This product contains magnetic material. Consult your doctor on whether this might affect your implantable medical device.



Contains small parts which may be a choking hazard. Not suitable for children under age 3.

## Warranty

All the Pro DG Systems products have a 24-month warranty period, which begins from the invoice date of the first purchase.

Consult everything relevant to the warranty conditions at Pro DG Systems website: <https://prodgsystems.com/20-vc-warranty.html>

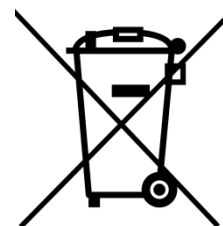
Or via email at: [info@prodgsystems.com](mailto:info@prodgsystems.com)

## Declaration of conformity



**Pro DG Systems** declares that the product with reference **GL-210-P** complies with the objectives expressed in the following **European Directives**:

- Low voltage 2014/35/UE.
- Electromagnetic compatibility 2014/30/UE.
- RoHS 2011/65/UE. About restrictions on the use of certain dangerous substances in electrical and electronic equipment.
- RAEE / WEEE 2012/19/UE. About waste electrical and electronic equipment.
- General Product Safety 2023/988/UE.



And it complies with the following **European Harmonized Standards**:

- EN 60065:2014. Audio, video and analog electronic devices.
- EN 55032:2012. Electromagnetic compatibility of multimedia equipment. Part 1: emission requirements.
- EN 55103-2:2009. Electromagnetic compatibility. Part 2 Immunity.

This declaration is available for request by email: [info@prodgsystems.com](mailto:info@prodgsystems.com)

Or to be downloaded from the website: [www.prodgsystems.com](http://www.prodgsystems.com)

## Description

**GL-210-P** is one of the Line Array systems from the new **GL Series**.

The new **GL Series** from **Pro DG Systems** has been developed with the purpose of offering the best quality-price ratio on the market.

**Designed in Spain**, the new **GL-210-P** is the passive three-way Line Array system with the best quality-price ratio on the market.



Equipped with two 10" speakers for LF and two 8" speakers for MF in a tuned enclosure. The HF section features two 3" compression drivers coupled to a waveguide.

The transducer configuration generates a symmetrical and horizontal dispersion of 120° without secondary lobes in the frequency range.

The construction of **GL-210-P** system is made of birch plywood using CNC machining, with special polyurea finish resistant to impacts and inclement weather.

Its front part is protected by a robust metal grille and acoustic foam.

The **flight hardware** design of **GL-210-P** system is quick and intuitive to use.

Easy to transport thanks to its compact, lightweight and ergonomic design, offering a pleasant visual impact too.

The perfect solution as main PA, frontfill and sidefill at outdoor events or permanent installation. Ideal for working in live concerts, theaters, coverage under amphitheatres, places of worship, corporate applications and all types of events where high performance and versatility are necessary.

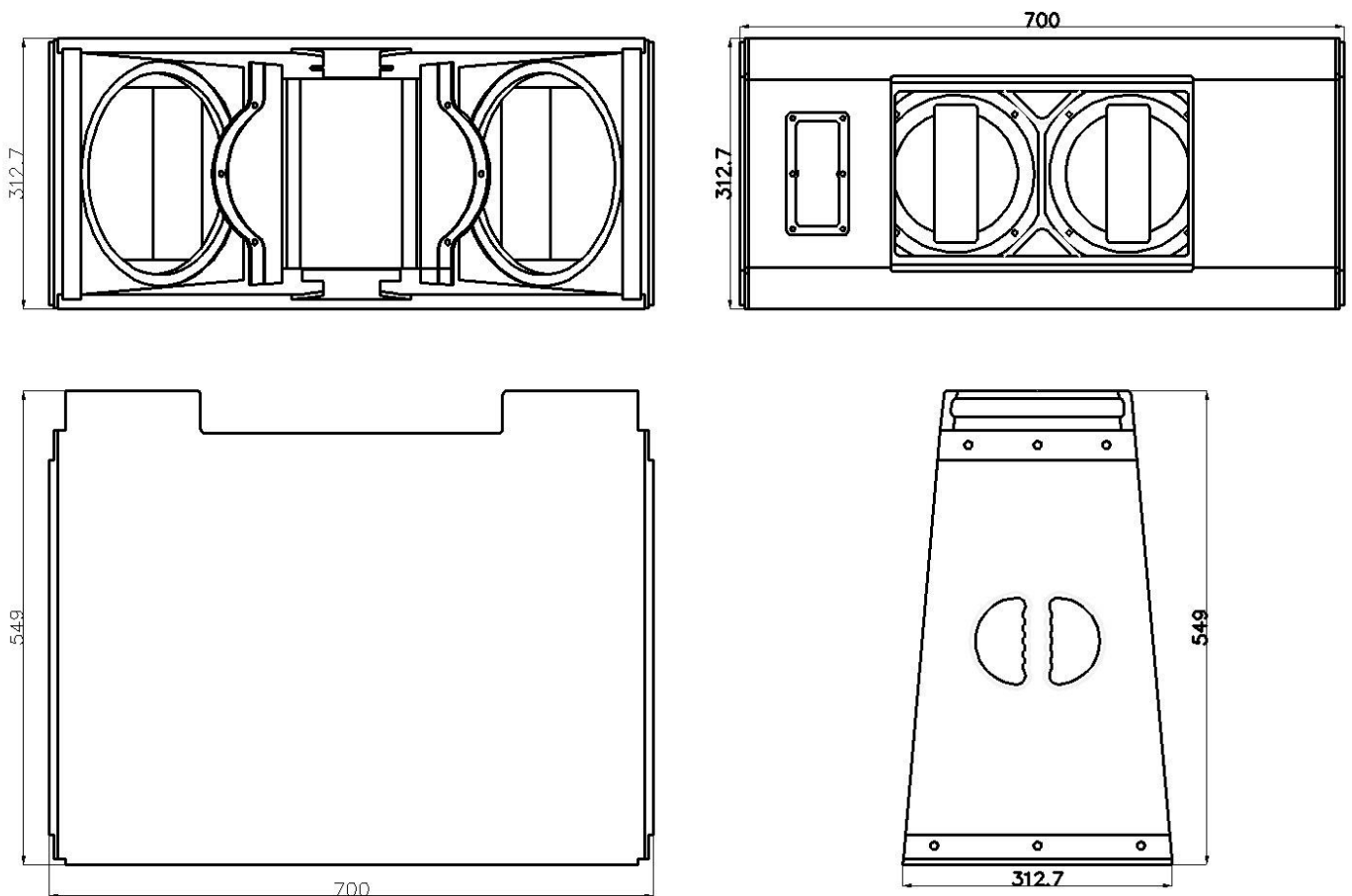
## Technical datasheet

### GL-210-P

<b>Power handling</b>	1100 W RMS / 2200 W program / 4400 W peak.
<b>Maximum SPL Calculation</b>	1m / 127 dB continuous / 130 dB program / 133 dB peak.
<b>Nominal impedance</b>	8 Ohm.
<b>Frequency range</b>	48 - 18000 Hz.
<b>Dispersion angle</b>	120° horizontal. 10° vertical.
<b>LF components</b>	Two 10" speakers. Neodymium. 300 W RMS (each unit).
<b>MF components</b>	Two 8" speakers. Neodymium. 200 W RMS (each unit).
<b>HF components</b>	Two 3" compression drivers. Neodymium. 50 W RMS (each unit).
<b>Frequency cut-off for LF *</b>	Without subwoofer: 65 Hz Linkwitz-riley 24 filter - 250 Hz Linkwitz-riley 24 filter.  With subwoofer: 90 Hz Linkwitz-riley 24 filter - 250 Hz Linkwitz-riley 24 filter.
<b>Frequency cut-off for MF *</b>	90 Hz Linkwitz-riley 24 filter - 1200 Hz Linkwitz-riley 24 filter.
<b>Frequency cut-off for HF *</b>	1200 Hz Linkwitz-riley 24 filter - 18 kHz Linkwitz-riley 24 filter.
<b>Frequency cut-off for subwoofer *</b>	Up to 90 Hz. Linkwitz-riley 24 filter.
<b>Connectors</b>	2 x Speakon NL4 MP.
<b>Construction</b>	Birch plywood using CNC machining. 2mm thick perforated steel front grille, with oven-dried black electrostatic powder paint finish. Includes acoustic foam.
<b>Paint</b>	Special polyurea finish resistant to impacts and inclement weather. Black color (standard).
<b>Dimensions (height x width x depth)</b>	312,7 x 700 x 549mm (12,31 x 27,56 x 21,61in).
<b>Weight</b>	41,6 Kg (91,71 lbs) net / 44 Kg (97 lbs) with packaging.

\* Disrespect the suggested frequency cuts-off on the different ways may cause components breakage.

## Architectural specifications



All measures expressed in millimeters (mm)

## User guide. First steps

### Turning On / Off

Turning on any sound system must be done from back to front. Turn on sources such as CD players first, then the mixer, then the processors, and finally the amplifiers.

When turning off the sound system, follow the reverse process, turning off the amplifiers before any other element of the system.

Both the power connector and the cabling must always be accessible and must never be covered or blocked.

To disconnect the power, remove the Speakon NL4MP type cable from the connector located on the rear plate of the equipment, perform this operation on all boxes.

**Important:** do not unplug the computer when music is playing.

## User guide. Troubleshooting

Problem	Cause	Solution
Neither unit sounds.	<ol style="list-style-type: none"> <li>1. The amplifier is not sending signal.</li> <li>2. Defective cable.</li> <li>3. Excessive number of speakers connected to the same amplifier channel.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check that the amplifier is turned on and that the gain is not at minimum.               <ol style="list-style-type: none"> <li>a. Check that the signal is reaching the amplifier from the mixing console.</li> </ol> </li> <li>2. Make sure the cables are connected correctly and none are damaged. If so; use another cable.</li> <li>3. Check the minimum impedance that your amplifier can handle.</li> </ol>
No sound on one unit.	The unit is not receiving signal.	Check that the signal cable is connected correctly; if damaged, replace it.
Distorted sound signal.	The mixer or other signal is distorting.	Lower the overall mixer output level or channel gain. Check that the signal source is ok.
Distorted and very loud sound signal.	The system is being overloaded with too much input signal and has reached maximum power.	Lower the mixer output level.

<p>Noise or buzz when light controls are used in the same environment.</p>	<ol style="list-style-type: none"> <li>1. The sound system is connected to the same phase than the lights.</li> <li>2. The sound cables are too close to the light cables.</li> </ol>	<ol style="list-style-type: none"> <li>1. Connect the sound system and lighting system to different phases. Request the help of an electrician.</li> <li>2. Aleje los cables de audio de los cables de luces.</li> </ol>
<p>The system does not turn on even though the power cable is correctly connected, both to the network and to the box.</p>	<ol style="list-style-type: none"> <li>1. Defective cable.</li> <li>2. Internal fuse blown.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the cables, connectors and power outlet with a tester or multimeter.</li> <li>3. Contact your Pro DG Systems distributor or authorized professional to perform the repair.</li> </ol>



If you have any technical problem or questions about Pro DG Systems products; contact our technical support department at: [sat@prodgsystems.com](mailto:sat@prodgsystems.com)

## Speakers

GL-210-P includes two 10" speakers with neodymium magnet, in charge of reproducing low frequencies.



<b>Main characteristics</b>
Power handling of 300 W RMS / 500 W program
Optimized cooling system
Optimized neodymium magnetic circuit
65mm magnet
Optimized to deliver great LF range performance

GL-210-P includes two 8" speakers with neodymium magnet, in charge of reproducing medium frequencies.



<b>Main characteristics</b>
Power handling of 200 W RMS / 400 W program
Optimized cooling system
Optimized neodymium magnetic circuit
52mm voice coil
102mm magnet
Optimized to deliver great MF range performance

## Compression driver

The HF section of GL-210-P has two 3" compression drivers with neodymium magnet, in charge of reproducing high frequencies.



Main characteristics
Power handling of 50 W RMS / 100 W program
FEM optimized motor, phaseplug and diaphragm
75mm voice coil
120mm magnet
State-of-the-art HF design

## Horn

The compression drivers of GL-210-P are coupled to a horn, specifically designed to achieve maximum performance and acoustic quality in high frequencies.



Made of fiberglass (BMC) and polyurethane (PU2). The combination of both materials allows obtaining a horn with great resistance and low weight, also providing a perfect blend between medium and high frequencies.

## Flight hardware. Safety instructions



Before flying the system, it is mandatory to take into account the following safety instructions:

- Always carry out a visual and functional inspection of the various components before use. In case of doubt about the correct functioning and safety of the components, they must be removed from use immediately.
- The fly bar for GL-210-P is designed to support up to a maximum of sixteen units GL-210-P. In no case should the aforementioned number of units be exceeded.
- In case of using the system in stacked format on a subwoofer; the maximum number of stackable units allowed will be 6 units. Always secure the array to the subwoofer by using slings.
- The hanging of the units must be carried out by professionals with adequate knowledge of the components and hardware to be used. This process must be carried out by at least two people.
- It is the responsibility of the person or team installing the system to ensure that the suspension / fixing points are suitable for the intended use.
- The application of safety factors of 5:1 for enclosures and static parts is accepted in a standardized manner. For those elements subjected to fatigue due to friction and variations in the stresses to which they are subjected, the following safety factors must be met: 5:1 for steel cable slings, 4:1 for steel chain slings and 7:1 for polyester slings. This means that an element with a breaking stress of 1000 Kg can be subjected to a static working load of 200 Kg (safety factor 5:1) and a dynamic load of only 142 Kg (safety factor 7:1).
- When hanging a system, the working load must be less than the strength of each individual anchor point as well as each enclosure.
- When suspending elements from the ceiling or other structures, extreme caution must be taken by previously calculating their resistance. Sound systems should never be hung on structures that do not guarantee full safety guarantees.
- When hoists are in operation (when lifting the system), ensure that no one is directly under or near the load.
- Under no circumstances scale or hang to the array.



- It will be necessary to fix at different points those systems that are subject to gusts of wind, to avoid their swaying. In no case is it recommended to fly systems that are subject to strong gusts of wind.
- No risk should be accepted in terms of public safety. It is the responsibility of the person or team of people carrying out the assembly to provide themselves with personal safety elements, such as helmet, gloves, safety footwear, etc., to carry out this work. As well as the correct signage of the space in which work is being done.
- All accessories used to fly a Pro DG Systems sound system not provided by Pro DG Systems are the responsibility of the user(s).

**In no case will Pro DG Systems be responsible for damages caused by incorrect use of the flying system by the user or users, whether physical damage to people or damage to the product or the attached facilities. As well as for failure to comply with the previously indicated safety instructions.**

## Accessories

Complete system wiring ready to go.



**GL-210-P**



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