Heavy duty 2x 18" subwoofer combined with two metal frame GH12 12" coaxial array modules featuring the K-array™ SAT® technology.

The active GPZA system is powered by a 4-channel Powersoft™ amplifier module with DSP delivering up to 1500 W per channel @ 4 ohm: the built in amp module makes the GPZA capable of driving a GPZ passive system in a stereo configuration.

Unpacking

Each KGEAR device is inspected before leaving the factory. Upon arrival, carefully inspect the shipping carton, then examine and test your new device. If you find any damage, immediately notify the shipping company. Check that the following parts are supplied with the product:

KGEAR GPZA
- 2x GH12 12" array element speaker
- 1x GSZ218A active subwoofer
- 1x G-POLE standing pole
- 1x GH-JOINT kit (2 lugs, 8 pins)
- 1x 2m (6.5ft) speaker cable
- 1x 35 cm (14 in) speaker joint cable
- 1x Power cord

KGEAR GPZ
- 2x GH12 12" array element speaker
- 1x GSZ218 passive subwoofer
- 1x G-POLE standing pole
- 1x GH-JOINT kit (2 lugs, 8 pins)
- 1x 2m (6.5 ft) speaker cable
- 1x 35 cm (14 in) speaker joint cable
- 1x 15 m (49 ft) speaker cable

Thank you for choosing KGEAR!

To ensure proper operation, please carefully read this owner's manual and safety instruction before using the product.

After reading this manual, be sure to keep it for future reference.

Should you have any questions about your new device please contact K-array customer service at info@kgear.it or contact the local distributor in your country.
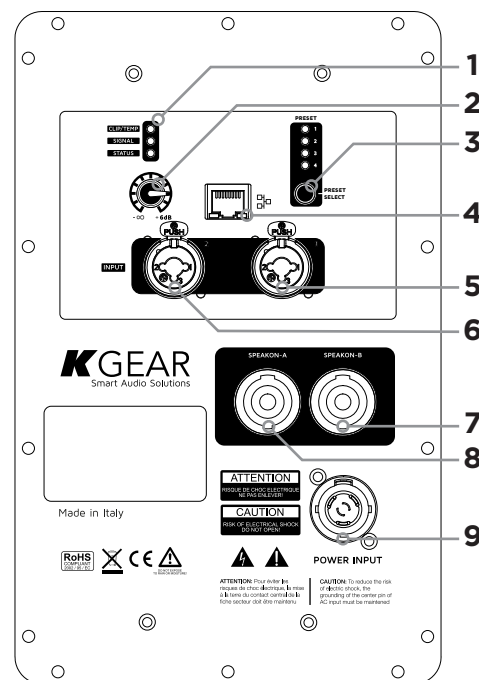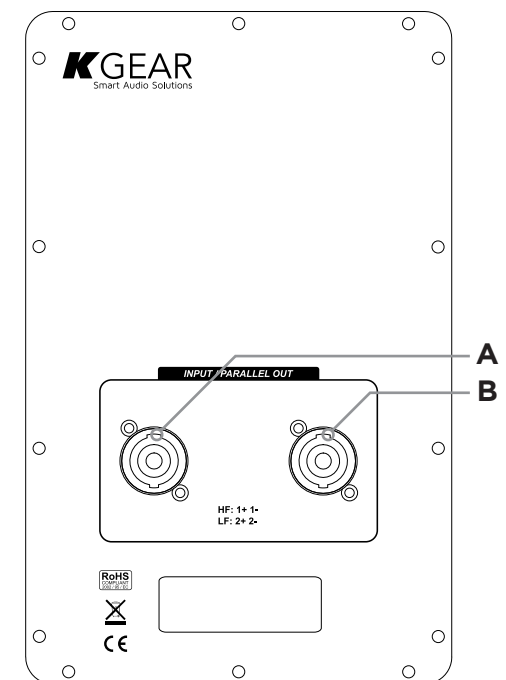
Rear Panel

GPZA - GSZ218A
1. Status LEDs
2. Volume potentiometer
3. DSP preset selection button
4. RJ45 Ethernet port
5. XLR Combo balanced input channel 1
6. XLR Combo balanced input channel 2
7. NL4 SpeakON B speaker output 3 and 4
8. NL4 SpeakON A speaker output 1 and 2
9. powerCON TRUE AC MAIN inlet

GPZ - GSZ218
A. NL4 SpeakON A: signal in/out
B. NL4 SpeakON B: signal in/out

AC MAINS Supply
GPZA

The GPZA features a powered subwoofer: the AC Main connection is made via the provided power cord with powerCON TRUE flying connector.

Insert the powerCon TRUE flying connector into the inlet and then rotate it clockwise: once properly plugged, the amplifier will power up.

ArmoníaPlus

ArmoníaPlus is the software for fine tuning and monitoring the KGEAR GPZA loudspeaker system.

Download ArmoníaPlus from Powersoft website: www.powersoft.com

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GPZA / GPZ

KGEAR Smart Audio Solutions

General heed and warnings

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat
- Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Only use attachments/accessories specified by the manufacturer.
- Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
- Clean the product only with a soft and dry fabric. Never use liquid cleaning products, as this may damage the products cosmetic surfaces.
- 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.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Avoid placing the product in a location under direct sunlight or near any appliance that generates UV (Ultra Violet) light, as this may change the product surface finishing and cause a change in color.
- 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.
- **CAUTION**: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
- **WARNING**: Only use attachments/accessories specified or provided by the manufacturer (such as the exclusive supply adapter, battery, etc.)
- Before turning the power on or off for all devices, set all volume levels to minimum.
- Use only speaker cables for connecting speakers to the speaker terminals. Be sure to observe the amplifier's rated load impedance particularly when connecting speakers in parallel. Connecting an impedance load outside the amplifier's rated range can damage the apparatus.
- KGEAR cannot be held responsible for damage caused by improper use of the loudspeakers.
- KGEAR will not shoulder any responsibilities for products modified without prior authorization.

These apparatus are intended for professional use.

Installation and commissioning may only be carried out by qualified and authorized personnel.

Service
To obtain service:
1. Please have the serial number(s) of the unit(s) available for reference.
2. Contact the official KGEAR distributor in your country: or KGEAR headquarter at info@kgear.it. Please describe the problem clearly and completely to the Customer Service.
3. You will be contacted back for on-line servicing.
4. If the problem cannot be resolved over the phone, you may be required to send the unit in for service. In this instance, you will be provided with an RA (Return Authorization) number which should be included on all shipping documents and correspondence regarding the repair. Shipping charges are the responsibility of the purchaser.

Any attempt to modify or replace components of the device will invalidate your warranty. Service must be performed by an authorized K-array service center.
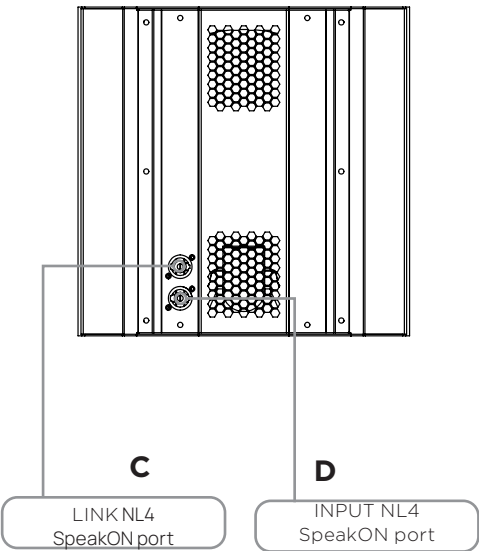
Cleaning
Use only a soft, dry cloth to clean the housing. Do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives. Do not use any sprays near the product or allow liquids to spill into any openings.

GPZA / GPZ

KGEAR
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Rear Panel

GPZA - GH12 satellite unit

C

LINK NL4
SpeakON port

D

INPUT NL4
SpeakON port

C. NL4 SpeakON C: signal in/out
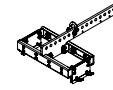D. NL4 SpeakON D signal in/out

Wiring

NL4 SpeakON 1+ 1- signal, 2+ 2- trough

The rear panel of the speaker hosted 2x SpeakON connector: The connector located at the bottom is used as input connector for the signal coming from an amplifier or an active subwoofer, while the one positioned at the top serves as link connector, allowing the signal to be distributed to multiple elements in a line array configuration.

Rigging Procedures

Suspended Array

⚠ Key rigging components must be inspected before each use.
Any rigging components found to be defective, or even suspect might be defective should be replaced with equivalent approved part.

⚠ Always use properly rated rigging hardware.

⚠ K-array is not responsible for any rigging equipment and accessories that are not manufactured by K-array.

⚠ KGEAR loudspeaker and hardware are intended for suspension from approved rigging points only.
Ensure that the total weight of the loudspeakers and additional hardware assembly in use is lower than the Working Load Limit (WLL) of the suspension points.

⚠ Rigging and flying loudspeaker systems shall be accomplished by knowledgeable and experienced professionals.

⚠ It is the user's responsibility to ensure that the use and suspension of heavy loudspeaker systems conform to all applicable laws and regulations in force at the time and location.

Needed Equipment

Name	Description	Image	Apply to
GH-JOINT[1]	Adjustable Joining Hardware + 2 Lugs + 8 Pins		GH12 GH412
GH-FLY[1]	Stainless Steel Fly Bar		GH12 GH412
GH12 - CEILING[1]	Stainless Steel Ceiling Mount Bracket with Adjustable Angle		GH12

1 This accessories are not included in the package, they have to be purchased separately.

GH12 line array elements

Rigging / Array Mounting

Any GH12 element can be mounted in an array configuration with GH-JOINT & GH-FLY adjustable Fly-Bar accessories. First, the user can join multiple elements together using the dedicated joining kit with 2x lugs and 8x pins.

Install the GH-JOINT kit on top of the GH12 loudspeaker: insert the four pins on the holes according to the desired tilting angle.
Secure the second GH12 on top of the system using the remaining four pins.
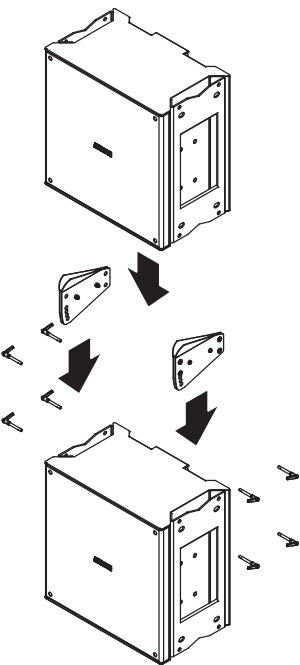
Then, fix the GH-FLY bar to the speaker's frame with the provided pins, adjusting the bumper to achieve the desired height and angle, and suspend the array in vertical to the rigging point.

When suspending multiple GH12 units in an array, please ensure strict adherence to the GH-FLY bar's maximum suspension capacity. Utilize certified accessories exclusively to guarantee secure suspension and prevent any equipment damage.


Ceiling Hanging

It is possible to hang a single unit on ceiling using the dedicated GH12-CEILING mounting bracket with adjustable angles. To set up the speaker with the desired inclination, use the dedicated 4x M8 screws provided within the accessory's package.
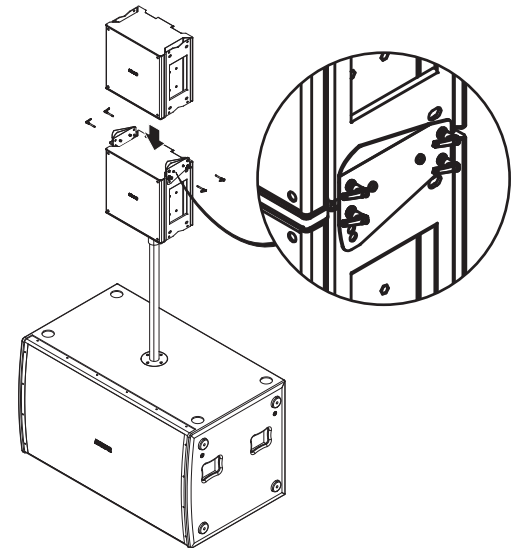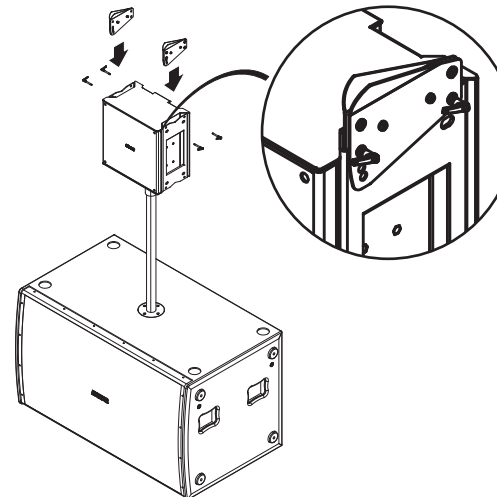

M8 23mm
0,9 in
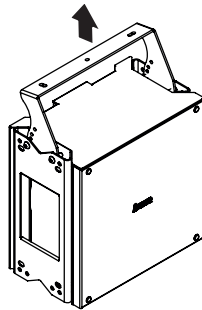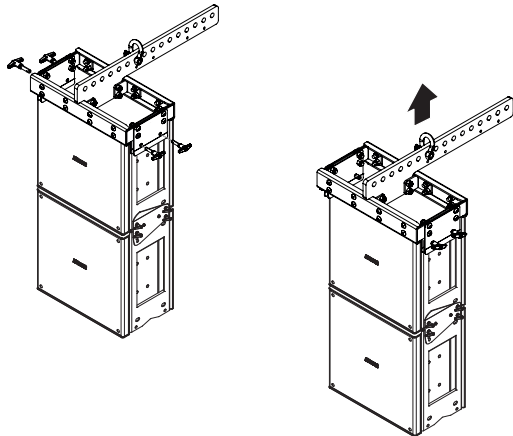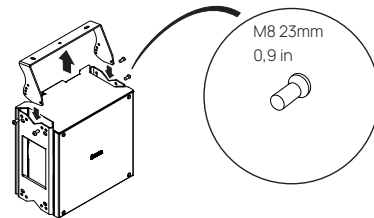
Assembling instructions

The GH-JOINT kit it useful also to install 2x GH12 12" array elements on top of the subwoofer in the GPZA system.
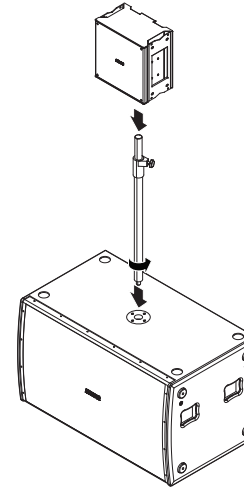
Tightly screw the G-POLE on top of the subwoofer, then set the GH12 12" array element on top of the G-POLE, following the same procedure mentioned earlier to join multiple GH12 together.

Set the height of the pole and the tilting angle of the top loudspeaker aiming at the listening area.
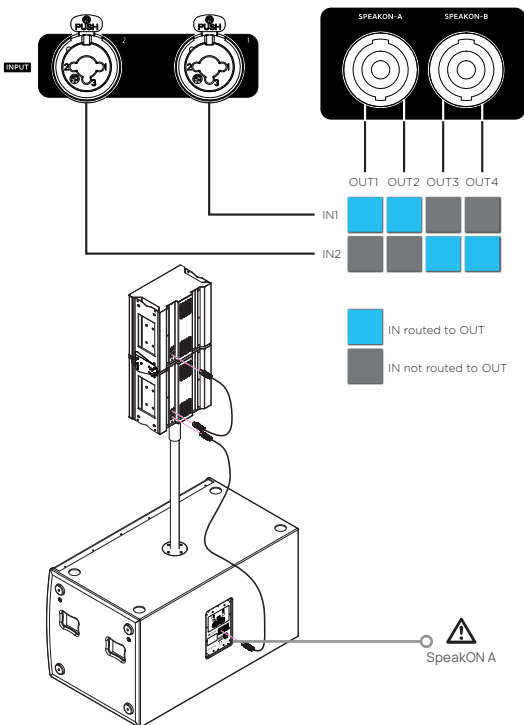
GPZA / GPZ

GPZA wiring

Once assembled, use the 2 m (6.5 ft) long speaker cable to connect one speakON connector on the GH12 rear panel to the speakON A connector on the active subwoofer rear panel.

Use the short joint cable to connect the top GH12 to the bottom GH12 loudspeaker.

By default, the input signal shall be fed with a pair of cables connected to the XLR Combo balanced input channels 1 and 2 on the GPZA active loudspeaker rear panel.

If only one cable is used to feed the input channels 1 or 2, the mono configuration can be set with ArmoníaPlus.

GPZ wiring

The GPZ must be bi-amplified feeding the speakON B (on the subwoofer rear panel) with two signals: one for driving the GH12 array loudspeakers on terminals 1+ 1−, the other one for driving the GS218 subwoofer on the speakON B terminals 2+ 2−.
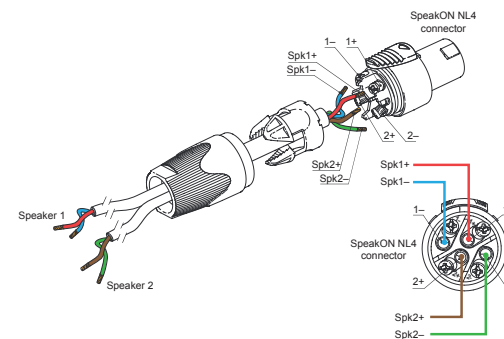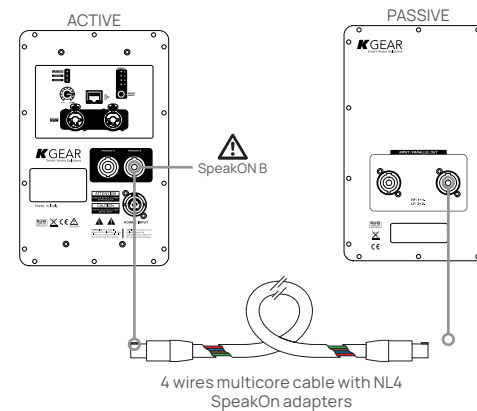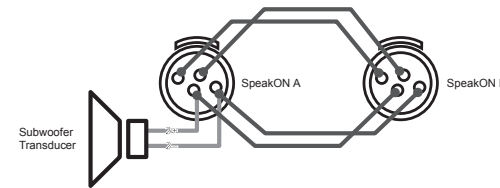
The GPZA active system implements a 4-channel amp module with DSP: a single GPZA can drive a GPZ passive systems in stereo mode.

ACTIVE   PASSIVE

⚠ SpeakON B to SpeakON B
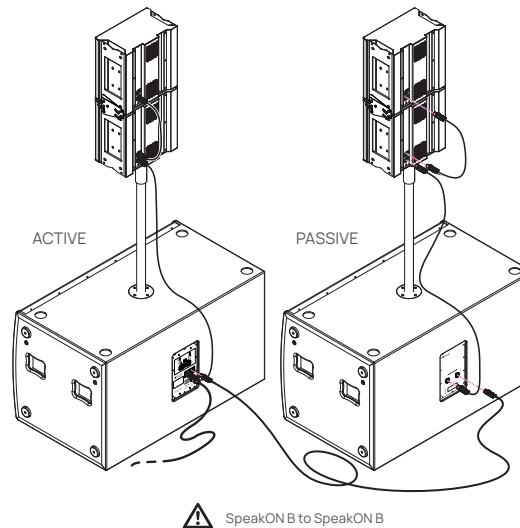
Once assembled, use the the 2 m (6.5 ft) long speaker cable to connect one speakON connector on the GH12 rear panel to the speakON A connector on the active subwoofer rear panel.

Use the 15 m (49 ft) long speaker cable to connect one SpeakON B connector on the subwoofer rear panel to the driving unit (i.e. a GPZA active system).

SpeakON A and speakON B are connected in parallel in order to make the signal pass through (see next picture).


SpeakON A   SpeakON B

Subwoofer Transducer

ACTIVE   PASSIVE

SpeakON B

4 wires multicore cable with NL4 SpeakOn adapters

GPZA-GPZ

KGEAR

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Remote Control With ArmoníaPlus

The built-in DSP can be remote controlled and tuned with the ArmoníaPlus software over an Ethernet network.

WINDOWS software
ArmoníaPlus

Click to Go

1. Download ArmoníaPlus from Powersoft website and install it on your PC.
2. Launch ArmoníaPlus.
3. Log-in with your ArmoníaPlus account.
4. The first time you launch ArmoníaPlus you need to download the KGEAR amplifiers presets form the ArmoníaPlus marketplace.
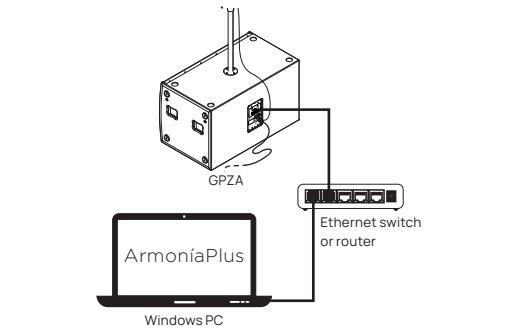5. Insert «KGEAR» in the search field and add
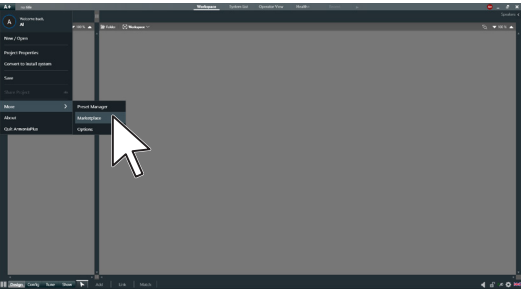
the support to the KGEAR devices you need.

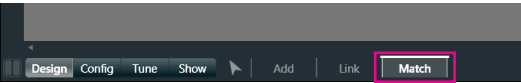6. Connect the PC with ArmoníaPlus and your
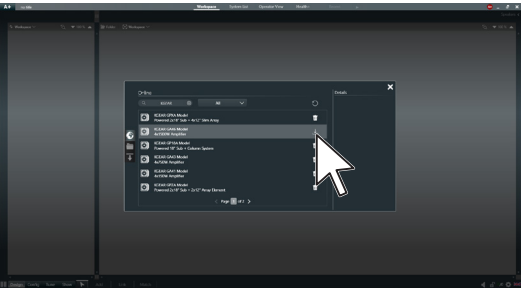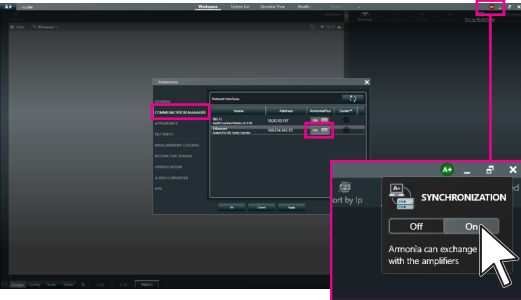

KGEAR device to the same local network.

7. Click on the Match button in the bottom toolbar.

GPZA

Ethernet switch or router

ArmoníaPlus

Windows PC

8. Check that the wired network interface is active an that the Synchronization mode is

ON.

9. Click on the Discovery button.
10. Wait until ArmoníaPlus shows the device,

then drag-and-drop the device from the right panel to the Workspace (left panel): the system takes few seconds to synchronize.

11. In order to access the device properties, select the pointer in the bottom toolbar and then double-click on the device in the Workspace.
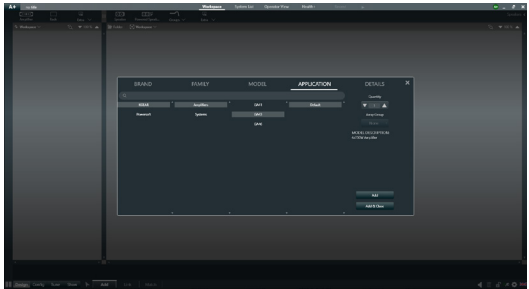12. You can eventually work off-line in «Design» mode: click on the Add button in the bottom toolbar.
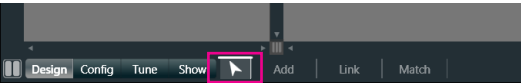
13. In the top menu bar, click on the button labeled «Powered Speaker» .
14. In the new window select the Brand / Family
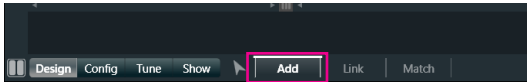
/ Model / Application according to your needs, the click on Add.
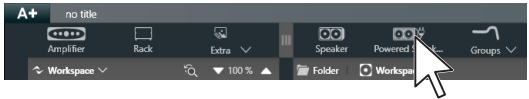
15. The device(s) will be added to the Workspace.

Setting Device Preset

The rear panel features four preset buttons that can be assigned to custom device preset.

A device preset includes the entire configuration of the four output channels and input equalization.

In order to customize the current device preset:

A. connect the device to ArmoníaPlus;
B. make your settings;
C. go to the preset windows and click on the
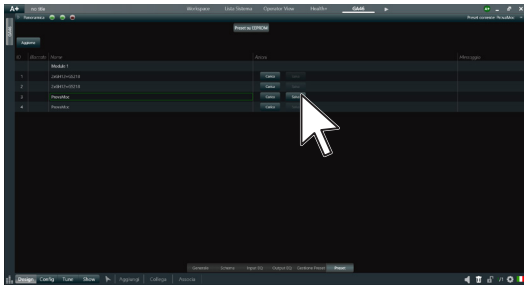
Save button: the current device configuration will override the previous settings.

The factory presets are listed below.

#	Preset Name
1	KGEAR optimized
2	Linear response
3	Subwoofer boost
4	Mid-high boost
Default	KGEAR optimized

GPZA / GPZ

KKGEAR
Smart Audio Solutions

Mechanical Drawings

334 mm [13.15 in]

327 mm [12.9 in]

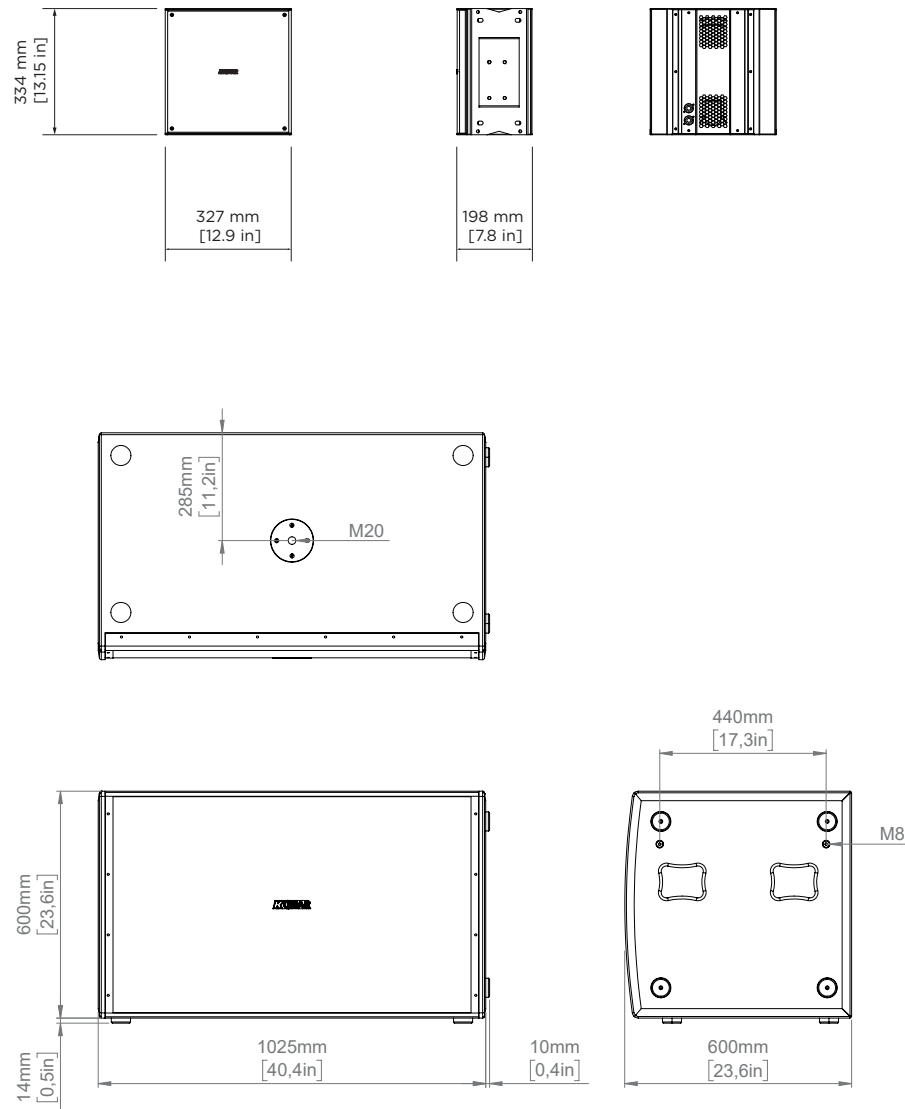198 mm [7.8 in]

285mm [11,2in]

M20

440mm [17,3in]

M8

600mm [23,6in]

1025mm [40,4in]

10mm [0,4in]

600mm [23,6in]

14mm [0,5in]

Technical Specifications

GPZA

Technical specifications	
Type	Powered Sub + Satellite system
Transducers	SUB: 18" woofer TOP: 12" coaxial woofer and 1" compression driver
Frequency Response	30 Hz – 20 kHz (-6 dB)
Max SPL [1]	129 dB (peak)
Coverage	V. 30° I H. 90°
Amp Module	4-channel Class-D
Output Power	4x 1500 W @ 4 Ω
Operating Voltage	90-240V AC, 50-60 Hz
Power Consumption	500W Rated Load, (1/8 Max Output Power)
DSP Features	Remote control and tuning Input and Output Delay Parametric input EQ Output parametric filters
Connectors	RJ45 for remote control 2x Combo XLR Input 2x SpeakON Output 1x PowerCon True AC MAINS
Controls	Volume potentiometer Preset selector Remote control through Powersoft ArmoniaPlus Software
Dimensions (WxLxH)	1035 x 2040 (min) x 600 mm (40,75 x 80,31 x 23,6 in)
Weight	90kg (198.4 lb)

1   Maximum SPL is calculated using a signal with crest factor 4 (12dB) measured at 1 m.

GPZ

Technical specifications	
Type	Passive Sub + Satellite system
Transducers	SUB: 18" woofer TOP: 12" coaxial woofer and 1" compression driver
Frequency Response	30 Hz – 20 kHz (-6 dB)
Max SPL [1]	129 dB (peak)
Coverage	V. 30° I H. 90°
Power Handling	SUB: 1500W I TOP: 400W
Nominal Impedance	SUB: 4 Ω I TOP: 32 Ω each satellite
Connectors	2x NL4 SpeakON (TOP: 1+, 1– SUB 2+, 2–)
Dimensions (WxLxH)	1035 x 2040 (min) x 600 mm (40,75 x 80,31 x 23,6 in)
Weight	86,6 (190.9 lb)

1   Maximum SPL is calculated using a signal with crest factor 4 (12dB) measured at 1 m.