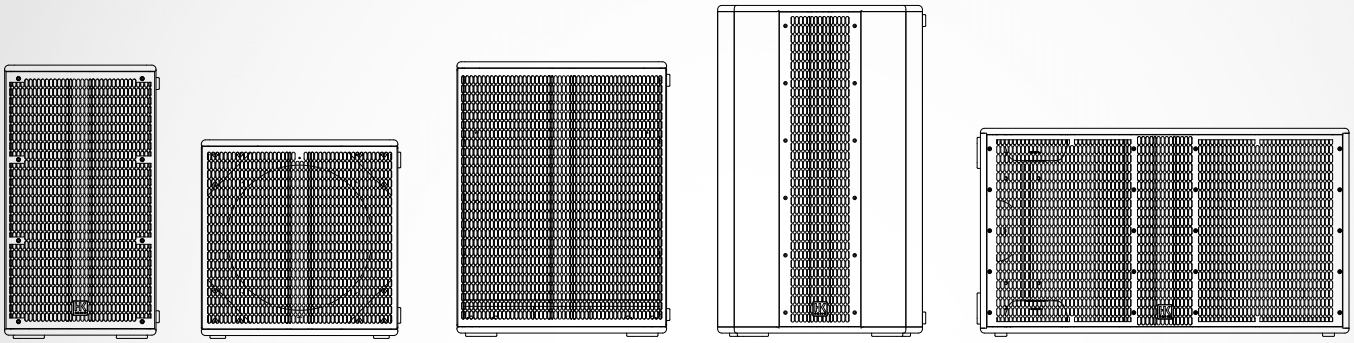


LINEAR SUB

L SUB 1200 A • L SUB 1500 A • L SUB 1800 A

L SUB 2000 A • L SUB 4000 A

Manual 1.6 V2

Important Safety Instructions! Read before connecting!

This product has been built by the manufacturer in accordance with IEC 60065 and left the factory in safe working order. To maintain this condition and ensure non-risk operation, the user must follow the advice and warning comments found in the operating instructions. If this product shall be used in vehicles, ships or aircraft or at altitudes exceeding 2000 m above sea level, take care of the relevant safety regulations which may exceed the IEC 60065 requirements.
WARNING: To prevent the risk of fire and shock hazard, do not expose this appliance to moisture or rain. Do not open case – no user serviceable parts inside. Refer service to qualified service personnel.

 This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.

 This symbol, wherever it appears, alerts you to the presence of externally accessible hazardous voltage. External wiring connected to any terminal marked with this symbol must be a "ready made cable" complying with the manufacturers recommendations, or must be a wiring installed by instructed persons only.

 This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Read the manual.

 This symbol, wherever it appears, tells you: Take care! Hot surface! To prevent burns you must not touch.

 All electrical and electronic products including batteries should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.

 Read these instructions. Keep these instructions. Follow all warnings and instructions marked on the product and in this manual.

- Do not use this product near water. Do not place the product near water, baths, wash basins, kitchen sinks, wet areas, swimming pools or damp rooms.
- Do not place objects containing liquid on the product – vases, glasses, bottles etc.
- Clean only with dry cloth.
- Do not remove any covers or sections of the housing.
- The set operating voltage of the product must match the local mains supply voltage. If you are not sure of the type of power available consult your dealer or local power company.
- Before connecting the device, please ensure that the mains supply you are using is equipped with adequate protection against short circuiting and grounding faults when the device is plugged in.
- To reduce the risk of electrical shock, the grounding of this product must be maintained. Use only the power supply cord provided with this product, and maintain the function of the center (grounding) pin of the mains connection at any time. Make sure the mains outlet used provides a proper protective ground connection.
- 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 obolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the device! Power supply cords should always be handled carefully. Periodically check cords for cuts or sign of stress, especially at the plug and the point where the cord exits the device.
- Never use a damaged power cord.
- Unplug this product during lightning storms or when unused for long periods of time.
- This product can be fully disconnected from mains only by pulling the mains plug at the unit or the wall socket. The product must be placed in such a way at any time, that disconnecting from mains is easily possible.
- Fuses: Replace with IEC127 (5x20mm) type and rated fuse for best performance only! It is prohibited to use "patched fuses" or to short the fuse-holder. Replacing any kind of fuses must only be carried out by qualified service personal.
- Refer all servicing to qualified service personnel. Servicing is required when the unit has been damaged in any way, such as:
- When the power cord or plug is damaged or frayed.
- If liquid has been spilled or objects have fallen into the product.
- If the product has been exposed to rain or moisture.
- If the product does not operate normally when the operating instructions are followed.
- If the product has been dropped or the cabinet has been damaged.
- Do not connect external speakers to this product with an impedance lower than the rated impedance given on the product or in this manual. Use only cables with sufficient cross section according to the local safety regulations.
- Keep away from direct sunlight.
- Do not install near heat sources such as radiators, heat registers, stoves or other devices that produce heat.
- This apparatus is for moderate climates areas use, not suitable for use in tropical climates countries.
- Do not block any ventilation openings. Install in accordance with manufacturer's instructions. This product must not be placed in a built-in installation such as a rack unless proper ventilation is provided.
- Always allow a cold device to warm up to ambient temperature, when being moved into a room. Condensation can form inside it and damage the product, when being used without warming up.
- Do not place naked flame sources, such as lighted candles on the product.
- The device must be positioned at least 20 cm/8" away from walls.
- 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.
- Use only accessories recommended by the manufacturer, this applies for all kind of accessories, for example protective covers, transport bags, stands, wall or ceiling mounting equipment. In case of attaching any kind of accessories to the product, always follow the instructions for use, provided by the manufacturer. Never use fixing points on the product other than specified by the manufacturer.
- This appliance is NOT suitable to be used by any person or persons (including children) with limited physical, sensorical or mental ability, or by persons with insufficient experience and/or knowledge to operate such an appliance. Children under 4 years of age must be kept away from this appliance at all times.
- Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock.
- This product is capable of delivering sound pressure levels in excess of 90 dB, which may cause permanent hearing damage! Exposure to extremely high noise levels may cause a permanent hearing loss. Wear hearing protection if continously exposed to such high levels.
- The manufacturer only guarantees the safety, reliability and efficiency of this product if:
- Assembly, extension, re-adjustment, modifications or repairs are carried out by the manufacturer or by persons authorized to do so.
- The electrical installation of the relevant area complies with the requirements of IEC (ANSI) specifications.
- The unit is used in accordance with the operating instructions.
- This product is optimized for use with music and speech signals. Using this product with sine wave, square wave or other kind of measuring signals at higher level may lead to severe damage of the product.

General Notes on Safety for Loudspeaker Systems

 Mounting systems may only be used for those loudspeaker systems authorized by the manufacturer and only with the mounting accessories specified by the manufacturer in the installation instructions. Read and heed the manufacturer's installation instructions. The indicated load-bearing capacity cannot be guaranteed and the manufacturer will not be liable for damages in the event of improper installation or the use of unauthorized mounting accessories.
The system's load-bearing capacity cannot be guaranteed and the manufacturer will not be liable for damages in the event that loudspeakers, mounting accessories, and connecting and attaching components are modified in any way.
Components affecting safety may only be repaired by the manufacturer or authorized agents, otherwise the operating permit will be voided.

 Installation may be performed qualified personnel only, and then only at pick-points with sufficient load-carrying capacity and in compliance with local building regulations. Use only the mounting hardware specified by the manufacturer in the installation instructions (screws, anchors, etc.). Take all the precautions necessary to ensure bolted connections and other threaded locking devices will not loosen.

 Fixed and portable installations (in this case, speakers and mounting accessories) must be secured by two independent safeties to prevent them from falling. Safeties must be able to catch accessories or parts that are loose or may become loose.
Ensure compliance with the given national regulations when using connecting, attaching, and rigging devices. Factor potential dynamic forces (jerk) into the equation when determining the proper size and load-bearing capacity of safeties.

 Be sure to observe speaker stands' maximum load-bearing capacity. Note that for reasons of design and construction, most speaker stands are approved to bear centric loads only; that is, the speakers' mass has to be precisely centered and balanced. Ensure speaker stands are set up stably and securely. Take appropriate added measures to secure speaker stands, for example when:
- the floor or ground surface does not provide a stable, secure base.
- they are extended to heights that impede stability.
- high wind pressure may be expected.
- there is the risk that they may be knocked over by people.
Special measures may become necessary as precautions against unsafe audience behavior. Do not set up speaker stands in evacuation routes and emergency exits. Ensure corridors are wide enough and put proper barriers and markings in place when setting speaker stands up in passageways. Mounting and dismounting are especially hazardous tasks. Use aids suitable for this purpose. Observe the given national regulations when doing so.

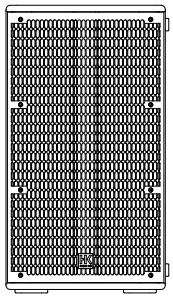
 Wear proper protection (in particular, a helmet, gloves, and safety shoes) and use only suitable means of ascent (ladders, scaffolds, etc.) during installation. Compliance with this requirement is the sole responsibility of the company performing the installation.

 WARNING! After installation, inspect the system comprised of the mounting fixtures and loudspeakers to ensure it is properly secured.
The operator of loudspeaker systems (fixed or portable) must regularly inspect or task a third party to regularly inspect all system components in accordance with the given country's regulations and have possible defects repaired immediately.
We also strongly recommend maintaining a logbook or the like to document all inspections.
When installing speakers for longer lasting or permanent outdoor operation, be sure to take into account the stability and load-bearing capacity of platforms and surfaces; loads and forces exerted by wind, snow, and ice; as well as thermal influences. Also be sure to provide sufficient safety margins for the rigging points used for flown systems. Observe the given national regulations when doing so.
- Ask the manufacturer if your product is allowed for outdoor usage !

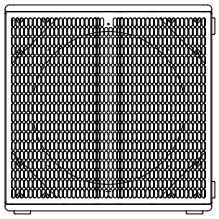
 Professional loudspeaker systems can produce harmful volume levels. Even prolonged exposure to seemingly harmless levels (starting at about 95 dBA SPL) can cause permanent hearing damage! Therefore we recommend that everyone who is exposed to high volume levels produced by loudspeaker systems wears professional hearing protection (earplugs or earmuffs).

Manufacturer: Stamer Musikanlagen GmbH, Magdeburger Str. 8, 66606 St. Wendel, Germany

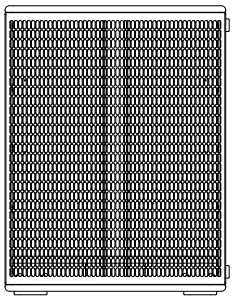
LINEAR SUB



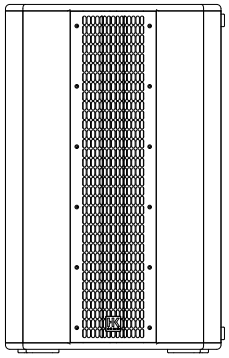
L SUB 1200 A



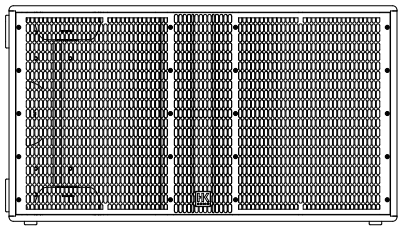
L SUB 1500 A



L SUB 1800 A



L SUB 2000 A



L SUB 4000 A

Welcome to the HK Audio family!

Thank you for choosing a brand-name product made by our company. Rest assured, we engineered and built it with the greatest care so it will serve you well for many tomorrows to come.

Even if your experience with sound systems runs deep, some things about this product are sure to be new to you. This is why we ask that you do not set this manual aside without reading it first. Be sure to keep it in a safe place for later reference.

Here's wishing you the best sound at every occasion!

Your HK Audio team

Warranty

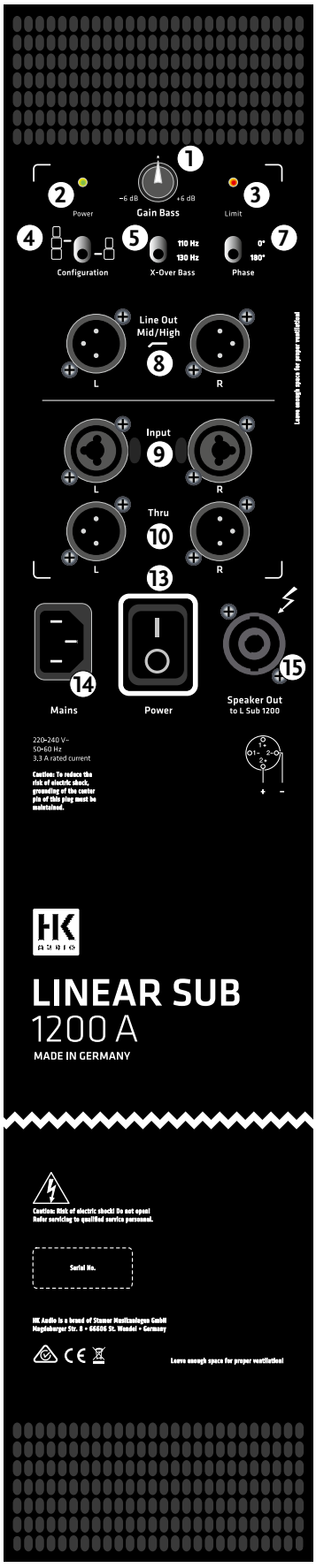
Use the convenient online registration option at www.hkaudio.com.

http://warranty.hkaudio.com

The registration is only valid if the device is registered via Internet within 30 days of the date of purchase.

HK AUDIO
Technischer Service
Postfach 1509
66595 St. Wendel, Germany
Fax: +49 6851 905 100

1 Control Features









1 Gain Bass
This knob adjusts the subwoofer's volume. When set to the 12 o'clock position (0 dB /center-notched), the subwoofer's volume is matched to the LINEAR active speakers' levels to achieve a balanced soundscape with an evenhanded distribution of low and midrange frequencies. If you want to increase or decrease the subwoofer's volume, simply rotate the knob to the left or right (control range +/-6 dB).

2 Power LED (L SUB 1200 A, L SUB 2000 A, L SUB 4000 A)
This LED lights up green when the Power button is set to On and mains power is provided

3 Limit LED (L SUB 1200 A, L SUB 2000 A, L SUB 4000 A)
This LED lights up red when the power amp's input signal is too high or a fault has been detected. The LED briefly flashes red to tell you the limiter is responding to signal peaks.



Caution! If the Limit LED stays red while the unit is up and running, it is being overloaded. Turn down the signal level! If you are not routing a signal in and the Limit LED stays red, the system has detected a fault.

4 Configuration

Set the switch to this position to configure one LINEAR active sub for use with one LINEAR active speaker.

Set the switch to this position to operate two LINEAR active sub with one LINEAR active speaker. In this setting, the levels of the two Line Out Mid/High outputs are boosted by up to 6 dB to bring up the one mid/ high unit's level and balance it out with two LINEAR active subs.

5 X-Over Bass
The X-Over switch lets you adjust the upper corner frequency of the X-over built into the LINEAR active sub.
- L SUB 1200 A between 110 Hz and 130 Hz
- L SUB 1500 A, L SUB 1800 A, L SUB 2000 A between 100 Hz and 120 Hz

Your choice of setting will depend on the conditions in the venue and the type of audio signal.

6 Mode (L SUB 4000 A only)
The Mode switch lets you adjust the upper corner frequency of the X-over built into the LINEAR active sub.
- L SUB 4000 A between 70 Hz (Sublow) and 100 Hz (Sub)

Your choice of setting will depend on the conditions in the venue and the type of audio signal, as well as whether the subwoofer is being used as a sub-low supplement or as a system bass.

7 Phase
The Phase switch configures the LINEAR active sub's phase position to match that of the connected mid/ high units (0°/180°). Set the switch to 0° when operating the bass bin with LINEAR mid/ high units. You may have to invert the phase 180° to operate it with other speakers.

Note:
- ELEMENTS setup:

E 110 Sub A/AS + L SUB 1500 A -> Phase = 180° (X-Over Bass = 100 Hz)
E 210 Sub AS + L SUB 1800 A -> Phase = 180° (X-Over Bass = 100 Hz)

8 Line Out Mid/High L/R
Use these two electronically balanced XLR outputs to connect active mid/ high units.

9 Input L/R
This electronically balanced, combination XLR/ 6.3 mm (1/4") input accepts audio signals.

10 Thru L/R
This parallel output routes Input L/R's incoming signal back out.

11 Auto Sleep (L SUB 1500 A, L SUB 1800 A)
The built-in amp switches to standby mode (Consumption around 0.5 watts) when the button is set to „On" and the unit does not receive a signal for 180 minutes. To power the subwoofer back up again, simply set its Power button to „Off" for five seconds and then back to On. The subwoofer will remain up and running if you disable Auto Sleep by setting this button to „Off".

12 Status LED (L SUB 1500 A, L SUB 1800 A)
This LED lights up green when the Power button is set to On and the unit is getting mains power.
This LED lights up red when the power amp's input signal is too high or a fault has been detected. The LED briefly flashes red to tell you the limiters are responding to signal peaks.
Heads up! If the Limit LED stays red while the unit is up and running, it is being overloaded. Turn down the signal level! If you are not routing a signal in and the Limit LED stays red, the system has detected a fault.

13 Power
This is the on/off button for the LINEAR active sub. Its status LED lights up green when it is engaged.

14 Mains
Use the factory-included mains cord to connect this socket to a wall outlet.
Note: All LINEAR SUBs are equipped with V-Lock mains sockets. If you use a VOLEX locking mains cord or another optionally available brand with the same design, you can fix the mains cord in place to prevent accidental disconnection.

15 Speaker Out (L SUB 1200 A only)
This port serves to connect a passive L SUB 1200 (NL4, 2+ = Sub+ / 2- = Sub-).
Heads up: Do not connect any other device. If you do, it may be destroyed along with L SUB 1200 A.

2 Connecting Cords

Use a microphone cord equipped with XLR connectors or 6.3 mm (1/4") jack plugs to send the signal from the audio source (master, monitor, line, or a similar output) to the balanced L/R Inputs. Connect the active mid/ high units to the XLR outputs labeled Line Out Mid/High. Use the two Thru L/R ports to route the fullrange signal to other speakers.

3 Operating the Sub

• Ensure the LINEAR active sub's Power switch is set to off.
Caution! Always make sure the local mains voltage matches the voltage specified on the LINEAR SUB. You may destroy its electronic components if you connect it to the wrong mains voltage.

• Turn the Gain Bass knob to the 12 o'clock position (0 dB/ center-notched).

• Set the Configuration switch accordingly to match the number of LINEAR active subs you are using.

• Ensure all connected line sources are switched on before powering up. First, switch on the connected mixer and all signal sources connected to it, for example, keyboards, amps, effects, and so forth. LINEAR active speakers should always be connected to the Line Out Mid/high ports and switched on after all other components are up and running. When you're ready to tear the rig down, please turn the LINEAR active speaker down by rotating the Input A/B Gain knobs counterclockwise as far as they will go and switch them off before powering down all other connected devices.

• When you flip the Power switch, the fan will briefly start up (system check) and stop after about five seconds. The fan is temperature-controlled. It kicks on only at very high volume levels and runs according to the given temperature. The Status LED (L SUB 1200 A, L SUB 2000 A, L SUB 4000 A) lights up red during the system check and will extinguish unless a fault is detected.
L SUB 1500 A, L SUB 1800 A: The Status LED lights up red during the system check, and then green if there is no malfunction and the unit is getting mains power.

4 Settings

• Adjusting Volume Levels with the Gain Bass Knob

Use the Gain Bass knob to adjust the active subwoofer's volume to suit the venue and situation. If you want to increase or decrease the subwoofer's volume, simply turn this knob to the left or right (control range +/-6 dB). If you hear distortion or the signal sounds saturated, first check the signal sources and, if possible, reduce the output signal level there.

• Adjusting the Corner Frequency:

With the X-Over Bass Switch
You can use this switch to adjust the LINEAR active sub's frequency range to match the signal you wish to render and/or the surroundings. The Line Out Mid/High Left/Right outputs are not affected by this setting.

With the Mode Switch (L SUB 4000 A only)
Use this switch to adjust the frequency response of the active LINEAR subwoofer to the audio signal and the surroundings. The Line Out Mid/High Left/Right outputs are not affected by Mode changes.
If you add the L SUB 4000 A to an existing PA system as a deep bass extension, Sub Low is the recommended setting. The LINEAR range's acoustic and phase-corrected tuning ensure that the L SUB 4000 A works with every model available.

• Adjusting the Phase Position with the Phase Switch

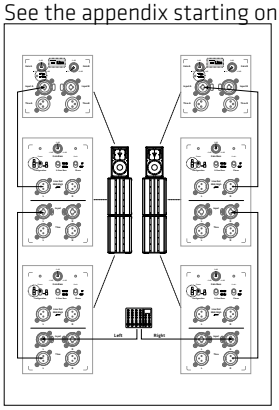
You can use the Phase switch to adjust the LINEAR active sub's phase position to match that of the connected mid/ high unit (for more on this, see section 1.7)

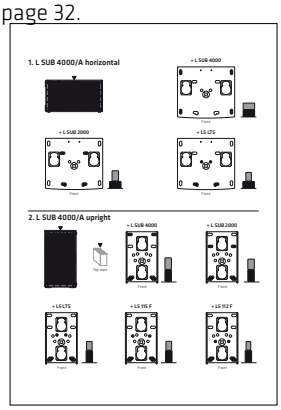
5 Technical Specifications

Model	L SUB 1200 A	L SUB 1500 A	L SUB 1800 A	L SUB 2000 A	L SUB 4000 A
Max. SPL@10% THD	126 dB half-space	129 dB half-space	130 dB half-space	132 dB half-space	135 dB half-space
Max. SPL Peak@10% THD	128 dB half-space	131 dB half-space	132 dB half-space	133 dB half-space	137 dB half-space
Max. SPL Calc.	129 dB half-space	132 dB half-space	133 dB half-space	135 dB half-space	138 dB half-space
Frequency response +/– 3 dB	55 Hz – X-Over	49 Hz – X-Over	42 Hz – X-Over	49 Hz – X-Over	31 Hz – X-Over
Frequency response –10 dB	38 Hz – X-Over	45 Hz – X-Over	38 Hz – X-Over	39 Hz – X-Over	39 Hz – X-Over
Power output	1,200 W	1,200 W	1,200 W	1,200 W	1,200 W
Amp/type	Class D	Class D	Class D	Class D	Class D
Active protection circuits	Under-voltage, thermal, short circuit, and over-current protection, Subsonic 24 dB/oct. peak limiter	Under-voltage, thermal, short circuit, and over-current protection, Subsonic 24 dB/oct. peak limiter	Under-voltage, thermal, short circuit, and over-current protection, Subsonic 24 dB/oct. peak limiter	Under-voltage, thermal, short circuit, and over-current protection, Subsonic 24 dB/oct. peak limiter	Under-voltage, thermal, short circuit, and over-current protection, Subsonic 24 dB/oct. peak limiter
Bass woofer	2x 10"	1x 15"	1x 18"	2x 12"	1x 18"
Cut-off Frequency active	110/130 Hz variable with 24 dB/oct.	100/120 Hz variable with 24 dB/oct.	100/120 Hz variable with 24 dB/oct.	100/120 Hz variable with 24 dB/oct.	70/100 Hz variable with 24 dB/oct.
Audio ports	2x XLR Combo In bal., 2 x XLR Thru bal., 2x XLR-Mid/High Out, Speakon NL4 for 2nd passive L Sub 1200 (2+ = Sub+ / 2- = Sub-)	2x XLR Combo In bal., 2 x XLR Thru bal., 2x XLR-Mid/High Out	2x XLR Combo In bal., 2 x XLR Thru bal., 2x XLR-Mid/High Out	2x XLR Combo In bal., 2 x XLR Thru bal., 2x XLR-Mid/High Out	2x XLR Combo In bal., 2 x XLR Thru bal., 2x XLR-Mid/High Out
Input sensitivity	+4 dBu @ Gain Center click	+4 dBu @ Gain center-notched	+4 dBu @ Gain center-notched	+4 dBu @ Gain center-notched	+4 dBu @ Gain center-notched
Mains connector	1x IEC socket with V-Lock cord retainer	1x IEC socket with V-Lock cord retainer	1x IEC socket with V-Lock cord retainer	1x IEC socket with V-Lock cord retainer	1x IEC socket with V-Lock cord retainer
Power consumption	3.3 A / 220-240 V (6.6 A / 100-120 V) nominal according to EN 60065	3 A / 220-240 V (6 A / 100-120 V) nominal according to EN 60065	3 A / 220-240 V (6 A / 100-120 V) nominal according to EN 60065	3.3 A / 220-240 V (6.6 A / 100-120 V) nominal according to EN 60065	3.3 A / 220-240 V (6.6 A / 100-120 V) nominal according to EN 60065
Pole mount	2x M20 (K&M)	1x M20 (K&M)	1x M20 (K&M)	1x M20 (K&M)	2x M20 (K&M)
Grips	4x HK Audio MultiGrip	2x HK Audio MultiGrip	4x HK Audio MultiGrip	4x HK Audio MultiGrip	8x HK Audio MultiGrip
Housing	Birch multiplex 15/18 mm, 9/13 ply	MDF 16 mm	MDF 16 mm	Birch multiplex 15/18 mm, 9/13 ply	Birch multiplex 15/18 mm, 9/13 ply
Front grille	2 mm metal grille	2 mm metal grille	2 mm metal grille	2 mm metal grille	2 mm metal grille
Finish	Acrylic enamel, black	Acrylic enamel, black	Acrylic enamel, black	Acrylic enamel, black	Acrylic enamel, black
Optional accessories	Protective cover, Satellite Add-On M20 XLR, Speaker, mounting pole M20, 100 mm casters, tilt unit	Protective cover, Satellite Add-On M20 XLR, Speaker, mounting pole M20, 100 mm casters, tilt unit	Protective cover, Satellite Add-On M20 XLR, Speaker, mounting pole M20, 100 mm casters, tilt unit	Protective cover, Satellite Add-On M20 XLR, Speaker, mounting pole M20, 100 mm casters, tilt unit	Protective cover, Satellite Add-On M20 XLR, Speaker, mounting pole M20, 100 mm casters, tilt unit
Dimensions (WxHxD)	38 x 66.8 x 56 cm 14-31/32 x 26-19/64 x 22-3/64"	48,5 x 48,5 x 59,5 cm 19-3/32 x 19-3/32 x 23-27/64"	51,0 x 67,0 x 72 cm 20-5/64 x 26-3/8 x 28-11/32"	50.6 x 80.6 x 61 cm 19-11/16 x 31-47/64 x 24-1/64"	91 x 51 x 81 cm 35-3/4 x 20 x 31-25/32"
Weight	30.7 kg / 67.7 lbs.	29,8 kg / 65,7 lbs.	42 kg / 92,6 lbs.	46.2 kg / 101.9 lbs.	59 kg / 130,1 lbs.

6 Applications

See the appendix starting on page 32.

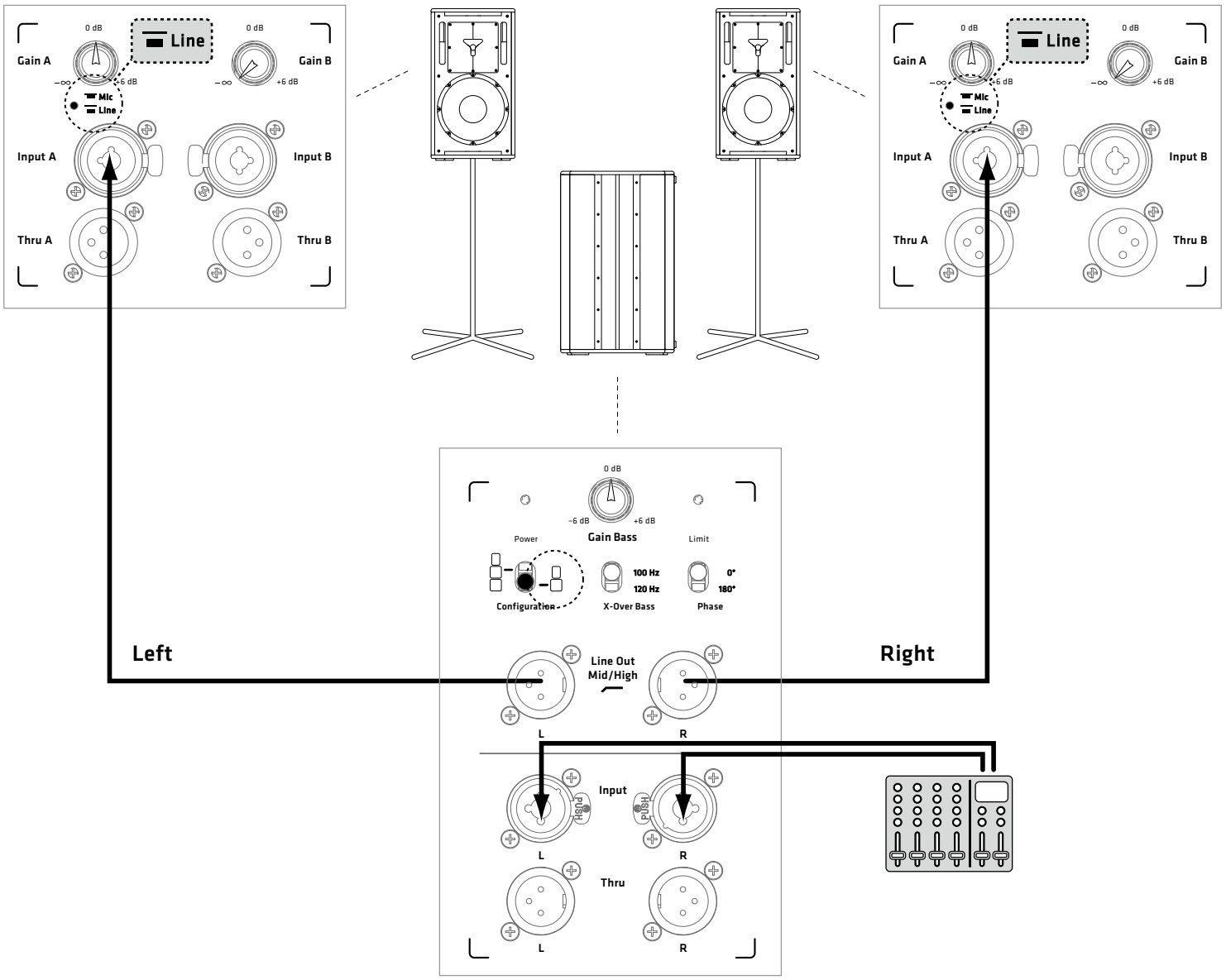




6 Application Samples

2.1 SYSTEM:

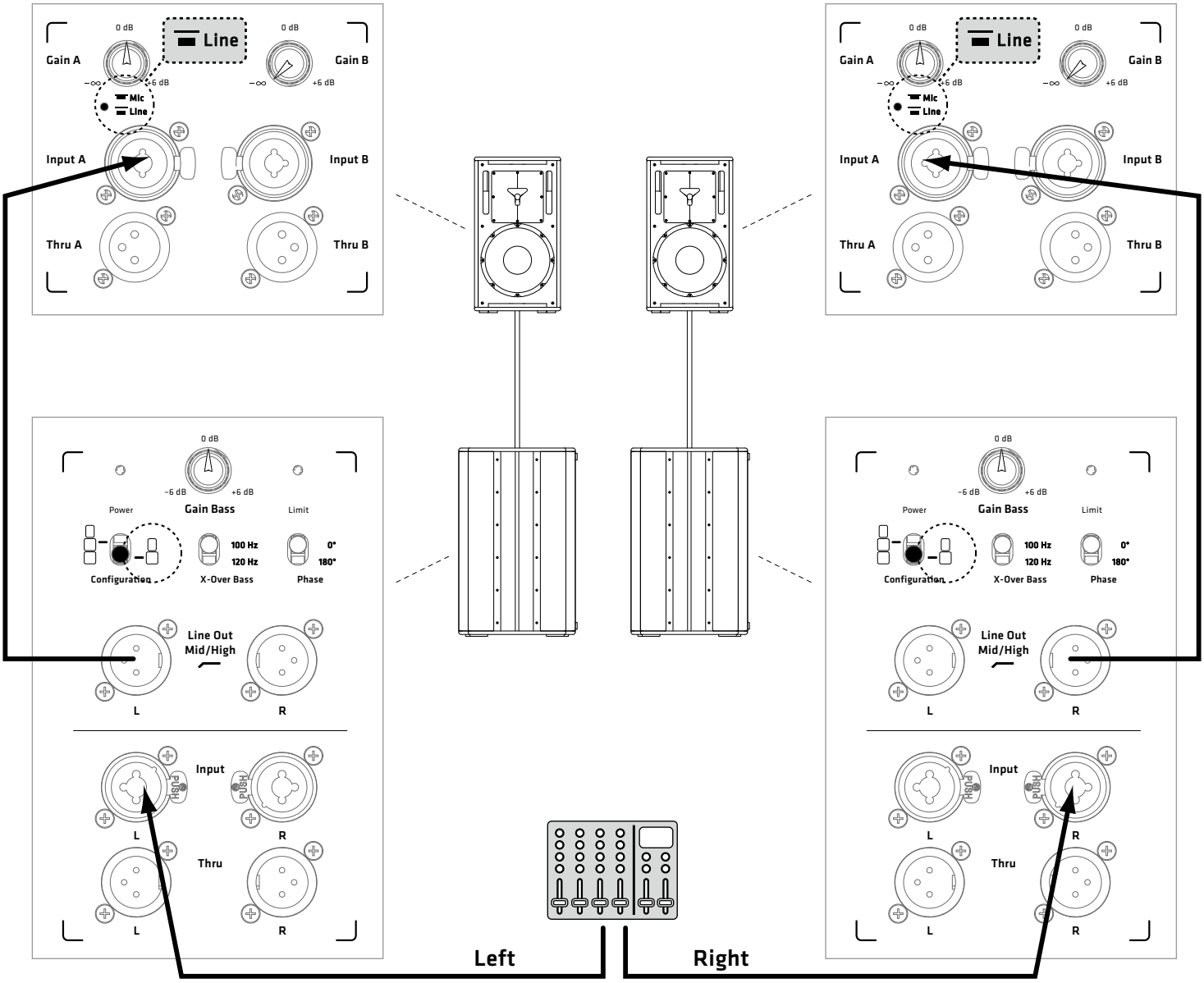
2x Mid/high unit LINEAR 3/LINEAR 5 (112 FA/112 XA/115 FA)
+ 1x LINEAR SUB 1200/1500/1800/2000/4000 A



HALFSTACK SYSTEM:

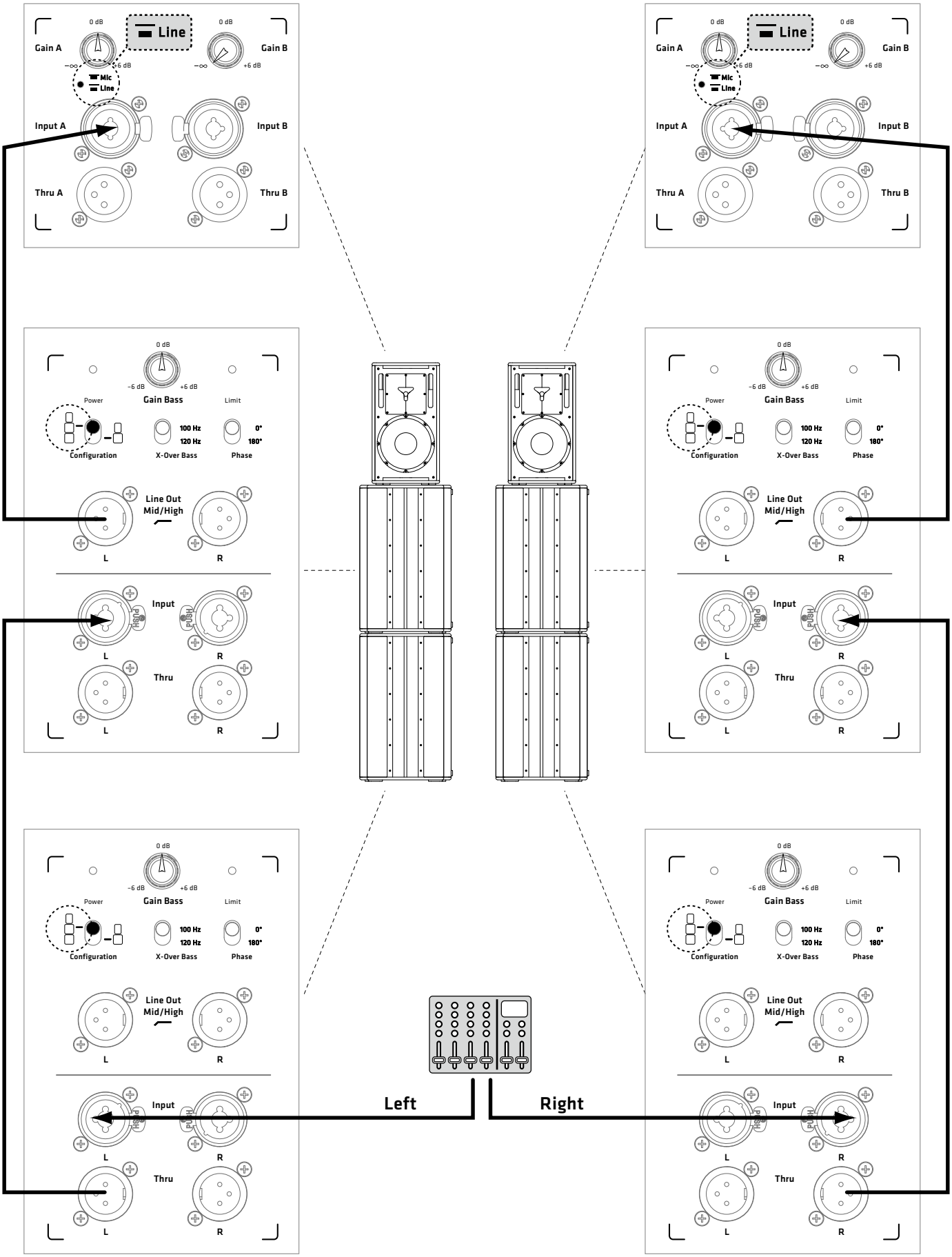
2x Mid/high unit LINEAR 3/LINEAR 5 (112 FA/112 XA/115 FA)

+ 2x LINEAR SUB 1200/1500/1800/2000/4000 A



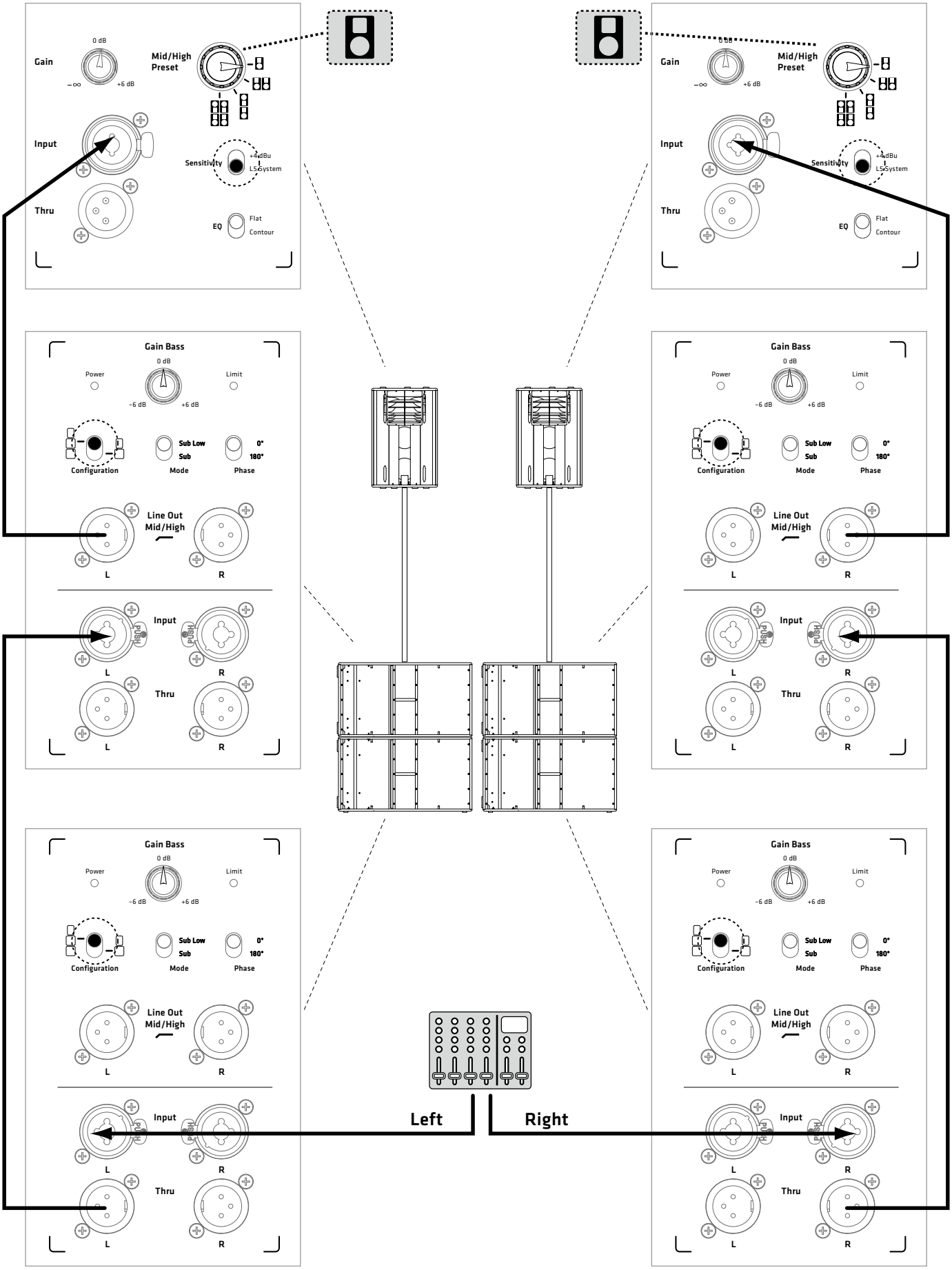
FULLSTACK SYSTEM:

2x Mid/high unit LINEAR 3/LINEAR 5 (112 FA/112 XA/115 FA)
+ 4x LINEAR SUB 1200/1500/1800/2000/4000 A



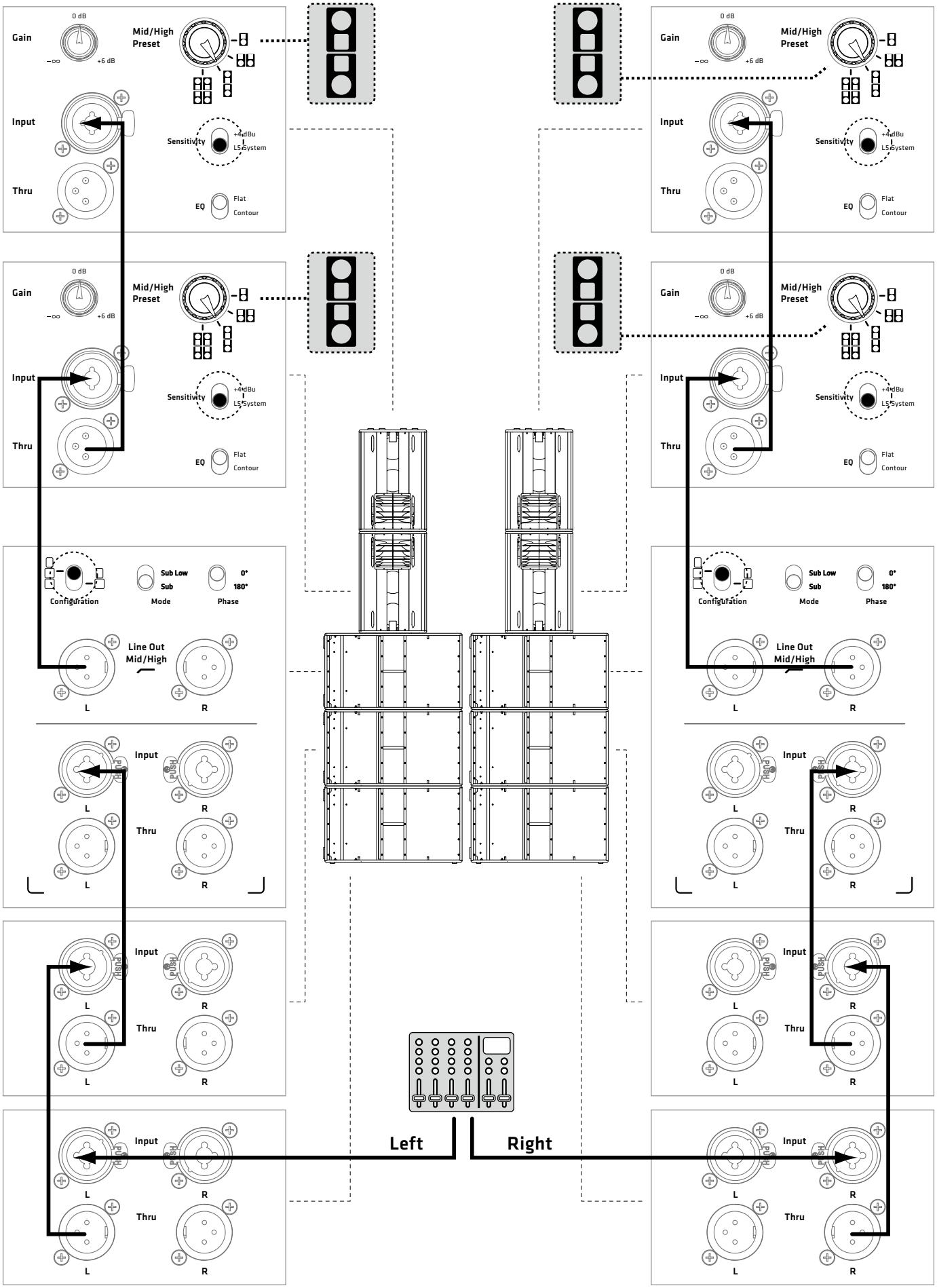
LINEAR 5 – LTS FULLSTACK SYSTEM:

2x L5 LTS A + 4x L SUB 4000 A



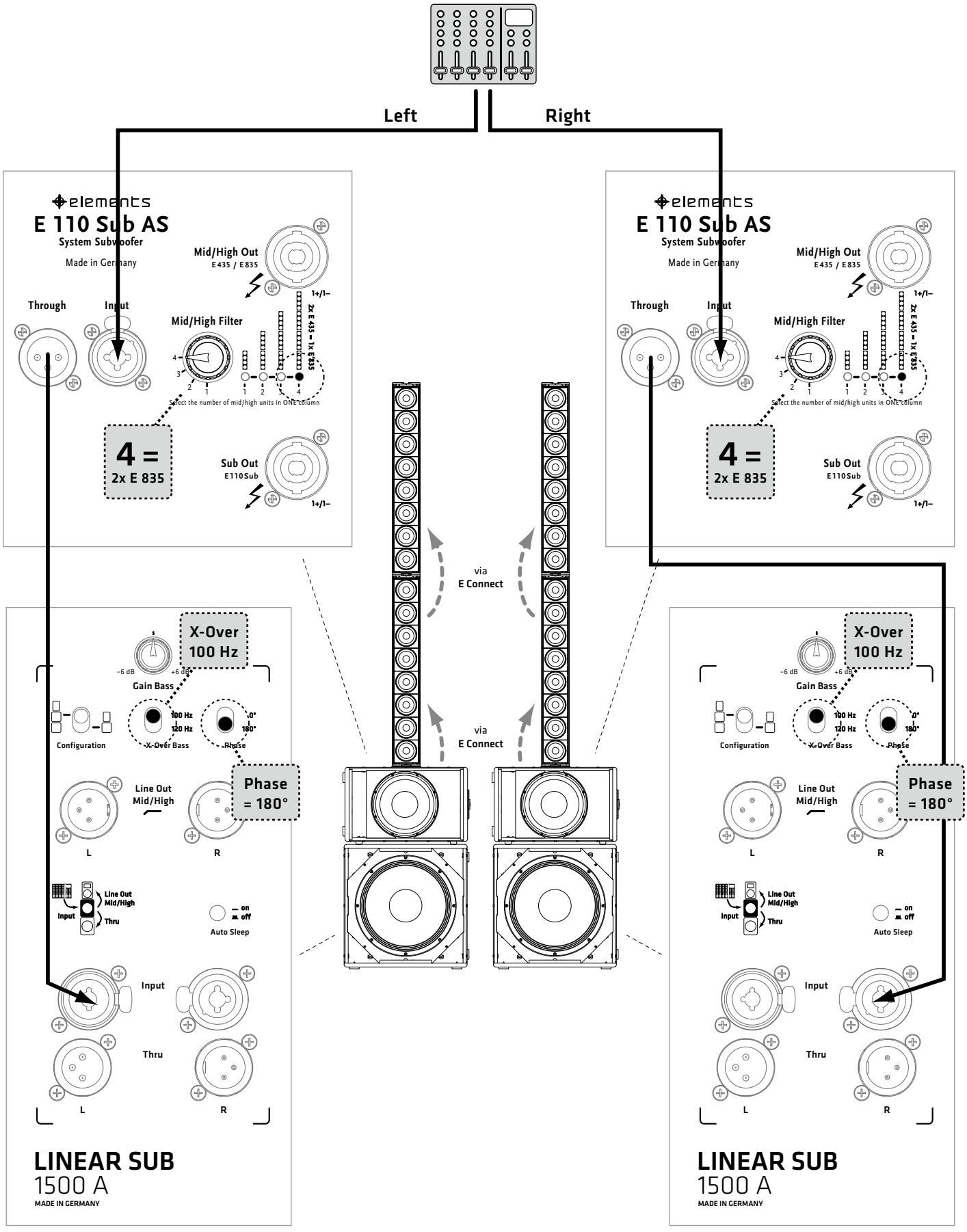
LINEAR 5 – LTS HEADSTACK SYSTEM:

4x L5 LTS A + 6x L SUB 4000 A



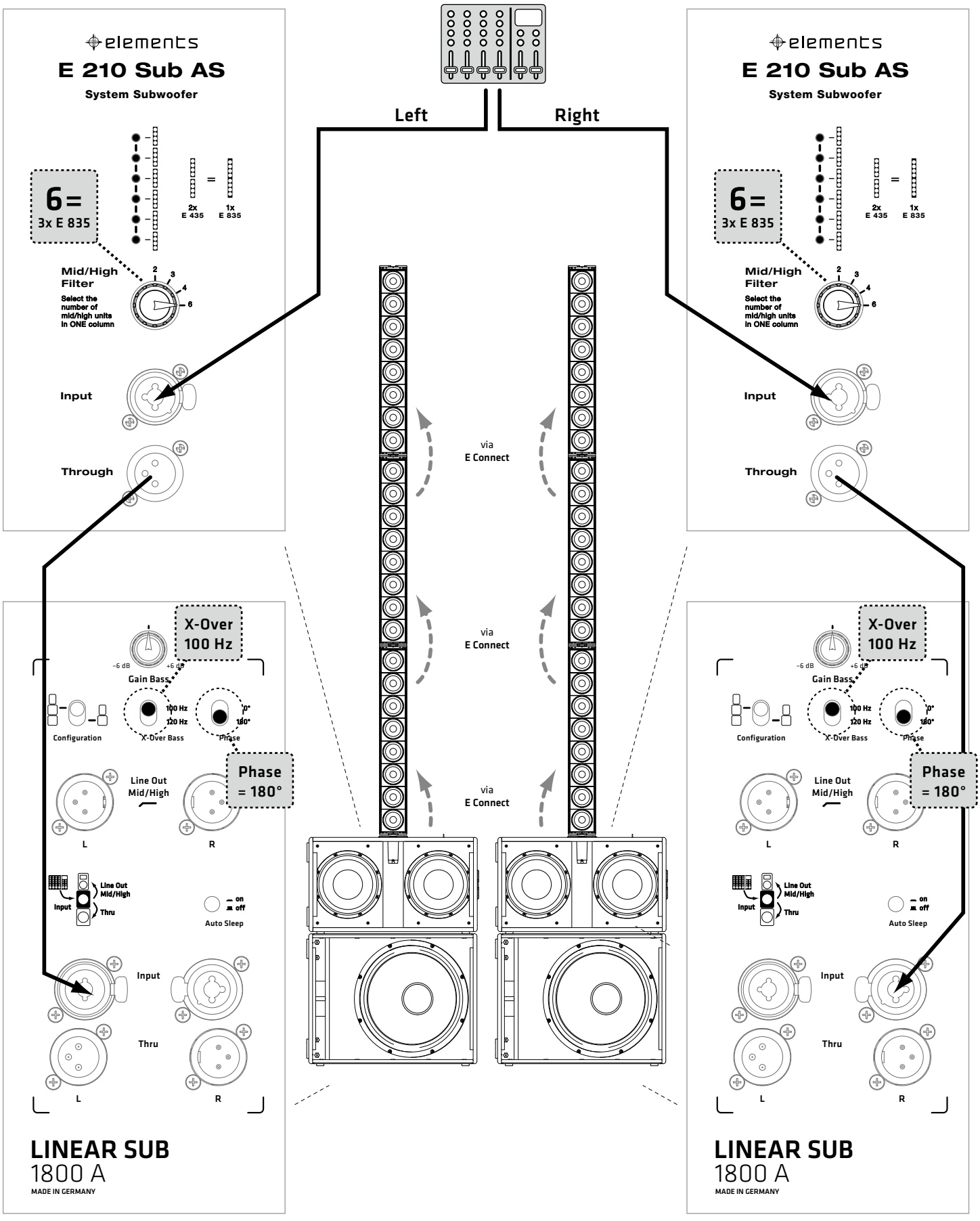
ELEMENTS „CLUB BASE“ SYSTEM:

4x E 835 / 2x E 110 SUB AS + 2x L SUB 1500 A



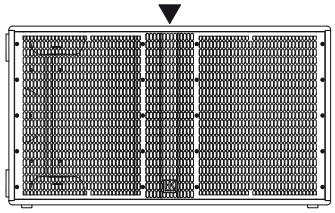
ELEMENTS „ROCK BASE“ SYSTEM:

6x E 835 / 2x E 210 SUB AS + 2x L SUB 1800 A

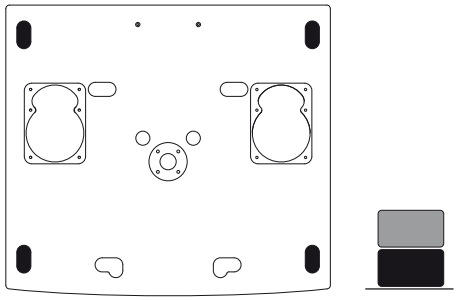


How to stack LINEAR cabinets correctly

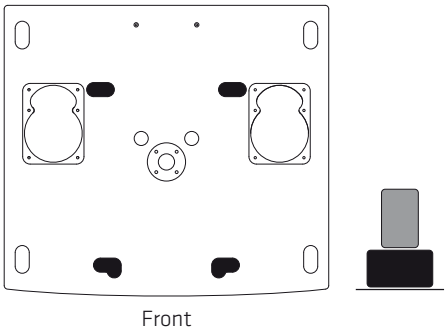
1. L SUB 4000/A horizontal



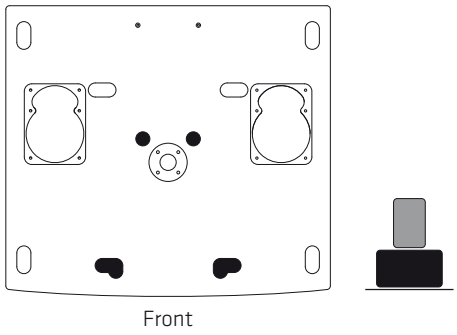
+ L SUB 4000



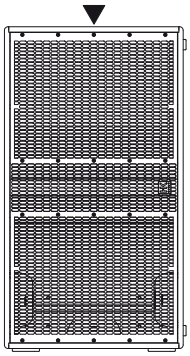
+ L SUB 2000



+ L5 LTS

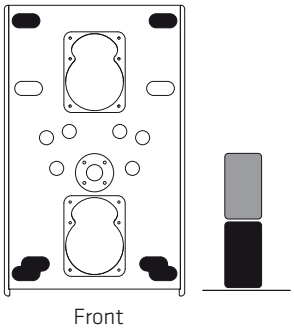


2. L SUB 4000/A upright

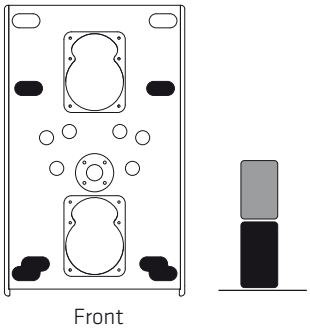




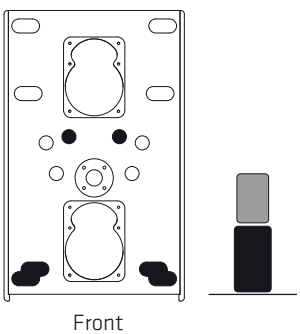
+ L SUB 4000



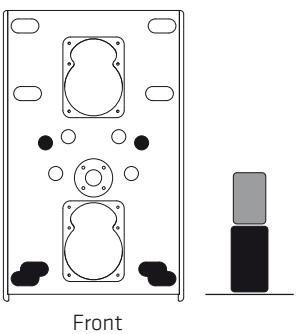
+ L SUB 2000



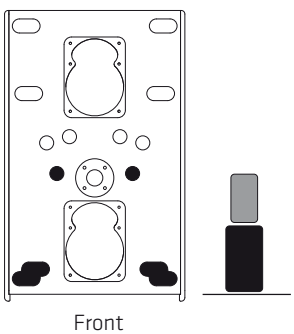
+ L5 LTS



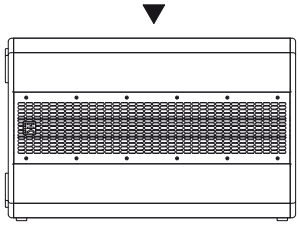
+ L5 115 F

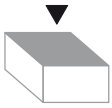


+ L5 112 F



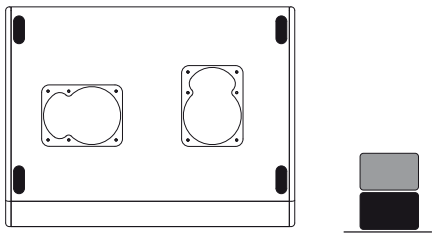
3. L SUB 2000/A horizontal





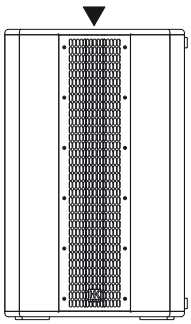
Top view

+ L SUB 2000



Front

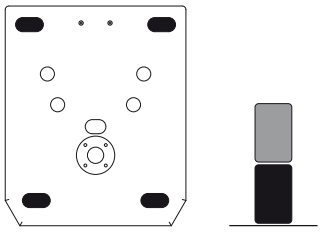
4. L SUB 2000/A upright





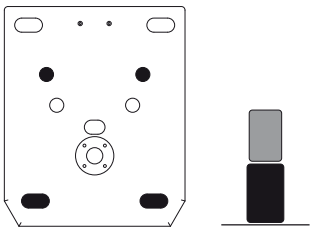
Top view

+ L SUB 2000



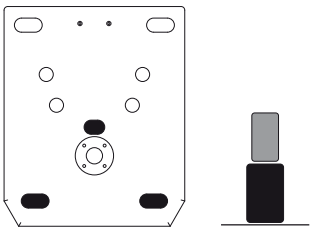
Front

+ L5 115 F



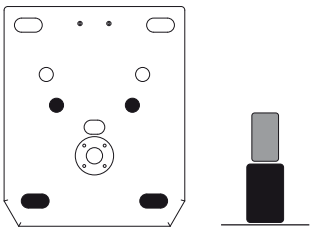
Front

+ L5 112 X



Front

+ L5 112 F



Front

LINEAR SUB

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