



KLING &
FREITAG

SOUND SYSTEMS

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USER'S MANUAL

K&F PIA LFX

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1 Introduction

1.1 Icons Used



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



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



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



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

1.2 About this user's manual

EN | Translation of the original instructions

All KLING & FREITAG manuals are originally authored in German.

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

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

All information in this manual is subject to change without notice.

To ensure safe operation, all persons using the speaker system must have access to these user's manual and all other relevant material during installation. The speaker system may neither be set up nor used until these user's manual has been read, understood and kept readily available in site.

KLING & FREITAG spare manuals are separately available for order or can be downloaded from our website: www.kling-freitag.de

Contact Us: info@kling-freitag.de

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Phone +49 511 96 99 70

1.3 Scope of Application

If you have purchased this product together with other accessories, the instructions of those accessories including, but not limited to, mounting-accessory instructions become part of these instructions by reference.

If the PIA LFX speaker is used together with accessories that restrict the use specified in here, those restrictions will apply.

2 Product Description

- 1-Way High-Power Line Subwoofer
- Visually seamless connection to the PIA M speaker
- Acoustic enhancement for added low-end and improved directivity
- NL4 port-wiring selector (1+/1– or 2+/2–)

The Kling & Freitag PIA LFX is a high-performance line woofer designed for mobile use as well as for stationary installations with a focus on superior yet discreet appearance. Thanks to the perfectly identical external dimensions and the uniform appearance, it seamlessly fits with the Kling & Freitag PIA M.

When used in a setup with a base plate and the PIA M20 Link accessory, the PIA LFX not only becomes an elegant stand for the PIA M but also extends the usable frequency range down to below 60 Hz. By extending the acoustic coverage, it improves directivity even in the low frequency range. Thanks to the very high crossover frequency of above 200 Hz, it complements the PIA M in both bass-reflex and cardioid modes, making it the ideal bass complement.

The PIA LFX contains a total of six 4" drivers. They are housed in groups of three inside bass-reflex chambers fitted with flow-optimized bass-reflex ports. The cabinet is made of multiplex with a superb-quality finish, giving the speaker a very elegant look. The top, bottom and back panels are made of die-cast metal, which contributes to the slim and elegant design. The front of the speaker is protected by a metal grille with opaque acoustic foam backing.

Like the PIA M, the woofer features M10 threaded inserts on the top, bottom, and rear for mounting accessories such as TV spigots, pole mounts, clamp adapters, or eyelets. In addition, the concealed wall mount provides a visually appealing solution for stationary installations.

The PIA Link and the PIA M20 Link are the latest additions to the range. Attaching the PIA Link using the M10 screws provided with the PIA M and PIA LFX allows for using the setup on a stand or for suspended use of two PIA units. The PIA M20 Link is attached using the screws on the rear and can be mounted to stands that feature M20 threads. All mounting tools are stored to the unit itself.

The PIA LFX has connector panels featuring NL4 SpeakOn ports at both the top and the bottom plus built-in Phoenix screw terminals. This allows for the input signal to be looped through the speaker and connected directly to the PIA M. Using the integrated selector, you can set the port-channel configuration to either 1+/1– or 2+/2– for efficient cabling. You can use amplifiers from the K&F PLM+ and D series, the K&F IPX 2400, or the K&F IPX 1200 to drive your setups.

2.1 Intended Use

Be sure to use the K&F PIA LFX only with system amplifiers or controllers approved by KLING & FREITAG.

Be sure to use the speaker system only with K&F mounting accessories suitable for the specific application.

The product and any optional accessories are suitable for indoor use (exhibition halls, event halls, etc.). This product is not designed for prolonged use in corrosive environments.

Installation and operation must be performed by qualified event technicians or appropriately trained persons. Planning must be performed and responsibility be taken by qualified personnel only.

WARNING

Risks imposed by falling or overturning parts!

Be sure to install, suspend, fasten, and use Kling & Freitag speakers only using the designated fixtures as specified in this document.

Be sure to observe all instructions and information in the user manuals of the specific mounting accessories.

Never down-tilt speakers mechanically.

Any use not described in this User's Guide is not an intended use.

2.2 System requirements

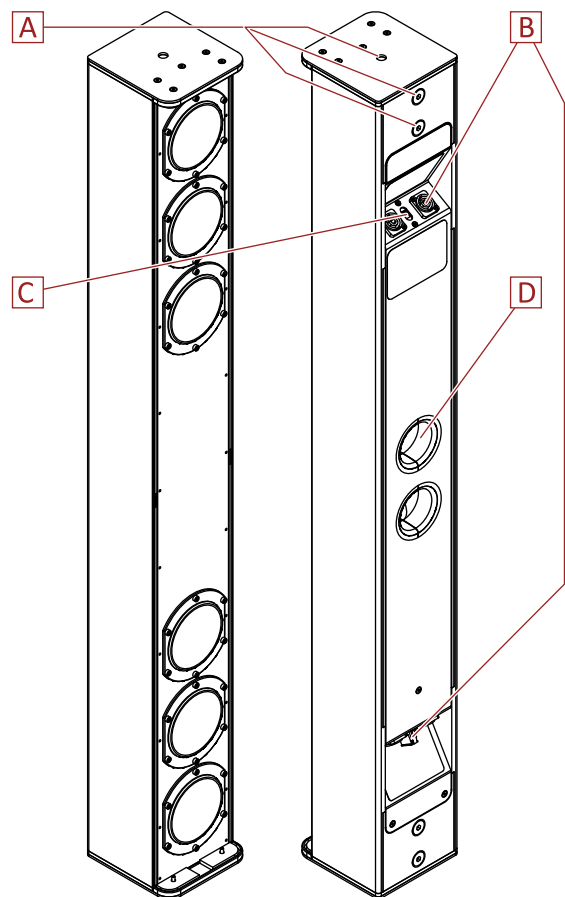
- K&F mounting hardware
- K&F SystemAmp:
 - K&F PLM+ series
 - K&F D series
 - K&F IPX2400
 - K&F IPX1200

2.3 Items Included

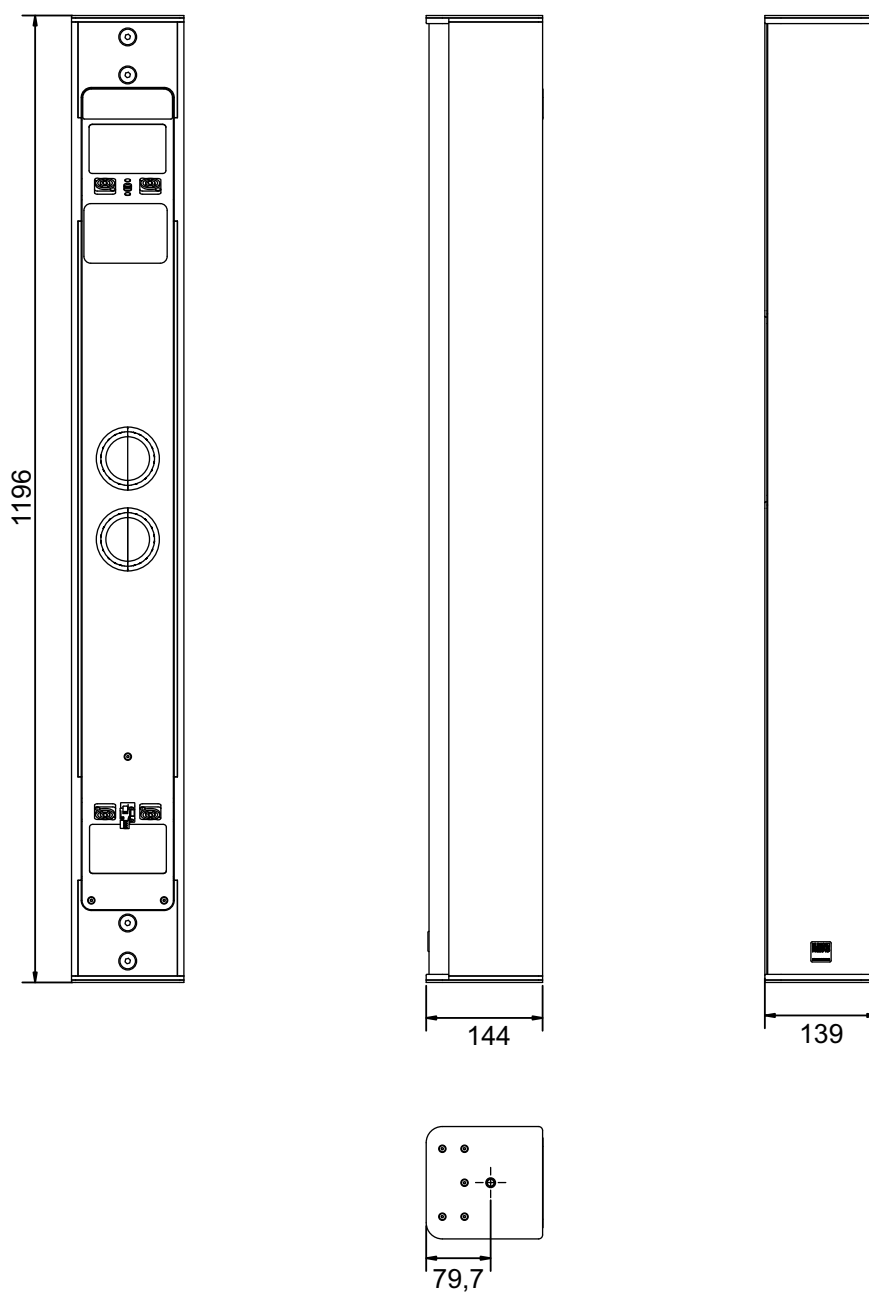
- 1 x K&F PIA LFX speaker
- 1 x user guide

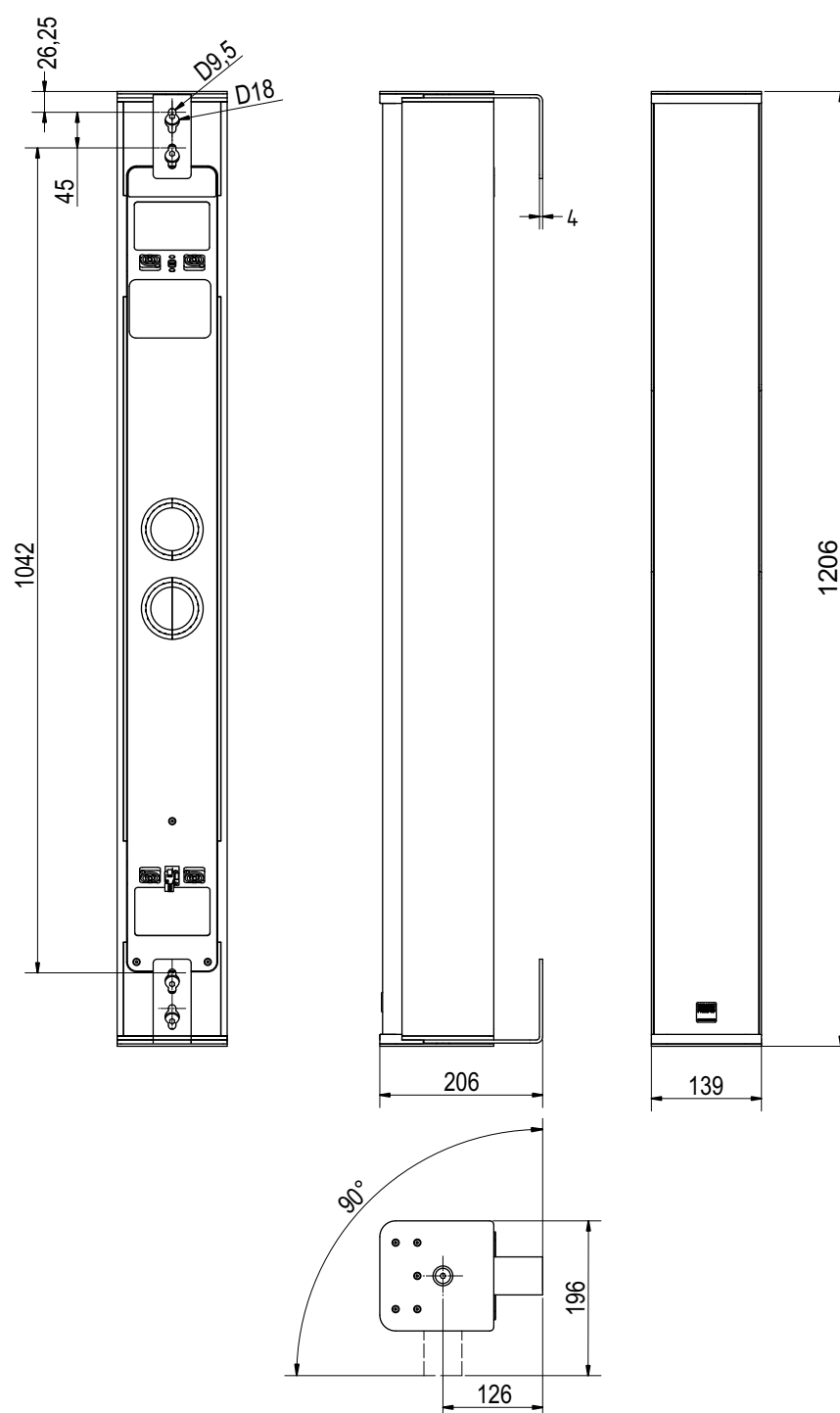
2.4 Overview of PIA LFX Parts

- [A]** M10 bore for fastening mounting hardware (same at the top and the base)
- [B]** Connector panels with 2 SpeakOn ports each at the top and bottom, plus an extra Phoenix terminal at the bottom
- [C]** Selector switch for toggling the port-channel configuration between 1+/1– and 2+/2–
- [D]** Bass-reflex ports



2.5 PIA LFX Dimensions



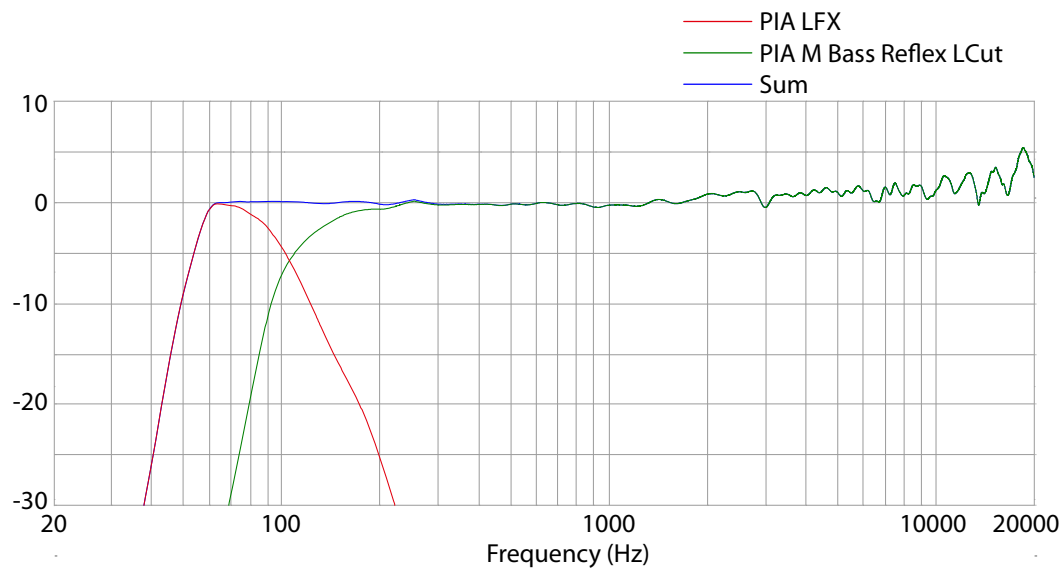
2.6 PIA LFX Dimensions (incl. wall mount)

2.7 Technical Specifications

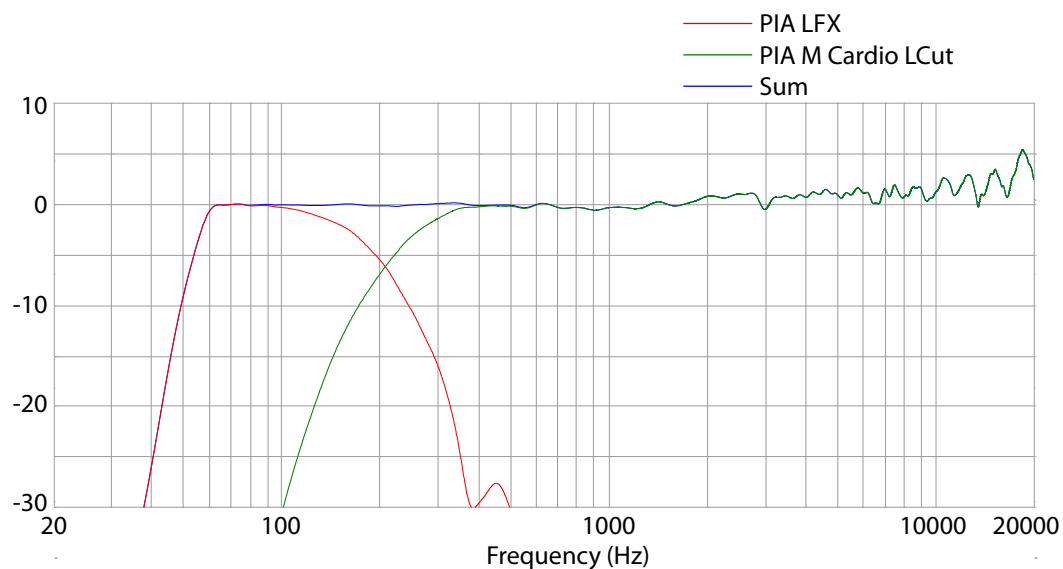
Concept	1-way system with active equalization
Supported amplifiers	K&F PLM+ series, K&F D series, K&F IPX 2400, K&F IPX 1200
Frequency range @-10 dB	52 Hz – 240 Hz
Frequency range @±3 dB	65 Hz – 160 Hz
Power handling	100 W
Program load	200 W
Peak load	400 W
Max. SPL (peak @ 10% THD max.)	122 dB SPL
Nominal impedance	8 Ohm
Speakers per channel	3
Components	6 x 4" woofer drive in bass-reflex chamber
Connection	SpeakOn NL4 (with selectable 1+/1– or 2+/2– configuration) / Phoenix terminal
Enclosure	<p>Birch multiplex with heavy-duty textured finish, RAL 9005 (black) or RAL 9010 (white)</p> <p>2 x M10 threaded inserts on the base and the top for attaching stand adapters, TV spigots, or a recessed U-mount wall/ceiling bracket</p> <p>4 x M10 threaded inserts on the rear panel for mounting clamp adapters</p> <p>Recessed SpeakOn ports and Phoenix terminal at the rear panel</p> <p>Steel grille with black acoustic foam backing</p>
Dimensions (W x H x D):	139 x 1196 mm x 168 mm (5.47" x 47.09" x 6.61")
Weight	11.4 kg
Colors	<p>RAL 9005 (black)</p> <p>RAL 9010 (white)</p> <p>RAL spot colors available on request</p>

2.8 Frequency response

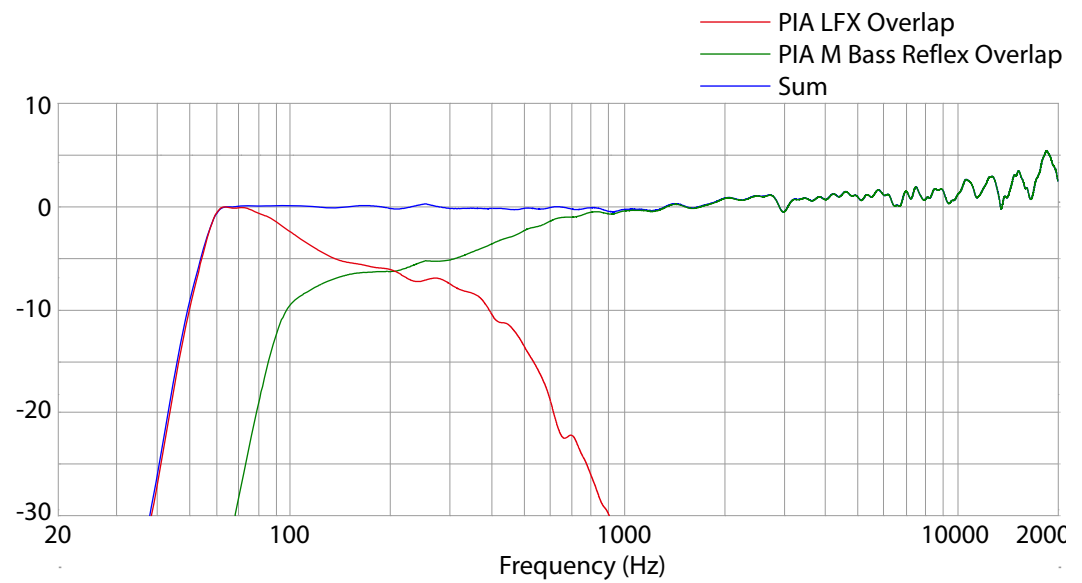
2.8.1 PIA M FQ in bass-reflex low-cut mode



2.8.2 PIA M FQ in cardioid low-cut mode



2.8.3 PIA M FQ in bass-reflex overlap (400Hz) mode



3 Accessories, Description and Items Included

K&F PIA M wall mount

The wall mount allows you to mount either one PIA M or one PIA LFX speaker to a wall.

Special top and base plates replacing the respective PIA LFX standard components are included for seamless rotation by 180°.

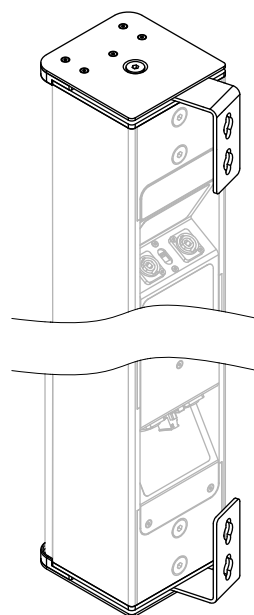
Included:

- 2 x base / cover for use with wall mount
- 2 x fastening brackets with keyholes
- 2 x M10x50 countersunk screws

⚠ WARNING

Not suitable for ceiling mounting or horizontal use!

Colors: black, white; RAL on request

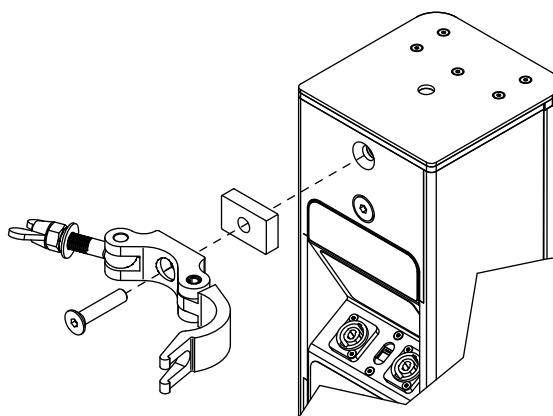


K&F PIA M truss adapter set

Allows for vertical mounting of one PIA M or PIA LFX speaker to a truss or pipe with a diameter of 48 mm – 51 mm (1.9" – 2").

Included:

- 2 x half couplers, incl. M12 spring washer, washer, nut and wing nut
- 2 x spacers



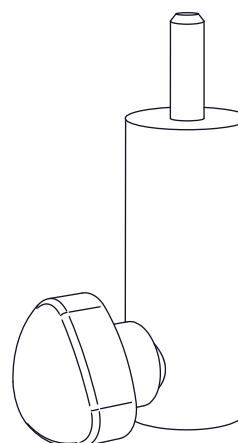
K&F stand sleeve M10 x 30 (incl. mounting material)

Allows one PIA M or one PIA LFX speaker to be mounted on a stand.

Included:

- 1 x stand sleeve feat. M10x30 thread
- 1 x Locktix® washer incl. rubber centering disk (not shown).

Colour: black



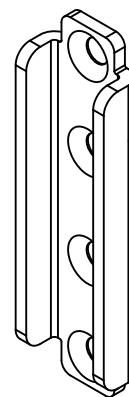
K&F PIA Link (incl. mounting material)

1. Allows for connecting one PIA M unit to one PIA LFX for suspended mounting using eyebolts or TV spigots.
2. Allows for stacking one PIA M unit on one PIA LFX that is mounted on stand or woofer.

Included:

- 1 x PIA Link

Colors: black, white; RAL on request

**K&F M10×35 eyebolt**

Allows for flying one PIA M or PIA LFX speaker or one speaker pair consisting of one PIA LFX and one PIA M speaker connected with a PIA Link accessory. Can also be used as a safety eyelet.

Color: silver

**TIPP****Please remember!**

Two M10 x 35 eyebolts are required to suspend a PIA LFX; this is because you need to fasten the speaker to a second eyebolt for safety purposes.

K&F TV spigot (45 mm / 1¾"; incl. mounting material)

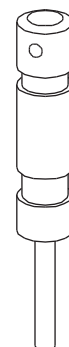
Allows for mounting the speakers onto suitable accessories that accept TV spigots (for example, e.g. K&F TV-spigot clamp).

Allows for flying one PIA M or PIA LFX speaker or one speaker pair consisting of one PIA LFX and one PIA M speaker connected with a PIA Link accessory.

Included:

- 1 x TV spigot feat. M10×45 thread
- 1 x Locktix® washer incl. centering O-ring (not shown).

Color: silver

**TIPP****Please remember!**

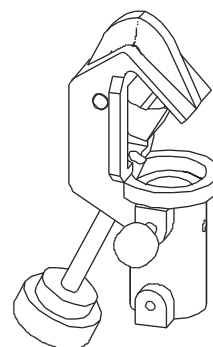
For mounting a PIA LFX to a TV spigot, you also need an additional M10×35 eyebolt to attach the speaker to the spigot.

K&F TV-spigot clamp

Suitable for pipes with diameters between 30 mm – 50 mm (1.18" – 1.97"); 50kg load (max.)

Combine with the K&F 45 mm TV spigot for suspending.

Colour: black

**K&F PIA M20 Link**

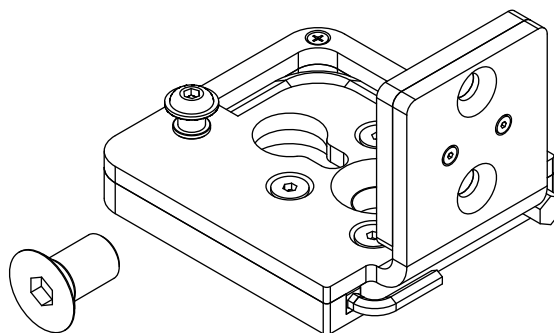
The PIA M20 Link allows for installing one PIA M or PIA LFX speaker or one speaker pair consisting of one PIA LFX and one PIA M speaker connected with a PIA Link accessory.

You can mount either to a stand or a K&F Subwoofer featuring an M20 thread.

Included:

- 1 x PIA M20 Link
- 1 x M20 x 40 countersunk screw
- 1 x M10 anchor bolt
- 1 x Allen key (size 6)
- 1 x Allen key (size 12)

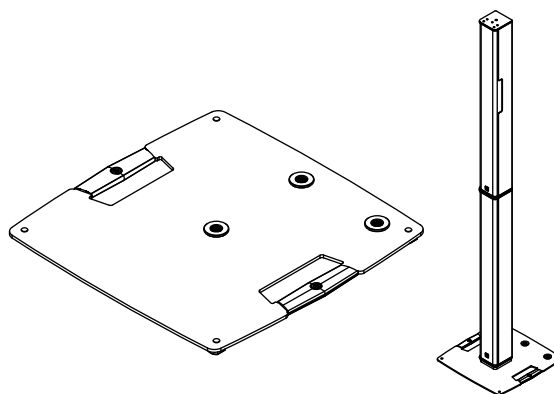
Colors: black, white; RAL on request

**Gravity TWB 431 B stand**

When used in combination with the PIA M20 Link,

the stand allows for safe installation of one PIA M or PIA LFX speaker or one speaker pair consisting of one PIA LFX and one PIA M speaker connected with a PIA Link accessory.

Colour: black

**K&F Transport Case PIA M (2)**

Transportcase for

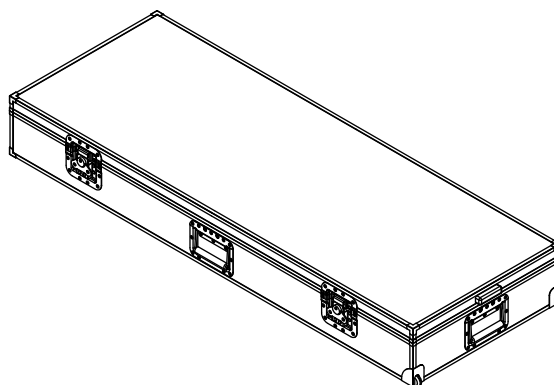
2 x PIA M or

2 x PIA LFX or

1 x PIA M und 1 x PIA LFX

for optimal handling when transporting speakers and accessories.

Colour: black



4 General Safety Instructions

⚠️ WARNUNG

Installation and operation must be performed by qualified event technicians or appropriately trained persons. Planning must be performed and responsibility be taken by qualified personnel only.

K&F PIA LFX speakers may be installed or flown by qualified personnel (riggers) only! Refer to the relevant accessory manuals for safety and handling instructions with regard to your installation options and further details. The manuals are available for free download on our website at www.kling-freitag.de.

4.1 Preventing Hearing Damage

⚠️ VORSICHT

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

Be sure to comply with your local noise regulations.

If possible, install the speakers in a place where nobody can stand right in front of them. If necessary, limit the maximum volume level.

4.2 Protecting the Speakers, Reliability

HINWEIS

K&F PIA LFX speakers must be powered by a K&F system amp only!

Never feed audio at excessive levels to the speaker. This may be caused by mixing consoles, equalizers, effect equipment, etc. and should be indicated on this equipment. Clipping at the power-amp output is typically shown by a red clipping indicator. In any case, be sure to lower the signal level once it sounds distorted.

For damage caused by

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

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

Signals that may damage the speakers include the following:

- Continuous high-volume signals at high frequencies, continuous audio feedback
- Continuously distorted signals at high levels
- Sounds occurring when connecting, disconnecting, or switching on a device on the audio system while the speaker is on

Never place your speakers

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

Damage Caused by the Speaker's Magnetic Fields

Even when not connected, loudspeakers continuously produce a magnetic field. Therefore, when transporting or placing the speaker, be sure to keep a minimum distance of about 1 meter between the speaker and magnetic disks or computer/video displays.

5 Mounting the Accessories

5.1 Mounting the PIA M Wall Bracket

⚠ WARNING

Risks imposed by falling parts

- Be sure to mount the PIA LFX vertically!
- Note you must not install the wall mount at the ceiling.
- Before installation, consider the load-bearing capacity, strength, and structure of the wall.
- Be sure to use appropriately sized and suitable mounting material (dowels, screws, etc.) to ensure the required strength.

Required Tools	Required mounting material
Allen key (size 2.5)	4 x suitable anchors (8-mm body diameter, 17-mm head diameter max.)
Allen key (size 6)	
Tools for attaching and tightening anchors	

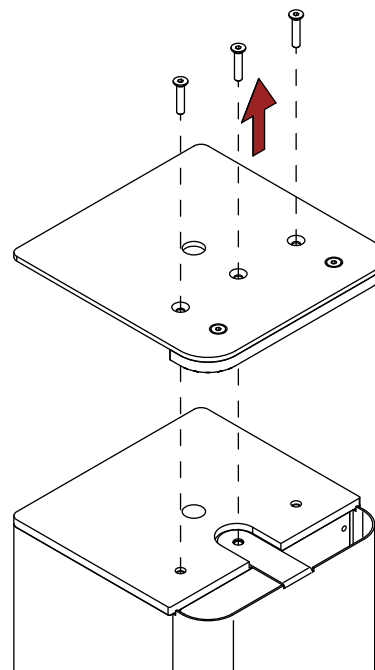
Wall-anchor strength specification (without safety factor)	
Tensile strength: 33.6 daN	Shear strength: 12.2 daN

⚠ WARNING

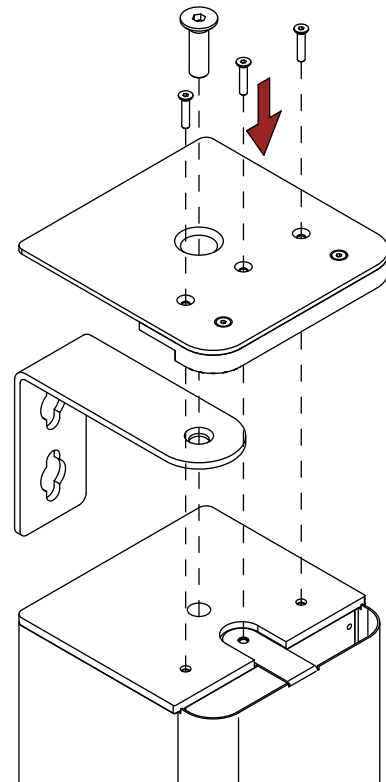
The anchors must withstand those forces permanently.

The specified values are actual loads; depending on the application at hand and the anchor properties, you may have to consider safety margins.

1. Loosen and remove the three screws shown, then remove the PIA LFX base / top plates (without the wall mount).



2. Mount the base / top plates supplied with the PIA M wall mount as shown.
3. Don't tighten the M10×50 screw yet—the fastening bracket should still be movable.
4. Repeat the procedure with the second plate.

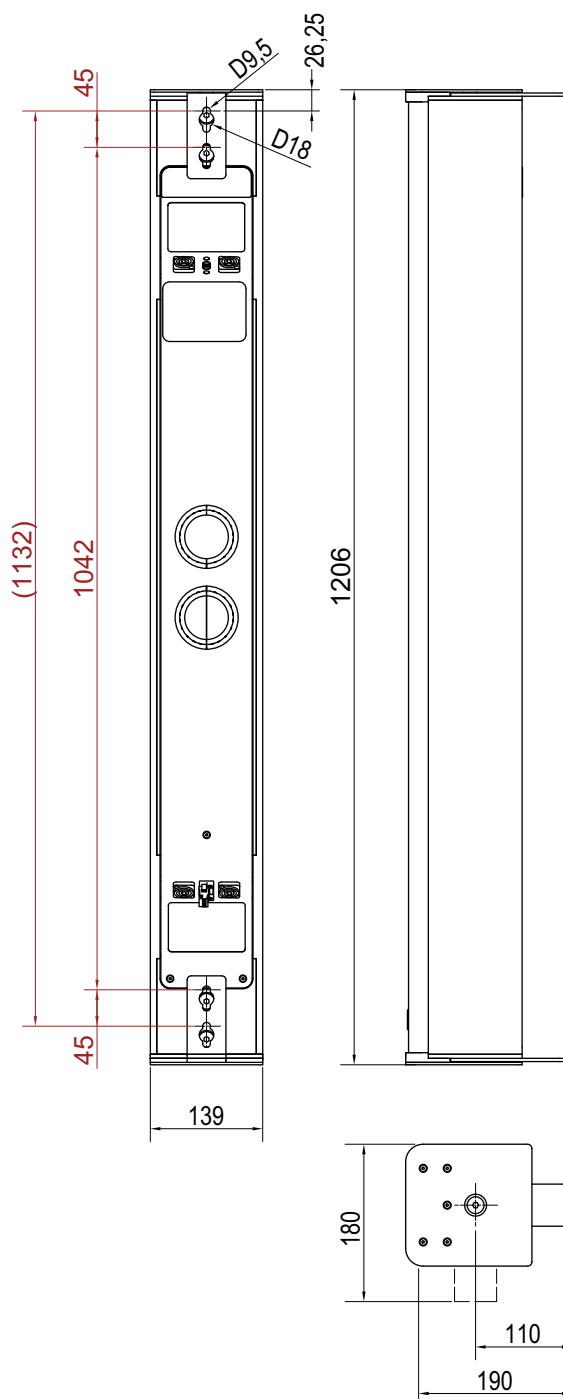


5. Install **four** anchors according to the adjacent drawing **[red measurements]**. Be sure to leave sufficient space between the anchor head and the wall, so you are able to place the wall mount behind the anchor head.

**TIPP****Tipp**

Perform the next step using a lifting platform, so that you don't need to fasten the speaker under load.

6. Lift the speaker to mounting height.
7. Center the keyholes in front of the respective anchor heads.
8. Lower the speaker.
9. Make sure the anchor points have been properly inserted and the anchor heads stand out from the holes.
10. Tighten the anchor points.
11. Align the speaker.
12. Tighten the M10 screws at the top and base using with a size-6 Allen key.



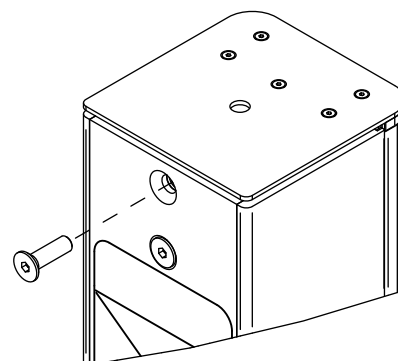
5.2 Mounting the PIA M Truss Adapter Set

Required Tools

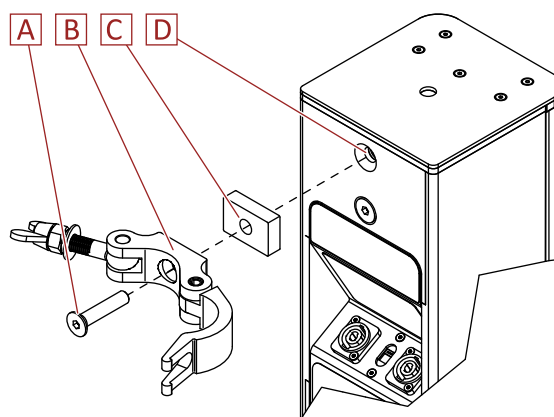
Allen key (size 6)

1. Remove the upper M10x50 countersunk screw from the rear panel to attach a truss adapter to the speaker's M10 thread.

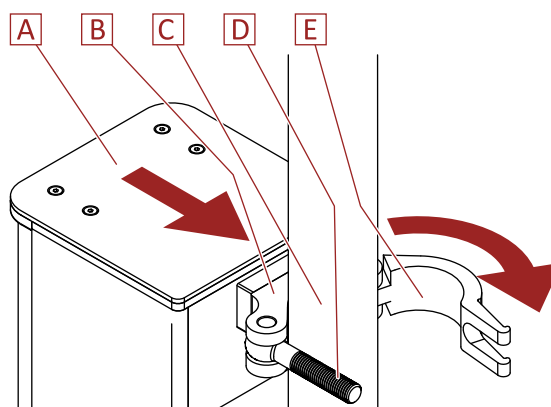
If necessary (for example, because a truss-adapter attachment causes space issues), you can also use the lower M10 thread for mounting the truss adapter.



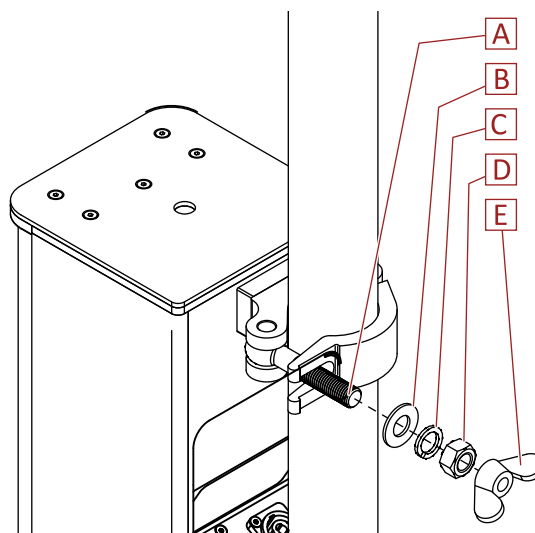
2. Using M10 x 50 countersunk screw **[A]**, mount half coupler **[B]** and spacer **[C]** to the exposed M10 thread of speaker **[D]**.
3. Repeat the procedure to mount the other truss adapter on the opposite side of the speaker.



4. Lift speaker **[A]** with half-coupler base **[B]** attached towards tube **[C]**.
This requires at least two persons or a suitable lift.
5. Close the top part **[E]** of the half-coupler.
6. Slide bolt **[D]** into the gap of the upper half-coupler part.



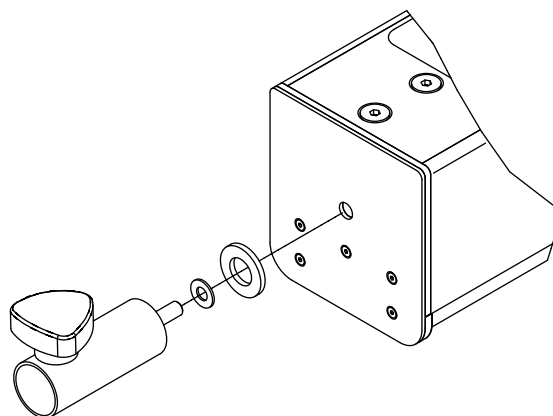
7. Screw the M12 nut **[D]** with spring washer **[C]** and washer **[B]** onto the bolt **[A]** and tighten it.
8. Secure the screw connection using butterfly nut **[E]**.
9. Repeat the procedure to mount the other truss adapter on the opposite side of the speaker.



5.3 Mounting the Stand Sleeve

Screw the stand sleeve into the M10 thread on the base / top and tighten it.

Secure it using the supplied Locktix® lock washer and the rubber disc.

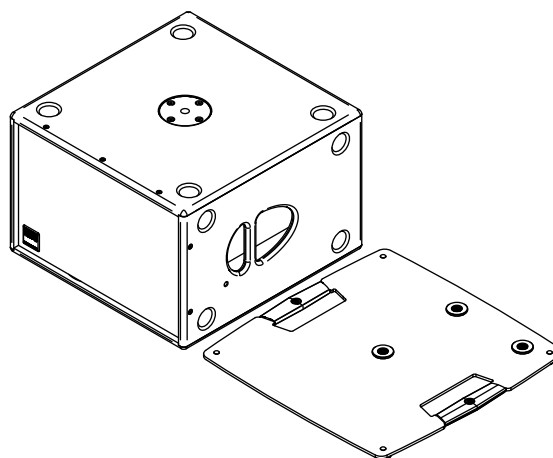


5.4 Mounting the PIA M20 Link for Use on a Stand

1. Place the Gravity TWB 431 B stand or a K&F woofer featuring an M20 thread on a level and firm surface.

The following describes the installation on a stand.

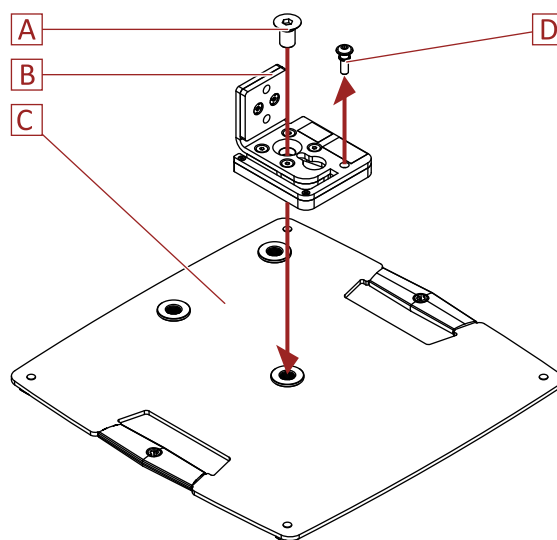
Installing on a K&F woofer is done in the same way.



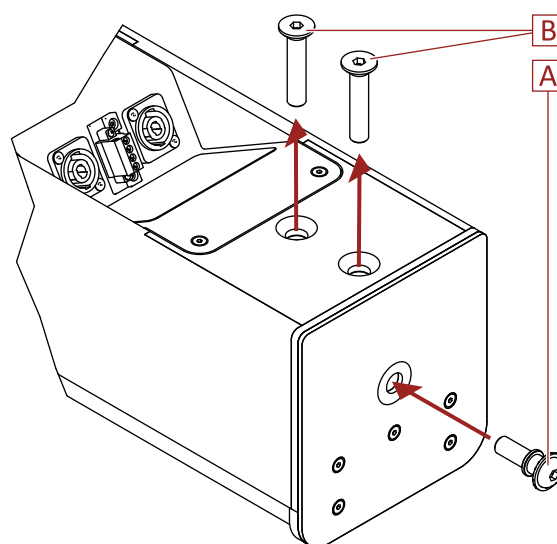
2. Attach and fix the PIA M20 Link **[B]** to the stand **[C]** using the M20 x 40 countersunk screw **[A]**.

Use the size-12 Allen key stored in the PIA M20 Link:

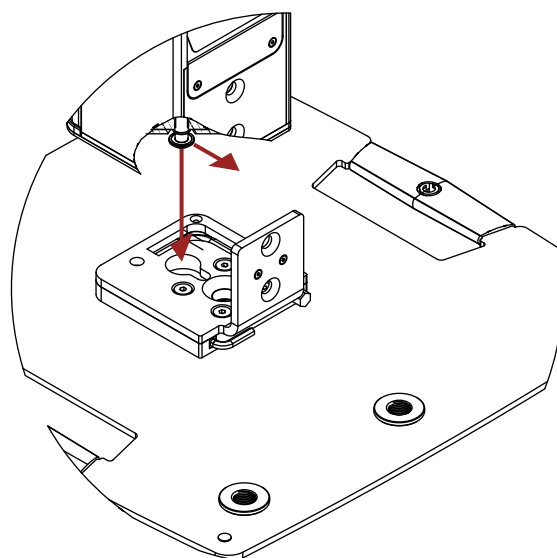
3. Put the Allen key back in its storage location.
4. Remove the M10 anchor bolt **[D]** using the size-6 Allen key that is stored in the PIA M20 Link.



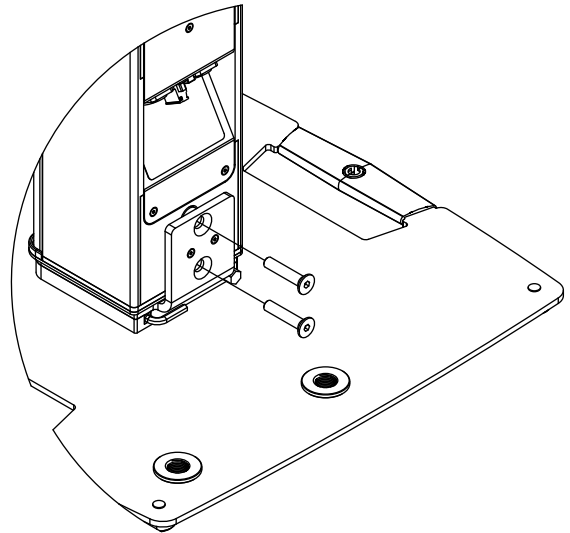
5. Screw the M10 anchor bolt **[A]** to the base of the PIA LFX speaker.
6. Remove the two lower M10x50 screws **[B]** from the PIA LFX speaker.



7. Insert the M10 anchor bolt of the PIA LFX into the keyhole of the PIA M20 Link.
8. Pull the speaker backwards to move the anchor bolt to the narrow keyhole part and make the speaker rest against the PIA M20 Link bracket.



9. Secure the PIA LFX speaker firmly to the PIA M20 Link using the M10×50 screws.
10. Put the size-6 Allen key back to its storage location.



5.5 Connecting to a PIA M speaker

Required Tools

Allen key (size 6)

⚠ WARNING

Hazard of falling

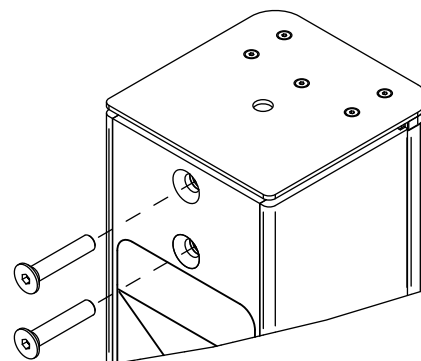
Be sure to connect no more than two PIA speakers using a PIA Link.

⚠ VORSICHT

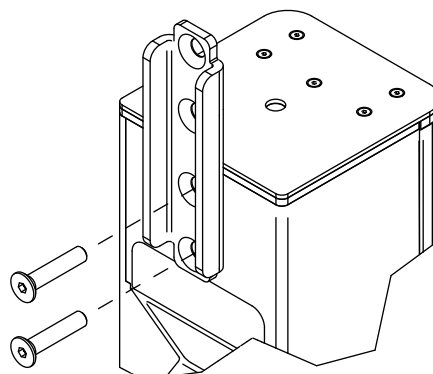
Danger of Tipping

Please note that the speaker footprint is very small. Therefore, secure the speakers against tipping during installation – preferably by getting help from a second person.

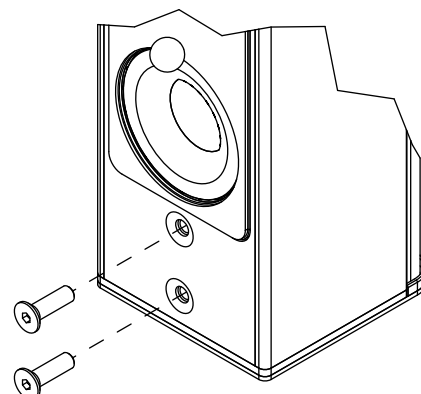
1. Place the PIA LFX speaker upright on the floor or connect it to the stand or a K&F woofer featuring an M20 thread. See »Mounting the PIA M20 Link for Use on a Stand« on page 21.
2. Remove the two M10×50 screws located at the top of the rear panel.



3. Attach the PIA Link to the speaker standing on the floor as shown.
4. Fasten the PIA Link using the two M10×50 screws but do not tighten yet.



5. Remove the two lower M10×50 screws from the PIA M speaker.



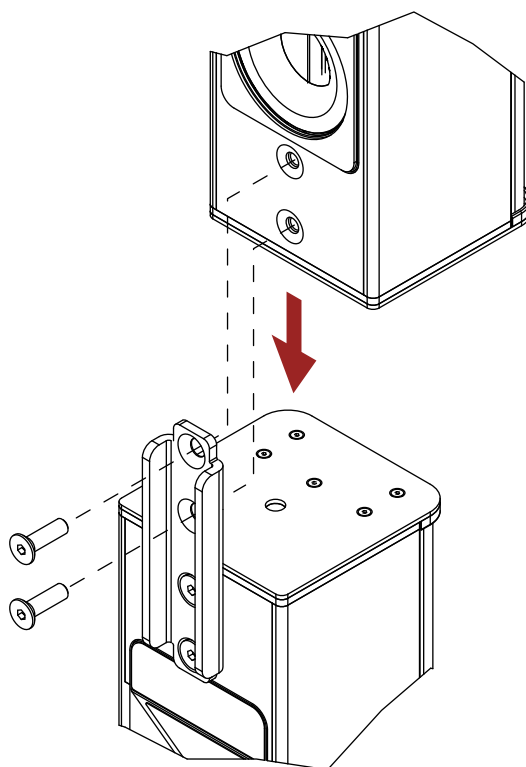
⚠ VORSICHT**Danger of Tipping**

Secure the speaker against tipping.

For suspended operation, use a hoist to lower the upper speaker onto the lower one, then fasten the lower speaker.

For upright operation, first mount the PIA LFX speaker to a stand or K&F woofer featuring an M20 thread (see »Mounting the PIA M20 Link for Use on a Stand« on page 21) while a second person secures the upper PIA LFX speaker.

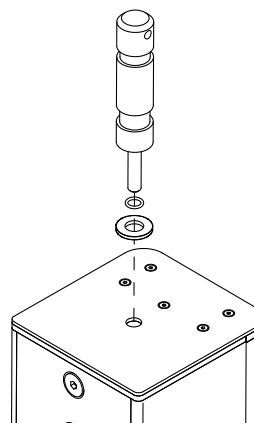
6. Place the PIA M speaker on the PIA LFX
7. Screw the PIA M speaker to the PIA Link.
8. Next, fasten the two lower M10×50 screws on the lower PIA LFX speaker.

**5.6 Mounting the TV Spigot****Required Tools**

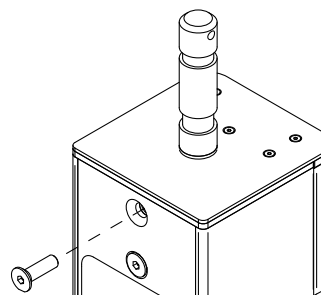
Allen key (size 6)

1. Screw the TV spigot into the M10 thread of the base / top and tighten it.

Secure it using the supplied Locktix® lock washer and the O-ring.



2. Remove the upper M10×50 screw from the back panel.



3. Screw a K&F M10×35 eyebolt into the exposed upper M10 thread on the rear panel.
4. Be sure to use the TV spigot with compatible and approved accessories only (e.g. K&F TV-spigot clamp)!

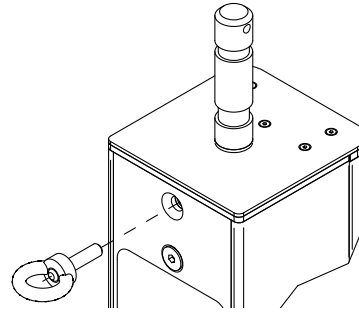
⚠ WARNING**Hazard of falling**

5. When suspending the speaker, be sure to secure it at the rear eyebolt using an approved safety rope suitable for the purpose.

For safe fastening, be sure to use an M10×35 eyebolt provided by Kling & Freitag only!

This is because the threads of commercially available eyebolts are typically too short.

Consider the drop distance specified for the safety rope.



5.7 Mounting the M10×35 Eyebolt

Required Tools

Allen key (size 6)

⚠️ WARNUNG

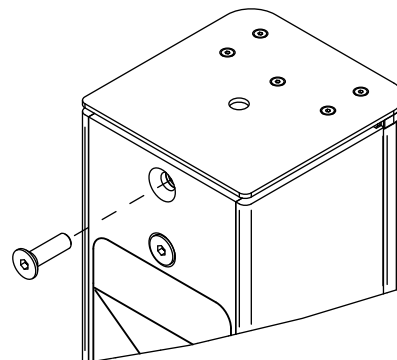
Hazard of falling

For suspension and safety fastening, be sure to use an M10×35 eyebolt provided by KLING & FREITAG only!

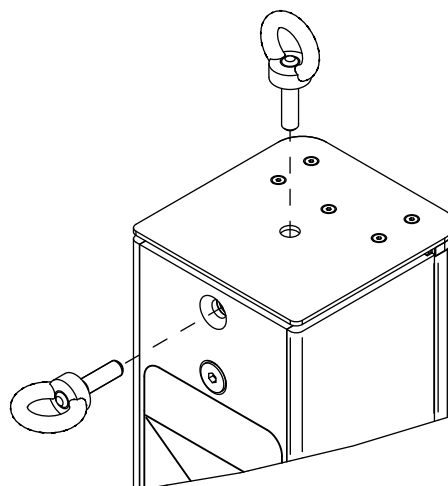
This is because the threads of commercially available eyebolts are typically too short.

Be sure to suspend the speaker vertically only. Never try to achieve a mechanical down-tilt, for example, by forward, e.g. by bracing the speaker.

1. Remove the upper M10×50 screw from the back panel.



2. Screw an M10×35 eyebolt into the M10 thread on the lid to suspend the PIA LFX.
3. Screw a K&F M10×35 eyebolt into the exposed upper M10 thread on the rear panel.
4. Suspend the PIA LFX from eyebolt at the top using an approved steel cable or chain suitable for this purpose.
5. Be sure to secure the speaker at the rear eyebolt using an approved safety rope suitable for the purpose.



⚠️ WARNUNG

Hazard of falling

6. Consider the drop distance specified for the safety rope.

6 Wiring

HINWEIS

- Before connecting your K&F PIA LFX speaker, switch off all devices and turn down all faders and encoders.
- Be sure to use high-end speaker cables with an appropriate wire gauge. Select the wire size based on the cable length.

$$\text{min. cable cross section (mm}^2\text{)} = \frac{\text{required cable length (m)}}{2 \times \text{speaker impedance (ohms)}}$$

- To connect the mixing console to the power-amp inputs, use shielded 2-pole balanced microphone cables equipped with quality connectors.
- Avoid creating ground loops.
- Be sure to follow the pinouts shown in this manual.
- Check for correct polarity of the speaker links to the power amplifier.
- Upon completing wiring, ensure that the connected speaker channels are working in phase, for example, using a phase tester. When the connected channels are used simultaneously, you can identify out-of-phase statuses by bass cancellation or mid-frequency signals (e.g. voices) that cannot be located properly.
- When connecting multiple speakers, you can daisy-chain the signal from one speaker to the next. Make sure that the total impedance of all speakers connected to an amplifier does not fall below the minimum impedance specified for the amplifier.

$$\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \dots = \frac{1}{R_{\text{(total)}}}$$

⚠ WARNING

Speaker-signal currents are potentially hazardous to the human body.

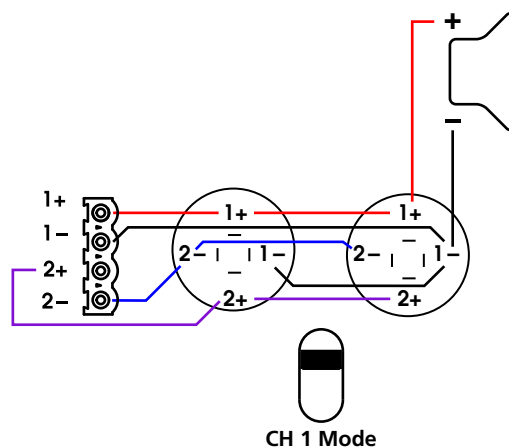
When the system is in use, make sure that the connectors are secured against inadvertent touch.

6.1 Pinout

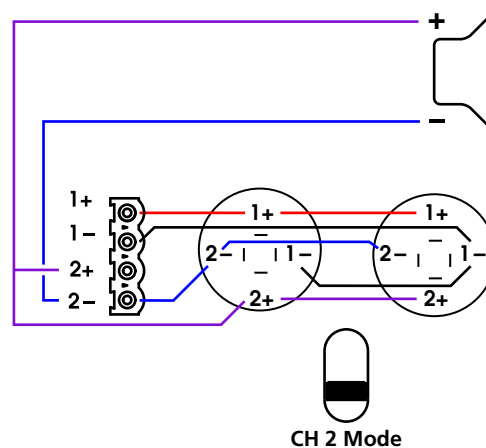
The PIA LFX speaker provides two SpeakOn ports at the top and two more at the bottom. In addition, there is a Phoenix terminal at the bottom. All ports are wired in parallel.

The connector panel also features a selector switch to toggle the port wiring between 1+/1- and 2+/2-. You can realize two loudspeaker ways with only one NL4 cable.

Up position



Down position



7 Operation in a Setup with Other K&F Woofers

K&F NOMOS and K&F PASSIO SUB woofers can be used for supporting the PIA LFX.

Example configuration:

1 × PIA M + 1 × PIA LFX + NOMOS LS2

1 × PIA M + 1 × PIA LFX + PASSIO SUB 12

If you intend to use a K&F woofer as a sub-bass driver below the PIA LFX, we recommend using woofers from our NOMOS series and operating them in 60-Hz mode.

All setups must be configured with regard to their intended use, the required beamwidth, and the on-site conditions.

8 Initial Operation

HINWEIS

- Switch off all devices and turn down all volume controls on the mixing console and the amplifiers.
- Wire your K&F PIA LFX systems as described in this manual.
- Be sure to switch on your console first and only then other equipment placed between the console and the power amplifiers; finally, switch on the power amplifiers. Failing to do so may result in switch-on noise that may damage your system.
- If you hear noise, turn off all devices in reverse order, then check all cable connections.
- Turn up all amplifier channels one after another and output a low-volume signal to the system. Check whether the audio is properly routed to the appropriate speaker paths. Make sure no noise is heard through those speakers.
- With amplifiers with insufficient input-stage headroom, you may not always be able to prevent distortion by reducing the power-amp volume controls. In this case, the clipping indicator may not light when clipping actually occurs! To prevent damage to the speakers, we recommend fully turning up the power-amp volume controls, then carefully turn up the volume on the mixing console or controller or reduce the limiter threshold of the controller as appropriate in order not to overload the amplifiers.
- When turning off the system, first turn down the amplifier input controls. Next, power down the amplifiers, then turn off the remaining devices.

9 Care and Maintenance

- Perform a visual inspection before each installation.
- Visually inspect the entire setup every six months.
- 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.

WARNING

Risks imposed by undetected damages

- The inspection must be carried out by a qualified expert.
- If as a result of these checks any uncertainty should arise with regard to safety or defects are found, don't use the speaker any longer. Contact your retailer.
- All repair work must be performed by KLING & FREITAG after approval from our design department.
- Many countries require regular inspection of mounting components and accessories. 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. This inspection log book shall be updated with the inspection steps, test intervals and parts lists.
- If necessary, use multifunction oil for care.

10 Transportation and Storage

Store the product in a dry place. Also, transport under dry conditions only.

During prolonged storage, ensure sufficient ventilation.

Avoid vibrations during transport.

Avoid mechanical stress during transport and storage, so the product is not damaged.

11 Disposal



This symbol on the electronic equipment indicates that the product must not be disposed of with household waste.

11.1 Germany

Don't dispose of waste electrical equipment through household waste. All KLING & FREITAG products are plain business-to-business (B2B) products. Don't deliver it to official recycling points either.

KLING & FREITAG GmbH is exclusively responsible for disposing of all KLING & FREITAG waste equipment marked with a crossed-out garbage-can icon. Please call the below phone number when you have a KLING & FREITAG product for disposal. We will offer you a straightforward and professional disposal at no cost.

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

The WEEE registration number of KLING & FREITAG GmbH is: DE64110372.

11.2 EU, Norway, Iceland, and Liechtenstein

The local distributor (sales partner) in the respective country is responsible for complying with the national implementation of the WEEE directive.

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

11.3 All Other Countries

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

12 EC Declaration of Conformity

EG-Konformitätserklärung

(Declaration of EG-Conformity)



Hersteller:
(Manufacturer)

Kling & Freitag GmbH
Wohlenbergstraße 5
30179 Hannover
Deutschland

**Bevollmächtigter
für die Zusammenstellung der
technischen Unterlagen:**
(Authorized representative
for the compilation of technical
documents)

Kling & Freitag GmbH
Abt. Entwicklung
Dipl. Ing. Arne Muscheites
+49 (0)511 / 96997-50
Deutschland

Produkt:
(Product)

Lautsprechersystem:
K&F PIA LFX

Wir erklären, dass das genannte Produkt den aufgeführten Anforderungen der folgenden EG-Richtlinien, einschließlich aller anwendbaren Bestimmungen entspricht:

(We declare that the designated product is conformity with the requirements imposed by the following EU directives including all applicable amendments:)

- 2014/35/EU
Niederspannungsrichtlinie
(Low Voltage Directive)
- 2011/65/EU (RoHS 2)
Richtlinie zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten.
(Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment)

Hannover, 23.10.2023

A handwritten signature in black ink, consisting of a large, stylized 'J' and 'F'.

Jürgen Freitag, Geschäftsführung (CEO)



**THANK
YOU** FOR
CHOOSING
K&F.



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