

K&F SEQUENZA 5 incl. accessories



Operating Instructions

Translation of the original instructions

Version 4.6

Released: 16.12.2016



**Important Information,
Please Read Before Use!**

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KLING &
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SOUND SYSTEMS

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1. Introduction

Thank you for purchasing a KLING & FREITAG product. To guarantee a trouble-free operating of the equipment and to allow your device to achieve its full potential please read the operating instructions carefully before use. With the purchase of a SEQUENZA 5, you have acquired a sound system with the highest possible quality and performance capabilities. As the owner of a SEQUENZA 5 system, you now have a versatile and highly professional tool that will satisfy the full range of highest demands on sound quality.

1.1 Icons Used



Warning

This icon indicates a risk of injury or death. Not following these instructions may result in serious health problems including potentially fatal injuries.



Caution

This icon indicates a possibly dangerous situation. Not following these instructions may cause minor injuries or damage.



Notice

This icon marks instructions for proper use of the described products. Not following these instructions may cause malfunctions or damage.



Tip

This icon marks information provided for simplified use of the described products.

1.2 About these operating instructions

Operating Instructions SEQUENZA 5 W and SEQUENZA 5 B in combination with the SEQUENZA 5 flying frame and accessories.

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All specifications regarding the features of the described products and applicable safety guidelines provided in these operating instructions are based on information available at the time of publishing.

We assume no responsibility for technical specifications, dimensions, weights, and properties.

All information in these operating instructions is subject to change without notice.

To ensure safe operation, all persons using the speaker system must have access to these operating instructions and all other relevant material during installation. Don't set up or operate the speaker system before you have carefully read and fully understood this operating instructions. Keep the operating instructions readily available on site at all times.

When re-selling the SEQUENZA 5 system, the seller must hand these operating instructions over to the buyer. The buyer must consult the Kling & Freitag website to find out if an updated version of these operating instructions is available. He is obligated to use the most current version of these operating instructions in the future.

The original language of all KLING & FREITAG operating instructions is German.

If you need operating instructions from KLING & FREITAG, you can order a replacement or download it from our www.kling-freitag.de.

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2. Items Included

2.1 Items Included SEQUENZA 5 W

- Full-range speaker system with integrated 'Snap&Fly+' rigging system incl. ball lock pin (usable with SEQUENZA 5 flying frame only)
- (1x) Operating Instructions

The calculation software CON:SEQUENZA+ is necessary to operate the system. Download the most current version from our website <http://www.kling-freitag.biz/>.

2.2 Scope of Delivery SEQUENZA 5 B

- Subwoofer with integrated 'Snap&Fly+' rigging system incl. ball lock pin (usable with SEQUENZA 5 flying frame only)
- (1x) Operating Instructions

The calculation software CON:SEQUENZA+ is necessary to operate the system. Download the most current version from our website <http://www.kling-freitag.biz/>.

2.3 Items Included SEQUENZA 5 Flying Frame

- Flying frame for flying and stacking speakers SEQUENZA 5 W and SEQUENZA 5 B, incl. ball lock pin.
- 1 x 3.25 t shackle (for optional safety chain)
- 2 x load adapter
- 1 x TV spigot
- 1 x flying frame connector

2.4 Scope of Delivery SEQUENZA 5 VariMount Adapter

- VariMount adapter for using max. three SEQUENZA 5 W speakers on a speaker stand and for flying with a TV spigot.
- TV spigot
- Pole mount socket

2.5 Scope of Delivery SEQUENZA 5 Downfill Adapter

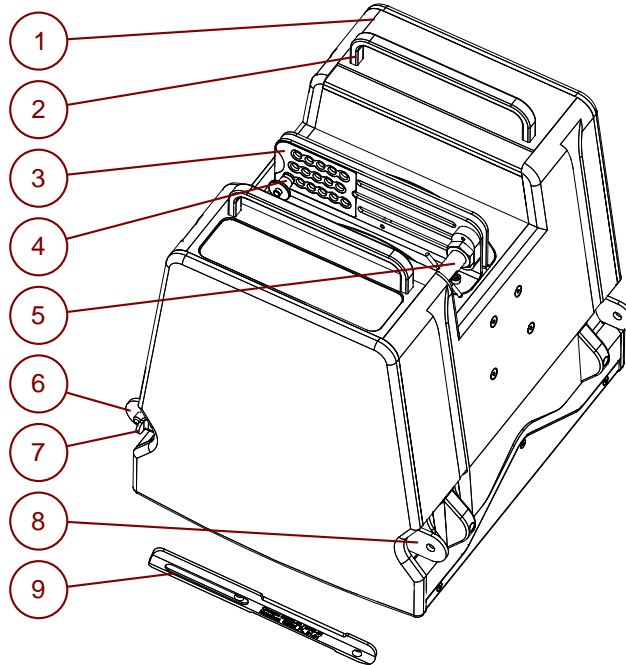
- Downfill adapter for mounting up to three SEQUENZA 5 W speakers under flown SEQUENZA 10 speakers.

2.6 Scope of Delivery SEQUENZA 5 Transport Case

- Transport case for three SEQUENZA 5 W speakers

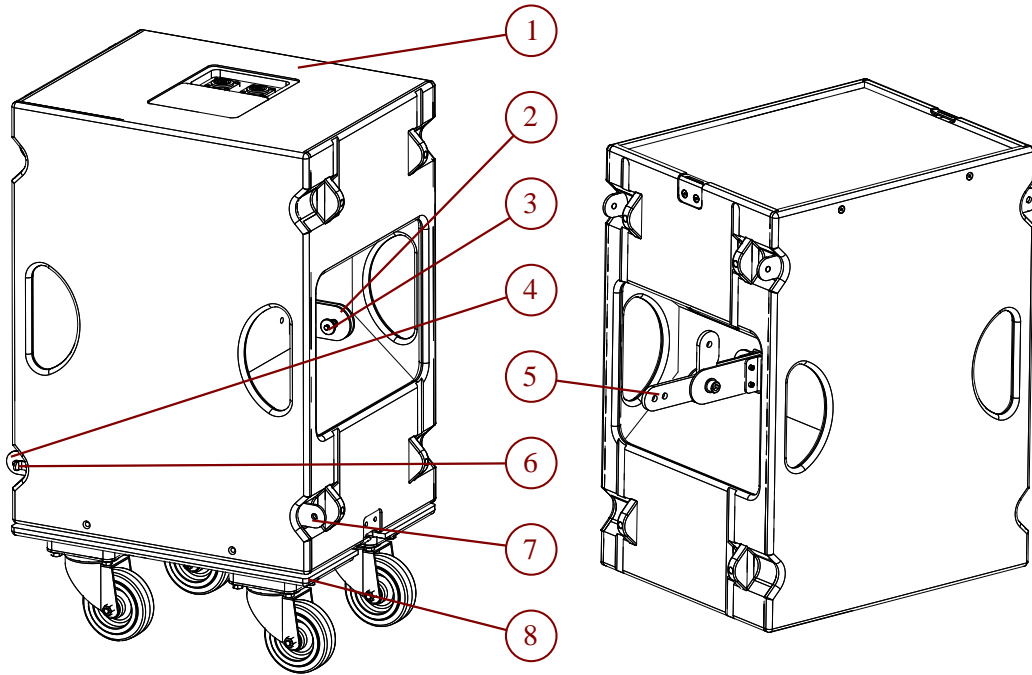
3. Product Description

3.1 Overview of SEQUENZA 5 W Parts



1. speaker enclosure
2. handle
3. Rear connecting plates (with park position connector)
4. Quick Release Pin
5. spring bolt
6. Joint bar (with bolt)
7. Safety latch 'Safelock'
8. Joint bar
9. Connector

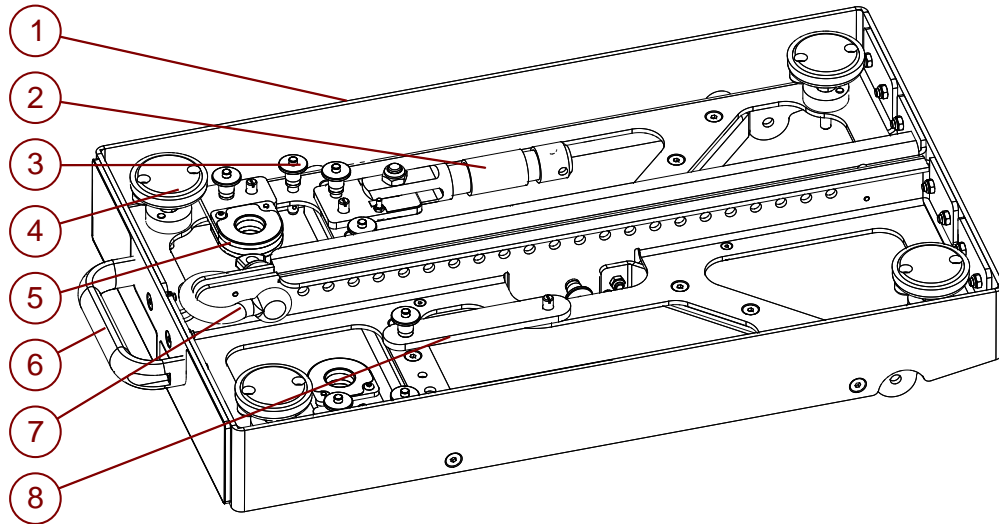
3.2 Overview of SEQUENZA 5 B Parts



1. Housing
2. connector brackets
3. Quick Release Pin
4. Joint bar (with bolt)
5. L connector
6. Safety latch 'Safelock'
7. Joint bar
8. Transport cover

3.3 Overview Components SEQUENZA 5 Flying Frame

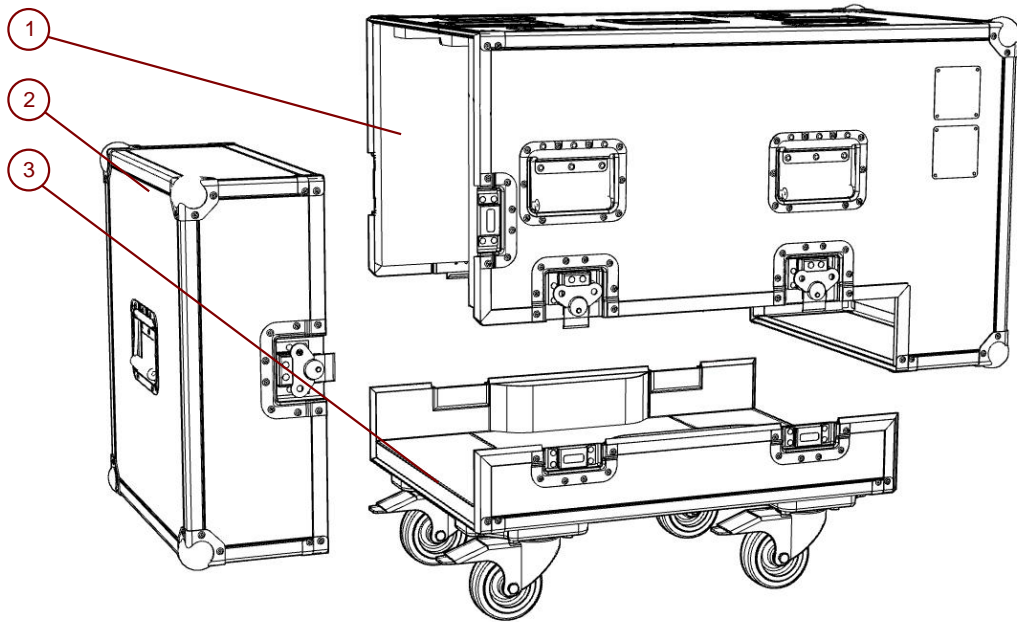
This flying frame was designed for flying or stacking KLING & FREITAG speakers SEQUENZA 5 W and SEQUENZA 5 B.



1. SEQUENZA 5 flying frame
2. TV spigot (in park position)
3. Quick Release Pin
4. Heavy duty foot, rear
5. Load adapter (in park position)
6. handle
7. 3.5 t shackle (in park position)
8. Flying frame connector (in park position)

3.4 Overview Components SEQUENZA 5 Transport Case

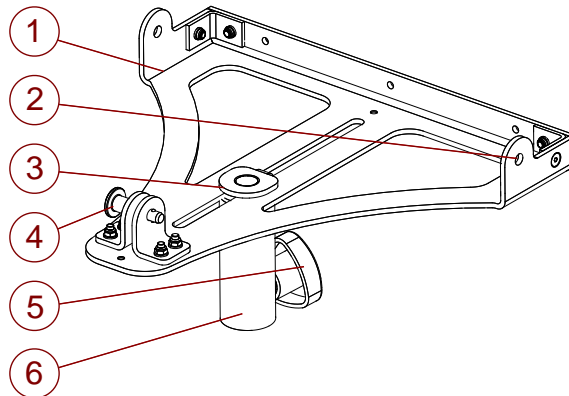
The SEQUENZA 5 transport case was specially designed for transporting three SEQUENZA 5 W speakers.



1. Case cover
2. Front cover
3. Castor base

3.5 Overview Components SEQUENZA 5 VariMount Adapter

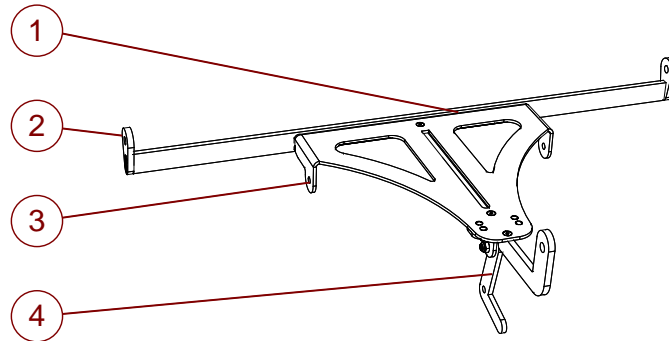
The VariMount adapter was designed for stacking KLING & FREITAG speakers SEQUENZA 5 W on speaker stands.



1. VariMount adapter
2. Adapter clamp
3. Vari connector
4. Joint bar
5. 'Stand adapter M10' with clamping screw
6. TV spigot

3.6 Overview Components Downfill Adapter SEQUENZA 10 to 5

This downfill adapter was designed for combining SEQUENZA 5 W with SEQUENZA 10 NW speakers.



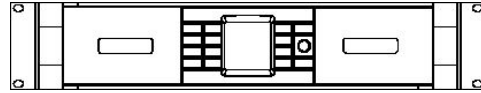
1. Downfill adapter
2. Joint bar SEQUENZA 10
3. Joint bar SEQ 5
4. Rear connector SEQUENZA 5

4. System Requirements for Use

4.1 System Requirements

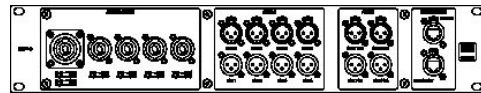
K&F PLM+ 20k44 (SystemAmp, ProRental)

K&F PLM+ 12k44 (SystemAmp, ProRental)



with

Connector Panel CP+
Anschlussfeld
(optional)

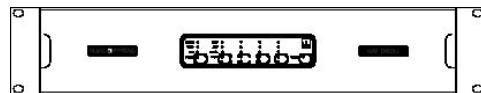


or

K&F D200:4 (SystemAmp, InstallSound)

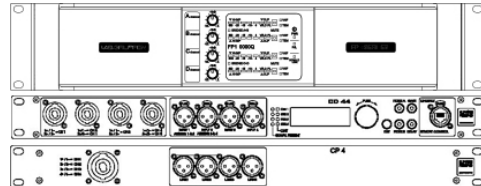
K&F D120:4 (SystemAmp, InstallSound)

K&F D80:4 (SystemAmp, InstallSound)



or

K&F SystemRack



5. Safety Instructions



Warning

The information described here does not relieve the user of the duty to follow the given safety requirements and legal regulations.

Only qualified technicians are permitted to perform the installation steps. Be sure to use personal protective equipment at all times.

The technicians responsible for installing the system on site are responsible for and guarantee safe setup and use.

To prevent injury and damage, be sure to securely place or suspend the speaker array as specified in the DGUV regulations 17 or similar locally applicable accident-control standards.

The flying frame is solely for commercial use and only for the suspension of the KLING & FREITAG speaker models SEQUENZA 5 and SEQUENZA 5 B in the manner described here.

It is only permissible to set up a configuration after the simulation software CON:SEQUENZA+ has indicated in the window 'Object properties' that this configuration is approved for use in the desired application.

You must observe and comply with the simulation software's safety instructions.

Run the cables in a way that nobody can trip over them.

Unless otherwise stated, use only KLING & FREITAG original parts for mounting the speakers. Never use other parts (in particular, parts not made by KLING & FREITAG).

In mobile and stationary installations, always use installation parts supplied by KLING & FREITAG. KLING & FREITAG

Be sure to always visually inspect all array components before use. In fixed installations, regularly check all array components for signs of wear. Visual inspection includes checking all speaker-system and flying frame components, supporting components (e.g. trusses, ceiling structures, etc.), and all screwed connections. During the inspection, check all flying-system components carefully for deformation, cracks, bolt damage, and corrosion. Remember checking the fixing pin and pin bolts for proper functioning. Also check slings and lifts (e.g. shackles, chains, and steel ropes) carefully for wear and deformation. If there are signs of wear, cracks, or deformation, etc., replace the affected parts immediately. See also the "Care and Maintenance" chapter on page 84.

5.1 Safety Instructions for Flying Configurations

**Loudspeakers falling down impose a deadly risk for people standing near-by!
Never use the array if you have any doubt regarding its safety and reliability!**

Only qualified event technicians are permitted to suspend a SEQUENZA 5 system.

Never suspend the speakers without the correct flying frame.

The maximum working load limit (**WLL**) of the flying frame depends on the selected setup.

Maximum-load specifications refer to configurations including cabling and any fittings. The provided simulation software 'CON:SEQUENZA+' must be used to determine if the frame is loaded permissibly. The CON:SEQUENZA+ software does not account for the weight of extra cabling and fittings! When following the specifications of the CON:SEQUENZA+ simulation software, consider this additional weight and reduce the number of speakers accordingly.

If the simulation software CON:SEQUENZA+ does not confirm the compliance with DIN 18 800, the array may not be assembled in the simulated setup.

If the simulation software CON:SEQUENZA+ does not confirm the compliance with BGV C1, no one may be situated in this area between the assembly and disassembly – not even those involved in assembly and disassembly. You must effectively block off this area and secure it from trespassing.

Ensure that all connections are secured against coming loose and that only authorized, statically tested and correctly sized supports, mounting equipment, wire ropes and chains are used. Follow the relevant specified safety factors. Be sure to follow the relevant national specifications, norms, and safety regulations.

Note that every suspension point as well as the supporting structure of the building (i.e. ceiling points, cross beams and stage or PA tower, etc.) must be capable of carrying the total load of the system (including cabling and additional fittings).

Note that the suspension points on the hall ceiling (i.e. shackles, attachment points, or chain hoists) must comply with the DGUV regulations 17 or similar locally applicable accident-control standards. The maximum load must have been certified by an authorized expert. When in doubt, request a confirmation by local authorities.

Also follow the operating and safety instructions supplied with the product you intend to suspend the flying frame from (e.g. a truss). Never mount the flying frame to a product if there is no information on safe use and maximum load.

Even with two-fall suspension, each chain and motor must be capable of carrying the entire array mass! Make sure that the motor chains hang down vertically and are not twisted, and that the motors are located at the required positions.

When operating with chain hoists that do not comply with the BGV C1 or the D8+, no one may be present in the danger zone underneath or near the speaker array.



Warning

If a BGV (government safety organisation) C1 or a D8+ motor is used, the SEQUENZA 5 system is intrinsically safe and does not require any secondary securing. If the SEQUENZA 5 system is, however, to be hung on another motor, then secondary securing is necessary. This can be attached to the 3.5 t shackles and must be implemented with zero drop height. Instructions for the correct use of secondary securing with zero drop height are in the standard VPLT (Assoc. of Media and Event Technology) SR 2.0 "Preparation & use of electric chain hoists".

Never use signal cables or power cords for suspending, aligning, or securing the systems. Run the cables in a way that nobody can trip over them.

Ensure there is sufficient clear space for assembling and suspending the array on-site.

Remember that the array may swing out wide!

Permit only personnel directly involved with assembly or disassembly to access the working area. The person in charge must announce all flying frame lifting and lowering activities beforehand and make sure all people attending are aware. In this case, all persons present must leave the swing and lifting range immediately.

Never use the flying frame for lifting or safeguarding persons or objects other than the above speakers.

Never use an array as a climbing aid.

The safe use of the flying frame and the speakers also depends on the various factors present at the area of use. Weather conditions such as wind or rain, for example, can compromise the safety of the flying frame and speakers. Always consider and evaluate these factors. (See chapter 'Wind Loading' on page 17.)

5.2 Safety Instructions for Stacked Setups

Falling speakers pose the threat of injuries to people near them!

Be sure to follow the relevant national specifications, norms, and safety regulations.

Always make sure that a sufficient safety level is still given, even when outside forces have an additional impact on the stacked speakers. Before setup, carefully ascertain if there are any possible outside forces that could result in the array falling over. (Slant of the ground / the bearing capacity of the ground / wind / person or vehicle impact, etc.). A technical expert who is responsible for the setup must evaluate and determine necessary measures (including calculating the statics). If necessary, obtain expert proof of stability.

For the stability inspection, you must always factor in an imperfection (tilt) of $\pm 15^\circ$ and destabilising loads. A planned tilt of the flying frame is not permissible. In calculations, the tilted setup serves the purpose of levelling out unevenness.

With the set-up systems for which you cannot verify the structural safety without safeguards, you must secure them to prevent sliding or tipping in order to provide proof of this safety. To secure the system from tipping over, use water tanks or floor bolts. Other possible measures include strapping it to a suitable substructure or tying it using safety straps. The simulation in the CON:SEQUENZA+ software is not valid as a verification of structural safety. This software always states that you must secure stacked speakers to prevent their falling over.

For outdoor and trade fair venues in which wind loads must be considered, additional proof of stability is necessary.

Maximum number of stacked speakers

The number of speakers (max. 7) depends on the tilting angle and must be verified by the simulation software CON:SEQUENZA+. This shows if the structural stability is attained with the optional outriggers or if the system has to be separately secured (i.e. with straps, weights, etc.) The simulation software CON:SEQUENZA+ shows if safe operation with the outriggers is guaranteed. The setup configuration with the outriggers must be secured. But even with additional securing, no more than seven speakers may be stacked.



Warning

5.3 Wind Loading

For open air events, obtain current local wind and weather data. The following chart provides a preliminary indication

Bft	m/s	Windspeed	Description
0	0 – 0.2	Calm	Smoke rises vertically
1	0.3 – 1.5	Light air	Smoke drift indicates wind direction, vanes do not move
2	1.6 – 3.3	Light	Wind felt on face, vanes begin to move
3	3.4 – 5.4	Gentle	Leaves, small twigs in constant motion, light flags extended
4	5.5 – 7.9	Moderate	Dust, leaves, and loose paper raised up, small branches move
5	8.0 – 10.7	Fresh	Small trees in leaf begin to sway, whitecaps on lakes visible
6	10.8 – 13.8	Strong	Larger branches of trees in motion; whistling heard in wires
7	13.9 – 17.1	Near gale	Whole trees in motion; resistance felt in walking against wind
8	17.2 – 20.7	Gale	Twigs and small branches broken off trees



Warning

For outdoor uses, we recommend using at least a BGV D8+ hoisting device to avoid wind causing the release of the secondary safety device.

If wind speeds higher than Beaufort 5 are expected, you must constantly consider the wind speed and its possible influence on the array. As well as the fact that the wind speed increases the higher the array is.

With expected wind speeds exceeding Beaufort 5, construct the rigging and safety points so that they can carry at least twice the static load.

With wind speeds exceeding Beaufort 6 (14 m/sec.), arrays are not recommended.

As of a wind speed of Beaufort 6, you must clear the area under the speakers. Effectively prevent the arrays from swaying in the wind by tying them off or using a lateral fixation. If the suspended load sways, it can create significant inertial force that can result in the PA tower structurally collapsing or tipping.

With wind speeds of Beaufort 8 or more, you must lower and disassemble the array.

5.4 Preventing Hearing Damage



Caution

Keep your distance from operating speakers. This equipment is capable of delivering sound pressure levels in excess of 90 dB SPL, which may cause permanent hearing damage.

5.5 Protecting the Speakers / Operating Safety

Notice

SEQUENZA 5 speakers may only be used in combination with a K&F SystemAmp/SystemRack.

In general, audio signals must not be overdriven. This may be caused by mixing consoles, equalizers, effect equipment, etc. and should be indicated on this equipment. When a power amplifier is overloaded at the output (clipping), then the amplifier activates a clipping warning signal. In any case, the signal must be reduced as soon as it sounds unnaturally distorted.

For damage caused by

- overloading the speakers or
- using the speakers without K&F SystemAmp/SystemRack

we do not assume warranty and excludes liability for possible consequential damage.

The following signals may damage the speakers:

- permanent high-level signals with high frequency and continuous noise from feedback,
- permanently distorted high-level signals,
- noises, which occur when the amplifier is on while equipment is being connected, disconnected or switched on.

Do not install devices in any of the following places:

- where the devices are permanently exposed to direct sunlight.
- where the devices are exposed to high moisture or rain.
- where the devices are exposed to strong vibrations and dust.

Damage caused by the speakers' magnetic fields

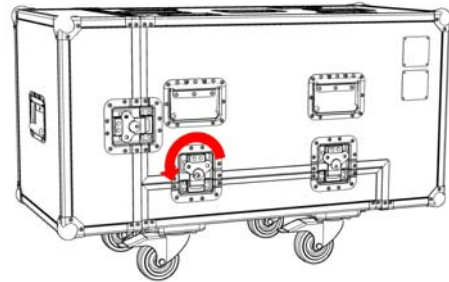
Speakers are permanently surrounded by a magnetic field, even when they are not connected. Therefore, during transport and placement of the speakers, it is important to ensure that there is always approx. 1 m between the speakers and magnetic data media and computer/video monitors.

6. Opening the Transport Case

In the SEQUENZA 5 transport case three SEQUENZA 5 W speakers are safely packed. When dismantling the speakers, you can leave them connected in any given tilt angle. You need not remove or loosen the rear connectors. This makes them easier to dismount and faster to disassemble.

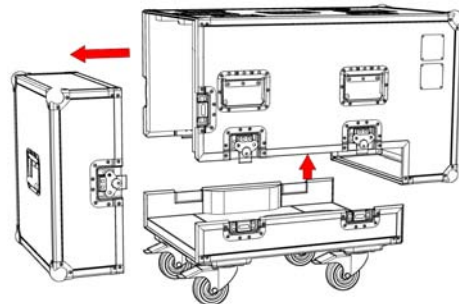
To remove the transport lid, turn the appropriate catches 180° to completely release the latch.

Once you have released catches, you can lift off the lid.



To remove the front lid, you must open two catches.

To remove the main lid, you must also open the four bottom catches.



You close the case by following these steps in reverse order.

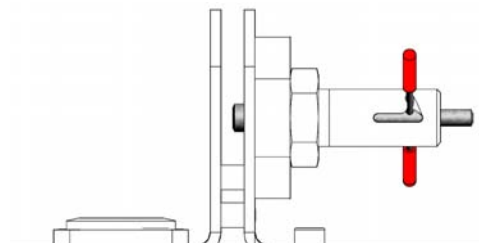
7. Using the Spring Bolt

The spring bolt is the central bolt of the 'Snap&Fly+' rigging system.

It can be set to four positions that you have either set manually or that have come about because of the handling of the speakers.

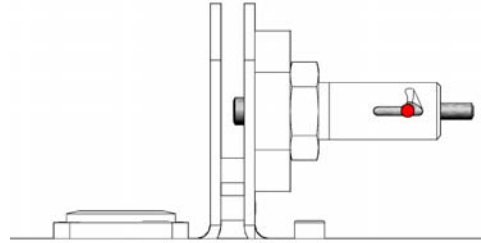
Initial position:

The spring bolt is under tension. You can mount a standard connector.



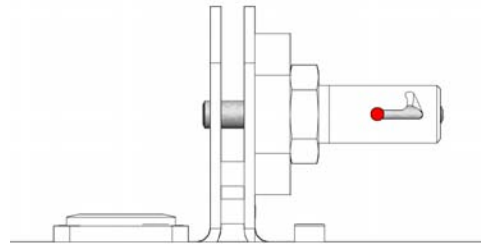
Waiting position:

In this position, the spring bolt is connected to a standard connector (not shown) and is 'waiting' for the speaker to move, snapping into its locking position.

**Locking position:**

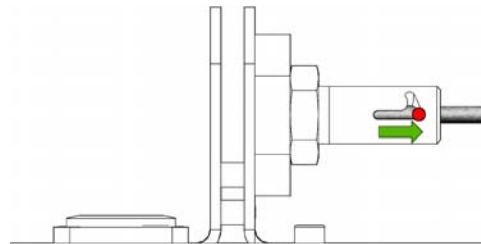
In this safe position, the spring bolt is holding a connector.

On the opposite side, the spring bolt protrudes.

**Release position:**

The spring bolt can only be manually moved to this position.

To release a connector from the spring bolt, the user must pull the spring bolt as far as it will go and hold onto it.



8. Safe Connecting and Disconnecting of the Products

To safely connect or disconnect the products, you always need the same hand grips. In general, the joints must always be connected and the appropriate speaker connector must be used and attached to the other speaker, flying frame, or adapter. To prevent inadvertent loosening, you must always ensure that the safety latch snaps over each joint. When you have mounted everything correctly, a red dot is visible on the safety latch.

For disassembly, release the connector first and then fasten it in its parking position. After doing so, you must then push the safety latch into the enclosure using one hand, then release the product to be dismantled to the side and then completely release it.

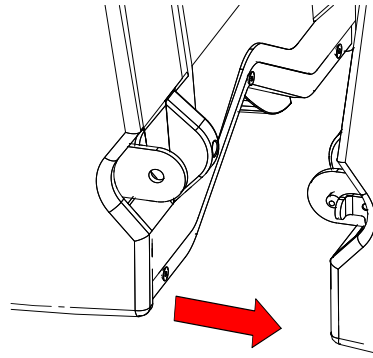
The safety latch is always on the speaker.



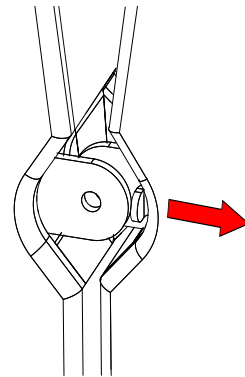
Tip

In general, all SEQUENZA 5 speakers can be safely connected to one another and with the SEQUENZA 5 adapters this way.

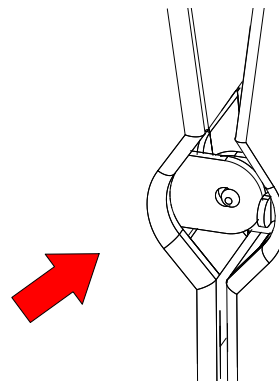
- 1 Place the speaker, flying frame or adapter onto a standing speaker so that the joint bars are next to one another.



2. Ensure that the safety latch of the standing speaker is pushed into the enclosure by the joint bars of the adjoining device.



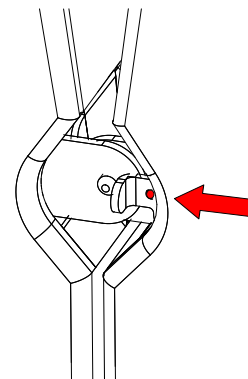
3. Push the speaker to the side to allow the joint bars to connect properly and ensure that the safety latch of the joint snaps into place.



4. The safety latch makes a clearly audible clicking noise when snapping into place.

Make sure that the joint bolts in both joints are properly connected in the joint bar.

Make sure the red dot is visible on the safety latch, indicating a properly locked joint.



In general, all SEQUENZA 5 speakers and SEQUENZA 5 adapters can be safely disconnected this way.



Warning

Risk of injury: Never disconnect speakers that are suspended or are installed by stretching!

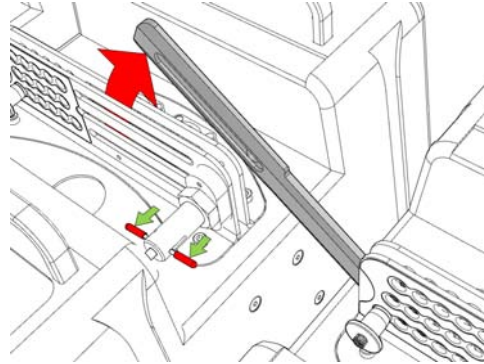
Take the load off the speakers' connecting points by laying the array onto the castor base of the transport case or by vertically lowering three speakers at a time into transport cases, thus lessening the load.

- 1 Loosen the connector on the spring bolt.

Do this by pulling the spring bolt out and holding it in this retracted position (release position, compare to 'Handling the spring bolt', page 20).

Pull the connector out and fold it between the connecting plates.

When all connections have been released, fasten the connector with the speaker's own spring bolt.

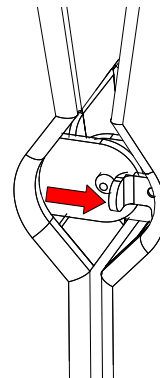


Tip

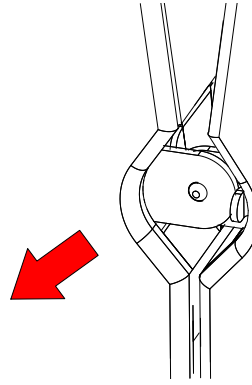
You should completely disassemble the flying frame connector and fasten it in its parking position on the rigging frame.

You should now mount the SEQUENZA 5 W connectors that you parked on the rigging frame during setup back onto the speaker.

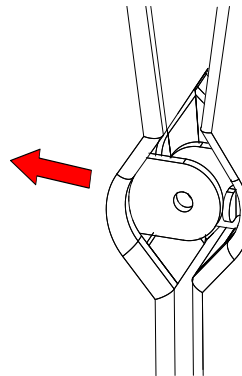
2. Using both hands, grasp to the right and left of the connecting joints and push the safety latch into the speaker using one finger.



3. To separate the joints, push the speaker to the side.



4. Slide the speakers apart.



9. SEQUENZA 5 Setup

9.1 Setup Variations

You can choose between the setup variations

- flown setup, SEQUENZA 5 W only
- stacked setup, SEQUENZA 5 W only SEQUENZA 5 B
- flown setup, SEQUENZA 5 W under SEQUENZA 10 N/W
- flown setup, SEQUENZA 5 B only
- stacked setup, SEQUENZA 5 W with SEQUENZA 5 B
- stacked setup, SEQUENZA 5 W with SEQUENZA 5 B, without flying frame
- Setup on a stand, SEQUENZA 5 W only

9.1.1 Setup variations, flown

If a BGV (government safety organisation) C1 or a D8+ motor is used, the SEQUENZA 5 system is intrinsically safe and does not require any secondary securing. If the SEQUENZA 5 system is, however, to be hung on another motor, then secondary securing is necessary. This can be attached to the 3.5 t shackles and must be implemented with zero drop height. Instructions for the correct use of secondary securing with zero drop height are in the standard VPLT (Assoc. of Media and Event Technology) SR 2.0 "Preparation & use of electric chain hoists".

Make sure no persons are standing below the configuration while lifting.

To remove a SEQUENZA 5 B lid, the array must be standing on the ground.



Warning

**Caution**

The simulation software CON:SEQUENZA+ must always verify the number of speakers.

It is generally prohibited to exceed the maximum number of 15 speakers.

To prevent injury and damage, be sure to securely place or suspend the speaker array as specified in the DGUV regulations 17 or similar locally applicable accident-control standards.

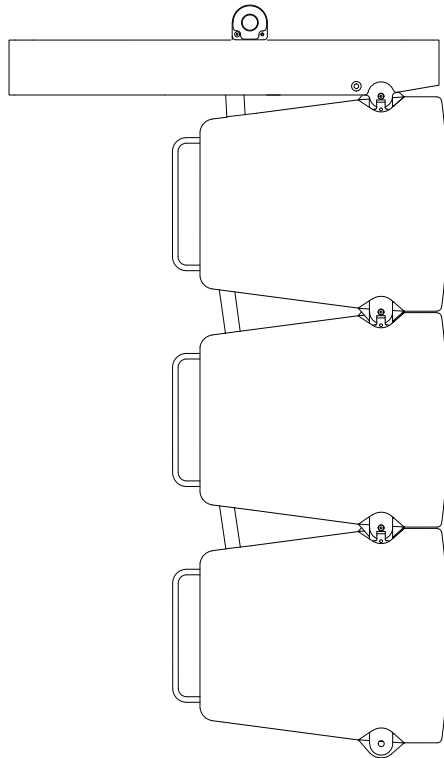
Always assemble the complete rigging frame first before connecting the rigging frame to the speakers.



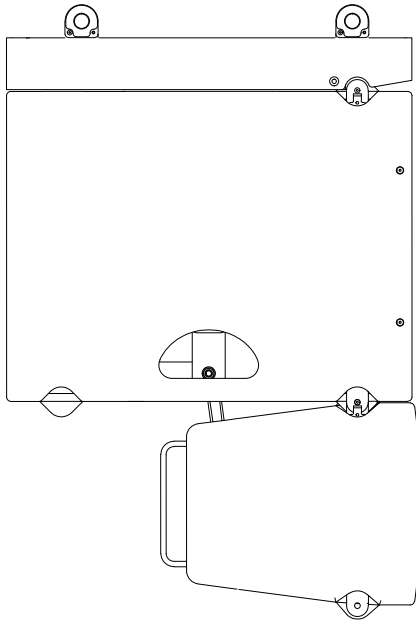
During setup, always make sure to use the correct connectors. When connecting the SEQUENZA 5 flying frame with a SEQUENZA 5 W speaker, you must always use the flying frame connector.

Using a wrong connector or incorrectly installing a connector can result in certain tilt angles being impossible or the array tipping because of a shifted centre of gravity. This would lead to unfavourable acoustic results. For this reason, always follow the depictions and descriptions mentioned in these operating instructions.

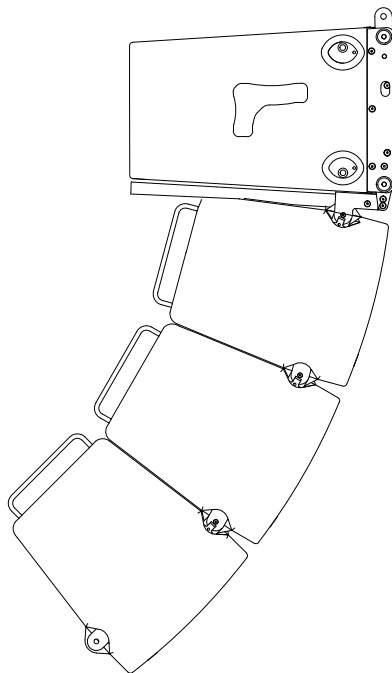
The following illustrations show you the possible setup variations with the corresponding chapters in which the working steps for the setup are explained.

**see following chapter:**

- General Preparation
- SEQUENZA 5 Flying Frame Preparation, Flown Setup
- Mounting SEQUENZA 5 W to SEQUENZA 5 Flying Frame, page 35
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown, page 39

**see following chapter:**

- General Preparation
- Preparing SEQUENZA 5 Flying Frame, Flown, page 30
- Mounting SEQUENZA 5 B to Flying Frame, page 34
- Mounting SEQUENZA 5 W to SEQUENZA 5 B, Flown, page 37
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown, page 39

**see following chapter:**

- When setting up Sequenza 10 speakers, consult the appropriate manual.
- Mounting the downfill adapter under the Sequenza 10, page 45
- Hanging the SEQUENZA 5 W under the downfill adapter
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown, page 39

9.1.2 Mounting Variations, Stacked



Warning

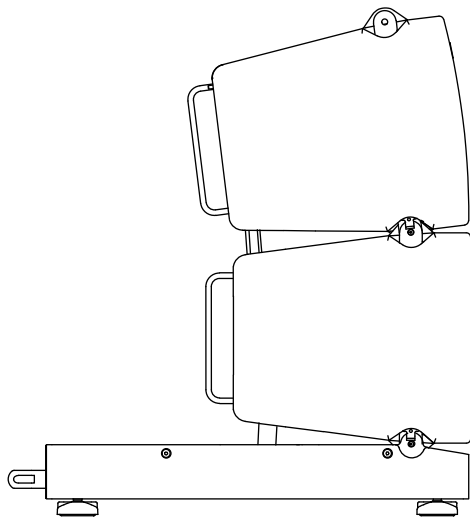
No matter which setup you use, you must always secure the array to prevent tipping and falling. To ensure safety, you can either use the lying flying frame with the optional accessory 'outrigger' or secure the array – with or without the flying frame – with suitable anchoring such as lashing straps.

We recommend using the optional accessory 'outrigger' that you can purchase from your K&F dealer. They are easy to mount and reliably secure the standing array to prevent falling.

The simulation software CON:SEQUENZA+ must always verify the number of stacked speakers (max. 7). It is generally prohibited to exceed the maximum number of 7 stacked speakers.

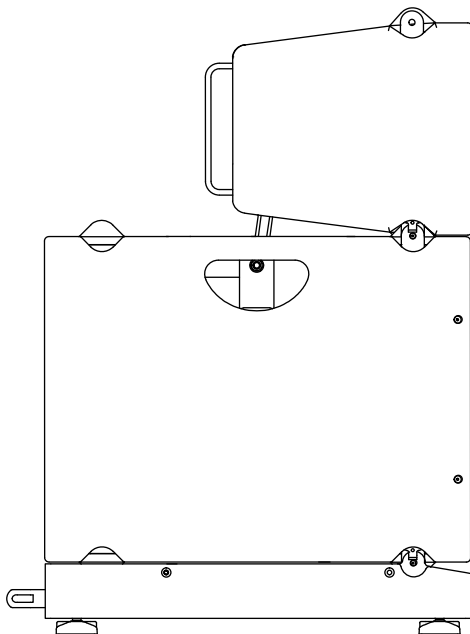
Before setup, make sure there is a stable and even surface.

The following illustrations show you the possible setup variations with the corresponding chapters in which the working steps for the setup are explained.



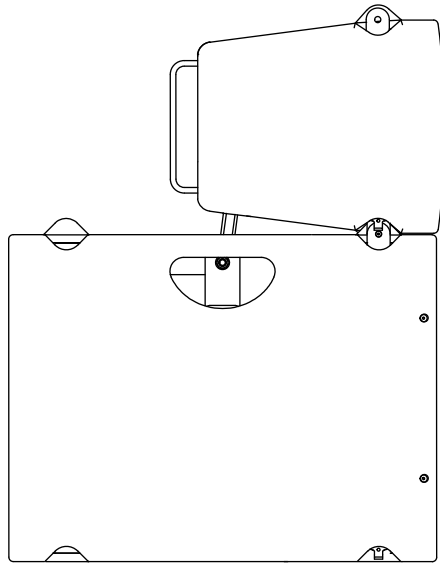
see following chapter:

- General Preparation
- Preparing SEQUENZA 5 Flying Frame, Flown, page 35
- Mounting SEQUENZA 5 W to SEQUENZA 5 Flying Frame, Stacked, page 52
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown, page 35



see following chapter:

- General Preparation
- Preparing SEQUENZA 5 Flying Frame, Flown, page 35
- Mounting SEQUENZA 5 B to Flying Frame, page 30
- Mounting SEQUENZA 5 W to SEQUENZA 5 B, Flown
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Page 56



A flying frame under a SEQUENZA 5 B speaker is not absolutely necessary. It is, however, very helpful when aligning the speakers on an uneven surface.

The structural stability must always be ensured!

see following chapter:

- General Preparation
- Mounting SEQUENZA 5 W to SEQUENZA 5 B, Flown
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown

9.1.3 Mounting Variation: Stand



Warning

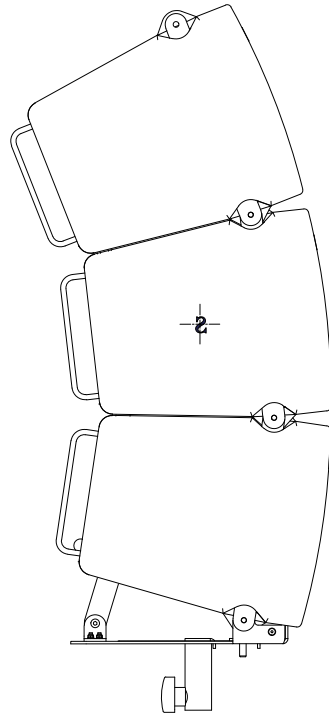
You may only mount a maximum of three speakers on a stand.

It is forbidden to mount a SEQUENZA 5 B speaker on a stand.

Before setup, make sure that there is a stable and even surface and the stand has a sufficient load capacity.

The following illustrations show you the possible setup variations with the corresponding chapters in which the working steps for the setup are explained.

Because the centre of gravity must always be directly above the stand, you must always check the speaker configuration with the simulation software CON:SEQUENZA+.

**see following chapter:**

- General Preparation
- Preparing the SEQUENZA 5 VariMount adapter and the speaker stand, page 58
- Mounting SEQUENZA 5 W to SEQUENZA 5 Flying Frame, Stacked, page 52
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Stacked, page 56

9.2 General Preparation



Warning

See the instructions in chapter 'Safety Instructions' from page 15 and in the corresponding sub-section 'Safety Instructions for Flying Configurations' from page 16.

When setting up, double-check **each** fixing pin for secure fit.

Simulate the desired configuration with the simulation software CON:SEQUENZA+ and determine the necessary tilt angle of every speaker. On the rear joint plate of the speakers, there are drill holes with the corresponding angles marked.

Print out the results of the simulation so that you can check the settings at any given time and so you have a documentation of the settings.



Tip

Before setup, adjust the tilt angle of every speaker.

9.3 Flown Setup

9.3.1 Prerequisites, Flown Setup



Warning

See the instructions in chapter 'Safety Instructions' from page 15 and in the corresponding sub-section 'Safety Instructions for Flying Configurations' from page 16.

When setting up, double-check **each** fixing pin for secure fit.

Preparation: You should have simulated the desired speaker configuration with the provided software CON:SEQUENZA+ and printed out the results. You can only be certain that the configuration is not overloaded if you have done the simulation. Aside from this, the software provides information about the tilt angles of the individual speakers.

You should have set the necessary tilt angle on every speaker.

9.3.2 SEQUENZA 5 Flying Frame Preparation, Flown Setup



Warning

If a BGV (government safety organisation) C1 or a D8+ motor is used, the SEQUENZA 5 system is intrinsically safe and does not require any secondary securing. If the SEQUENZA 5 system is, however, to be hung on another motor, then secondary securing is necessary. This can be attached to the 3.5 t shackles and must be implemented with zero drop height. Instructions for the correct use of secondary securing with zero drop height are in the standard VPLT (Assoc. of Media and Event Technology) SR 2.0 "Preparation & use of electric chain hoists".

Before speaker setup, you must prepare the SEQUENZA 5 flying frame completely.

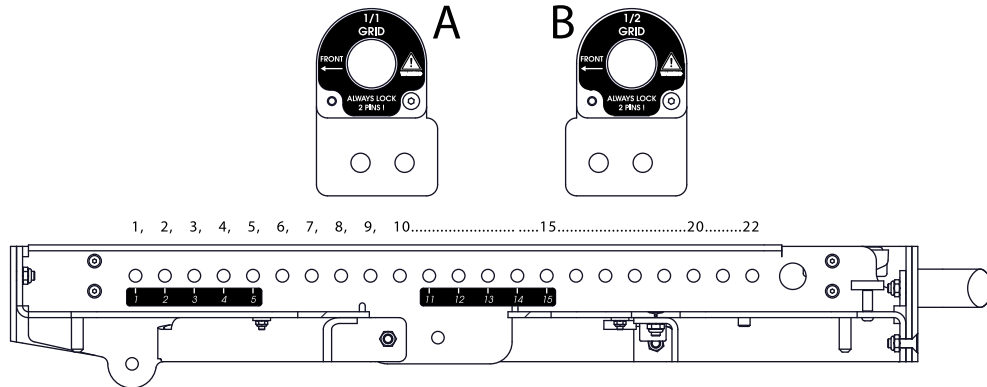
Using the CON:SEQUENZA+ software, you can simulate both single-fall and dual-fall configurations. For one-strand rigging, use one load adapter; for two-strand rigging, use two load adapters.

The drill holes on the flying frame where the load adapters are to be attached are determined by the simulation software CON:SEQUENZA+. You will find the specifications on the relevant calculation printouts. The specification of the drill hole in the simulation software refers to the drill hole in the load adapter that is facing the front side of the frame. The front side of the frame is marked with a sticker (Front).

With the required second ball lock pin, the connection in the next drill hole is secured.

The drill holes in the flying frame are numbered consecutively from 1 to 22, beginning on the front end of the frame (Front). For your orientation, the drill holes 1 to 5 and 11 to 15 are labelled.

You can set the position of the load adapters in 1/2-steps because they are usable on both sides. This doubles the flying-frame bore grid and thus the adjustment options. The load adapters are labelled with '1/1 Grid' on the one side and '1/2 Grid' on the other. The simulation software CON:SEQUENZA+ gives you the information whether a load adapter should be mounted in the 1/1 or the 1/2 position. In the 1/1 position (**A**), the arrow on the 1/1 side of the load adapter must point toward the front side of the flying frame (Front). In the 1/2 position (**B**), the arrow on the 1/2 side of the load adapter must point toward the front side of the flying frame (Front).



A = Load adapter 1/1 grid position

B = Load adapter 1/2 grid position



Tip

Tip for unneeded accessories

An appropriate bay exists for each accessory items such as connector sets or fixing pins. Whenever an accessory is not in use, lock it in the appropriate bay. Doing so will ensure that all accessories will be at hand when needed.

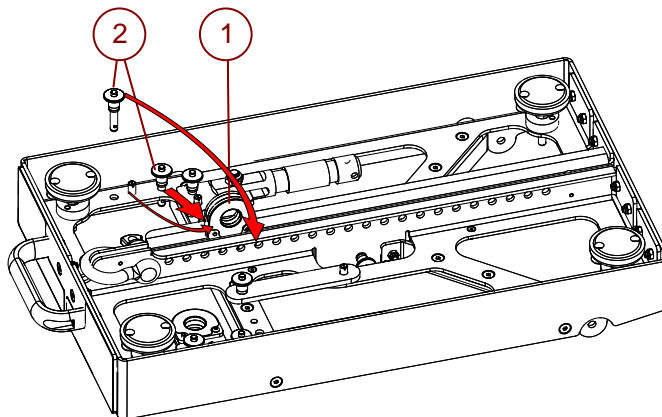


Notice

Instructions about using the load adapter or the TV spigot

Always use the simulation software CON:SEQUENZA+ to calculate the correct position of load adapters or TV spigots. In this calculated position, the array is guaranteed to fly at the desired angle later, and the sound will be emitted correctly.

9.3.2.1 Installation of a Load Adapter



Take the load adapter **(1)** out of its park position and place it onto the drill hole on the flying frame, as determined by the simulation software CON:SEQUENZA+.

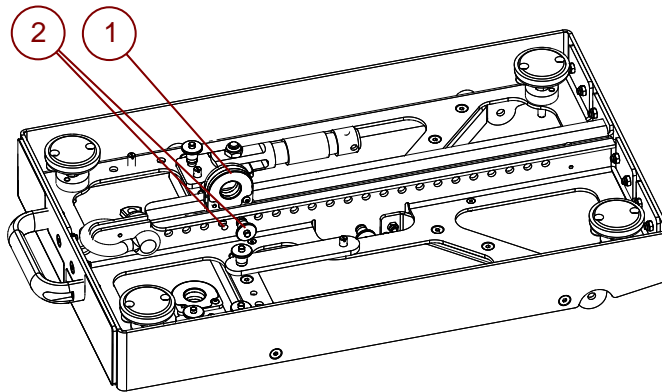
With a two-strand rigging, proceed with the second load adapter accordingly.

Make sure the load adapter is correctly aligned.

Always fasten the load adapter with **two** ball lock pins **(2)**.

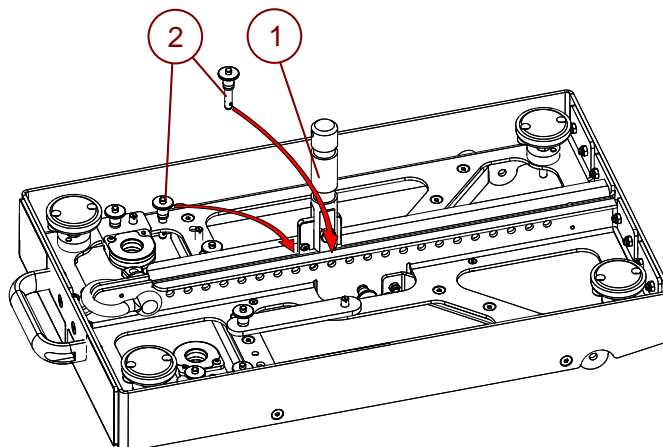


Warning



Make sure the load adapters **(1)** and the two ball lock pins **(2)** are secured in place.

9.3.2.2 Installing the TV Spigot



Remove the TV spigot **(1)** from its park position and place it on the drill hole on the flying frame, as determined by the simulation software CON:SEQUENZA+.

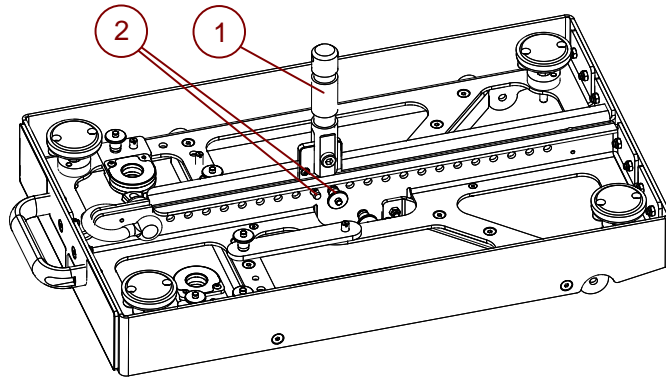
To do so, select a one-stranded suspension in the software.



Warning

Always fasten the TV spigot with **two** ball lock pins.

Keep in mind the safe maximum load for the TV spigot is limited to 116 kg (BGV C1 / Factor of Safety 10:1). (e.g. 6 SEQUENZA 5-tops)



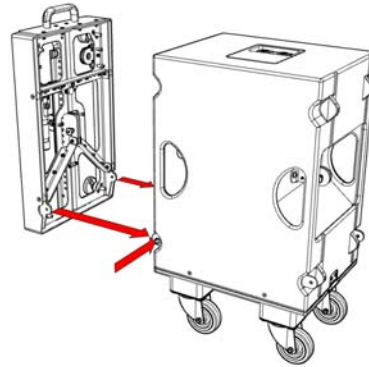
Check the TV spigot **(1)** and the two ball lock pins **(2)** to make sure they are secured in place.

9.3.3 Mounting SEQUENZA 5 B to SEQUENZA 5 Flying Frame, Flown

1 Prepare the flying frame for flying mode. (see chap. 'Preparing the Sequenza 5 Flying Frame' on page 30)

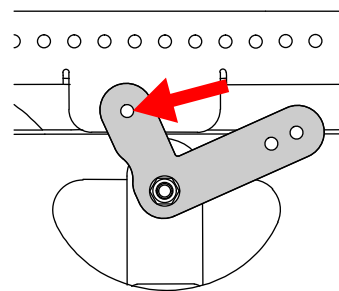
2. Connect the SEQUENZA 5 flying frame with the SEQUENZA 5 B speaker as explained in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

Make sure you can see the red dot on the safety latch.



3. To connect a SEQUENZA 5 B speaker with a SEQUENZA 5 flying frame, you must use the provided L-bracket of the speaker.

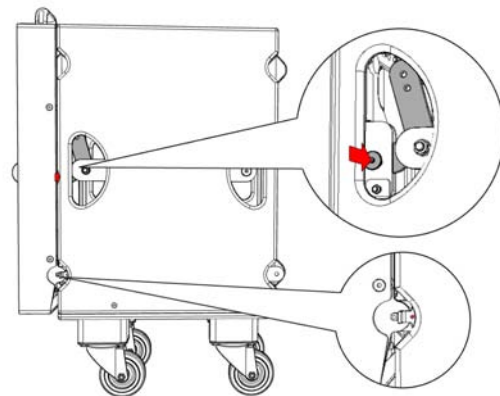
To connect the L-bracket to the rigging frame, reach into the side opening of the speaker and swivel the L-bracket down by nearly 180 degrees.



Align the drill holes of the L-bracket with the corresponding drill holes of the flying frame.

Secure the connection with the removed ball lock pins.

Make sure that the L-bracket is in a sloped position after you have completed the setup.



Tip

Make sure the ball lock pin is secured in place.

The speaker is now completely assembled and secured.

If you don't want to mount any more speakers, then you can now wire the speakers.

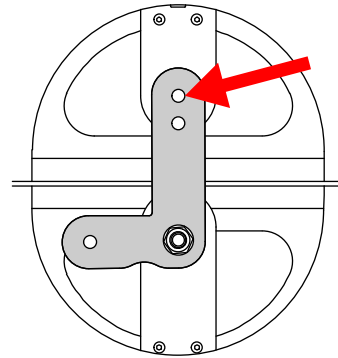
Further information in chapter 'Wiring' on page 63.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.3.4 Mounting SEQUENZA 5 B to SEQUENZA 5 B

To setup a SEQUENZA 5 B speaker with a further SEQUENZA 5 B speaker, you must use the L-bracket provided with the speaker.

Please note that the outer drill hole of the L-bracket's long side is connected to the next speaker.

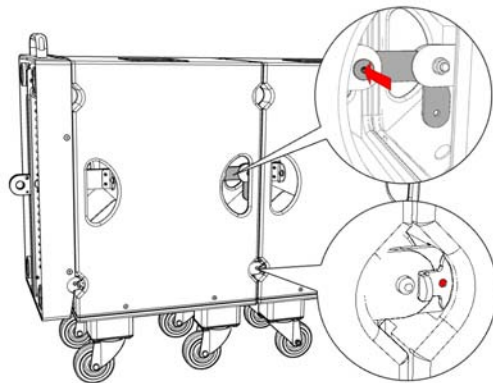


- 1 Connect the SEQUENZA 5 B speaker with further SEQUENZA 5 B speakers, as described in Chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

Make sure you can see the red dot on the safety latch.

Swivel the L-bracket of the already setup SEQUENZA 5 B speaker downwards so that the long leg is facing up.

Secure the L-bracket with the ball lock pin.



2. The speaker is now completely assembled and secured.

If necessary, repeat the procedure for the next SEQUENZA 5 B speaker.

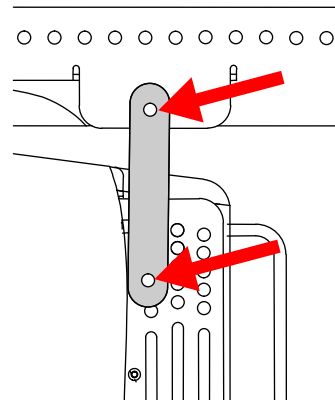
If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 63.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.3.5 Mounting SEQUENZA 5 W to SEQUENZA 5 Flying Frame, Flown

When mounting a SEQUENZA 5 W speaker with a SEQUENZA 5 flying frame, you must use the flying frame connector that is provided with the flying frame. Upon delivery of the flying frame, the flying frame connector is secured in its park position with a ball lock pin.



Tip

To ensure that the flying frame connector is available at all times and cannot get lost, we recommend fastening it back into its park position on the flying frame when not in use.

For the flying mode, you can mount a complete triple from a transport case in one step.

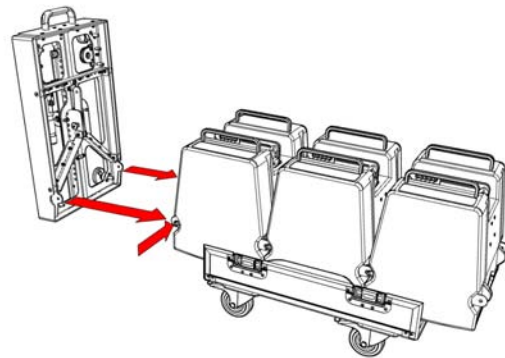


Tip

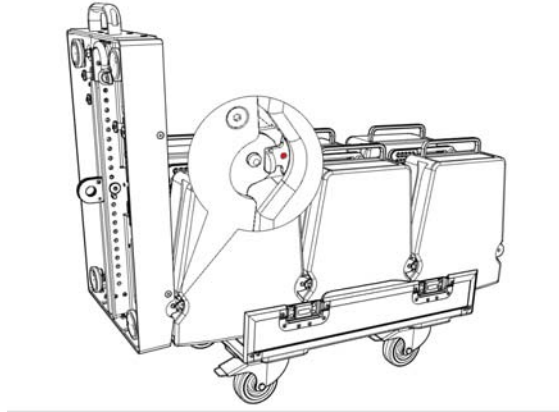
You can also mount the triples directly from vertically standing transport cases. This procedure is especially recommendable when you have little room for assembly.

If you also disassemble the speakers using a vertically standing transport case, you can be certain that the speakers are in the transport case the right way for the next assembly.

- 1 Prepare the flying frame for flying mode. (see chap. 'Preparing the SEQUENZA 5 Flying Frame, Flown' on page 30)
2. Open the transport case of the SEQUENZA 5 W triple by turning the catches 180° and removing the lid.
3. Connect the SEQUENZA 5 flying frame with the SEQUENZA 5 W speaker as explained in chapter '[...]' on page 21.



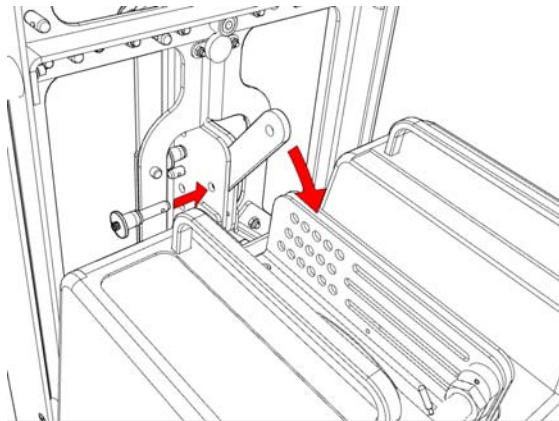
4. Make sure you can see the red dot on the safety latch.



5. Fasten the flying frame connector onto the flying frame with a ball lock pin.

Fold the flying frame's connector (that was mounted to the speaker during preparations) upwards between the connecting plates of the flying frame.

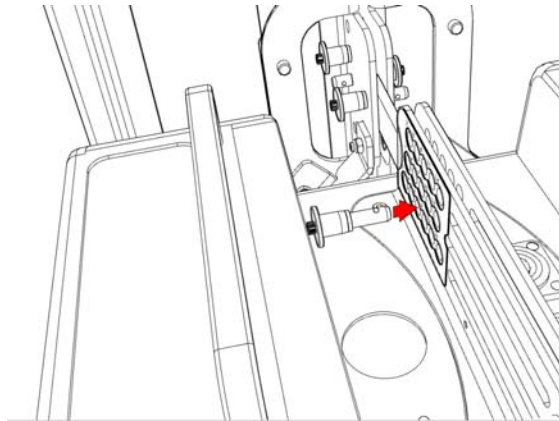
To prevent losing the SEQUENZA 5 W connector, it should be mounted in the intended parking position of the rigging frame.



6. The simulation software CON:SEQUENZA+ specifies real angles.

With the help of the chart on the flying frame, you can determine the required hole position.

Using a further ball lock pin, secure the connector to the speaker using the tilt angle drill hole calculated by the software CON:SEQUENZA+.



7. The speaker is now completely assembled and secured.

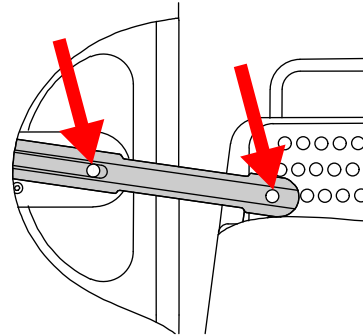
If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 63.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.3.6 Mounting SEQUENZA 5 W to SEQUENZA 5 B, Flown

When mounting a SEQUENZA 5 W speaker with a SEQUENZA 5 B speaker, you must use the provided connector on the SEQUENZA 5 W speaker.



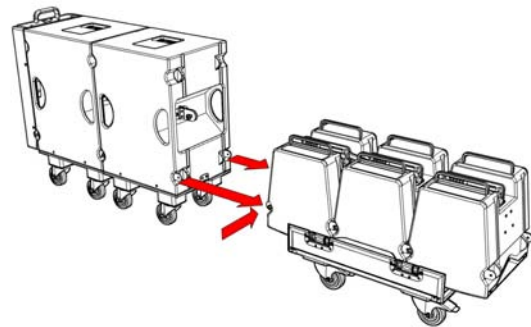
Tip

We recommend setting up a triple directly from a vertically standing transport case, as described in Chapter 'Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown' on page 39.

If you also disassemble the speakers using a vertically standing transport case, you can be certain that the speakers are in the transport case the right way for the next assembly.

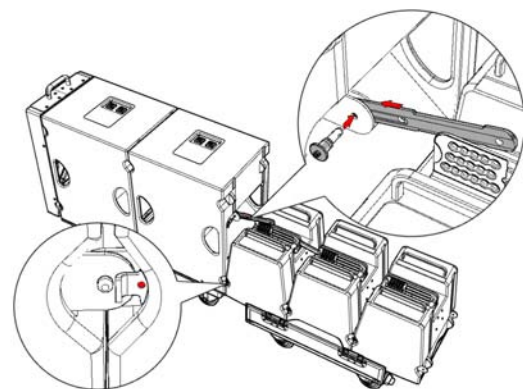
- 1 Connect the SEQUENZA 5 W speaker with a previously mounted SEQUENZA 5 B speaker as described in Chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

If you want to setup complete triples, remove all lids from the transport cases.



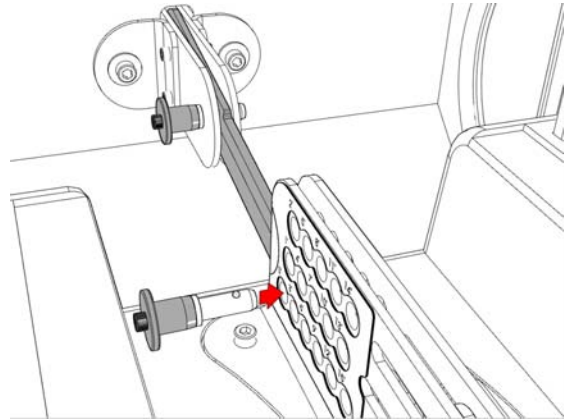
2. Make sure you can see the red dot on the safety latch.

Remove the ball lock pin from the SEQUENZA 5 W speaker and fasten it with the standard SEQUENZA 5 W connector.



3. Fold the connector between the connecting plates of the adjacent speaker.

Secure the connection with the ball lock pin.



4. The speaker is now completely assembled and secured.

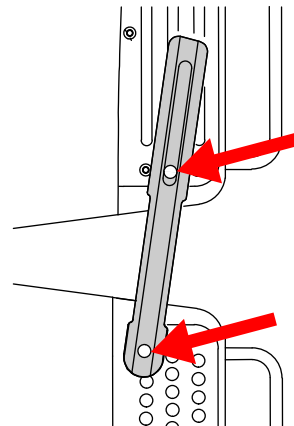
If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 63.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.3.7 Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown

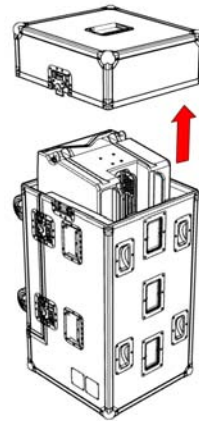
When mounting a SEQUENZA 5 W speaker with another SEQUENZA 5 W speaker, you must use the provided connector on the speaker.



If you also disassemble the speakers using a vertically standing transport case, you can be certain that the speakers are in the transport case the right way for the next assembly.

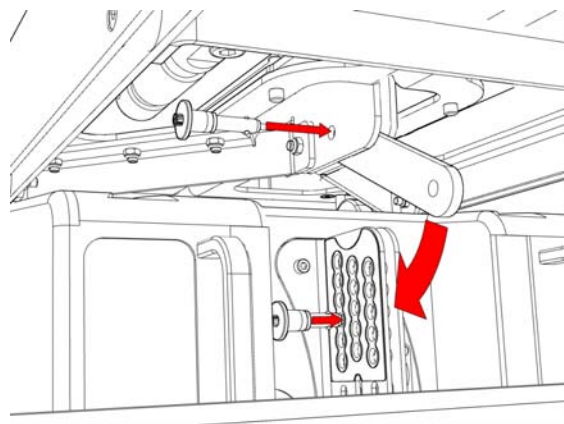
Vertical setup:

- 1 Stand the transport case vertically and remove the lid.



2. Insert the flying frame connector into the SEQUENZA 5 flying frame and secure it with a ball lock pin.

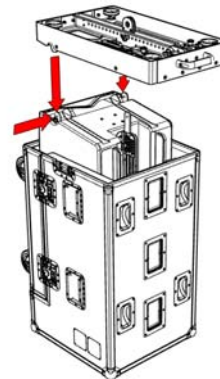
The magnet fitted on the flying frame prevents the connector from hindering the subsequent steps of setup.



3. Lift the prepared flying frame onto the topmost speaker.

Connect the flying frame with the speaker as explained in chapter 'Safe Connecting and Disconnecting of the Products' on page 21

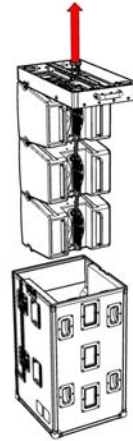
Make sure you can see the red dot on the safety latch.



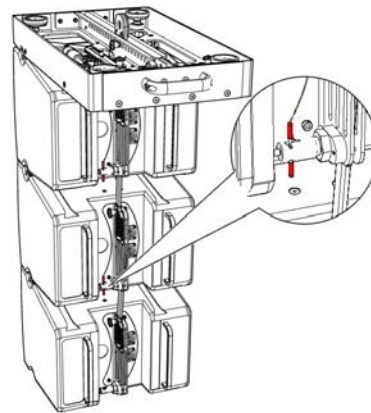
4. Release the flying frame connector from the magnet and fold it downwards between the connecting plates of the SEQUENZA 5 W speaker.

Align the drill hole of the connector with the drill hole that has been determined for the calculated tilt angle.

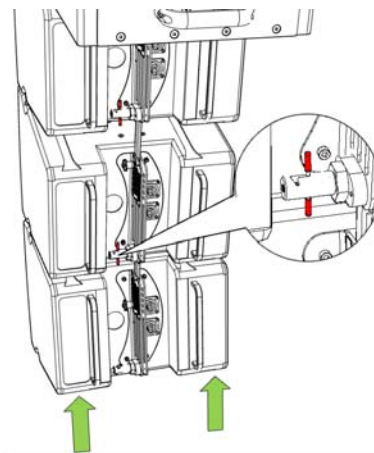
Secure the connection with the ball joint pin.



5. Connect the flying frame with the hoist.
Completely lift the triple out of the transport case.



6. To allow the speakers to securely and reliably connect, pull the lower speaker upwards until all spring bolts click into place.
Check the SEQUENZA 5 W connector and push it into the previously drawn back spring bolt, if necessary.



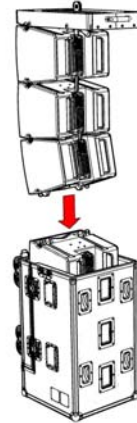
7. Compare the drill hole to which the connector is attached with the print-out of the simulation.

Correct the position if necessary:

Pull the spring bolt outwards as far as it will go (release position), hold onto it, and fold the connector out. (see chapter 'Using the Spring Bolt' on page 20)

Position the connector in the calculated tilt angle drill hole.

Attach the connector with the removed ball lock pin.



8. The speakers are now completely assembled and secured.

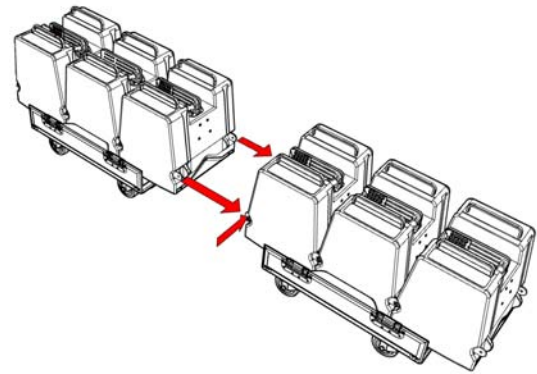
If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 63.

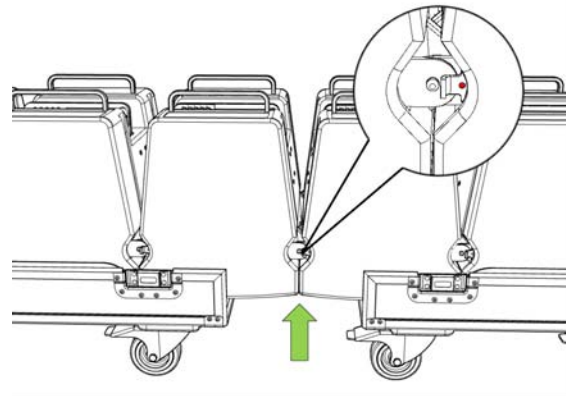
Horizontal setup:

Line up all required transport cases next to one another. You can completely set up all three speakers from one transport case without having to separate the speakers from one another.

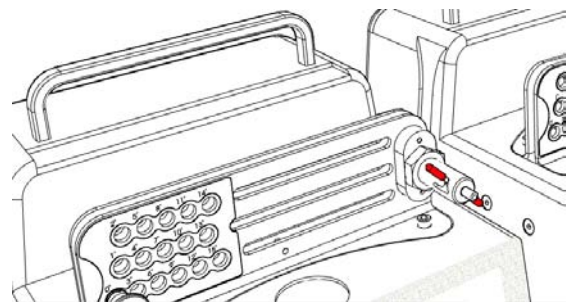
- 1 When setting up the speakers, make sure you can add another speaker without obstacles.
If you want to set up a complete triple, remove the entire lid from the first transport case and the lid of the next transport case.
Position the transport cases of all triples behind one another so that the side of the first speaker's safety catch is in front.



2. Connect the SEQUENZA 5 flying frame with the top SEQUENZA 5 W speaker, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.
If you cannot connect the speakers straightaway, it is most likely because of uneven ground. In this case, slightly lift both speakers under the connecting point while sliding them sideways so that the bolts are inserted.



3. Set the spring bolts of all speakers by turning each one 90° to the right into the start position. 20Using the Spring Bolt

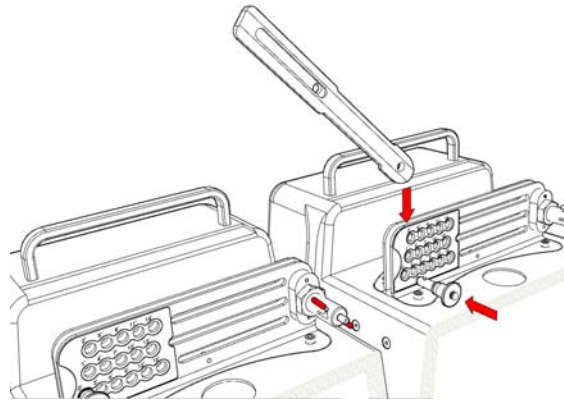


4. Adjust every speaker to the tilt angle calculated by the simulation software:

Align the drill hole of the connector with the drill hole that is marked with the desired angular degree.

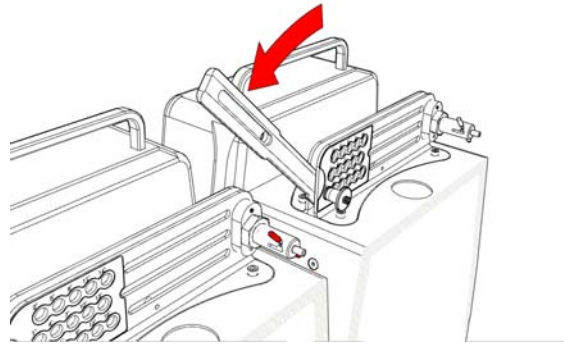
Fasten the connector with the ball lock pin.

Make sure the ball lock pin is secured and clicked into place.



5. Fold out the connector and push it between the connecting plates and into the drawn back spring bolts of the next speaker.

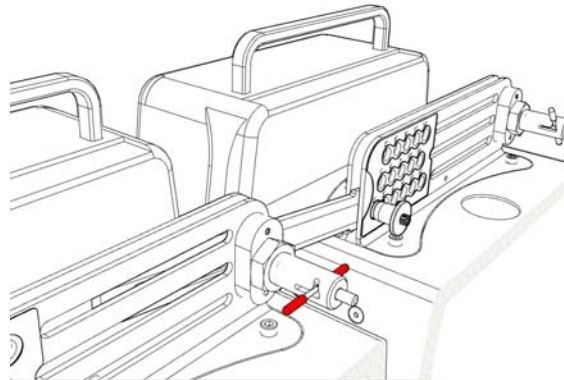
In doing so, the spring bolt clicks into the track of the standard connector into its locking position.



Caution

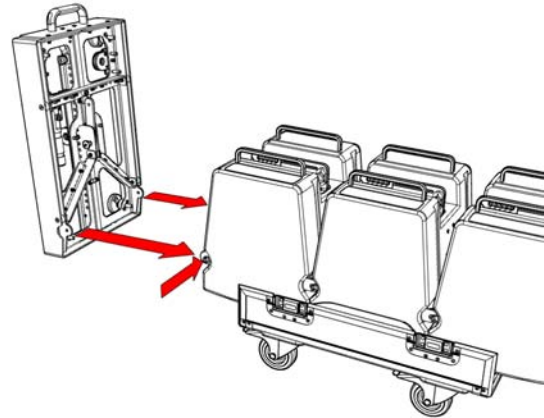
6. It is absolutely necessary that you lock the rear bolts into place.

When lifting the array, the connector is secured by the spring bolt, indicated by a loud clicking noise.



7. The speaker is now completely assembled and secured.

Connect the SEQUENZA 5 flying frame with the SEQUENZA 5 W speaker as explained in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.



If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 63.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

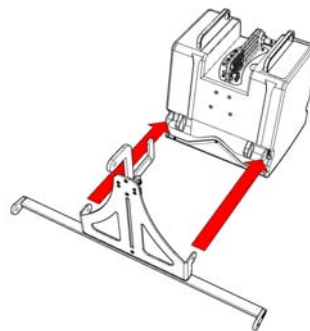
Read more in chapter 'Lifting the Array' on page 47.

9.3.8 Mounting SEQUENZA 5 W and SEQUENZA 10 with Downfill Adapter

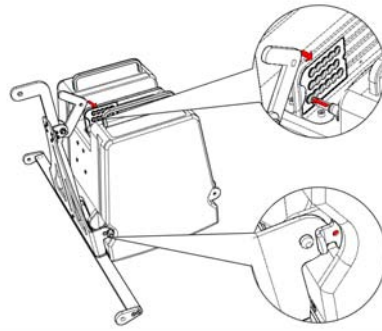
Using the downfill adapter, you may hang a maximum of three speakers under a SEQUENZA 10 N/W speaker. You must always check the structural calculations with the simulation software CON:SEQUENZA+.

With the downfill adapter, you create a stable and safe connection between a SEQUENZA 10 N/W speaker and a SEQUENZA 5 W speaker.

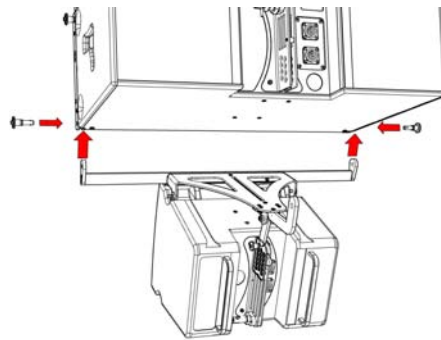
- 1 Connect the SEQUENZA 5 downfill adapter with the SEQUENZA 5 W speaker, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.



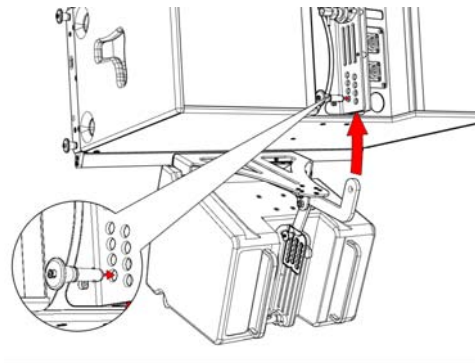
2. Make sure you can see the red dot on the safety latch.
- Use a ball lock pin to fasten the connector of the adapter in the desired drill hole on the speaker.



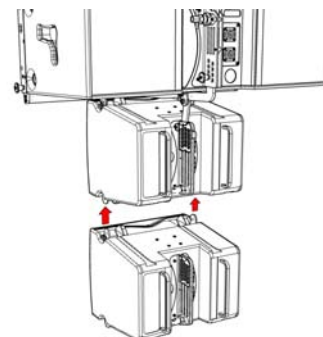
3. Lower the SEQUENZA 10 N/ W array until you can insert the downfill adapter into the lower speaker.
- Secure the connection with one ball lock pin on each side.



4. Lift the speaker and connect the upper connector bracket in the 1° angle drill hole with the SEUQNZA 10 speaker.
- Secure the connection with the ball joint pin.



5. If further speakers are to be flown, connect them as described on page 21.



If you don't want to mount any more speakers, then you can now wire the speakers. Further information in chapter 'Wiring' on page 63.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.4 Lifting the Array



Warning

If a BGV (government safety organisation) C1 or a D8+ motor is used, the SEQUENZA 5 system is intrinsically safe and does not require any secondary securing. If the SEQUENZA 5 system is, however, to be hung on another motor, then secondary securing is necessary. This can be attached to the 3.5 t shackles and must be implemented with zero drop height. Instructions for the correct use of secondary securing with zero drop height are in the standard VPLT (Assoc. of Media and Event Technology) SR 2.0 "Preparation & use of electric chain hoists".



Caution

See the instructions in chapter 'Safety Instructions' from page 15 and in the corresponding sub-section 'Safety Instructions for Flying Configurations' from page 16.

Risk of crushing hands!

The speakers move towards each other during lifting.

During hoisting - as long as the motor is running - the specifications of the BGV (government safety organisation) C1 are not fulfilled.

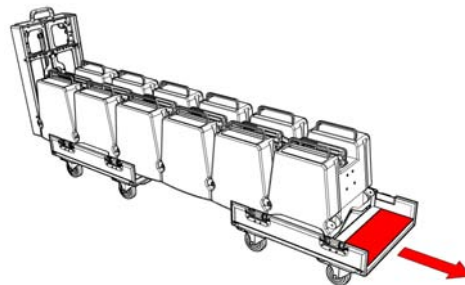
Ensure that nobody can step below the suspended systems.



These instructions are valid for arrays consisting of up to 15 SEQUENZA 5 W speakers or 10 SEQUENZA 5 B speakers and also for mixed arrays with SEQUENZA 5 W and SEQUENZA 5 B.

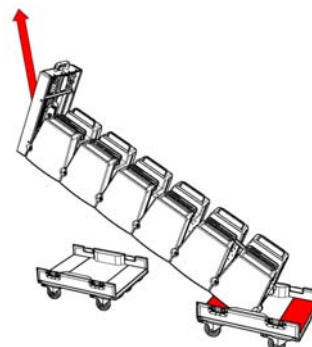
The simulation software SEQUENZA 5 must always verify the number of speakers.

- 1 To prevent the castor base from being pushed up if a load is outside of the castors, pull the rear-most castor base out from underneath the lying speakers until the red marking is completely visible.



2. Hook the load hook of the hoist chain (i.e. of the hoist motor) into the load adapter's shackle and begin to lift the array carefully.

Make sure that the speaker array does not pull the castor bases up with them.



Caution

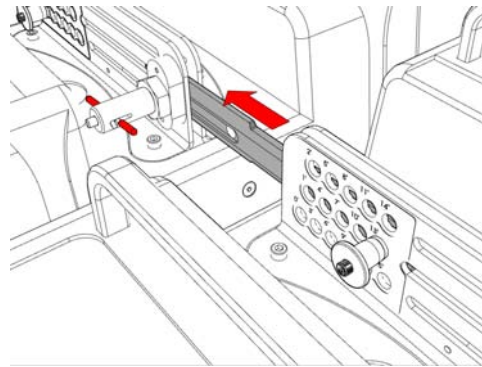
During lifting, the spring bolts snap into their pre-determined position with a clearly audible clicking noise.

At a 0° position, the spring bolt should already click into place on the ground.

When the ground is uneven, the spring bolts may not correctly click into place.

To ensure that it has correctly locked into place while the speakers are on the ground, you may need to manually assist, especially with a 0 degree angle.

3. During lifting, the connectors should slide along the spring bolts – one after the other from top to bottom – until the bolts snap into place and secure the connection.



Warning

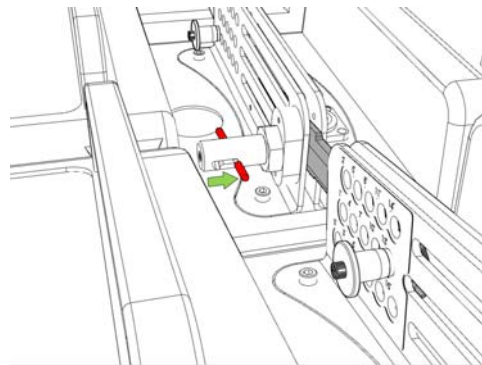
If the spring bolts do not snap into place properly, the array may not be lifted any further.

If the spring bolts have not snapped into place, lower the array and correct the error.

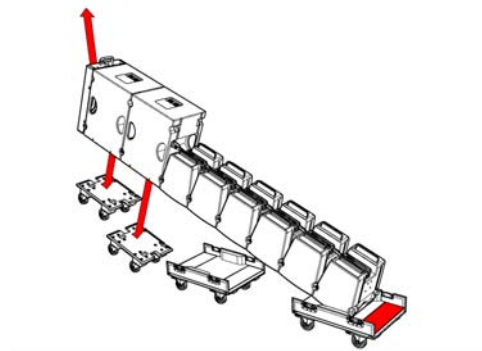


Caution

4. Make sure that the spring bolts have completely locked into place. The bolts are in the correct position when they slightly protrude out of the connecting plate on the opposite side.



5. When the first speakers are at working height, you can remove the castor bases of the SEQUENZA 5 B speakers and mount the optional rain protections for this speaker model if necessary.



For outdoor use, there are optional rain covers for the flying frame, the bass speakers and the tops. These covers serve as rain protection for the rear flying mechanics as well as for the cables and plugs.



Warning

The array can potentially swing out. For this reason, only the setup crew may be in front of or behind the array during lifting.

Lift the array evenly and slowly into its operating position so that it cannot swing out during lifting, then secure it. In doing this, make sure that chain hoists and lifting accessories do not get caught. Make sure that the speaker cables do not get crimped or get caught.

9.5 Stacked Setup

SEQUENZA 5 W speakers may only be stacked on a flying frame, on a SEQUENZA 5 B speaker, or with a SEQUENZA 5 VariMount adapter on a stand. If a SEQUENZA 5 W speaker is to be mounted on a SEQUENZA 5 B speaker, a SEQUENZA 5 flying frame does not have to be mounted as a support.



Notice

Please note that the speakers must be turned upside down for a stacked setup. In order to avoid detracting from the speakers' appearance, the logos should be turned by 180° after setup.



Warning

No matter which setup you use, you must always secure the array to prevent tipping and falling. To ensure safety, you can either use the lying flying frame with the optional accessory 'outrigger' or secure the array – with or without the flying frame – with suitable anchoring such as lashing straps.

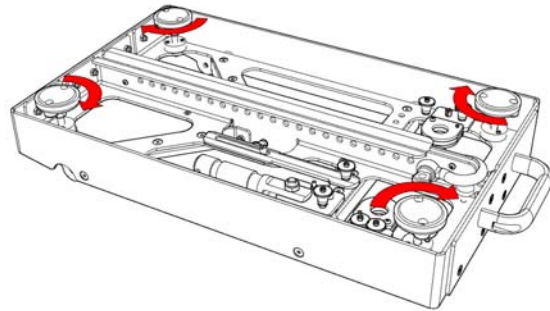
We recommend using the optional accessory 'outrigger' that you can purchase from your K&F dealer. They are easy to mount and reliably secure the standing array to prevent falling.

Before setup, ensure that the ground is firm and cannot give in under the load of the stacked speakers.

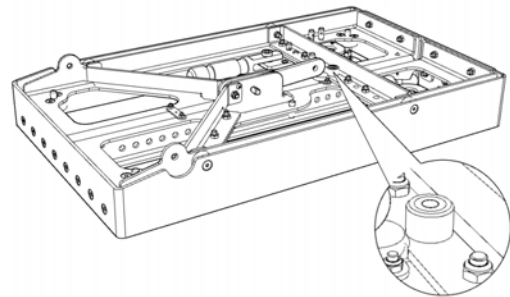
Ensure that all accessories of the flying frame are fastened in their provided parking positions.

9.5.1 Preparing the flying frame

- 1 To compensate for minimal ground unevenness, you can adjust the integrated rubber padded feet by a few centimetres. This prevents the mounted flying frame from sliding and/or causing damaging scratches to the floor.



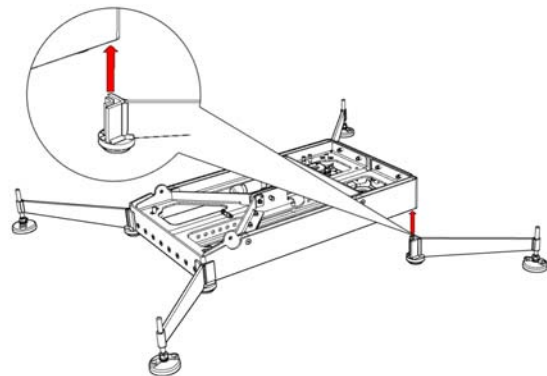
- 2 Lay the flying frame on the floor and align it horizontally using the built-in spirit level.



3. **Optional:**

Place one outrigger on each corner of the flying frame.

You must adjust **all** feet on the flying frame and outrigger so that they are all on the ground.

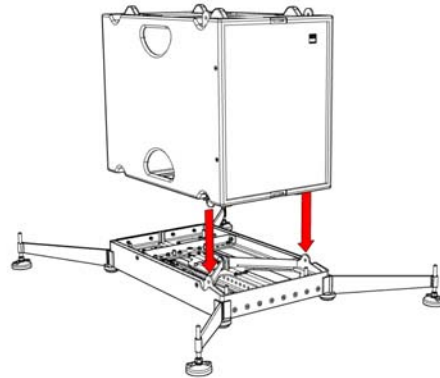


Caution

To avoid damaging the material, the adjustable feet of the flying frame must always be completely on the ground. They must bear the entire load of the array.

9.5.2 Mounting SEQUENZA 5 B to SEQUENZA 5 Flying Frame, Stacked

- 1 Connect the speaker with the flying frame as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.



2. If the array is set up on a stage edge and tilted downwards, then the SEQUENZA 5 B speakers must also be tilted accordingly.

Tilt angle (downtilt):

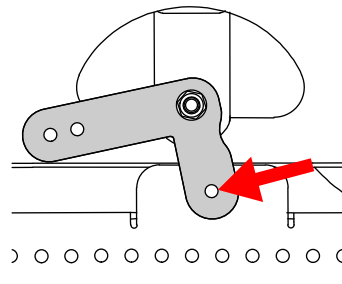
Depending on the configuration, you can set three different tilt angles.

- If the speakers are standing at foot level, they don't require any tilt angle. Read step 2a for more.
- If the speakers are standing slightly higher, you can use a 5° downtilt. Read step 2b for more.
- If the speakers are standing higher, you can use a 10° downtilt. Read step 2c for more.

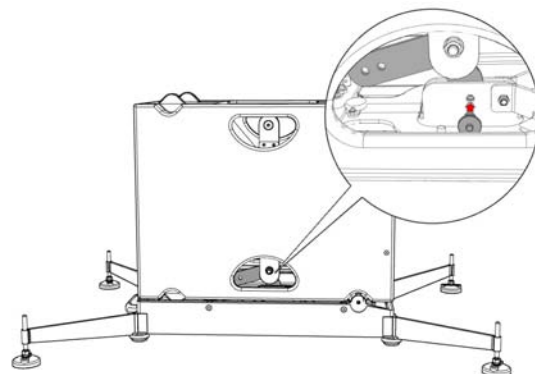
- 2a: During setup, be sure to use the short side of the L-bracket on the speaker for a 0° angle.

Align the L-bracket so that you can insert the ball lock pin.

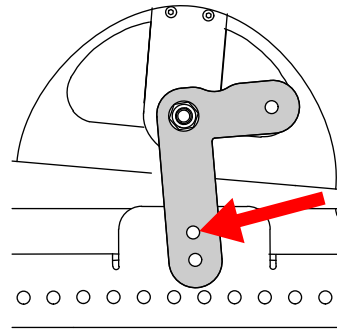
Attach and secure the L-bracket with a ball lock pin.



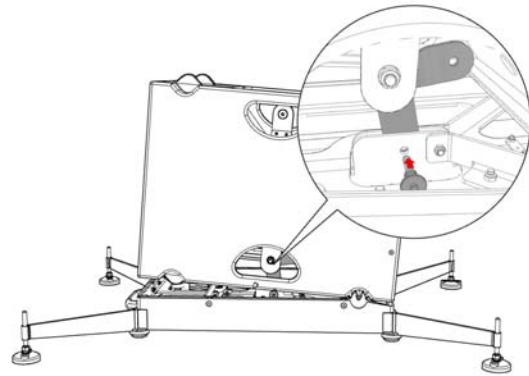
Make sure that the L-bracket has a slightly sloped position.



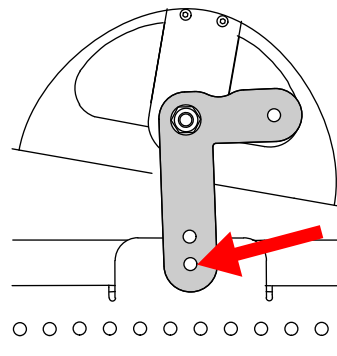
- 2b: During setup, be sure to use the long side of the L-bracket and the inner drill hole on the leg for a 5° downtilt.
Align the L-bracket so that you can insert the ball lock pin.
Attach and secure the L-bracket with a ball lock pin.



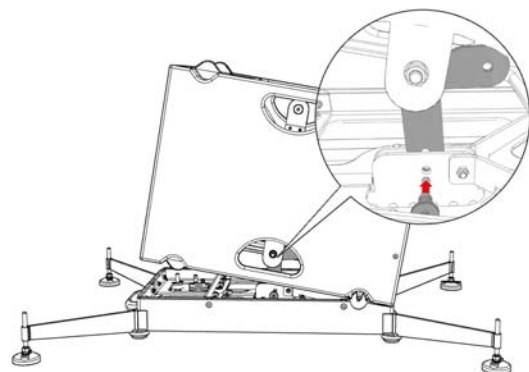
Make sure that the L-bracket has a slightly sloped position.



- 2c: During setup, be sure to use the long side of the L-bracket and the outer drill hole on the leg for a 10° downtilt.
Align the L-bracket so that you can insert the ball lock pin.
Attach and secure the L-bracket with a ball lock pin.

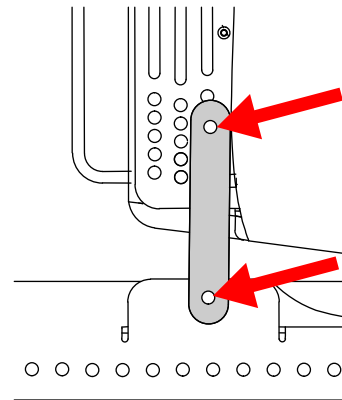


Make sure that the L-bracket has a slightly sloped position.



9.5.3 Mounting SEQUENZA 5 W to SEQUENZA 5 Flying Frame, Stacked

When mounting a SEQUENZA 5 W speaker with a SEQUENZA 5 flying frame, you must use the flying frame connector that is provided with the flying frame. Upon delivery of the flying frame, the flying frame connector is secured in its park position with a ball lock pin.



Tip

To ensure that the flying frame connector is available at all times and cannot get lost, we recommend fastening it back into its park position on the flying frame when not in use.

You will get the specifications for the setting angle of the bottom speaker on the frame from the simulation software CON:SEQUENZA. CON:SEQUENZA+

To determine the correct drill hole for the desired tilt angle of the first speaker, look at the table on the flying frame for the angle indication and number of the corresponding drill hole. See following illustration. In the left column, positive angles are denoted and in the right are negative angles. In the middle column, you will find the numbers of the corresponding drill hole in the speaker enclosure.

ANGLE BETWEEN FRAME AND 1st SEQUENZA 5		
+	HOLE IN CABINET	-
6.6°	15 ● 7°	-1.3°
7.4°	14 ● 6°	-3.3°
5.3°	13 ● 5°	-2.5°
3.3°	12 ● 4°	-4.5°
4.0°	11 ● 3°	-6.5°
2.0°	10 ● 2°	-5.7°
0.0°	9 ● 1°	-7.7°
0.8°	8 ● 0°	-9.6°

SOUND SYSTEMS

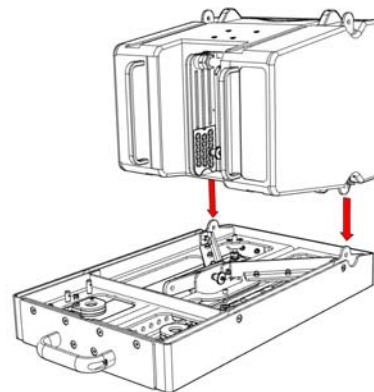
USE FRAME LINK TO CONNECT 1st SEQUENZA 5

MODEL:
SEQUENZA 5 FLYING FRAME

KLING & FREITAG GmbH
made in Germany / Hannover

- 1 Connect the SEQUENZA 5 W speaker with the rigging frame, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

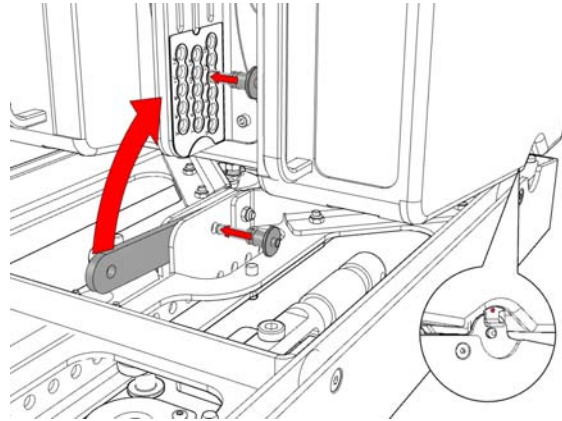
Make sure you can see the red dot on the safety latch.



2. Insert the flying frame connector into the SEQUENZA 5 flying frame and secure it with a ball lock pin.

Fold the flying frame connector upwards between the SEQUENZA 5 W speaker's connecting plates and position it in the desired tilt angle drill hole.

Secure the connection with the ball lock pin.



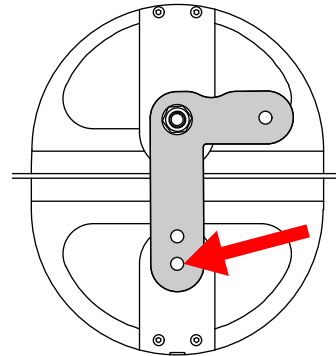
If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 63. Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.5.4 Mounting SEQUENZA 5 B to SEQUENZA 5 B, Stacked

To setup a SEQUENZA 5 B speaker with a further SEQUENZA 5 B speaker, you must use the L-bracket provided with the speaker.

Please note that the outer drill hole of the L-bracket's long side is connected to the next speaker.



Caution

In general, make sure to just set up as many speakers as the simulation software CON:SEQUENZA+ calculates to be acceptable.

It is forbidden to mount additional speakers onto the array!



Notice

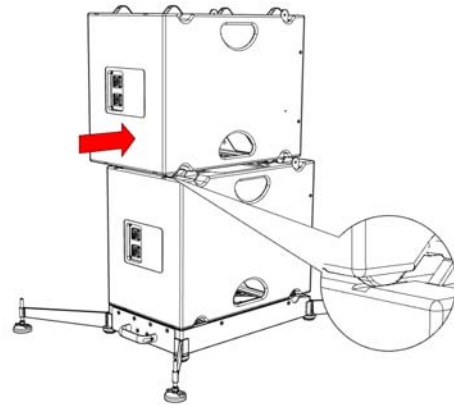
A cardioid configuration is not intended.

A tilt between two bass speakers (downtilt) is not intended.

- 1 Connect a further SEQUENZA 5 B speaker with the present speaker as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

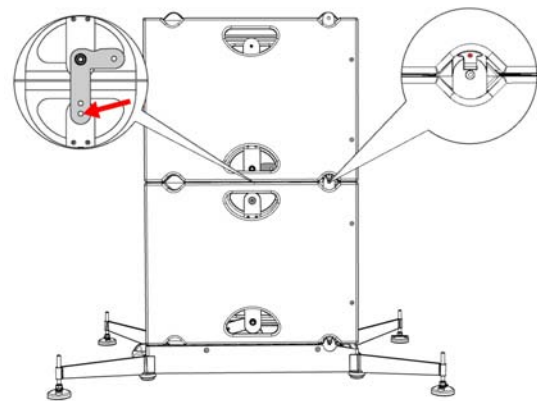


The gliding feet and guide grooves help to position the speaker.



2. Please note that you must use the long leg of the L-bracket and the outer drill hole to safely mount a further SEQUENZA 5 B speaker.

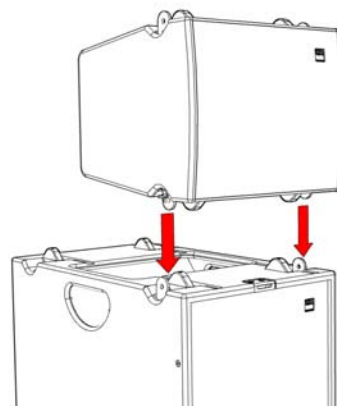
Make sure you can see the red dot on the safety latch.



9.5.5 Mounting SEQUENZA 5 W to SEQUENZA 5 B, Stacked

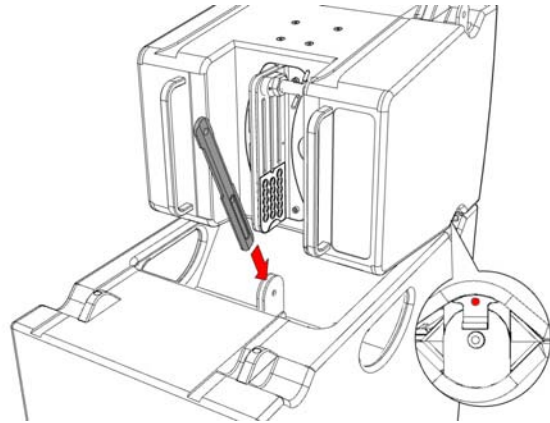
The setup for stacked use only differs from flown use in the alignment of the speakers. Please note that the speakers must be turned upside down for a stacked setup. In order to avoid detracting from the speakers' appearance, the logos should be turned by 180° after setup.

- 1 Connect a SEQUENZA 5 W speaker with the present speaker as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21. SEQUENZA 5 B

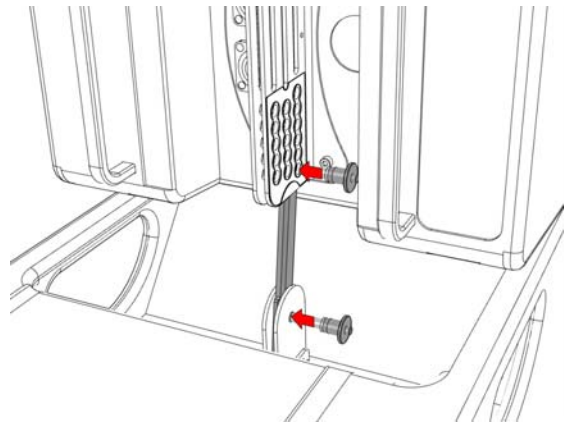


2. Make sure you can see the red dot on the safety latch.

Place the speaker's connector into the lower speaker in the mounting position shown here.



3. Using a further ball lock pin, secure the connector to the speaker using the tilt angle drill hole calculated by the software CON:SEQUENZA+.



9.5.6 Mounting SEQUENZA 5 W to SEQUENZA 5 W, Stacked

For weight reasons, you may only lift, set up and mount max. one speaker.

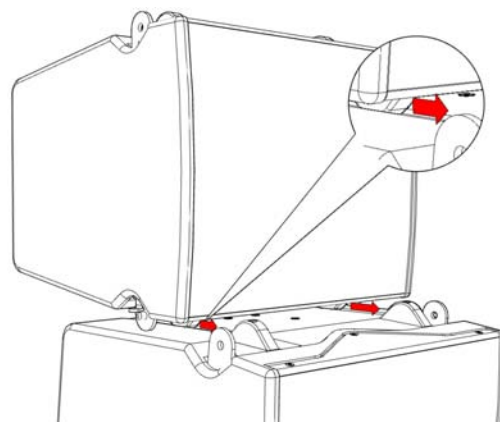


Caution

- 1 Connect the SEQUENZA 5 W speaker with the lower SEQUENZA 5 W as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

Notice

The gliding feet and guide grooves help to position the speaker.

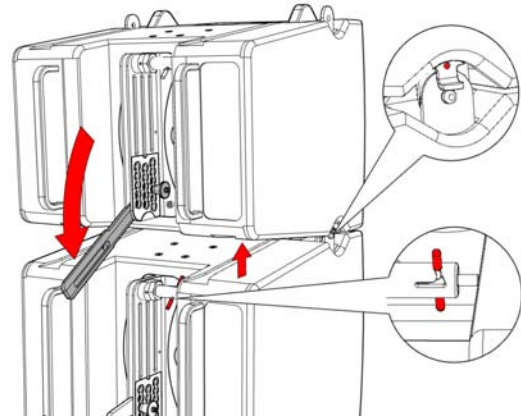


2. Make sure you can see the red dot on the safety latch.

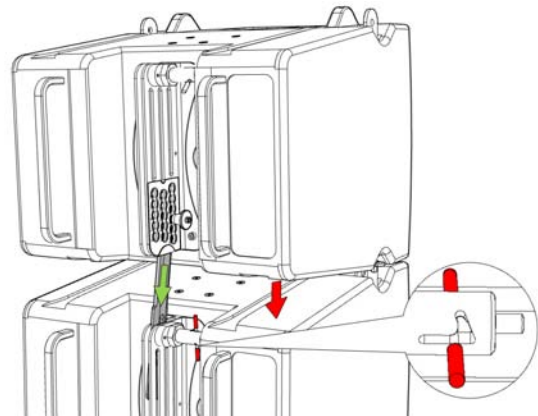
Position the lower speaker's spring bolt into its original starting position. (See chapter 'Using the Spring Bolt' on page 20)

Using a further ball lock pin, secure the connector to the speaker using the tilt angle drill hole calculated by the software CON:SEQUENZA+.

Push the connector between the lower speaker's connecting plates until it clicks into place and the spring bolt catches in its waiting position.



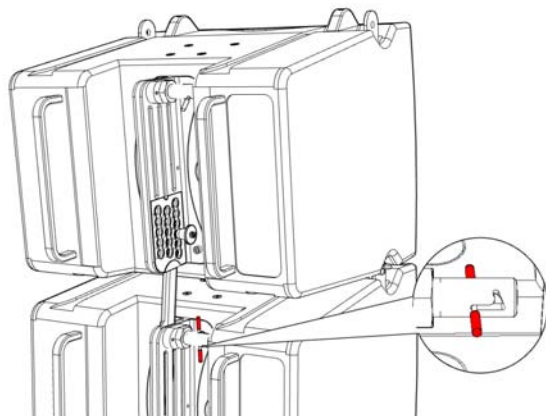
3. When the connector is guided by the spring bolt, lower the upper speaker until the spring bolt completely catches and snaps into its locking position.



4. Check that the spring bolts protrude at least 0.5 mm out of the drill holes at the entire circumference.

The speaker is now completely mounted and secured.

If your configuration provides for it, you can connect a further SEQUENZA 5 W speaker onto the present speaker, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

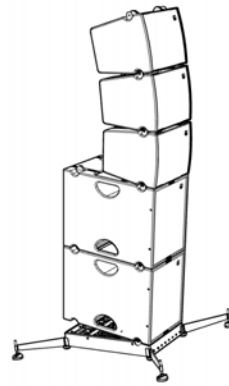


5. The complete standing SEQUENZA 5 speaker array is now set up and the speakers are secured among each other.



Please note that without outriggers on the rigging frame, the array must be secured from tripping and falling with suitable lashing straps.

With outriggers on the rigging frame, you must ensure that no one can trip over the outriggers. If the array cannot stand in a secured area, block the area around the array.



9.5.7 Mounting SEQUENZA 5 W to SEQUENZA 5 Varimount Adapter

In the following steps, the handling of the VariMount adapter will be shown.

The VariMount adapter can be used for stand mounting as well as flown mounting. Flown mounting requires the TV spigot and the appropriate accessories.

Please note that the SEQUENZA 5 VariMount adapter is designed for a maximum of three SEQUENZA 5 W speakers. Make sure that the stand is designed for the total weight.

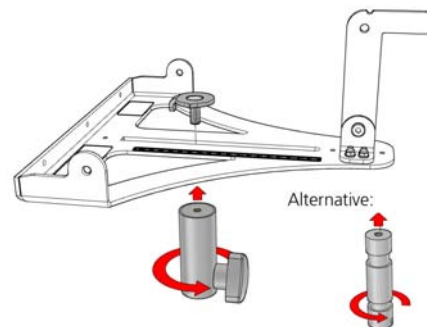
You can find out about further setup alternatives in chapter 'Setup Variations' from page 24.



In the following description, only a stand adapter is shown. All work on the speakers up to the final mounting or flying is identical.

- 1 If you wish to mount a maximum of three SEQUENZA 5 W speakers, you can decide between the alternatives of a stand positioned on the ground or a hanging TV spigot.

Either screw in the stand adapter or the TV spigot.



2. Ensure that the adapter is always positioned precisely horizontal.

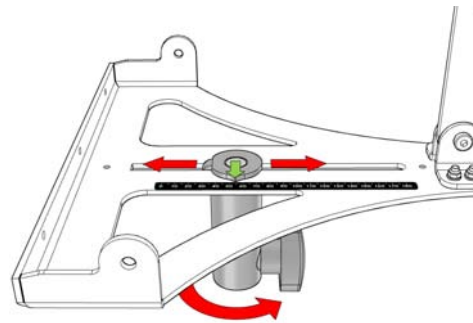
To ensure safe use, the array's centre of gravity must always be vertically in line with the TV spigot.



Consult the print-out from the simulation software CON:SEQUENZA+ to find out which position on the VariMount scale the stand adapter must have.

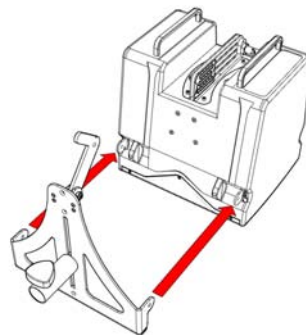
3. Slide the stand adapter to the determined value on the scale.

Tighten the stand adapter or the TV spigot.



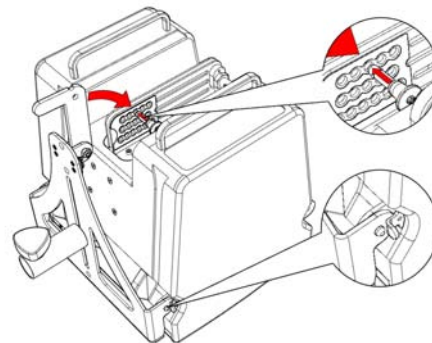
4. Connect the SEQUENZA 5 VariMount adapter with a SEQUENZA 5 W speaker, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

Make sure that the joint bar of the VariMount adapter pushes the speaker's safety latch into the enclosure.



5. Make sure you can see the red dot on the safety latch.
- Fold the VariMount-Connector between the joint bars of the speaker.

Secure the VariMount connector with a ball lock pin.



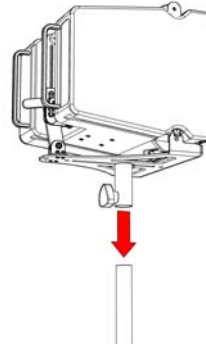
- If you have mounted the SEQUENZA 5 VariMount adapter with the stand adapter because you want to place the array on a stand, please read sections 6a to 8a.
- If you have mounted the SEQUENZA 5 VariMount adapter with the TV spigot because you want to hang the array with a pipe clamp, please read sections 6b bis 8b.

Stand alternative:



Tip

- 6a: We recommend first assembling all elements on the floor and subsequently raising the complete array with two people.



If your configuration provides for it, you can mount up to two further SEQUENZA 5 W speakers, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

Place the speaker stand on an even and stable surface.

With two people, raise the stand to the desired height, tighten and secure it.

Tighten the clamping screw.

- 7a: Place the speaker with the VariMount adapter onto the speaker stand and tighten the clamping screw.

- 8a: You may only stack a maximum of three speakers on a stand using the VariMount adapter.

The speakers are now completely assembled and secured.



You can now wire the speakers.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

Pipe clamp alternative:

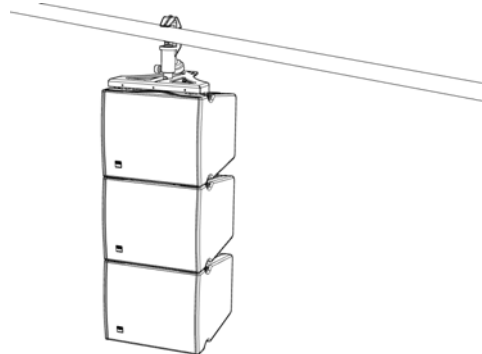
- 6b: If your configuration provides for it, you can mount up to two further SEQUENZA 5 W speakers, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

- 7b: Place a pipe clamp onto the TV spigot.



- 8b: Lift the triple with an approved hoist and hang it from a suitable support.

The speakers are now completely assembled and secured.



You can now wire the speakers.

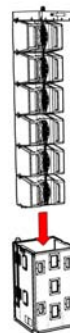
Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

10. Dismounting

Basically, you disassemble the array in the reverse order of assembly.

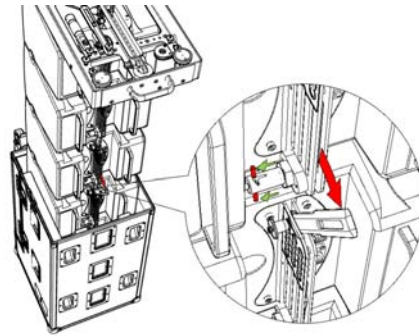
If you want to disassemble complete flown triples, you must proceed as follows:

- 1 Place a transport case vertically – with its front lid facing upward – under the speaker array.
Open the front lid of the transport case.
Slowly lower the bottom three speakers of the array into the transport case.



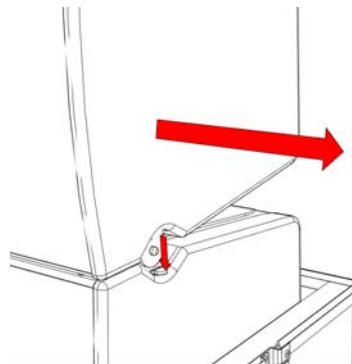
2. Completely remove the SEQUENZA 5 speaker cable split adapter out of the wiring.

When the connection is relieved, loosen the spring bolt on the fourth speaker.



3. Grasp to the right and left on the speaker's connecting joints and push the safety catch into the enclosure.

While doing so, push the top speaker to the side so that the speakers disconnect from one another.

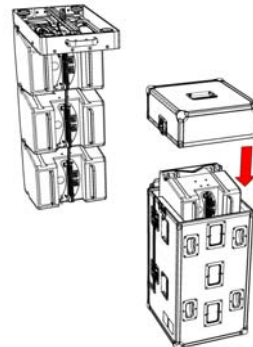


4. Slightly lift the still flown speakers.

Close the transport case, tip it onto the castors and slide it to the side.

The triple is now completely disassembled and packed into the transport cases.

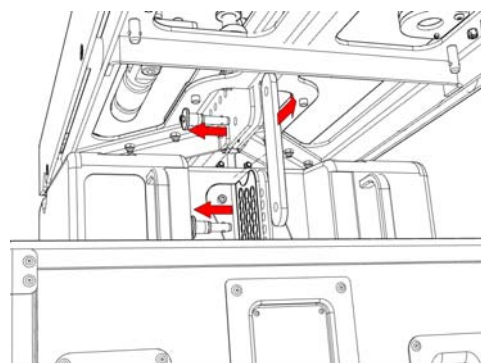
Proceed in the same manner with the remaining speakers.



5. Loosen the flying frame from the topmost SEQUENZA 5 W speaker as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

Fold the flying frame connector against the built-in magnet.

Lower the flying frame to the ground and separate it from the hoist.



10.1 Flown Disassembly

10.1.1 Disassembling an Array

1. Disassemble the array as described in the previous chapters.
2. Prepare the SEQUENZA 5 system for transport:
 - Fold the connectors back into their parking position.
 - Dismantle all used components so that they do not protrude and cannot be damaged during transport.
 - Close the transport cases with the lids. Note that each of the lid pieces only fits onto one side of the castor base.

10.2 Disassembling the Stacked Array

Basically, you disassemble the array in the reverse order of assembly.

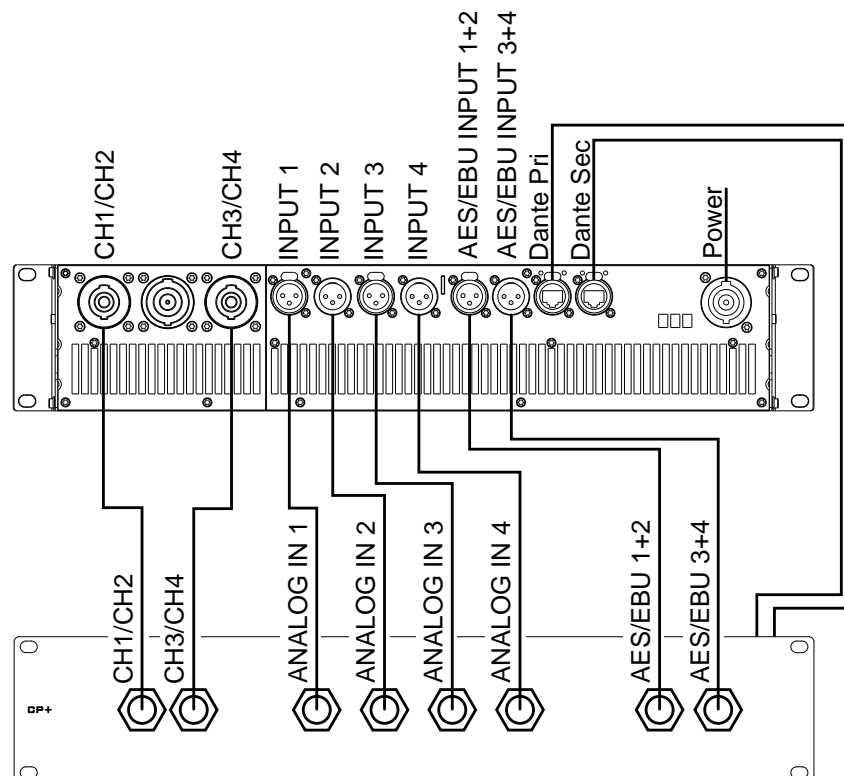
11. Wiring

The operating safety and the highest-possible performance is only guaranteed in conjunction with the K&F Topas or K&F SystemRack.



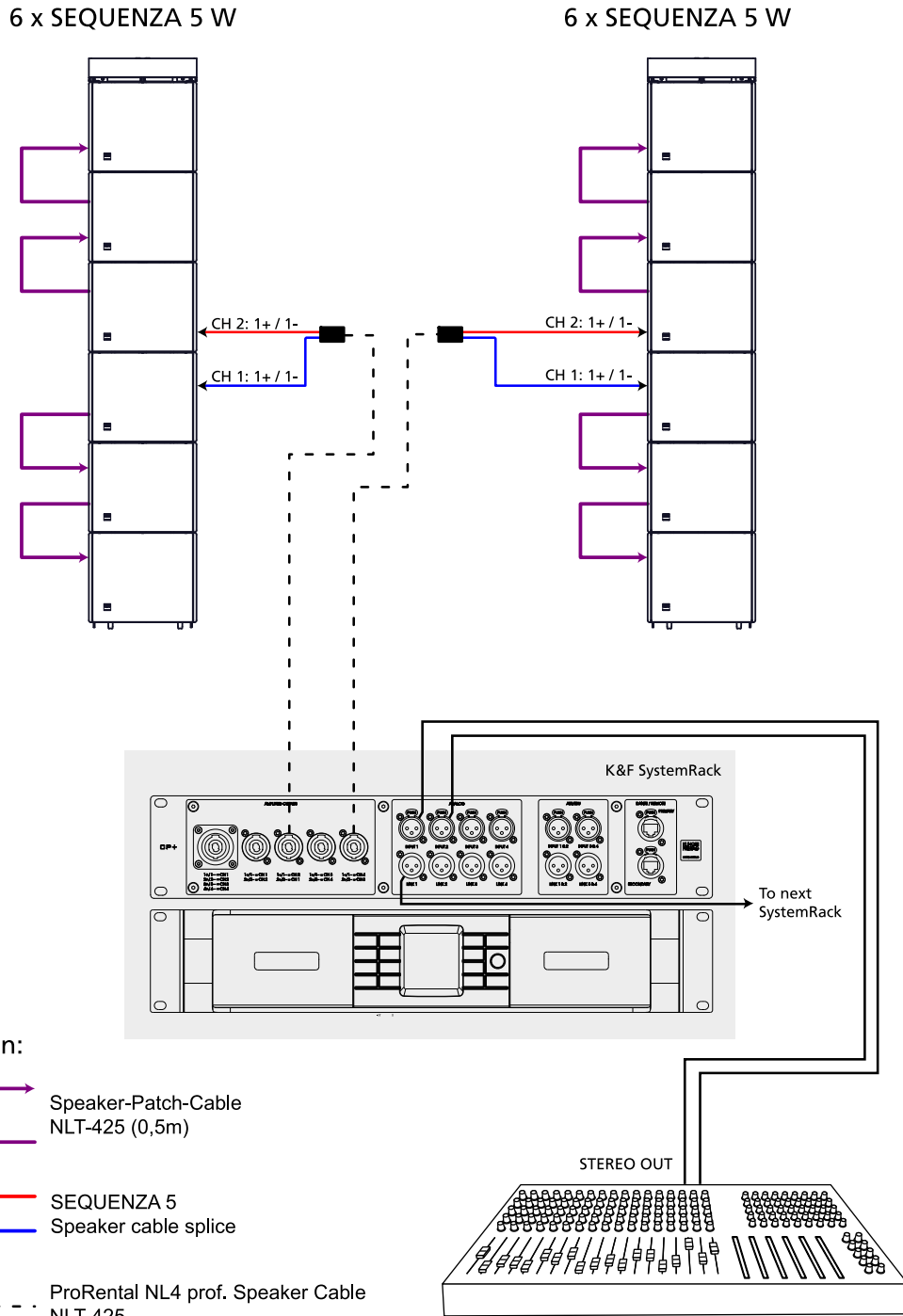
Caution

11.1 Cabling a K&F System Rack



11.2 Connecting the SEQUENZA 5 Speakers

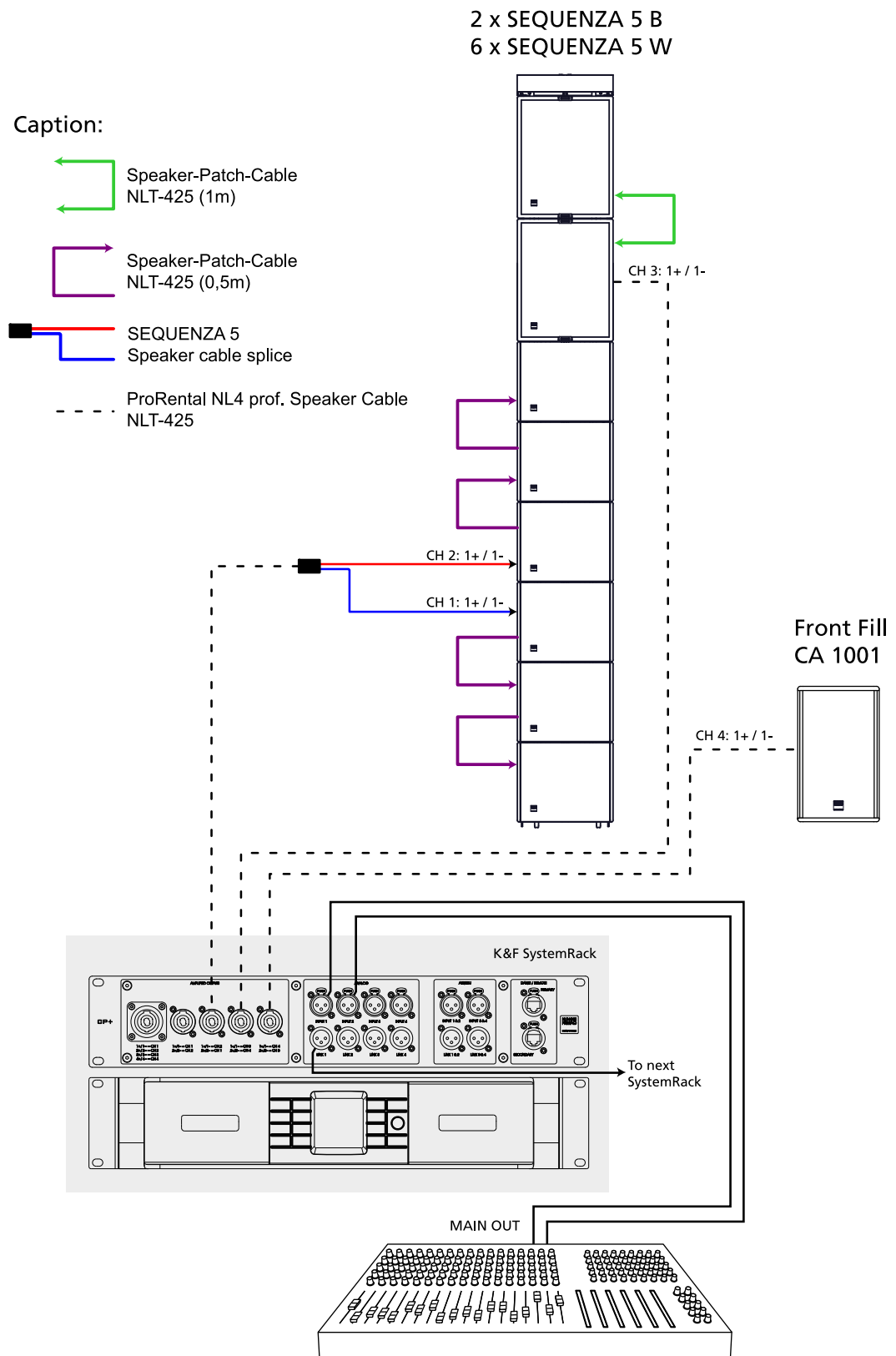
Connecting arrays that only consist of SEQUENZA 5 W speakers:



Use the following modules:

- Sequenza 5W FR

Connecting SEQUENZA 5 W speakers with SEQUENZA 5 B speakers:



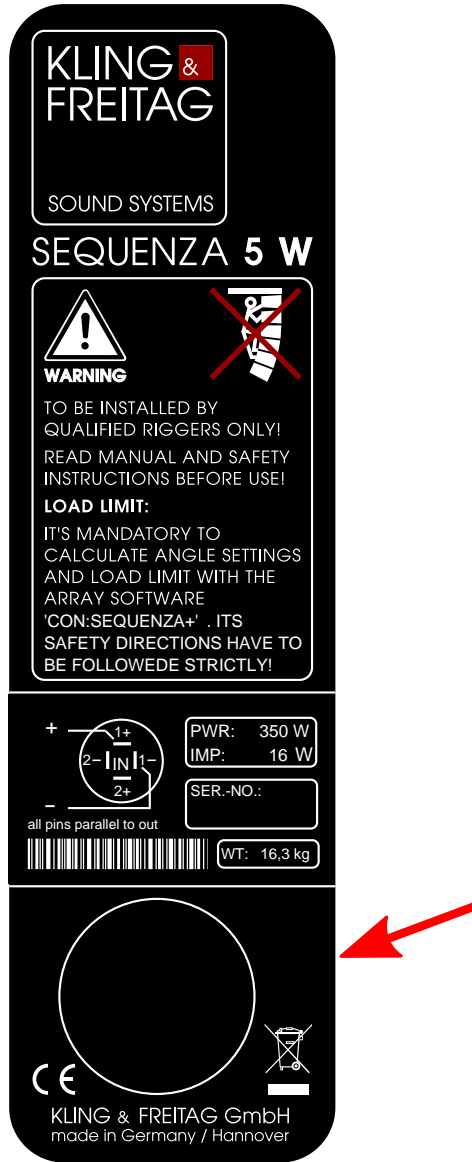
Use the following modules:

- Sequenza 5W LCut, Sequenza 5B, CA1001 FR

12. Optional BGV C1 Certification

In Germany, you have the possibility to have your system individually certified. If required, you can request the necessary basis of calculation from KLING & FREITAG. On the speakers as well as on the flying frame, there is a field where an inspection label can be affixed.

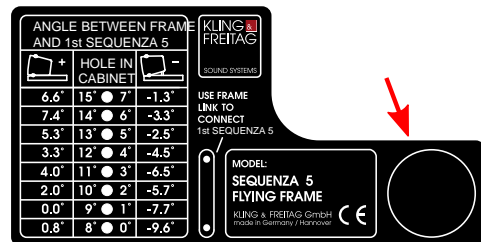
Seal of approval box on the SEQUENZA 5 W speaker



Seal of approval box on the SEQUENZA 5 B speaker



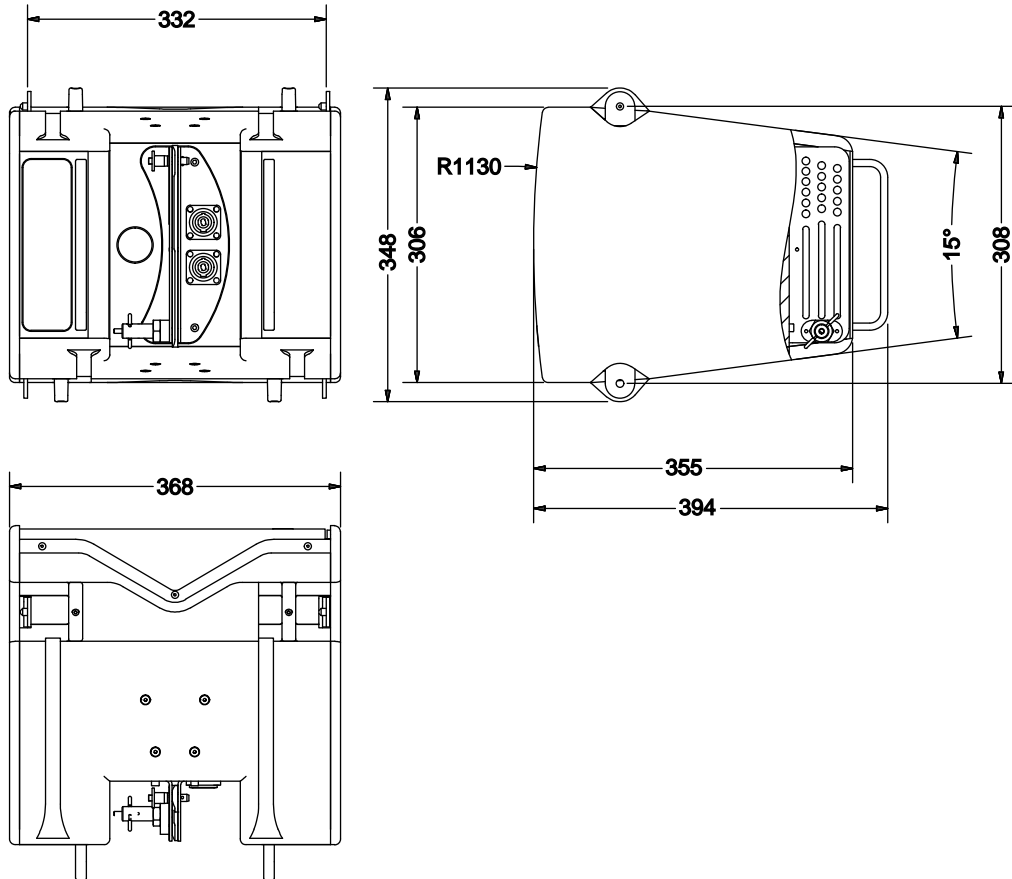
Seal of approval box on the SEQUENZA 5 flying frame



13. Dimensions speaker

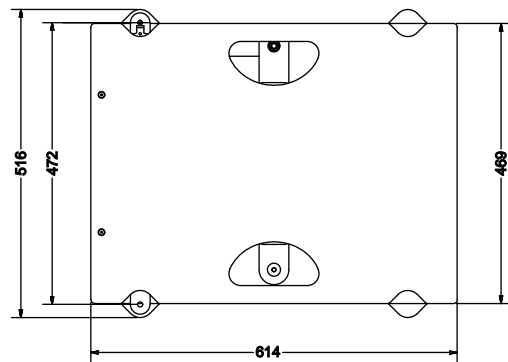
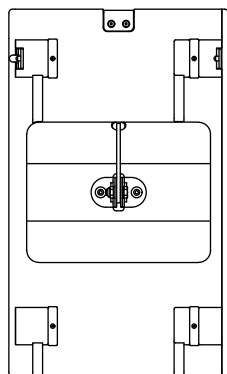
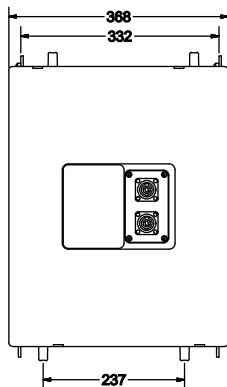
13.1 Dimensions SEQUENZA 5 W

Weight: 16.3 kg



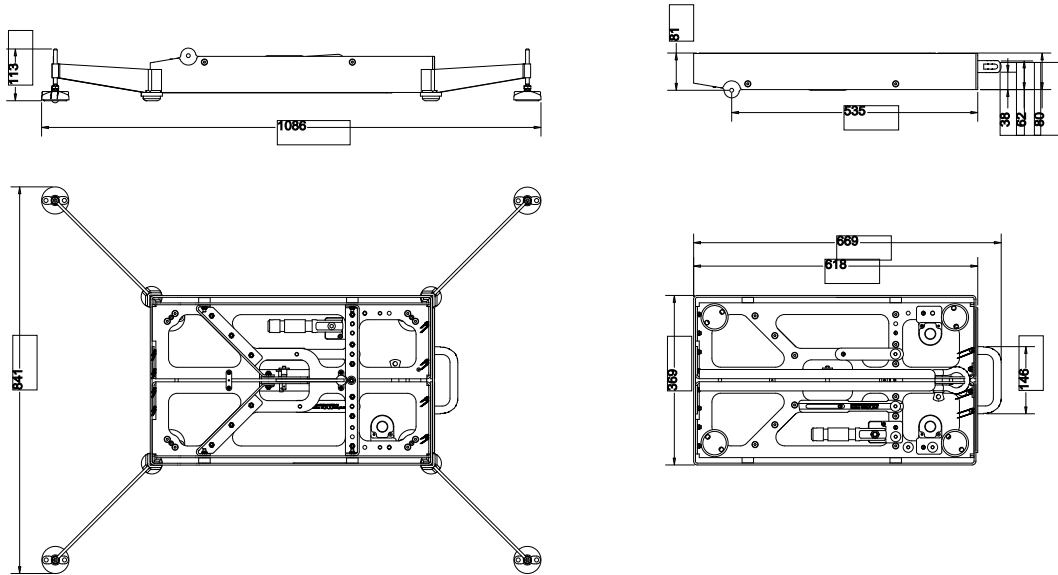
13.2 Dimensions SEQUENZA 5 B

Weight: 23.6 kg



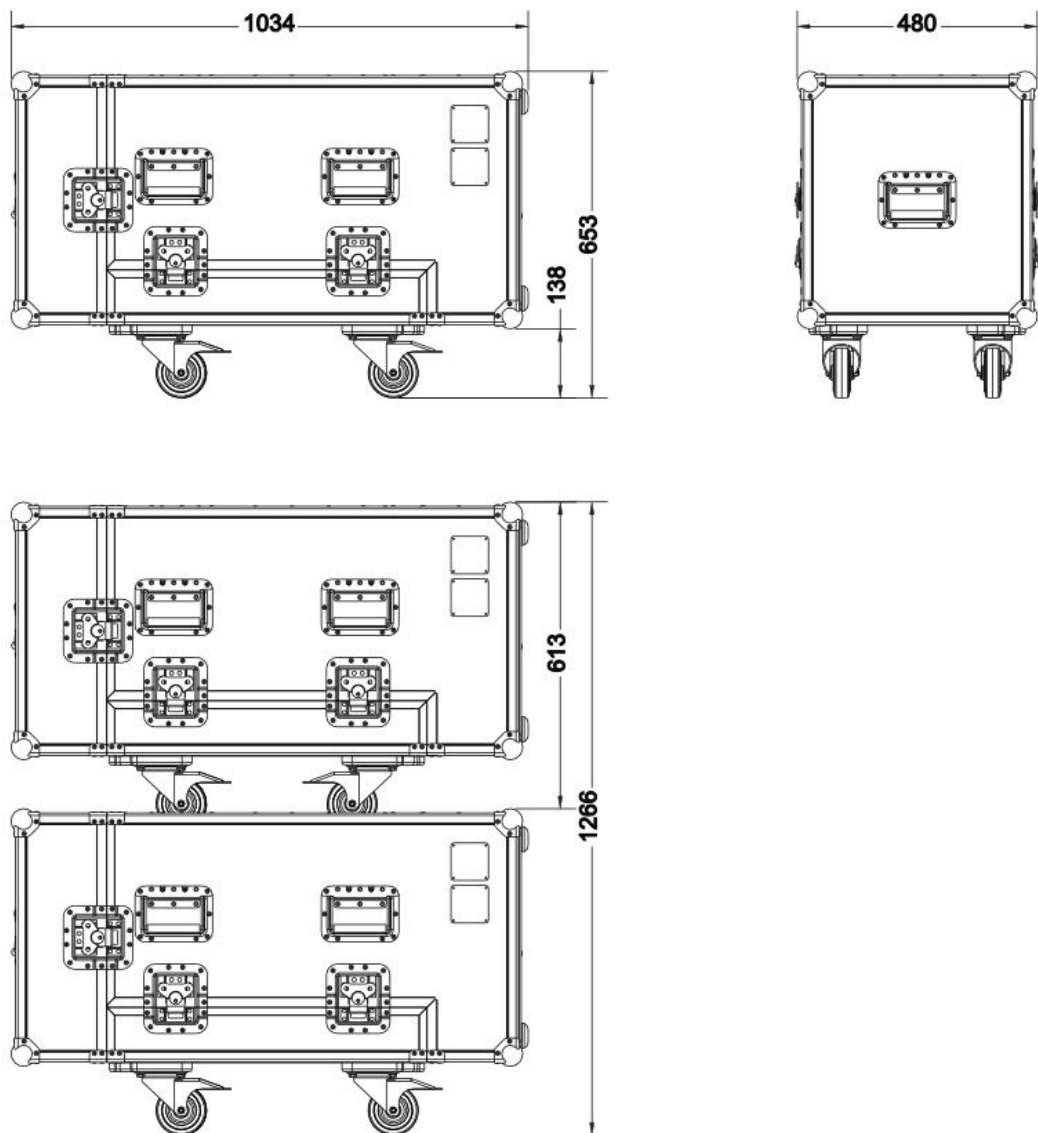
13.3 Dimensions SEQUENZA 5 flying frame

Weight: 17.4 kg



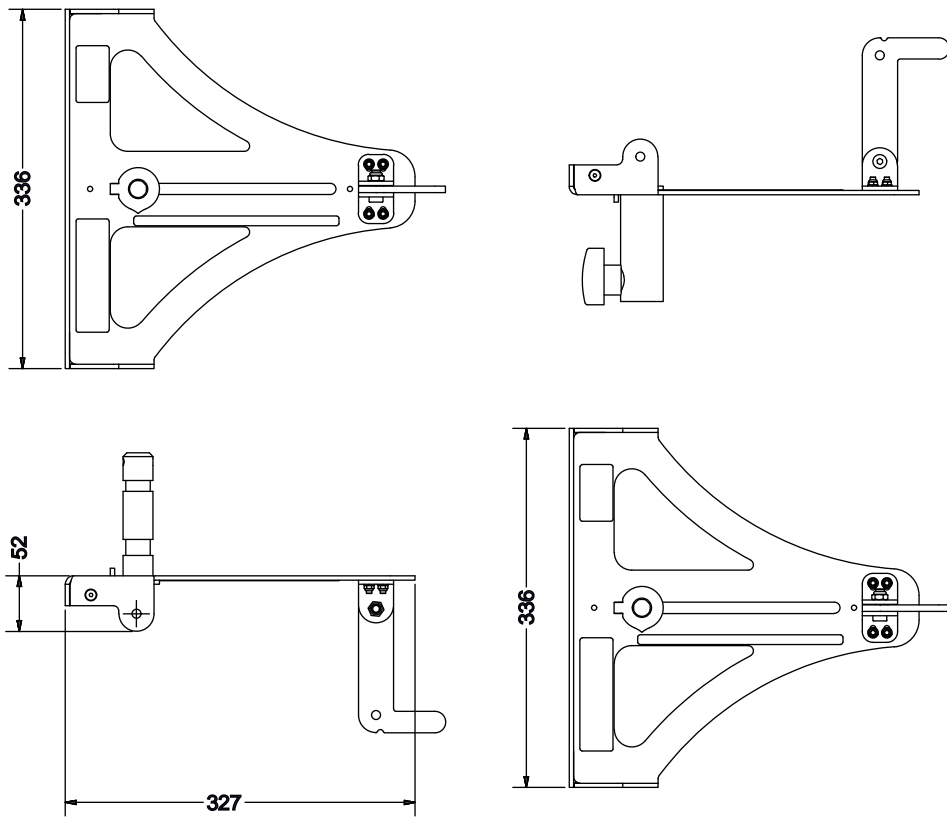
13.4 Dimensions SEQUENZA 5 transportation case

Weight: 36.5 kg



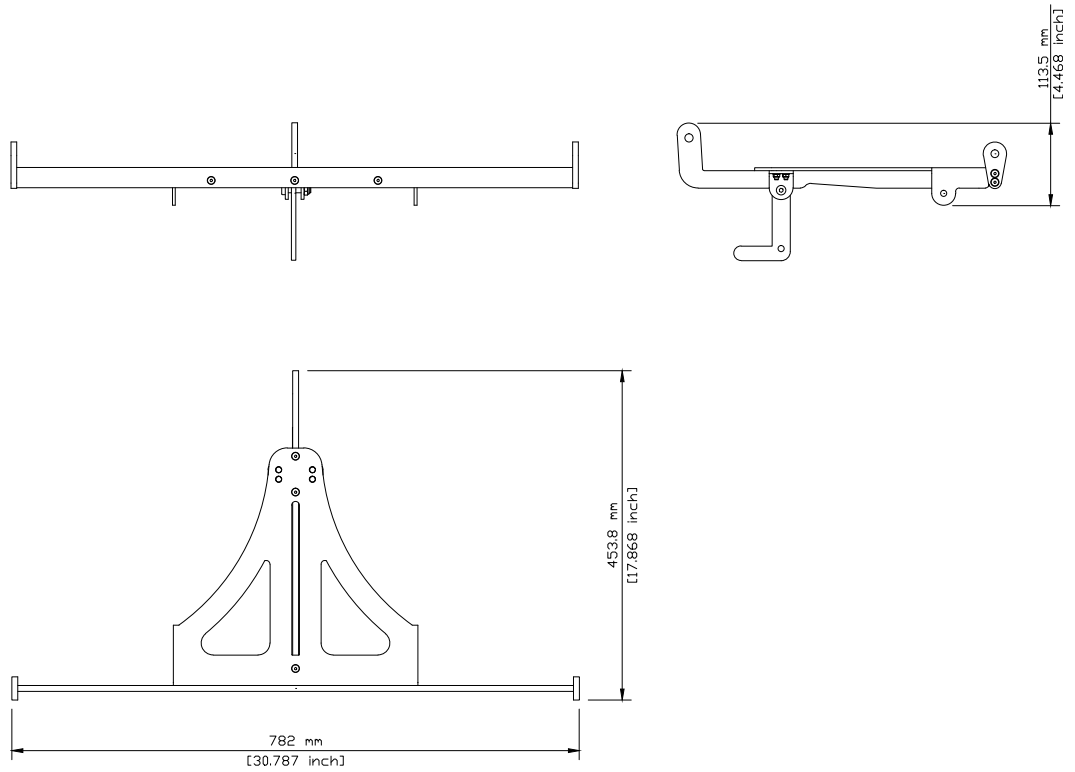
13.5 Dimensions SEQUENZA 5 VariMount adapter

Weight: 2.8 kg



13.6 Dimensions SEQUENZA 5 downfill adapter

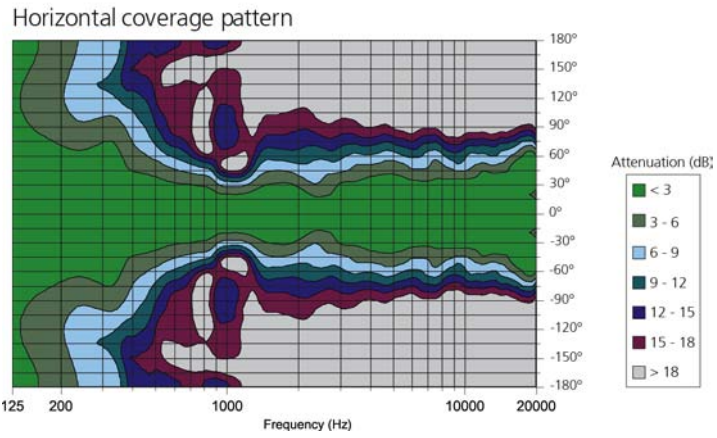
Weight: 3.0 kg



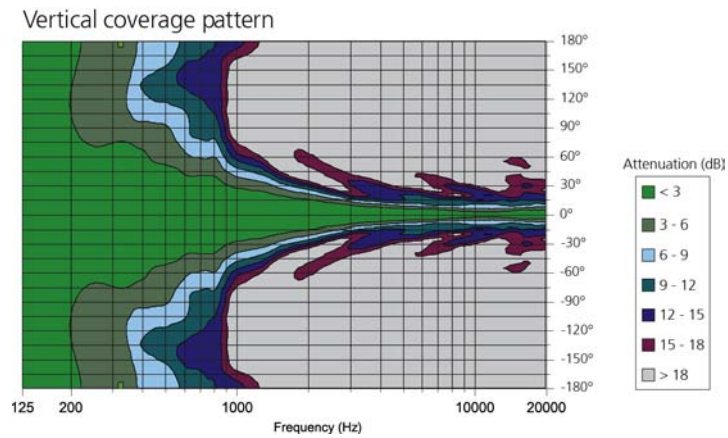
14. Measuring Diagrams

14.1 SEQUENZA 5 W diagrams

Horizontal Directivity

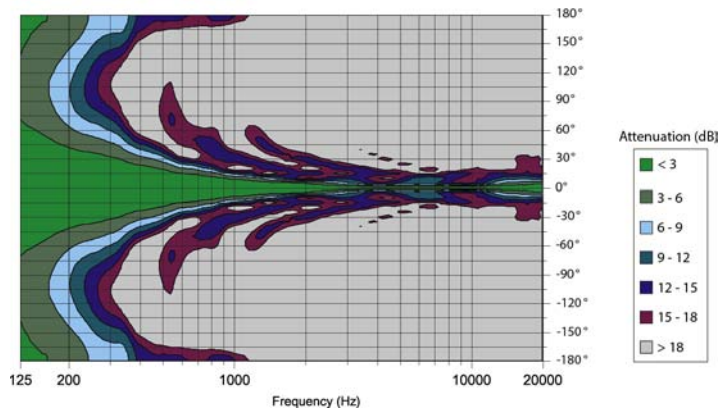


Vertical coverage pattern



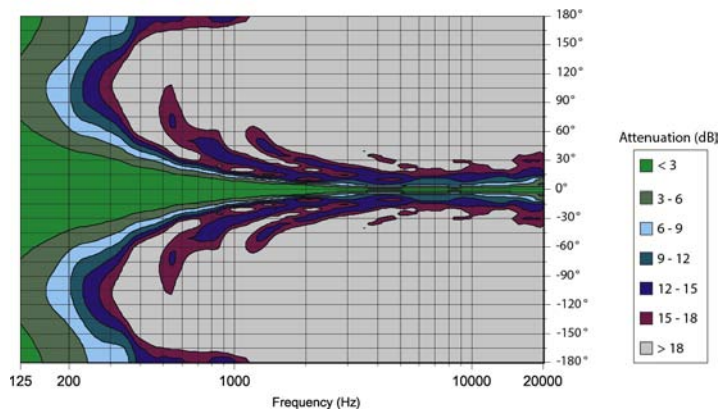
vertical coverage, 0 deg. tilt

Vertical radiation patten 3 x SEQUENZA 5 W, 0° splayed



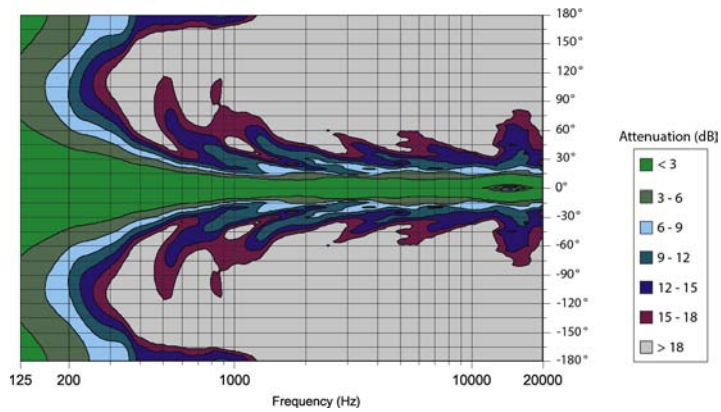
vertical coverage, 3 deg. tilt

Vertical radiation patten 3 x SEQUENZA 5 W, 3° splayed



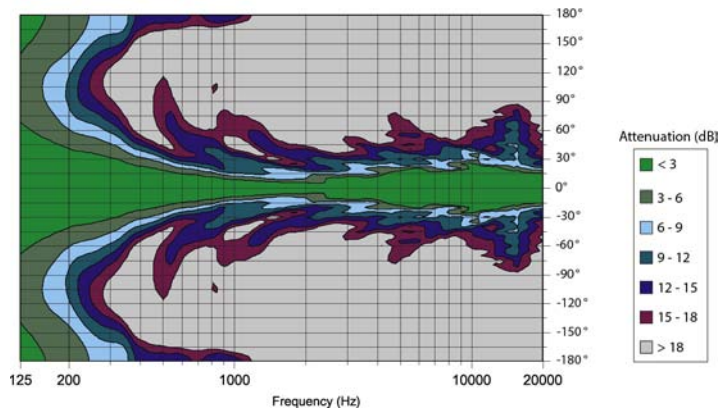
vertical coverage, 6 deg. tilt

Vertical radiation patten 3 x SEQUENZA 5 W, 6° splayed



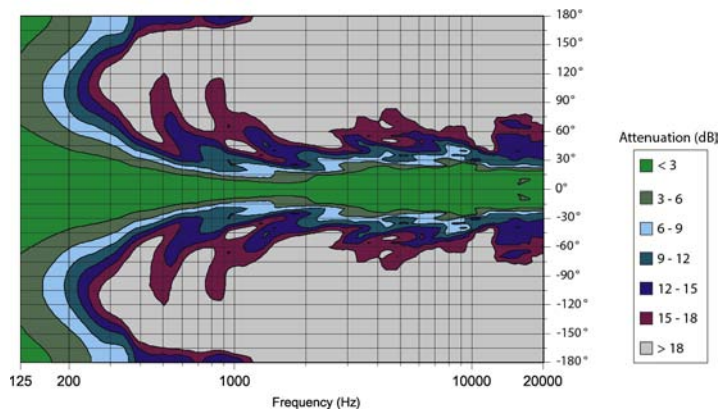
vertical coverage, 9 deg. tilt

Vertical radiation patten 3 x SEQUENZA 5 W, 9° splayed



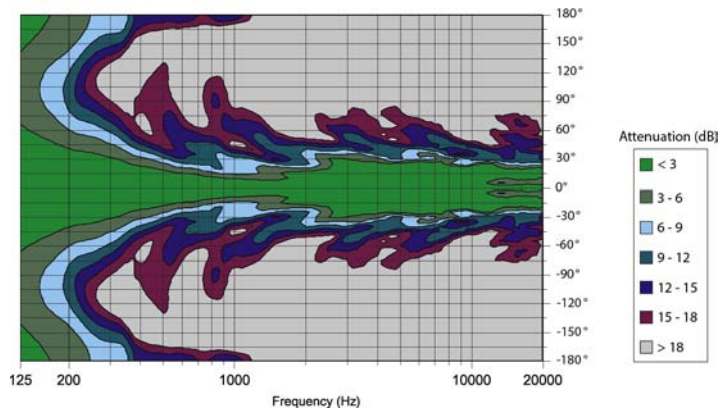
vertical coverage, 12 deg. tilt

Vertical radiation patten 3 x SEQUENZA 5 W, 12° splayed

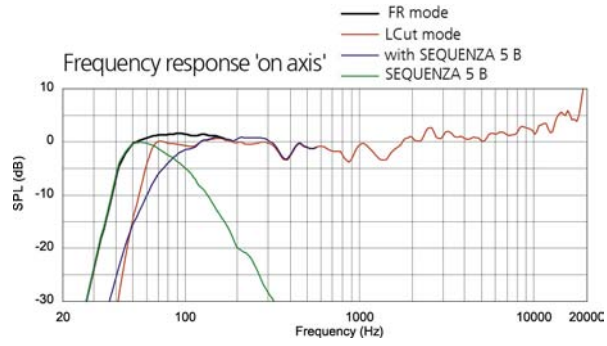


vertical coverage, 15 deg. tilt

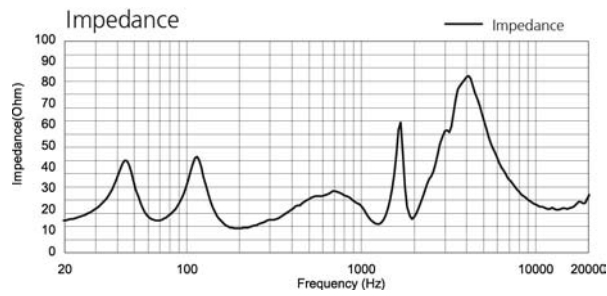
Vertical radiation patten 3 x SEQUENZA 5 W, 15° splayed



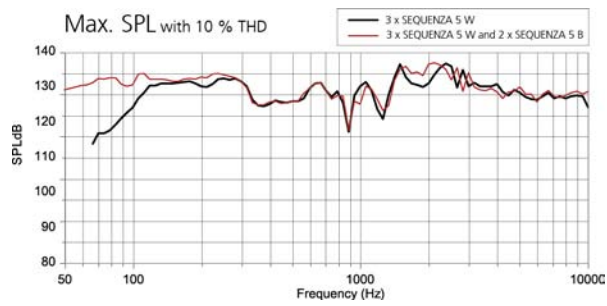
Frequency response 'on axis'



Impedance



max. SPL at 10% THD



15. Technical Specifications of Loudspeakers

15.1 Technical Specifications SEQUENZA 5 W

Concept	2-way passive system, bass reflex tuning (operation with K&F SystemRack or K&F TOPAS)
Frequency range @-10 dB	59 Hz – 22 kHz (FR mode) 74 Hz – 22 kHz (LCut mode)
Frequency range @±3 dB	70 Hz – 22 kHz (FR mode) 110 Hz – 22 kHz (LCut mode)
Horizontal coverage angle	100°
Vertical coverage angle	depending on the configuration (15° for one speaker)
Power handling	350 W nominal power handling 700 W program 1400 W peak
Max. SPL	130 dB (SPL peak/1 m/185 ms burst) (1 x SEQUENZA 5 W) 137 dB (SPL peak/1 m/185-ms burst) (3 x SEQUENZA 5 W)
Components	4 x 5" neodymium woofer 3 x 1" neodymium tweeter
Speakers / channel	3 (recommended / up to 5 possible)
Nominal impedance	16 ohms, Zmin 11.75 ohms @ 195 Hz
I/O	2 x Speakon 4-NLT4MP
Housing	Multiplex plywood with highly resilient Polyurea synthetic black coating, integrated steel rigging system with CTP and powder coating, wear resistant connectors, 1 ball lock pin (undetachable), 2 rear mounted handles, 2 non-abrasive plastic feet each on top and bottom for fast installation, ball proof steel grille with black acoustic foam on the inside.
Rigging system	integrated 3 point rigging system
Dimensions (W x H x D)	368 x 349 x 394 mm
Weight	16.3 kg
Color	RAL 9005 (black)

15.2 Technical Specifications SEQUENZA 5 B

Concept	bass reflex tuning (operation via K&F SystemRack or K&F TOPAS)
Frequency range @-10 dB	36 Hz - 147 Hz
Frequency range @±3 dB	40 Hz - 100 Hz
Coverage	Omnidirectional
Power handling	400 W nominal power handling ¹⁾ 800 W program ²⁾ 1600 W peak
Max. SPL	123 dB (SPL peak, 1 m, 185 ms burst) SEQUENZA 5 B
Components	1 x 12" neodymium woofer
Speakers / channel	3
Nominal impedance	8 Ohm
I/O	2 x SpeakOn 4-pin NLT4MP
Housing	Frame reinforced enclosure, 15 mm multiplex with highly resilient Polyurea synthetic black coating, integrated 3 point steel rigging system with CTP and powder coating with wear resistant connectors, 1 Qball lock pin (und detachable), 8 non-abrasive plastic feet on top and bottom for fast installation and high stability, 2 locking profiles for optional transport cover, ball proof steel grille with black acoustic foam on the inside.
Rigging system	integrated 3 point rigging system
Dimensions (W x H x D)	368 x 349 x 394 mm
Weight	23.6 kg
Color	RAL 9005 (black)

¹⁾pink noise, depending on the signal's crest factor and the amplifier's output power

²⁾same as pink noise but with 50% duty cycle

16. EC Declaration of Conformity

applicable to all products designated hereafter and distributed by KLING & FREITAG GmbH including model variants unless these products have been altered afterwards.

Loudspeaker systems:

ACCESS B5	E 90 MK II	SEQUENZA 10 B
ACCESS B10	LINE 212 -6/-9	SEQUENZA 5 W
ACCESS T5/T9	NOMOS LS CIN	SEQUENZA 5 B
CA 106	NOMOS LS II	SONA 5 **)
CA 205 *) **)	NOMOS LT	SONA 6
CA 1001	NOMOS XLC	SONA 8
CA 1201 *)	NOMOS XLS	SONA SUB **)
CA 1215 -6/-9	NOMOS XLT	SONS SUB II
CA 1515 -6/-9	PASSIO **)	SW 112
GRAVIS 8 W	PASSIO SUB 12	SW 115D *)
GRAVIS 12 N/W*	PASSIO SUB 15	SW 115E
GRAVIS 12+ N/W/XW	SCENA 15	SW 118E
GRAVIS 15 N/W/XW	SEQUENZA 10 N/W	SW 212E

*) These products are discontinued.

***) These systems are not covered by the Low Voltage Directive because of the rated voltage used.

We declare that the designated product(s) are in conformity with the protection requirements imposed by the following EU directives:

Electromagnetic Compatibility (EMC) Directive	(2004/108/EC)
Low Voltage Directive	(2006/95/EC)
Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances	(VDE 0042-12:2013-02)

The operating conditions specified in these operating instructions must be met accordingly.

This declaration is issued under sole responsibility of the manufacturer:

KLING & FREITAG GmbH
Junkersstraße 14, D-30179 Hannover, Germany



Hannover, 30th March 2015

Jürgen Freitag

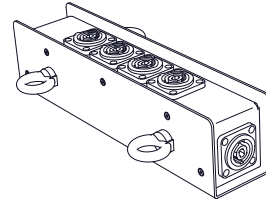
(Managing Director / CEO)

17. Accessories

17.1 General Accessories for SEQUENZA 5

K&F BOB:

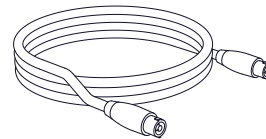
Speaker signal distributor, 2x 8-pin into 4x 4-pin, optionally with 3 x eyebolt M8 for vertical or horizontal suspension.



ProRental NL8 Prof. Speaker Cable

NLT-840:

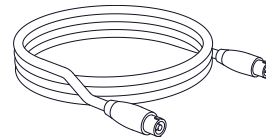
high grade halogen-free speaker cable, 8 conductors with 4 mm² cross section each, water proof metal connectors Neutrik® NLT8FX



ProRental NL4 Prof. Speaker Cable

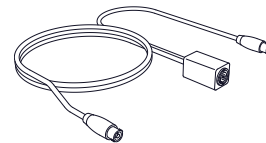
NLT-425:

High-grade halogen-free speaker cable, 4 conductors with 4 mm² cross section each, water proof metal connectors Neutrik® NLT4FX



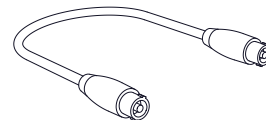
SEQUENZA 5 Speaker Split Adapter

Split adapter, weather proof, 1 x Neutrik® NLT4MP metal connector, 4 contacts, to 2 x Neutrik® NLT4FX metal connector, 2 contacts, high-grade halogen-free cable with 2.5 mm² cross section



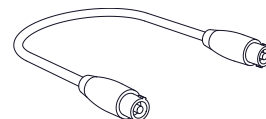
Speaker Patch Cable NLT-425, 0.5 m

50 cm patch cable for connections between SEQUENZA 5/10 (N/W) elements, high-grade halogen-free cable, 4 conductors with 2.5 mm² cross section each, water proof metal connectors Neutrik® NLT4FX



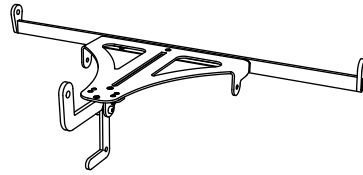
Speaker Patch Cable NLT-425, 1 m

100 cm patch cable for connections between SEQUENZA 5 B elements, high-grade halogen-free cable, 4 conductors with 2.5 mm² cross section each, water proof metal connectors Neutrik® NLT4FX

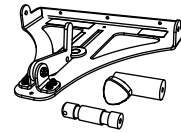


17.2 Accessories for SEQUENZA 5 W

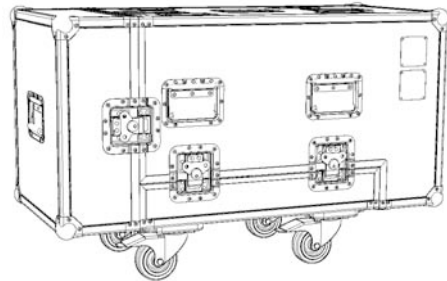
Downfill adapter SEQUENZA 10 to 5,
downfill adapter for flown configurations
of max. 3 SEQUENZA 5 W elements under
SEQUENZA 10 N/W



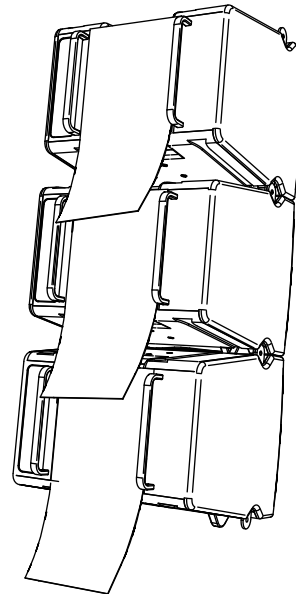
VariMount adapter SEQUENZA 5 W for
stacking or suspending of 3 elements
SEQUENZA 5 W, black colour



Transport case SEQUENZA 5 W (3)
Transport case for 3 SEQUENZA 5 W
elements for optimal handling during
setup (horizontal or vertical). The tilt
angles of the single elements can be
maintained. Colour: RAL 9005 (black)

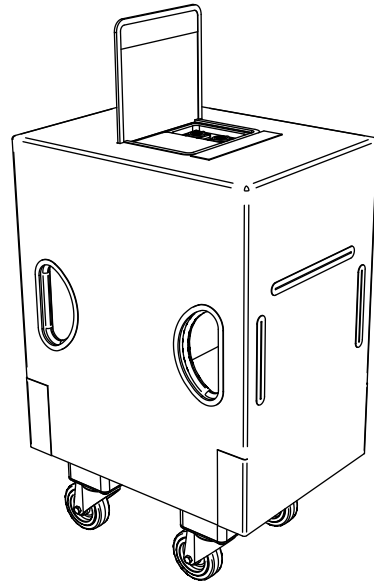


Rain Protection SEQUENZA 5
Rain protection for the rear flying
mechanics and the cable connections
while the speakers are in use. Colour:
black

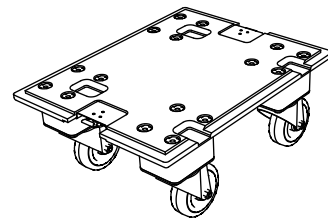


17.3 Accessories for SEQUENZA 5 B

Transport cover (textile) SEQUENZA 5 B



Transport Cover SEQUENZA 5 B

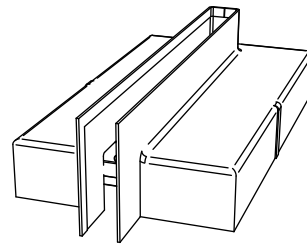


17.4 Accessories for SEQUENZA 5 Flying Frame

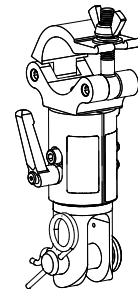
SEQUENZA 5 Flying frame outrigger
for increased stability



Rain protection SEQUENZA 5 rigging frame
Rain protection while the speakers are in use
Colour: black



K&F Rotation Clamp 450 with 50 mm half coupler (HC823) or 60 mm half coupler (HC828), Load max. 450 kg, for K&F VIDA L, K&F SEQUENZA 5 and K&F SEQUENZA 10 Flying Frames designed



18. Care and Maintenance

For the owner and user, it is mandatory to be aware of the fact that rigging systems are highly safety critical.

The inspection requirements vary depending on application and country of use. Observe the requirements that are relevant for you. If in doubt, contact local authorities.

Many countries require regular inspection of mounting components and accessories. It is thus recommendable to carry through such an inspection for your own safety, too. An additional annual inspection is typically required to be performed by a technical expert. Moreover, a legally certified or official authority must perform a detailed inspection every four years.

Therefore, be sure to maintain an inspection log. Enter the values determined for each speaker and accessory during the periodic checks into this log. This way, relevant data are always at hand in case of inspection.

In addition an inspection book for the rigging components of the SEQUENZA 10 system should be kept and maintained carefully. SEQUENZA 5The log should also document maintenance measures and inspection intervals and contain parts lists.

If as a result of these checks any uncertainty should arise with regard to safety or if specific faults are found, the product may no longer be used. You should send in the product to a KLING & FREITAG specialist dealer for inspection and repairs, if necessary.

If defects are ascertained, then you must send in the product to KLING & FREITAG GmbH for inspection and repairs, if necessary.

You may not repair or straighten the system components of the SEQUENZA 10 System (speakers and flying frame) yourself! SEQUENZA 5If parts of the rigging system are damaged, send in the speakers or the flying frame to KLING & FREITAG GmbH or recycle it at a professional scrap processing plant. It must by all means be guaranteed that the parts can no longer be used in any way after their disposal.

18.1 Inspection Intervals and Items

The SEQUENZA 5 system can exhibit signs of wear over the years, for example, from mechanical strain, transport damage, corrosion, or improper handling. In general, this always indicates an increased accident risk.

As a basic principle, you must visually inspect the SEQUENZA 10 System every time you get it out or box it up. SEQUENZA 5For fixed installations, you must inspect the SEQUENZA 10 System at regular intervals for signs of wear. SEQUENZA 5

When performing those checks, particularly look for deformations, cracks, dents, damage to threads, and corrosion. Also check slings and lifts (e.g. shackles, chains, and steel ropes) carefully for wear and deformation.

Use the visual inspection as an opportunity to rub all metal parts, especially the connectors, ball lock pins and spring bolts with a suitable corrosion preventive oil.



Tip

During the inspection, you must pay special attention to the following points:

- Mobility of the spring bolts. The bolts must move easily and snap securely into place. They must protrude at least 0.5 mm out of the joining plate on the opposite side.
- Impact and corrosion damage on the flying frame and on the speaker enclosure.
- Joint connectors and bolts
- Adhesion
- Tight fit of the front bolts

19. Transportation and Storage

All metal components are protected against short-term moisture with a coating. SEQUENZA 5 Store, transport, and use the accessories in dry environments only. The SEQUENZA 5 System is not designed for long-term use in a corrosive environment.

Make sure that the system is adequately ventilated during longer storage periods so any residual moisture can escape from the equipment.

Furthermore, you should ensure that all components of the SEQUENZA 5 System are protected from mechanical strain to prevent possible damage.

We recommend using the SEQUENZA 5 W transport cases and the optional transport covers for the SEQUENZA 5 B speakers that protect the components from the above-mentioned influences.

20. Disposal

20.1 Regulations for Disposal

20.1.1 Germany

Don't dispose of waste electrical equipment through household waste.

Don't deliver it to official recycling points either.

All KLING & FREITAG products are plain business-to-business (B2B) products. Therefore, KLING & FREITAG GmbH is exclusively responsible for disposing of all KLING & FREITAG waste equipment marked with a garbage-can icon. Please call the below phone number when you have a KLING & FREITAG product (marked with the garbage-can icon) for disposal. We will offer you a straightforward and professional disposal at no cost.

KLING & FREITAG equipment with no such icon was sold before 24 March 2006; in that case, the owner is legally responsible for disposal. We will, however, gladly assist you by naming appropriate ways of disposal.

For further disposal information of KLING & FREITAG waste products, call +49 (0)511-96 99 7-0

Background information: The Electrical and Electronic Equipment and Appliances Act (ElektroG) is the German implementation of the European (EU) Waste Electrical and Electronic Equipment Directive (WEEE, 2002/96/EC).

Therefore, starting on 24 March 2006, KLING & FREITAG GmbH has marked all products subject to the WEEE that are distributed in Germany with an icon showing a crossed-out garbage can with a white bar below it. The icon indicates that the equipment was distributed on or after 24 March 2006 and must not be disposed of through household waste.

KLING & FREITAG GmbH is legally registered as a manufacturer with the German waste-equipment registration authority (EAR). The WEEE registration number is: DE64110372.

We substantiated towards the EAR that our products are for B2B trade only.

20.1.2 EU, Norway, Iceland, and Liechtenstein

Don't dispose of waste electrical equipment through household waste.

Starting on 13 August 2005, KLING & FREITAG GMBH has marked all products subject to the WEEE directive that are distributed in any member state of the European Union (except Germany), Norway, Iceland, or Liechtenstein with an icon showing a crossed-out garbage can with a white bar below it. The icon indicates that the equipment was distributed on or after 13 August 2005 and must not be disposed of through household waste.

Unfortunately, the European WEEE directive was implemented in different national legislation in the EU member states, making it impossible to offer a consistent disposal solution throughout Europe.

The local distributor (sales partner) in the respective country is responsible for complying with the applicable legislation.

Contact your retailer or the local authorities for information on the regulations applicable in any EU member state (except Germany).

20.1.3 All Other Countries

Contact your retailer or the local authorities for information on the regulations applicable in any country not listed above.

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