K&F VIDA L and VIDA C

User's Manual

Translation of the original instructions

Version 2.6
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Important Information, Please Read Before Use!

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KLING & FREITAG
SOUND SYSTEMS

Table of contents

1. Introduction

Thank you for purchasing a KLING & FREITAG product. You have acquired a quality VIDA L speaker system with built-in power amplifier designed for maximum performance. To guarantee trouble-free operation and enable the device to achieve its full potential, read these user's manual carefully before use. You will find that your VIDA L speaker system is truly a versatile pro-grade tool.

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.

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 this Manual

© KLING & FREITAG GmbH. All rights reserved.

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. Don’t set up or operate the speaker system before you have carefully read and fully understood this user's manual. Keep the user's manual readily available on site at all times.

All KLING & FREITAG manuals are originally authored in German.

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

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2. Product Description

2.1 Intended Use

Use the KLING & FREITAG speaker for audio reproduction only. Always use the specified accessories for flying or rigging.

Never operate the speaker in environments where the temperature exceeds 35 °C / 95 °F.

Never operate the speaker in places exceeding an altitude of 2,000 meters / 6,000 ft.

Make sure that the humidity is between 10% and 90%.

When using **a single flying frame**, you can fly up to **8 VIDA L without VIDA C** at a maximum down-tilt of -7.9° or up to **8 VIDA L with VIDA C** at a maximum down-tilt of -6.1°.

When using **two** VIDA L flying frames, you can fly up to 4 horizontally aligned VIDA L **with or without** VIDA C.

For commercial use as specified in this document only!

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).

Any other use not described in this document is not an intended use

2.2 Items Included VIDA L

- (1x) Line-array speaker with beam steering and optional VIDA C
- (1x) VIDA L reset dongle
- Neutrik PowerCon TRUE1 power cord (with Type C safety plug)
  Or Neutrik PowerCon TRUE1 power cord (1 item, no connector, for 115 V operation)
- (1x) User manual

Using the VIDA App software is obligatory for setting up the system. You can download the latest version from the Microsoft App Store (http://www.microsoftstore.com).

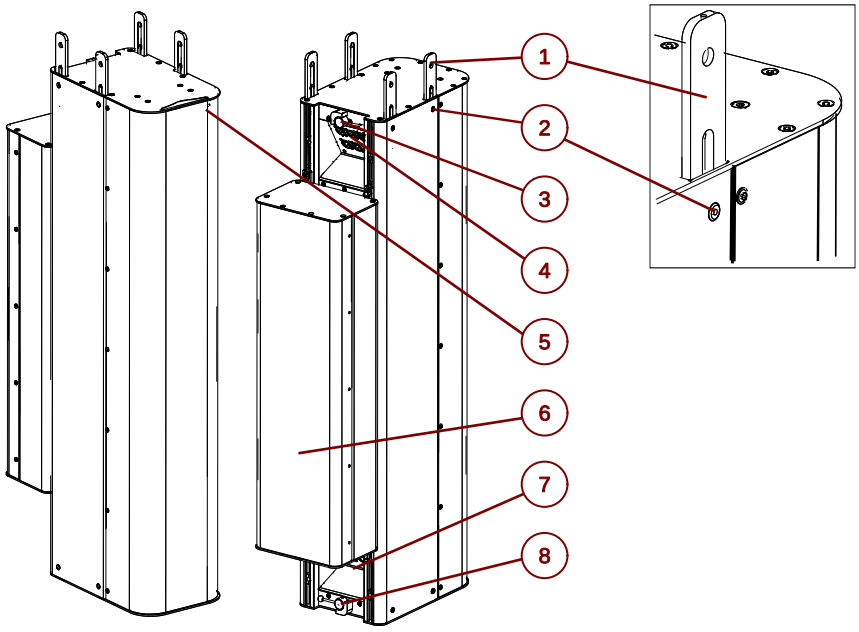
http://www.microsoftstore.com

When setup is complete, if you use the speaker in a fixed installation, you will not need VIDA App anymore.

2.3 Items included VIDA C

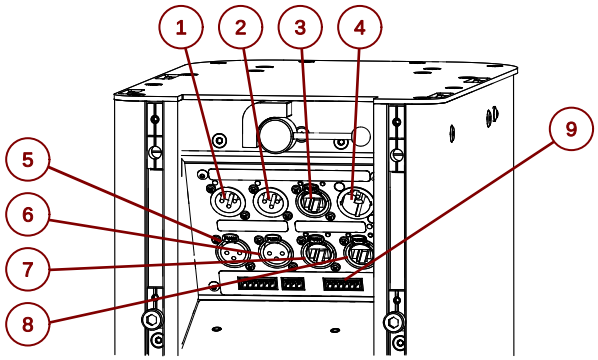
- (1x) VIDA C
- (1x) Allen wrench (6 mm)
- (1x) CP-4 - Speaker-patch-cord, 4x2.5 mm², black, 0.5 m, K&F Art.-No. 35892
- (1x) User manual

2.4 Overview of VIDA L Parts

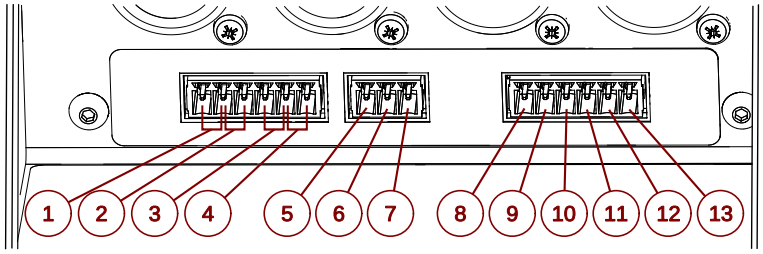


1. (4x) Connecting Adapters (extended)
2. (8x) Connecting Pins
3. Upper Lever
4. Upper Terminal
5. Status indicator
6. 'VIDA C' (optional)
7. Lower Terminal
8. Bottom Lever

2.4.1 Upper Terminal

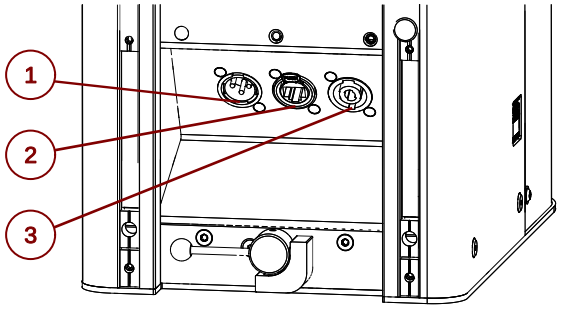


1. Analogue Input (XLR)
2. AES/EBU Input (XLR)
3. VIDA Link Bus Input (RJ45)
4. AC Mains, 100 V – 240 V AC (Neutrik PowerCon True1)
5. Analogue Link (XLR)
6. AES/EBU Link (XLR)
7. Dante/Remote Primary (RJ45)
8. Dante/Remote Secondary (RJ45)
9. Phoenix Connectors (see below)



- **1. – 4. NC1, NO1, NC2, NO2:** GPOs used for status output (warnings, errors)
- **5. – 7. COM, MUTE, PRIO:** GPIs used, for example, for warning systems: auto switch-off for prioritizing another warning system, or for loading a specific warning-system preset
- **8. – 13. GND, +10 V, COM, a1, a2, a3:** GPIs featuring power sources, allowing for switching between 8 presets

2.4.2 Lower Terminal

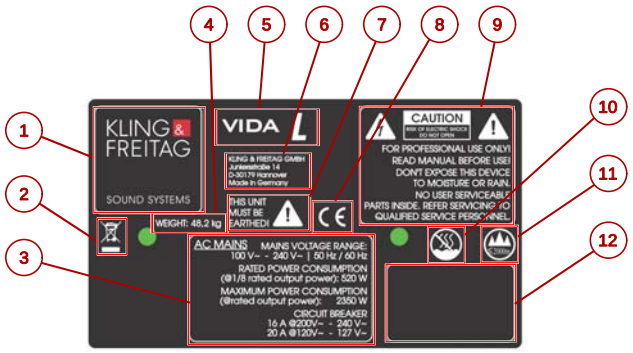


1. AUX output (XLR)
2. VIDA Link Bus Output (RJ45)
3. AMP output (Neutrik Speakon)

2.5 Product Labels and Icons

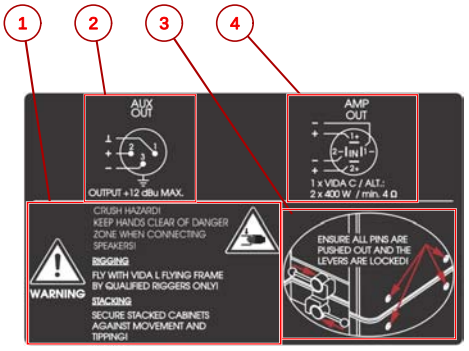
VIDA L speakers have one or more labels showing icons and important information.

2.5.1 VIDA L name plate



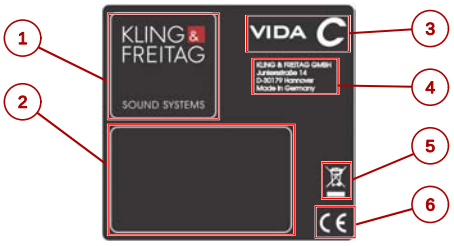
1. Manufacturer logo
2. Disposal information (see the Disposal chapter on page 74)
3. Rating information (see the Wiring chapter on page 24)
4. Product weight
5. Product name
6. Manufacturer address
7. Grounding instruction
8. CE mark
9. Warnings
10. NEVER use this product in tropical climates or under similar climate conditions.
11. Never use this product in places exceeding an altitude of 2,000 meters.
12. Serial number, weight

2.5.2 VIDA L, bottom label



1. Warnings
2. AUX-out pinout and internal wiring (see the Wiring chapter on page 24)
3. AMP OUT pinout and internal wiring (see the Wiring chapter on page 24)
4. Safety instructions on operating rigged speakers (see the Attaching a Flying Frame to a Speaker chapter on page 14)

2.5.3 VIDA C name plate



1. Manufacturer logo
2. Serial number, weight
3. Product name
4. Manufacturer address
5. Disposal information (see the Disposal chapter on page 74)
6. CE mark

2.6 System Requirements

For operating a VIDA L speaker, you only need a power source and an audio source. For setup purposes, you need a computer running Windows 8, 8.1, or 10 and the VIDA App installed.

The VIDA App required for setting up the speaker system is freely available at the Windows Store.

The software allows for making all required adjustments to the VIDA L: emulating audiences, managing array groups, making detailed sound-ray settings, and selecting the appropriate cardioid configuration.

For more information, refer to the VIDA App user's manual, which is available for download on our website.

The audio can be applied from any source including Analog, AES, or Dante.

3. Safety Instructions

3.1 General Safety Instructions

Warning

Power Supply

- Before connecting the device to a power source, check if the local voltage matches the voltage marked on the device. NEVER connect the device to an unauthorized power source. Doing so may permanently destroy the device.
- Make sure that the power outlet has a ground connector and it is connected to the device through the PE conductor of the power cord!
- Always route power cords so that they are protected from damage caused by stepping on it, tensile stress, or getting caught.
- Make sure you can disconnect the device from the mains at any time!
- All equipment interconnected through signal cables must be connected to common ground. Failing to do so may result in an electric shock or permanent damage to the connected equipment.

Warning

I/O

- The device does not include a master fuse. Therefore, be sure to protect the supply line appropriately (230 V: 16 A fuse max.; 115 V: 20 A fuse max.)!
- Also make sure the supply line has an appropriately dimensioned cable cross-section.
- Always use properly shielded cables with connectors attached as specified by the EMC directive.
- This device is not designed for home use.
- The device is designed for indoor use only.

Caution

Maintenance and Technical Service

Never perform any maintenance work on the equipment other than what is described in these user's manual. Have repairs works performed by a qualified service technician only.

Only qualified technicians expressly authorized by KLING & FREITAG are permitted to repair the device. This is required, for example, if

- the power cord or power inlet have been damaged,
- objects or liquids have got inside the device,
- the device was exposed to rain,
- the device doesn't appear to be functioning properly,

- the device has fallen down or the enclosure has been damaged.


Caution

Never place your devices

- where they are permanently exposed to direct sunlight,
- near heat sources or open fire,
- where the airflow for cooling is blocked,
- where they are exposed to high moisture,
- where they are exposed to strong vibrations or dust.


Caution

Intrusion of liquids

- Make sure at all times that no objects or liquids can intrude or leak into the device.

Noise
RF interference at the power cord or line cables may result in unwanted noise.

When using the AES/EBU input, strong interference may result in a total audio dropout.

Prolonged Periods Of Non-operation
Disconnect the power cord from the mains if you don't use the device for a prolonged period of time.

Cleaning
Before cleaning, disconnect the device from power. Use a dry cloth only.

Transportation
When transporting the device, make sure that it is protected from vibrations.

3.2 Preventing Hearing Damage


Caution

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

4. VIDA L Setup

Warning

As general rules apply:

With one strand rigging you can array up to eight pieces of K&F VIDA L for mechanical tilt angles between 2.5 to -6.1 degrees (with VIDA C), or rather 2.0 to -7.9 degrees (without VIDA C).

According to larger or smaller mechanical tilt angles the number of speakers for an array may need to be reduced.

Detailed information about the rigging of K&F VIDA L arrays can be found in the user's manuals for K&F VIDA L Flying Frame and K&F VIDA L Flying Bracket.

4.1 Required Tools

The following is required for mounting the VIDA C to the VIDA L speaker:

- Allen wrench (6 mm)
- Torque wrench for 16Nm

4.2 Interconnecting System Components

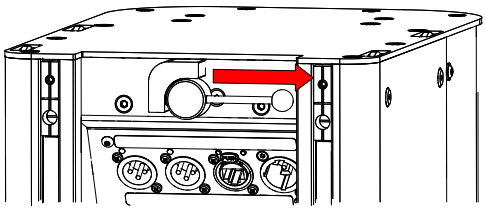
The following describes how to interconnect VIDA L system components. The approach is basically applicable to VIDA L accessories, too. Here, we will explain how to securely interconnect two speakers as an example. In this case, whether the components are placed vertically (upright) or horizontally is not important.

The key parts required for interconnecting two components are the upper and lower levers.

Upper lever:
The upper lever is used for locking or unlocking the rigging-system connecting adapter (steps 1 – 6 below).

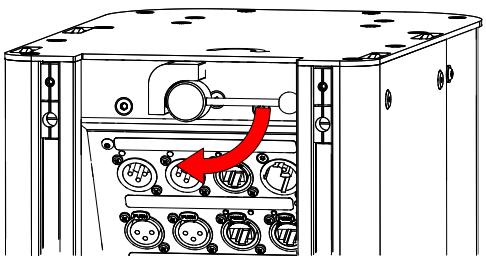
Lower lever:
The lower lever is used for locking or unlocking the connection to another speaker or accessory (steps 7 – 9 below).

1) Pull out the upper lever towards its longitudinal axis.

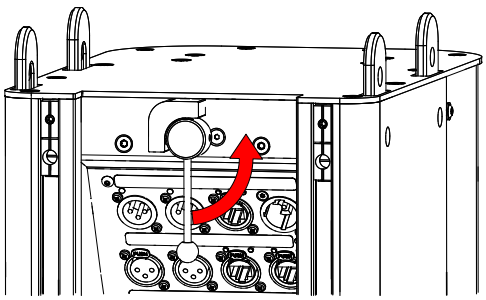


2) Rotate the lever clockwise by 90 degrees.

   Doing so will push the connecting adapters out of the speaker.

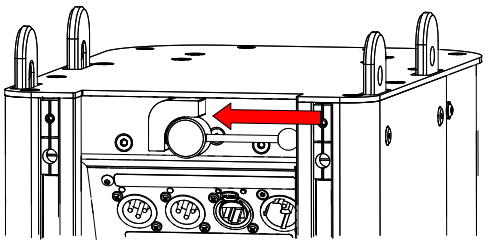


3) When all four connecting adapters are in position, rotate the lever anticlockwise back into the vertical position.



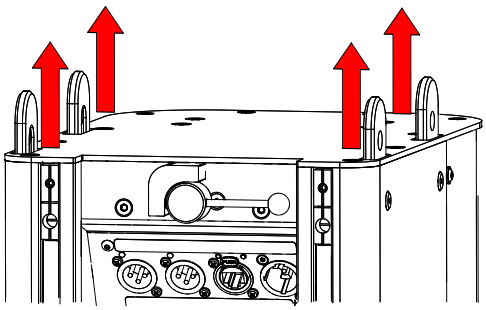
4) Push the lever back in in longitudinal direction until it snaps.

This will lock the lever.



5) Pull the connecting adapters out of the housing.

The connecting adapters are fastened and secured by means of connecting pins.



6)

Warning

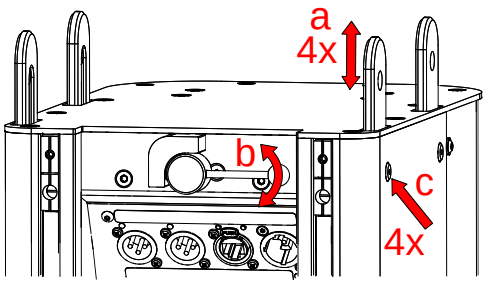
Danger! Risk of injury from falling objects!

Improperly mounted speakers are not safe for suspending. Objects falling down impose a deadly risk for people standing near-by!

Check whether all four connecting adapters have been fully pushed out and locked (a).

Make sure that the lever has returned to its captive position (b).

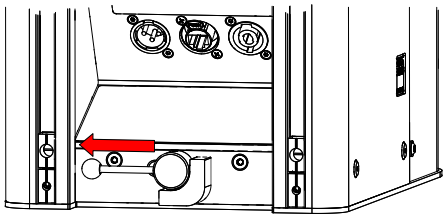
On both sides of the speaker, make sure that you can see and feel the chamfers of the 4 connecting pins (8 pins in total) are flush with the walls from outside (a).



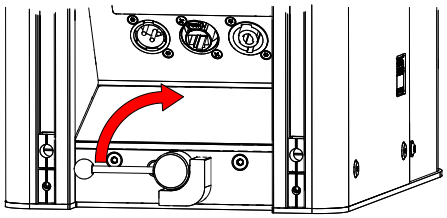
The speaker top with the pulled-out connecting adapters is now ready for interconnection with another speaker or accessory.

The steps 7 – 9 below show how to prepare the speaker bottom for accepting the connecting adapters of another speaker or accessory.

7) Pull out the lower lever towards its longitudinal axis.

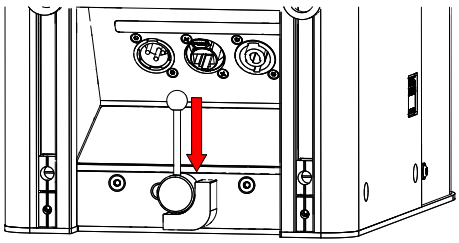


8) Rotate the lever clockwise by 90 degrees.



9) Push the lever longitudinally into the joint case to lock it.

Doing so will allow the receptacles to accept the connecting adapters of another speaker or accessory.



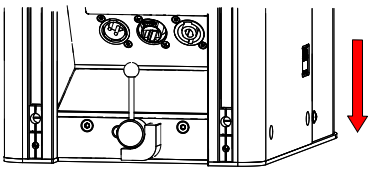
This speaker is now ready for accepting and securely locking the connecting adapters of another speaker or accessory. The steps below explain how to securely mount two prepared speakers to each other.

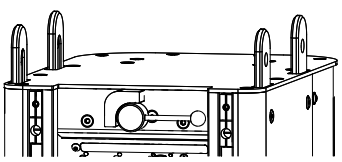
Caution

10) **Crushing hazard!**

When mounting, avoid crushing your body parts between system components moving towards each other.

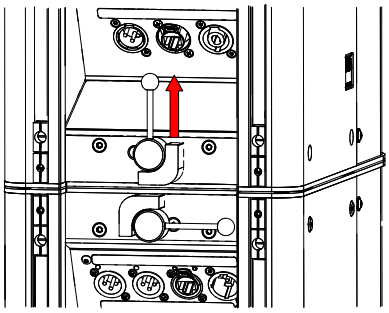
While mounting speakers onto each other, never put your hands between the connecting faces (i.e. speaker bottom and top faces)!





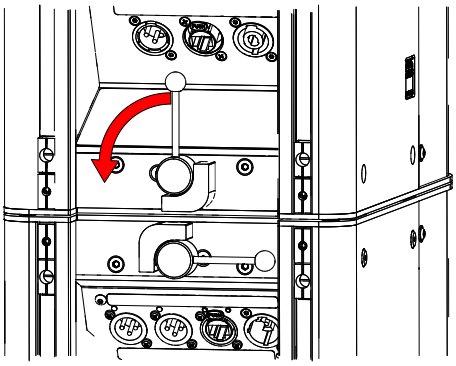
Put this speaker onto another one or the connecting adapters of an accessory.

11) Pull out the lower lever towards its longitudinal axis.

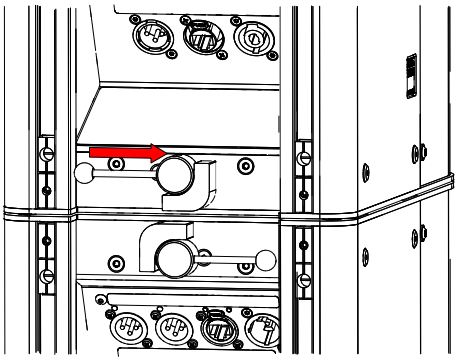


12 Rotate the lever anticlockwise into its original position.

Doing so will fasten and secure the connecting adapters of the lower speaker.



13 Push the lever back in in longitudinal direction until it snaps.



14

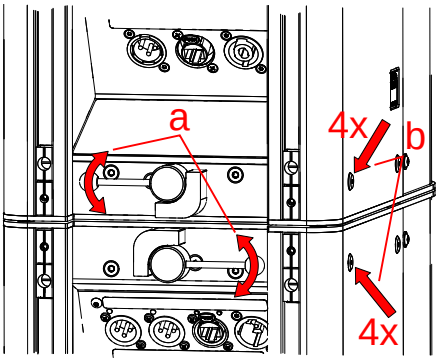
Warning

Danger! Risk of injury from falling objects!

Improperly mounted speakers are not safe for suspending. Objects falling down impose a deadly risk for people standing near-by!

Check whether all four connecting adapters have been fully pushed out and locked (a).

Make sure that the lever has returned to its captive position (b).



On both sides of the speaker, make sure that you can see and feel the chamfers of the 4 connecting pins (8 pins in total) are flush with the walls from outside (a).

Tip

To support the adapters snapping into each other, slightly push the joint in every direction.

If any connecting pin still doesn’t extend fully, try pulling it out through the emergency bore. (See the Troubleshooting Mechanical Issues chapter on page 19.)

4.2.1 Troubleshooting Mechanical Issues

Warning

Danger! Risk of injury from falling objects!

Improperly mounted speakers are not safe for suspending. Objects falling down impose a deadly risk for people standing near-by!

At the end of the installation process, make sure that the lever locks into its horizontal position. In this position, the lever is secured against rotation.

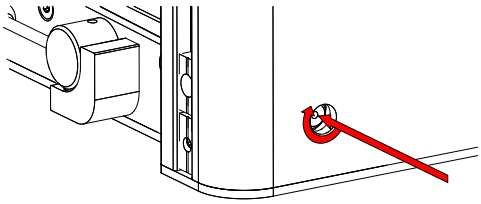
Never use the rigging system if the lever does rotate in this position! Contact your retailer.

Notice

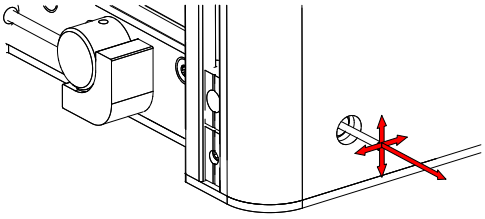
At the end of the connecting process, if the connecting pins have not been sufficiently moved out, the rigging system of this speaker may be damaged.

If the pin is blocked by dirt or foreign objects, try loosening it through the emergency bore.

1) For this purpose, carefully thread an M4 screw into the connecting pin from outside.

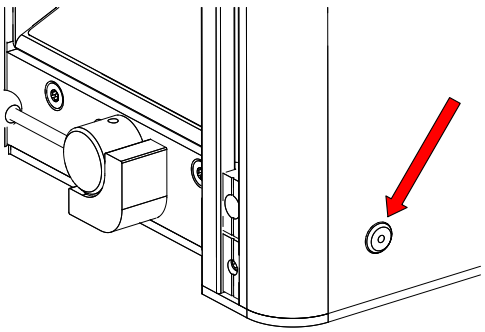


2) Trying moving the screw and the lever to release the blocked pin.



Tip

If you have successfully released and pulled out the pin, be sure to have any issues resolved before next use.



Warning

Danger! Risk of injury from falling objects!

Improperly mounted speakers are not safe for suspending. Objects falling down impose a deadly risk for people standing near-by!

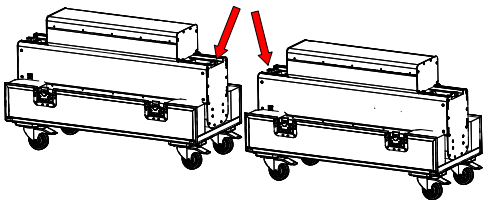
Have the flying system repaired by a KLING & FREITAG authorized service provider.

4.2.2 Setting up a Speaker Array

1) Prepare the interfacing speaker sides as described on page 14ff.

Upper speaker: steps 1 – 6

Lower speaker: steps 7 – 9

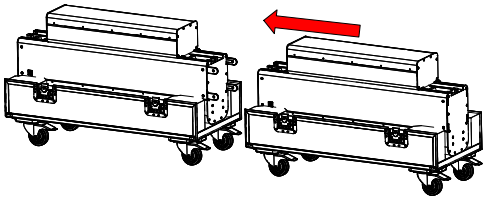


Caution

2) **Crushing hazard!**

When mounting, avoid crushing your body parts between system components moving towards each other.

While mounting the speakers to one another, never put your hands between the connecting faces (i.e. speaker bottom and top faces)!



After preparing the speakers as explained, push them towards each other.

Make sure that the four connecting adapters smoothly slide into the other speaker's housing.

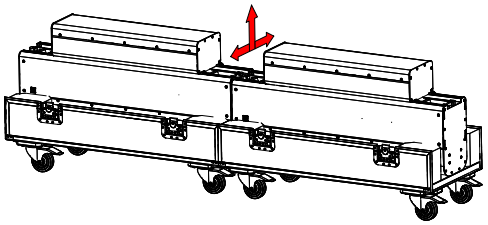
Tip

3) Also note that trouble-free assembly might be obstructed, for example, by an uneven ground surface.

To support the adapters snapping into each other, slightly push the joint in every direction.

If you still have trouble mounting the speakers, switch to a more level place.

In entirely level places, if you cannot achieve secure interconnection between speakers, the rigging system of at least one speaker is probably faulty. In this case, don't attach the faulty speaker to the other speakers but have it repaired.



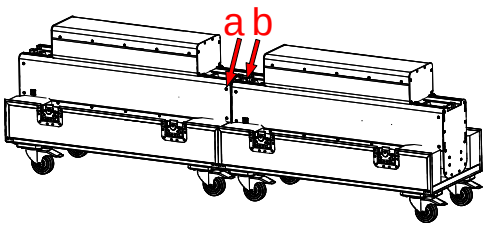
Warning

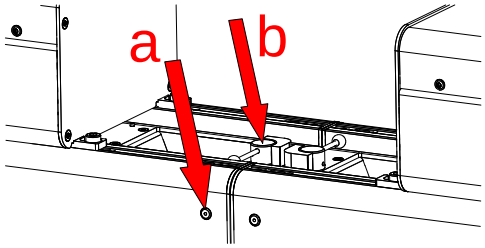
4) **Danger! Risk of injury from falling objects!**

Improperly mounted speakers are not safe for suspending. Objects falling down impose a deadly risk for people standing near-by!

On both sides of each speaker box, make sure that you can see and feel the chamfers of the 4 connecting pins (8 pins in total) are flush with the walls from outside (a).

Make sure that all levers of both speakers are locked in their captive positions (a, 2x).





4.2.3 Mounting the VIDA C

Warning

Danger! Risk of injury from falling objects!

Improperly mounted speakers are not safe for suspending. Objects falling down impose a deadly risk for people standing near-by!

To attach the VIDA C, use only the dedicated fasteners featuring captive screws inside the rails located at the VIDA L rear panel.

Make sure all bolts and screws are tightened to the specified torque.

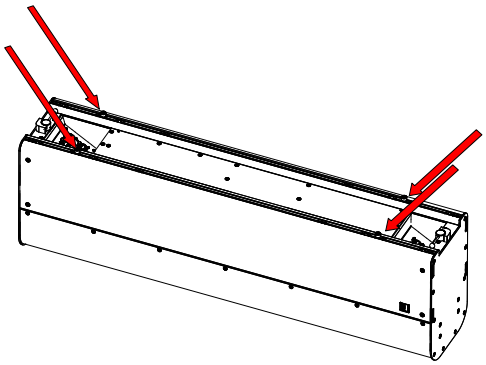
Tip

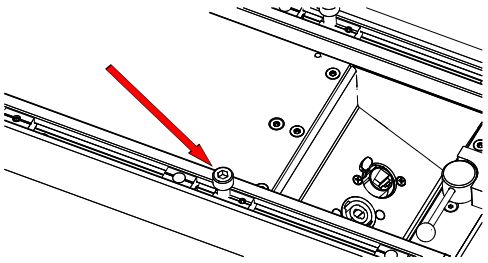
If you want to use the VIDA L speakers in combination with VIDA C, you need to attach one VIDA L to each VIDA C speaker. You need to emulate that setup using the VIDA App, too.

You can mount a VIDA C to a VIDA L speaker while it is still in the transportation case.

1) Loosen the mounting screws until the VIDA C can be mounted.

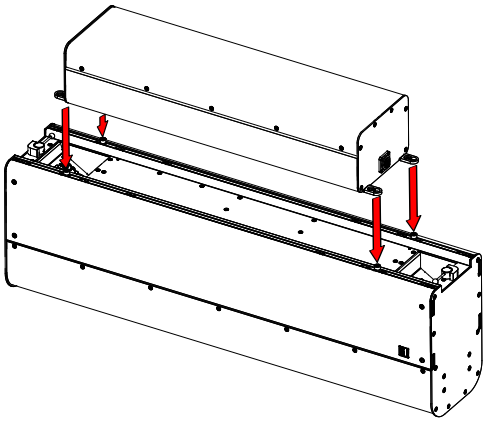
Note that these are captive mounting screws, i.e. they are tied to their respective holders. To avoid damaging the screws and threads, don’t apply excessive force when loosening the screws.

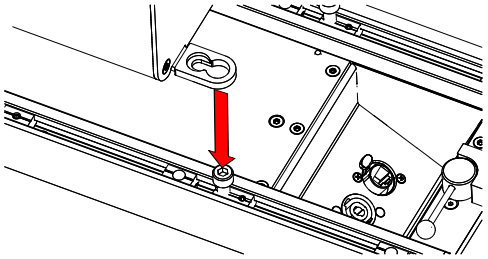




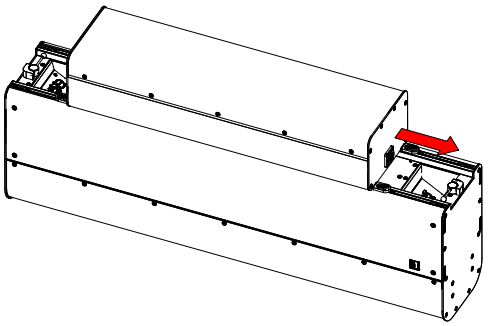
2) Place the VIDA C onto the VIDA L speaker.

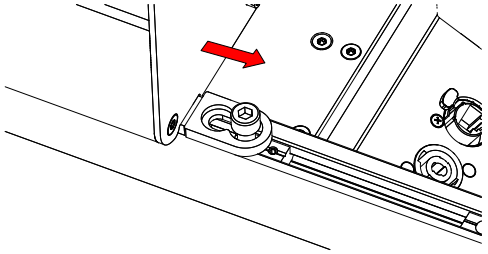
The Speakon port of the VIDA C needs to point towards the lower connector panel (three ports).





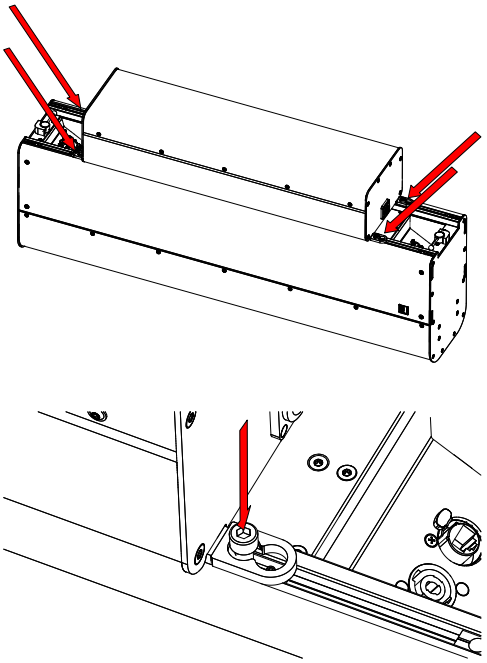
3) When the VIDA C is properly aligned to the speaker through all four screws, push it towards the lower connector panel until it stops.





4) Fasten all four screws finger-tight.

Connect the VIDA C to the VIDA L's AMP OUT port using a 4-pin SpeakOn patch cord.



5. Dismounting


Tip

When dismounting is completed, store all speakers and accessories in the transportation case. This way, they cannot get lost and are always at hand when needed. In addition, the parts are protected at least temporarily against the effects of unfavorable weather conditions, etc.

Basically, dismounting the speakers is performed in reverse order of the installation process.

- Unload the interconnect point.
- Rotate the lever on the upper speaker clockwise until it snaps.
- Pull the speakers apart.


Tip

If you intend putting the speakers into a transportation case, you don’t need to push the connecting adapters back into the housing and to unmount the VIDA C. The transportation case is designed for housing the speaker with the adapters extruded and the VIDA C mounted. This saves a few steps when dismounting and remounting the speakers.

6. Wiring


Warning

Risk of Electrical Shock

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.

Be sure to fully insert the stripped wires into the Euroblock, so stripped wire parts cannot be touched.


Warning

Power Supply

- Make sure that the power outlet has a ground connector and it is connected to the device through the PE conductor of the power cord!
- Always route power cords so that they are protected from damage caused by stepping on it, tensile stress, or getting caught.
- Make sure you can disconnect the device from the mains at any time!
- All equipment interconnected through signal cables must be connected to common ground. Failing to do so may result in an electric shock or permanent damage to the connected equipment.


Warning

I/O

- The device does not include a master fuse. Therefore, be sure to protect the supply line appropriately (230 V: 16 A fuse max.; 115 V: 20 A fuse max.)!
- Also make sure the supply line has an appropriately dimensioned cable cross-section.
- Always use properly shielded cables with connectors attached as specified by the EMC directive.
- This device is not designed for home use.
- The device is designed for indoor use only.

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

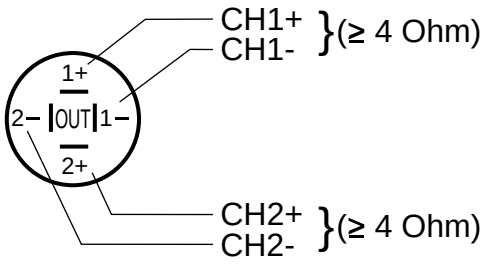
Never use signal cables or power cords for suspending, aligning, or securing the systems.

Warning

6.1 AMP OUT pinout

This output is provided mainly for connecting a VIDA C; However, using the VIDA App, you can set up the AMP OUT of the VIDA L speaker for joint operation with PASSIO SUB 12 or PASSIO SUB 15. In addition, using the Flat setting, you can connect a passively equalized top. For this purpose, the AMP OUT setup allows for configuring high-pass and low-pass filters, etc.

Note that with the PASSIO SUB 12, PASSIO SUB 15, and Flat settings, the AMP OUT is available at the array master unit only! In an array, the master unit is always the topmost VIDA L speaker.



Pinout:
CH1 = 1+ / 1-

CH 2 = 2+ / 2-

Power:
400 W rms/800 W peak, min. 4 Ohm

Notice

Never bridge the 2 AMP OUT channels of the VIDA L.

6.2 Wiring Instructions


Tip

Note that the topmost speaker inside a VIDA L array is the 'master' speaker.

Connect all audio sources to that speaker. Signal lines to other speakers within the array are not supported!

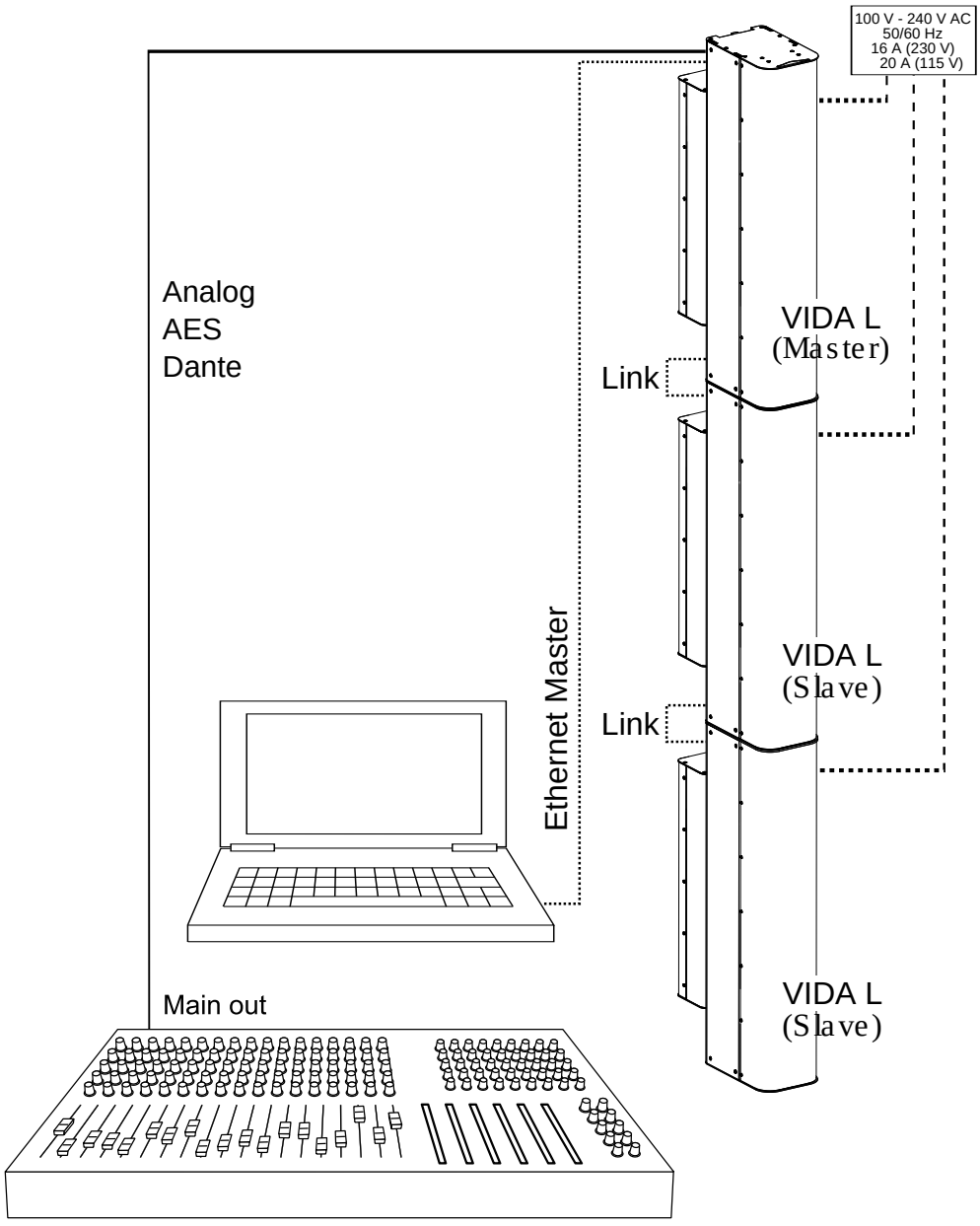
Just as with the inputs, only the master-speaker outputs are active.

All other speakers are daisy-chained using the VIDA Link Bus. Connect the VIDA Link Bus Out on the lower connector panel of each speaker to the VIDA Link Bus In on the upper connector panel of the next speaker in the chain using an RJ45 patch cord.

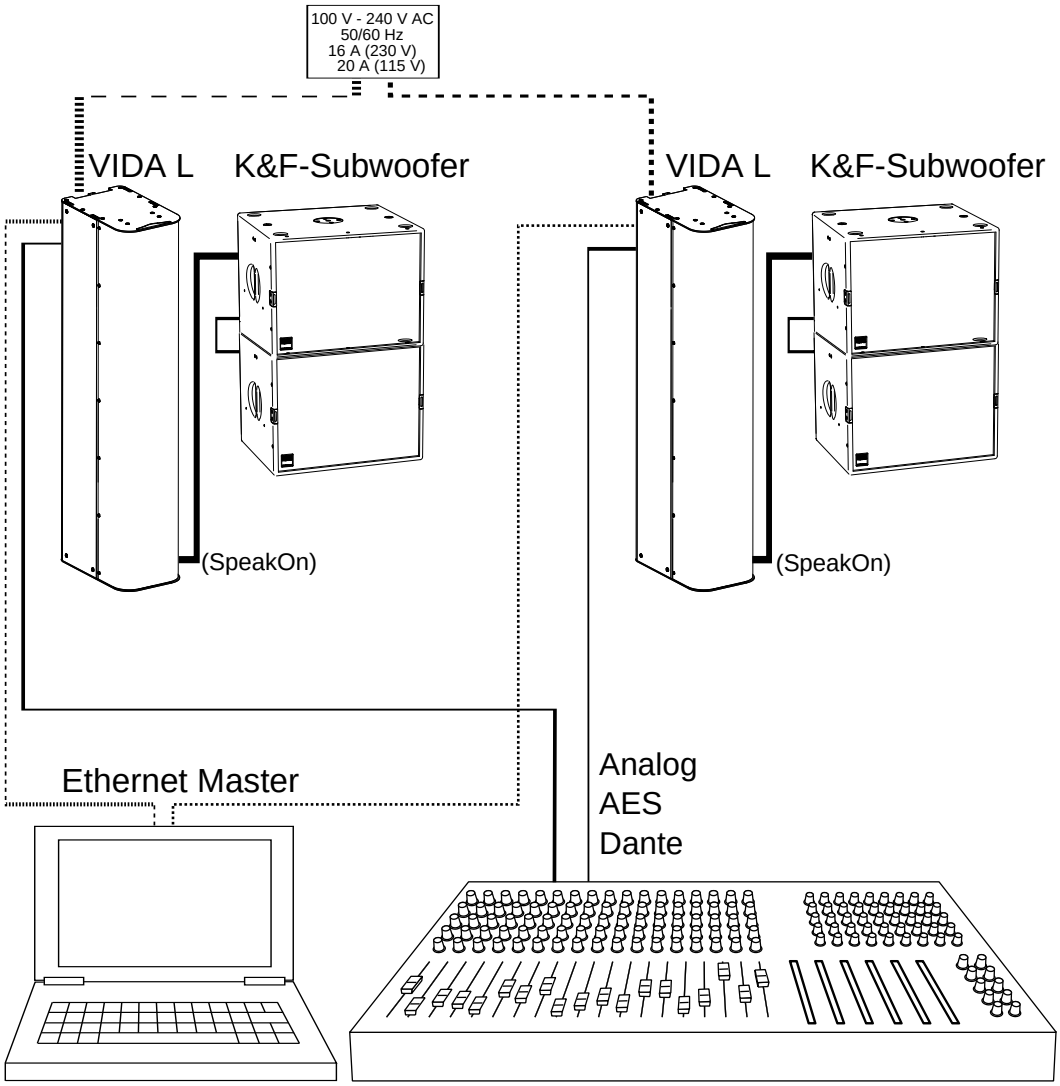
- Before connecting your VIDA L speaker, switch off all devices and turn down all faders and encoders.
- To connect the mixing console to the speaker inputs, use shielded balanced 2-pole microphone cables equipped with quality connectors.
- Avoid creating ground loops.
- Be sure to note the pinouts shown in these user's manual.
- Check for correct polarity (+/–) at the AMP OUT port of the VIDA L speaker.
- Upon completing wiring, ensure that the connected speaker channels are working in phase, for example, using a voltage 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.
- When connecting 3rd-party speakers to the AMP OUT port of the VIDA L speaker, make sure not to fall below the minimum overall impedance of 4 ohms.

6.3 Connecting the VIDA L Speakers

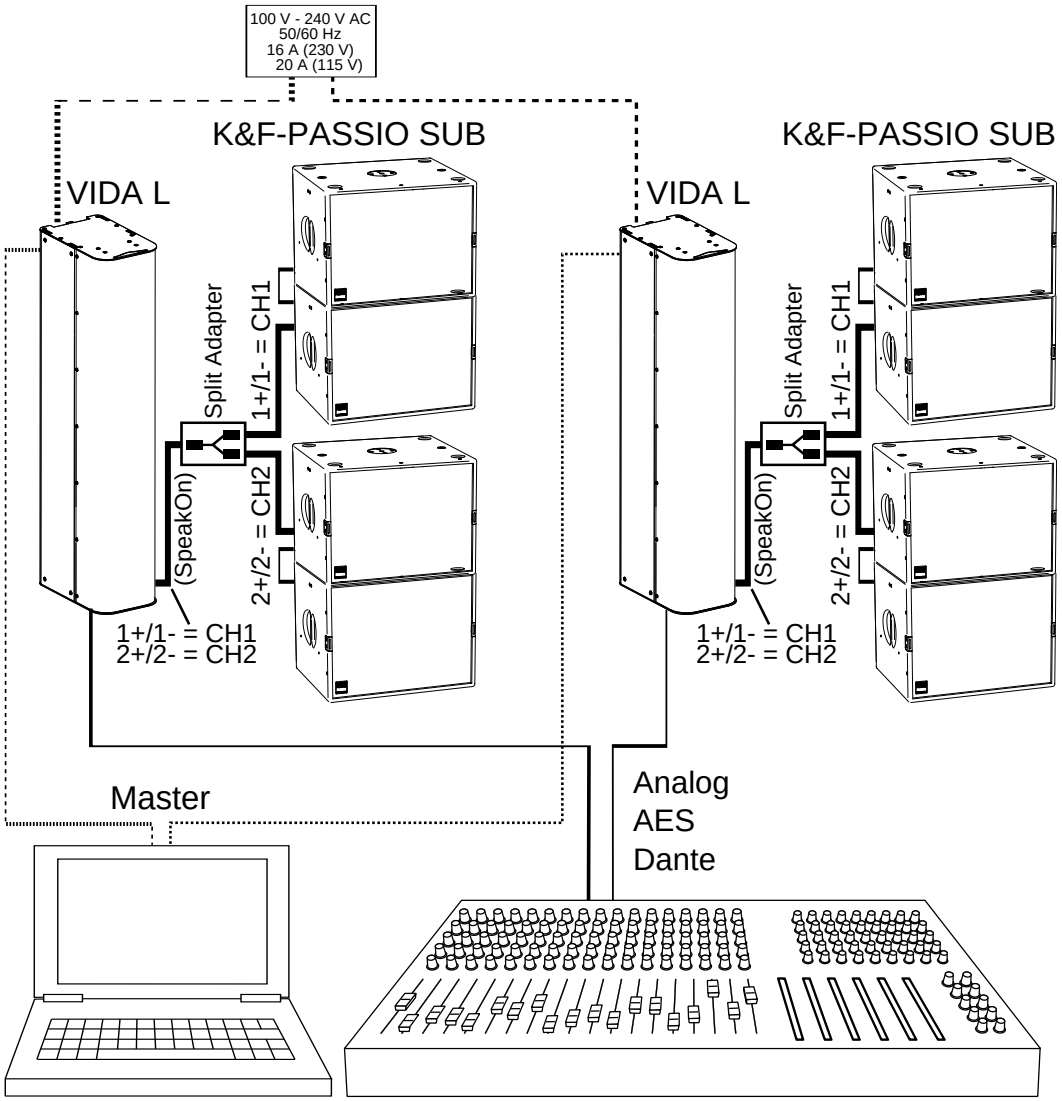
Connecting VIDA L speakers with or without VIDA C



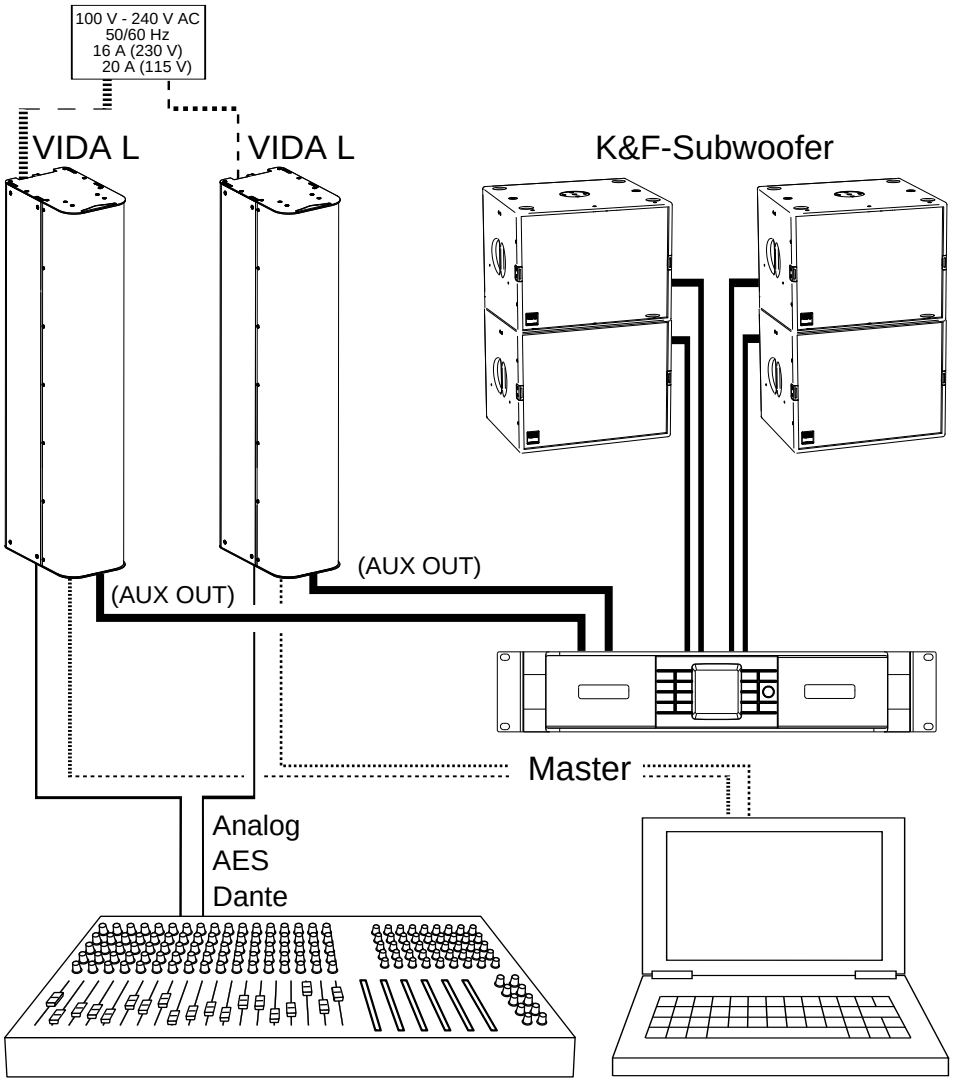
Connecting VIDA L speakers with K&F PASSIO SUB 12 or K&F PASSIO SUB 15:



Connecting VIDA L speakers with the maximum number of K&F PASSIO SUB subwoofers



Connecting VIDA L speakers with K&F subwoofers and power amp connected to AUX OUT



6.4 Status indicator

Each VIDA L features an LED indicator located behind the front grille. You can turn the LED on and off using the VIDA App in order to identify a specific VIDA L speaker.

The indicator color shows the following statuses:

- Power-up (blue): The speaker is being powered up and will be ready for operation shortly.
- Beam error (red-lit): The speaker has been powered up successfully and is ready for operation; however, the sound-ray setup needs to be checked.
- Identification (green): The speaker is part of the selected speaker group.

7. First-time Use

Notice

Harmful Environmental Conditions

Environmental conditions falling outside the specifications may damage the system!

The speaker system is designed for operation in environments with a maximum temperature of 35 °C, a maximum altitude of 2,000 meters (6,000 ft), and a relative humidity of 10% – 90%.

- When turning off the system, power down the VIDA L speakers first, then turn off the remaining devices.

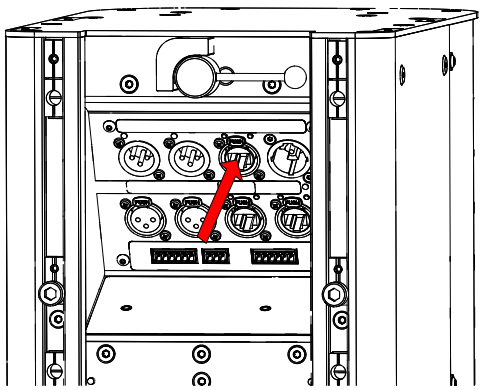
1. Make sure that all devices have been turned off and all volume controls have been fully turned down.
2. Wire the VIDA L systems.
3. Turn on the devices in the following order:
   - Players
   - Console
   - VIDA L speakers
   - Auxiliary power amps
4. If noise occurs, turn off all devices and check all cable connections.
5. Output a low-volume signal to the system. Check whether the audio is properly routed to the appropriate speakers. Make sure no noise is heard through those speakers.

To power down the system, turn the devices off again in reverse order.

7.1 Reset dongle

Using the VIDA reset dongle allows for restoring the factory defaults of the speaker. Doing so will rest all customized parameters as well as the network settings. In particular, note that the network-address assignment of the speaker will be reset to DHCP.

Insert the reset dongle into the VIDA Link port.



The rear-panel indicators produce the following subsequent light chases:

- Green, from left to right
- Orange, from left to right
- Red, from left to right

If you remove the dongle at this time, the indicators will flash red twice. Meaning that the reset operation has been canceled.

If you don’t remove the dongle, the indicators will flash green twice. Restart the speaker now to complete the reset operation.

When the restart is complete, all editable user data and network settings have been reset. In particular, note that the network-address assignment of the speaker will be reset to DHCP.

To restart the speaker, disconnect it from the mains for at least 3 seconds.

7.2 Connecting VIDA L to UPS

In case of using a UPS System (uninterruptible power supply) with a VIDA L following numbers should be used for designing the system:

For full load, the internal buffers keep the controller of VIDA L at least for 50 ms operational.

To prevent the controller from rebooting the UPS therefore should react within 50 ms.

8. VIDA App Quick Overview

Tip

Download the VIDA app from the Microsoft Store and install it.

Download the VIDA-App User's Manual from our website (www.kling-freitag.de) and print it.

http://www.kling-freitag.de/content/uploads/man_vida-app_en.pdf

In order to access and set up VIDA speakers using the app, you need to add the speakers to the network as well as to the mains. Refer to page 24 in these user's manual for more information.

Tip

For details on the VIDA-App, see the VIDA-App User's Manual available at our website (www.kling-freitag.de).

8.1 Initial Function Checks

1) Wire your speakers as described in these user's manual. (See page 24.)

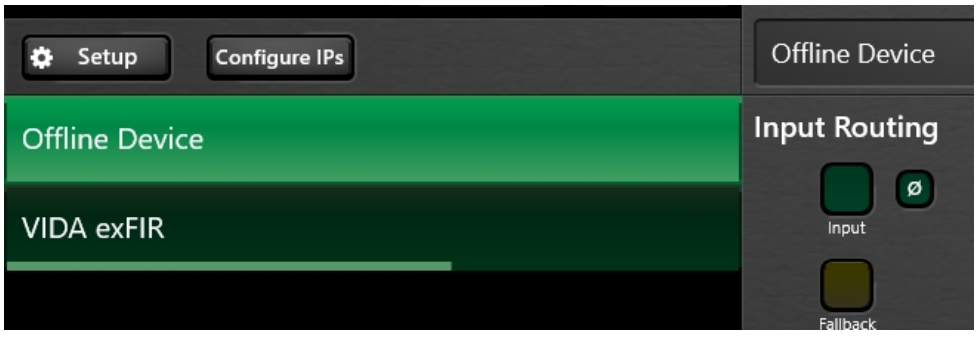
2) Connect the speaker(s) to the mains.

3) Run the VIDA app on your computer.

   The left-hand side of the Setup screen lists all VIDA speakers (or arrays) found. By default, the Offline Device is always displayed. Using that device, you can configure settings without physically connecting a VIDA speaker. This means you can create and store “virtual setups” that you can later apply onto your physical speakers.

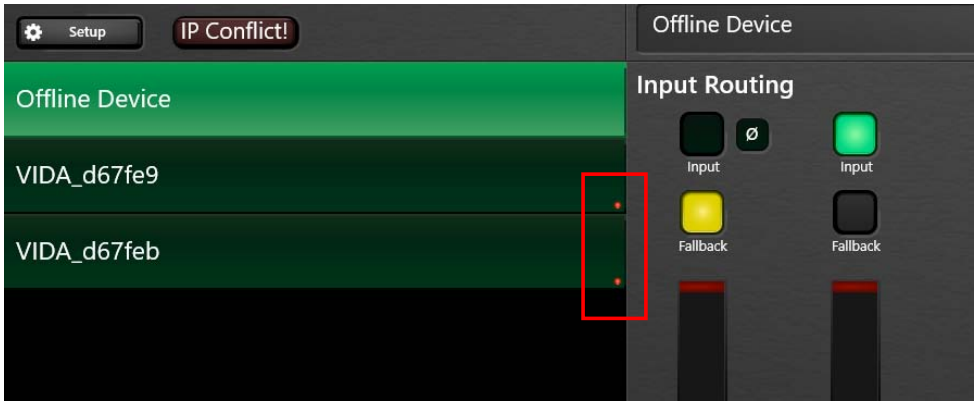
4) During the speaker (array) upgrade process, a small green progress bar is displayed next to each speaker array. When the update is complete after a few seconds, the progress bar will normally disappear. If it continues to show, you need to check why the app cannot access the arrays.

   Check if the speaker-firmware version is compliant with the installed app version. (See the Speaker-Firmware Update section.)



5) When the progress bar disappears after a few seconds, you can access the speaker settings from within the software for configuration.

   If the icon continues to show or turns into a red dot, the arrays are not accessible. For troubleshooting purposes, first check whether both the VIDA app and the speaker firmware are up to date.



8.2 Key Settings on the Setup Screen

- Speaker-array name settings
- Audio-input and fallback-input settings
- Input-gain adjustment
- Visualization of the selected speaker array

8.3 Key Settings on the Beam Screen

- Sound-beam visualization for various frequencies
- Graphical definition of audience-area sizes and positions
- Measurement of the actual down-tilt of a selected online array, or calculation of the pick point required for achieving a specific down-tilt of an offline array
- Settings for down-tilt and coverage-angle software control including instant sonic-cone calculation
- Split-beam settings
- Sound-beam optimization

8.4 Key Settings on the Audio Tools Screen

- Master gain. Sets the gain of the selected VIDA array. Note that this does **not** affect the AMP OUT and AUX OUT. Using this in combination with the Amp Out gain control allows for creating an appropriate balance between head and woofer.
- One Knob control for quick compensation of excessive low or high ends
- Parametric EQ
- Full-range/low-cut selection
- VIDA C polar-pattern selection (if available)
- Selection of connected woofers and speaker outputs (PASSIO SUB units at the Amp Out, other amps and woofers at the Aux Out)

8.5 Key Settings on the Groups Screen

- Speaker and array grouping
- Common parametric “group” EQ

8.6 Key Information on the Status Screen

- General system status
- Gain/Gain Reduction
- GPI Priority/Mute
- Selected audio input
- Selected fallback input
- Split-Beam (On/Off)
- Optimize (On/Off)
- VIDA L Mode
- VIDA C Mode
- AMP OUT status (on/off)
- Speaker temperature

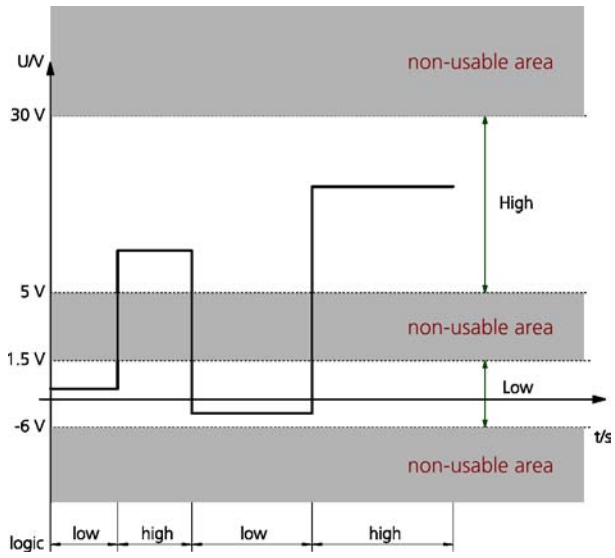
9. Control

9.1 GPI

The GPIs are designed as floating optocoupler inputs.

Voltages of less than 1.5 V reliably put the optocoupler into the Off state. The reverse voltage is -6 V. Always make sure not to exceed the maximum negative voltage of 6 V.

Voltages of 5 – 30 V reliably put the optocoupler into the On state. Never apply a control voltage exceeding the allowable maximum of 30 V.



The current drawn at 10 V is 2.5 mA.

The 10 V output is a galvanically isolated (floating) DC/DC converter featuring a current limit at approx. 15 mA.

If no external voltage source is used, you can use the converter either for controlling the GPIs or for indicating the GPO statuses, for example, using a low-current LED. Another application is a GPO-state indicator (for example, using a low-current LED).

9.2 GPI Software

You can set the response to a voltage change separately for each GPI. The settings available for changes from low to high are listed on the left-hand side of the configuration window; those for high-to-low changes are listed on the right-hand side.

- **Low** means “less than 1.5 V” for hardware GPIs and “0” for software GPIs.
- **High** means “more than 5 V” for hardware GPIs and “1” for software GPIs.

The GPIs allow for configuring 25 functions for each high-to-low and low-to-high changes.

1: **Mute toggle:** Toggles the master-mute button—disabled mute becomes enabled, and vice versa.

2 – 11: **Change Volume:** Changes the volume by the specified value (10 presets from –10 dB to +10 dB).

12: **Select Input Analog:** Selects the analog input.

13: **Select Input Dante 1:** Selects Dante input 1.

14: **Select Input Dante 2:** Selects Dante input 2.

15: **Select Input AES 3 L:** Selects AES input 1.

16: **Select Input AES 3 R:** Selects AES input 2.

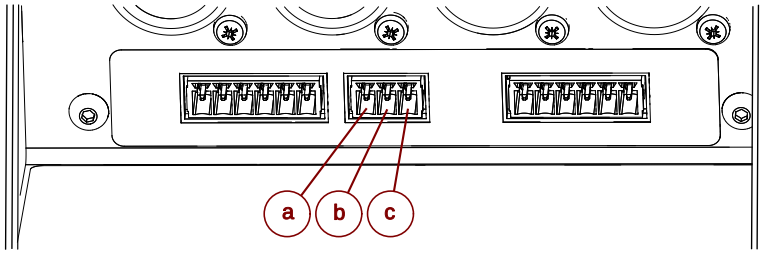
17: **Select Input AES 3 L+R:** Selects AES inputs 1+2.

18: **Load Preset:** (not yet implemented)

There are also two 'emergency' GPIs:

1. **Mute:** You can set whether mute is enabled by the high or low state. Enabling will mute the system – you cannot unmute it using the app nor the mute toggles of other GPIs.
2. **Priority:** Here you can select the audio input that is switched to when the GPI is enabled. This state disables both input gain and input mute, i.e. the signal is routed to the amplifiers at 0-dB level regardless of the gain setting and the mute status.

9.3 GPI MUTE and GPI PRIO



- a: COM
- b: GPI MUTE
- c: GPI PRIO

Depending on the setting in the VIDA App, the VIDA L can react to low or high levels (see Chapter 'GPI Software').

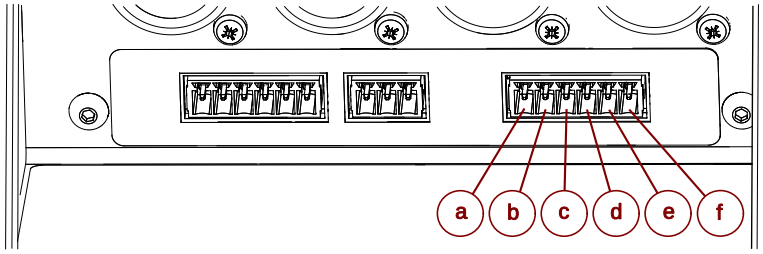
GPI MUTE
For example: If the GPI MUTE is configurated to high level, the loudspeaker will switch to complete mute when a signal with more than 5 V is applied to the GPI MUTE connector. On the other hand, if there is no high signal present on GPI MUTE, the loudspeaker will continue to play the main audio signal which is set in the software at the 'setup' screen. VIDA AppThis means, an alarm system is able to mute the complete loudspeaker with one signal on GPI MUTE.

GPI PRIO
E.g, with a signal applied to the PRIO-GPI the Loudspeaker switches directly to the input channel defined for PRIO-GPI. Also every mute and negative gain will be disabled, so that the priority signal is played instantaneous with 0 dB. With this connector an alarm system can switch the loudspeaker to the channel with an emergency signal, if an emergency case is present.

Notice

Depending on the configuration of the GPI input level, the scenarios described above can also change to the inverse cases. That means, the loudspeaker could be muted when **no** signal is present. The GPI PRIO is always activated by a high level.

9.4 GPI1, GPI2, GPI3



- a: GND
- b: +10 V
- c: COM
- d: GPI 1

- e: GPI 2
- f: GPI 3

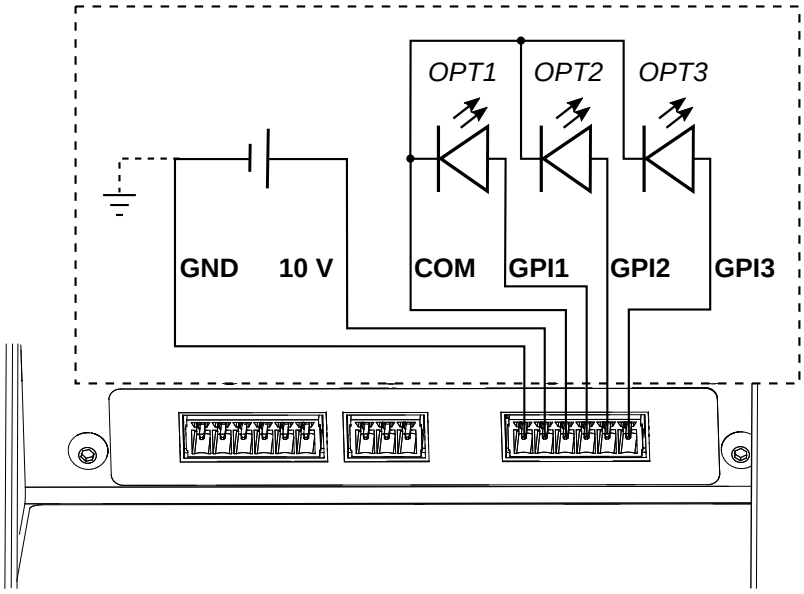
The connectors COM and GND are galvanically isolated. If you want to use an external control, e.g. a fire alarm system, you have to connect it with the COM connector and at least one of the GPI pins and assign a function to the GPI within the software.

Notice

If a galvanic isolation is necessary or required, do not use the GND connector.

In this case you can not use the internal voltage supply.

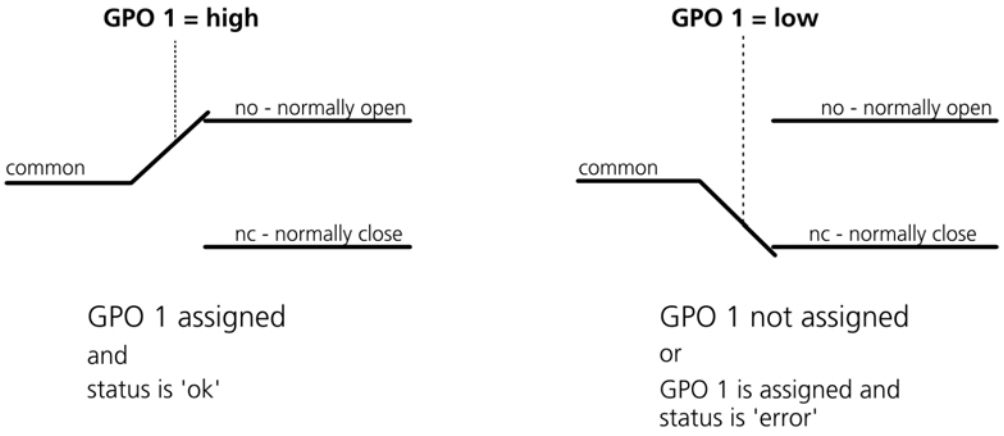
Internal wiring:



9.5 GPO Control Outputs

The GPOs are floating MOSFETs supporting NO (normally open) and NC (normally closed). If the outputs have been enabled using the software, NO is low-resistance and NC is high-resistance to common. In case of errors, NO is high-resistance and NC is low-resistance.

9.5.1 GPO Hardware



Resistive Load:

500 mA, 60 V AC/DC

9.5.2 GPO Software

The GPOs allow for querying 5 statuses:

1. **Off:** The GPO is disabled. The MOSFET switch is off.
2. **System On:** The MOSFET is on when the VIDA has powered up successfully and is ready for operation.

3. **System Status (high if config is wrong):** The MOSFET is off at config errors. This status is indicated by the red front-panel LED.
4. **System Overtemp:** The MOSFET is off when the temperature of an amp exceeds 70 °C or the power-supply temperature is 5 °C or less within the cutoff-temperature.
5. **System Hardware Fault:** MOSFET switch is off, if
   - When reports **Protect** reports or is not connected

9.6 Software GPIs (SGPI)

The SGPIs and SGPOs are configured in the same way as their hardware counterparts. You can access and query them using a browser or a similar HTTP-enabled piece of software. The VIDA web interface will always respond with JavaScript Object Notation (JSON) messages. The software GPI/Os are provided for integrating VIDA components with media-controller software.

For more informations about the SGPIO's read our "Technical Information, VIDA GPIO/ SGPIO".

10. Updating the Software

Like any other software, the VIDA App as well as the speaker firmware are regularly improved and enhanced with more features. To benefit from software updates, make sure to always have the latest software versions installed on the respective devices.

To **update the app**, connect your computer to the Internet.

To implement **speaker-firmware updates**, you need a network link between your computer and the speaker in addition to Internet access.

To perform the updates, first verify your network settings as described in the Network Configuration chapter on page . Correct the settings as necessary.

10.1 Updating the VIDA App

Just like with any other software from the Microsoft store, the VIDA App should update automatically.

If it doesn't, automatic updates might be disabled on your system. In this case, search the Internet for information on how to enable automatic updates on your computer.

You may also update the VIDA App manually by browsing to the app page in the Microsoft Store and clicking Update there.

10.2 Updating the Speaker Firmware

To update the VIDA speaker firmware, you first need to download the corresponding file from our website.

From the K&F homepage, change to the Project page, or enter the following URL into the location bar of your browser:

- http://www.kling-freitag.de/prorental/vida/firmware/#detail

Click the firmware-download link and store the file to your computer.

To update the speaker firmware:

If you know the IP address of the VIDA L to be updated, skip to step 3.

1) In the VIDA app, launch the IP-configuration dialog.

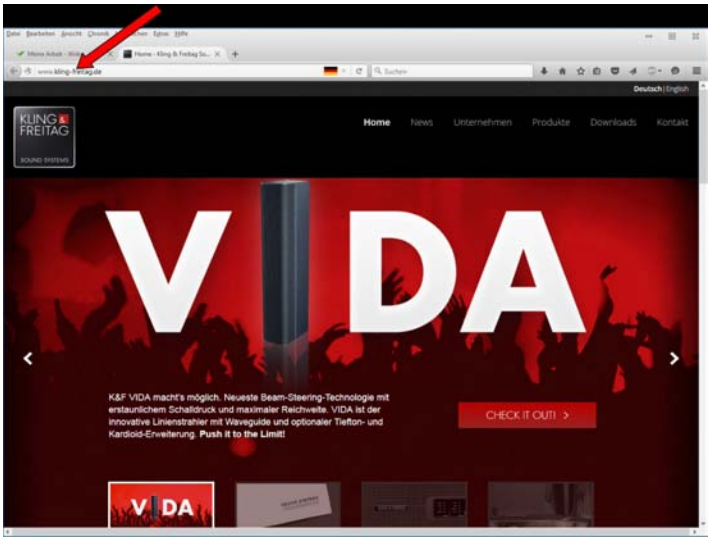
2) Make a note of the speaker's IP address displayed.

3) Enter the IP address into the address bar of a web browser. When doing so, omit all leading zeroes.

Notice

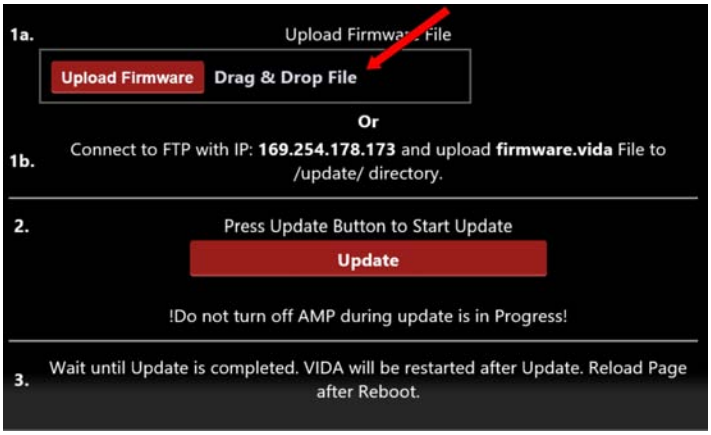
For example: If you want to access the address 192.168.000.015, enter "192.168.0.15" into the browser's address bar.

Please note: Any leading zeroes must be removed even if you have copied and pasted the address using the clipboard.

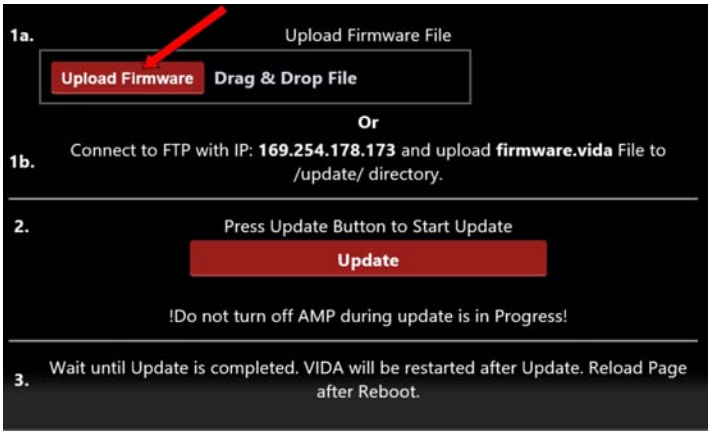


4) In the occurring speaker menu, click Software Update.

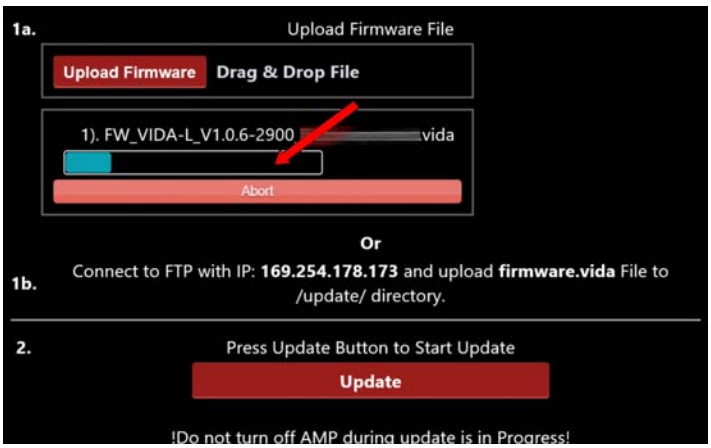
5) Either select the actual firmware installation file from the dialog or drag and drop it onto the appropriate page area using the mouse.



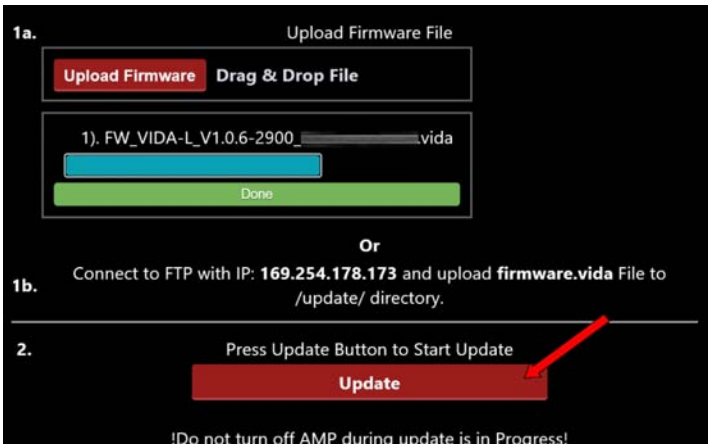
6) Click Upload Firmware.



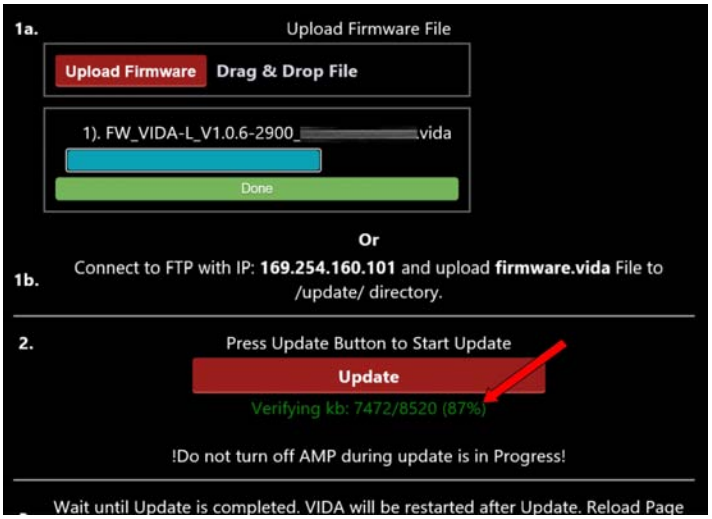
7) Wait about 2 minutes for the operation to finish.



8) Click Update.



9) Wait about 5 minutes for the operation to finish.



10) When the update is complete, a Rebooting Now message will be displayed. Be sure to wait at least 10 seconds before completing the operation, for example, by disconnecting the VIDA from the mains.

When the update is complete, the speaker will reboot and will then be ready for operation.

10.3 Upgrading the Dante Firmware

In specific cases, you may need to update the Dante firmware on the VIDA speakers as well. To find out, compare the version number of the Dante firmware running on your speaker with the version number indicated on the product page of the Kling & Freitag website.

Tip

We recommend using an IP address that has been **automatically** assigned to your computer by a DHCP server.

Make sure that an enabled firewall does not prevent network access from your updater.

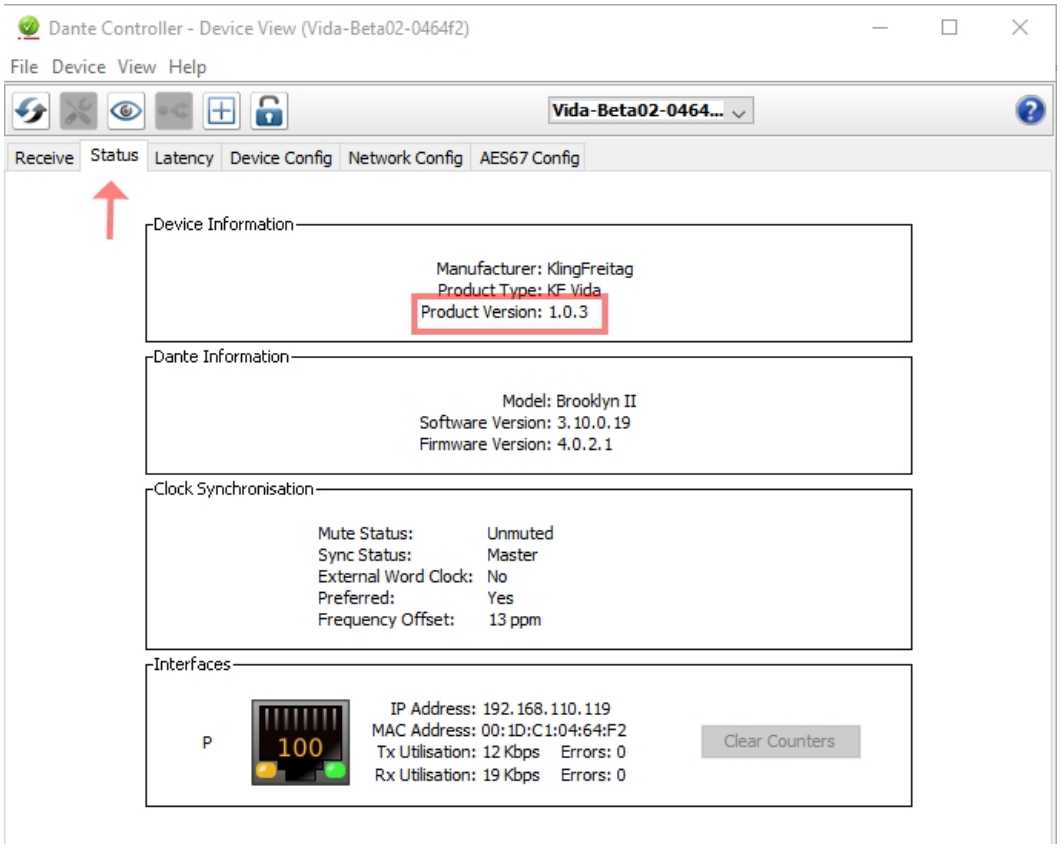
Verify that you can access and control the VIDA speaker using the VIDA App.

Run the Dante Updater as an administrator.

We recommend reviewing the Audinate website for details on the Dante system.

10.3.1 Information on the Installed Dante Version

Launch the Dante Controller and switch to the Status tab.

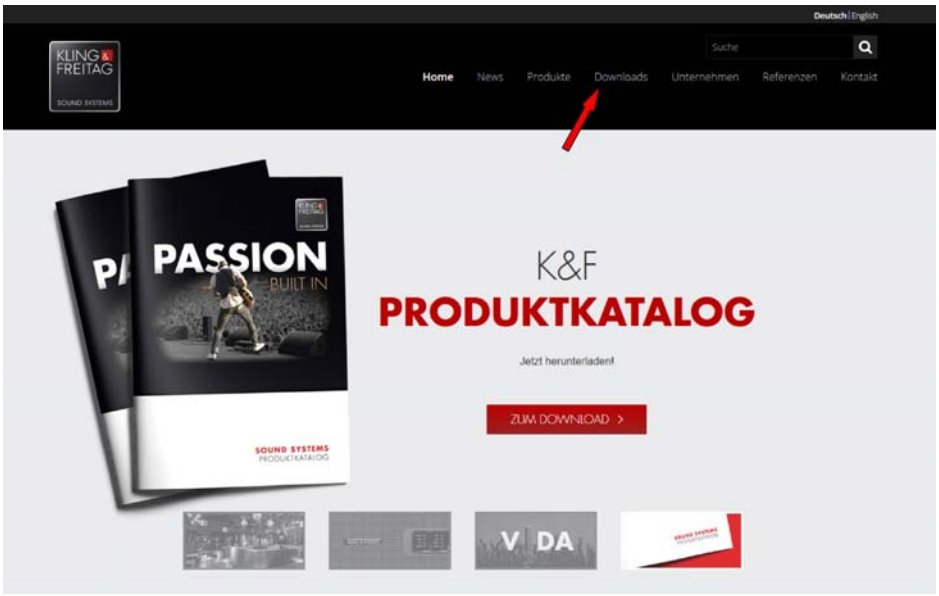


Find the product version in the Device Information pane.

If the indicated version number is lower than the current version supplied by K&F, be sure to update the Dante firmware on your VIDA speakers.

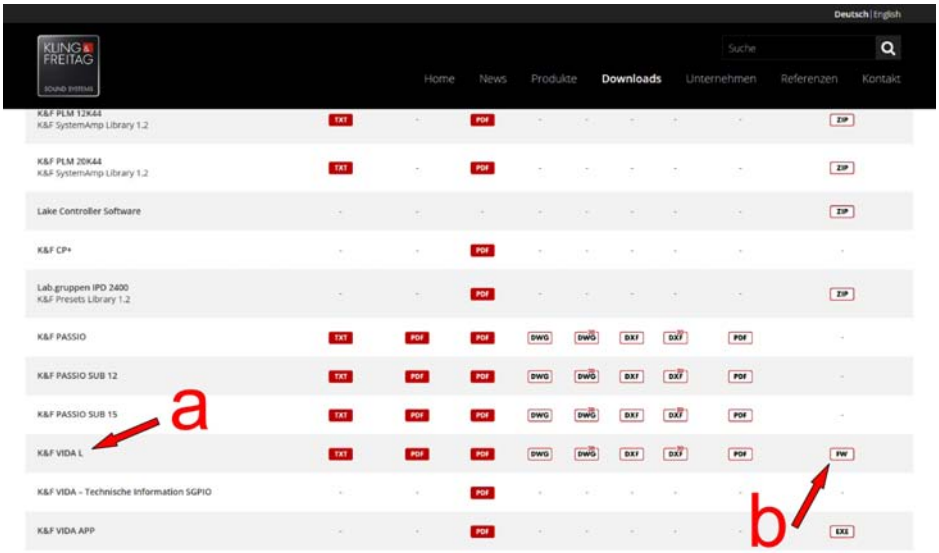
10.3.2 Dante Firmware-Update Instructions

1) Visit the Kling & Freitag website and go to the Download section.



2) (a) Find the K&F VIDA L item.

(b) Click the FW (firmware) item in the table.



3) On the opening page, you can download the K&F VIDA L firmware as well as the Dante firmware for the VIDA L.

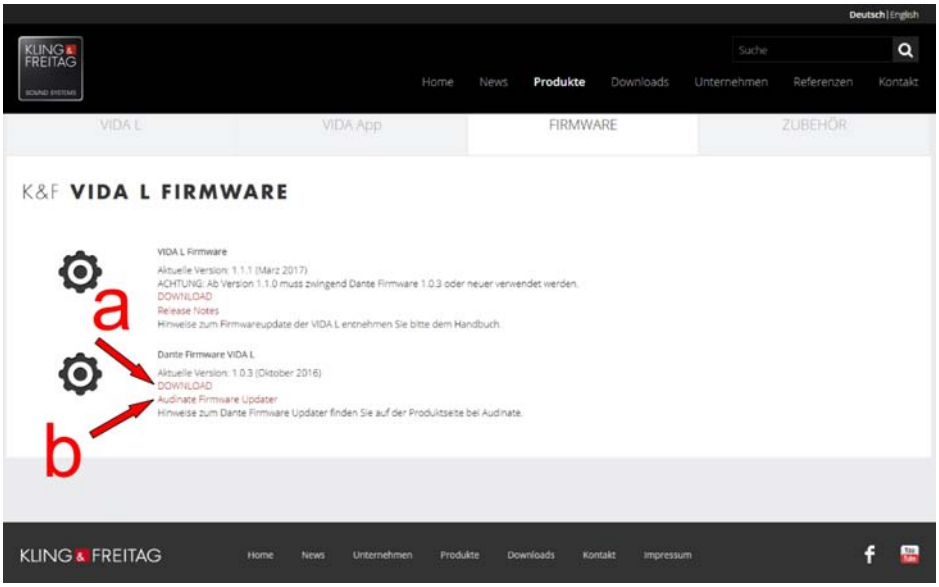
(a) Download the latest Dante firmware version VIDA L.

Note that this is a compressed ZIP archive; be sure to uncompress it in order to use it. A Dante firmware file that can be applied has the ".dnt" extension—for example, "Vida-V1.0.3.dnt".

In addition, verify whether the current version of the Audinate Firmware Updater is installed on your system. If not, download and install it.

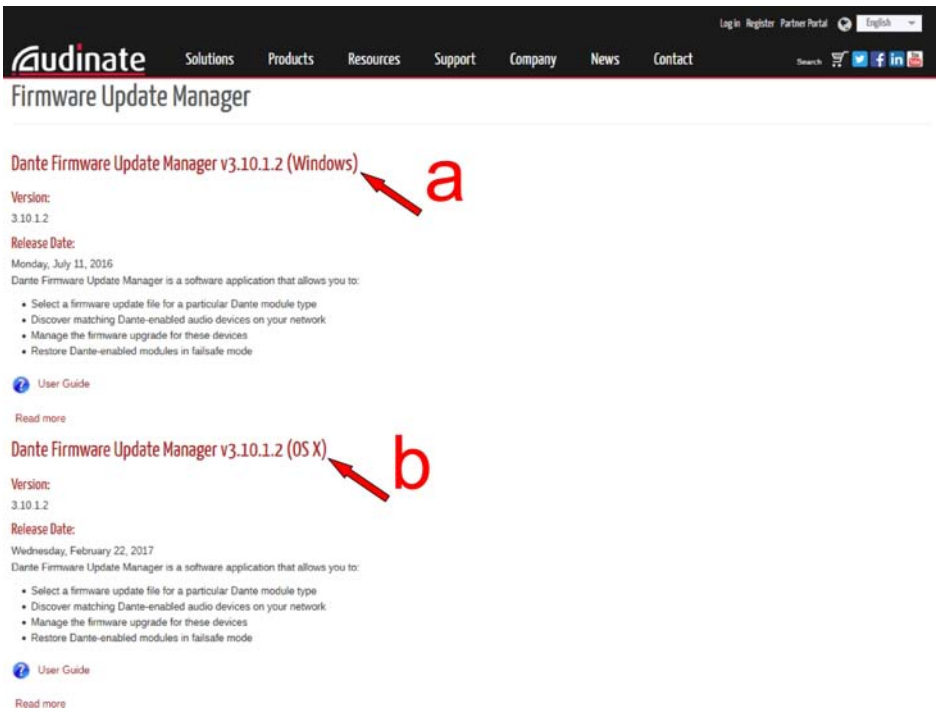
If the current version of the Firmware Update Manager is installed on your system, skip steps 4 and 5 and continue at step 6.

(b) To install the current updater version, click the Audinate Firmware Updater link.



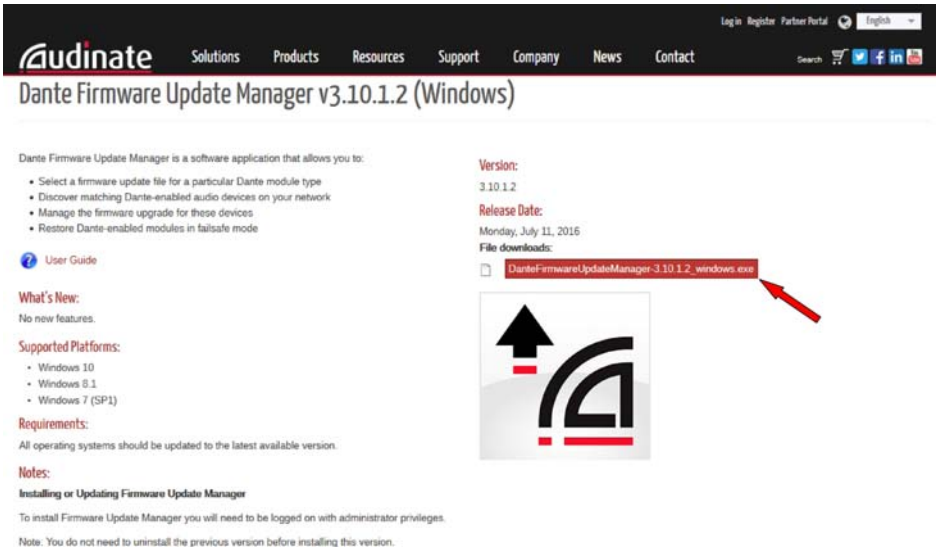
4) (a) For the Windows updater, click the Dante Firmware Update Manager (Windows) link.

(b) For the OS X updater, click the Dante Firmware Update Manager (OS X) link.



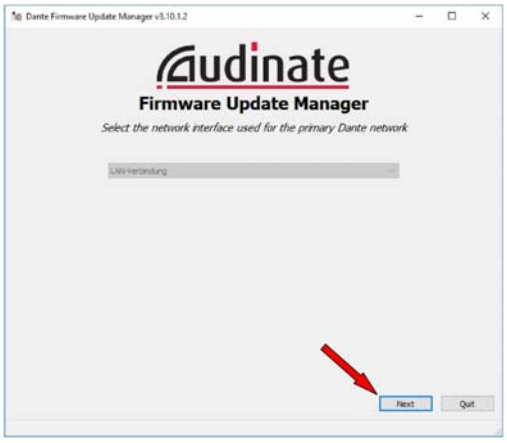
5) Click the link displayed on the opening page to download the installer.

To install the Audinate Firmware Updater, run the downloaded installer and follow the installation instructions.

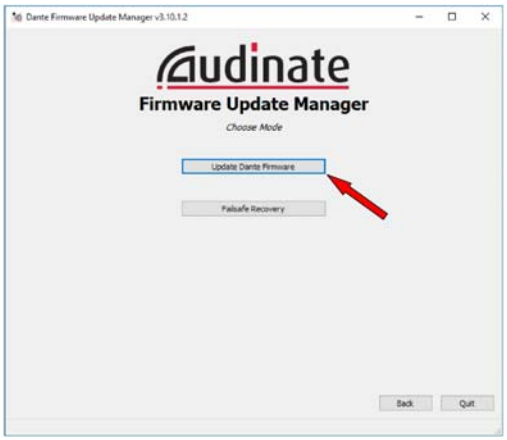


6) Run the Audinate Firmware Updater.

On the first page, the program lists the available network options. Select your connection type, then click Next to confirm your selection.



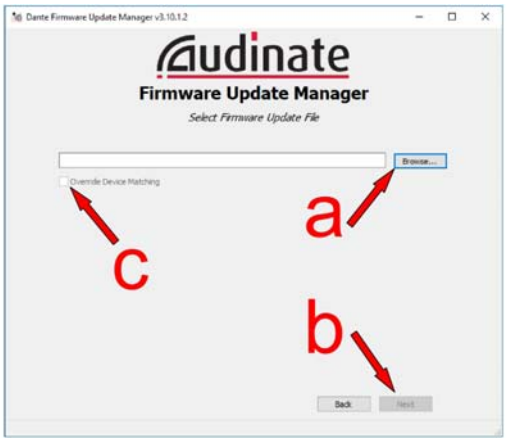
7) To perform a Dante firmware update, select the Update Dante Firmware item at the top.



8) (a) Click the Browse button, then browse to and select the previously downloaded and uncompressed **Dante firmware file** (with the "*.dnt" extension).

(b) Click Next.

(c) We recommend **NOT** to check the Override Device Matching option. Checking that option may render devices not supporting the selected Dante firmware unusable!



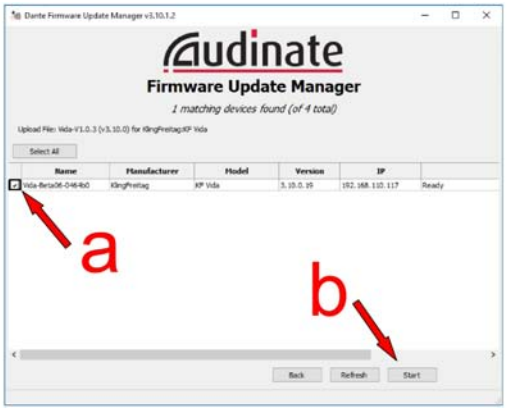
9) (a) Select the VIDA speakers to update from the list.

(b) Click the Start button to launch the update operation.

If your VIDA system is not listed, verify that you can access and operate it using the VIDA App. If this is not possible, you may need to correct the IP addresses of the devices involved or update the software packages.

For information on how to confirm or change IP addresses, refer to the Network Configuration chapter on page .

To perform a software update, refer to the Software Updates chapter on page 42.



The Dante firmware update will be completed after a few minutes. Exit the Audinate Firmware Updater and restart your VIDA speakers.

11. Updating the Firmware

To update the speaker firmware:

If you know the IP address of the VIDA L to be updated, skip to step 3.

1) In the VIDA app, launch the IP-configuration dialog.

2) Make a note of the speaker's IP address displayed.

3) Enter the IP address into the address bar of a web browser. When doing so, omit all leading zeroes.

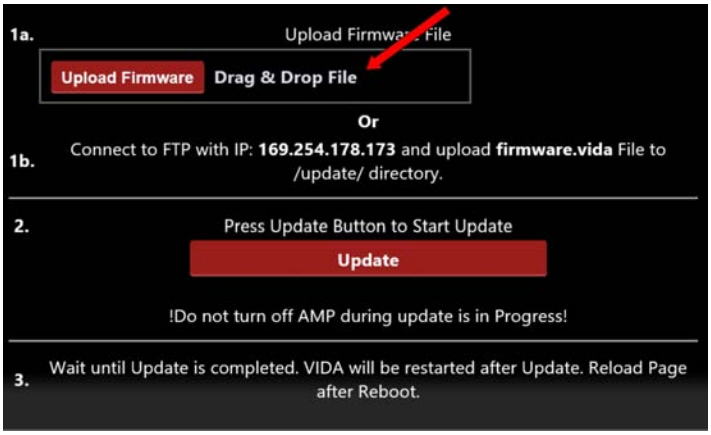
Notice

For example: If you want to access the address 192.168.000.015, enter "192.168.0.15" into the browser's address bar.

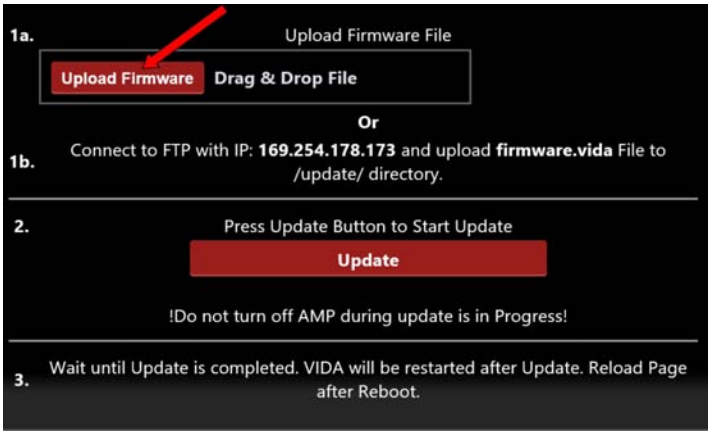
Please note: Any leading zeroes must be removed even if you have copied and pasted the address using the clipboard.

4) In the occurring speaker menu, click Software Update.

5) Either select the actual firmware installation file from the dialog or drag and drop it onto the appropriate page area using the mouse.

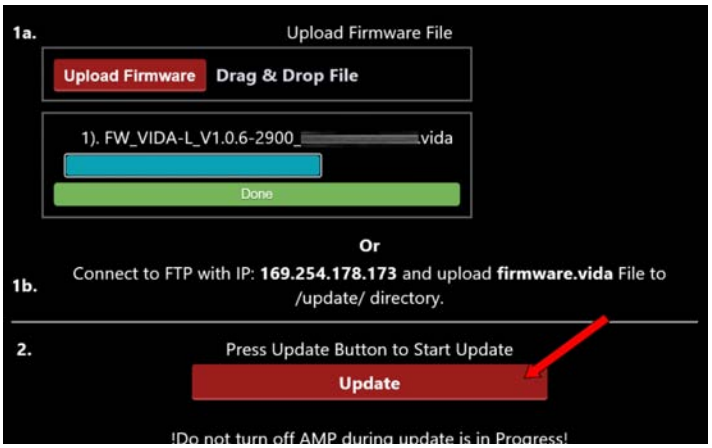


6) Click Upload Firmware.

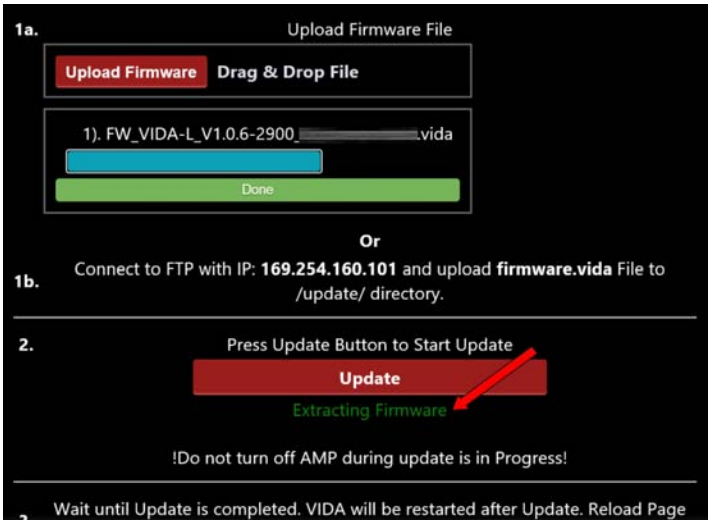


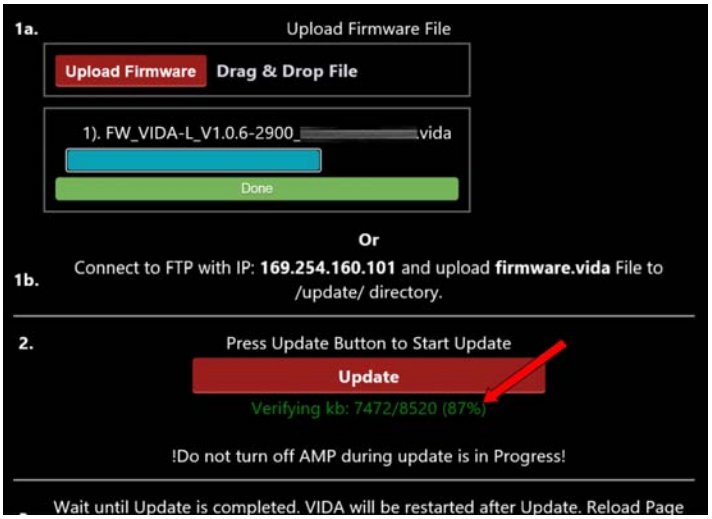
7) Wait about 2 minutes for the operation to finish.

8) Click Update.



9) Wait about 5 minutes for the operation to finish.





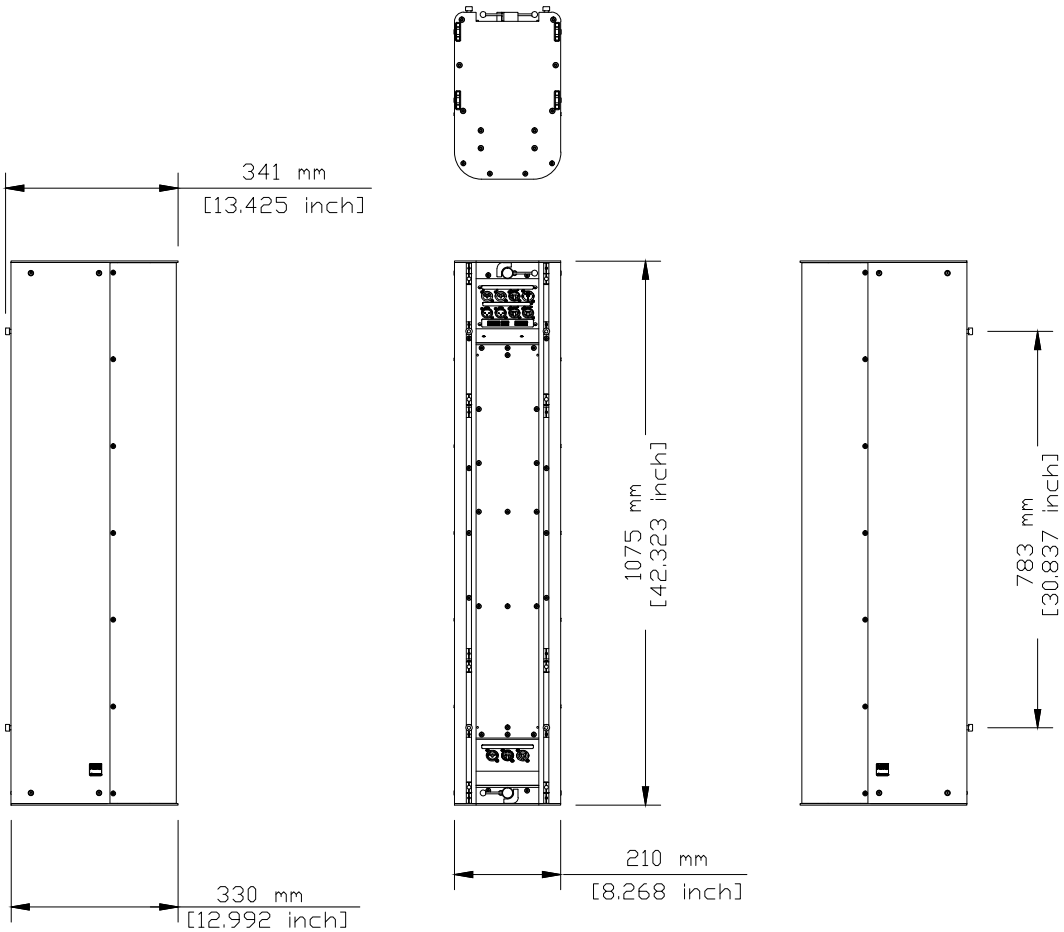
10) When the update is complete, a Rebooting Now message will be displayed. Be sure to wait at least 10 seconds before completing the operation, for example, by disconnecting the VIDA from the mains.

When the update is complete, the speaker will reboot and will then be ready for operation.

12. Dimensions and Weight

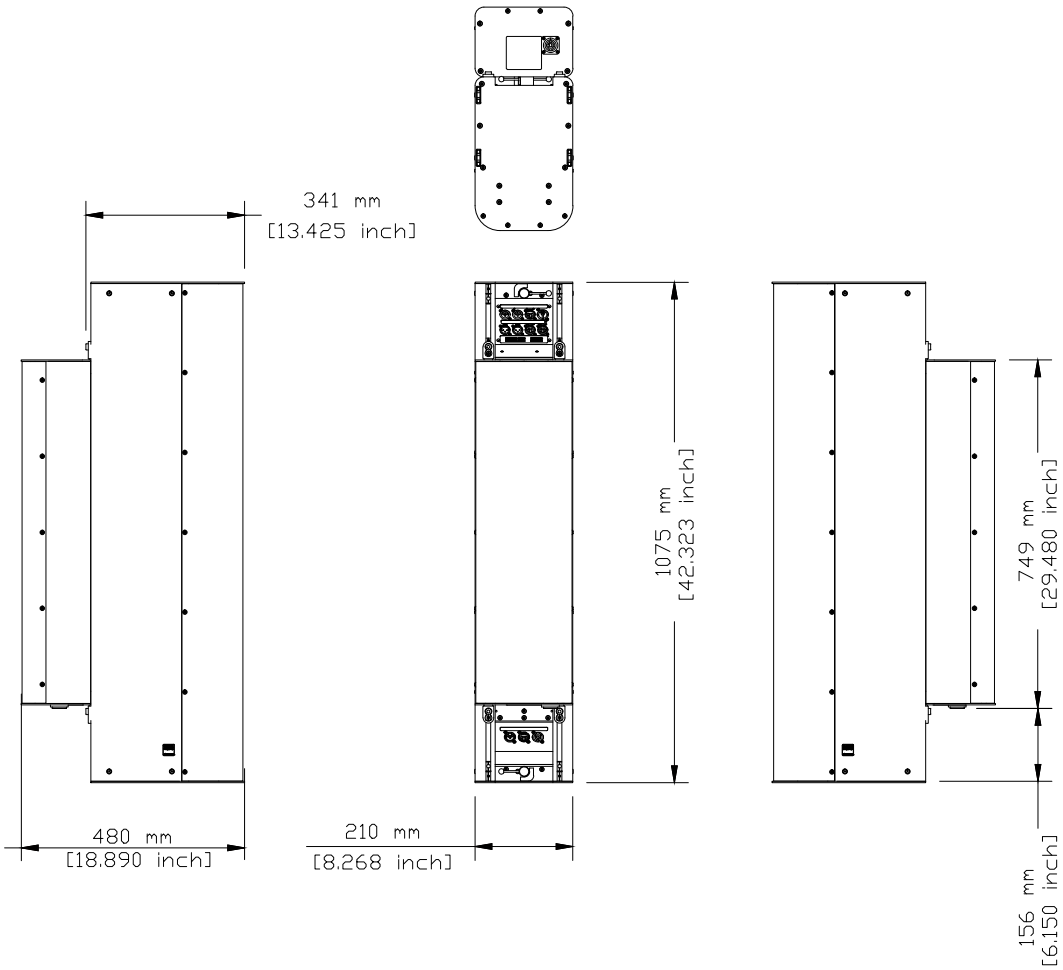
12.1 VIDA L, Dimensions and Weight

Weight: 48.2 kg

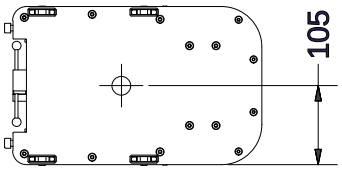


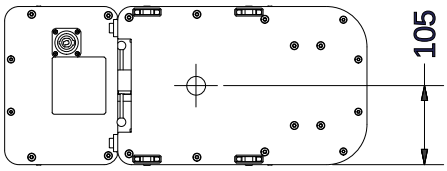
12.2 VIDA L with VIDA C, Dimension and Weight

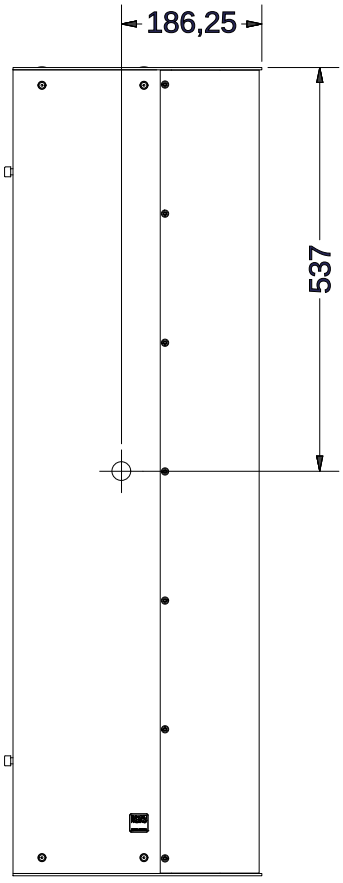
Weight: 61.8 kg

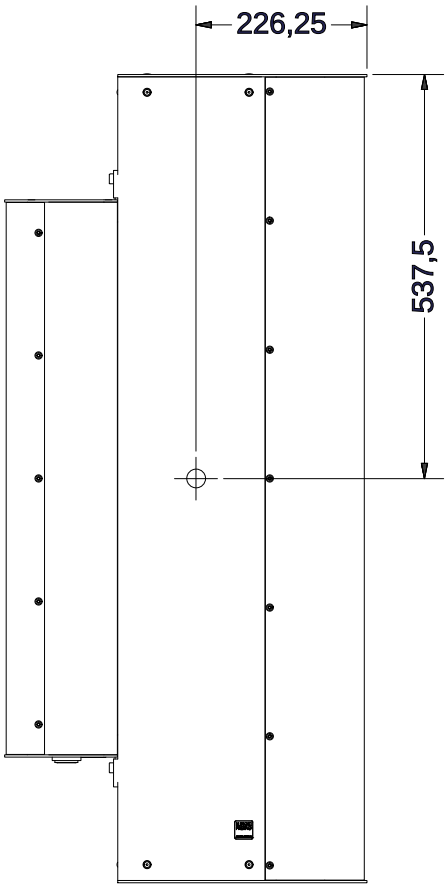


12.3 VIDA L Mass Center









13. Systemlatency

The following table lists the systems latency that is to be expected of the VIDA L. These values are true for the firmware version 1.1.0 and without using beamsteering.

Input	K&F VIDA L	AUX OUT	AMP OUT Flat
Analog	6.016 ms	1.260 ms	1.349 ms
AES 44.1 kHz	8.299 ms	3.537 ms	3.628 ms
AES 48.1 kHz	8.062 ms	3.313 ms	3.396 ms
AES 88.2 kHz	7.302 ms	2.540 ms	2.619 ms
AES 96 kHz	7.208 ms	2.448 ms	2.521 ms
AES 176.4 kHz	6.830 ms	2.046 ms	2.143 ms
AES 192 kHz	6.760 ms	2.000 ms	2.094 ms
DANTE	n.a.	n.a.	n.a.

When using system amplifiers such as the K&F PLM+ series with the AUX OUT, additional delay will be added due to the amps signal processing. For this reason, the AUX OUT has the least amount of delay possible, which leaves room to be adjusted via the VIDA APP.

The AMP OUT runs a special attuned mode for the VIDA C alongside the main VIDA L system. To gain more flexibility, the AMP OUT also runs on low latency when using the "Flat" Setup.

13.1 Dante

The latency for the DANTE playback results from the setup for the DANTE network and the latency for the AES Input of the chosen samplerate in the DANTE controller. The latency setup in the DANTE controller depends on the networks topology itself.

For example:
Setup DANTE controller = 0.5 ms latency, samplerate = 96 kHz

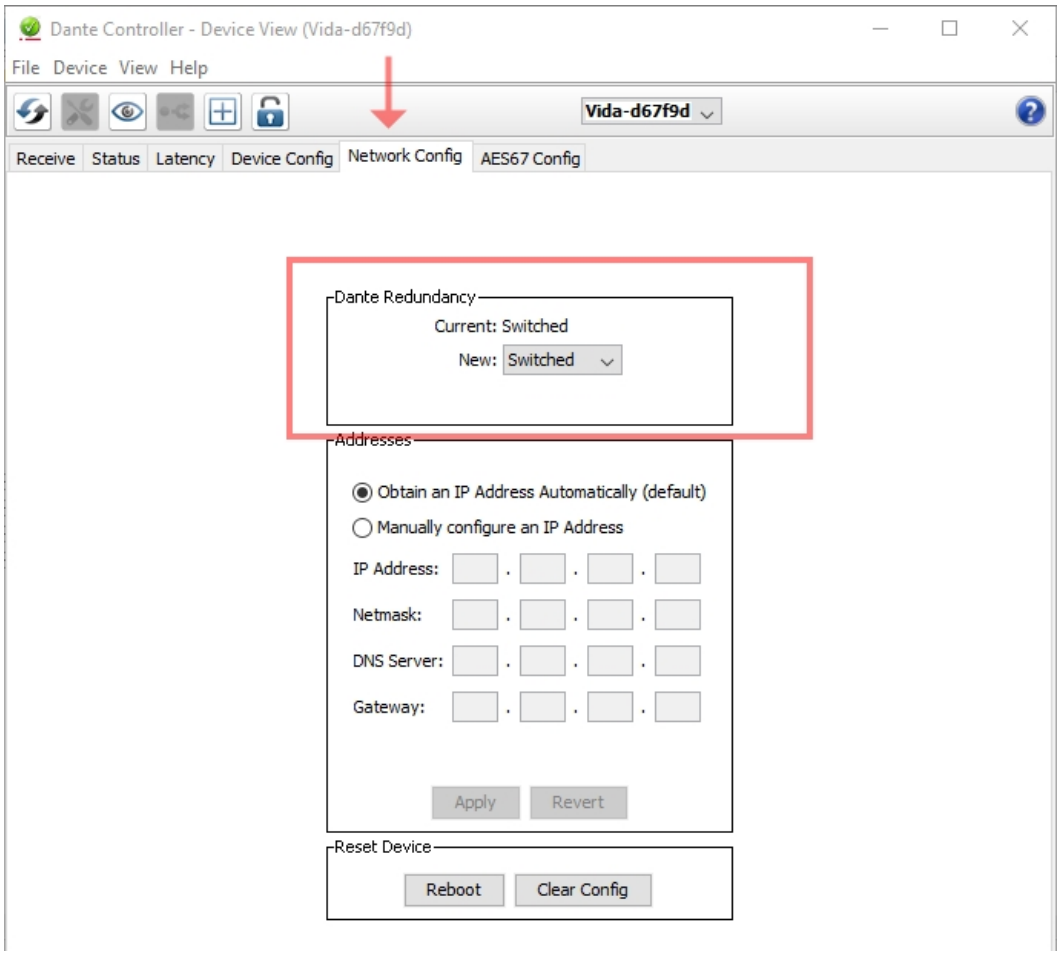
Total latency = 7.208 ms (AES 96 kHz) + 0.5 ms (DANTE) = 7.708 ms

By factory default, the two network ports of the VIDA L are configured for redundant operation. This way, you can route a signal through Dante and two separate cable runs in order to increase fail-safety.

If necessary, you can change the two ports to the Switched mode using the Dante Controller software. This way, you can route control data and the Dante signal from one speaker to the next. (This is referred to as daisy-chaining.) In this case, you cannot achieve a redundant configuration.

Switching the Operating Modes

1. Launch Dante Controller.
2. Double-click the VIDA you want to edit. Doing so will open the Device View.
3. Click the Network Config tab.
4. Make the appropriate settings in the Dante Redundancy section.



Hops:

There is one additional network switch installed inside K&F VIDA L which translates to one additional hop for the network. Take that into account for your Dante network planning.

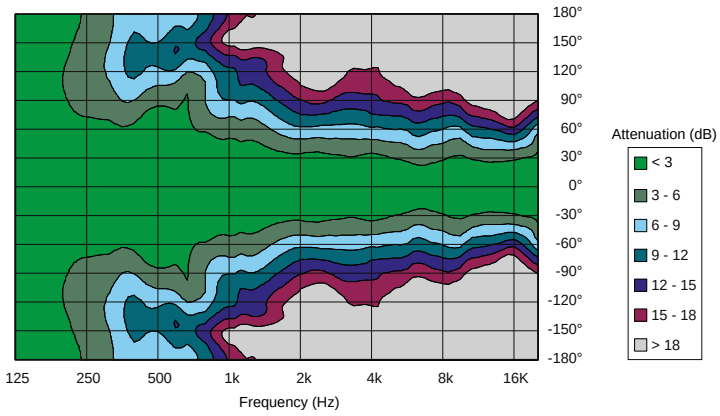
For more information about setup and design of a Dante audio network and the necessary software 'Dante Controller' refer to

- www.audinate.com/resources

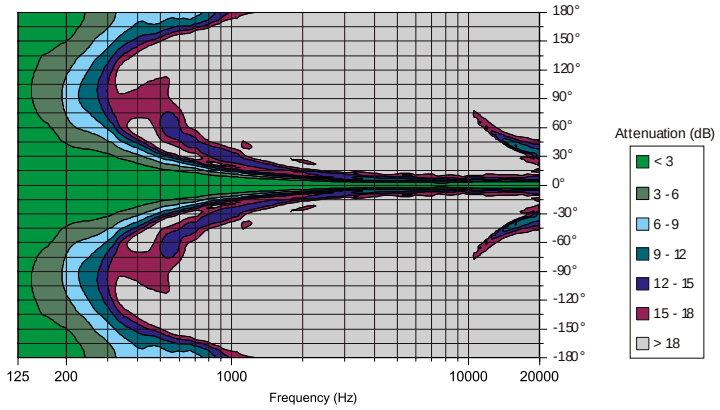
14. Measuring Diagrams

14.1 VIDA L diagrams

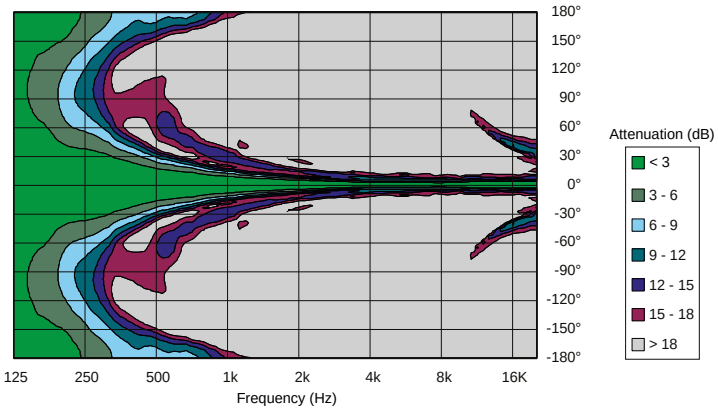
Horizontal Directivity



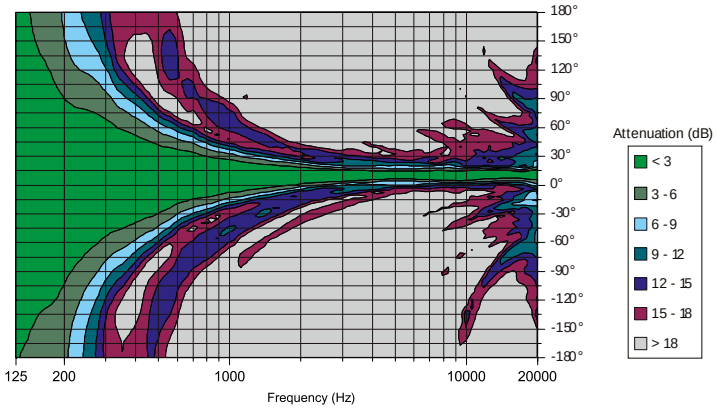
Vertical coverage pattern



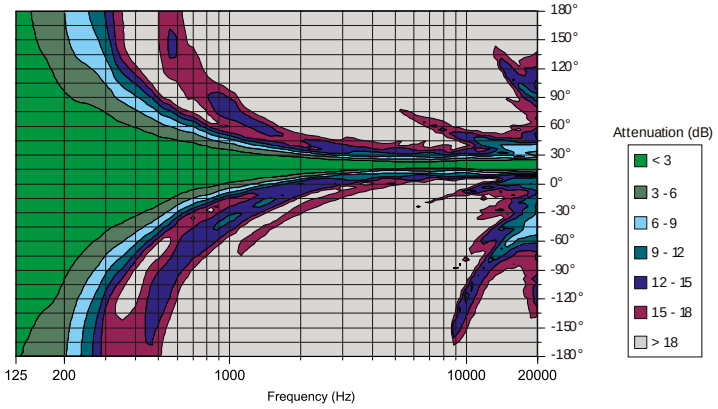
Vertical coverage, 0° Splayangle, 0° Tilt



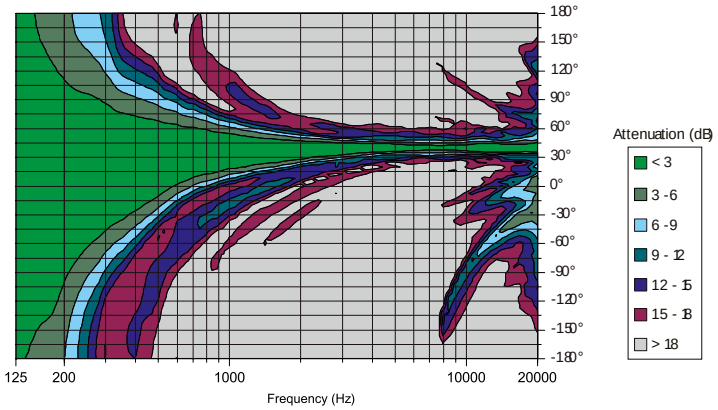
Vertical coverage, 0° Splayangle, 5° Tilt



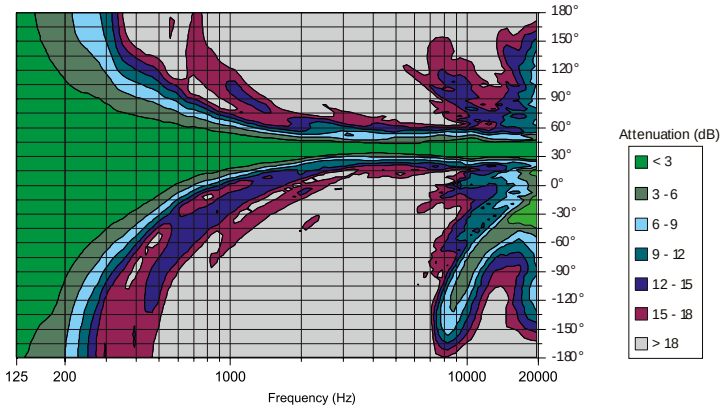
Vertical coverage, 0° Splayangle, 10° Tilt



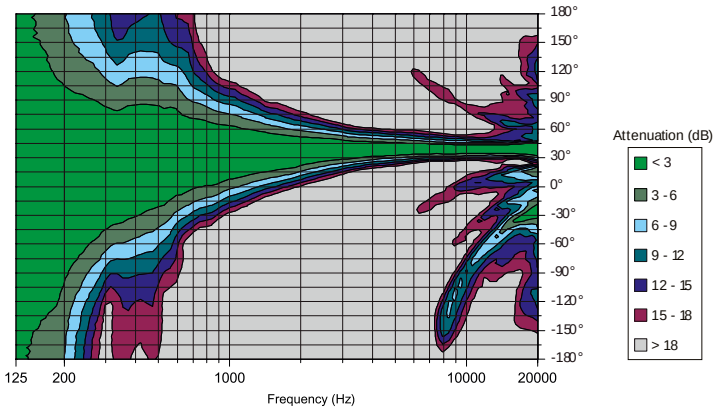
Vertical coverage, 0° Splayangle, 20° Tilt



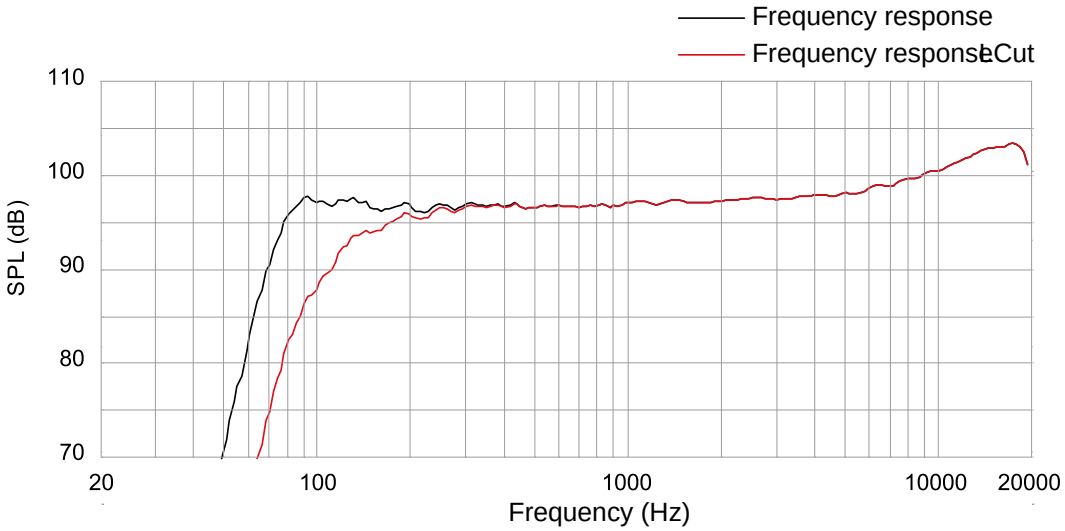
Function optimize 'off'
Vertical coverage, 0° Splayangle, 20° Tilt



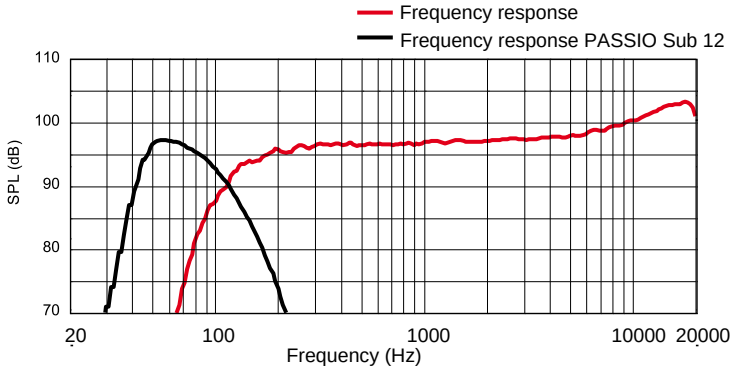
Function optimize 'on'
Vertical coverage, 20° Splayangle, 20° Tilt



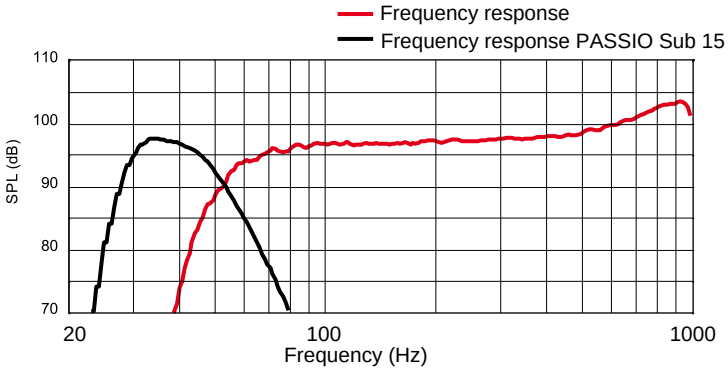
Frequency response 'on axis'



Frequency response with PASSIO SUB 12



Frequency response with PASSIO SUB 15



15. Technical Specifications

15.1 Technical Specifications VIDA L

Speaker	
Concept	High-performance line-array speaker with beam steering, 3-way coaxial design, built-in DSP and amplifier electronic components
Frequency range @-10 dB	65 Hz – 22 kHz in FR mode 80 Hz – 22 kHz in LCut mode
Frequency range @±3 dB	77 Hz – 21 kHz 'FR mode' 115 Hz – 21 kHz 'LCut mode'
Horizontal coverage angle (nominal)	90° (in vertical operation)
Vertical coverage angle	Continuously adjustable up to 90° ±45° steering angle
Max. SPL (1 m)	135 dB
Components	32 × 1" dome tweeters 12 × 3.5" midrange speakers 6 × 6.5" woofer drivers
AMP OUT power	2 x 400 W RMS/4 Ohm
AMP OUT impedance (min.)	4 Ohm/Channel
AUX OUT	Nominal +6 dBu
Analog input	Fullscale at +18 dBu
I/O	1 analog input (XLR), 1 AES/EBU input (XLR), 1 VIDA BUS input (Ethernet), 1 PowerCon True 1, 1 Analog Link (XLR), 1 AES/EBU Link (XLR), 2 Dante Remote (primary/secondary), 1 AUX OUT (XLR), 1 AMP OUT (Speakon), 1 VIDA BUS output (Ethernet), GPIOs (Phoenix terminal block)
Mechanical tilt	Single-fall and dual-fall supported (with or without VIDA C)
Enclosure Design	
	Aluminum extrusion profile with built-in hidden flying mechanism, rear rail with slot nuts for mounting holders and VIDA C units (flying mechanism is locked / unlocked using a rear lever), highly robust black powder coating, downwards-tilted connector panel, impact-proof grille with black acoustic foam.
Dimensions (H x W x D)	1,075 x 210 x 341 mm 1,075 x 210 x 480 mm (VIDA L with VIDA C)
Weight	48.2 kg

	61.8 kg (VIDA L mit VIDA C)
Color	RAL 9005 (black) special finish in RAL colours
Ambient temperature (max., during operation)	35° C
Relative humidity	10% – 90%
Operating altitude (max.)	2,000 m (6,000 ft)
Contamination class	2
Power-surge category	2
Power Supply	
Wide-range power supply	100 V – 240 V AC, 50/60 Hz
Rated input power	520 watts (@ 1/8 rated output power)
Maximum power consumption	2350 watts

Note: Be sure to use a power-plug design suitable for mains connection at your location. This might require replacing the existing power plug.

15.2 Technical Specifications VIDA C

DSP/Amplifier	powered by VIDA L
Frequency range @±3 dB	65 Hz – 240 Hz
Frequency range @-10 dB	57 Hz – 350 Hz
Horizontal coverage angle	Cardioid, HyperCardioid, Omnidirectional (BassBoost)
System components	4 x 6.5" Woofer
Dimensions (H x W x D)	210 x 749 x 150 mm
Weight	13.6 kg
Color	RAL 9005 (black) special finish in RAL colours

16. Declaration of Conformity (CE)

EG-Konformitätserklärung

(Declaration of EG-Conformity)

Hersteller: *(Manufacturer)*	Kling & Freitag GmbH Junkersstraße 14 30179 Hannover Deutschland
Bevollmächtigter für die Zusammenstellung der technischen Unterlagen: *(Authorized representative for the compilation of technical documents)*	Kling & Freitag GmbH Abt. Entwicklung +49 (0)511 / 96997-50 Deutschland
Produkt: *(Product)*	**Lautsprechersystem VIDA L**
Benannte Stelle für die Baumusterprüfung: *(Named Company of the examination)*	Test-Report-Nr. 028-713069561-000 TÜV SÜD Product Service GmbH Zertifzierstelle Ridlerstraße 65 80339 München Deutschland

Wir erklären, dass das genannte Produkt den aufgeführten Schutzanforderungen der folgenden EG-Richtlinien entspricht:

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

- 2014/35/EU, Niederspannungsrichtlinie (Low Voltage Directive)
- 2014/30/EU, Elektromagnetische Verträglichkeit (Electromagnetic Compatibility)
- RoHS II 2011/65/EU

Zur Beurteilung hinsichtlich der Einhaltung wurden folgende harmonisierte Normen herangezogen:

(Conformance of the products with the requirements is approved by compliance with the following harmonized European standards:)

- DIN EN/ISO 60065 : 2002/A12:2011
- Eurocode 1/DIN EN 1991-1-1 : 12/2010
- Eurocode 3/DIN EN 1993-1-1 : 12/2010
- Eurocode 9/DIN EN 1999-1-1 : 12/2010
- EN 55103+1 : 2009+A1 : 2012
- EN 55103- 2 : 2009

Nationale Vorschriften:

(National regulations:)

- DGUV Vorschrift 17 (BGV C1)

Hannover, 20.4.2016

Jürgen Freitag, Geschäftsführung (CEO)

EG-Konformitätserklärung

(Declaration of EG-Conformity)

Hersteller: *(Manufacturer)*	Kling & Freitag GmbH Junkersstraße 14 30179 Hannover Deutschland
Bevollmächtigter für die Zusammenstellung der technischen Unterlagen: *(Authorized representative for the compilation of technical documents)*	Kling & Freitag GmbH Abt. Entwicklung +49 (0)511 / 96997-50 Deutschland
Produkt: *(Product)*	**Lautsprechersystem** **VIDA C**

Wir erklären, dass das genannte Produkt den aufgeführten Schutzanforderungen der folgenden EG-Richtlinien entspricht:

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

- 2014/35/EU, Niederspannungsrichtlinie (Low Voltage Directive)
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Nationale Vorschriften:

(National regulations:)

- DGUV Vorschrift 17 (BGV C1)

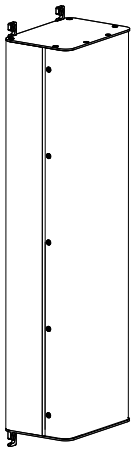
Hannover, 20.4.2016

Jürgen Freitag, Geschäftsführung (CEO)

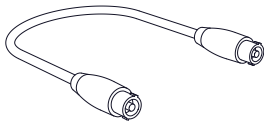
17. Accessories

17.1 Accessories for VIDA L

VIDA C
Expansion module for cardioid applications or as subwoofer expander



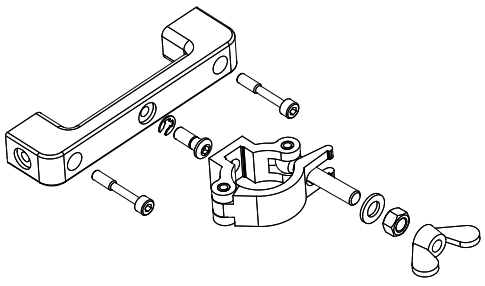
Speaker Patch Cable NLT-425, 0.5 m
50 cm patch cable for connections between SEQUENZA 5/10 (N/W) elements, high-grade halogen-free cable, 4 conductors with 2.5 mm^2 cross section each, water proof metal connectors Neutrik® NLT4FX VIDA LVIDA C



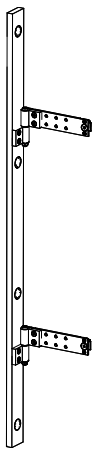
RJ45 patch cord, approx. 30 cm
for interconnecting two VIDA L units

Mains power cable (EU, Schuko), 3 m Neutrik powerCon True1™
3 m lockable device connector, handles up to 16A, supports insertion / removal on load and voltage

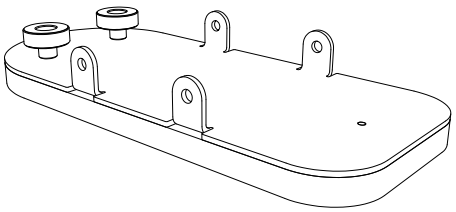
VIDA L Mounting Bracket / Handhold
for mounting to the VIDA L rear mounting rail. This ergonomic handhold allows for carrying the speaker or mount it to a truss using the supplied clips. Items included: 2 handholds, 2 pipe clips, custom screws



VIDA L Wall Bracket
For vertical mounting to suitable walls (without VIDA C only)

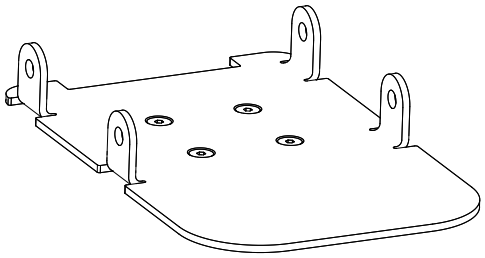


K&F VIDA L Sub Adapter
Mounting plate for secure placement of a VIDA L or VIDA L/C configuration onto a K&F subwoofer equipped with K&F M20 mounting plate, horizontally rotatable

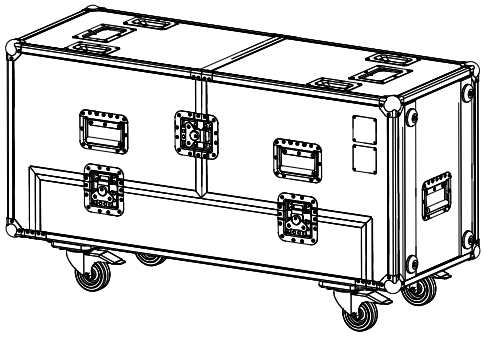


VIDA L Reset-Dongle
restoring the factory settings (included)

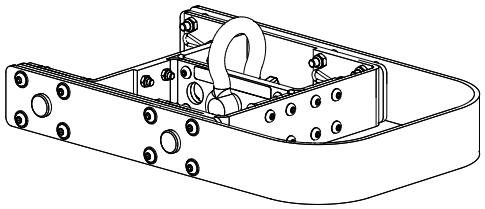
VIDA L Speaker-stand Mounting Plate
For mounting VIDA L speakers to H.O.F. Alutec speaker stands



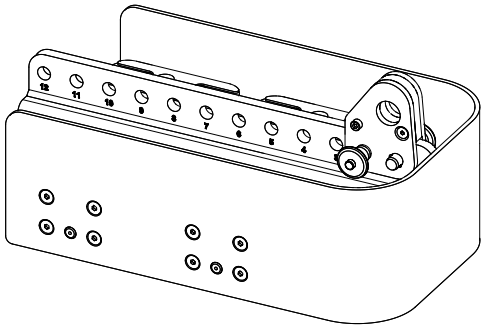
K&F VIDA L Transportation Case
For safe and secure transport of a VIDA C unit including VIDA C and other accessories. **Available on request.**



VIDA L Flying Bracket
Flying bracket for up to four VIDA L or four VIDA L plus VIDA C
0° angulation (fixed)

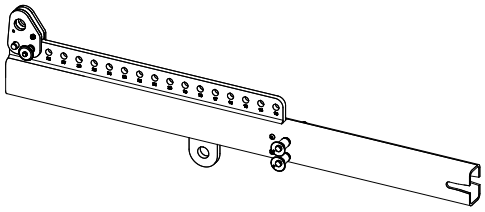


VIDA L Flugrahmen
Flying frame for up to eight VIDA L or eight VIDA L plus VIDA C

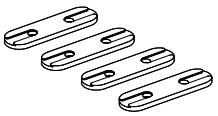


17.2 Accessories for VIDA L Flying Frame

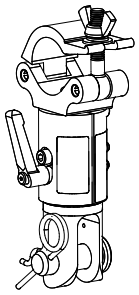
VIDA L Flying Frame Extension
For enlarging the front capacity in combination with a VIDA L flying frame.



VIDA L Connector Set (set of 4)
For attaching a VIDA L flying frame under a VIDA L speaker for dual-train rigging



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

Warning

The VIDA L system can exhibit signs of wear over the years, for example, from mechanical strain, transport damage, corrosion, or improper handling. Remember that flying speakers always impose a high safety risk.

Generally, perform a visual inspection of your speaker every time you suspend it or take it down. In fixed installations, check the speaker for signs of wear at regular intervals.

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.

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.

Inspection regulations may vary depending on application and country of use. Observe all applicable regulations; when in doubt, contact the local authorities.

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. The log should also document maintenance measures and inspection intervals and contain parts lists.

We recommend using protective coverings or transport cases to help avoid damaging the paint in case of continuous mobile use, etc.

19. Transportation and Storage

Always protect all metal parts from even temporary moisture. despite, be sure to store, transport, and use the accessories in dry environments only. Speaker accessories are not designed for prolonged use in corrosive environments.

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

In addition, protect all system parts and VIDA L accessories from mechanical strains in order to prevent damage.

We recommend storing VIDA L speakers inside a VIDA L transportation case. (See also the Accessories chapter on page 70.)

20. Disposal

Recycle the packaging material of the device.

20.1 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. 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.

20.2 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).

20.3 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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