

QUESTRA®

simply **powerful.**



QUESTRA®

DESIGN AND MANAGEMENT SOFTWARE

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1 INTRODUCTION

1.1 YOU MADE THE RIGHT CHOICE!

This product has been developed and manufactured to the highest quality standards to ensure many years of problem-free operation. Find further information about LD Systems on our website:

<https://www.ld-systems.com/>

1.2 CONTACTS

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Website	www.adamhall.com	www.adamhall.com

1.3 VISUALISATION CONVENTIONS IN THIS USER MANUAL

In this manual we use graphical symbols and icons in certain contexts. Find below a table with explanations and use cases of the graphical symbols and icons.

Icon / Symbol	Designation	Context	Explanation / Example
	Prerequisite	Tasks	Used in task topics to indicate a prerequisite that must be met before beginning the task.
	Result / Intermediate Result	Tasks	Used in task topics to indicate a result or intermediate result of an action step.
1 Step a) Substep	1 Action Step a) Substep	Tasks	Used in task topics to indicate action steps and substeps.
	Callout	Graphics; tasks	Text-image reference or labeling of certain functions on the device
[...]	Value range indicator	Technical data; paragraphs; lists	Indicates the range of a value, such as "Compressor ratio: 1:1...20:1 ". Mostly used in tables or callouts.
*	Asterisk	Paragraphs; tables	Indicates additional information in a footnote.

Icon / Symbol	Designation	Context	Explanation / Example
The LIM LED lights up	General User Interface element	Paragraphs; tasks; tables; lists	The words presented in this way represent graphic user interface elements on the device.
PAGE button	Key / Button	Paragraphs; tasks; tables; lists	The words presented in this way represent user interface controls on the device.
<name>	User input	Paragraphs; tasks; tables; lists	The words presented in this way represent required user inputs.
https://adamhall.com	Weblink	Paragraphs; tables; lists	External link to a website

1.4 ABOUT TBA (TO BE ANNOUNCED)

Questra® is a fast evolving software so this user manual is a work in progress. Some functions of **Questra®** may not be reflected yet. The chapters concerning these functions are labelled as TBA (to be announced) and will be added at a later point. Please visit the **Questra®** website or the **Adam Hall** Webshop for the most recent version of this user manual.

1.5 ABOUT VERSION-SPECIFIC SCREENSHOT DIFFERENCES

The appearance of screenshots in this documentation may vary depending on the software version installed.

2 INSTALLATION

2.1 WINDOWS MINIMUM SYSTEM REQUIREMENTS

- Microsoft Windows 10 and above
- CPU: 1.6 GHz or higher
- 500 MB of available disk space
- 2 GB graphics card
- 8 GB RAM

2.2 INSTALLING QUESTRA® ON WINDOWS 10 OPERATING SYSTEMS

- 1 Download the latest version of **QUESTRA®** Software from the [LD System Brand Site](#) or the [Adam Hall B2B Webshop](#).
- 2 Double-click the downloaded MSI package to launch the installer.



The MSI package comes with **QUESTRA®** Software, the **LD Systems Update Manager** and **QUESTRA®** Panels.

- 3 Choose **Next>**.
- 4 Select **I accept the terms in the License Agreement** to agree to the End-User License Agreement.
- 5 Choose **Next>** to open the **Installation Type** window.
- 6 Under **Installation Type**, choose one of the following:
 - **Only for me (<username>)** to install **QUESTRA®** software only for this user.
 - **Everybody (all users)** to install **QUESTRA®** software for all users on this computer.



Certain ports are required for the installation for **Everybody (all users)**. These can be enabled by the system administrator. The following list contains the required information.

Description	Protocol	Port	TCP/UDP	IP-Address
IPA-General-Control	LDIPA_JSON_20210701_v14	50000	tcp	any (default: 192.168.0.192)
Update Manager	libah_utp_wrapper_v0.0.0-6	50001	tcp	any (default: 192.168.0.192)
Monitoring / Discovery	LDIPA_JSON_20210701_v14	50000	udp (multicast)	224.0.0.230
mDNS	Standard Protokoll / eigen Implementation	5353	udp (multicast)	224.0.0.251
QUESTRA® Control	Proprietary binary protocol	43472 / 43471	tcp	any (default: 192.168.0.192)
QUESTRA® Panels Discovery (v1.0.2)	JSON	51000	udp (multicast)	224.0.0.230

Description	Protocol	Port	TCP/UDP	IP-Address
QUESTRA® Panels Discovery (v1.0.17+)	Proprietary binary protocol	42473	udp (multicast)	224.0.0.231

7 Choose **Next>** to open the **Select Installation Folder** window.

8 In the **Select Installation Folder**, run the installation:

- a) Choose **Browse...** to select a folder.
- b) Choose **Install** to run the installation.



We recommend using the default installation folder **C:\Program Files\LD Systems\QUESTRA** to guarantee problem-free performance of **QUESTRA®**.

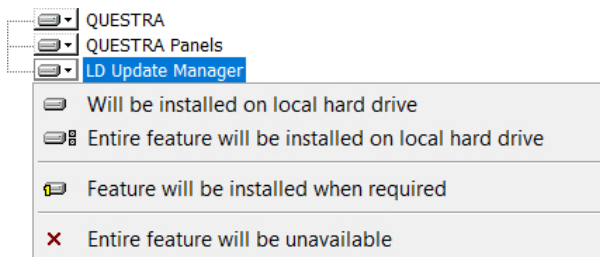
9 Choose **Next>** to open the **Optional features to install** window.

10 Select the optional features to install:

- a) Choose  to open the corresponding context menus.
- b) In the context menu of each feature, choose one of the following options



You can install each application separately. If you do not select any options, all three applications are installed by default.



11 After the **QUESTRA®** setup process is completed, choose **Finish** to exit the **Setup Wizard**

⇒ You installed **QUESTRA®** software. Find a launch icon for each application on your desktop and in the start menu.

2.3 INSTALLING QUESTRA® PANELS ON ANDROID DEVICES

1 Download the **QUESTRA® Panels** App from the **LD Systems Brand Site** at <https://www.ld-systems.com/questra#questra-download> or directly from the **Google Play Store**.



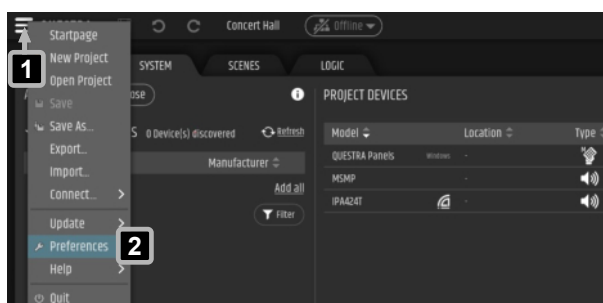
Make sure the Android device is in the same network as **QUESTRA®**.

2.4 INSTALLING QUESTRA® PANELS ON IOS DEVICES

1 Download the **QUESTRA® Panels** App from the **LD Systems Brand Site** at <https://www.ld-systems.com/questra#questra-download> or the **Apple App Store**.

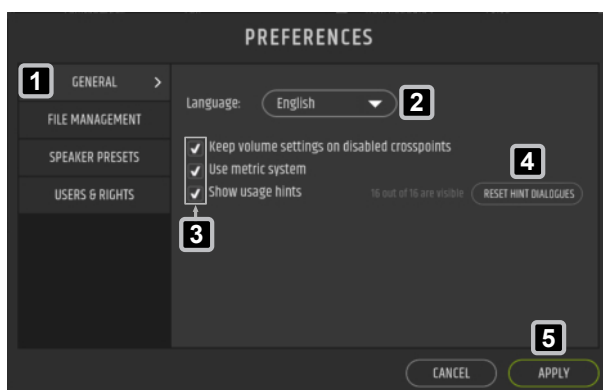
3 PREPARATION

3.1 OPENING THE PREFERENCES



- 1 In the **Hamburger Menu** **1**, click on **Preferences** **2** to open the **PREFERENCES** window.

3.1.1 SETTING GENERAL PREFERENCES



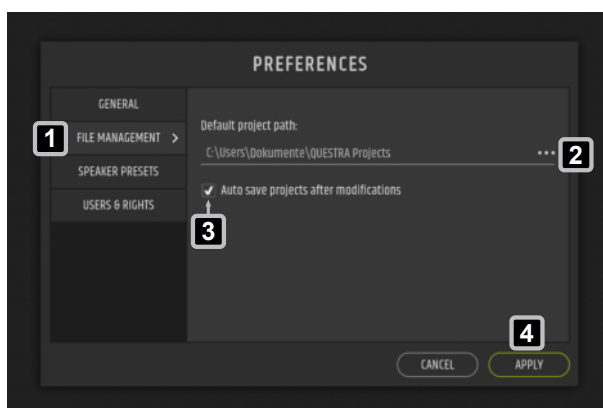
✓ You have opened the **PREFERENCES** window.

- 1 In the **GENERAL** tab **1**, choose from the drop-down menu the required language **2**.
⇒ The **QUESTRA®** interface is displayed in the respective language.
- 2 Tick the boxes to select your desired preferences **3**.
- 3 Click **APPLY** **5**.



For some dialogues and hints, you can select **Do not show/ask again**. To make all dialogues visible again, use the **RESET HINT DIALOGUES** button **4**.

3.1.2 SETTING FILE MANAGEMENT PREFERENCES

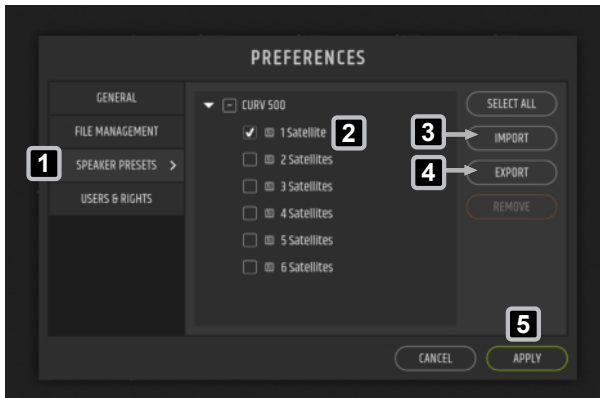


✓ You have opened the **PREFERENCES** window.

- 1 In the **FILE MANAGEMENT** tab **1**, click the ellipsis **2**.
- 2 Select the default project path.
- 3 Check the box **Auto save projects after modifications** **3** to save your project after each modification while you are working on the project.
- 4 Click **APPLY** **4**.

3.1.3 MANAGING SPEAKER PRESETS

You can import, export, and remove speaker presets in the **SPEAKER PRESETS** tab.



✓ You have opened the **PREFERENCES** window.

IMPORT SPEAKER PRESETS

- 1 In the **SPEAKER PRESETS** tab **1**, click **IMPORT**.
- 2 Choose the needed file from your directory.
- 3 Click **APPLY** **5**.

EXPORT SPEAKER PRESETS

- 4 In the **SPEAKER PRESETS** tab **1**, select at least one speaker preset **2** for export.

- 5 Click **EXPORT** **4**.
- 6 Choose the storage location for the speaker preset file.
- 7 Click **APPLY** **5**.



QUESTRA® speaker preset files have the extension ***.splib**.

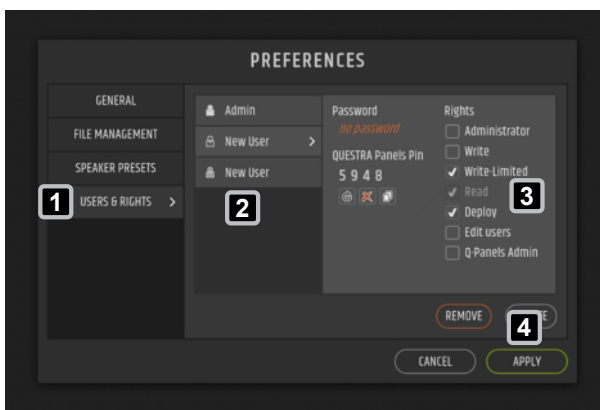


LD speaker presets are read-only, as indicated by the **LD** icon when a drop-down menu is opened.

3.1.4 ASSIGNING USER PERMISSIONS



By default, QUESTRA® launches with an **Admin** user and no password, without any additional users initially.



- 1 In the **USER & RIGHTS** tab **1**, select the needed user tab **2**.
- 2 Select the needed **Rights** **3**.
- 3 Click **APPLY** **4** to save the user settings.



After you added users, the menu bar shows the currently active user, with a drop-down menu to switch between users.

3.2 PREPARING HARDWARE DEVICES

3.2.1 CONNECTING A DEVICE TO THE NETWORK

✓ Ethernet cable RJ-45 (Cat 5d or comparable).

- 1 Connect the device's Ethernet port to a network (LAN) or directly to a computer using a point-to-point connection.
- 2 Use the IP address and subnet mask information provided in the device-specific information to configure the required network parameters.

⇒ Find the corresponding device in the **AVAILABLE DEVICES** list in **QUESTRA®**.



Further information can be found in the respective user manuals of the devices.

QR codes linking to the user manuals are provided within the following device-specific information sections.

See also:

System Tab Overview [▶ 30]

3.2.2 INSTALLATION POWER AMPLIFIER (IPA)

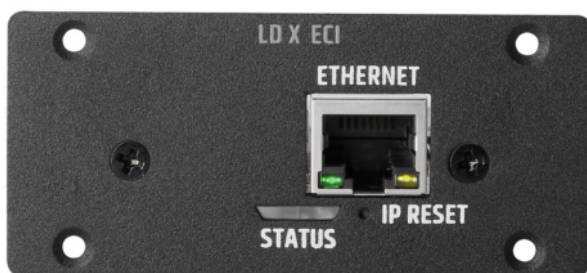
3.2.2.1 ABOUT IPA

Use the Installation Power Amplifier (IPA) to amplify audio signals in large spaces and power multiple speaker zones.

3.2.2.2 UPGRADING AN IPA FOR NETWORK CAPABILITY

If you want to use the preamplifier (IPA) in a network with QUESTRA®, equip it with an Ethernet **Control Interface Card** or with an Ethernet and **Dante Audio Interface Expansion Card**.

Follow these links to additional accessories that enable Ethernet and Dante connections for your devices.



Product Information and Download Link for the X-ECI User Manual:

[*X-ECI Ethernet control interface card for IPA series*](#)



Product Information and Download Link for the X-EDAI User Manual.

[*X-EDAI Ethernet & Dante audio interface expansion card*](#)

3.2.2.3 CONNECTING AN IPA TO THE NETWORK VIA ETHERNET CABLE



✓ Use a standard RJ45 Ethernet cable (Cat 5e or better).

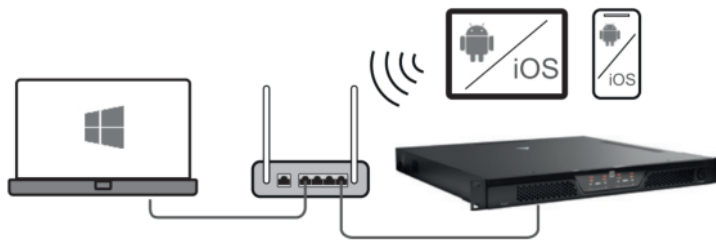
- 1 Connect the IPA to your computer using the RJ45 Ethernet cable.

⇒ Find the corresponding device in the **AVAILABLE DEVICES** list in **QUESTRA®**.

See also:
System Tab Overview [► 30]

3.2.2.4 CONNECTING AN IPA TO A NETWORK VIA ROUTER

The XECI/X-EDAI modules have a pre-configured static IP address (192.168.0.192) as standard. Recognise the unit with the QUESTRA® software, please make sure that the IP settings of the computer on which the QUESTRA® software is installed are configured in the same IP range as the X-ECI or X-EDAI modules.



Multicast is the communication between a single sender and several receivers in a network. For the following steps, it is necessary to activate this function in the menu of the used router.

- ✓ Router or switch with activated multicast traffic.
 - ✓ Two Ethernet cables. Use standard RJ45 cables (Cat 5e or better).
- 1 Use an RJ45 cable to connect the retrofitted ethernet interface of the IPA with the network interface of the router or switch
 - 2 Connect the network interface of the router or switch with the ethernet port of the computer.
 - ⇒ Find the corresponding device in the **AVAILABLE DEVICES** list in QUESTRA®.

See also:
System Tab Overview [► 30]

3.2.3 MESSAGE SCHEDULER-STREAMER MUSIC PLAYER (MSMP)

3.2.3.1 ABOUT MSMP

Play music and announcements from USB or MicroSD with the MSMP, and connect to audio streaming services via URL, DLNA, and AirPlay. Connect the MSMP to speakers via RCA-Phono or mini-jack, and use either Wi-Fi or wired internet connections. Schedule or trigger announcements via GPI inputs. Manage control through QUESTRA® software and the built-in web configurator.

3.2.3.2 MSMP QR-CODE TO PRODUCT PAGE AND NETWORK INFORMATION

The default settings of the device are:



CONNECTION MODE: DEVICE IN AN EXISTING NETWORK

IP address:	- Assigned automatically by the DHCP server in the existing network - Alternatively, a static IP address can be used (access then via IP address or NetBIOS hostname)
Subnet mask:	255.255.255.0
Gateway:	192.168.0.1
DHCP enabled:	On

CONNECTION MODE: DEVICE AS ITS OWN WI-FI ACCESS POINT

IP address:	192.168.192.1
Wi-Fi SSID:	MSMP-WIFI
Wi-Fi password:	LDPlayerAP
Web Application Login Credentials:	
Username:	root
Password:	ldsystems

3.2.4 SWITCHER & AUDIO EXTRACTOR (TIVA® SWAV41)

3.2.4.1 ABOUT TIVA® SWAV 41

Route any of four HDMI sources to a single 8K display with the **TIVA® SWAV41**, and extract audio via optical or analog outputs. Control the device through the front panel, IR remote, ASCII commands, or the built-in web interface. Manage EDID settings using the DIP switch unit or the web configurator, and integrate the SWAV41 into networked control environments via Ethernet. Use auto or manual input switching, monitor system status, and configure output formats, test patterns, and HDCP modes for reliable operation in professional installations.

3.2.4.2 SWAV 41 QR CODE TO PRODUCT PAGE AND NETWORK INFORMATION



The default settings of the device are:

IP address:	192.168.1.41
Subnet mask:	255.255.255.0
Gateway:	192.168.1.1
DHCP enabled:	On

3.2.5 ETHERNET EXPANSION INTERFACE (TIVA® SGP 42)

3.2.5.1 ABOUT TIVA® SGP 42

The **TIVA® SGP42** is an Ethernet-based expansion interface designed for professional AV and control installations. It provides configurable GPIO ports, two low-voltage relays, and an RS-232 interface for integrating external devices. The unit supports operation via a built-in web interface, ASCII commands, RS-232, or Ethernet using TCP or UDP. Network parameters, serial settings, and I/O modes can be adjusted through the configuration tools, while status information can be monitored remotely. Power is supplied either through PoE or an external DC input, making the device suitable for fixed, networked control environments.

3.2.5.2 SGP 42 QR CODE TO PRODUCT PAGE AND NETWORK INFORMATION



The default settings of the device are:

IP address:	192.168.1.42
Subnet mask:	255.255.255.0
Gateway:	192.168.1.1
DHCP enabled:	On

3.2.6 NETWORKED MATRIX PROCESSOR (NMP 8 & NMP 32)

3.2.6.1 ABOUT TICA® NMP 8 & NMP 32

The **TICA® NMP 8** and **NMP 32** are networked audio matrix processors designed for fixed installations requiring routing, processing, and distribution of analog and AES67 audio signals. Both models provide four mic/line inputs with phantom power, offer AES67 network audio support, and use software-based configuration via **QUESTRA®**. The devices include DSP functions such as EQ, filters, dynamics, delay, and optional automixing, with AEC available on the NMP8 model. Operation is fanless, and power is supplied via PoE+ or an external adapter. The NMP8 provides an 8×8 matrix, while the NMP32 offers a 32×32 configuration for larger systems.

3.2.6.2 NMP8 AND NMP 32 QR CODE TO PRODUCT PAGE AND NETWORK INFORMATION



IP address:	192.168.0.105
Subnet mask:	255.255.255.0
Gateway:	192.168.0.0
DHCP enabled:	On

3.2.7 QUESTRA® PANELS

3.2.7.1 ABOUT QUESTRA® PANELS



With the QUESTRA® Panel (QTP), you can control LD Integrated Systems solutions and other professional audio and video applications. By installing the QUESTRA® Panels App, you can manage custom panels created with the QUESTRA® software, enabling you to adjust audio settings, lighting, and various other building functions.

See also:

Adding and Positioning Elements in QUESTRA® Panels [► 93]

3.2.8 QUESTRA® PANELS APP INSTALLATION

3.2.8.1 DOWNLOADING THE QUESTRA® PANELS APP FROM THE APP STORE OR GOOGLE PLAY

✓ Internet Access is available.

- 1 From the Google **Play Store** or Apple **App Store**, download the **QUESTRA® Panels App** to your mobile device.
- 2 Open the **QUESTRA® Panels App**.
 - ⇒ If the devices are connected to the same network, **QUESTRA® Software** recognises the **QUESTRA® Panels App**.

3.2.8.2 UPLOADING THE QUESTRA® PANELS APK

The QUESTRA® installer includes the latest Android Package Kit (APK). You can find the APK file **1** at this path:

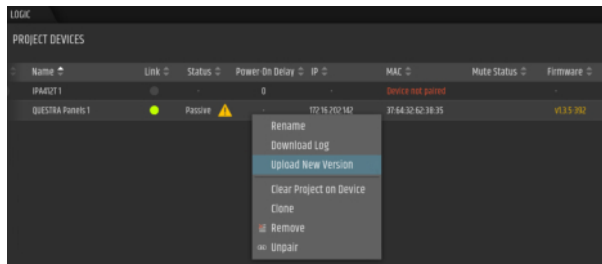
C:\Program Files\LD Systems\QUESTRA\QUESTRA_Data\StreamingAssets



C:\Program Files\LD Systems\QUESTRA\QUESTRA_Data\StreamingAssets				
Name	Date modified	Type	Size	
QPanels_1.3.1-364.apk 1	07/08/2024 13:05	APK File	37,625 KB	

✓ You have enabled Developer mode on your Android device.

- ✓ The QUESTRA® Android device is listed and connected in the **PROJECT DEVICES** list.

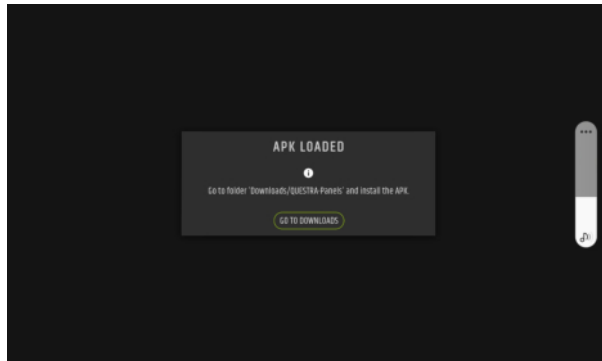


- 1 Right-click the corresponding QUESTRA® Android device to open the context menu.
- 2 Choose **Upload New Version** to initiate the upload process.

⇒ The upload progress is displayed in the **Firmware** column  **v1.3.5-392** and simultaneously on the Android device.

⇒ After the upload, a screen with a **GO TO DOWNLOADS** button is displayed, which links directly to the Downloads folder

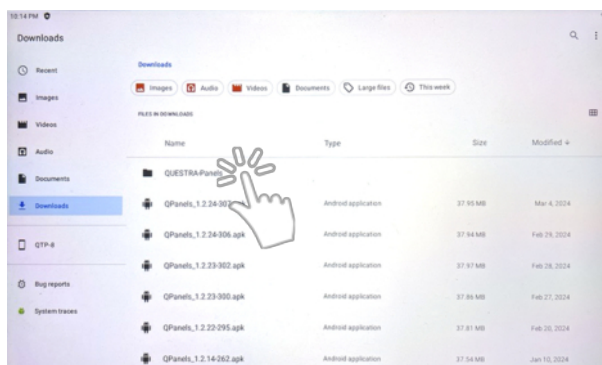
⇒ You can find the uploaded file at this path:
..\Downloads\QUESTRA-Panels



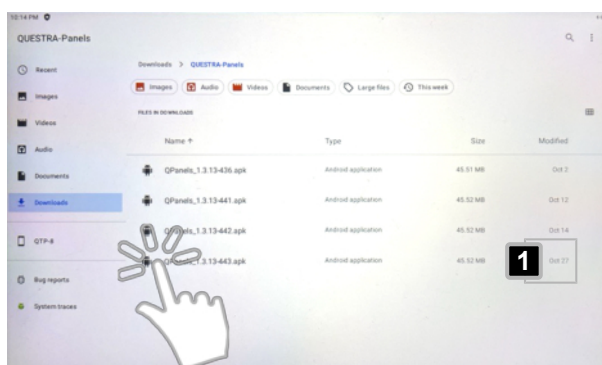
3.2.8.3 UPDATING THE QUESTRA® PANELS APK ON A QUESTRA® TOUCHSCREEN DISPLAY (QTP)

- ✓ You have uploaded the latest APK to the QTP/Android device.
- ✓ You have enabled Developer Mode on your Android device.
- ✓ You have removed any existing installation of the QUESTRA® Panels App that was installed via another method (e.g., Play Store) to use the APK — and vice versa.

- ✓ You clicked the **GO TO DOWNLOADS** button, but the folder did not open automatically.



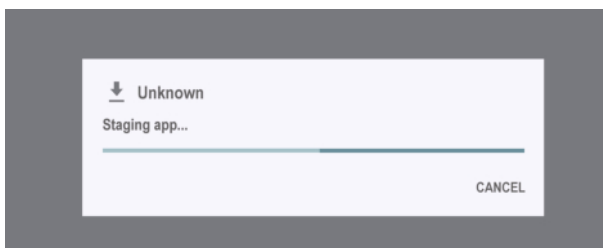
- 1 Navigate to this path:
..\Downloads\QUESTRA-Panels
- 2 Tap the QUESTRA-Panels folder to access the **QPanels_x.x.x-XXX.apk** files



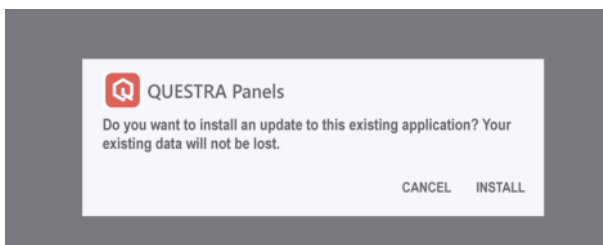
- 3 Tap on the latest .apk file **1** to start the update.



Updates are available only after the app has been installed via the Play Store or USB connection.



⇒ A progress bar appears showing the update status.



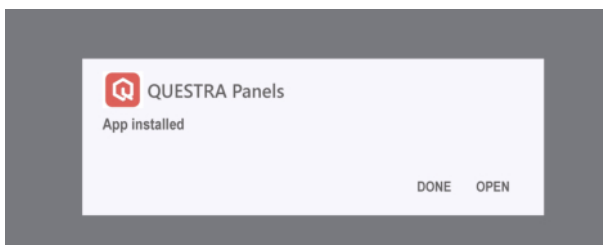
✓ You are prompted with a confirmation that installing this update will not delete your existing data.

4 Tap **INSTALL** to proceed



If the installation fails, locate and uninstall the existing version of the app. Then install the APK manually again.

Your project data will not be kept. You will need to redeploy the project to QUESTRA® Panels.



✓ A window appears showing: **App installed**

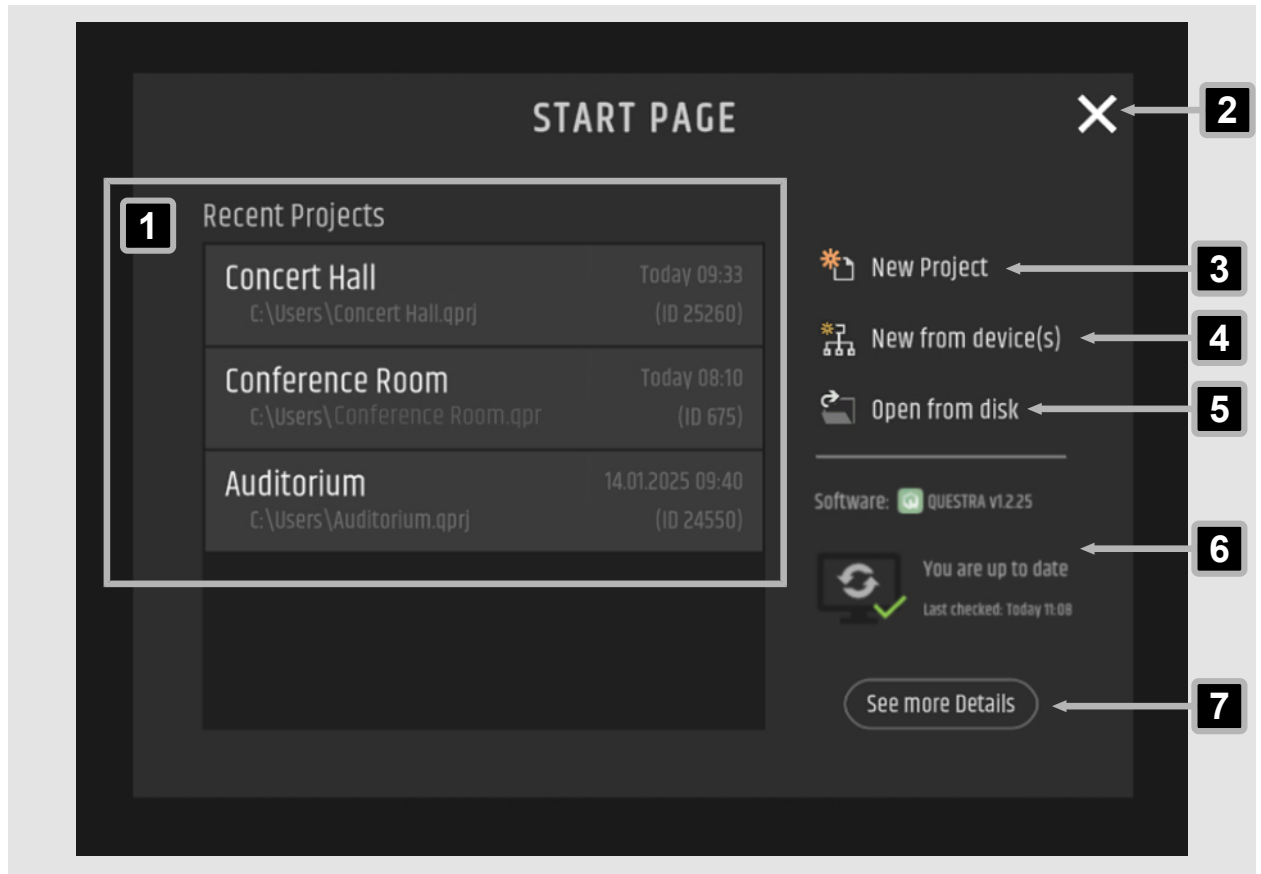
5 Tap **OPEN** to launch the Qestra® Panels App immediately or **DONE** to close the installer.



On other Android devices the UI may look differently.

4 OPERATION

4.1 START PAGE OVERVIEW



- 1** **Recent Projects** - Opens a project from the recent projects list, with the most recent project at the top.
- 2** **✕** - Closes the **START PAGE** screen when it is opened from within a project.
- 3** **New Project** - Creates a new project
- 4** **New from device(s)** - Creates a project from a connected device and saves the project to your computer
- 5** **Open from disk** - Opens a saved project from your computer
- 6** **Software** - Indicates the software version and the update information
- 7** **See more details** - Opens the **SOFTWARE UPDATE INFORMATION** window.

4.1.1 RENAMING PROJECTS

- 1 In the **Recent Project** list, right-click on a project to open the context menu.
- 2 Click **Rename** to highlight the project name.
- 3 Enter a <Project Name>.

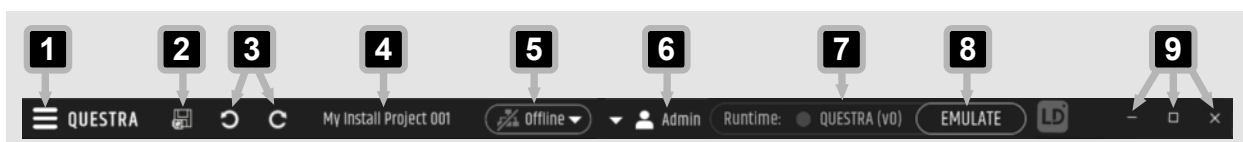
4.1.2 REMOVING PROJECTS

- 1 In the **Recent Project** list, right-click on a project to open the context menu.
- 2 Click **Remove**.

4.2 QUESTRA® TITLE BAR OVERVIEW



The layout of the menu ribbon may look different from yours, as it will vary according to the project name and the users defined.



- 1 **“Hamburger” menu** - Contains some global commands, submenus and settings e.g., New Project, Export, Update, Preferences, Help, etc.
- 2 **Save [CTRL+S]** - Saves the project. Auto-save is enabled by default. If Auto-save is disabled, the icon is highlighted whenever there are unsaved changes. After saving, the icon turns grey to indicate that all changes are stored.
- 3 **Undo [CTRL+Z] / Redo [CTRL+Y]**
- 4 **Project Name** - Indicates the currently active project
- 5 **Offline / Online Button** - Displays the online and offline status. You can use the drop-down menu to connect and deploy or to connect and download.
- 6 **User Rights** - Displays the user role
- 7 **Runtime** - Indicates the device currently operating as the active runtime for the system. During emulation, the **QUESTRA®** PC application serves as the runtime. After deployment, the associated QTP panel is shown here as the active runtime device.
- 8 **EMULATE** - Provides a preview of the preconfigured system without using real hardware. Emulation allows you to test control scenes, presets, and QTP panel designs, but it does not emulate audio processing or signal flow. Audio behavior can only be verified after deploying the project to actual devices.
- 9 **Window Management Buttons** - Minimises, maximises and closes QUESTRA® Software

4.3 FIRMWARE AND SOFTWARE UPDATES

4.3.1 FIRMWARE UPDATES

4.3.1.1 ABOUT THE LD® UPDATE MANAGER



Update Manager

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Initialising ...

An Update Manager is a maintenance tool that helps install updates for firmware or drivers, such as those for Ethernet cards. The software automatically checks for the latest firmware, downloads any updates, and installs them with minimal user interaction.

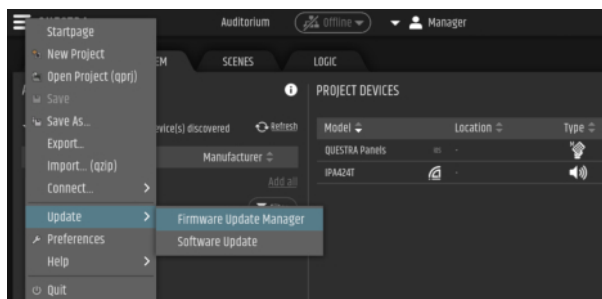
4.3.1.2 LD® UPDATE MANAGER ACCESS



There are three ways to access the Firmware Update Manager.

4.3.1.2.1 ACCESSING THE LD® UPDATE MANAGER VIA THE HAMBURGER MENU

VIA THE HAMBURGER MENU



- 1 In the Hamburger Menu, click on **Update > Firmware Update Manager**.

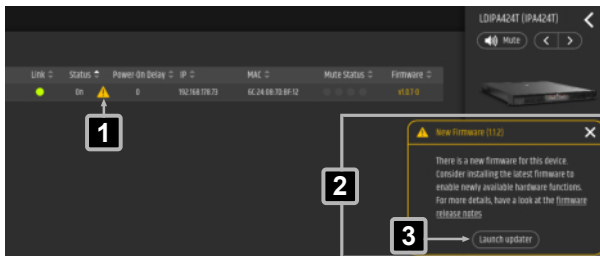
4.3.1.2.2 ACCESSING THE LD® UPDATE MANAGER VIA THE IPA SETTINGS SECTION



- 1 In the **PROJECT DEVICES** area, choose the corresponding IPA to open the compact view.
- 2 On the top right In the compact device view, choose **<** to open the expanded view.
- 3 Choose **SETTINGS** 1.
- 4 Click the **LAUNCH UPDATER** button 2.

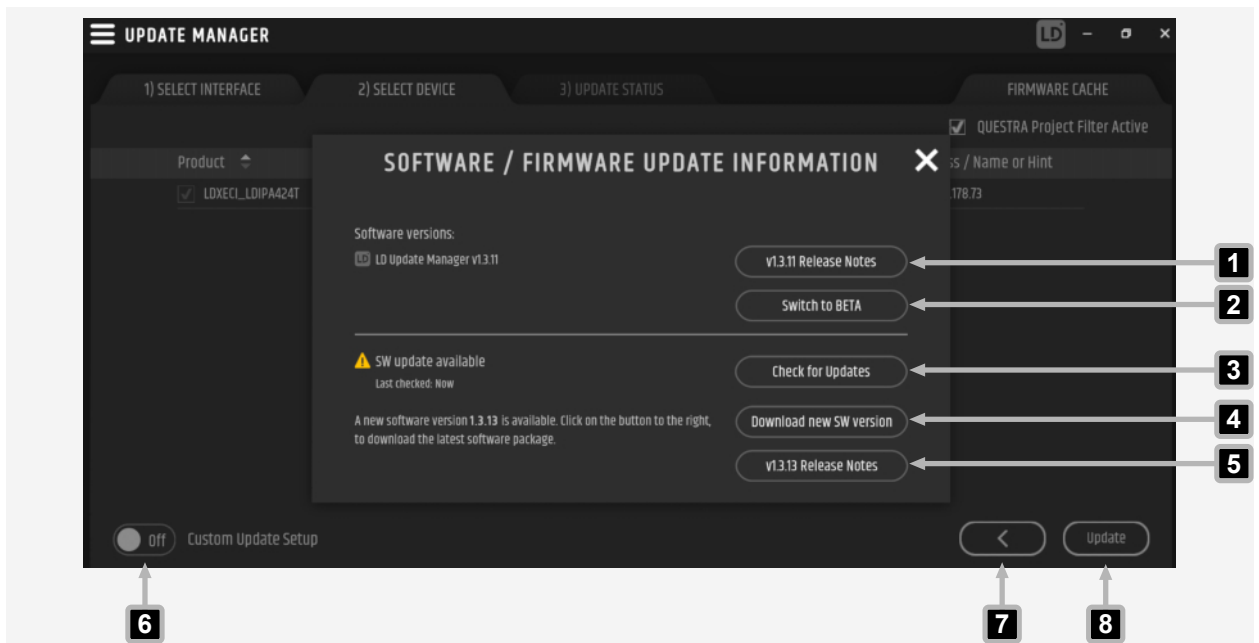
4.3.1.2.3 ACCESSING THE LD® UPDATE MANAGER VIA THE WARNING ICON AND INFO BOX

- ✓ A yellow warning icon in the IPA column indicates a mismatch between the currently installed firmware and the latest version available for the corresponding IPA.



- 1 Click the yellow warning icon 1 in the IPA column to open the information box with firmware update details 2.
- 2 Click the **Launch updater** button 3.

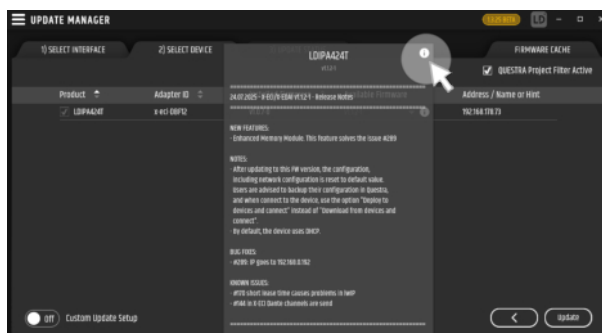
4.3.1.3 UPDATE MANAGER OVERVIEW



- 1 **v1.3.11 Release Notes Button** - Opens the release notes for the selected software version.
- 2 **Switch to BETA Button** - Switches the firmware update track to the latest available **BETA** track. Activation key is required.
- 3 **Check for Updates Button** - Checks if a new software version is available for download

- 4 Download new SW version Button** - Downloads the latest available software version
- 5 v1.3.13 Release Notes Button** - Opens the release notes for the available software update version
- 6 Custom Update Setup** ☐ - Allows selection of specific devices for update.
- 7 Arrow Button** - Navigates to the previous screen
- 8 Update Button** - Triggers the installation of the new firmware version

4.3.1.4 OPERATING THE UPDATE MANAGER



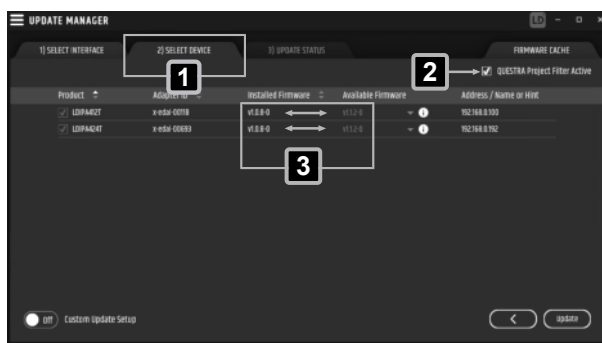
Hovering over **i** reveals the release notes for the available firmware version.

For example:

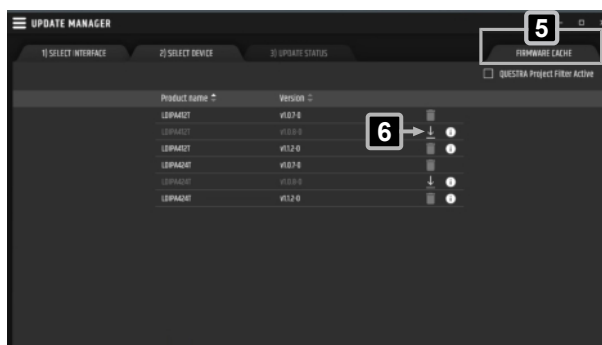
- i** • As of firmware version v1.1.2-1, DHCP is enabled by default. (In previous firmware versions, the default was set to the static IP address: 192.168.0.192.)



Since USB is not supported, LAN is the preferred connection method and will be selected automatically. The **1) SELECT INTERFACE** tab is skipped, and you will be taken directly to the **2) SELECT DEVICE** tab **1**.



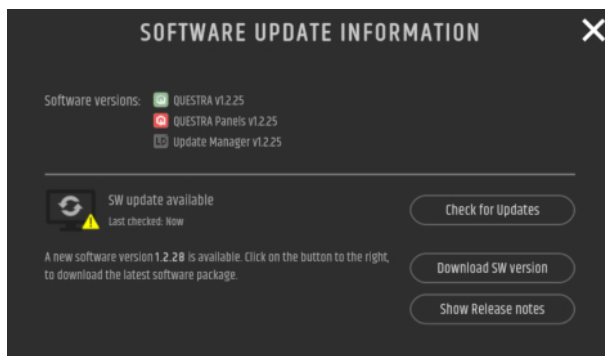
- 1** Tick the box **QUESTRA Project Filter Active** **2** to show only devices that are part of the project.
- 2** Compare the installed firmware version with the available firmware version **3**.
- 3** Proceed with the update if the available firmware version is newer than the installed one.
- 4** Click **Update** to install the available firmware for the selected device.



i You can download the latest version for off-line use by tapping the download arrow **6** in the **FIRMWARE CACHE** tab **5**.

4.3.2 SOFTWARE UPDATES

4.3.2.1 CHECKING FOR UPDATES



✓ Your computer is connected to the internet.

- 1 Click **Check for updates** to start a current scan for updates..

4.3.2.2 INSTALLING A NEW SOFTWARE VERSION

- ✓ Your computer is connected to the internet.
- ✓ A software update is available

- 1 Click on **Download SW version** to download the latest software package.

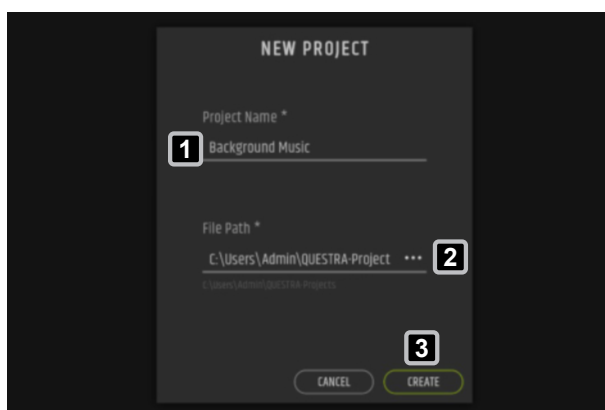
4.3.2.3 DOWNLOADING RELEASE NOTES

- ✓ Your computer is connected to the internet.

- 1 Click on **Show Release notes** to go to the release notes website.

4.4 PROJECTS

4.4.1 CREATING A PROJECT IN QUESTRA®

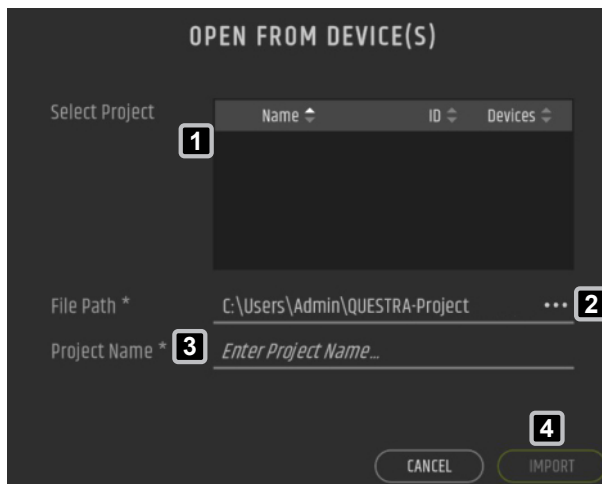


- 1 On the **START PAGE**, click the **NEW PROJECT** button.
⇒ The **NEW PROJECT** window opens.
- 2 Enter a **Project Name**. **1**
- 3 Click the ellipsis **2** to choose a storage location different from the default file path set in the preferences.
- 4 Click **CREATE** **3** to create a project.



When installed, **QUESTRA®** creates a default file path. You can change the default project path in the preferences.

4.4.2 CREATING A PROJECT FROM A DEVICE



- 1 On the **START PAGE**, click the **New from device(s)** button.
⇒ The **OPEN FROM DEVICE(S)** window opens.
⇒ A list of available projects on the devices opens.
- 2 Select a project. **1**
- 3 If necessary, edit the **File Path** **2**.
- 4 If necessary, edit the **Project Name** **3**.
- 5 Click the **IMPORT** button **4**.
⇒ **QUESTRA®** saves the file from the device on your computer.

4.4.3 LOADING A PROJECT FROM DISK

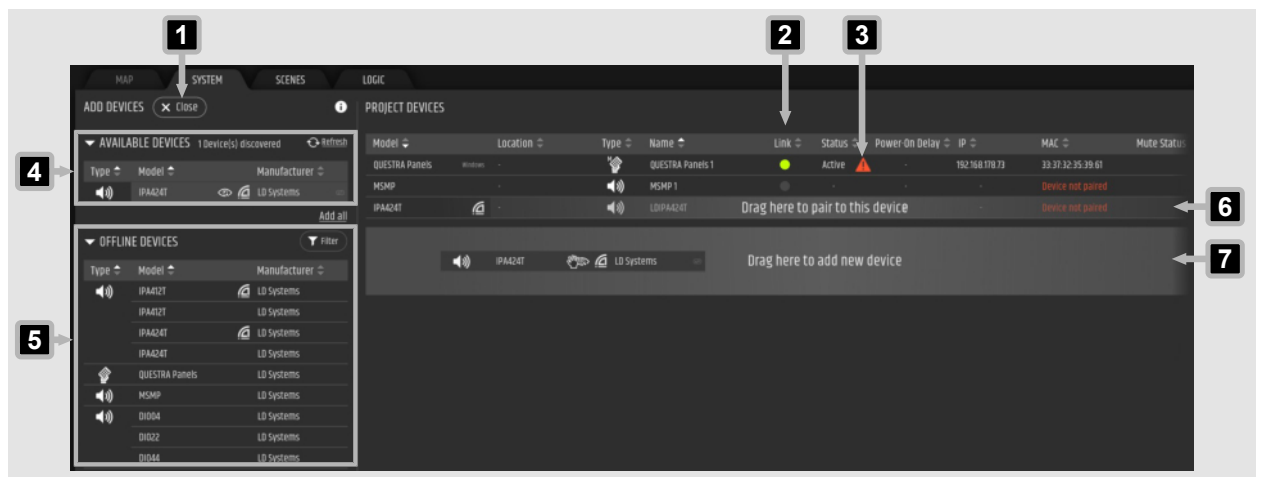
- 1 On the **START PAGE**, click **Open from disk**.
- 2 Select a project file.



QUESTRA® project files have the extension ***.qprj**.

4.5 QUESTRA MAIN VIEW

4.5.1 SYSTEM TAB OVERVIEW

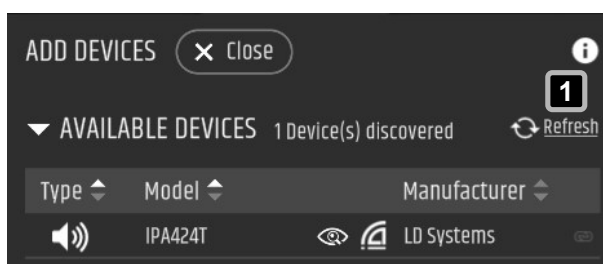


- 1 **Close Button** - Closes the **ADD DEVICES** view
- 2 **Link Icon** - Indicates the connection status of the respective device
- 3 **Warning Symbol** - Indicates invalid references

- 4 AVAILABLE DEVICES area** - Shows a list of devices available in the network
- 5 OFFLINE DEVICES area** - Shows a list of offline devices that can be added to the project's device section during configuration.
- 6 Pairing Drop Zone** - Drag a device from the **AVAILABLE DEVICES** list and drop it here to pair it
- 7 New Device Drop Zone** - Drag and drop devices here to add them to the project

4.5.1.1 ADD DEVICES VIEW

4.5.1.1.1 SCANNING FOR AVAILABLE DEVICES



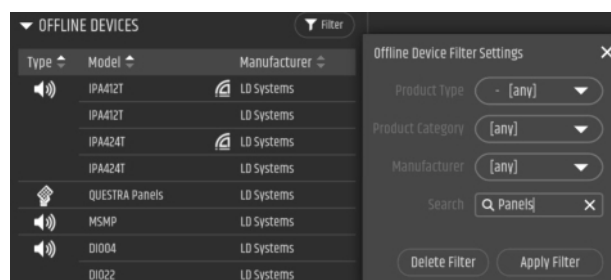
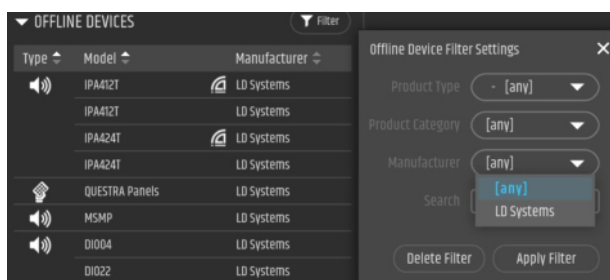
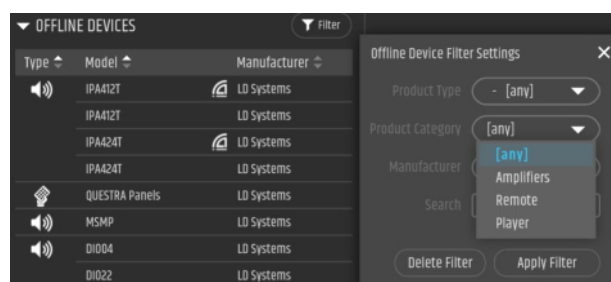
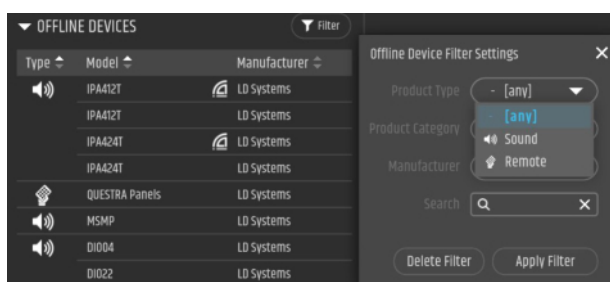
- 1** In the **ADD DEVICES** view, click **Refresh** **1** to refresh the **AVAILABLE DEVICES** list.

If a device does not show up immediately, please wait a few seconds before using the Refresh button again.

4.5.1.1.2 OFFLINE DEVICES FILTERING OPTIONS

Filter the offline devices according to:

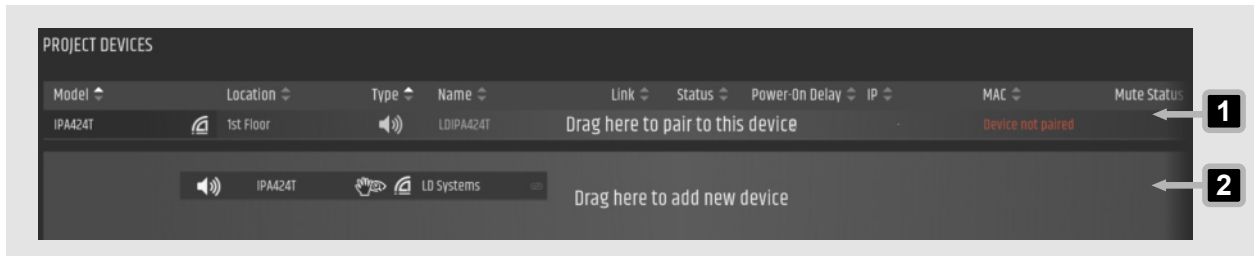
- Product Type
- Product Category
- Manufacturer
- <Custom text>



4.5.1.1.3 PAIRING DEVICES



Offline devices act as virtual placeholders that let you pre-configure the system before installation. When the actual devices appear in the **AVAILABLE DEVICES** list, you simply pair each one with its corresponding offline device.



- 1 From the **ADD DEVICES** panel, drag a device to the **PROJECT DEVICES** list.
⇒ Drop zones are highlighted.
- a) Select **Drag here to pair to this device** **1** to pair the device with a corresponding **PROJECT DEVICES** list entry.
- b) Select **Drag here to add new device** **2** to add a new device entry to the **PROJECT DEVICES** list.



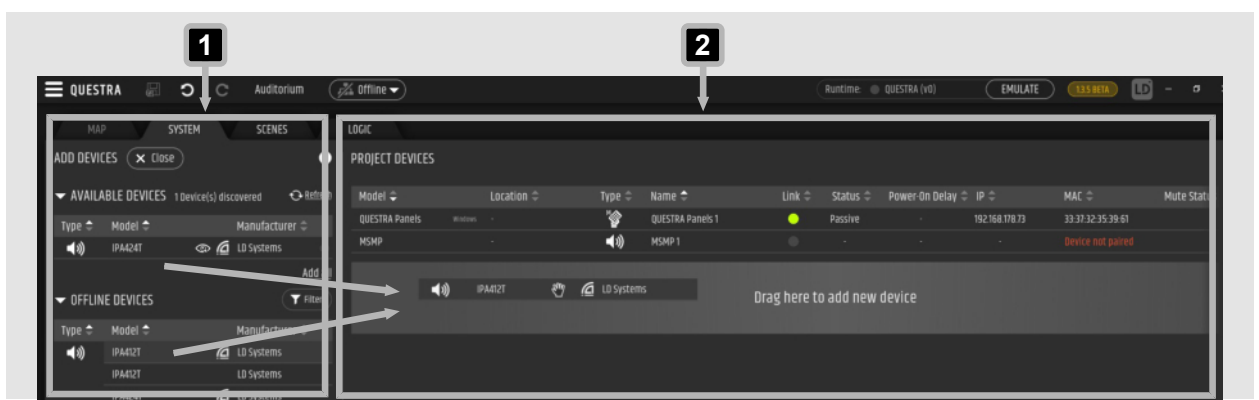
Drop zone **1** is only highlighted if there is a matching entry in the **PROJECT DEVICES** list

4.5.1.2 PROJECT DEVICES LIST

4.5.1.2.1 SYNCHRONISATION DIRECTIONS OVERVIEW

- **Deploy to devices and connect** - synchronises the current settings from the software to the devices.
- **Download from devices and connect** - synchronises the previously deployed settings from the devices to the software

4.5.1.2.2 ADDING DEVICES TO THE PROJECT DEVICES LIST



- 1 From the **ADD DEVICES** panel **1**, drag and drop the corresponding devices to the **PROJECT DEVICES** list **2**.

4.5.1.2.3 RENAMING DEVICES

- 1 Click on the name field to highlight it.
- 2 Enter a new `<device name>`



You can also use the context menu to rename the device by right-clicking and selecting the **Rename** option.

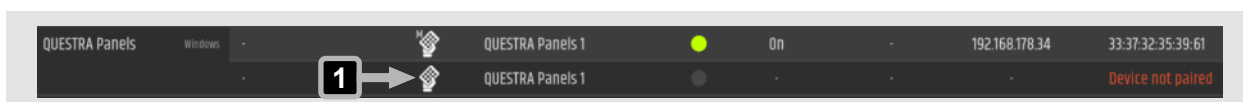
4.5.1.2.4 CLONING DEVICES

Cloning devices creates an exact duplicate of a device, including all its settings and its name. Cloning is a quick way to create projects with several identically configured devices.



Consider renaming the cloned device so that it is easier to identify.

- 1 Right-click the device to open the context menu.
- 2 In the context menu, choose **Clone**.



⇒ Find the cloned device in the **PROJECT DEVICES** list **1**.

4.5.1.2.5 REMOVING DEVICES FROM THE PROJECT DEVICES LIST

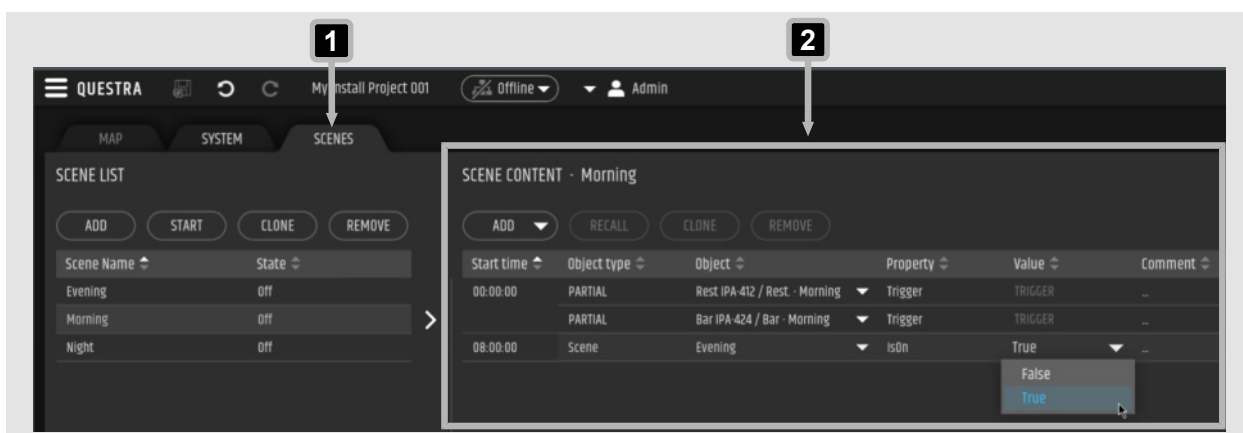
- 1 Right-click the device to open the context menu.
- 2 In the context menu, choose **Remove**.

4.5.1.2.6 UNPAIRING DEVICES

- 1 Right-click the device to open the context menu.
- 2 In the context menu, choose **Unpair**.

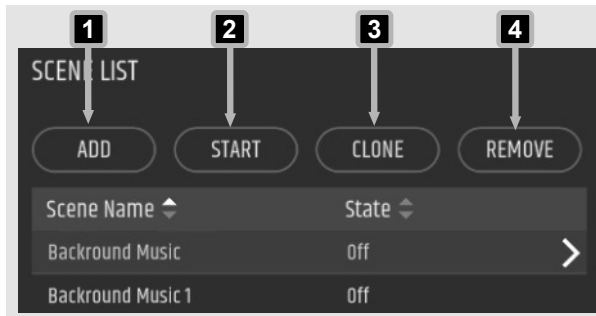
4.5.2 SCENES TAB OVERVIEW

4.5.2.1 SCENES OVERVIEW



- 1** SCENE LIST area
- 2** SCENE CONTENT area

4.5.2.2 SCENE LIST OVERVIEW



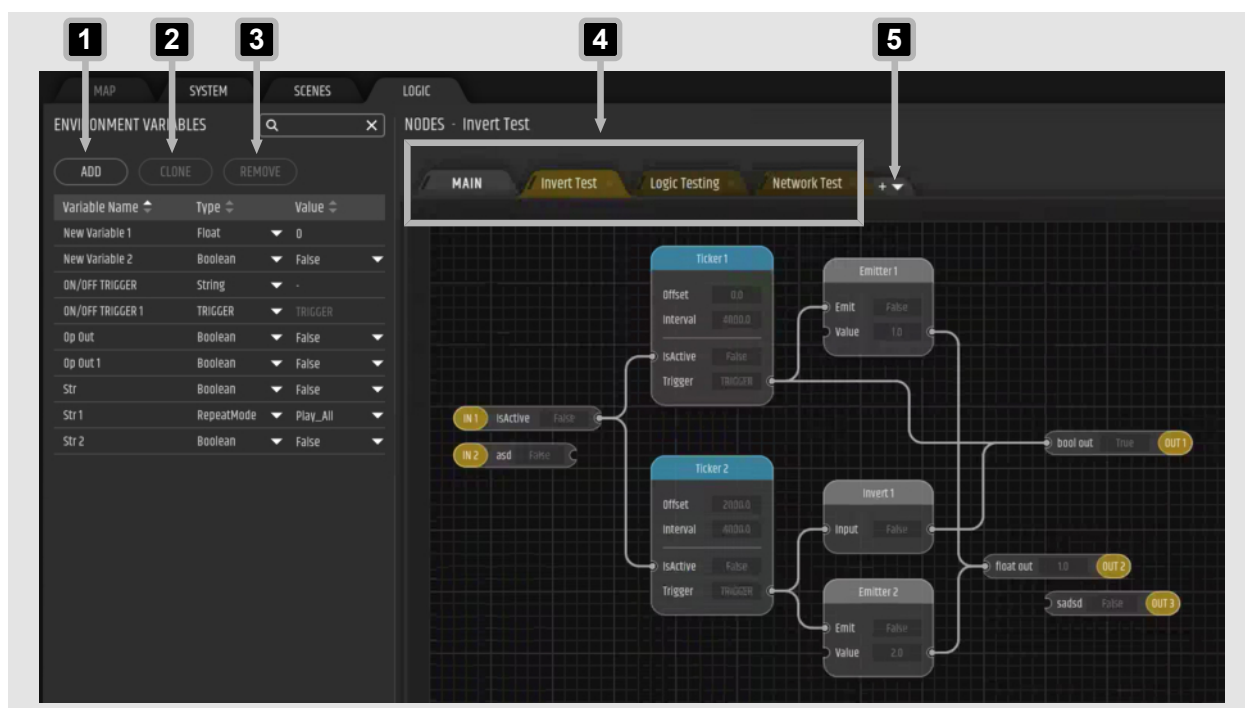
- 1 ADD Button** - Adds a new scene. A new entry in the scene list will appear with a sequential number.
- 2 START Button** - starts the playback of the scene
- 3 CLONE Button** - Duplicates the scene selected in the list. The cloned scene will be displayed with the same name as the original scene, plus a sequential number
- 4 REMOVE Button** - Removes the scene selected in the list

4.5.2.3 SCENE CONTENT OVERVIEW



- 1 Start time** - Displays the time offset of an action in relation to the start of the scene. You can edit this value
- 2 Object type** - Shows the type of object that will be affected by an action. This is a read-only field
- 3 Object** - Shows the actual object the action will have an effect on. You can reassign this value
- 4 Property** - Shows the property that is affected by the action. This is a read only field
- 5 Value** - Is editable if the property allows a value change
- 6 Comment** - Is available for internal comments and better organization. You can edit this field freely

4.5.3 LOGIC TAB OVERVIEW (TBA)



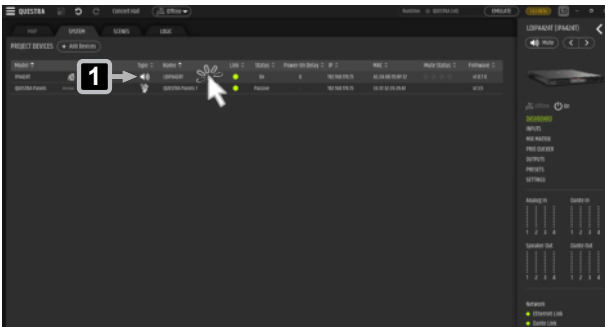
- 1** **ADD** - Adds a new environment variable
- 2** **CLONE** - Duplicates the selected variable
- 3** **REMOVE** - Removes the selected variable
- 4** **User Node Tabs** - Indicates the **MAIN** tab and the node container tabs of this project
- 5** **NODES Drop-down Menu** - Provides menu items for creating new node containers, inserting nodes, and editing user nodes (**Add New Node Container**, **Insert Node**, **User Node**)

4.5.4 MAP TAB OVERVIEW (TBA)

4.6 PROJECT DEVICES OVERVIEW

4.6.1 IPA

4.6.1.1 OPENING THE IPA COMPACT VIEW



1 In the **PROJECT DEVICES** area, choose an IPA **1** to open the corresponding compact view.

4.6.1.2 OPENING THE IPA EXPANDED VIEW



1 On the top right in the compact view, choose **1** to open the expanded view.
⇒ You have access to the configuration options of all submenus.

4.6.1.2.1 DASHBOARD



- 1** **Dashboard area** - Displays the decibel levels of the inputs and outputs in real-time
- 2** **HI-Z, Low-Z** - Switches the frequency range between **HI-Z** and **LOW-Z** (if this access has been previously allowed on the IPA)
- 3** **Parallel, Bridge, Stereo** - Switches the operating modes to **Parallel**, **Bridge**, and **Stereo** (if this access has been previously allowed on the IPA)
- 4** **Remote on/Remote off** - Switches the remote function of the channels on or off (if this access has been previously allowed on the IPA)



Find more information in the IPA user manual.

4.6.1.3 CONFIGURING NETWORK SETTINGS



The X-ECI or X-EDAI modules are supplied with the preconfigured static IP address 192.168.0.192.

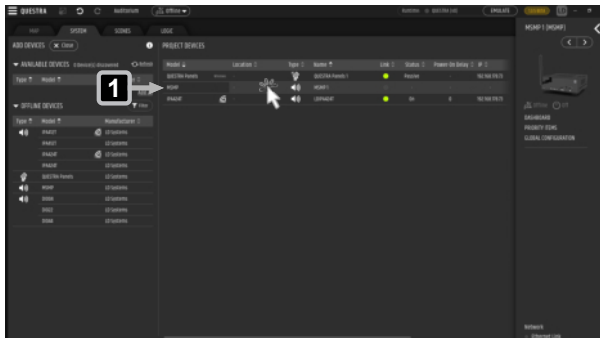
- ✓ The IPA is available in the network.
 - ✓ The IPA is paired.
- 1** In the **PROJECT DEVICES** list, select the device to open the compact view.
 - 2** In the compact view, choose the **SETTING** sub menu.
 - 3** Choose  to open the expanded view.
 - 4** At the top of the screen, choose the **Offline** button, to open the drop-down menu.
 - 5** Choose **Download from Devices and connect**.
 - 6** Choose  to start the editing process.
 - 7** Activate DHCP.
 - 8** Enter the corresponding values for the <IP ADDRESS>, the <SUBNET MASK>, and the <GATEWAY>.



You can directly connect a PC to the Ethernet card using a point-to-point connection.

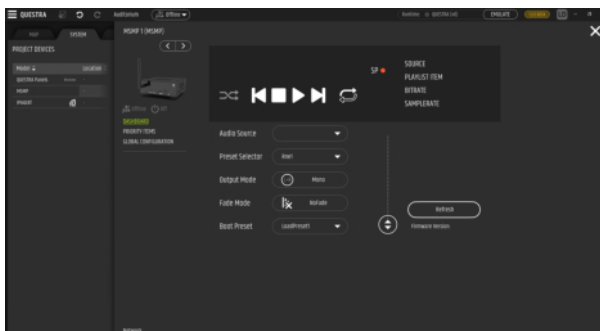
4.6.2 MSMP

4.6.2.1 OPENING THE MSMP COMPACT VIEW



- 1 In the **PROJECT DEVICES** area, choose the an **MSMP** **1** to open the corresponding compact view.

4.6.2.2 OPENING THE MSMP EXPANDED VIEW



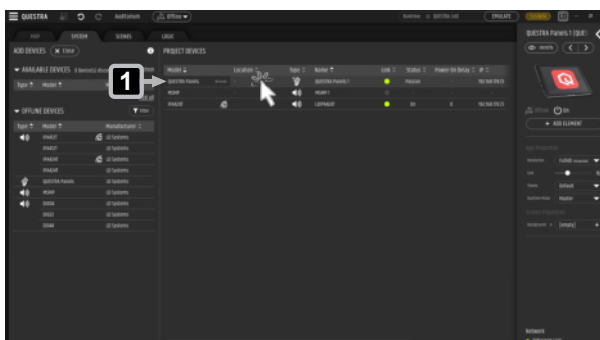
- 1 On the top right of the compact view, choose **1** to open the expanded view.
⇒ You have access to the configuration options of the submenus **DASHBOARD**, **PRIORITY ITEMS**, and **GLOBAL CONFIGURATION**.
- 2 Click on **GLOBAL CONFIGURATION** to open the browser and gain direct access to the MSMP.



Find more information in the MSMP user manual.

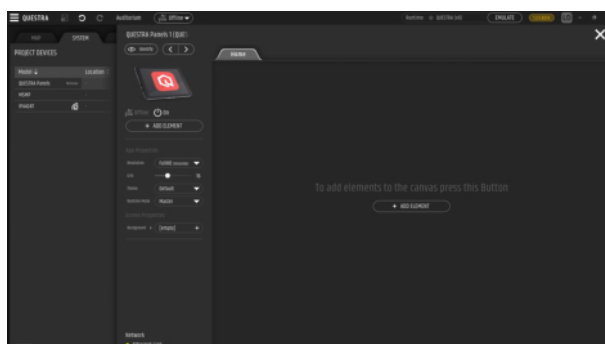
4.6.3 QUESRA® PANELS

4.6.3.1 OPENING THE QUESRA® PANELS COMPACT VIEW



- 1 In the **PROJECT DEVICES** area, choose a **QUESRA® Panel** **1** to open the corresponding compact view.

4.6.3.2 OPENING THE QUESTRA® PANELS EDITOR



- 1 On the top right in the compact view, choose  to open the expanded view.
⇒ You have access to the configuration options of the panel.

4.7 PROJECT DEVICES FUNCTIONS

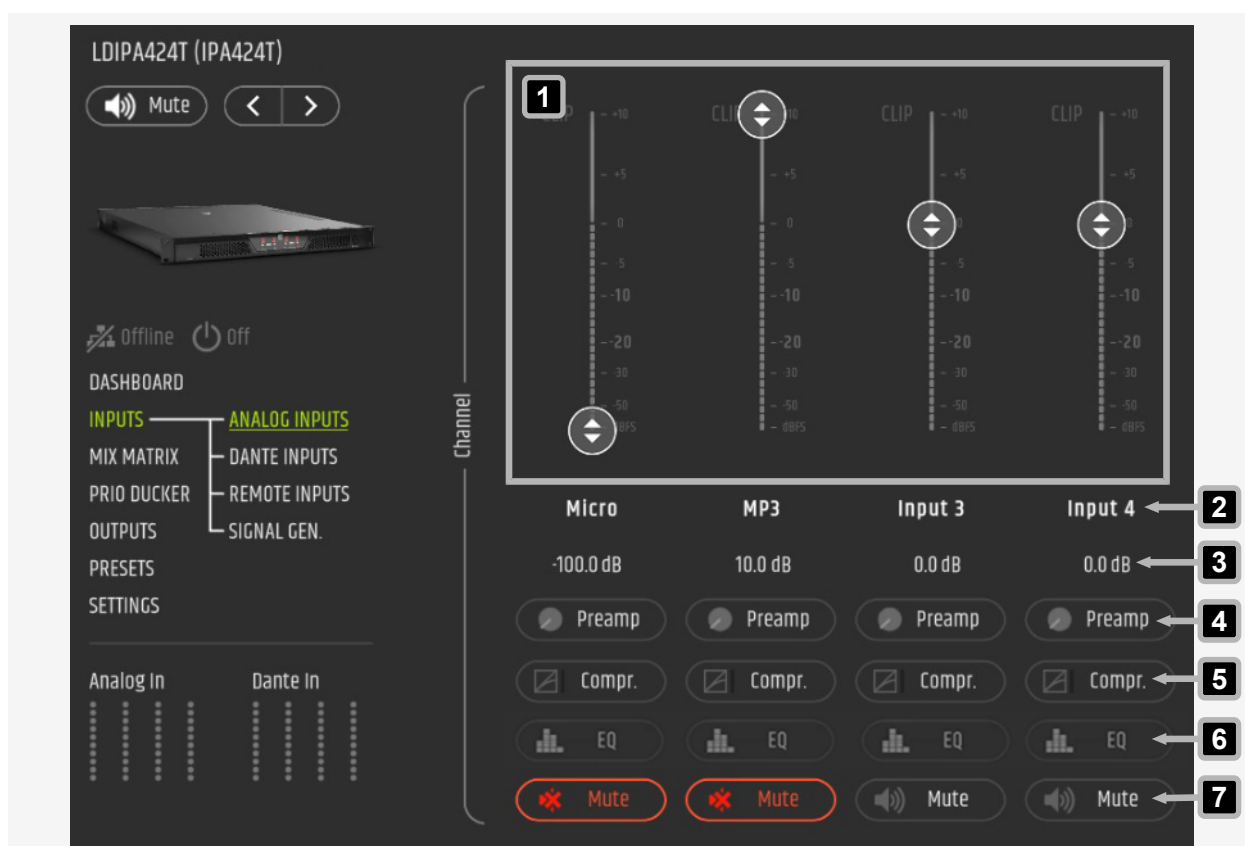
4.7.1 IPA



Hovering over  reveals Questra® tooltips.

4.7.1.1 INPUTS

4.7.1.1.1 ANALOG INPUTS OVERVIEW

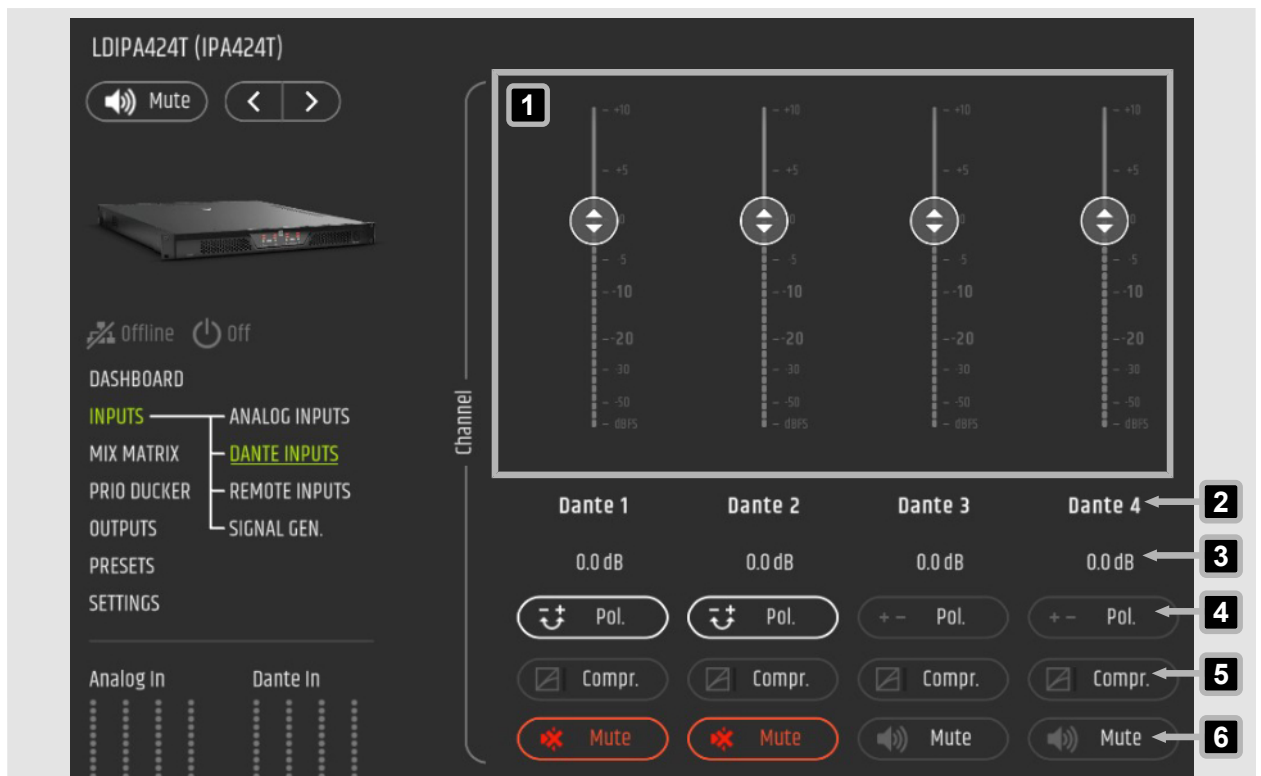


1

ANALOG INPUTS Fader - Changes the analog input signal (-100.0 dB ... +10.0 dB)

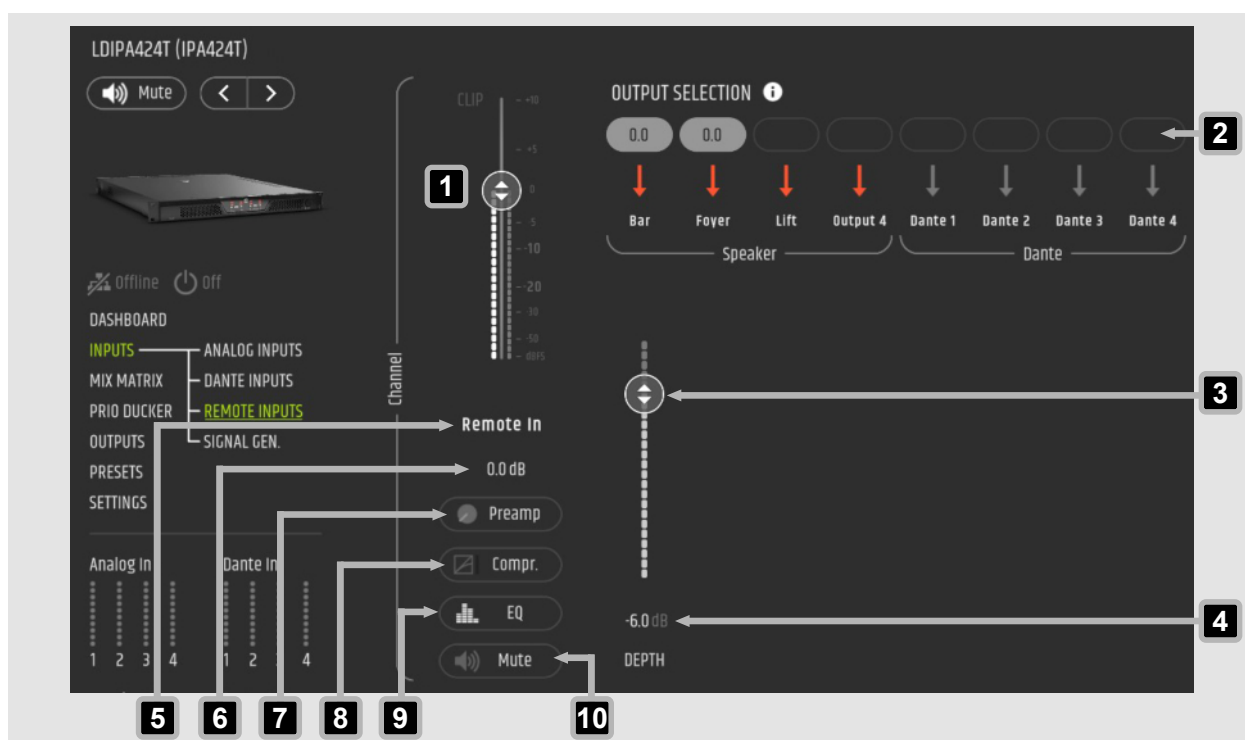
- 2** **ANALOG INPUTS Names** - Displays the current analog input names.
- 3** **dB Level** - Displays the decibel value of the analog input fader above
- 4** **Preamp** - Opens the preamp window
- 5** **Compr.** - Opens the compressor window
- 6** **EQ** - Opens the EQUALIZER window (Available from firmware version 1.1.0)
- 7** **Mute** - Mutes or unmutes the corresponding analog input

4.7.1.1.2 DANTE INPUTS OVERVIEW



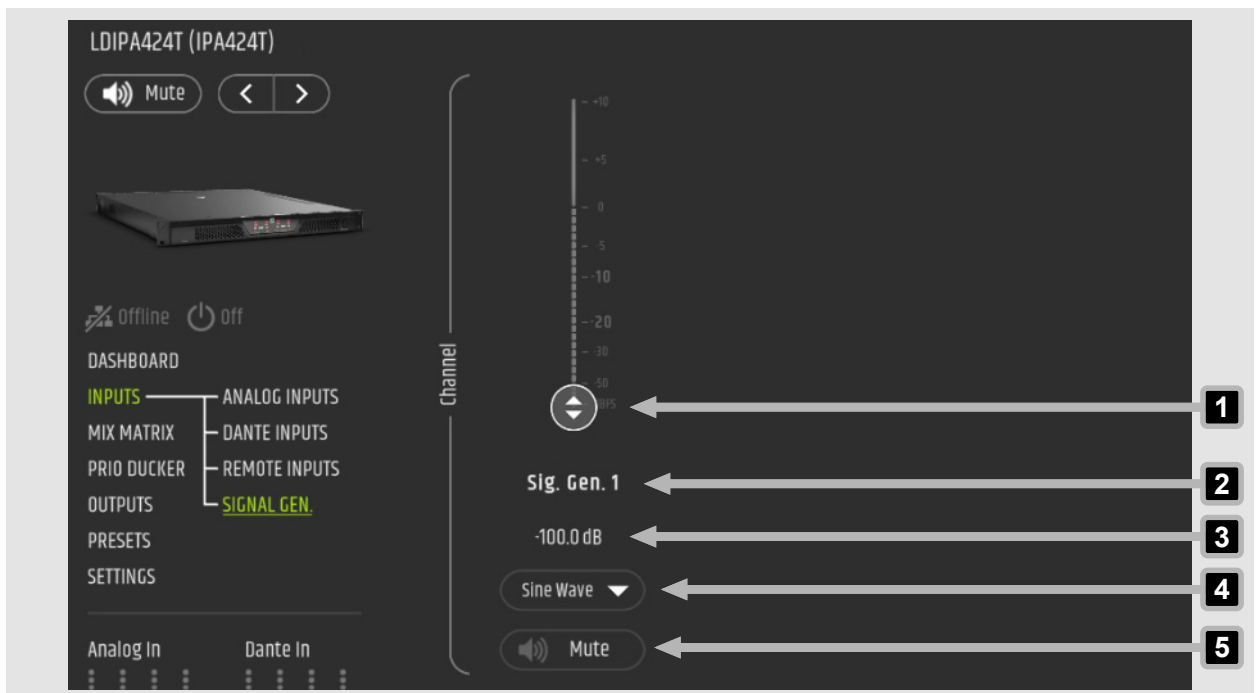
- 1** **DANTE INPUT Fader** - Changes the DANTE® input signal (-100.0 dB ... +10.0 dB)
- 2** **DANTE INPUT Name** - Displays the recent input names
- 3** **dB Level** - Displays the decibel value of the DANTE® input fader above
- 4** **Pol.** - Changes the polarity of the DANTE® input signal
- 5** **Compr.** - Opens the compressor window for setting options
- 6** **Mute** - Mutes or unmutes the corresponding DANTE® input

4.7.1.13 REMOTE INPUTS OVERVIEW



- 1** **REMOTE INPUT Fader** - Changes the remote input signal (-100.0 dB ... +10.0 dB)
- 2** **OUTPUT SELECTION** - Shows the status of the physical switches on the hardware. You can only change these settings on the hardware
- 3** **DEPTH Slider** - Changes the bass signal (-100.0 dB ... 0.0dB)
- 4** **dB Level** - Displays the decibel value of the DEPTH slider
- 5** **REMOTE INPUT Name**
- 6** **dB Level** - Displays the decibel value of the REMOTE INPUT fader
- 7** **Preamp** - Opens the PREAMP window
- 8** **Compr.** - Opens the COMPRESSOR window
- 9** **EQ** - Opens the EQUALIZER window
- 10** **Mute** - Mutes or unmutes the remote inputs

4.7.1.1.4 SIGNAL GEN. OVERVIEW



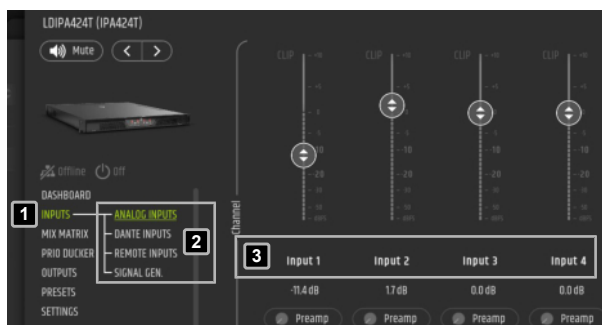
- 1** **SIGNAL GEN. Fader** - Changes the generated signal (-100.0 dB ... +10.0 dB)
- 2** **SIGNAL GEN. Name**
- 3** **dB Level*** - Displays the decibel setting of the SIGNAL GEN. Slider
- 4** **Test Signal**- Selects the signal type of the signal generator (sine wave, white noise and pink noise)
- 5** **Mute** - Switches the SIGNAL GEN. on or off



For safety reasons, the **SIG. GEN.** is always set to -100.0 dB by default upon deployment

4.7.1.1.5 NAMING INPUTS

- 1** In the **PROJECT DEVICES** list, choose the corresponding IPA to open the compact view.
- 2** On the top right in the compact view, choose **<** to open the expanded view.



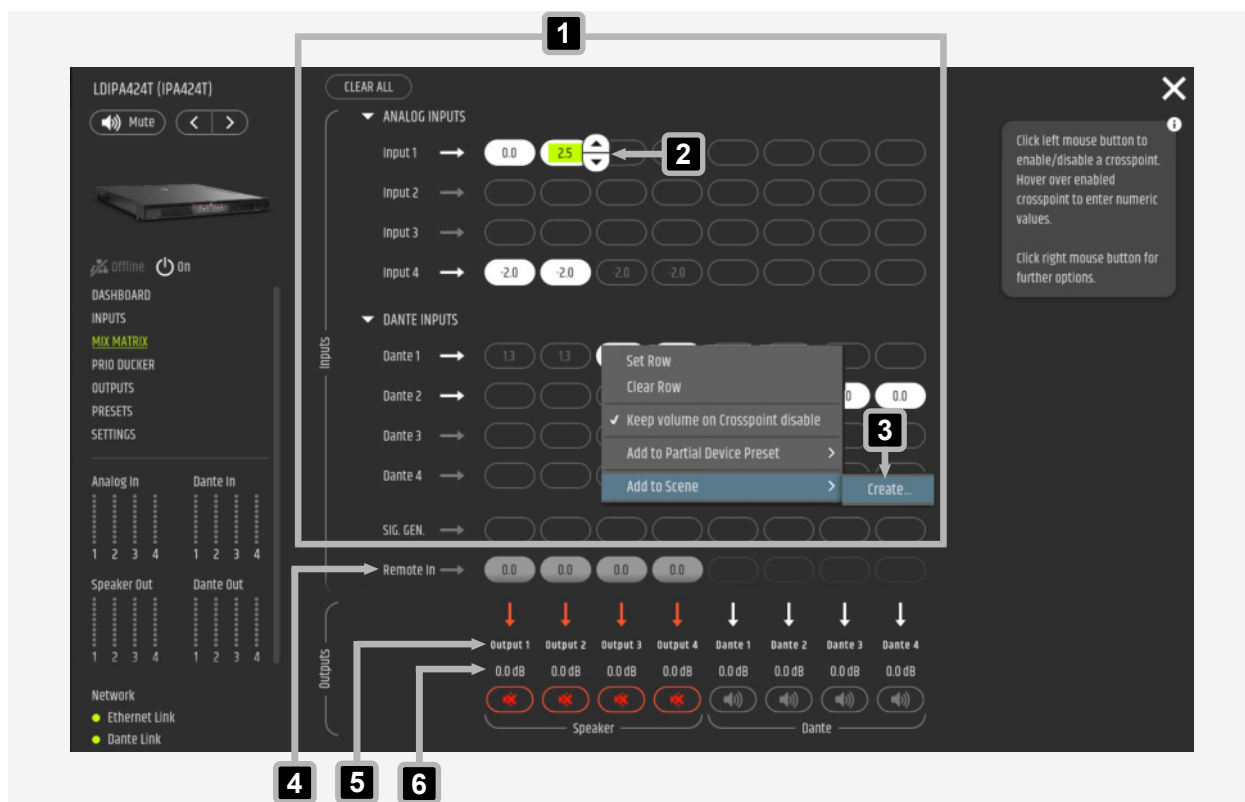
- 3** Choose **INPUTS** **1**.
- 4** Choose the corresponding input type **2**.
- 5** Click on the corresponding name field **3**.
⇒ The name highlights.
- 6** Enter a <name>.



We recommend assigning input names that are related to their input sources.

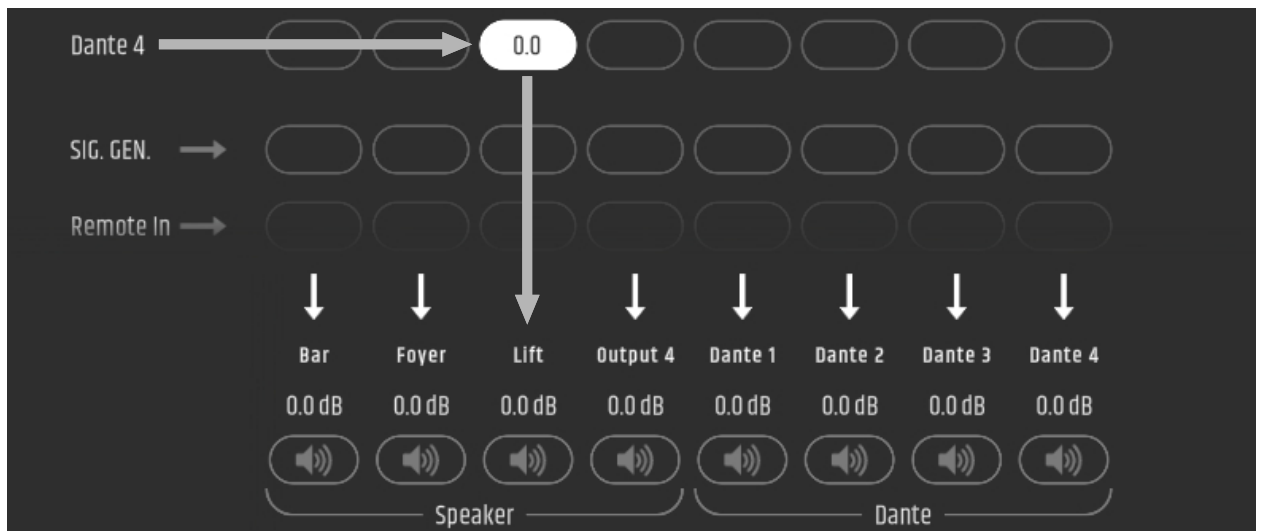
4.7.1.2

MIX MATRIX OVERVIEW



- 1 MIX MATRIX Crosspoint Area** - Establishes connections between inputs and outputs
- 2 Skip Buttons** - Appear by clicking on the cross points. Change the decibel settings by skipping or by entering a decibel value in the field (when it is highlighted in green by hovering over it)
- 3 Create...** - Creates a new Scene and adds the selected parameter(s) to it. Crosspoints store two parameters (crosspoint enable and crosspoint gain) that can be controlled separately.
- 4 Remote in** - Shows the status of the physical switches on the hardware. You can only change these settings on the hardware
- 5 Speaker Outputs and Dante Outputs Names** - Displays the names entered in the output settings
- 6 dB Levels** - Displays the decibel value of the corresponding output

4.7.1.2.1 ABOUT THE MIX MATRIX



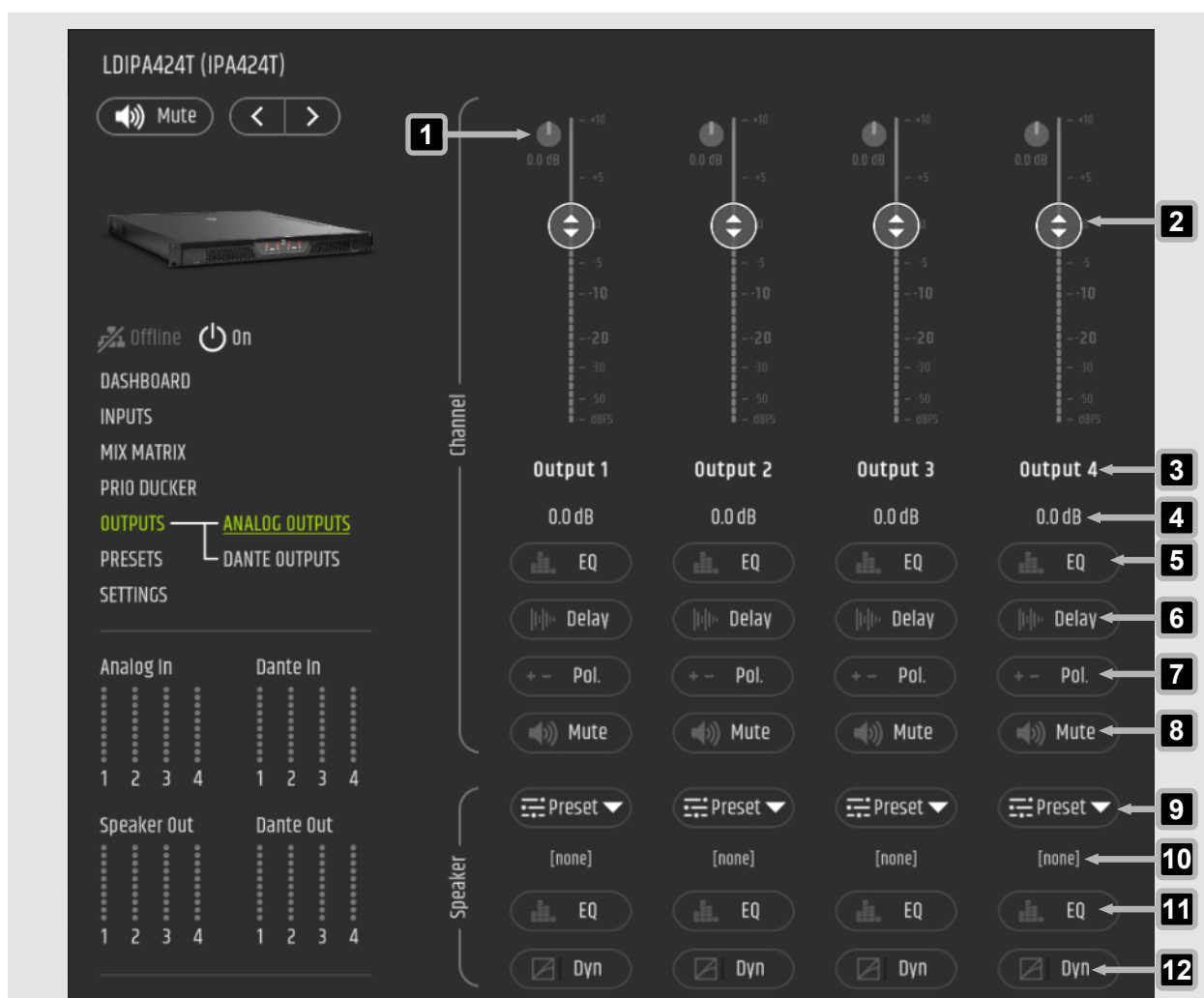
The mix matrix routes audio signals from inputs to outputs using crosspoints. Inputs are listed in rows on the left, and outputs are listed in columns. Activating a crosspoint connects an input to an output..

4.7.1.2.2 USING THE MIX MATRIX

- ✓ You have identified the inputs and outputs, determining which input signals you want to route to which outputs.
 - ✓ You have located the crosspoints of the desired input rows and output columns.
- 1** Click the crosspoints
 - a)** Single-click the corresponding crosspoints to activate the connection between inputs and output.
 - b)** Double-click the corresponding crosspoints to deactivate the connection between inputs and outputs.
 - 2** Hover over an already activated crosspoint to make the skip buttons visible.
 - 3** Click on the corresponding skip buttons to increase or decrease the decibel setting.

4.7.1.3 OUTPUTS

4.7.1.3.1 ANALOG OUTPUTS OVERVIEW



- 1** **Output Level** - Indicates the set output level of the channel
- 2** **Channel Fader** - Adjusts the volume of the output channel
- 3** **Channel Name** - Indicates the output channel name. Select to edit the name
- 4** **Fader Value** - Indicates the fader level in dB (-100.0 dB ... +10.0 dB). Select to enter a value
- 5** **EQ** - Opens the equaliser for the respective output channel
- 6** **Delay** - Opens the delay settings for the respective output channel
- 7** **Pol.** - Inverts the polarity of the audio signal for the respective output channel
- 8** **Mute** - Toggles mute on or off
- 9** **Preset Menu** - Selects a loudspeaker preset

- 10** **Preset Indication** - Indicates the selected loudspeaker preset
- 11** **EQ** - Opens the equaliser for the respective channel
- 12** **Dyn** - Opens the dynamics for the respective channel

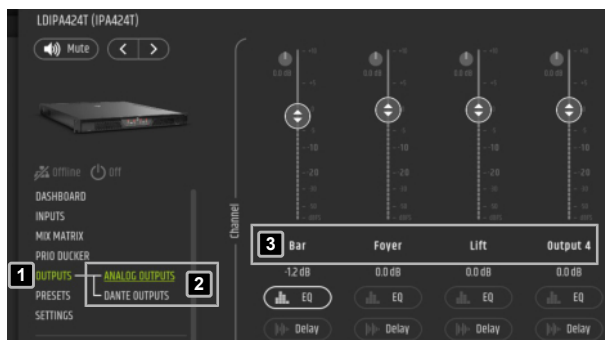
4.7.1.3.2 DANTE OUTPUTS OVERVIEW



- 1** **Channel Fader** - Adjusts the volume of the output channel
- 2** **Channel Name** - Indicates the output channel name. Select to edit the name
- 3** **Fader Value** - Indicates the fader level in dB (-100.0 dB ... +10.0 dB). Select to enter a value
- 4** **Pol.** - Inverts the polarity of the audio signal for the respective output channel
- 5** **Mute** - Toggles mute on or off

4.7.1.3.3 NAMING OUTPUTS

- 1** In the **PROJECT DEVICES** area, choose the corresponding IPA to open the compact view.
- 2** On the top right In the compact device view, choose **<** to open the expanded view.



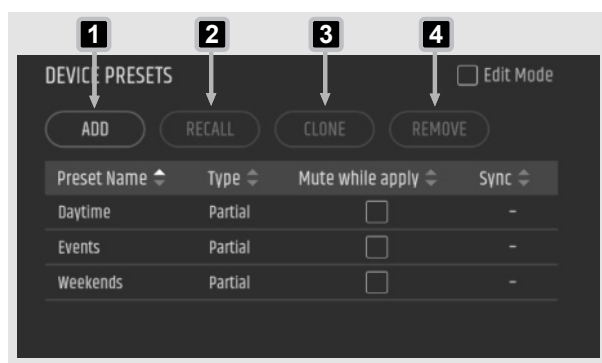
- 3 Choose OUTPUTS **1**.
- 4 Choose the corresponding output type **2**.
- 5 Click on the corresponding name field. **3**.
⇒ The name highlights.
- 6 Enter a <name>.



We recommend assigning output names that are related to their output destinations.

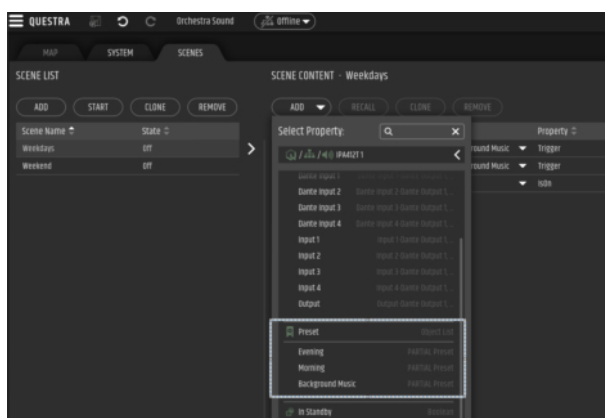
4.7.1.4 PRESETS

4.7.1.4.1 DEVICE PRESET OVERVIEW



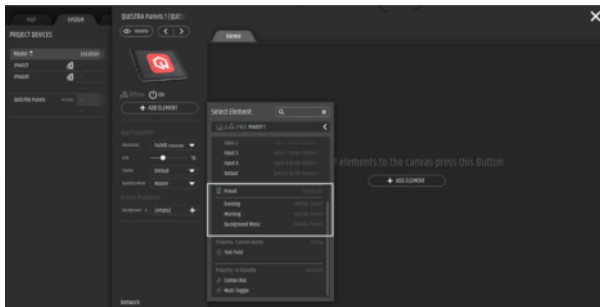
- 1 ADD** - Adds a new full or partial preset
- 2 RECALL** - Resets the preset to its original pre-set values
- 3 CLONE** - Duplicates the selected preset
- 4 REMOVE** - Removes the selected preset

4.7.1.4.2 LOADING A PRESET VIA SCENES



- 1 Insert a presets when creating a scene

4.7.1.4.3 LOADING A PRESET VIA QUESTRA® PANELS



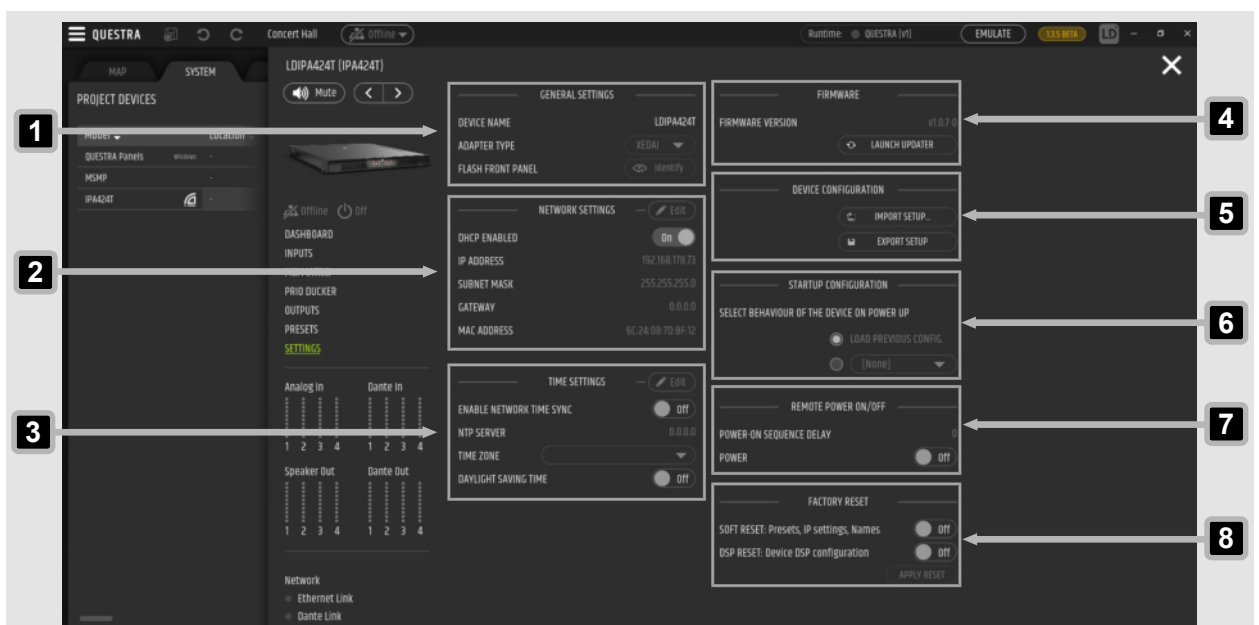
- 1 Drop the chosen preset on the canvas.



The preset is now displayed as a trigger button that activates the preset.

4.7.1.5 SETTINGS

4.7.1.5.1 SETTINGS OVERVIEW



- 1 GENERAL SETTINGS Section** - Displays the system settings
- 2 NETWORKING SETTINGS Section** - Assigns network settings
- 3 TIME SETTINGS** - Synchronises the network time using the Network Time Protocol (NTP)
- 4 FIRMWARE Section** - Displays the system settings
LAUNCH UPDATER - Starts the update manager
- 5 DEVICE CONFIGURATION Section** - Exports and imports device configurations
- 6 STARTUP CONFIGURATION** - Selects whether the device should start with the previous configuration or a preset
- 7 REMOTE POWER ON/OFF** - Puts the IPA into standby and turns it back on
- 8 FACTORY RESET** - Triggers a factory and/or DSP reset

4.7.1.6 ADDING A PRESET

- 1 In the **PROJECT DEVICES** area, choose the corresponding IPA to open the compact view.
- 2 In the compact view, choose **<** to open the expanded view.
- 3 In the expanded view, choose **Presets** to access the **DEVICE PRESETS**.
- 4 Choose **ADD** to open the **NEW DEVICE PRESET** window.
- 5 Enter a `<preset name>`.
- 6 Choose one of the following:

- **Full Device Preset**
- **Partial Device Preset**

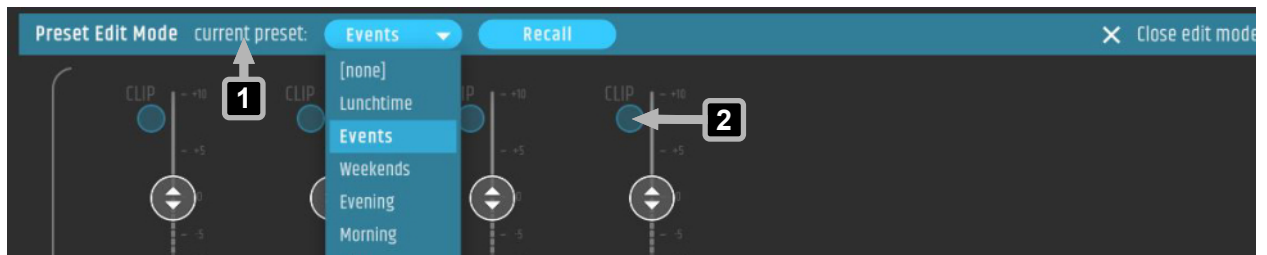


Partial Device Preset takes less space on your hard drive.



Quickly create a partial preset and enable Preset Edit Mode by right-clicking on a button that is configurable in a preset.

- 7 Choose **CREATE** to start the configuration of the preset.
- 8 On the right side on top of the preset list, tick the checkbox ☒ **Edit Mode**.



⇒ The preset edit mode bar is displayed **1**.

⇒ The preset is now editable, and you can configure the settings for the IPA in the submenu sections **INPUTS**, **MIX MATRIX** and **OUTPUTS**.

- 9 Press and hold the **Ctrl.** key on your keyboard to make the selectable points visible **2**.
- 10 Click on the selectable points to save them for the preset.



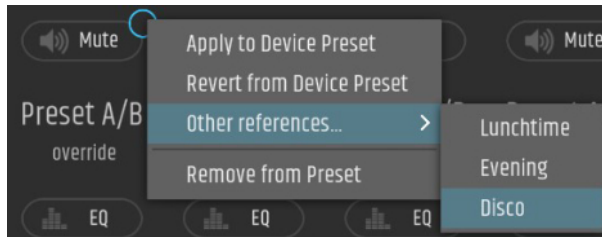
If you click on the selectable points in the submenu, all points of the respective submenus are marked.

- 11 Choose **X** to exit the **Edit Mode**.
 - ⇒ Find the created **PRESET** in the **DEVICE PRESET** list.



The maximum number of presets on an IPA is 10.

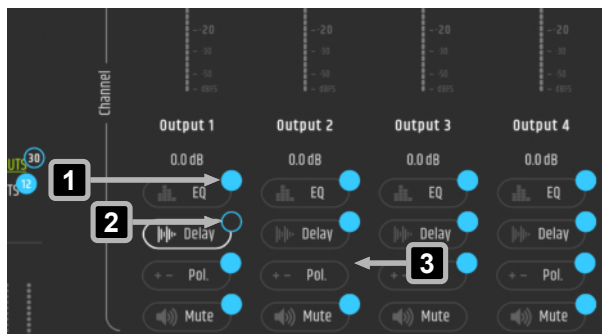
4.7.1.6.1 USING THE SELECTABLE POINTS CONTEXT MENU



- 1 Right-click on the selectable point to access the context menu.
⇒ The context menu opens, allowing you to manage your current selection with various options.

4.7.1.7 USING THE EDIT MODE FOR INPUTS AND OUTPUTS

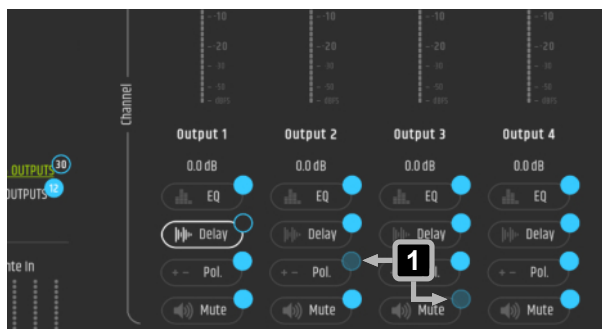
4.7.1.7.1 ABOUT SELECTABLE POINTS



IN EDIT MODE, THE SELECTABLE POINTS INDICATE

- which settings match the current preset **1**
- which settings have been changed compared to the preset **2**, or
- which settings are not saved in the current preset **3**.

4.7.1.7.2 ADDING SELECTABLE POINTS

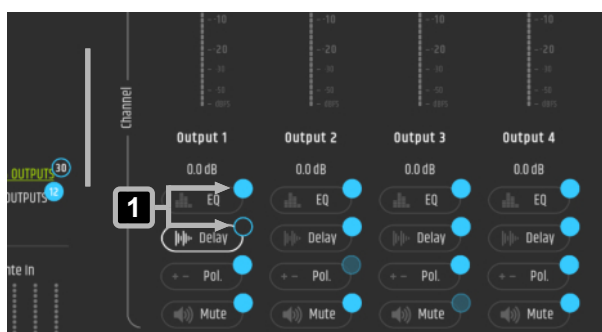


- 1 Press and hold the **Ctrl** key to make the selectable points visible that are not saved in the preset. **1**
- 2 Click on the needed transparent selectable points to save the corresponding setting in the preset.



If you click on the selectable points in the submenu, all points of the respective submenus are marked.

4.7.1.7.3 REMOVING SELECTABLE POINTS



- 1 Click on any selectable point **1** to remove it.
⇒ The corresponding setting is not saved in the current preset.

4.7.1.7.4 APPLYING OR REVERTING SELECTABLE POINTS



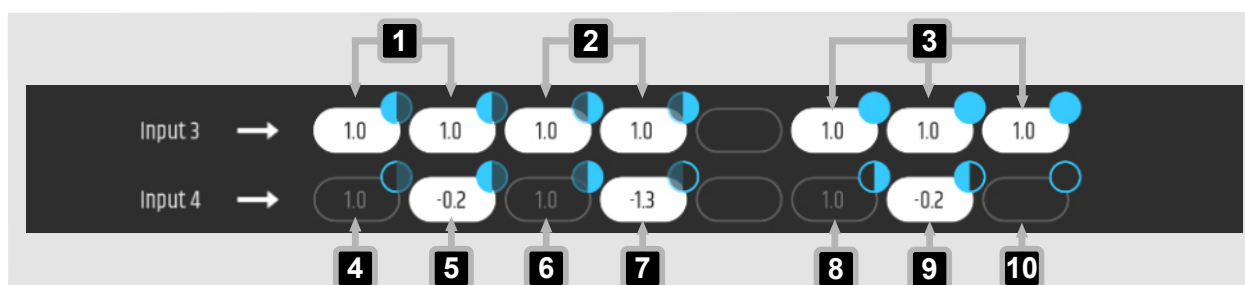
You can either save changes to the preset or reset it to its original preset value.



- 1 Right-Click on a selectable point. **1**
⇒ The context menu opens.
- 2 Click on a function:
 - a) **Apply to Device Preset 2** to apply the new setting to the preset.
⇒ The corresponding setting is saved in the current preset.
 - b) **Revert from Device Preset 3** to reset the setting to the value of the preset.
⇒ The corresponding setting is reverted from the preset.

4.7.1.8 USING THE EDIT MODE FOR MIX MATRIX

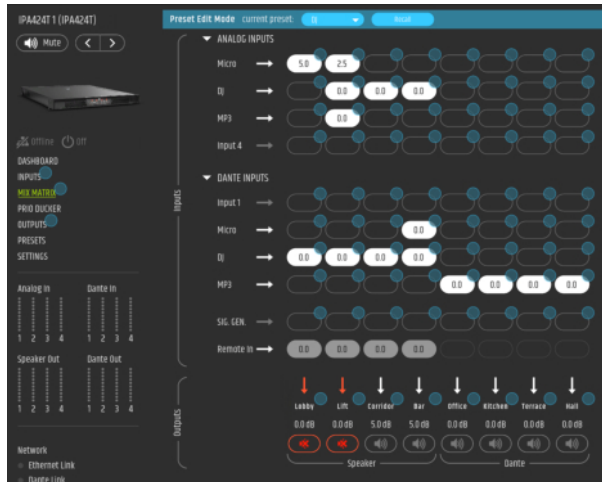
4.7.1.8.1 CROSSPOINT STATE VISUALISATION



- 1** Saved active/inactive state - The decibel value is not considered
- 2** Saved decibel value - The active/inactive state is not considered
- 3** Saved active/inactive state and saved decibel value
- 4** Saved active/inactive state with changed active/inactive state and unchanged decibel value
- 5** Saved active/inactive state with unchanged active/inactive state and changed decibel value
- 6** Saved decibel value with unchanged decibel value and changed active/inactive state
- 7** Saved decibel value with changed decibel value and unchanged active/inactive state
- 8** Saved state active/inactive and saved decibel value with changed active/inactive state and unchanged decibel value

- 9** Saved state active/inactive and saved decibel value with changed decibel value und unchanged active/inactive state
- 10** Saved state active/inactive and saved decibel value with changed active/inactive state and changed decibel value

4.7.1.8.2 EDITING CROSSPOINT STATES IN THE MIX MATRIX



✓ You have created a preset

✓ Edit mode is active

- 1** In the sub menu, select and change to the **MIX MATRIX**.
- 2** Press and hold the **Ctrl.** key on your keyboard to make the selectable points visible.



The number of clicks (1, 2, or 3) determines the stored result.



- 3** Tick the selectable points that the preset should contain.
 - a)** Click to save the status for active/inactive.
⇒ After clicking, the selectable point indicates the saved state.
 - b)** Double-click to save the decibel value.
⇒ After double-clicking, the selectable point indicates the saved state.
 - c)** Triple-click to save the active/inactive state and the decibel value.
⇒ After triple-clicking, the selectable point indicates the saved state.



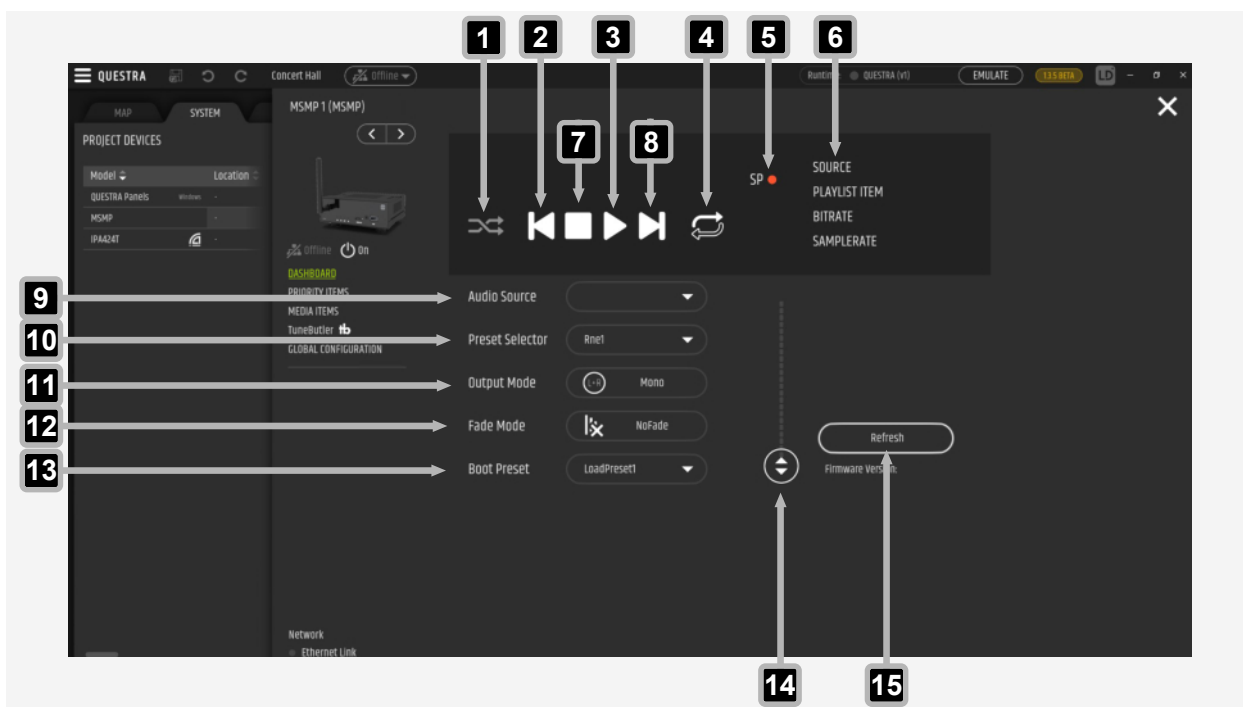
If you click on the selectable points in the submenu, all points of the respective submenus are marked.

- 4** Choose to exit the **Edit Mode**.
⇒ Find the created **PRESET** in the **DEVICE PRESET** list.

4.7.2 MSMP

4.7.2.1 DASHBOARD

4.7.2.1.1 DASHBOARD OVERVIEW



- 1** **Shuffle Playback** - Activates randomised audio track playback
- 2** **Skip Back** - Skips back to the previous track
- 3** **Play** - Starts or pauses the audio playback
- 4** **Repeat Mode** - Toggles between repeat modes (Repeat Off, Repeat One, Repeat All)
- 5** **SP LED** - Highlights green when an audio signal is present at the output
- 6** **Track Information** - Displays information about the current track
- 7** **Stop** - Stops the playback and returns to the beginning of the track
- 8** **Skip Forward** - Skips forward to the next track
- 9** **Audio Source** - Selects an audio source
- 10** **Preset Selector** - Selects a preset
- 11** **Output Mode** - Toggles the output **Mono** or **Stereo**
- 12** **Fade Mode** - Toggles between fade modes (**NoFade**, **CrossFade**, **Fade**)
- 13** **Boot Preset** - Selects the boot preset from the MSMP device (**KeepStatus** and **Preset 1**)

14 **Fader** - Adjusts the playback volume

15 **Refresh** - Loads the current settings of the MSMP device

4.7.2.2 ABOUT PRIORITY AND MEDIA ITEM BEHAVIOUR

In MSMP, **Media Items** and **Priority Items** follow different playback logic. The system handles them as if two separate players were running:

- One dedicated to normal media
- One for priority messages.

Typical use cases for using Media Items and Priority Items are:

- Scheduled announcements
- Emergency or important notifications.



To ensure that emergency or important notifications override background music without abrupt interruptions, trigger them manually from the **Media Explorer** widget in a **QUESTRA®** panel or schedule their playout using a **Calendar** node and scenes.

[Adding Scene Content](#) [▶ 80] [Adding Environment Variables](#) [▶ 81]

Behaviour of Media Items

When selected, the file starts playing immediately. If another file is currently playing, it stops and the new file begins.

Behaviour of Priority Items:

If normal music (Media Item or Tunebutler playlist) is playing, the current source fades out rather than stopping. The priority message is then played, and once it finishes, the previous source fades back in.

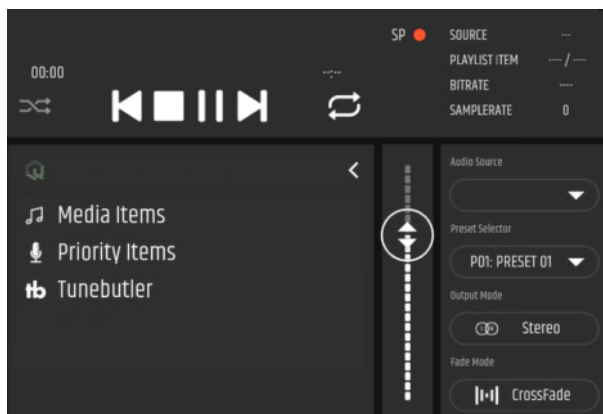
See also:

[Adding and Positioning Elements in QUESTRA® Panels](#) [▶ 77]

4.7.2.3 ABOUT WIDGETS

A widget is a customisable graphical component that can be inserted into any **QUESTRA®** panel design. Users can create a widget by combining multiple elements—such as buttons, lists, and controls—to build an interface tailored to specific functions. Once configured, the widget appears in the **Select Element** window, ready to be placed on the panel.

4.7.2.3.1 ABOUT THE MEDIA EXPLORER MSMP WIDGET



The Media Explorer MSMP Widget enables users to browse and play audio files stored on the USB drive or MicroSD card connected to an MSMP player that have been previously added to the **PRIORITY ITEM** or the **MEDIA ITEM** menu in **QUESTRA®**.

Categories displayed in the widget:

- **Media Items** (standard audio files)
- **Priority Items**
- **tb Tunebutler** (music-for-business service)

4.7.2.4 PRIORITY ITEMS

4.7.2.4.1 ABOUT PRIORITY ITEMS

The **PRIORITY ITEMS** menu in MSMP allows you to define audio files that are treated as priority messages within the **QUESTRA®** ecosystem. These files behave differently compared to standard media files.

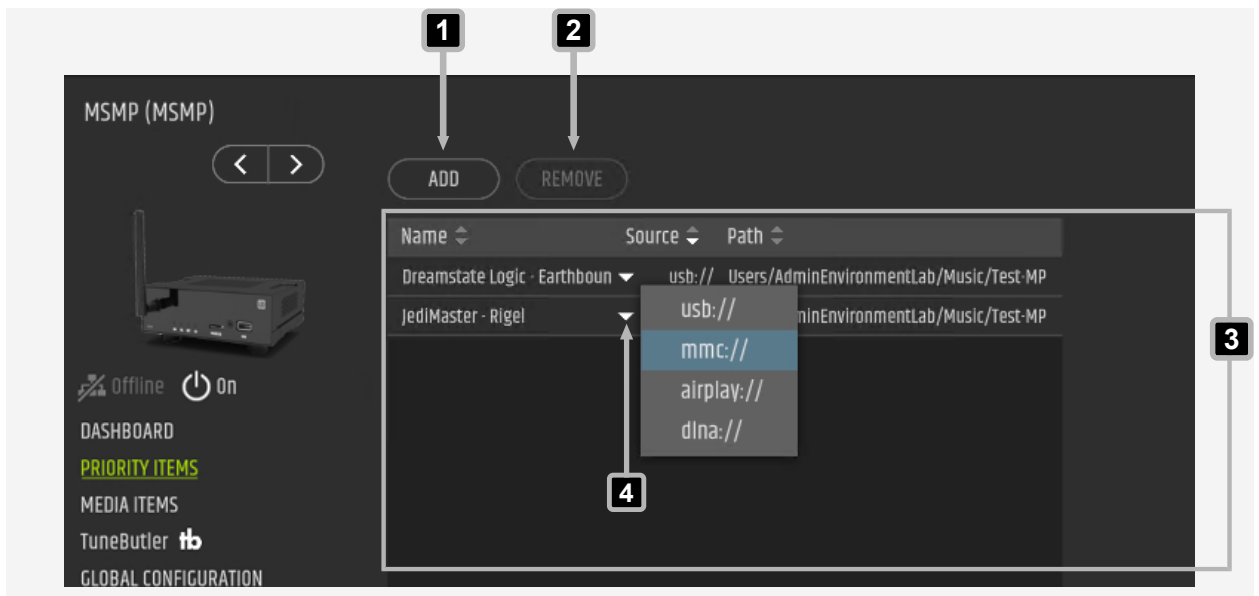
Priority Items are designed for announcements or messages that temporarily override background music. They integrate seamlessly with **QUESTRA®** panels, scenes, and scheduling logic, making them ideal for retail, hospitality, and other environments where timely communication is essential.

Once Priority Items have been added in MSMP, they become available in the **QUESTRA® Select Element** window under the **Widget** category.



Priority Items can also be used in **QUESTRA®** scenes. For example, you can create a scene that plays a specific priority message at a scheduled time using the **Calendar Node** in the **LOGIC** tab. This setup ensures that announcements are triggered automatically at the defined time without requiring manual action. [Adding New Node Containers \[▶ 88\]](#) [Adding Scene Content \[▶ 80\]](#)

4.7.2.4.2 PRIORITY ITEMS OVERVIEW



- 1** **ADD** - Opens the file explorer on your computer
- 2** **REMOVE** - Removes the selected priority item
- 3** **PRIORITY ITEM File List area** - Displays the priority items
- 4** **Source Drop-Down Menu** - Selects the source for media playback (**usb://**, **mmc://**, **airplay://**, **dlina://**)



To add priority items in MSMP, open the **PRIORITY ITEMS** menu and upload the desired audio files. Once Priority Items have been added in MSMP, they become available in the **QUESTRA® Select Element** window under the **Widget** category, and in the **SCENES** tab.

4.7.2.4.3 COMBINING PRIORITY ITEMS WITH THE LOGIC TAB IN QUESTRA®

- 1** Create a scene that plays a specific priority message on MSMP.
- 2** In the Logic tab, insert a Calendar node and define the repetition schedule (e.g., daily announcements).
- 3** Insert the previously defined Scene Trigger in the Logic tab.
- 4** Connect the output of the Calendar node to the Scene Trigger.

[Adding Scene Content](#) [► 80]

[Adding Environment Variables](#) [► 81]

4.7.2.5 MEDIA ITEMS

4.7.2.5.1 ABOUT MEDIA ITEMS

The **MEDIA ITEMS** menu in MSMP allows you to map and organise standard audio files stored on a USB drive or MicroSD card for playback through **QUESTRA®** panels.

Purpose

Media Items represent regular audio content—such as background music or playlists—that can be played from an MSMP player. Unlike **PRIORITY ITEMS**, the Media Item files do not override other sources—they simply replace the currently playing file when selected.

4.7.2.5.2 PREPARING AND MAPPING MEDIA ITEMS – RECOMMENDED WORKFLOW

- 1 Prepare Your Media Files by connecting the USB drive or MicroSD card with audio files to the computer running **QUESTRA®**.



You can group your media files in folders to maintain a structured navigation experience.

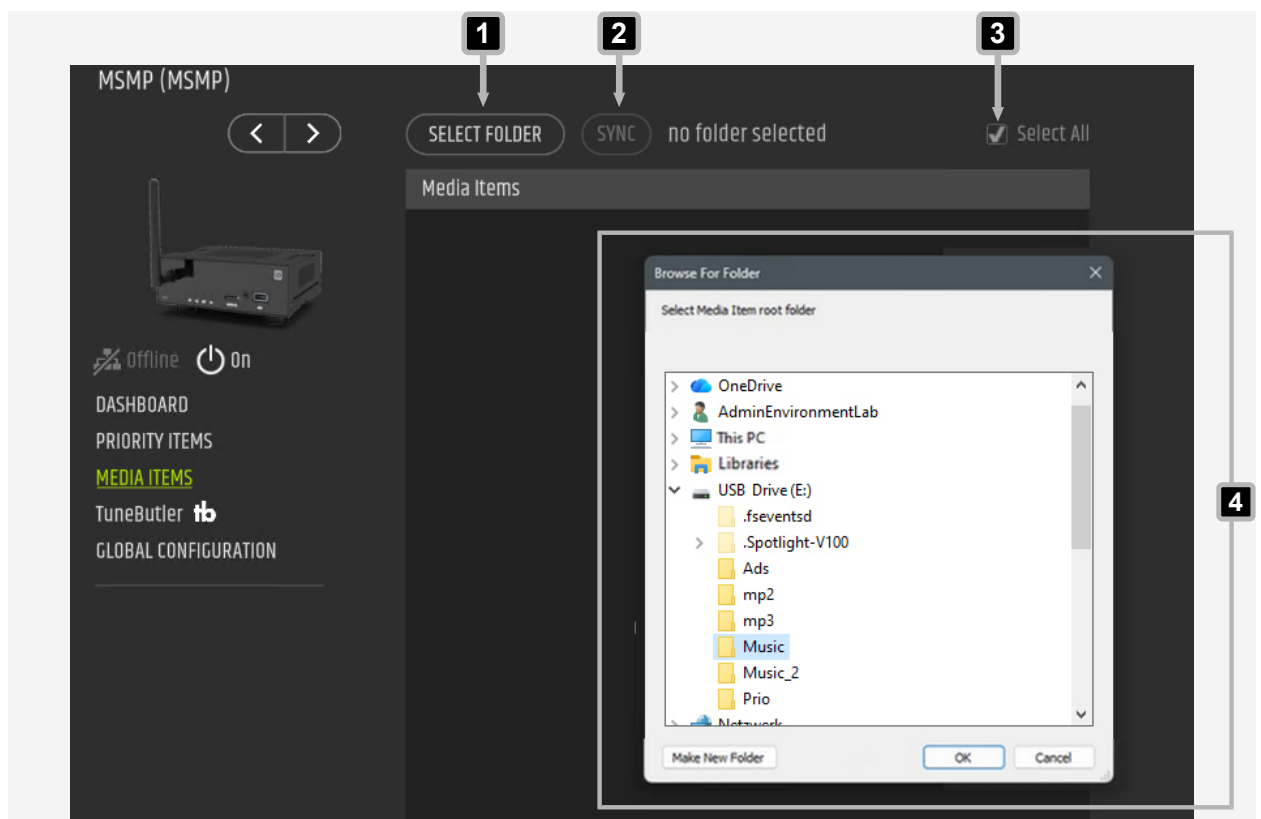
- 2 Add Media Files in **QUESTRA®**.
 - a) In the **SYSTEM** tab, choose the corresponding MSMP device.
 - b) Open the **MEDIA ITEMS** menu.
 - c) Click **ADD**.
 - d) Choose one of these file selection options: **Single Files**, to select one file at a time; **Multiple Files**, to select several files using *Ctrl+Click*; **Complete Folders**, to select entire folders including subfolders.



When folders are added, **QUESTRA®** preserves the folder hierarchy for navigation in panels. It also maps the location of all added files on the USB or MicroSD card. This mapping ensures that when the storage device is reconnected to MSMP, **QUESTRA®** recognises the exact file paths for reliable playback.

- 3 Disconnect the USB/MicroSD from the computer.
- 4 Connect the USB/MicroSD into the MSMP player.
 - ⇒ **QUESTRA®** sends play commands with file locations to the MSMP whenever a user selects a file or folder in a panel.

4.7.2.5.3 MEDIA ITEMS OVERVIEW



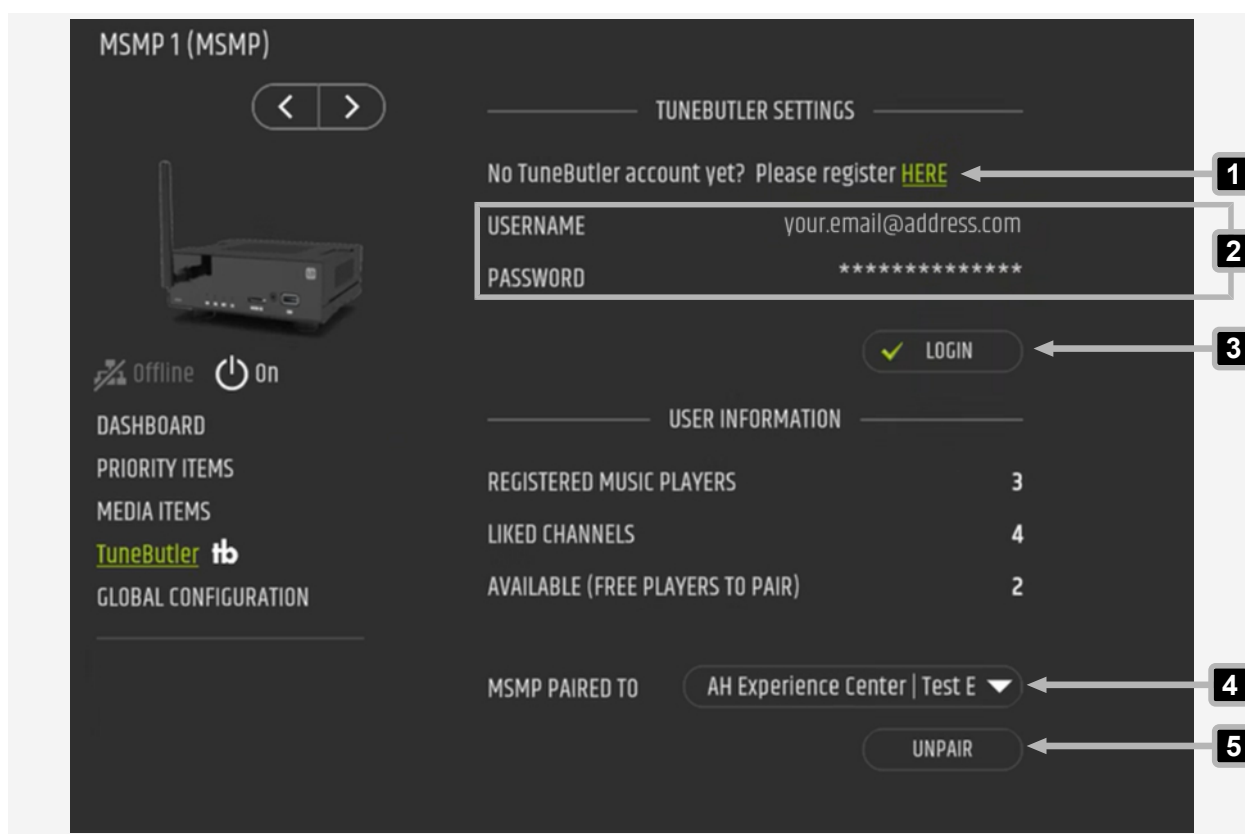
- 1 SELECT FOLDER** - opens the **Browse For Folder** window on your computer to select media items.
- 2 SYNC** - Updates **QUESTRA®** with the latest changes made on the USB stick during operation (added or deleted files).
- 3 Select All Checkbox** - Selects all inserted media items for playback
- 4 Browse For Folder window** - Displays the available folders on your computer for choosing media items.

4.7.2.6 TUNE BUTLER

4.7.2.6.1 ABOUT TUNE BUTLER

tb TuneButler is a cloud-based platform that allows you to manage background music in commercial audio applications such as restaurants, cafés, retail stores, hotels, fitness centers, and offices. With TuneButler, you can schedule and control music playlists across multiple locations—all from a single dashboard.

4.7.2.6.2 TUNEButLER OVERVIEW



- 1** **No TuneButler Account yet? Please register HERE** - Links to the **tb TuneButler** online registration page
- 2** **USERNAME & PASSWORD** - Authenticates your identity for using **tb TuneButler** by entering the login credentials assigned to you during registration for the **tb TuneButler Music for Business service**.
- 3** **LOGIN** - Enables access to **tb TuneButler** after entering username and password
- 4** **MSMP PAIRED TO** - Establishes pairing between the MSMP and the predefined registered players in **tb TuneButler**. Once you click the combo box, you will see all predefined players, including an indicator showing whether a player is already paired with another MSMP unit. When you select a free player, **QUESTRA®** sends the MSMP unit's MAC address to **tb TuneButler** to verify that it matches the MAC address previously defined for that player.
- 5** **UNPAIR** - Disconnects or unpairs the current MSMP player from the registered player in **tb TuneButler** account. Once this device is unpaired the number of available (free players to pair) will increase in one unit.

4.7.2.6.3 MAKING TUNEBUTLER AVAILABLE IN QUESTRA®

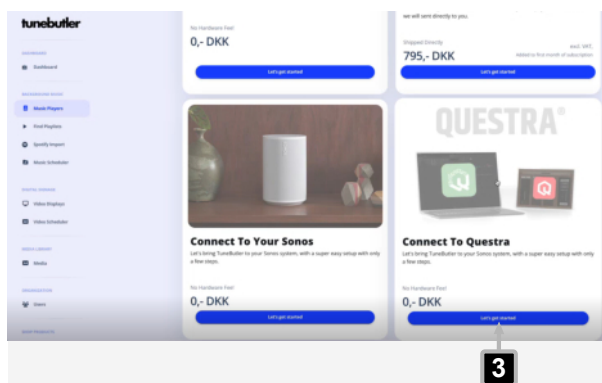


- ✓ Your MSMP is available in the network
- ✓ Your MSMP is paired
- ✓ The expanded view of your MSMPs is open

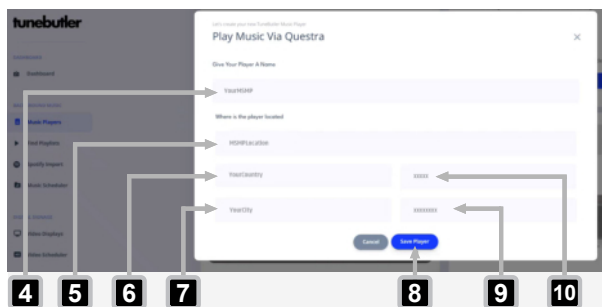
- 1 Choose the **TuneButler** **tb** submenu **1**.
- 2 Click **HERE** **2** to access the **tb** TuneButler on-line registration page.

If you are already registered with

 **TuneButler**, please enter your **USERNAME** and **PASSWORD**, then click **Login** to access the TuneButler interface.



- 3** In the **Connect to QUESTRA®** window, click **Let's get started** **3** to access the next page, where you can connect to Qestra®.

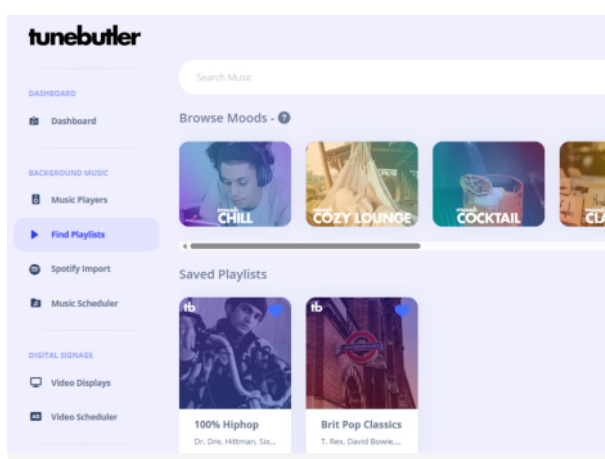
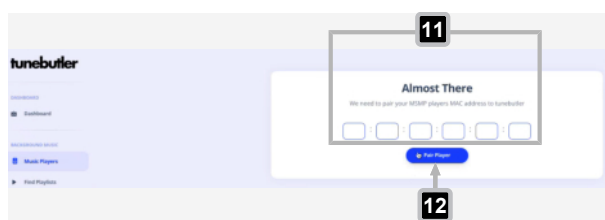


- 4 Enter the required information:
 - a) Enter your player's name. 4
 - b) Enter the specific location, such as a hotel, venue, or building. 5
 - c) From the drop-down menu, choose the country where the player is located. 6
 - d) Enter the city where the player is located. 8
 - e) Enter the VAT-number. 9
 - f) Enter the ZIP Code corresponding to the player's location within the selected country. 10

- 5 Click **Save Player** to create your player and access the next page. **8**

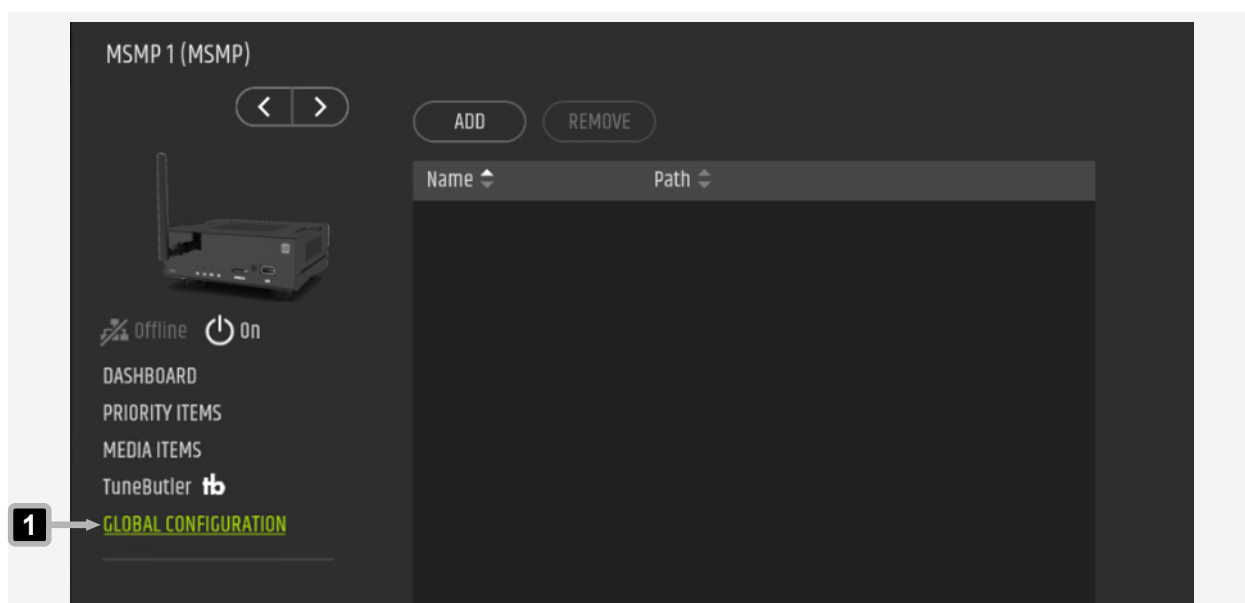
⇒ A confirmation message appears:

Player is created.



- 6 Enter your MAC address **11**.
- 7 Click **Pair Player** to start the pairing process **12**.
⇒ A confirmation message appears:
Player is paired.
- ⇒ You can find the player under the **Music Players** menu item.
- 8 In the ► **Find Playlists** menu, navigate through all available playlists and moods.
- 9 Save the playlists you want to allocate to a respective user as favourites.
- 10 Open the Organisation/User menu and select the user account you want to manage.
- 11 Click the **Allocate Playlist** button to display all favourite playlists.
- 12 Enable the playlists that should be visible for the selected user in **QUESTRA®**.
- ✓ The expanded view of your Panel is open
- 13 Choose **+ ADD ELEMENT 12** to open the **Select Element** window.
- 14 In the **Select Element** window, left-click on the **Media Item Selector 13** element.
⇒ The **Media Item Selector** element attaches to your mouse cursor.
- 15 Move the element to the canvas.
- 16 Click to drop the selected element to the canvas.
- 17 Click **tb TuneButler 14** to open the **TuneButler** interface.
- 18 Browse and select a playlist.
- 19 Click on the desired playlist to start the playback immediately.

4.7.2.7 GLOBAL CONFIGURATION OVERVIEW



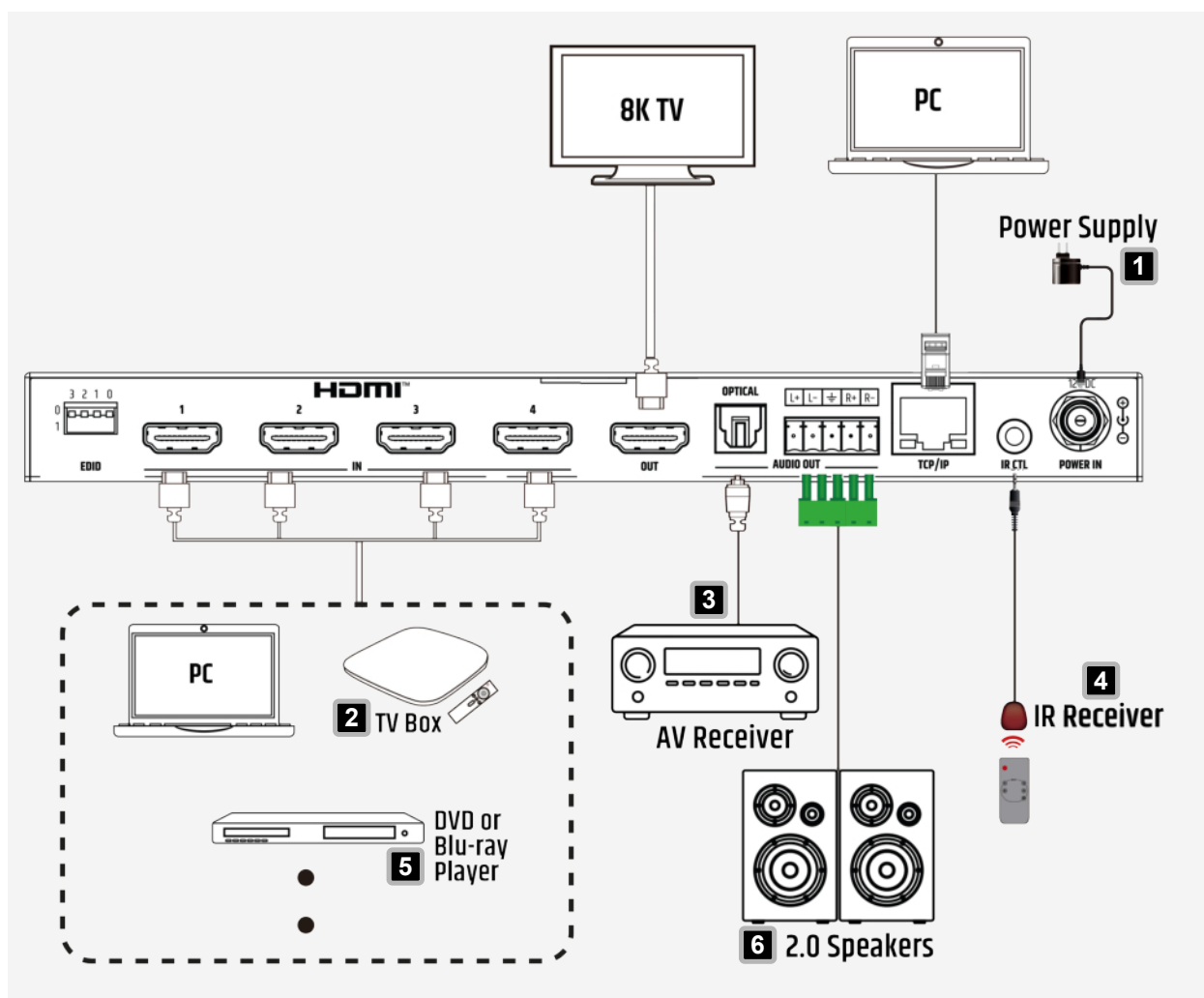
1

GLOBAL CONFIGURATIONS - Opens the **LD MSMP** website to operate the MSMP via a web browser

Find more information in the MSMP user manual.

4.7.3 TIVA® SWAV 41

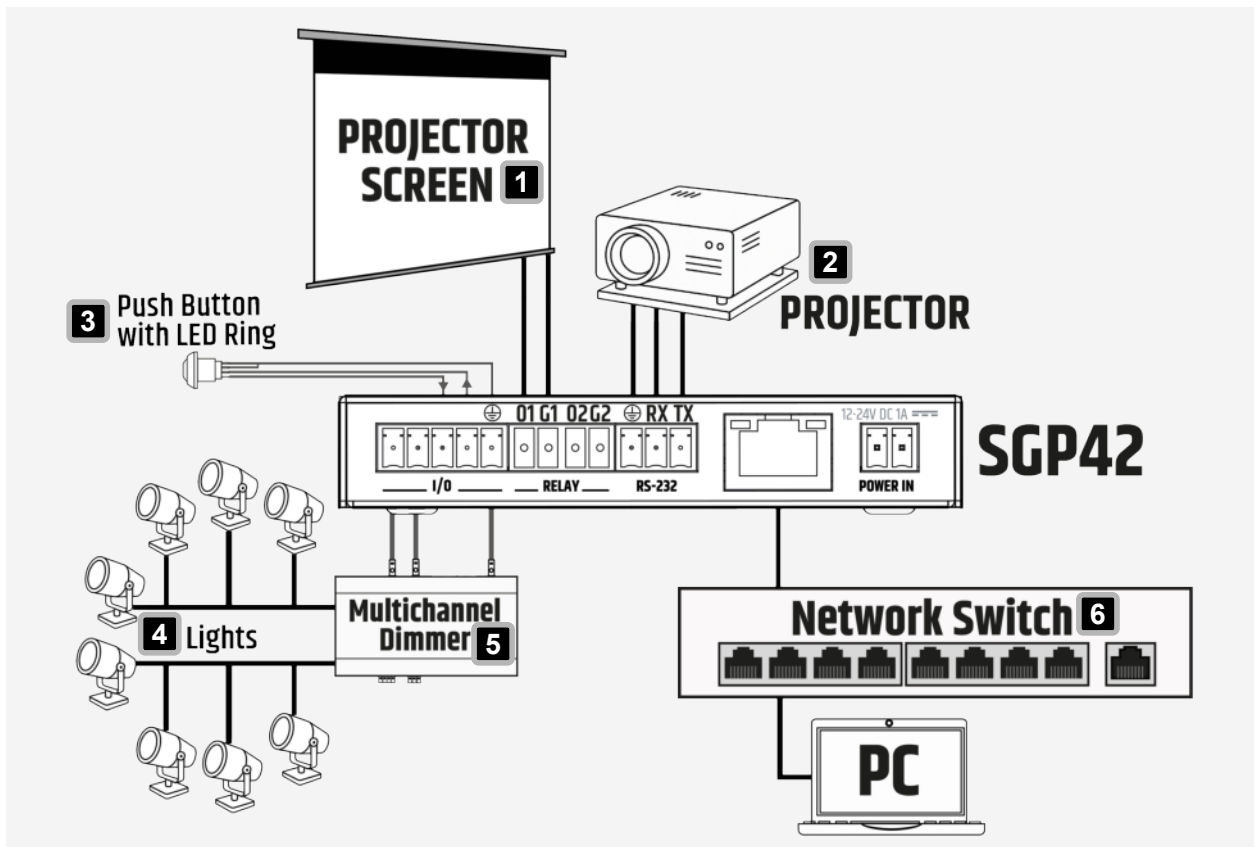
4.7.3.1 USE CASE



- 1** Power Supply
- 2** TV Box
- 3** AV Receiver
- 4** IR Receiver
- 5** DVD or Blu-ray Player
- 6** Active Speakers

4.7.4 TIVA® SGP 42

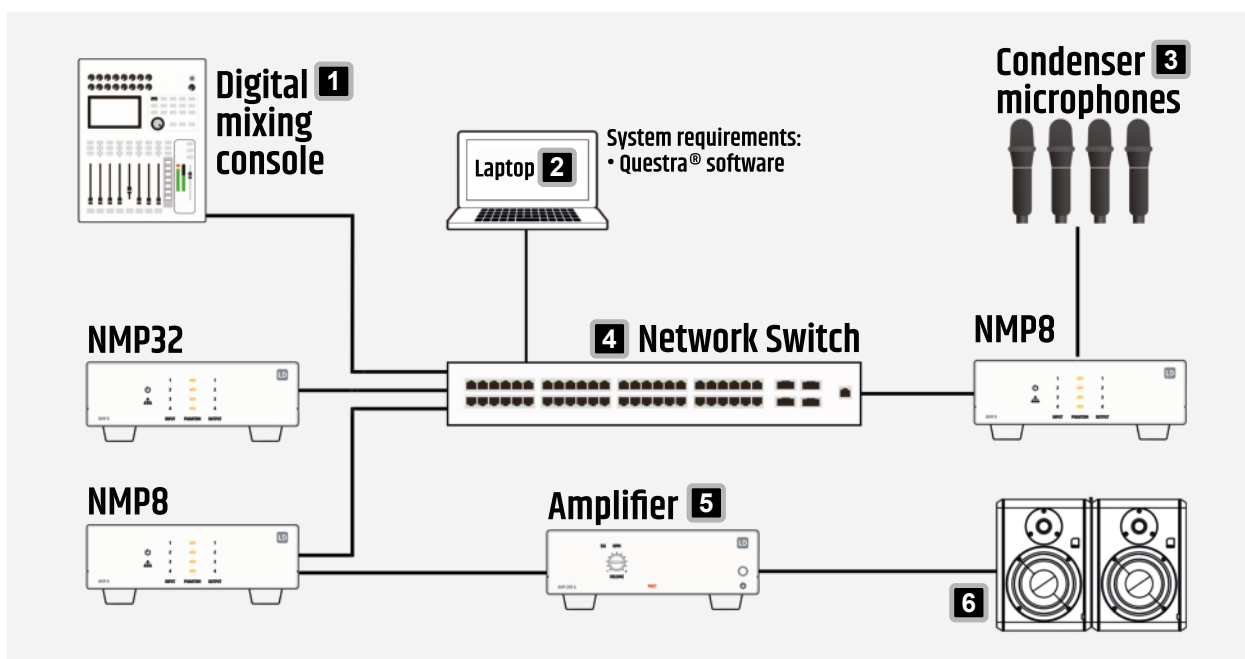
4.7.4.1 USE CASE



- 1** Projector Screen
- 2** Projector
- 3** LED Ring Button
- 4** Lights
- 5** Multichannel Dimmer
- 6** Network Switch

4.7.5 TICA® NMP 8 & NMP 32

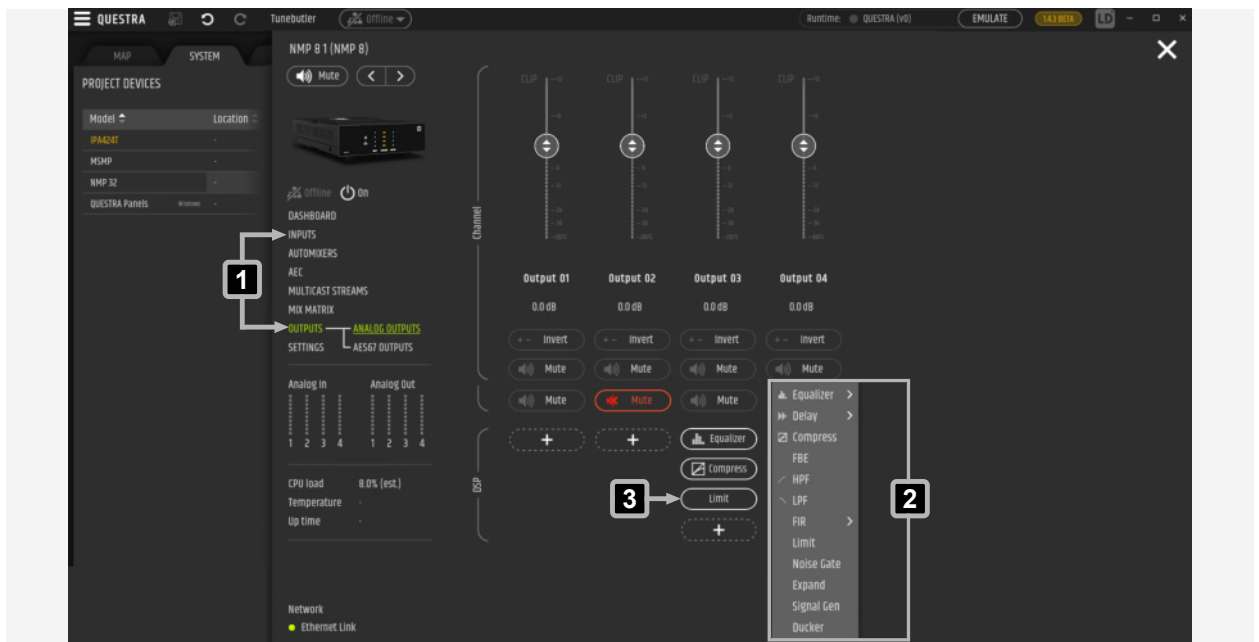
4.7.5.1 USE CASE



- 1** Digital mixing console
- 2** Laptop
System requirements:
• QUESTRA® software
- 3** Condenser microphones
- 4** Network switch
- 5** Amplifier
- 6** 2.0 Speaker

4.7.5.2 ADDING A DSP ELEMENT TO THE NMP8

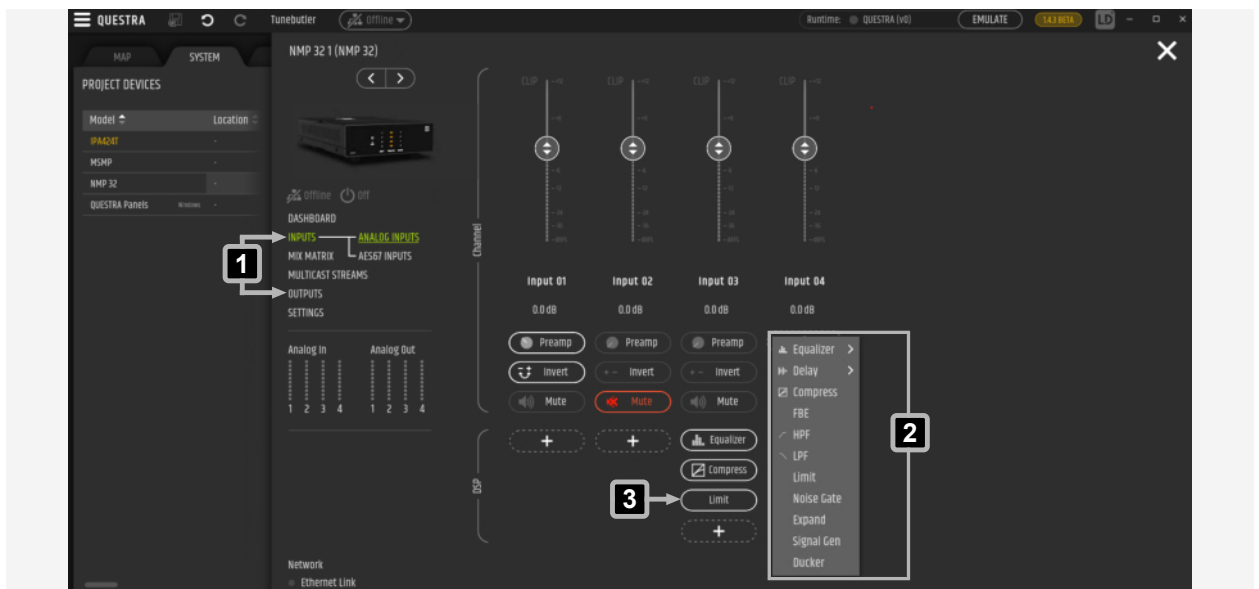
- ✓ You have opened the expanded view of your NMP8.



- 1 In the **NMP8 INPUTS** or **OUTPUTS** submenu **1**, click **+** to open the DSP element context menu.
- 2 In the context menu, click the desired entry (DSP element) to select it **2**.
 ⇒ The selected DSP element appears at the bottom of the list **3**.

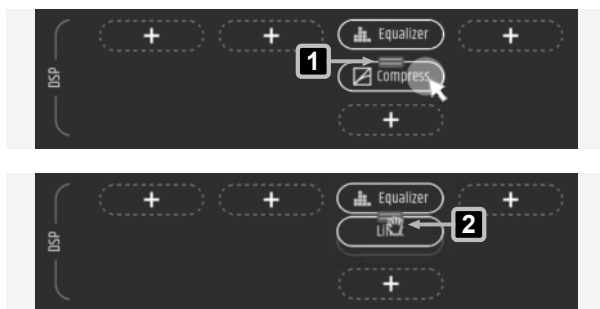
4.7.5.3 ADDING A DSP ELEMENT TO THE NMP32

- ✓ You have opened the expanded view of your NMP32.

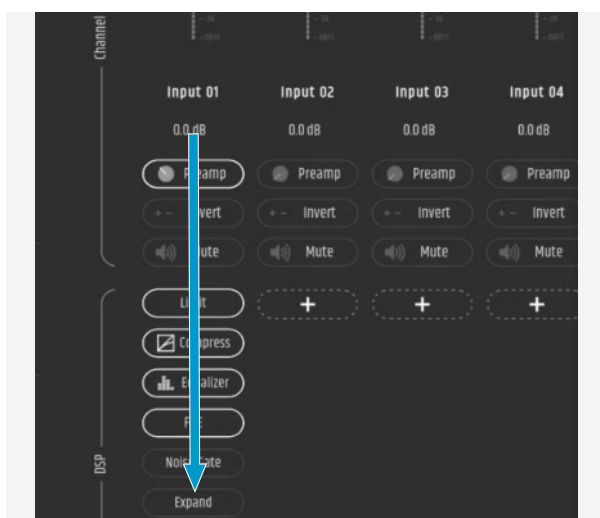


- 1 In the **NMP32 INPUTS** or **OUTPUTS** submenu **1**, click **+** to open the DSP element context menu.
- 2 In the context menu, click the desired entry (DSP element) to select it **2**.
 ⇒ The selected DSP element appears at the bottom of the list **3**.

4.7.5.4 REARRANGING DSP ELEMENTS (SIGNAL PROCESSING ADJUSTMENT)



- 1 Hover the cursor over the DSP element you want to adjust.
⇒ An icon appears **1**,
- 2 Click and hold the icon.
⇒ A hand cursor appears **2**, indicating that you can drag the DSP element.
- 3 Move the DSP element up or down to change its position.



The audio signal passes through the elements from top to bottom, so their order directly affects processing. When you change the position of DSP elements, you modify the audio signal flow—not just the visual arrangement.

4.7.5.5 EQUALIZER OVERVIEW NMP



- 1a** **HPF (High-Pass Filter)** - Cuts low frequencies below the selected cutoff. When added, the **HPF** is displayed immediately in the Equalizer view **1b**.
- 2a** **LPF (Low-Pass Filter)** - Cuts high frequencies above the selected cutoff. When added, the **LPF** is displayed immediately in the Equalizer view **2b**.
- 3** **+** - Adds a new DSP Element.

4.7.5.6 AUTOMIXERS GAIN SHARING MODE

4.7.5.6.1 ABOUT GAIN SHARING MODE

Gain Sharing mode provides a continuous and adaptive method of balancing multiple microphones. It redistributes gain based on detected speech activity, improving clarity and reducing noise without the abrupt on/off behavior of gating systems.

4.7.5.6.2 AUTOMIXERS OVERVIEW (GAIN SHARING MODE)



- 1** **Automixer Drop-down Menu** - Selects the active automixer instance
- 2** **REMOVE Button** - Removes the active automixer block

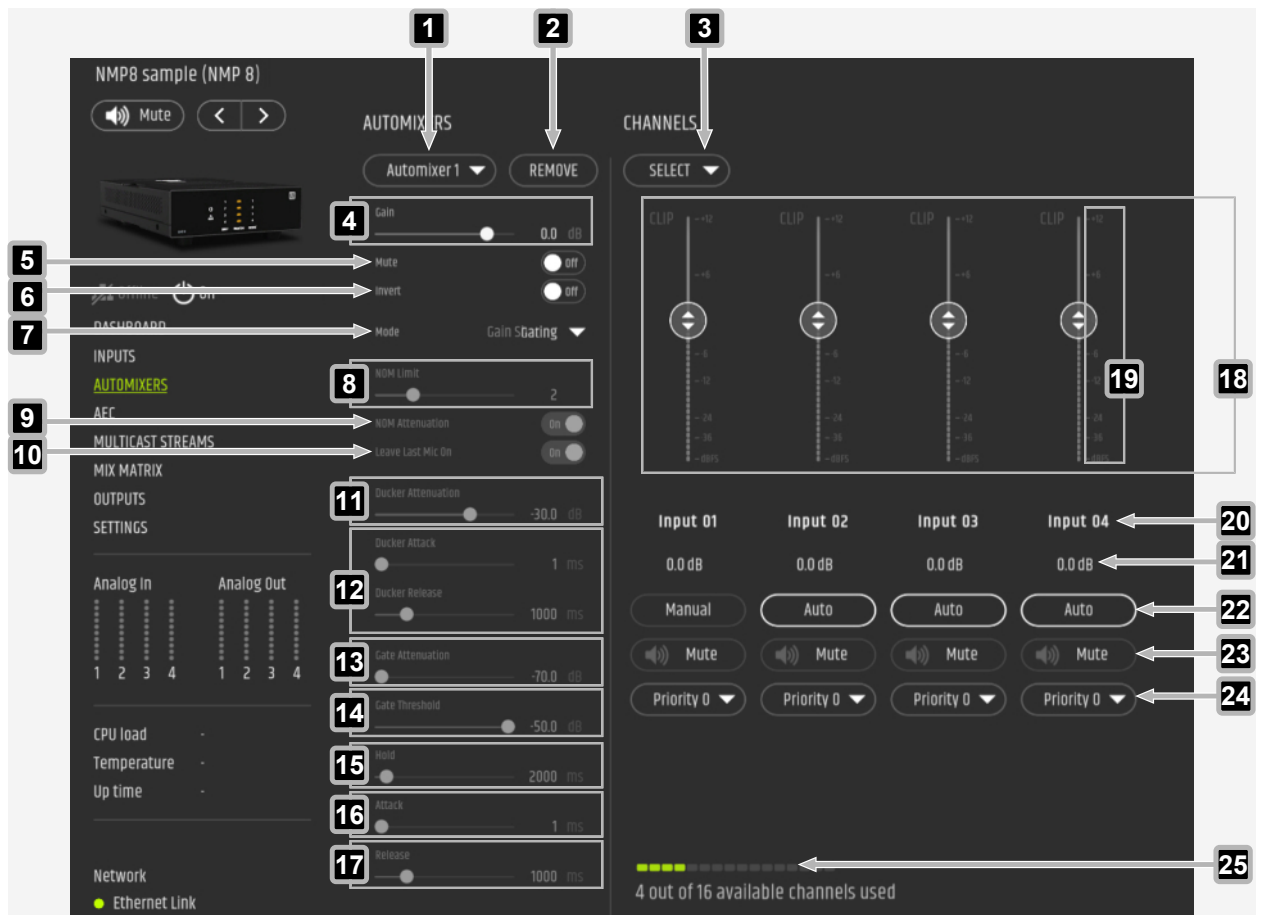
- 3 CHANNELS SELECT Drop-down Menu** – Selects the input channels to include in the Automixer.
When adding an Automixer in **QUESTRA®**, a DSP block with capacity for 4 channels is automatically allocated. Selecting more than 4 channels automatically adds an additional 4-channel DSP block. After deployment, DSP block allocation is fixed; to change assignments, go offline, adjust selections, and redeploy.
- 4 Gain Slider** - Controls the overall output gain of the automixer block
- 5 Mute**  - Toggles the automixer on/off
- 6 Invert**  - Toggles the polarity inversion of the automixer output
- 7 Mode Drop-down Menu** - Selects the automixing mode (**Gating, Gain Sharing**)
- 8 Input Gain Fader** - Controls the level feeding into the automixer algorithm
- 9 Meter Indicator** - Displays the processed signal level in dBFS after the Gain Sharing algorithm has applied gain redistribution. This makes sure the meter reflects the channel's actual contribution to the mix without referencing any post-fade mute stage.
- 10 Channel Name** - Displays the channel label
- 11 Level Readout** - Displays the fader value
- 12 Auto / Manual Button** - Switches the channel between automatic and manual operation.
 - In **Auto** mode, the channel participates in Gain Sharing and its gain is adjusted automatically
 - In **Manual** mode, the channel is excluded from the algorithm while audio passes through unchanged
- 13 Mute Button** - Mutes the channel at the input stage and excludes it from the automixer algorithm.
- 14 Priority Drop-down Menu** - Sets the relative priority for ducking behavior. Lower numbers mean higher priority.
- 15 Channel Usage Indicator** – Displays how many channels are currently assigned relative to the available DSP block capacity

4.7.5.7 AUTOMIXERS GATING MODE

4.7.5.7.1 ABOUT GATING MODE

Gating mode uses thresholds and timing parameters to determine when microphones open or close. This mode is effective in environments where strict control of microphone activity is preferred.

4.7.5.7.2 AUTOMIXERS OVERVIEW (GATING MODE)



1 Automixer Drop-down Menu - Selects the active automixer instance

2 REMOVE Button - Removes the active automixer block

3 CHANNELS SELECT Drop-down Menu - Selects the input channels to include in the Automixer.

When adding an Automixer in **QUESTRA®**, a DSP block with capacity for 4 channels is automatically allocated. Selecting more than 4 channels automatically adds an additional 4-channel DSP block. After deployment, DSP block allocation is fixed; to change assignments, go offline, adjust selections, and redeploy.

4 Gain Slider - Controls the overall output gain of the automixer block

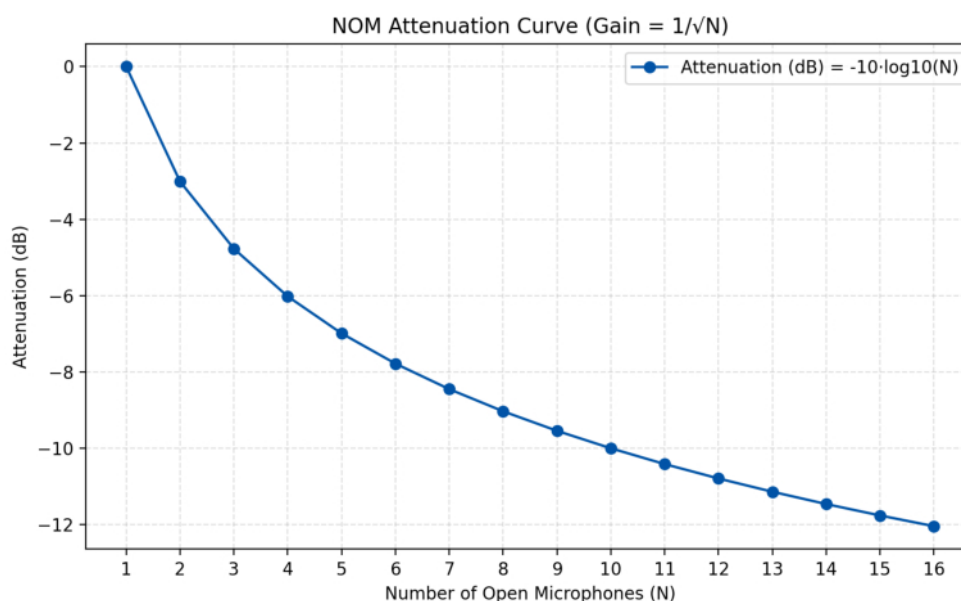
5 Mute ☐ On ☐ Off - Toggles the automixer on/off

6 Invert ☐ On ☐ Off - Toggles the polarity inversion of the automixer output

7 Mode Drop-down Menu - Selects the automixing mode (**Gating**, **Gain Sharing**)

8 NOM Limit (Number of Open Microphones Limit) Slider - Defines the maximum number of microphones that may be open simultaneously. If more microphones attempt to open than the configured **NOM Limit**, the automixer evaluates all channels every 1 ms using a real-time competition algorithm: channels with higher priority are selected first; if priorities are equal, the channel with the lower input index is chosen. Additional microphones are only admitted to the mix when one of the currently active channels becomes inactive.

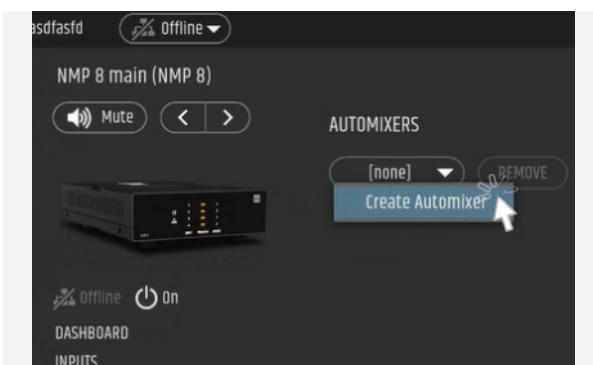
- 9 NOM Attenuation** ☒ - Enables the automixer to adjust the bus gain according to the number of open microphones. The applied gain follows $1/\sqrt{N}$ (equivalently $-10 \cdot \log_{10}(N)$ dB). This maintains a consistent perceived mix level as additional talkers become active and helps prevent overload.



- 10 Leave Last Mic On** ☒ - Keeps at least one microphone open at all times. If all active microphones stop receiving speech, the automixer prevents full closure by keeping the most recently active channel open. This avoids complete silence in the mix, maintains consistent room ambience, and prevents abrupt noise-floor changes. It is especially useful in conferencing, broadcast, and panel setups to avoid unwanted “dead air.”
- 11 Ducker Attenuation Slider** - Sets the amount of attenuation applied to non-priority channels when priority channels become active.
- 12 Ducker Attack / Release Sliders** - Control how quickly the ducker applies and releases attenuation in response to priority-channel activity.
- **Attack** - Sets the speed at which ducking engages after a priority channel becomes active.
 - **Release** - Sets the speed at which the attenuation on non-priority channels is removed after the priority channel becomes inactive.
- 13 Gate Attenuation Slider** - Sets the level of attenuation applied to microphones when the gate is closed.
- 14 Gate Threshold Slider** - Sets the input level required for a microphone to be considered active.
- 15 Hold Slider** - Sets the minimum time a microphone remains open after its level drops below the gate threshold.
- 16 Attack Slider** - Sets the time it takes for a microphone to fully open once the input exceeds the threshold.

- 17 Release Slider** – Sets the time it takes for a microphone to begin closing after the **Hold** period has fully elapsed. The release phase only starts once the configured **Hold** time is complete, ensuring smooth and predictable microphone deactivation behavior.
- 18 Input Gain Fader** - Controls the level feeding into the automixer algorithm
- 19 Meter Indicator** - Displays the processed signal level in dBFS after the Gain Sharing algorithm has applied gain redistribution. This makes sure the meter reflects the channel's actual contribution to the mix without referencing any post-fade mute stage.
- 20 Channel Name** - Displays the channel label
- 21 Level Readout** - Displays the fader value
- 22 Auto / Manual Button** - Switches the channel between automatic and manual operation.
 - In **Auto** mode, the channel participates in Gain Sharing and its gain is adjusted automatically
 - In **Manual** mode, the channel is excluded from the algorithm while audio passes through unchanged
- 23 Mute Button** - Mutes the channel at the input stage and excludes it from the automixer algorithm.
- 24 Priority Drop-down Menu** - Adjusts a channel's weighting factor within the gain-sharing automixer, determining its relative contribution to the shared gain distribution.
 A difference of 1 priority step corresponds to a 2 dB change in weighting.
 Priority 5 represents the 0 dB reference point. Higher priorities apply a positive weight, and lower priorities apply a negative weight, influencing the gain the channel receives relative to others.
 The automixer combines real-time signal energy and the priority setting to calculate each channel's effective weight. Channels with higher priority receive a larger share of the available gain, allowing integrators to favor key participants, such as presenter microphone without disabling other contributors.
- 25 Channel Usage Indicator** – Displays how many channels are currently assigned relative to the available DSP block capacity

4.7.5.8 ADDING AN AUTOMIXER



✓ **Offline** mode is activated

- 1** Click the **AUTOMIXERS** drop-down menu to open the **Create Automixer** submenu.
- 2** Click **Create Automixer**.
 - ⇒ A new Automixer module is inserted.
 - ⇒ One DSP block (4 channels) for processing capacity is reserved.

4.7.5.9 CONFIGURING AN AUTOMIXER

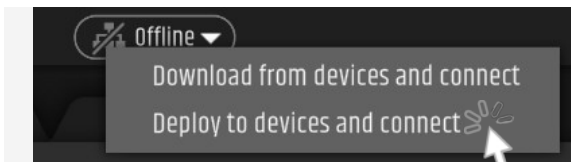


- 1 Click the **Mode** drop-down menu if you want to switch to gating mode.
- 2 Select **Gating** from the list.

i By default, the automixer runs in **Gain Sharing** mode.



- 3 In the **CHANNEL SELECT** drop-down menu, select the four input channels you want to assign to this automixer block.
 - ⇒ The selected channels are automatically routed into the automixer.
 - ⇒ The selected channels are displayed as an active channel strip in the interface.



- 4 In the menu bar, click **Offline** to open the **Online** connection options.
- 5 From the drop-down menu, select **Deploy to devices and connect**.

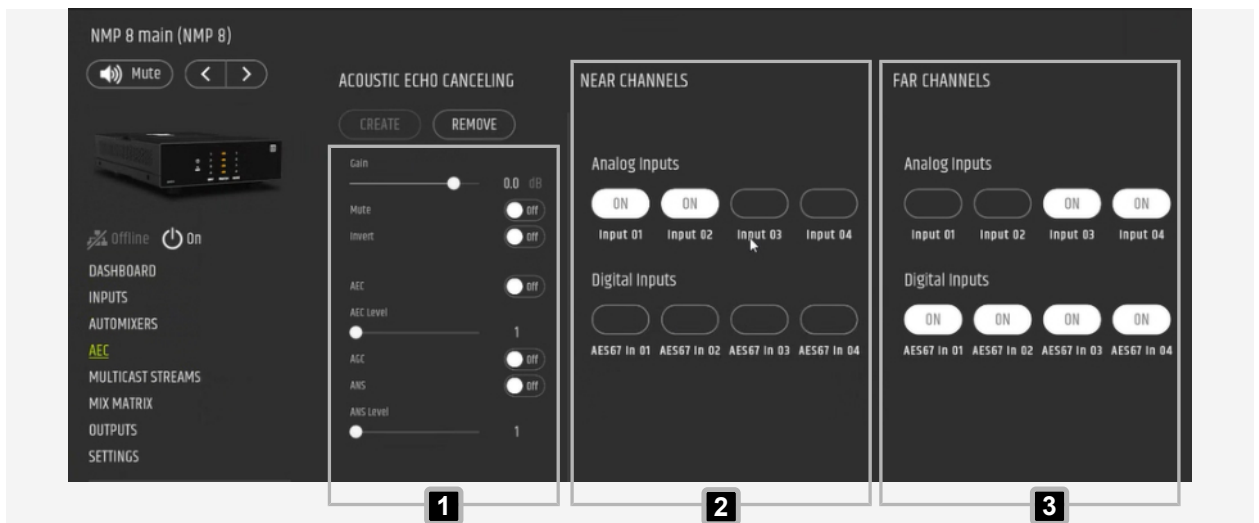


Changes such as deleting, adding, or configuring blocks can only be made in **Offline** mode. After deployment, these blocks become fixed and any modifications must be redeployed.



When you add a fifth channel **5**, a new four-channel placeholder **1 - 4** appears.

4.7.5.10 AEC (ACOUSTIC ECHO CANCELLING) OVERVIEW (ONLY NMP8)



- 1 AEC Control Panel** - Adjusts the Acoustic Echo Cancellation settings.
- 2 NEAR CHANNELS area** - Selects the channels for which you want to adjust the acoustic echo cancellation settings.
- 3 FAR CHANNELS area** - Selects the channels for which you want to adjust the acoustic echo cancellation settings.

4.7.5.11 ABOUT MULTICAST

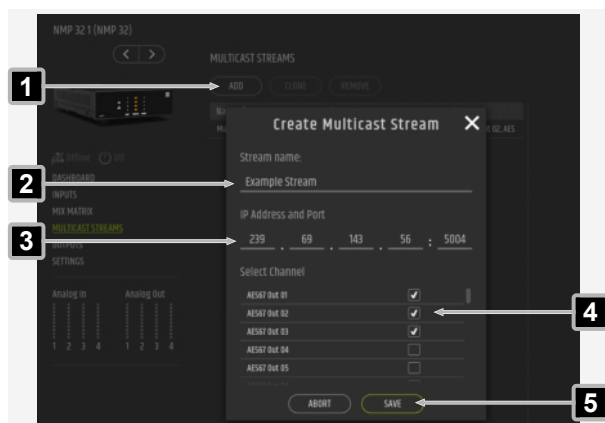
A multicast stream is a network-based transmission method in which a single data stream is delivered from one source to multiple designated receivers simultaneously. This minimises overall network traffic and provides consistent, synchronised signal distribution across all subscribed devices.

In mixed Dante and AES67 environments, interoperability depends on AES67 multicast streaming: Dante devices with AES67 support can send and receive AES67 multicast flows to and from third-party AES67 devices, whereas AES67 unicast is not supported. Therefore, AES67 streams must always be configured as multicast when bridging Dante with non-Dante AES67 equipment.

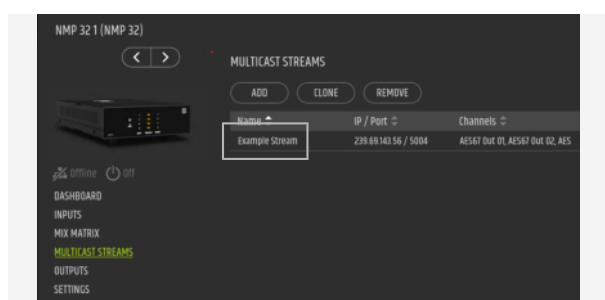
Deployment notes

- Use Dante Controller's AES67 Config tools to create AES67 multicast flows and make sure that multicast addresses comply with the ranges supported by the receiving devices (many Dante chipsets expect addresses in the 239.x/16 range).
- Confirm that the network infrastructure properly supports multicast (IGMP snooping and a querier enabled) to prevent unwanted flooding and to maintain deterministic audio delivery.

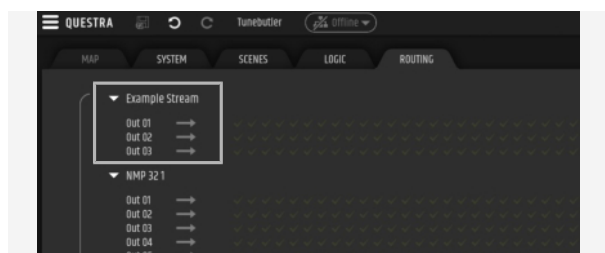
4.7.5.11.1 ADDING A MULTICAST STREAM



- 1 Click **ADD** **1** to open the **Create Multicast Stream** window.
- 2 Enter a name of your choice **2**.
- 3 Adjust the multicast IP address and port if necessary **3** —the system generates valid AES67-compliant defaults automatically, so these values usually don't require modification.
- 4 Select the desired AES67 channels by clicking the corresponding checkboxes **4**.
- 5 Click **SAVE** **5** to create the multicast stream



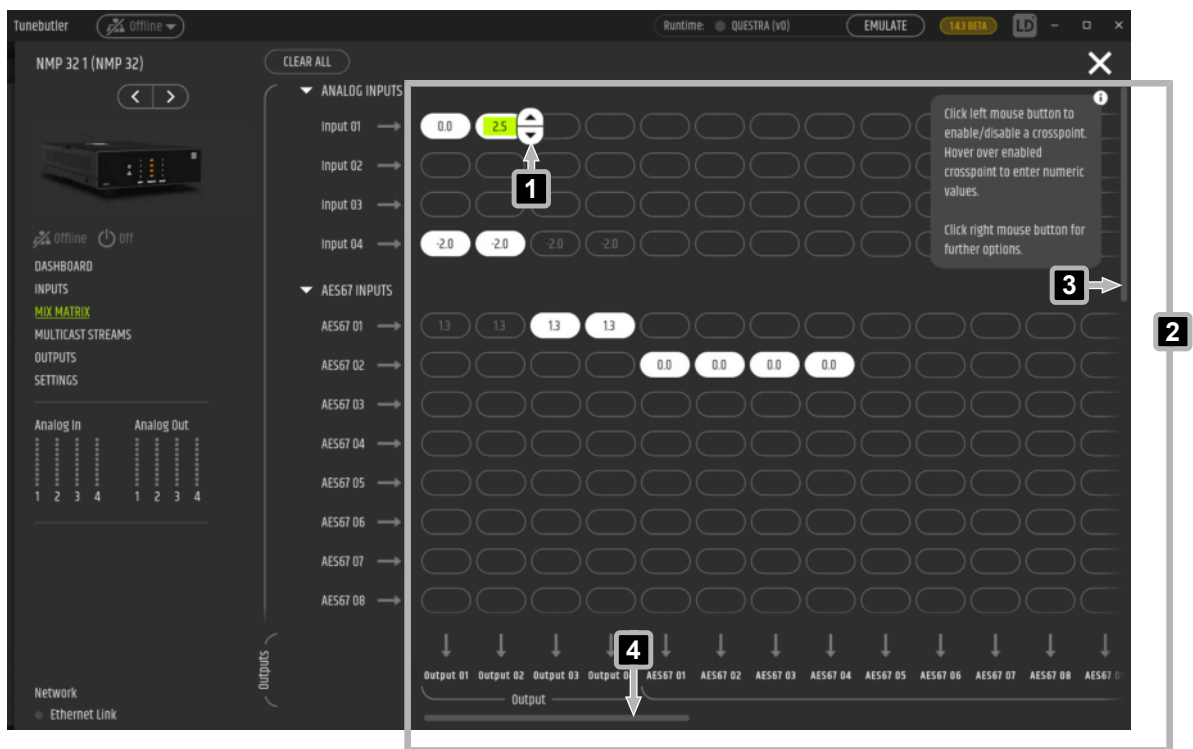
⇒ The created stream appears in the **MULTICAST STREAMS** list.



⇒ The created stream appears in the **ROUTING** tab and is available for routing to the outputs.

⇒ The multicast stream appears in the Dante Controller software, allowing it to be subscribed to by AES67-enabled Dante devices.

4.7.5.12 MIX MATRIX OVERVIEW NMP

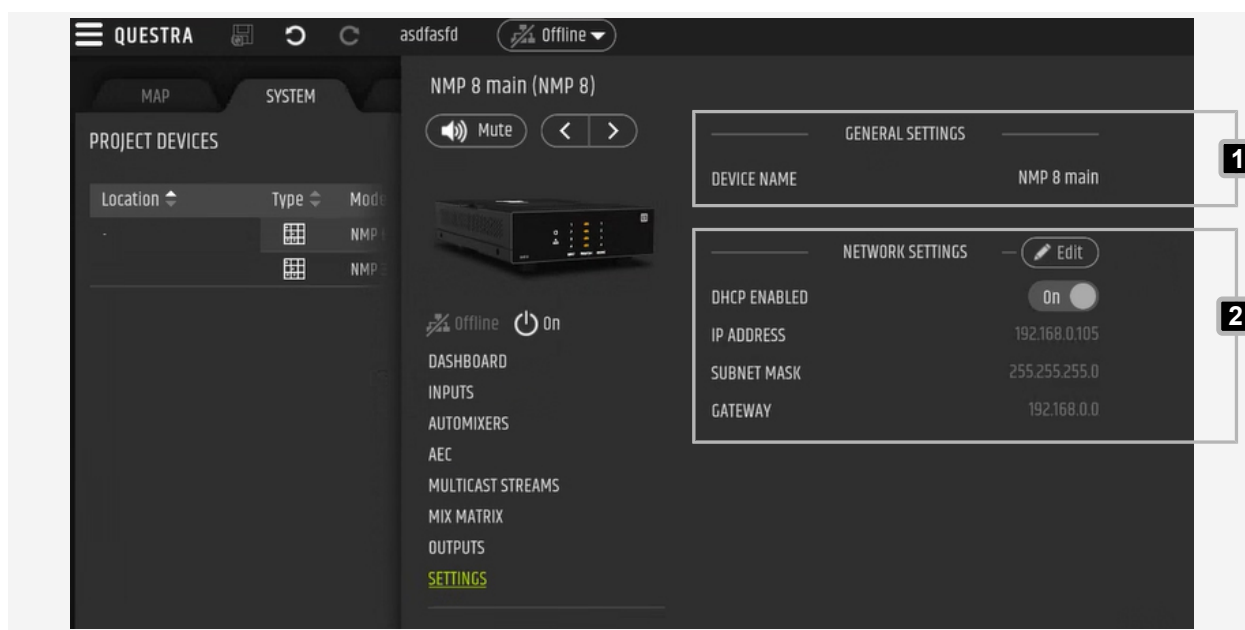


- 1** **Crosspoint ▲/▼ buttons** – Adjusts gain values by hovering over an enabled crosspoint. The ▲/▼ buttons appear for incremental gain changes, and the gain field highlights in green to allow direct numeric entry.
- 2** **MIX MATRIX Crosspoint Area** - Establishes connections between inputs and outputs
- 3** **Scroll bar** – Scrolls through Crosspoints 1 to 28 in the vertical direction.
- 4** **Scroll bar** – Scrolls through Crosspoints 1 to 28 in the horizontal direction.



Refer to the **QUESTRA®** User Manual for further information on how to operate the mix matrix.

4.7.5.13 NETWORK SETTINGS OVERVIEW



1 **GENERAL SETTINGS Section** - Displays the system settings

2 **NETWORK SETTINGS Section** - Assigns network settings

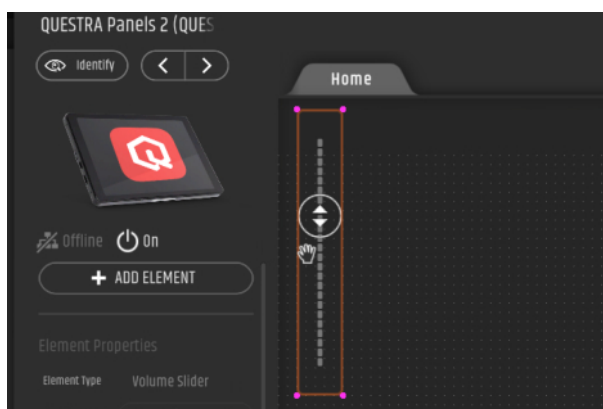
4.7.6 PANELS

4.7.6.1 ELEMENTS

4.7.6.1.1 ABOUT ELEMENTS

Elements are graphical elements of the general user interface (GUI). You can associate elements with functions.

4.7.6.1.2 ADDING AND POSITIONING ELEMENTS IN QUESTRA® PANELS



⇒ The selected element attaches to your mouse cursor.

5 Move the selected element to the canvas.

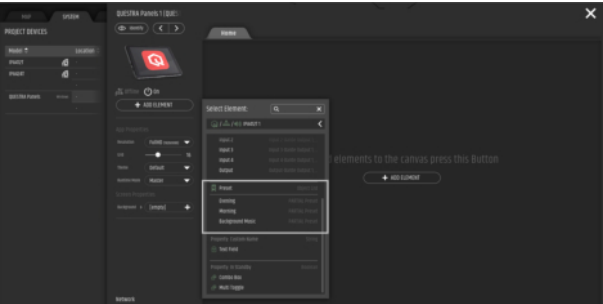
- 1** In the **PROJECT DEVICES** list, choose the corresponding panel to open the compact view.
- 2** In the compact view, choose **<** to open the expanded view.
- 3** In the expanded view, choose **+ ADD ELEMENT** to open the **Select Element** window.
- 4** In the **Select Element** window, left-click the element you want to add.



A red frame indicates that the element cannot be placed here.
A blue frame indicates that the element can be placed in this position.

6 Click to drop the selected element to the canvas.

4.7.6.1.3 LOADING A PRESET VIA QUESTRA® PANELS



1 Drop the chosen preset on the canvas.



The preset is now displayed as a trigger button that activates the preset.

4.7.6.1.4 DEPLOYING ELEMENTS TO QUESTRA® PANELS AND DEVICES



CAUTION

Sudden volume changes

- Risk of hearing damage
- a. Do not overwrite the current settings.
 - b. Download the settings from the devices to the software to avoid an excessive increase in volume due to arbitrary settings.



- 1 Choose **Offline** to open the context menu.
- 2 Select **Deploy to devices and connect** to open the **DEPLOY SELECTION** window.
- 3 On the right side of the **DEPLOY SELECTION** window, under **Deploy**, select one or multiple connected devices.
- 4 Choose **CONNECT** to start the deployment.



After successful deployment, Qestra® is not required to be online. The QTP will run the project.



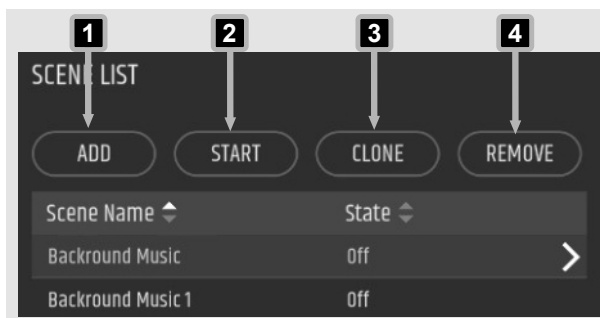
- ⇒ The deployment is complete.
- ⇒ The QTP displays the configured control elements.

4.8 SCENES

4.8.1 ABOUT SCENES

Scenes trigger actions and presets across devices and may include an internal timer for scheduled operations.

4.8.2 SCENE LIST FUNCTIONS



- 1** **ADD** - Adds a new Scene
- 2** **START/STOP** - Starts/stops the runtime of the selected scene
- 3** **CLONE** - Duplicates the selected scene
- 4** **REMOVE** - Removes the selected scene

4.8.2.1 ADDING A SCENE

- 1** In the **SCENE LIST**, click on the **ADD** button to create a scene.

4.8.2.2 STARTING A SCENE ONLINE

✓ **QUESTRA®** operates in online status.

- 1** In the **SCENE LIST**, select a scene.
- 2** Click **START**.
 - ⇒ The scene has started and is running through. Meanwhile the button labelling changes to **STOP**.



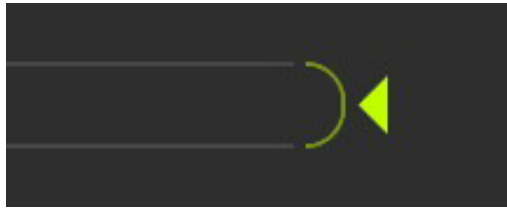
Click **STOP** to interrupt the sequence of a scene, especially if start times have been defined, click on the **STOP** button.

4.8.2.3 STARTING A SCENE OFFLINE



It is also possible to start scenes in **offline** mode. Since runtime is required for this, it can be initiated using the **EMULATE** button.

- 1** In the **SCENE LIST**, select a scene.
- 2** In the menu ribbon, click **EMULATE**.
 - ⇒ A message **RUNTIME WILL BE ACTIVATED** appears.
- 3** Click **OK** to activate the runtime.
- 4** In the **SCENE LIST** area, click on the **START** button.
 - ⇒ The scene has started and is running through.
 - ⇒ The button labeling changes to **STOP**.



This graphic, located on the right side in the listing area of the **SCENE CONTENT**, indicates which line of the scene is being played back.



Click **STOP** to interrupt the sequence of a scene, especially if start times have been defined, click on the **STOP** button .

4.8.2.4 CLONING A SCENE

- 1 In the **SCENE LIST**, select a scene.
- 2 Click **CLONE** to duplicate the selected scene.

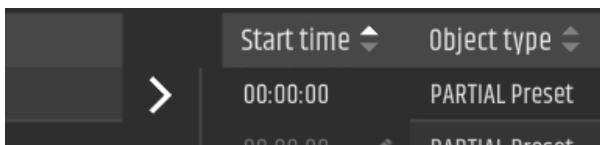
4.8.2.5 REMOVING A SCENE

- 1 In the **SCENE LIST**, select a scene.
- 2 Click **REMOVE** to remove the selected scene.

4.8.3 ADDING SCENE CONTENT

- 1 In the **SCENE CONTENT** area, click **ADD**.
⇒ The **Select Property** window appears.
- 2 Select a property from the list.

4.8.4 SETTING THE START TIME



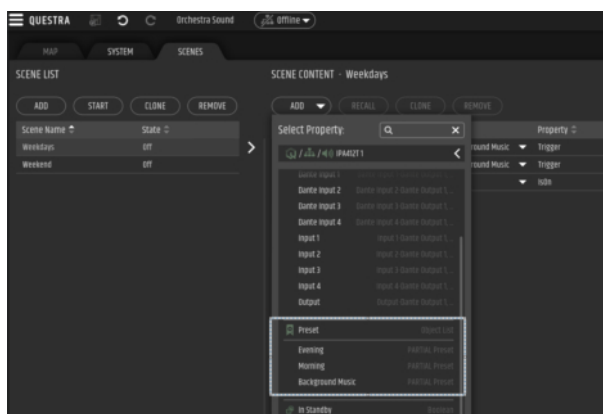
- 1 Click in the time input field.
- 2 Enter a start time.



Scene sections are sorted in ascending order and automatically reposition after a time change.

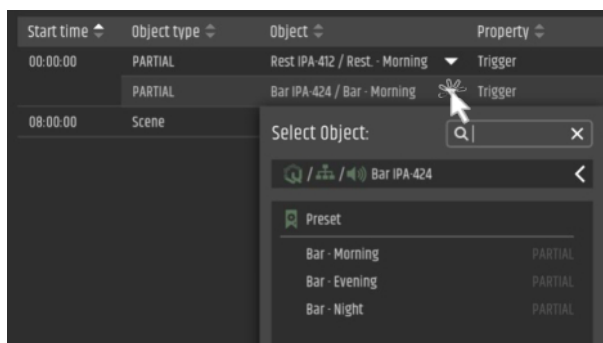
4.8.5 RECALLING A SCENE

4.8.6 LOADING A PRESET VIA SCENES



- 1 Insert a presets when creating a scene

4.8.7 SELECT OBJECT WINDOW



The **Select Object** window locates, select, and reassign values similar to the Apple Finder or the Windows Explorer.

4.9 LOGIC (TBA)

4.9.1 ABOUT LOGIC

LOGIC uses flow-based programming to set up complex structures and dependencies. Each node functions as a data processor. Some nodes can receive and/or send data. QUESTRA® includes a collection of logic and command nodes.



Hovering over reveals QUESTRA® tooltips.

4.9.2 ADDING ENVIRONMENT VARIABLES

- 1 In the **ENVIRONMENT VARIABLES** area choose **ADD** to add a variable.

⇒ A new entry appears in the list with a default variable name and the default **Boolean** variable type.



We recommend to change the default variable name to a descriptive one to improve code clarity.

- 2 In the **Type** drop-down menu, choose the corresponding variable type.



The value field adapts to the selected variable type. For example, if the type is Trigger, the value is Trigger; if the type is Boolean, the value is true or false; and if the type is Float, Uint16, or Uint32, numbers can be entered in the value field.

3 Enter a value in the value field or select the corresponding entry from the drop-down menu

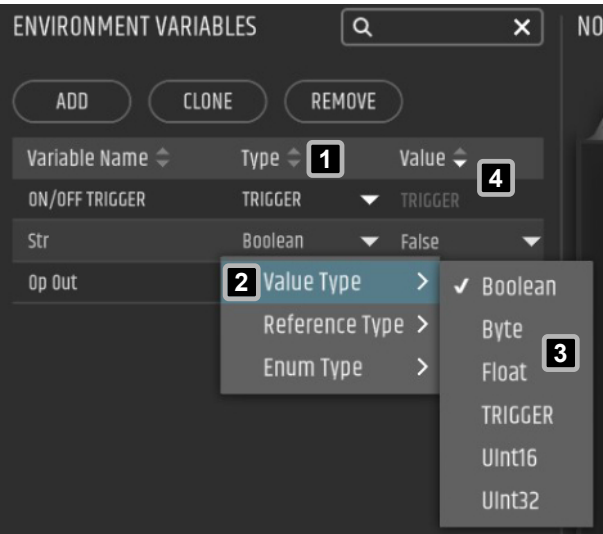
4.9.2.1 ADDING ENVIRONMENT VARIABLES VALUE TYPE

1 in the ENVIRONMENT VARIABLES area, open the Type drop-down menu 1.

2 Choose Value Type 2.

⇒ You have 8 different options to choose from 3.

Find Information about the values that need to be entered in the Value field 4 in this list:



Type:	Value:
Boolean	Drop-down menu True, False
Byte	Range of numbers: 0 to 255
Float	Floating-point numbers (e.g., gain = 36.5)
TRIGGER	TRIGGER
UInt16	Range of values: 0 and 65,535
UInt32	Range of values: 0 and 4,294,967,295

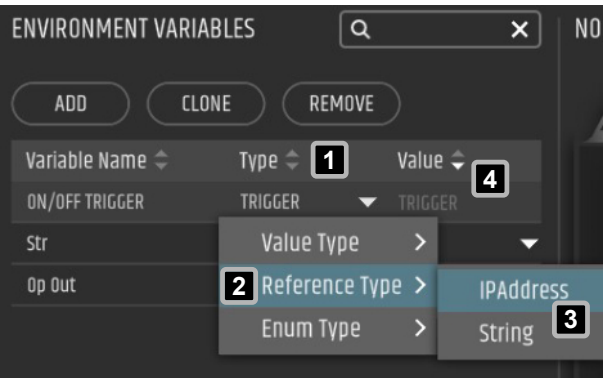
4.9.2.2 ADDING ENVIRONMENT VARIABLES REFERENCE TYPE

1 in the ENVIRONMENT VARIABLES area, open the Type drop-down menu 1.

2 Choose Reference Type 2.

⇒ You have 2 different options to choose from 3.

Find Information about the values that need to be entered in the Value field 4 in this list:



Type:	Value:
IPAddress	XXX.XXX.XXX.XXX
String	Entry according to string properties

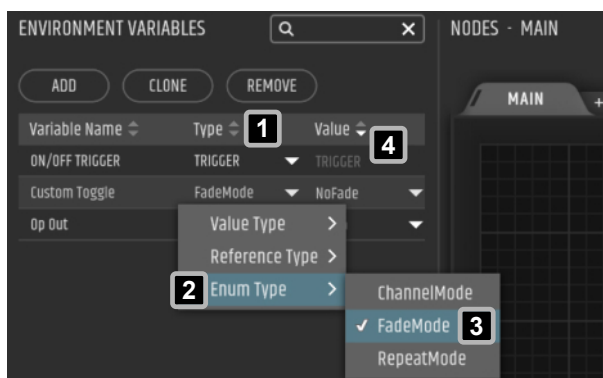
4.9.2.3 ADDING ENVIRONMENT VARIABLES ENUMERATION TYPE

1 in the ENVIRONMENT VARIABLES area, open the Type drop-down menu 1.

2 Choose Enum Type 2.

⇒ You have 3 different options to choose from **3**.

Find Information about the values that need to be entered in the **Value** field **4** in this list:



Value:

Type:

ChannelMode

Drop-down menu **Mono, Stereo**

FadeMode

Drop-down menu **NoFade, CrossFade, Fade**

RepeatMode

Drop-down menu **Play_All, Play_One, Repeat_All, Repeat_One**

4.9.3 CLONING ENVIRONMENT VARIABLES

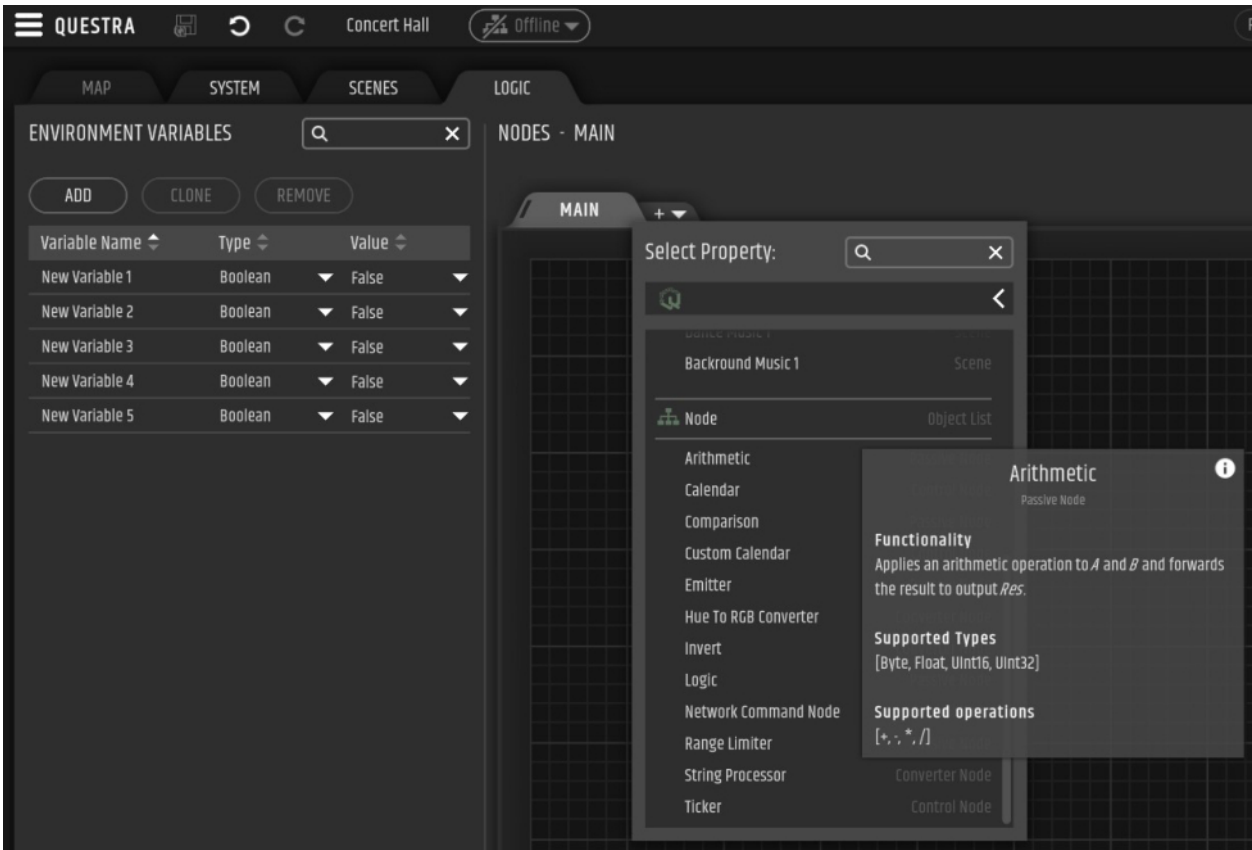
- 1** In the **ENVIRONMENT VARIABLES** area, select the needed variable.
 - 2** Click the **CLONE** button.
- ⇒ The variable is cloned.

4.9.4 REMOVING ENVIRONMENT VARIABLES

- 1** In the **ENVIRONMENT VARIABLES** area, select the needed variable.
 - 2** Click the **REMOVE** button.
- ⇒ The variable is removed.

4.9.5

ABOUT NODES AND NODE CONTAINERS



Each node can be regarded as a basic building block.

A node will usually show input and output slots that can be connected using transitions. Simply click and drag from the output of node 1 to the input of node 2.

Nodes need to be connected for data to flow between them once the runtime is activated or emulated. Data flow is visualized by transitions turning green.

A node container allows you to group specific actions or behaviors into one container. Node containers also offer the option to add custom input, output, and internal variables that may be required in an installation.

4.9.5.1

ARITHMETIC NODE

Functionality:

Applies an arithmetic operation to A and B and forwards the result to output.

Supported Types:

[Byte, Float, UInt16, UInt32]

Supported operations:

[+, -, *, /]

4.9.5.2

CALENDAR NODE

Functionality:

Allows scheduled triggers to be fired within a defined time frame between StartDate and EndDate. Within the timeframe, following parameters are used to control the firing of the Iteration trigger:

StartTime:

Can be chosen to define the daytime when the trigger should fire the first time

Recurrence:	Defines a pattern, by which days in the general time frame are supposed to fire the trigger.
Repetitions/Interval:	After the first firing, the Interval trigger is fired Repetition times with a timely distance of Interval.

4.9.5.3 COMPARISON NODE

Functionality:	Compares two input values A and B and outputs a boolean TRUE or FALSE value according to the selected operator.a
Supported operations:	[Greater, GreaterEqual, Equal, NotEqual, LessEqual, Less]
Supported input types:	[Boolean, Byte, Float, UInt16, UInt32, String]

4.9.5.4 CONTAINER NODE

Functionality:	Template nodes contain an internal node hierarchy and are used to hide complex node interaction in a black box. Dynamic inputs and outputs are used to expose the internal interaction.
-----------------------	---

4.9.5.5 CUSTOM CALENDAR NODE

Functionality:	Template nodes contain an internal node hierarchy and are used to hide complex node interaction in a black box. Dynamic inputs and outputs are used to expose the internal interaction.
-----------------------	---

4.9.5.6 EMITTER NODE

Functionality:	Sends the value stored property Value under two specific circumstances, which are defined by property SwapTrigger. If SwapTrigger is FALSE, Value is sent exactly the moment Emit receives a signal of value TRUE. Otherwise, if SwapTrigger is TRUE, Value is forwarded exactly the moment it was received, if Emit is TRUE.
-----------------------	---

4.9.5.7 HUE TO RGB CONVERTER NODE

Functionality:	Takes a HUE value of type UInt16 and converts it to RGB. The individual values are fired through output properties of the individual channel names and type Byte, as soon as a HUE value is received.
-----------------------	---

4.9.5.8 INVERT NODE

Functionality:	Takes a boolean value and forwards its inverted value through output Out.
-----------------------	---

4.9.5.9 LOGIC NODE

Functionality: Performs a logical operation on all inputs. Inputs must be of type boolean. By default two inputs are provided, but new inputs with can be created. The result of the logical operation is forwarded in output property Out. Following operations are available:

AND Sends TRUE if all inputs are TRUE

OR Sends TRUE if any input is TRUE

XOR Sends if exactly one input is TRUE

Supported Types: [Boolean]

Supported operations: [AND, OR, XOR]

4.9.5.10 NETWORK COMMAND NODE

Functionality: Sends and optionally receives messages to devices on the network where IP Address and Port define the connection. Inputs of any type can be inserted into the send data. Depending on the protocol input values are automatically converted to text or binary. If answer processing is activated, output properties can be created to receive typed the data. Property based settings:

Protocol: Defines which type of data is supposed to be sent as well as the type of connection.

Post Message: Message to be sent, in text or binary form. For specifics on syntacs see user manual or samples.

Process Answer: If TRUE, replies from the device are read. In case of a JSON based protocol, values are read automatically into output properties which match by name.

Answer Matcher: In case of binary or text, in this property expected device answers can be described, using output variables as placeholders, where values are expected.

4.9.5.11 RANGE LIMITER NODE

Functionality: Interpolates a value to selected limit (Min/Max) over defined fade time in milliseconds.

Supported Types: [float]

4.9.5.12 STRING PROCESSOR NODE

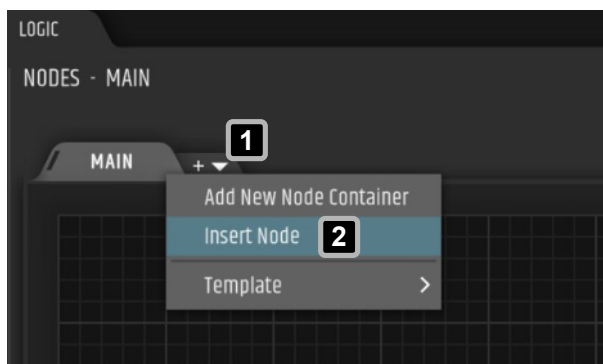
Functionality: Replaces placeholders in a string, with values of inout properties. Values of all types are converted to string.

Syntax: To describe input property placeholders, the property name must be wrapped in squared brackets.

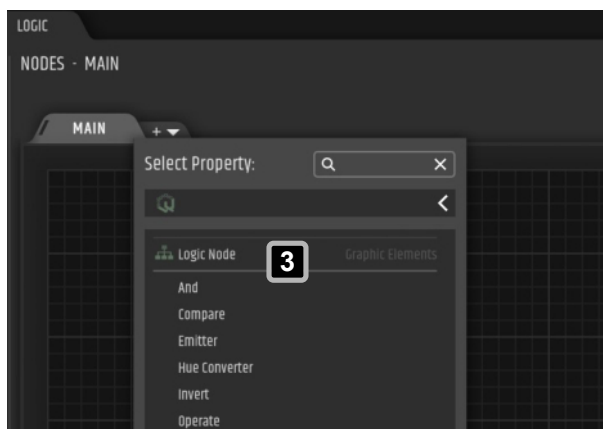
4.9.5.13 TICKER NODE

Functionality: Sends continuous trigger events with specified interval in milliseconds while property IsActive is TRUE. The first trigger after IsAcivate is set to true is delayed by Offset milliseconds.

4.9.6 INSERTING NODES

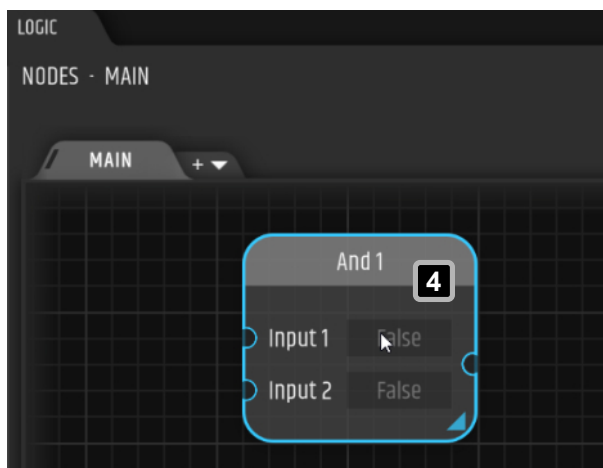


- 1 In the **LOGIC** tab, click on the **+** icon **1**.
- 2 Click on **Insert Node** **2**.



⇒ The **Select Property** window opens.

- 3 Select the needed property from the list. **3**

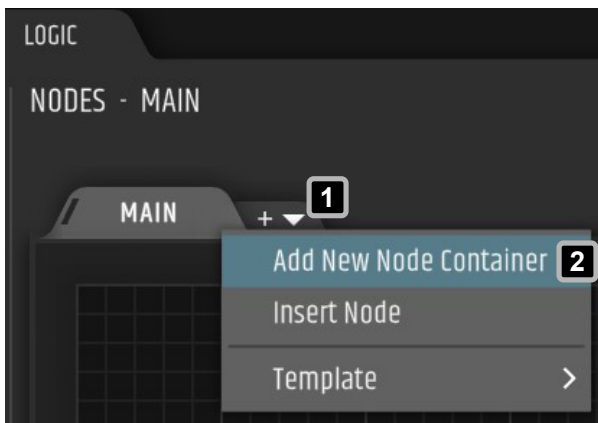


⇒ The selected property appears on the mouse pointer. **4**

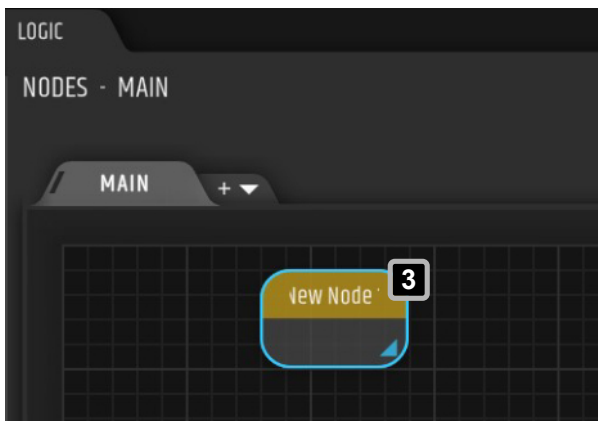
- 4 Click on any position on the currently active canvas to place the selected property.

⇒ The selected property is placed on the canvas.

4.9.7 ADDING NEW NODE CONTAINERS



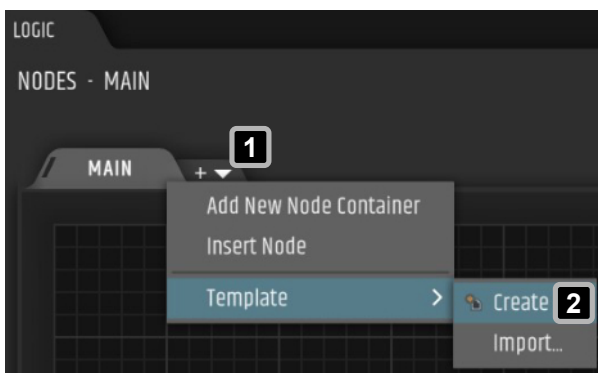
- 1 In the **LOGIC** tab, click on the **+** icon **1**.
- 2 Click on **Add New Node Container** **2**.



⇒ A new node container **3** is placed on the currently active canvas.

4.9.8 TEMPLATES

4.9.8.1 CREATING A TEMPLATE

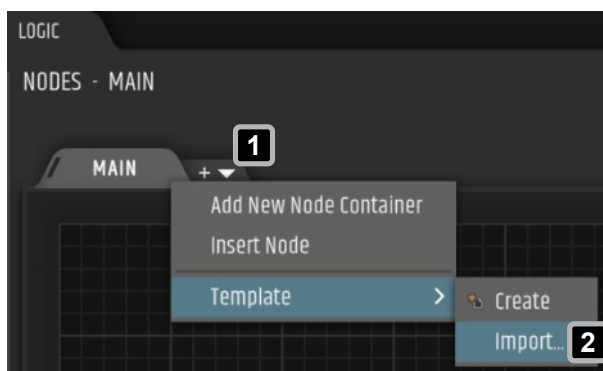


- 1 In the **LOGIC** tab, click on the **+** icon **1**.
- 2 Hover the mouse pointer over **Template**.
- 3 Click on **Create** **2**.

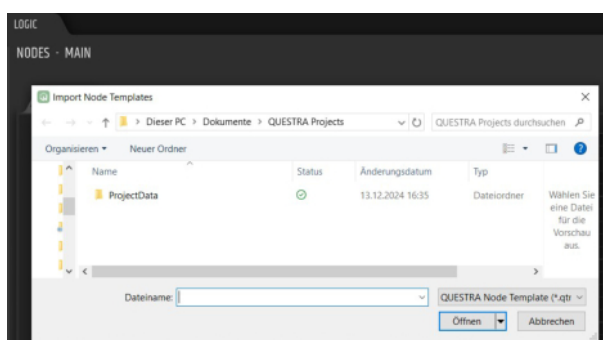


- ⇒ A new canvas appears.
- ⇒ The area for adding variables (INPUTS, OUTPUTS, INTERNAL) to the **Container Node** appears on the right-hand side. **3**
- 4 If required, edit the template name. **4**

4.9.8.2 IMPORTING A TEMPLATE



- 1 In the **LOGIC** tab, click on the **+ ▼** icon **1**.
- 2 Hover the mouse pointer over **Template**.
- 3 Click on **Import...** **2**.



- 4 Select the needed template file.
⇒ The template is imported.



QUESTRA® template files have the extension
***.qtmp**.

4.10 ROUTING

The **ROUTING** tab displays all AES67 transmit and receive channels from devices detected on the same network as the QUESTRA software. All compatible devices are discovered automatically, and this tab allows you to create, view, and manage audio routes between their channels.

4.10.1 ROUTING TAB OVERVIEW



- 1 Multicast Stream** - Displays the AES67 streams that were created under the **MULTICAST STREAMS** submenu.
- 2 Transmitter** - Displays the AES67 transmitters connected to the matrix.
- 3 Routing Area** - Assigns AES67 transmitter signals to receivers by clicking the corresponding cross-points.
- 4 Receiver** - Displays the AES67 receivers connected to the matrix.



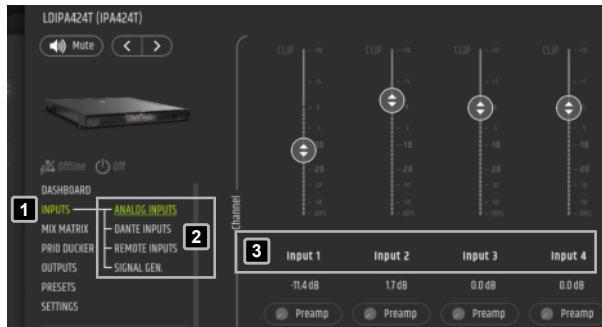
A crosshair appears when you hover over the routing area, making it easier to select the desired crosspoints.

5 QUICK START

5.1 DEFAULT WORKFLOW RECOMMENDATION

5.1.1 NAMING INPUTS

- 1 In the **PROJECT DEVICES** list, choose the corresponding IPA to open the compact view.
- 2 On the top right in the compact view, choose  to open the expanded view.



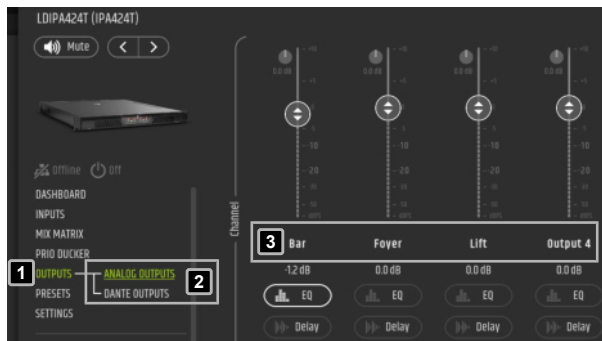
- 3 Choose **INPUTS** **1**.
- 4 Choose the corresponding input type **2**.
- 5 Click on the corresponding name field **3**.
⇒ The name highlights.
- 6 Enter a <name>.



We recommend assigning input names that are related to their input sources.

5.1.2 NAMING OUTPUTS

- 1 In the **PROJECT DEVICES** area, choose the corresponding IPA to open the compact view.
- 2 On the top right in the compact device view, choose  to open the expanded view.



- 3 Choose **OUTPUTS** **1**.
- 4 Choose the corresponding output type **2**.
- 5 Click on the corresponding name field. **3**.
⇒ The name highlights.
- 6 Enter a <name>.



We recommend assigning output names that are related to their output destinations.

5.1.3 ADDING A PRESET

- 1 In the **PROJECT DEVICES** area, choose the corresponding IPA to open the compact view.
- 2 In the compact view, choose  to open the expanded view.
- 3 In the expanded view, choose **Presets** to access the **DEVICE PRESETS**.
- 4 Choose **ADD** to open the **NEW DEVICE PRESET** window.
- 5 Enter a <preset name>.
- 6 Choose one of the following:
 - **Full Device Preset**

• Partial Device Preset

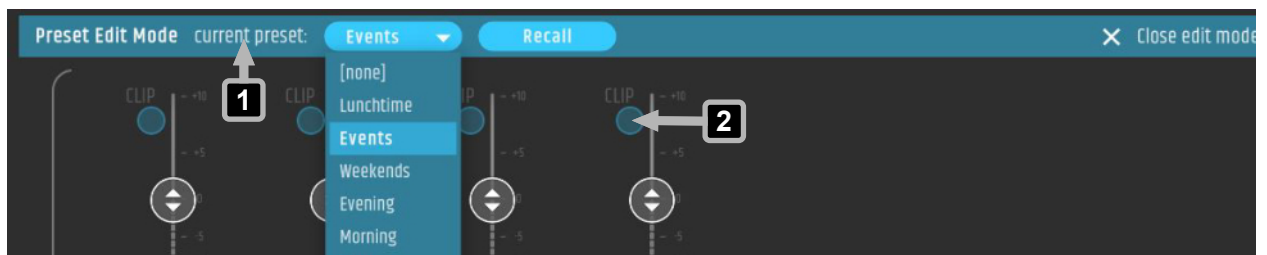


Partial Device Preset takes less space on your hard drive.



Quickly create a partial preset and enable Preset Edit Mode by right-clicking on a button that is configurable in a preset.

- 7 Enter a device preset name.
- 8 Choose **CREATE** to start the configuration of the preset.
- 9 On the right side on top of the preset list, tick the checkbox ☒ Edit Mode.



- ⇒ The preset edit mode bar is displayed **1**.
- ⇒ The preset is now editable, and you can configure the settings for the IPA in the submenu sections **INPUTS**, **MIX MATRIX** and **OUTPUTS**.

- 10 Press and hold the **Ctrl.** key on your keyboard to make the selectable points visible **2**.
- 11 Click on the selectable points to save them for the preset.



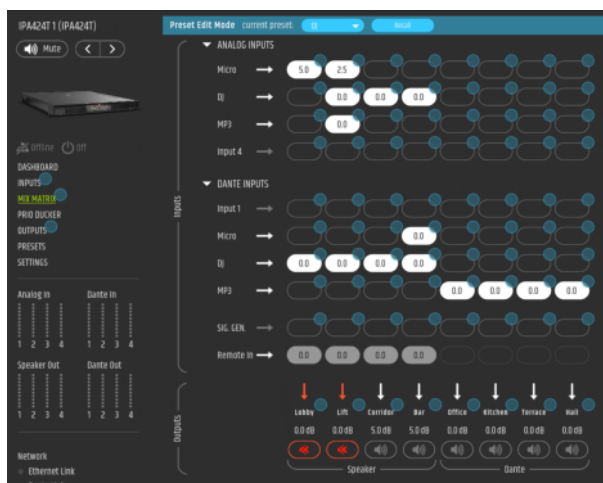
If you click on the selectable points in the submenu, all points of the respective submenus are marked.

- 12 Choose to exit the **Edit Mode**.
 - ⇒ Find the created **PRESET** in the **DEVICE PRESET** list.



The maximum number of presets on an IPA is 10.

5.1.4 EDITING CROSSPOINT STATES IN THE MIX MATRIX



✓ You have created a preset

✓ Edit mode is active

- 1 In the sub menu, select and change to the **MIX MATRIX**.
- 2 Press and hold the **Ctrl.** key on your keyboard to make the selectable points visible.



The number of clicks (1, 2, or 3) determines the stored result.



- 3 Tick the selectable points that the preset should contain.
 - a) Click to save the status for active/inactive.

⇒ After clicking, the selectable point indicates the saved state.
 - b) Double-click to save the decibel value.

⇒ After double-clicking, the selectable point indicates the saved state.
 - c) Triple-click to save the active/inactive state and the decibel value.

⇒ After triple-clicking, the selectable point indicates the saved state.

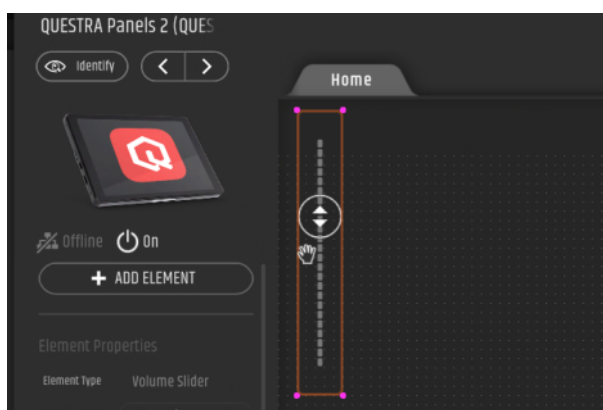


If you click on the selectable points in the submenu, all points of the respective submenus are marked.

- 4 Choose **X** to exit the **Edit Mode**.

⇒ Find the created **PRESET** in the **DEVICE PRESET** list.

5.1.5 ADDING AND POSITIONING ELEMENTS IN QUESTRA® PANELS



- 1 In the **PROJECT DEVICES** list, choose the corresponding panel to open the compact view.
- 2 In the compact view, choose **<** to open the expanded view.
- 3 In the expanded view, choose **+ ADD ELEMENT** to open the **Select Element** window.
- 4 In the **Select Element** window, left-click the element you want to add.

⇒ The selected element attaches to your mouse cursor.

5 Move the selected element to the canvas.



A red frame indicates that the element cannot be placed here.

A blue frame indicates that the element can be placed in this position.

6 Click to drop the selected element to the canvas.

5.1.6

DEPLOYING ELEMENTS TO QUESTRA® PANELS AND DEVICES

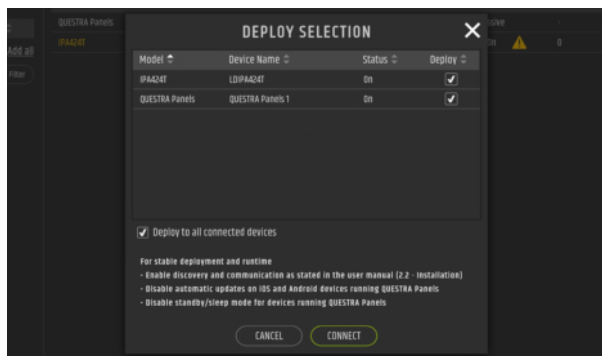


CAUTION

Sudden volume changes

Risk of hearing damage

- Do not overwrite the current settings.
- Download the settings from the devices to the software to avoid an excessive increase in volume due to arbitrary settings.



- Choose **Offline** to open the context menu.
- Select **Deploy to devices and connect** to open the **DEPLOY SELECTION** window.
- On the right side of the **DEPLOY SELECTION** window, under **Deploy**, select one or multiple connected devices.
- Choose **CONNECT** to start the deployment.



After successful deployment, Questra® is not required to be online. The QTP will run the project.



⇒ The deployment is complete.

⇒ The QTP displays the configured control elements.

6 TROUBLESHOOTING

6.1 DOWNLOADING LOGFILES

In case of bugs or errors, provide the log files to the product support.

- ✓ The device is connected to the network.

- 1 In the **PROJECT DEVICES** list, choose the corresponding device.
- 2 Right-click the device to open the context menu.
- 3 Choose **Download log**.
⇒ A window opens that contains the log file.

6.2 TROUBLESHOOTING ERROR MESSAGES

6.2.1 RESOLVING INVALID REFERENCES

The red warning symbol indicates that there are invalid references (orphaned controls) within the QUESTRA® Panels device.

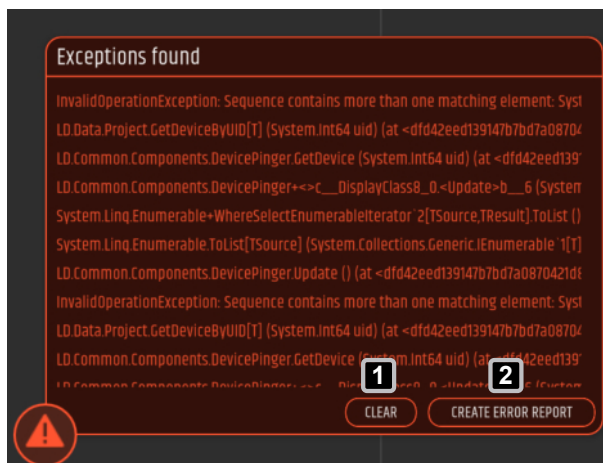


- 1 In the menu ribbon choose **OFFLINE** to open the synchronisation context menu.
- 2 Choose **download from devices and connect**.
⇒ The devices are synchronized, and the warning symbol disappears.

6.2.2 EXCEPTION FOUND MESSAGE OVERVIEW



We recommend restarting the software if this error message appears. Although using **CLEAR** will remove the message, the error will still persist



- 1 CLEAR** - Removes the error message
- 2 CREATE ERROR REPORT** - Opens your email program to enable the sending of the error report

