KLING & FREITAG

SOUND SYSTEMS

EN | VERSION 2.2 | 06/16/2021

USER'S MANUAL
K&F VIDA App

Table of Content

1 Introduction

1.1 Icons Used

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

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

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

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

1.2 About this user's manual

EN | Operating instructions for the VIDA App software.

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

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2   System requirements

One of the following operating systems is required for using the VIDA App:

- Windows 8.1 (32/64 bit)
- Windows 10 (32/64 bit)

Display (standard or touchscreen):

- The minimum screen resolution required for running the app is 1024 × 768.
- The VIDA App also supports touchscreen operation and gesture control.

3   Prerequisites

- Familiarity with Microsoft Windows
- Basic knowledge of computer networks (in particular, on assigning and managing IP addresses)
- Command of the English language (the VIDA App and the license agreement are available in English only).

4   Installation

By installing the software, you agree to be bound to the license agreement for the VIDA App. The license agreement is available on the KLING & FREITAG GmbH website at:

https://www.kling-freitag.de/prorental/vida/lizenzbedingungen/#detail

If you don't accept the license agreement, you may not install the VIDA App.

4.1   Windows 10

1.   Select **Start** ⊞ > **Microsoft Store**.
2.   Type **VIDA App** into the search box and select the app.
3.   Click the **Install** button.

4.2   Windows 8.1

1.   On the startup screen, select **Store** to access the store.
2.   Type **VIDA App** into the search box and select the app.
3.   Click the **Install** button.
     On Windows 8.1, you might need to place the app icon on the Windows tile interface.

5   Software Update

You need an internet connection to perform the software update.

5.1   Automatic Update (recommended)

5.1.1   Windows 10

To enable automatic updates in the Windows Store:

1. Select **Start** ⊞ > **Microsoft Store**.
2. In the top right corner of the Microsoft Store screen, select the Account menu ⋯ > **Settings**.
3. Under **App Updates**, set **Update apps automatically** to **On**.

5.1.2   Windows 8.1

To enable automatic updates in the Windows Store:

1. Click the **Start** button. ⊞
1. On the startup screen, select **Store** to access the store.
2. Point to the lower right screen corner. Move the mouse up, then click **Settings**.
3. If you are using a touchscreen, wipe inwards from the right edge, then tap **Settings**.
4. Click or tap the **App updates** item.
5. Verify that **Automatically update my apps** is set to **Yes**.

5.2   Manual Update

If the auto-update feature is disabled, you need to update the VIDA App manually.

5.2.1   Windows 10

1. Select **Start** ⊞ > **Microsoft Store**.
2. Type **VIDA App** into the search box and select the app.
3. Click the **Update** button.

5.2.2   Windows 8.1

1. Click the **Start** button. ⊞
2. On the startup screen, select **Store** to access the store.
3. Type VIDA App into the search box and select the app.
    Click the **Update** button.

6   Uninstalled

6.1   Windows 10

1. Select **Start** ⊞, then find **VIDA App** in the displayed list.
2. Right-click the **VIDA App**.
3. Select **Uninstall**.

6.2   Windows 8.1

1. Right-click the **Start** button ⊞.
2. From the appearing menu, select **Apps and Features**.
3. Select the **VIDA App** from the list.
4. Click **Uninstall** and follow the on-screen instructions.

7   Definition of "Speaker" in this Manual

TIP

All VIDA L speakers on the same VIDA bus form a speaker array. You can combine up to 8 VIDA L speakers to a speaker array. All speakers on an array behave like a single speaker in the software. **Therefore, an array of multiple VIDA L systems is referred to as "speaker" in this manual.**

8   Switching to High-Contrast View

The VIDA App has no contrast setting. Therefore, due to the dark app design, readability may be limited in bright environments, for example, outdoors.

TIP

In this case, we recommend using the color-inversion feature of the Windows operating system.

To do so:

1. Click the Windows icon in the bottom-right screen corner.
2. Type "Magnifier".
3. Click the program icon to launch the magnifier.
4. Open the magnifier settings.
5. Move the magnification slider to 100%.
6. Enable the Color Inversion checkbox.
7. Switch to the VIDA App.

9   Getting Started

1. Connect the speakers as described in the user manuals for the respective VIDA speakers.

2. Connect the speaker to the mains.

3. Add the speakers to your network. To do so, use the **Dante / Remote Primary (RJ45)** socket.

4. Run the VIDA App on your computer. At program launch, the Setup tab will be displayed.

    - An offline device is located at the top left. *Using that device, you can configure settings without physically connecting a speaker. This allows for creating and storing "virtual setups" that you can later apply to your physical speakers. To configure offline devices, press the* ⚙ *button on the right-hand side to select the desired speaker type and (in case of VIDA L speakers) the number of speakers.*

    - The offline device will list all accessible VIDA speakers.

    - While the VIDA App is uploading the settings to the speakers found, green progress bars will show the upload status for each system.
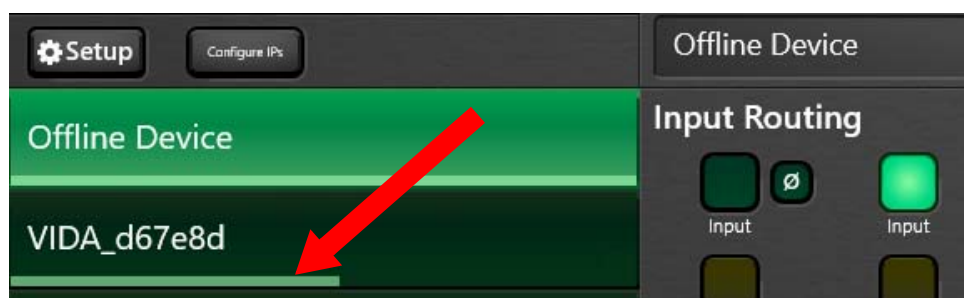
    - A red progress bar indicates that the speaker has received damaged data packets, or no data packets at all. In this case, make sure you are within the WLAN service area, are connected to the correct WLAN, and no other network-related problems exist.

- **At first use**, a red dot appears next to the speaker. In addition, the front LED will light red. This means that no valid preset could be uploaded, so the speaker is not ready for operation.
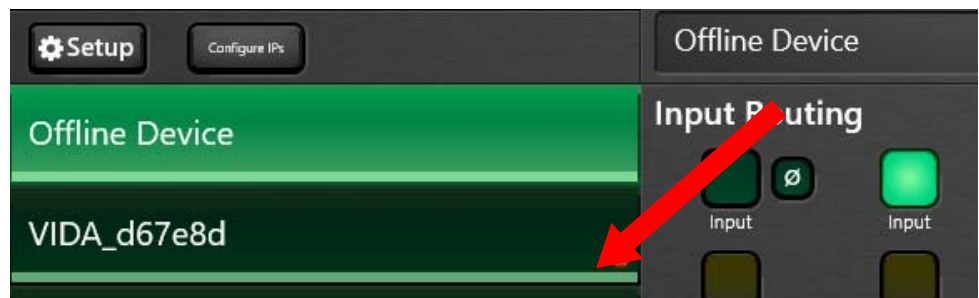
- In this case, change to the Beam tab.
- Press the Presets button in the bottom right corner.
- Load a setup.
  If you just want to perform a function check, the Default setup will do. Note that this preset is for performing function checks only—it is not suitable for sound adjustment.

5. To check, change to the Setup tab.
  - When the progress bar is fully displayed and no red dot is shown, the speaker is ready for operation.
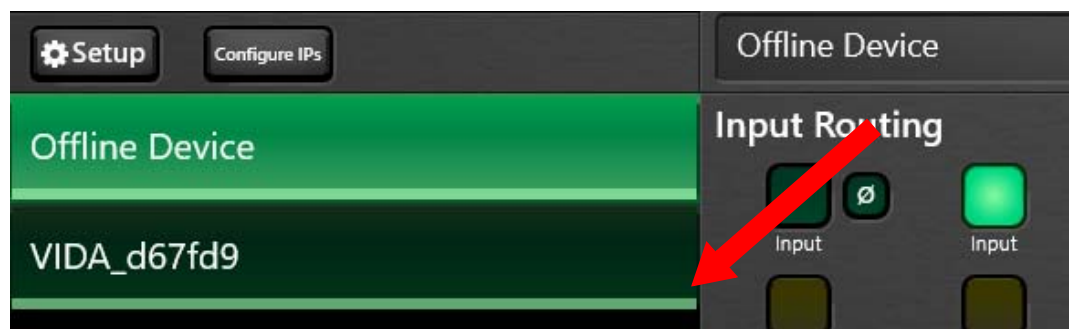
6. Output a low-volume signal to the system.
7. Check to see if the desired signals are applied to the intended speakers and make sure there is no interference.
8. If no VIDA is shown after launching the VIDA App, verify your network settings. See chapter »Network Configuration«, page 11.

10   Network Configuration

The primary remote data connection should always be through the primary port of the VIDA unit.

The secondary port can be used as necessary, for example, for integrating a redundant Dante network.

After startup, the speaker will automatically try to log in to your network in the order shown below.

NOTICE

The computer running the VIDA App must be on the same subnet as the speaker.

1. At first, the speaker will always try to log in using a DHCP server **[DHCP]**.

2. If no DHCP server is found after approx. 30 seconds, the speaker will automatically try to log in using to a free IP address within the so-called zeroconf range **[Auto IP] (recom-mended)**.

    The zeroconf range has the 255.255.0.0 subnet mask (i.e. it is in the address range between 192.168.1.0 and 192.168.254.255).

3. If that does not work either, the **[Configure IPs]** button on the Setup tab will be renamed to **[IP Conflict]** and will turn red. In that case, your network is probably configured in a way that the zeroconf range is not available. Therefore, you will need to configure your speaker with a static IP address **[Static IP]**.

4. If configuring a static address fails, too, a different network error is present.

10.1   Changing the IP assignment method

[A] Click the button **IP Conflict** or **Configure IPs** button on the Setup tab.
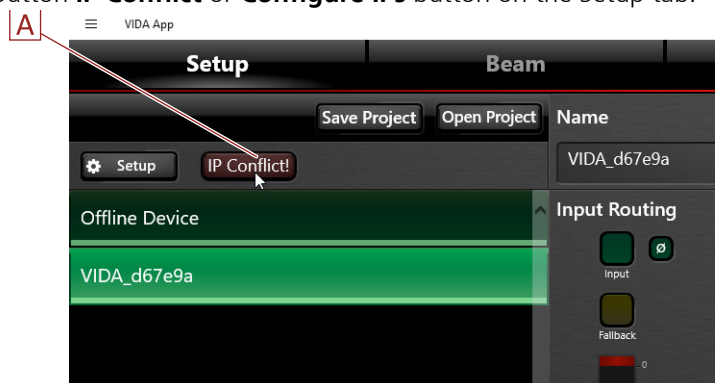
[B] Select the speaker that you want to configure a different IP-address assignment method for.

[C] If you want to assign a static IP to the speaker, click **Static IP**.

[D] Enter the desired settings for the IP address, the subnet mask, and the gateway manually. Be sure to use leading zeros in the VIDA app.

For example: 192.168.001.002

If necessary, ask the network administrator for static IP addresses and the subnet mask.

[E] Click the DHCP button to have the IP address automatically assigned by a DHCP server; to have the VIDA App auto-configure the IP, select Auto IP.

[F] Click the **Change** button to confirm your settings.
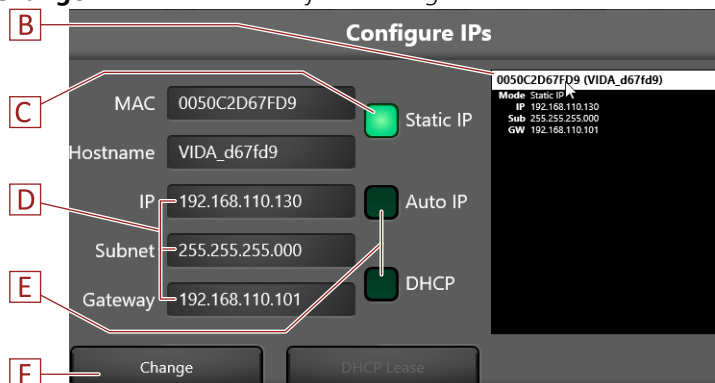
10.2 Multiple VIDA App Instances Running on the Same Network

Note that you can access VIDA systems logged into a network using a single VIDA App instance only.

Therefore, at startup, the app checks for a running VIDA App instance on the same network.

If it finds one, the Multi User Error dialog will appear. The dialog has a number of items including the following:

[A] The IP address of the VIDA App instance already running on the network

[B] Close App button: Clicking this button will close your VIDA App.

[C] Get Control button: Requests control of the VIDA systems at the running VIDA App instance.

[D] Use Offline button: Allows for configuring offline devices.

The dialog shown here will appear in the already running VIDA App instance. It provides the following options:

[A] Accept button: Transfers control of the VIDA systems to the requesting VIDA App instance.

[B] Deny button: Rejects the control-transfer request for the VIDA issued by the other VIDA App instance.
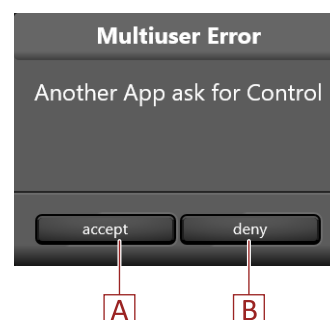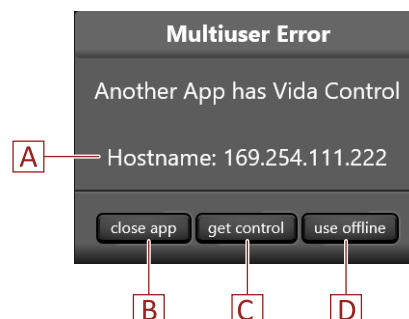
11   Control-Tab Features

All features and controls are accessible on the Setup, Beam, Audio Tools, Groups, and Status tabs.

11.1   Setup
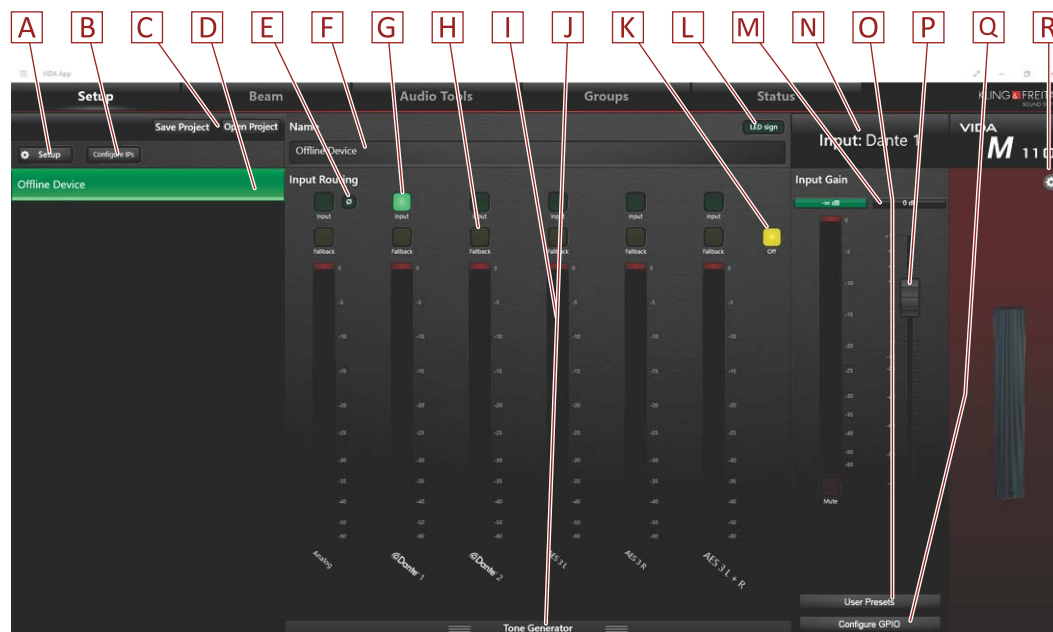
[A] **Setup button:** Clicking this button will show the program version and the selected units of length ([m] / [ft]) and temperature ([°F] / [°C]).

[B] **Configure IPs button:** Allows for configuring the network settings.

[C] **Save Project / Open Project buttons:** These buttons allow for storing the entire project configuration to an XML file and loading it, respectively.

[D] List   of all VIDA speakers found on the network.

[E] **Ø**: Reverses the polarity of the analog input signal.

[F] The name of the selected speaker. To change the speaker name, click this field. Make your edits and confirm by pressing the Enter key.

[G] **Input Routing pane:** Primary-input selectors.

[H] This is where you select a fallback input.

[I] Input-level meter.

[J] **Tone Generator pop-up:** Allows for adjusting the internal tone generator.

[K] **Off button:** Disables the fallback selection.

[L] **LED Sign button:** This button allows for identifying speakers in your environment. When enabling the button, the LED of the selected speaker will light up green.

[M] **Input Gain button:** Click to enter the gain level using the keyboard.

[N] Input-port name.

[O] **User Presets button:** Click this button to load and store user presets.

[P] Gain slider (with fine-tune scale in the upper adjustment range).

[Q] **Configure GPIO button:** Click this button to access the GPIO setup dialog.

[R] Allows for setting up the offline-device speaker type. If VIDA L is selected, you can also set the number of speakers.

11.1.1 Fallback Functionality and Setup

At audio failure at the primary input, the fallback function automatically switches over to a second (fallback) input.

1. Connect the two input signals to the speaker.

2. Select the primary input (Input).

   To do so, enable the green button above the desired input.

   To use the analog input as a primary input with the fallback feature, you need to add a 20-KHz pilot tone at a minimum gain of –35dBu to the input signal required for effectively detecting signal failure.

3. Select the secondary input (Fallback):

4. To do so, enable the yellow button above the desired input.

5. Repeat the procedure for additional speakers that you want to provide with the fallback function.

Fallback trigger:
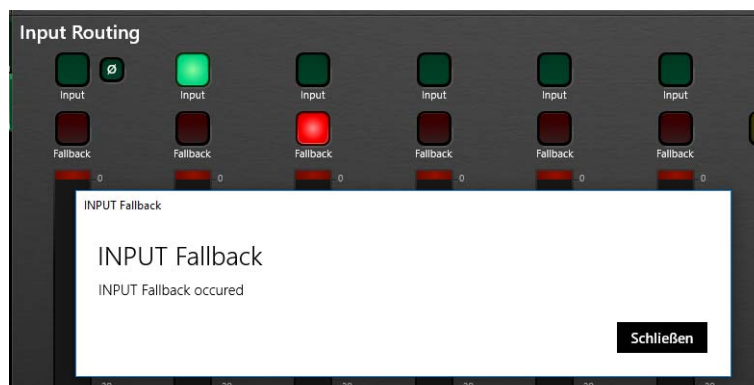
When the fallback input has become enabled after the primary audio signal has failed, a pop-up window will open on the Setup tab informing about the fallback occurrence (and thus about the primary-signal failure). You can close that window.

Possibly unnoticed error message

Please note that the Setup tab must be visible—otherwise you won't get informed about the primary-signal failure!

- While no signal is present at the primary input and the fallback input is therefore enabled, the Fallback button will light up red.

- When the primary signal is present again, the speaker will automatically switch back to the primary input and the Fallback button will light yellow again.

- After clicking the **Configure GPIO** button, you can configure if and how GPOs respond to fallback events. To do this, select the Input Fallback Error menu item in the GPO settings (see the »GPO Setup Instructions« chapter on page 18).

11.1.2 GPI Setup Instructions

The following (S)GPI ports exist on a VIDA speaker:

- 3 GPI ports for custom functions
- 1 mute GPI, for example, for emergency announcements.
- 1 priority GPI, for example, for emergency announcements.
- 8 SGPIs (virtual ports) for custom functions

Setup and operation:

- **GPI 1–3** are physical signal input ports. On the VIDA App, you can preconfigure functions that will be triggered by a voltage change between the GPI and the COM ports.

  Whether the action is triggered by a low-high transition �▍ or a high-low transition ▍ᴫ▍ is set using the VIDA App.

  You will need separate control lines in order to use the GPIs.

- **SGPI 1–8** are virtual signal inputs; they trigger an action previously configured on the VIDA App when an I/O message (Signal on or Signal off) is received.

  Similarly, whether a high-low status change (1 to 0) or a low-high change (0 to 1) triggers the action is set using the VIDA App.

  Using SGPIOs, you can integrate VIDA speakers with media controls just using software.

  All I/O messages on the network are received in the JavaScript Object Notation (JSON) data exchange format. There are no separate control lines required for this.

- **GPI Mute** is a physical input that mutes the speaker at a high ▍ᴫ▍ or low voltage level ▍ᴧ▍.

  To use GPI Mute, you need a separate control line.

- **GPI Priority** is a physical input port. When a high voltage level ▍ᴫ▍ is applied to this port, the speaker switches the speaker to a channel with an emergency signal.

  To use GPI Mute, you need a separate control line.

The following functions for the GPIs and SGPIs are available:

- **GPI 1–3** (3 items, connecting to speaker GPI > A1–3) and **SGPI 1–8** (8 items):
  - **Off**: No GPI action is triggered (default).
  - **Mute Toggle**: Toggles the mute status (on to off or off to on).
  - **Change Volume**: Sets the level for the Change Volume function. The following values are available:
    +0.1dB; –0.1dB; +0.5dB; –0.5dB; +1dB; –1dB; +5dB; –5dB; +10dB; –10dB.
  - **Select Input**: Enables the selected input **(Analog, Dante 1, Dante 2, AES L, AES R, or AES L + R)**
  - **Load Preset 1–8**: Loads one of the **User Presets** available on the Setup tab.
- **MUTE** (requires connection to speaker ALARM > MUTE): Mutes the speaker. You cannot unmute it using the VIDA App nor the mute toggles of other GPIs. This means an alarm system can always definitely mute the speaker at status change.
- **PRIORITY** (requires connection to speaker ALARM > PRIO): Enables an audio input previously selected in the VIDA App. In this case, input gain and mute settings will not apply meaning that the signal is routed to the amplifiers at 0dB level. With this connector an alarm system can switch the loudspeaker to the channel with an emergency signal, if an emergency case is present.

(S)GPI control voltages and signals:

Definition	VIDA GPI voltage	SGPI/O signal
Low	–6 V to +1.5 V	0
High	+5 V to +30 V	1

11.1.3 Configuring (S)GPIs in the VIDA App

1. On the **Setup tab**, click the **Configure GPIO** button.

- The left-hand column shows the settings for actions to be performed when switching the (S)GPIs from low to high .

- The right-hand column shows the settings for actions to be performed when switching the (S)GPIs from high to low .

2. Click the desired gear icon .

3. From the appearing list, select an action for the (S)GPI.

4. For GPI Mute, select whether the input should respond to a high voltage level (left-hand column) or a low one (right-hand column). The enabled setting will light bright green.

5. For GPI Priority, select an action from the list. This GPI will respond to a high voltage level only.

6. To finish setting up any or all (S)GPIs, click the Close button to close the window.

11.1.4 GPO Setup Instructions

The following physical GPO ports exist on a VIDA speaker:

- **2 × GPO1**, routed to port M1:
  - 1 normally closed GPO (NC1)
  - 1 normally open GPO (NO1)
- **2 × GPO2**, routed to port M2:
  - 1 normally closed GPO (NC2)
  - 1 normally open GPO (NO2)

Setup and operation:

- **GPOs** are switches that open (NC) or close (NO) a circuit at a previously defined speaker status. Which speaker status is queried is set in the VIDA App.
  - To create a circuit, you need separate lines for the GPIs.
- **SGPOs** are messages issued by the speaker indicating whether the speaker has a previously defined status (true) or not (false). Which speaker status is queried is set in the VIDA App.
  - The status messages on the network are transmitted in the JavaScript Object Notation (JSON) data exchange format. There are no separate control lines required for this.

You can query the following speaker-status changes for controlling the (S)GPOs:

- **Off:** A changing speaker status has no effect (default).
- **System On**: Indicates that the speaker is ready for operation.
- **System Status (Low if config is wrong)**: This status indicates a configuration error. It is additionally identified by the red lit front LED and the red dot on the speaker indicator on the Setup tab.
- **System Overtemp**: Temperature Exceeded status. Occurs when the temperature of an built-in VIDA-speaker amplifier exceeds 70 °C or the operating temperature of a power supply is 5 °C below shut-off.
- **System Hardware Fault**: This status indicates that an amplifier error has occurred.
- **Input Fallback / Error**: This status is raised in case of a fallback event.

11.1.5 Configuring (S)GPOs using the VIDA App

1. On the **Setup tab**, click the **Configure GPIO** button.
2. Click the top-right **Configure GPO** button.
3. Click the desired gear icon ⚙.
4. From the appearing list, select a status message for the (S)GPO.
5. To finish setting up any or all (S)GPOs, click the Close button to close the window.

	Configure GPO	Configure GPI
	⎍	
GPO 1	System Hardware Fault	⚙
GPO 2	System Overtemp	⚙
SGPO 1	Off	⚙
SGPO 2	Off	⚙
SGPO 3	Off	⚙
SGPO 4	Off	⚙
SGPO 5	Off	⚙
SGPO 6	Off	⚙
SGPO 7	Off	⚙
SGPO 8	Off	⚙
	close	

11.1.6 Querying the GPIO Status

-   The **Status tab** informs on whether the **MUTE GPI** or the **PRIO GPI** are enabled (red indicator).
-   To query the status of all GPIOs using a web browser:
1. Identify the IP address of the required VIDA speaker. To do so, select **Setup tab > Configure IP button** or **Status tab > System Status display.**
2. Enter the IP address into the address bar of your web browser and press the Enter key.
3. Click the **Status** button, then select **GPIO Status**.
4. Now, you can see if any GPIOs are enabled (red indicator).

11.2   Beam
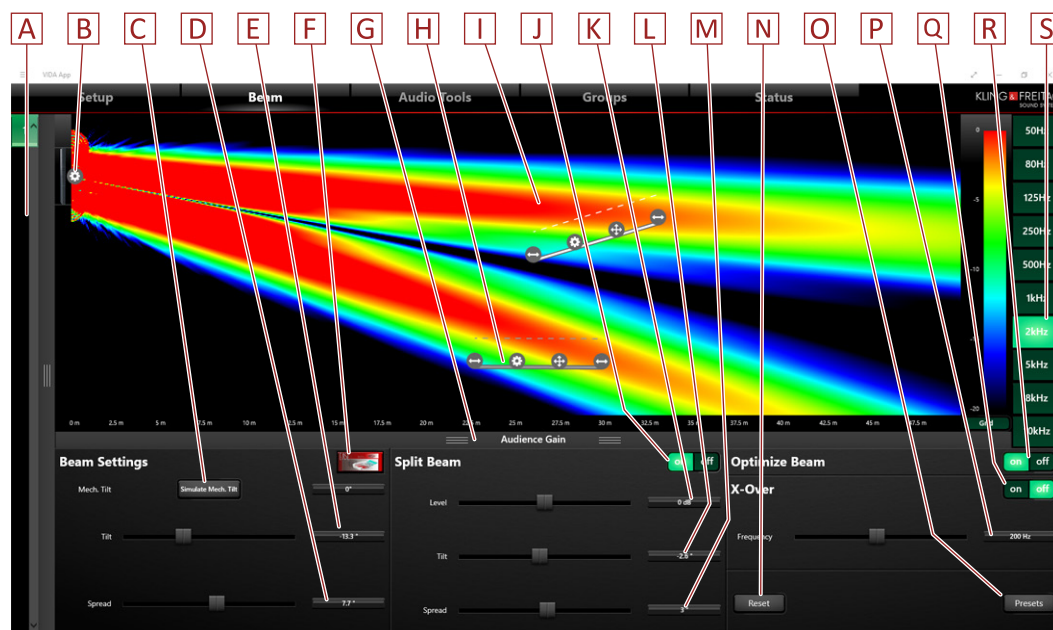
[A] List of accessible speakers and slideout bar (for expanding and collapsing the view)

[B] Position of the selected speaker.

[C] **For a VIDA L offline device** :

- **Simulate Mech. Tilt**: Allows for setting and verifying the mechanical down-tilt of VIDA L speakers (see chapter »Mechanical Down-tilt for VIDA L Speakers« on page 23) or

  For a VIDA L online device :

- **Measure**: Measures the actual mechanical down-tilt.

  For a VIDA M (offline or online):

- **Upside Down**: Beam simulation for when the VIDA M speaker is to be installed upside down (i.e. bottom is up).

[D] **Spread**: Beam spread angle.

[E] **Tilt**: Adjusts the electronic beam tilt.

[F] **Ease Export (Offline Device only)**: Exports the settings to the Ease file format (XGLC).

[G] **Audience Gain:** Toggles the diagram between sound-level distribution and a signal level at the audience area. On the right, click the desired frequency (50Hz to 10KHz).

[H] Audience-area representation with adjustment options.

⬌	Using these icons, you can change the starting and ending points of the audience area. Double-click: Use your keyboard for entries.
✛	Using this icon, you can shift the entire audience area.
⚙	Double-click the icon to set audience ear level: sitting, standing or custom.

[I] Graphical beam-level view (the Audio Tools settings are not considered)

[J] **Split Beam**: Enables the Split beam feature. Split beam generates two speaker-sound beams that can be separately directed towards two different audience areas. In effect, enabling split beam creates a second audience area.

[K] **Level (split beam)**: Sets the volume of the second beam relatively to the first.

[L] **Tilt (split beam)**: Electronic down-tilt of the second beam

[M] **Spread (split beam)**: Spread angle of the second beam

[N] **Reset**: Clicking this button restores the default settings.

[O] **Preset**: Clicking this button opens a popup where you can save, restore, and delete the sound-beam settings.

[P] **Frequency (X-Over)**: Allows for adjusting the crossover frequency for the second beam using a high pass filter.

[Q] **X-Over**: Enables or disables an adjustable crossover frequency for the second beam.

[R] **Optimize Beam**: Click this to enable electronic beam optimization.

[S] Buttons for viewing the various frequency ranges.

11.2.1 Adjusting the Beam

1. On the left side of the screen, select an array to modify sound propagation.

2. If you require covering two separate audience areas, click the On button in the Split Beam pane.

3. Configure the audience area(s) and set the expected average ear level.

4. Enter the speaker height.

5. At 8 kHz, direct the sound beam towards the audience-area center. With the VIDA L, when using a heavily tilted beam, we recommend implementing a mechanical tilt in order to achieve improved coverage. See chapter »Mechanical Down-tilt for VIDA L Speakers«, page 23.

6. Select the 1kHz view on the right-hand side of the screen, then open up the sound beam until favorable audience-area coverage has been achieved at ear level.

    Note that the beam spread angle has a value range from −90° to +90°. Negative spread angles focus the beam to a single point.

    Beam focusing through a negative spread angle is used only in very rare special cases as it typically causes unwanted frequency interaction. Therefore, you will normally use positive spread angles.

7. Click the vertical slideout below the level graph and confirm consistent coverage in the Audience Gain view. Also, be sure to check your settings, in particular, for higher

8. If necessary, use the Optimize Beam feature to improve the sound beam.

11.2.2 Mechanical Down-tilt for VIDA L Speakers

⚠ **WARNING**

Risk of injury from falling objects!

To achieve a mechanical down-tilt with a VIDA L system, you need to simulate and verify the stability using an offline device on the VIDA App. Never implement down-tilt angles that are not supported by the VIDA App!

Make a note of the settings and adhere to them during speaker installation.

The achievable beam tilt is physically limited. Extreme settings affect the resulting coverage and the audience experience. To prevent this, you can mechanically down-tilt the VIDA L in order to reduce the required electronic beam tilt and thus improve the resulting coverage.

1. On the **Setup** tab, select the **VIDA L** system as offline device.
2. Specify the number of desired VIDA L speakers.
3. Click **Confirm** to confirm your input.
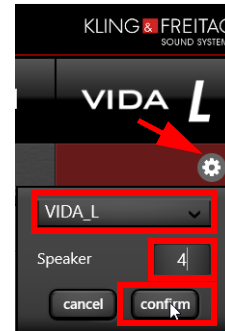
4. Switch to the **Beam** tab.
5. Click **Simulate Mech. Tilt.**

6. In the Simulate Tilt dialog , make your settings as per below instructions, then continue to step 7.

[A] Load Limit acc. DGUV 17 (BGV C1): When lit, this indicator confirms that your setup meets the stability requirements as per DGUV regulations 17 (formerly BGV C1).

[B] Mechanical Tilt: This is where you enter the required tilt angle.

- You can change the tilt angle step by step using the arrow keys.

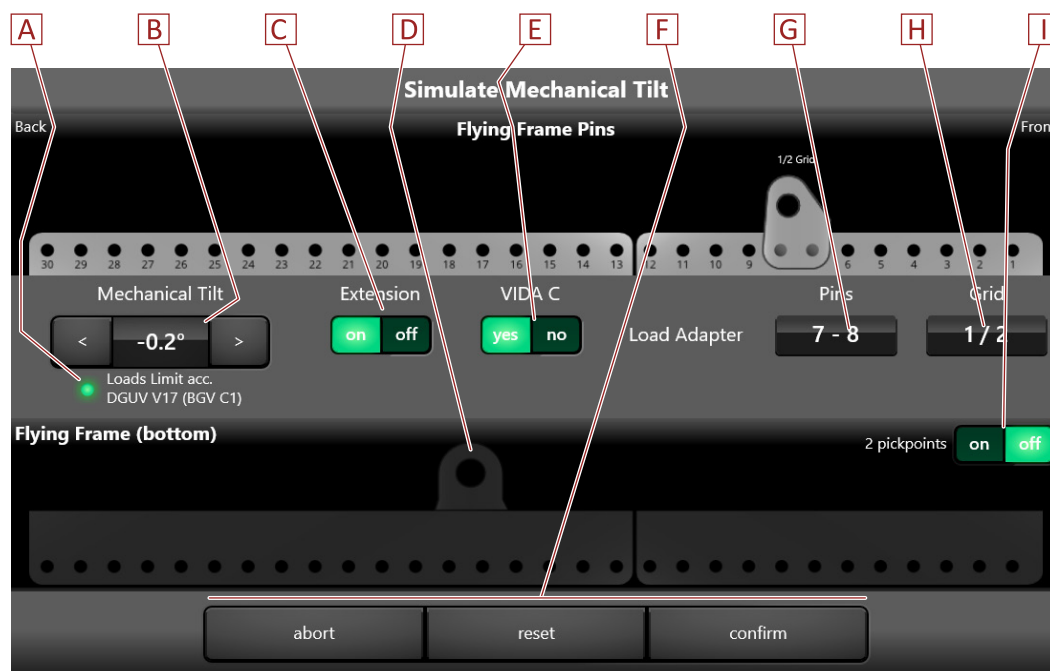- Click the displayed value to be able to change it using the keyboard. If your entry is not valid, the setting changes to the next supported value.

[C] Extension: Click this button when using the optional VIDA L flying-frame outrigger in order to achieve larger tilt angles.

[D] Pickpoint for two-strand suspension using a second flying frame plus outrigger at the bottom loudspeaker. This is relevant only when **2 Pickpoints** is set to **On**.

[E] VIDA C: Use these buttons to indicate whether a VIDA C is present or not.

[F] Abort / Reset / Confirm:

- **Abort** effectively cancels your edits by restoring the settings valid at the time the Simulate Tilt windows was opened and also closes the window.

- **Reset** restores the defaults of the following parameters:
  - One-strand suspension
  - Extension set to Off
  - Tilt angle set to approximately 0°

- **Confirm** applies your edits and closes the Simulate Tilt window.

[G] Load Adapter – Pins: Shows to which flying-frame or outrigger bores the load adapter needs to be mounted.

[H] Load Adapter – Grid: Shows how to align the load adapter.

[I] 2 Pickpoints: Set to On when implementing two-strand suspension.

7. Store your edits on the **Beam** tab as a preset.

8. Now, load the previously stored preset from the **Beam** tab to the online device you are about to install.

9. Click the Measure button **[A]**. While this button is enabled (lit green), the built-in position sensor of the VIDA L transmits the actual tilt angle of the speaker to the app. The current setting is displayed in the green field **[B]** in real time. **[C]** shows the mechanical tilt angle previously simulated in the offline device.

10. Disabling the Measure button **[A]** will transfer the measured and displayed angle to field **[C]**. This true value will then be used for beam simulation.

11. Afterwards, if you still need to slightly correct the beam, use the electronic tilt adjustment feature **[D]**.
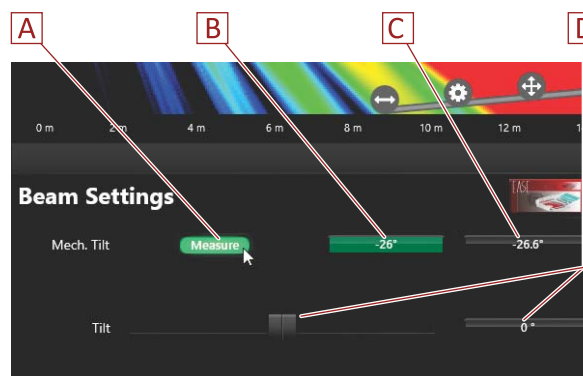
⚠ **WARNING**

Risk of injury from falling objects!

With dual-fall suspension, when pulling up the rear fall, the tilt angle is often inadvertently exceeded.

1. Therefore, make a note of the tilt angle previously simulated using the offline device or, in case of the online device, avoid inadvertently changing the tilt angle in field **[C]**.

2. When setting up the speaker, with the button **[A]** enabled, keep monitoring the real-time angle **[B]**.

3. Make sure that the previously simulated tilt angle is as far as possible. Also be sure not to exceed the following tilt angles.
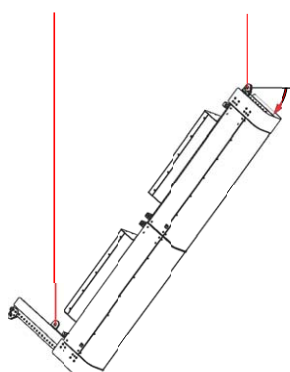
Quantity	Minimum angle	Maximum angle
1	0.0°	-90.0
2	0.0°	-90.0
3	0.0°	-90.0
4	0.0°	-90.0
5	0.0°	–70.0° without VIDA C –45.0° with VIDA C
6	0.0°	–40.0 without VIDA C –30.0° with VIDA C
7	0.0°	–25.0 without VIDA C –20.0° with VIDA C
8	0.0°	–20.0 without VIDA C –15.0° with VIDA C

11.2.3 Beam Optimization

Sound propagation can be improved using the Optimize Beam feature. This way, you can suppress side beams, thus allowing for clearer sound-beam separation.

Note that the Optimize Beam feature causes a decrease in maximum level.

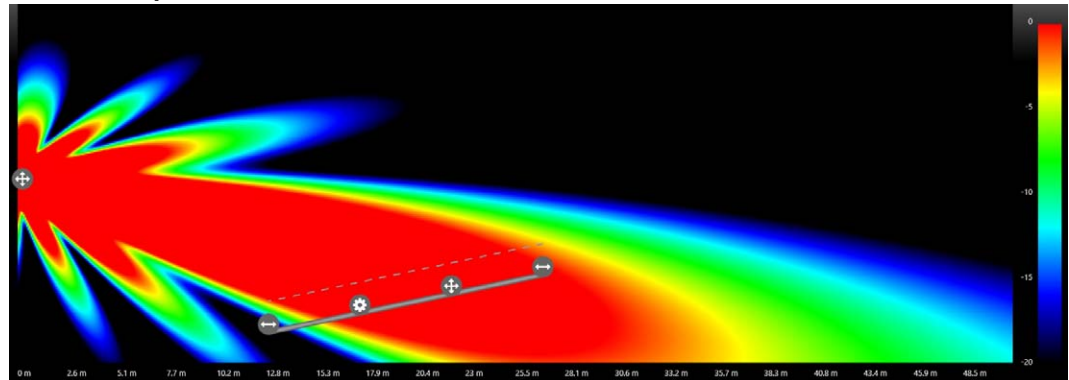**Beam not optimized:**

Beam optimized:
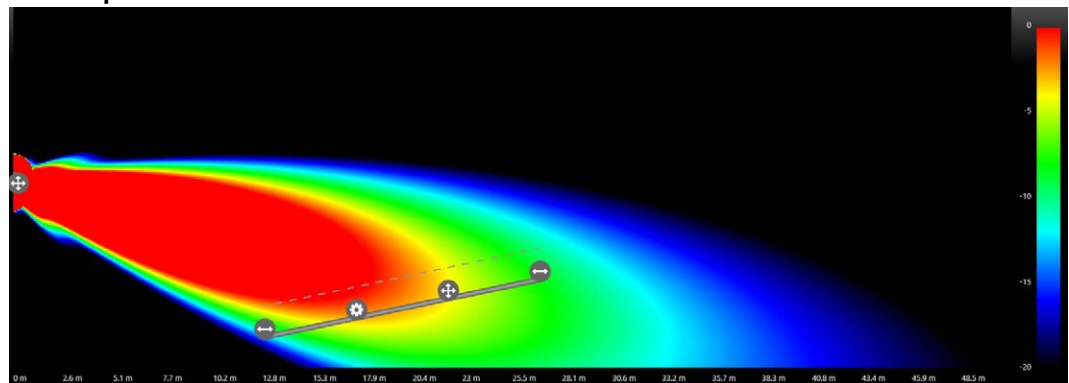
11.2.4 Viewing Maximum Sound Levels

On the right-hand side of the screen, there is a color meter ranging from 0 to –20 dB. The meter allows you to evaluate the relative sound level. All values above 0 dB are red, all values below –20 dB are black.

The values in the simulation window are the maximum sound-pressure levels in dB(Z) achievable with your VIDA system.

1. Point to any position in the simulation window, then press and hold the mouse key until the level is displayed. While pressing the mouse button, you can change the position while monitoring the changing value.

2. When you release the mouse button at any position, the value will be permanently displayed.

3. Repeat the process for any other values.

Afterwards, if you change the beam, the values will change accordingly.

When a value is displayed in the simulation window, the following buttons will be shown in the top right corner:

- **Peak**: Enabling this button displays the peak level.

- **RMS**: Enabling this button displays the RMS level.

- **Clear**: Clicking this button clears all displayed values.
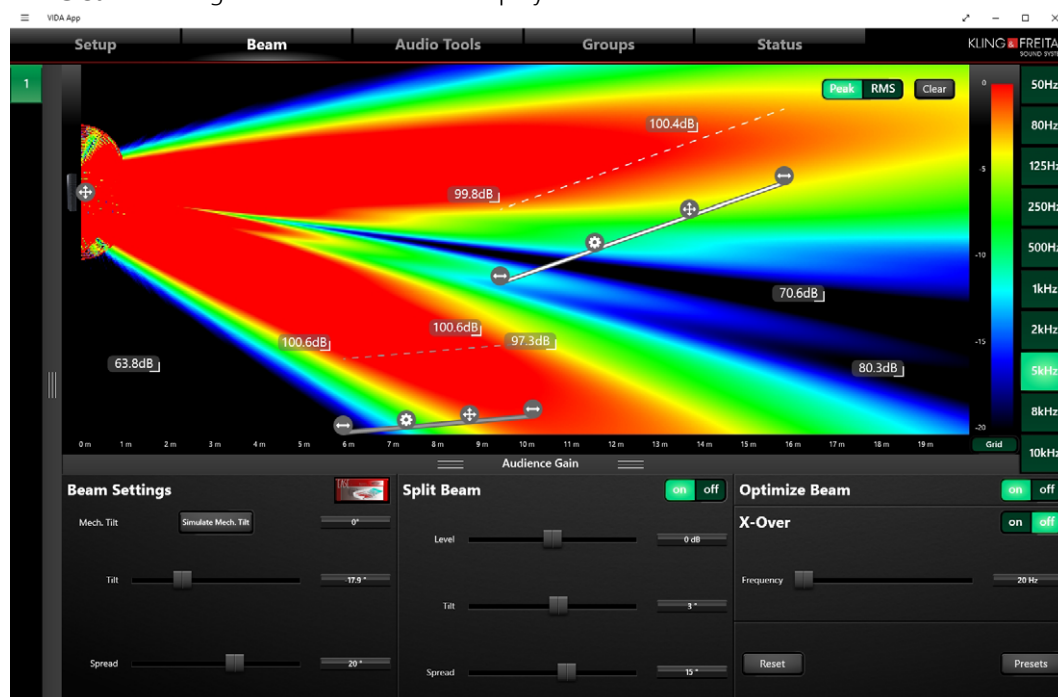
11.3   Audio Tools

> 🔆 **TIP** 🔆   Note the settings made on the Audio Tools tab will not be reflected in the beam diagram!

[A] List of accessible speakers and slideout bar (for expanding and collapsing the view)

[B] Master: Sets the gain of the selected VIDA speaker. Note that this will **not** affect Amp Out and Aux Out.

[C] Delay: Allows for configuring and enabling a speaker delay. Note that the delay does not affect speakers connected to the Amp Out or Aux Out ports.

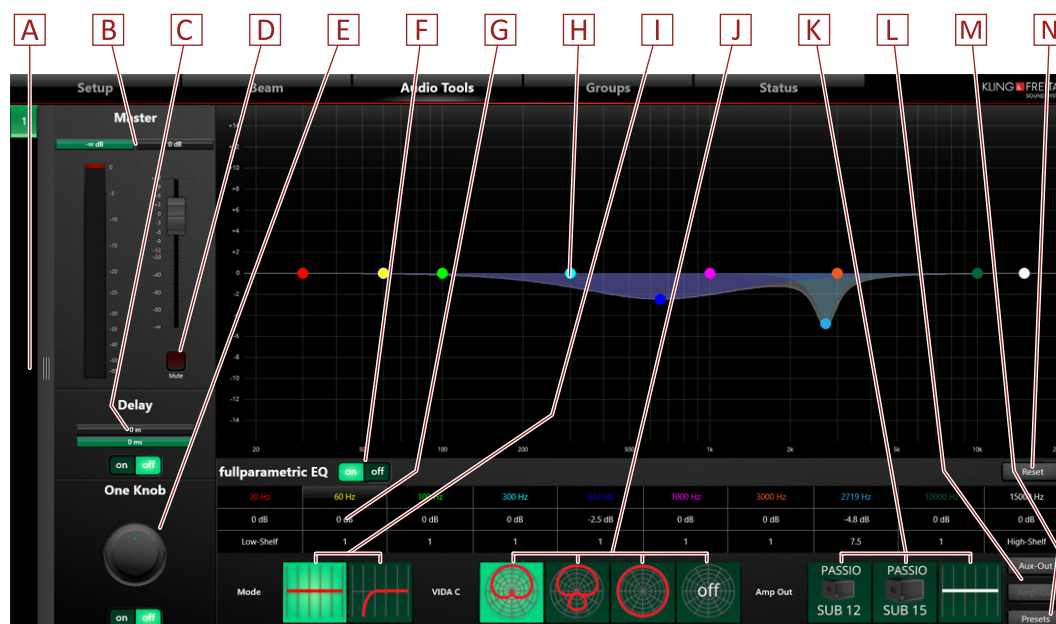**[D] Mute:** Mutes the VIDA overall system and any other outputs.

[E] One Knob: Use this control for compensating excessive low or high ends.

[F] Fullparametric EQ On / Off: Used for enabling or disabling the 10-band parametric equalizer.

[G] Click any frequency band to enter the required frequency range using the keyboard.

[H] You can also adjust the equalizer settings by dragging the color-coded marker of each frequency band.

[I] Mode (for VIDA L only): Toggles between the fullrange and low-cut modes.

[J] VIDA C (for VIDA L only): Toggles the horizontal directivity (when using the VIDA C). Cardioid characteristics reduce the sound pressure level of loudspeakers at the rear (cardioid) or in the rear lateral area (hypercardioid) and at the same time increase the sound pressure level at the front.

Cardioid	Hypercardioid	Omnidirectional Bass boost	Off Disables the VIDA C

[K] Amp Out (for VIDA L only): Outputs a filtered signal to a PASSIO SUB 12 or PASSIO SUB 15 or an unfiltered signal to the Amp Out of a VIDA L.

[L] Aux Out / Amp Out (Amp Out only for VIDA L): Click these buttons to configure the Aux Out or Amp Out, respectively.

[M] Preset: Clicking this button allows for storing, loading, and deleting equalizer settings.

[N] Reset: Resets all equalizer settings.

11.3.1 Setting up Additional VIDA Speakers

VIDA M:

- An unamplified line signal can be output from **Aux Out** of the VIDA M speaker. Use the **Aux Out** button to adjust that signal.

VIDA L without a VIDA C:

- An unamplified line signal can be output from **Aux Out** of the topmost VIDA L (master) speaker. Click the **Aux Out** button to configure the settings.

- You can output an amplified speaker signal from the **Amp Out** port of the topmost VIDA L speaker to a connected speaker (2 × 400W RMS @4 ohm).

  To forward adequately filtered signals to the K&F woofers **PASSIO SUB 12** and **PASSIO SUB 15**, use the respective buttons.

  Using the **Linear** button allows for supplying an unfiltered signal for any other passive speaker. Click the **Amp Out** button to configure more settings.
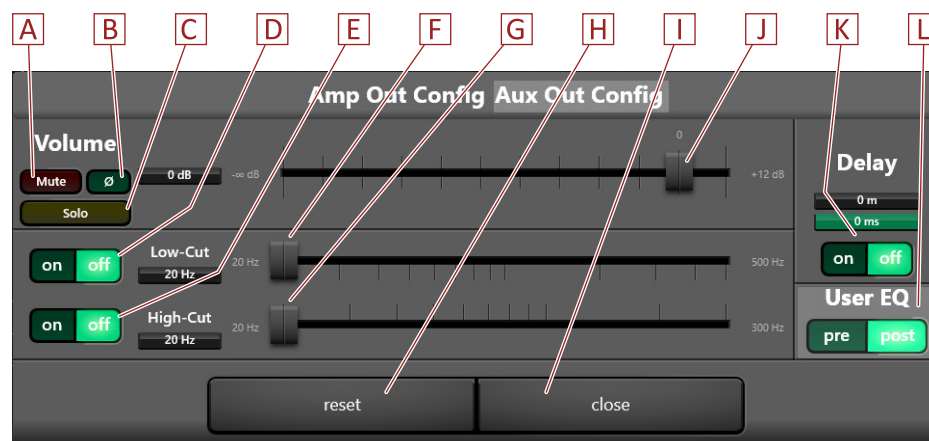
VIDA L with VIDA C:

- An unamplified line signal can be output from **Aux Out** of the topmost VIDA L (master) speaker. Click the **Aux Out** button to configure the settings.

- Connect the **Amp Out** jack of each VIDA L speaker on the array to the respective VIDA C speaker. You can use the **Cardioid, Hypercardioid, or Omnidirectional buttons** to manipulate this signal.

[A] Mute: Mutes the Aux Out / Amp Out port.

[B] Ø: Reverses the polarity of the output signal.

[C] Gain: Use the slider or the input field for entering the gain value.

[D] Solo: Mutes all ports without affecting the Aux Out / Amp Out.

[E] Low-Cut On / Off: Enables or disables the high pass filter.

[F] Low-Cut: Use the slider or double-click the input field for entering the cutoff frequency of the high pass filter.

[G] High-Cut On / Off: Enables or disables the low pass filter.

[H] High-Cut: Use the slider or double-click the input field for entering the cutoff frequency of the low pass filter.

[I] Reset: Click this button to reset the Amp Out / Aux Out setup.

[J] Close: Clicking this button will close the window.

[K] Delay: Used for configuring and enabling a signal delay at the Amp Out / Aux Out.

[L] User EQ, Pre / Post (for Aux Out only): Enables or disables the full-parametric EQ for the Aux Out.

11.4   Groups

On the Groups tab, you can add speakers to groups and then set them up together using the Audio Tools button on this tab.

[A] Lock: Used for locking the settings.

[B] List of available speakers.

[C] Shows the group name. To change the name, click the pencil icon ✎.

[D] Audio Tools: Click this button to configure the filter settings of the entire group. The window launched when you click the **Audio Tools** button is similar to the Audio Tools tab; however, there are no Amp Out, Aux Out, VIDA C, and Low-Cut Mode settings here.
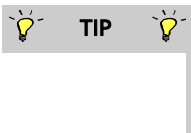
> **TIP**
>
> If you use a filter for processing a group, it will no longer be available for a single speaker on the Audio Tools tab. The group-filter settings override and lock the single-speaker filters on the Audio Tools tab.
>
> Note the settings made on the Audio Tools tab will not be reflected in the beam diagram!

[E] Use this check box for selecting a speaker to assign it to a group (column).

11.5 Status

Parameter overview:

- View relevant parameters of each VIDA speaker.
- Load projects as a scenario and switch between them.
- Protect settings with passwords.

[A] Output level.
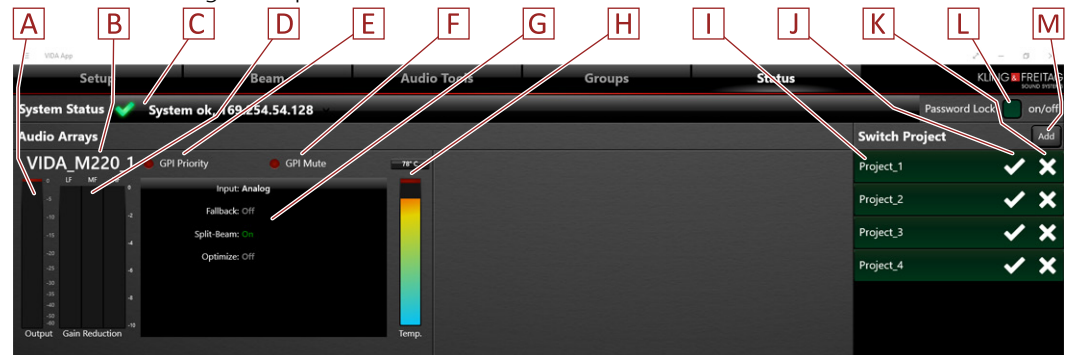
[B] The name of the speaker.

[C] **System Status:** Shows the system status.

[D] **Gain Reduction**: Shows the gain reduction applied by the limiter for low, mid, and high frequencies.

[E] **GPI Priority indicator:** Shows whether the Priority GPI has received an activation signal.

[F] **GPI Mute indicator:** Shows whether the Mute GPI has received an activation signal.

[G] Status indicators (Input, Fallback, Split Beam, Optimize, Mode, VIDA C, Amp Out).

[H] Speaker temperature.

[I] List of stored projects.

[J] Icon for loading a scenario.

[K] Click this icon to delete the scenario. This will display only if **no** password has been configured.

[L] **Password Lock**: Allows for setting up password protection for your settings.

[M] **Add:** Adds an already stored project to the VIDA App as a scenario.

11.5.1 Password Protection

To protect your settings from inadvertent changes, you can configure a password on the Status tab to block access to most app controls. (Note that this works only if the VIDA App has found an online device.) .

With password protection enabled, you can activate projects previously loaded to the Switch Projects list on the Status tab; however, parameters can be changed or the project deleted only after disabling password protection.

NOTICE

Note that only the settings of the active VIDA App instance are locked. Closing and starting the app again will disable password protection. The same is true when another VIDA App instance accesses the speakers.

Therefore, this function is not really suitable for scenarios where on-site engineers who have no audio background are to switch between speaker setups without inadvertently changing parameter settings.

To set up password protection:

1. Click the Password Lock button in the top-right corner of the Status screen to access the password-entry dialog.

2. Enter your password and click the Confirm button.

3. To confirm your password, re-enter it in the next window that appears. The app will indicate that password protection is on by changing the display to green and showing a key icon in the title bar. At the same time, icons allowing for deleting project files will be hidden.

   The app cannot be operated now; however, you can still switch between the various tabs for viewing.

The operator can now load projects but needs to supply the correct password to make changes.

To cancel password protection and allow for changing project parameters:

1. Click the Password Lock button.

2. Enter your password into the displayed dialog.

3. Confirm.

4. The confirmation screen and the key icon will disappear and the icons for deleting projects will become visible again.

12   Storing and Loading Projects and Presets

12.1   Save Project on the Setup Tab

Clicking the **Save Project** button on the **Setup** tab stores all speaker settings to an XML file in the selected directory.

12.2   Open Project on the Setup Tab

- Clicking the **Open Project** button on the **Setup** tab loads a previously stored XML (project) file. A project file contains **all settings of all speakers** in a project.
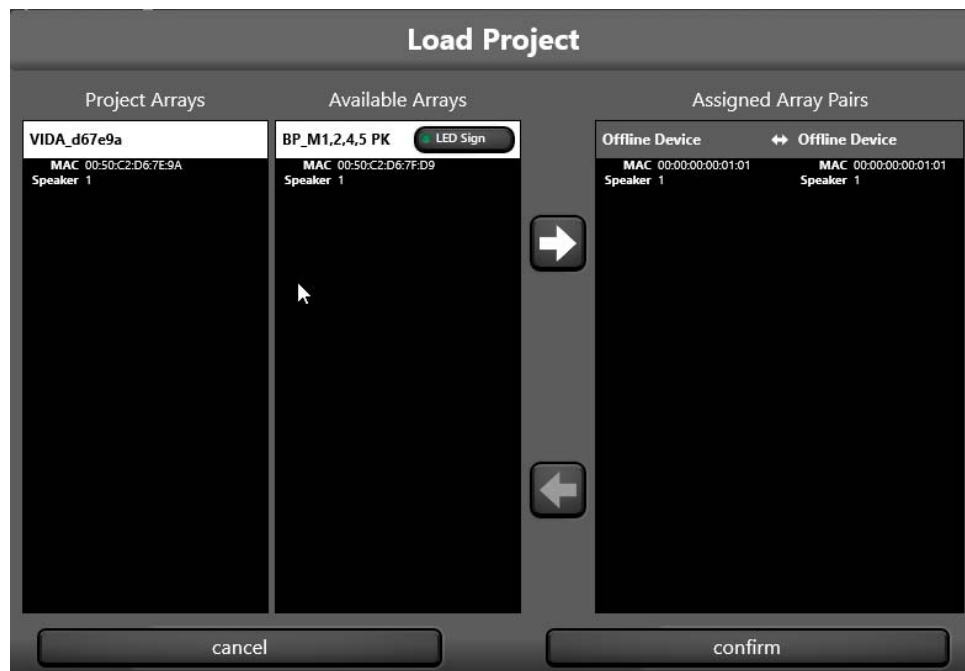
1. Select the **Setup** tab.

2. Click the **Open Project** button and select the project file to open.

   The **Load Project** dialog will open.

    - If the project contains settings for exactly the same speakers that are on your network, they will be auto-configured as pairs and be displayed on the right side of the opening dialog box.

    - If there are other speakers on the network than those originally stored in the project file, you need to pair a project speaker with an available speaker.

      In this case, the Project Arrays column contains the speakers stored in the project while the Available Arrays column has the available speakers.

      3. Select one project speaker and one available speaker to pair them. For better identification, you can use the **LED Sign** button to enable the front-panel indicators of arrays on the network.

      4. Click the right arrow to move the pair to the Assigned Array Pairs pane. This pane shows all existing speaker pairs.

5. If you want to unpair speakers to reconfigure your setup, select the required speaker pair in the **Assigned Array Pairs** pane on the right-hand side.

6. Click on the left arrow to return the speakers to the Project Arrays and Available Arrays columns.

7. To pair the project speakers again or with other existing speakers, start over from step 3.
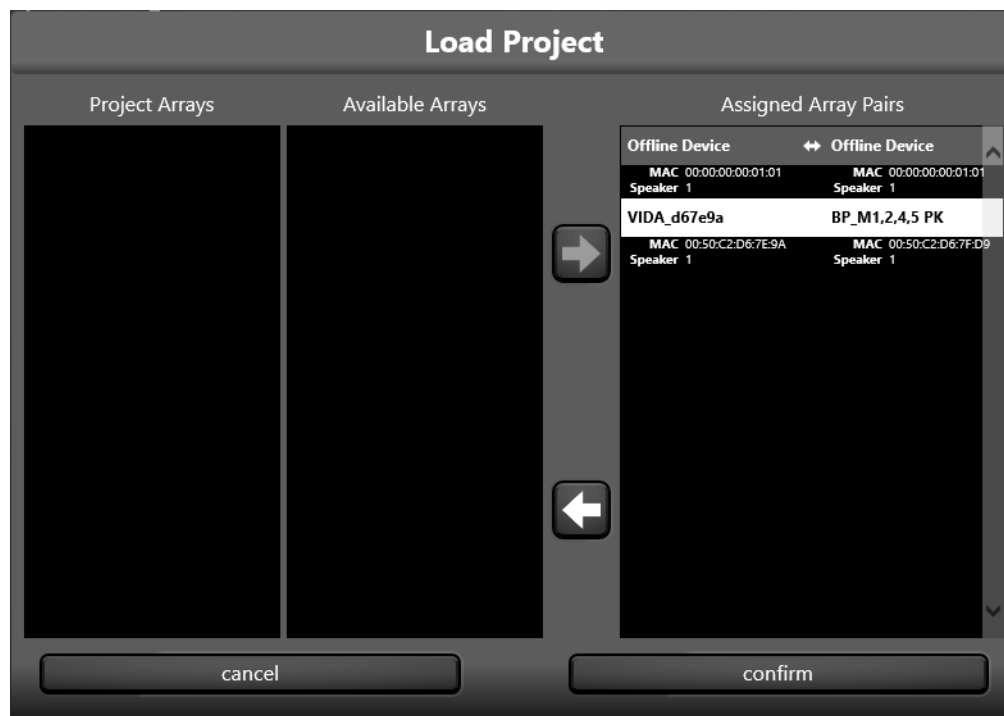
8. Click the **Confirm** button to confirm your settings and close the dialog.

12.3   Preset on the Beam Tab

- **Presets** on the **Beam** tab: These presets contain only the settings made on the Beam tab. They will remain in the VIDA App until you explicitly delete them. You can use these presets to transfer settings on the Beam tab to other speakers.

12.4   Preset on the Audio Tools Tab

- **Preset** on the **Audio Tools** tab: These presets contain only the settings made on the Audio Tools tab. They will remain in the VIDA App until you explicitly delete them. You can use these presets to transfer settings on the Audio Tools tab to other speakers.

12.5   Switch Project on the Status Tab

- **Switch Project** on the **Status** Tab

    Project files previously stored using the Save Project button on the Setup tab can be loaded as a scenario to the Switch Project list using the **Add** button.
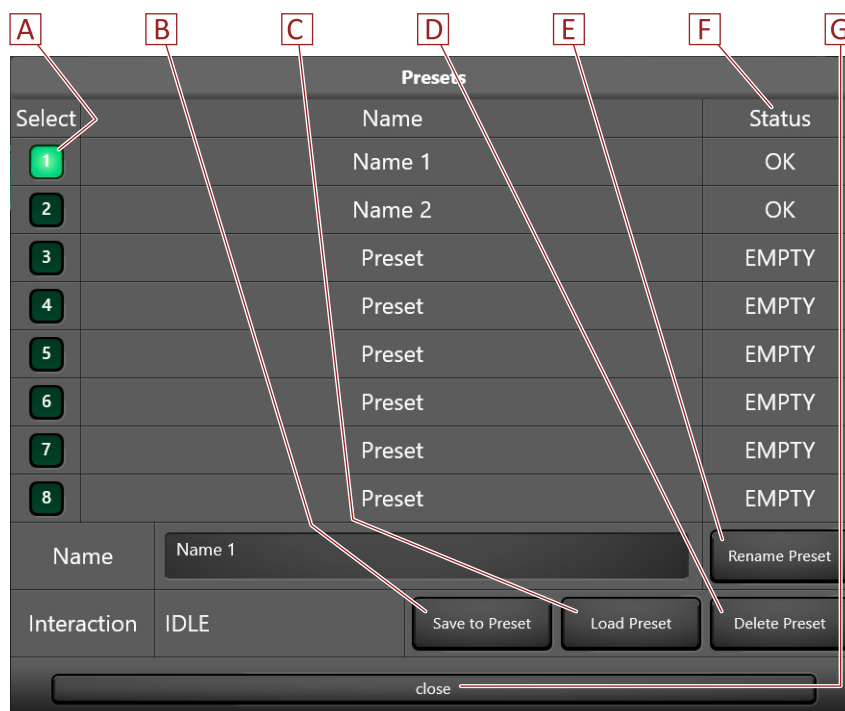
    You can enable the scenarios listed there using the ✅ button. This is also true when all other settings have been locked using the Password Lock function.

    - Note that doing so will discard all current settings you might have made in the VIDA App.

    - Also note that a project listed as a scenario in the Switch Project list on the Status tab contains only those settings stored to the project file at the time it was added to the list.

    - To update a project that has been added to the Switch Project list as a scenario:

    1. Store the project to a file using the **Save Project** function on the **Setup** tab.

    2. Switch to the Status tab.

    3. If the Switch Project list contains a project item with the same as the previously stored project file, be sure to remove it from the list using the ❌ button.

    4. **Add the project** as a scenario **to the Switch Project list using the Add button.**

TIP

12.6   User Presets on the Setup Tab

- The **User Presets** function on the **Setup** tab allows for storing **all settings of the selected speaker** as a preset and for loading presets.

    - The app stores up to eight user presets on the VIDA speakers.

    - At delivery, the eight user-preset memory slots are empty.

    - You can trigger your user presets using GPIs and SGPIs in order to provide connectivity to a simple media controller.

    - User presets cannot be stored to a computer, nor can they be transferred to a different speaker.

A	B	C	D	E	F	G

Presets

Select	Name	Status
1	Name 1	OK
2	Name 2	OK
3	Preset	EMPTY
4	Preset	EMPTY
5	Preset	EMPTY
6	Preset	EMPTY
7	Preset	EMPTY
8	Preset	EMPTY

Name	Name 1	Rename Preset
Interaction	IDLE	Save to Preset	Load Preset	Delete Preset

close

[A] Click a preset button to make it light green. That preset is now selected for editing.

[B] Click the **Save to Preset** button to store your current settings to the selected preset.

[C] To enable the selected preset, click the **Load Preset** button.

[D] To clear a VIDA-speaker memory slot and delete all settings from the preset, select the **Delete Preset** button.

[E] To rename the selected preset, type a name into the Name field, then click the **Rename Preset** button.

[F] **Status: EMPTY** indicates that the memory slot of the selected preset is still empty; **Status: OK** indicates that you have already saved settings to that slot.

[G] Click to close the window.

THANK YOU FOR CHOOSING K&F.