

GF42I- GF42TI- GF42AI

4x2" Line Array Column Speaker - Passive - Passive With Transformer - Active



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. If 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.

GF42I, GF42TI, GF42AI are the smallest and minimalist line array elements of the GF family in a practical and compact column format and resistant frame. The GF42I, GF42TI and GF42AI comprise 4x 2" ferrite magnet woofers closely-spaced into a recycled ABS enclosure, featuring PAT (Pure Array Technology).

These columns speakers are the perfect solution for speech reproduction with high definition and intelligibility, thanks to their directivity and a narrow vertical dispersion, as well as music reproduction when coupled with a KGEAR subwoofer.

GF42I is a 100W line array element with selectable impedance: low Z - 16 Ω / high Z - 64 Ω .

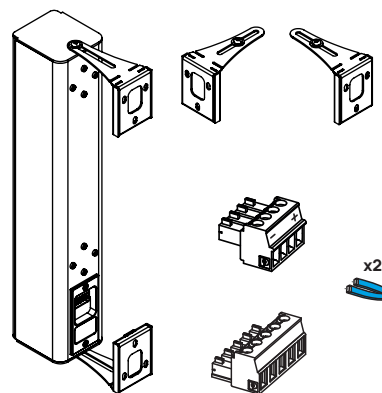
GF42TI has the feature of an internal transformer and it is compatible high voltage lines at 70V or 100V and has different power taps: 4/8/16/32 W @ 100V or 2/4/8/16 W @ 70V.

GF42AI is an active speaker with a built-in amplifier module with a balanced line input, a mute contact and an auto ON-OFF switch with selectable thresholds, plus a speaker output to connect another KGEAR speaker or passive subwoofer from KGEAR GS family.

Unpacking

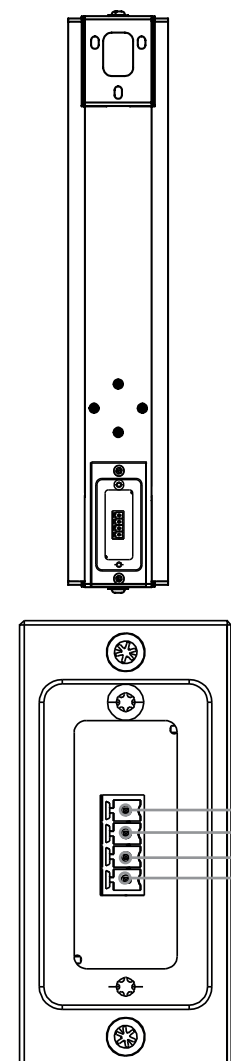
Each KGEAR device is inspected before leaving the factory. Upon arrival, carefully inspect the shipping carton, then examine and test your new device. If you find any damage, immediately notify the shipping company. Check that the following parts are supplied with the product:

- 1 x GF42I - (GF42AI or GF42TI) line array column speaker
- 1x Phoenix connectors x GF42I
- 2x Phoenix connectors x GF42AI
- 1x Phoenix connectors x GF42TI (Euroblock 1,5/ 4-ST-3,81 or 1,5/ 5-ST-3,81) with dedicated jumpers to select impedance.
- 2 x Wall mount L-brackets + screws and covers.







Rear Panel GF42I

GF42I passive speaker is equipped with 1x Phoenix connector 4 pin - Euroblock 1,5/ 4-ST-3,81.



GF42I Wiring

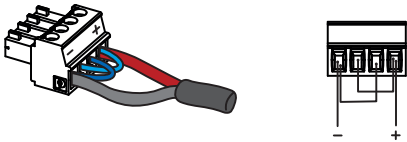
Signal polarity output and wiring of GF42 passive speaker:

| GF42 I - Wiring | | |
|-----------------|---|----------|
| PIN 1 |  | SIGNAL - |
| PIN 2 |  | SIGNAL + |
| PIN 3 |  | SIGNAL - |
| PIN 4 |  | SIGNAL + |

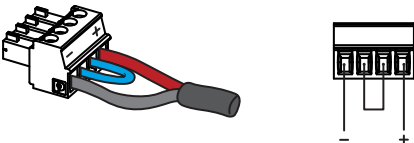
GF42I Impedance selection

With GF42I passive speaker the user can set the speaker @ Low impedance 8 Ω or @ High impedance 32 Ω using the provided jumper cables. Follow the scheme in the picture below for the right impedance settings.

Impedance selection 8 Ω Low-Z

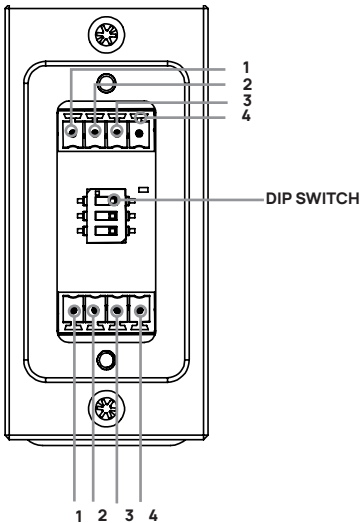
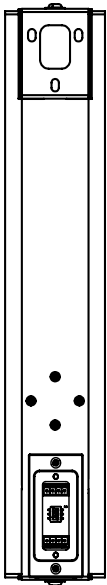


Impedance selection 32 Ω High-Z











Rear Panel GF42AI

GF42A active speaker is equipped with 2x Phoenix connector 4 pin - Euroblock 1,5/ 4-ST-3,81.



GF42AI Wiring

Signal polarity Input - mute contact - speaker output and ON-OFF switch selector of GF42A.

| GF42A I - Wiring | | | |
|------------------|-------------------|---|---|
| | Connector 1 | | Connector 2 |
| PIN 1 | MUTE |  | + DC POWER IN  |
| PIN 2 | SIGNAL + BALANCED |  | - DC POWER IN  |
| PIN 3 | SIGNAL - BALANCED |  | SPK. OUTPUT +  |
| PIN 4 | GROUND |  | SPK. OUTPUT -  |

GF42AI Controls

GF42AI features 2x Phoenix connectors (4-pin Euroblock 1,5/ 4-ST-3,81) with:

INPUTS:

- 1x balanced line input
- 1x mute contact (normally open) - more information about mute wiring and connections in the Mute contact section in the next page.

OUTPUTS:

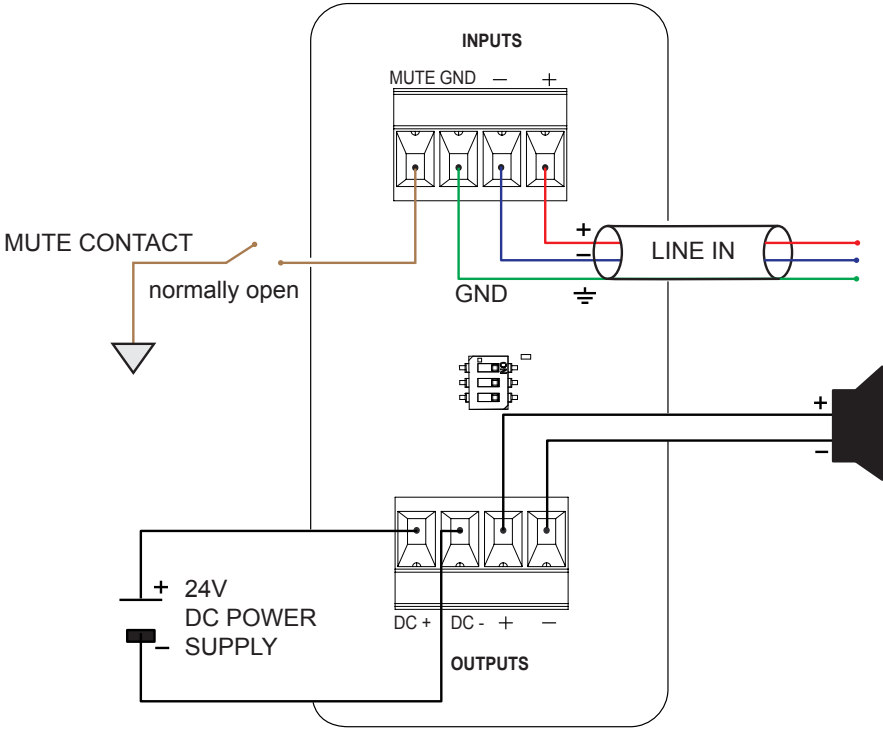
- 1x speaker output to connect another KGEAR speaker or passive subwoofer driven by the built-in amplifier module, 4 Ω minimum load.

CONTROLS:

- 1x auto ON/OFF switch with selectable thresholds
The dip switch controls the auto-standby mode of the speaker and can be set to 3 different thresholds - see the table in the next page for more information about ON/OFF switch modes.

Mute Contact

It is possible connect an external switch to the Mute contact input to close the circuit down and switch the speaker off. Please follow the wiring scheme below.






It is possible to use the G-AL120 power supply accessory to provide power to the internal amplifier module. This accessory is able to drive up to 1x GF42AI amplifier module and 2x GF42I connected in parallel with the LOW-Z → 8 Ω impedance selection.

With a minimum load of 4 Ω, the amplifier module is capable of delivering a power of 100 W with a maximum consumption of 6.5 A (I_{rms}).

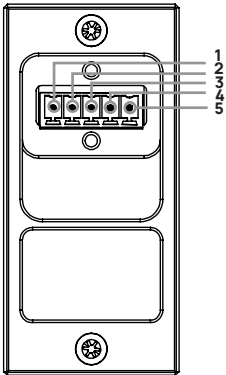
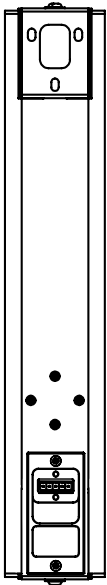
DIP Switch modes

The table below illustrates three different modes along with their corresponding input signal threshold values, which can be used to configure the ON/OFF switch.

| ON/OFF SWITCH MODES | | | |
|--|--|---|--|
| MODES | | Thresholds Values | Description |
| NO THRESHOLDS | | / | |
| HIGH THRESHOLDS LOW + MID + HIGH ON | |  -42 dBu | The amplifier switches on only after a stronger signal has passed the chosen threshold. This mode is useful to avoid noisy signal to enter the circuit |
| MEDIUM LOW+MID ON | |  -46 dBu | This mode requires the input signal to be stable and exceed the minimum threshold for an extended period to keep the speaker switched on. |
| LOW THRESHOLDS LOW ON | |  -52 dBu | The amplifier module switches ON immediately when the signal is higher than this minimum threshold, this mode is useful when a quick response is needed. |

Rear Panel GF42TI

GF42T 1 x Phoenix connector compatible
5 pin - Euroblock 1,5/ 5-ST-3,81



GF42TI Wiring

Transformer inputs / power taps of GF42T

| GF42T - Wiring | | | | |
|----------------|----------|--|----------|--|
| | 70 V | | 100 V | |
| PIN 1 | COMMON - | | COMMON - | |
| PIN 2 | 1 W | | 2 W | |
| PIN 3 | 2 W | | 4 W | |
| PIN 4 | 4 W | | 8 W | |
| PIN 5 | 8 W | | 16 W | |

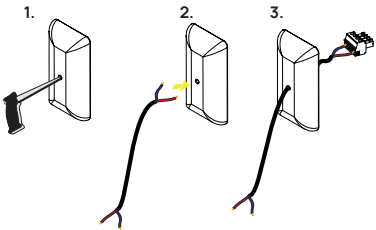
G-IPCAP - IP sealing accessory

GF42I, GF42AI and GF42TI can be protected against external agents, salt, chlorine and water using the G-IPCAP1 and G-IPCAP2. These are dedicated IP sealing CAP made of highly resistant and tight rubber, thought to be mounted at the rear panel of the speakers to protect connectors from water.

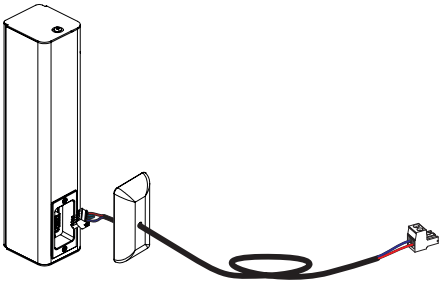
G-IPCAP1 is thought to be mounted to raise the IP grade of GF42 passive speaker and GF42AI active speaker, while G-IPCAP2 is dedicated to GF42T speaker with transformer.

To install the speakers with the dedicated accessory, please follow the procedure shown below:

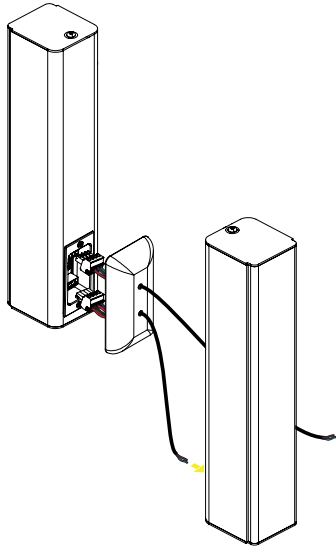
1. Take the dedicated accessory G-IPCAP1 and make a hole into the rubber material with a bradawl.
2. Choose a cable with a sheath for greater insulation and pass it through the hole.



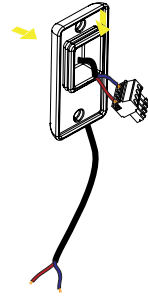
3. Connect the wires to pins 1 - 4 of the provided Euroblock connector and plug it to the speaker terminals.
4. Use the jumper cables for the desired impedance configuration.



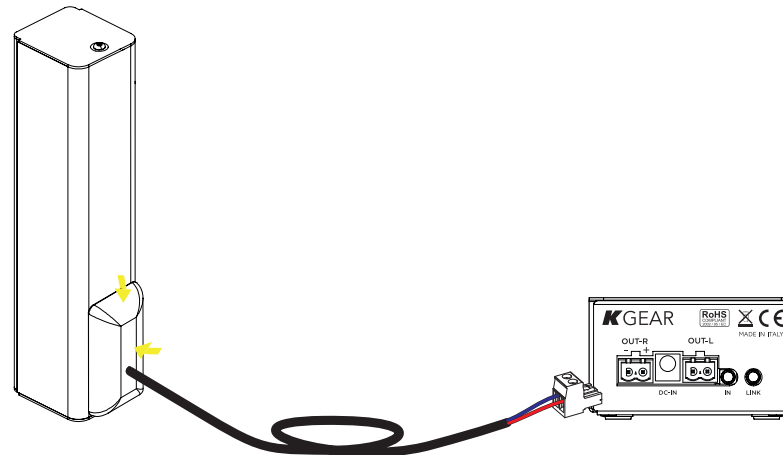
5. GF42AI connections are shown in the picture below. For external input and DC power connection, connect the wires to one of the provided connector and plug it to the speaker terminals at the top of the rear panel.
6. Connect the wires for speaker output to the connector's terminals at the bottom of the panel.



7. Ensure a secure fit by firmly pressing down the accessory's gasket to close the connector compartment.



8. Connect the speaker to the dedicated amplifier channel. GF42I is finally installed with its dedicated G-IPCAP1 or G-IPCAP2 accessory.

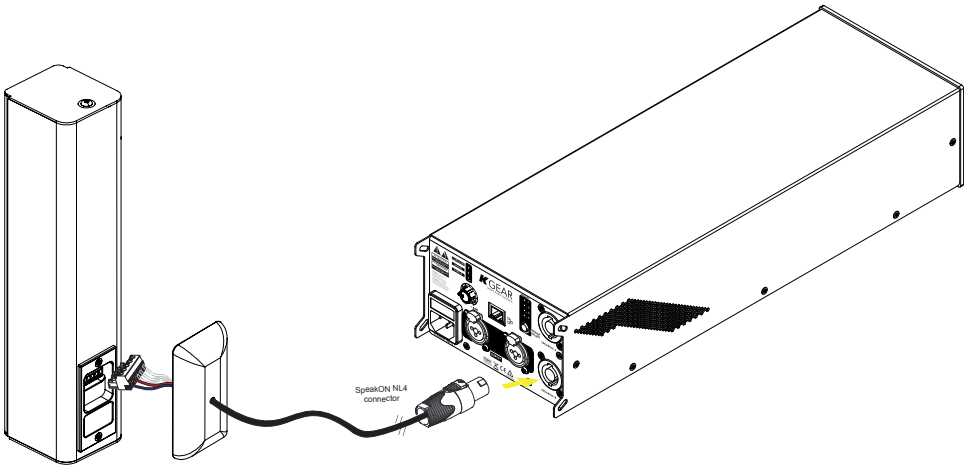
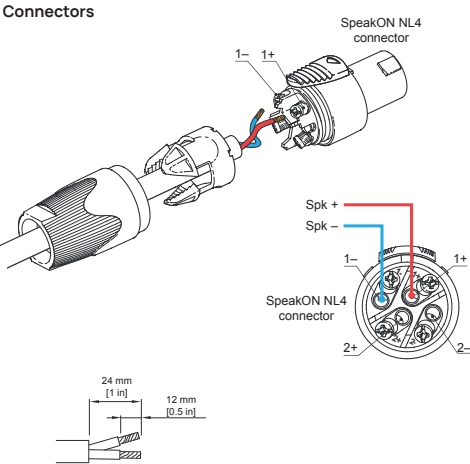


GF42TI Transformer wiring

GF42TI has the feature of an internal transformer and it is compatible with high voltage lines at 70V or 100V and has different power taps: 1/2/4/8 W @ 70V or 2/4/8/16 W @ 100 V.

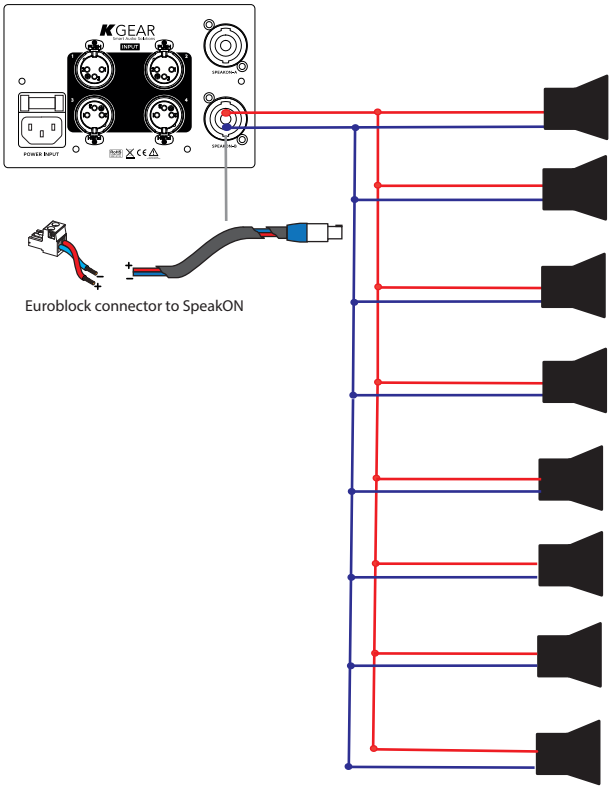
This selector makes it easy to connect a large number of speakers in parallel with high power and efficiency and setting different output levels on each speakers, for every kind of space and use.

GF42TI can be installed with the dedicated IP accessory G-IPCAP2.



Example of configuration

It is possible to mount more GF elements in array setting, connecting each speaker with high impedance configuration. In this example, 8x GF82 are connected with the selected impedance and driven by a single channel of GA43L/GA46L amplifier.



IMPORTANT SAFETY INSTRUCTIONS


CAUTION

 RISK OF ELECTRIC SHOCK
 DO NOT OPEN

ATTENTION: RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol alerts the user to the presence of recommendations about the product's use and maintenance.



The lighting flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated, dangerous voltage within the product enclosure that may be of magnitude to constitute a risk of electrical shock.



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



Operator's manual; operating instructions
This symbol identifies the operator's manual that relates to the operating instructions and indicates that the operating instructions should be considered when operating the device or control close to where the symbol



For indoor use only
This electrical equipment is designed primarily for indoor use.



WEEE
Please dispose of this product at the end of its operational lifetime by bringing it to your local collection point or recycling center for such equipment.




This device complies with Restriction of Hazardous Substances Directive.



Warning. Failure to follow these safety instructions could result in fire, shock or other injury or damage to the device or other property.

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
- Only use attachments/accessories specified by the manufacturer.
- 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.
- 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.

These apparatus are intended for professional use.

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

WARNING: Only use attachments/accessories specified or provided by the manufacturer (such as the exclusive supply adapter, battery, etc.)

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 will not shoulder any responsibilities for products modified without prior authorization.

Service

To obtain service:

Please have the serial number(s) of the unit(s) available for reference.

Contact the official KGEAR distributor in your country: find the Distributors and Dealers list on www.kgear.it website. Please describe the problem clearly and completely to the Customer Service.

You will be contacted back for on-line servicing.

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

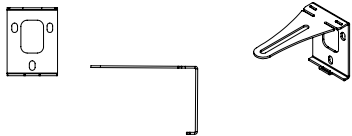
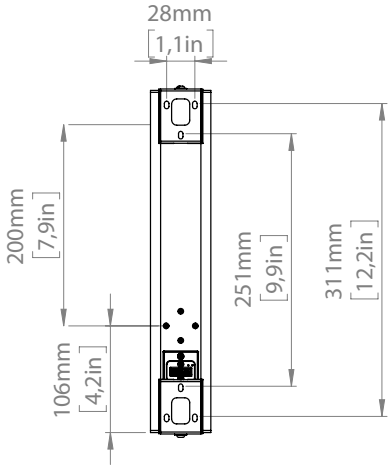
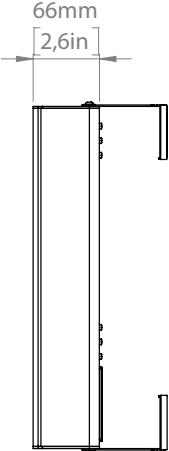
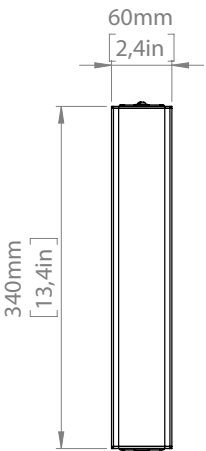
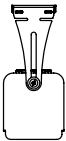
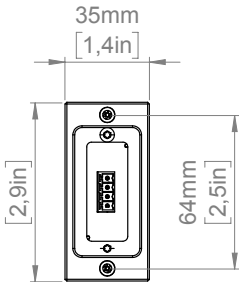
Use only a soft, dry cloth to clean the housing. Do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives. Do not use any sprays near the product or allow liquids to spill into any openings.

Installation

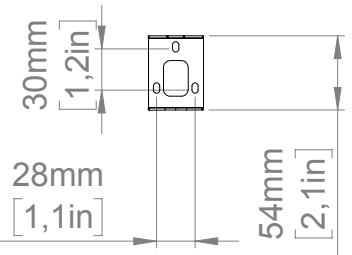
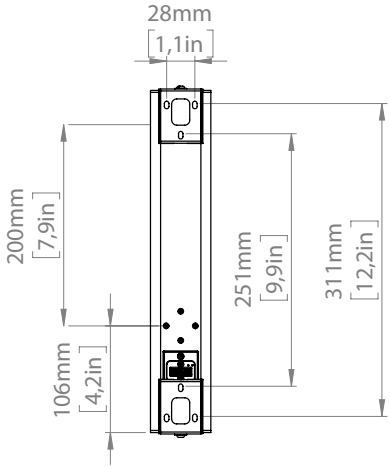
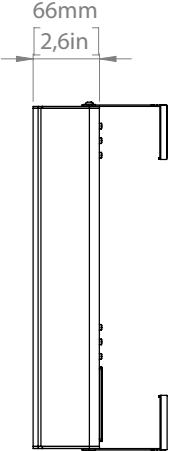
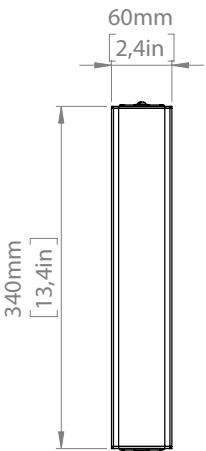
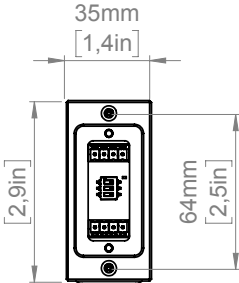
According to Table 35 of IEC/EN 62368-1:2018, equipments are suitable for mounting at heights ≤ 2 m. Install in a well ventilated location at 35°C (95°F) max environment temperature.

Mechanical Drawings

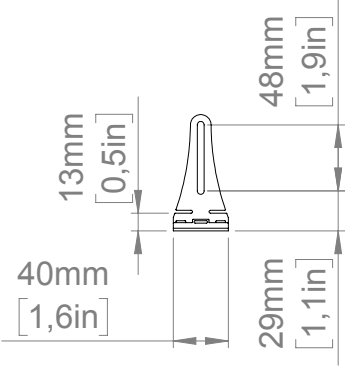
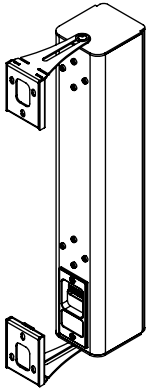
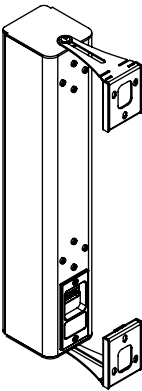
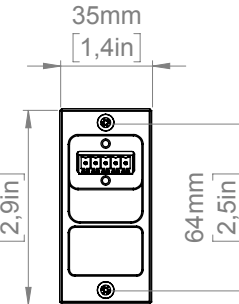
GF42I



GF42AI



GF42TI



GF42I

| Technical specifications |
|---|
| Type Passive loudspeaker |
| Transducer 4 x 2" ferrite magnet woofer |
| Frequency Response ¹ 160 Hz - 20 kHz (-6dB) |
| Max SPL ² 111 dB (peak) |
| Power Handling 100 W |
| Coverage V.25 H.90° |
| Connectors 1x Phoenix connector (4-pin Euroblock) |
| Nominal Impedance 8Ω - 32Ω |
| IP Rating IP56 |
| Handling & Finishes |
| Dimensions (WxLxH) 60 x 300 x 72 mm (2.36 x 11.81 x 2.83 in) |
| Weight 0.8 kg (1.76 lb) |
| Material ABS |
| Color Black - White (GF42W) |

1 With dedicated preset
2 Maximum SPL is calculated using a signal with crest factor 4 (12 dB) measured at 8 m then scaled at 1 m

GF42AI

| Technical specifications |
|--|
| Type Active loudspeaker |
| Transducer 4x2" neodymium magnet full-range driver |
| Frequency Response ¹ 160 Hz - 20 kHz (-6dB) |
| Max SPL ² 105 dB |
| Coverage V.25 H.90° |
| Connectors 2x Phoenix connector (4-pin euroblock) Balanced line in Mute Contact Power out 24V DC IN (power supply not included) |
| Controllers Auto ON/OFF with selectable threshold |
| Amp Module 1-channel Class D amplifier |
| Output Power 100W @ 2 Ω (24V power) |
| Power Consumption 30W Power Load 1/8 Max Power |
| Protections Thermal Protections (Power-Limiting - Thermal Shutdown) Short - circuit/overload output protections |
| Operating Range 12-24 V DC |
| IP Rating IP56 |
| Handling & Finishes |
| Dimensions (WxLxH) 60 x 300 x 72 mm (2.36 x 23.22 x 2.83 in) |
| Weight 0.8 kg (1.76 lb) |
| Material Stainless Steel |
| Color Black - White (GF42AW) |

1 With dedicated preset
2 Maximum SPL is calculated using a signal with crest factor 4 (12 dB) measured at 8 m then scaled at 1 m

GF42TI

| Technical specifications |
|---|
| Type Passive loudspeaker with Transformer |
| Transducer 4 x 2" ferrite magnet woofer |
| Frequency Response ¹ 160 Hz - 20 kHz (-6dB) |
| Max SPL ² 102 dB |
| Rated Power 100 W |
| Transformer Taps 2/4/8/16W 100V - 1/2/4/8W @ 70V |
| Coverage V.25 H.90° |
| Connectors 1x Phoenix connector (5-pin Euroblock) |
| Handling & Finishes |
| Dimensions (WxLxH) 60 x 300 x 72 mm (2.36 x 11.81 x 2.83 in) |
| Weight 1.3 kg (2.87 lb) |
| Material ABS |
| Color Black - White (G42TW) |

1 With dedicated preset
2 Maximum SPL is calculated using a signal with crest factor 4 (12 dB) measured at 8 m then scaled at 1 m

KGEAR by K-array surl
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- Firenze - Italy - www.kgear.it

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