DYNACORD

VZX Web App

en Software manual

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1 Glossary

This glossary provides definitions for technical abbreviations and specialized terms used throughout the VZX Web App manual. Refer to this section whenever you encounter unfamiliar terminology in the application or documentation.

Term	Meaning
DSP	Digital Signal Processing - Section for configuring audio inputs, outputs, and zones
VOX	Voice Operated Exchange - Automatically ducks background music during speech
BGM	Background Music - Input mode for music sources
ANC	Ambient Noise Compensation - Adjusts output level based on room noise
EMG	Emergency - Highest priority input for emergency announcements
MSG	Message - Media player mode for pre-recorded messages
HPF	High-Pass Filter - Removes low-frequency noise
PEQ	Parametric Equalizer - Allows precise frequency adjustments
AGC	Automatic Gain Control - Maintains consistent audio levels
AMM	Automixer - Gain-sharing automatic microphone mixer
FX	Effects - Audio effects such as reverb in Virtual Mixer
GPIO	General Purpose Input/Output - Ports for external triggers and controls
RTC	Real-Time Clock - System time settings
API	Application Programming Interface - Enables external control via Ethernet

2 Introduction

Welcome to the VZX Web App Help Guide.
The VZX Web App is the browser-based audio system design and control application for the VZX-8 8-zone processor. The VZX Web App layout is designed to be simple and intuitive to allow you to setup your zone audio system quickly and with minimal effort.
Configure and tune the system to set inputs, zones, messaging, paging, wall panels, levels, and EQ. Setup the output speakers settings with presets or custom speaker configurations. Operate the system: view metering, zone levels, Mutes, Event Log with events and faults and more.

3 Key concepts

- The VZX Web App supports SONICUE Speaker Database presets, pre-loaded with Electro-Voice and generic loudspeaker presets.
- You can create custom speaker settings. Use this option to set all speaker parameters manually.
- Processing blocks have copy and paste functions to speed up configuration.
- The app is open for third-party plug-ins and external control.
- The connection is secure: Set a username and password the first time you use the unit. This prevents unwanted changes. You can also require the Multi-Function button as part of device login.
- Wall panels can use a 4-digit PIN for access control.
- The system automatically backs up configurations to a MicroSD card.
- The app supports multiple languages: English, German, and Portuguese.
- The VZX Web App provides best-in-class performance.

4 Navigation

The VZX Web App uses a clear structure to help you find all functions. The home page shows the system overview.
To return to the home page, select the **Dynacord VZX-8 logo** at the top left.
The main menu includes these sections: **Overview**, **DSP**, **Media**, **Accessories**, and **Control & Automation**. Each section opens a dropdown menu with its own settings.
When you select **DSP > Inputs** (or the **Inputs** tile on the **Overview** menu), the top menu shows extra options: **Mic/Line**, **Aux**, **Accessory**, and **Media Player**. Each option opens a separate setup page.
Use the top navigation bar to move between sections. Quick-access tiles on the **Overview** page let you open the 10 most common pages directly.

4.1 Overview

Use the Overview page to access shortcuts to common functions. The page displays tiles for key areas such as DSP, Media, Accessories, and Control & Automation. Each tile shows a summary of its settings. Select a tile to open the related section. You can also use the side menu to navigate directly to any section.

4.2 DSP

The DSP section lets you configure audio processing for inputs, outputs, and zones. It also includes the Virtual Mixer.

4.2.1 Inputs

Setting up Inputs

1. Select **DSP > Inputs**. Choose an input type such as **Mic/Line**, **Aux**, or **Accessory** from the top menu.
2. Edit the input label to make it clear. Type a new label or delete the existing text and enter your own.
3. Select the input mode: **BGM**, **MIX**, **VOX**, **ANC**, **EMG** (Mic/Line 8 only), or **MSG** (Media Player only).
4. Choose an input preset or set parameters manually. Presets include gain, phantom power, and high-pass filter settings for common situations. For example, the **Condenser Mic Speech** preset sets gain to 35 dB, 48 V phantom power to ON, and HPF to ON at 100 Hz (BW = 12 dB).
5. After selecting the preset, configure processing blocks. Turn on/off and adjust the **HPF, Noise Gate, PEQ**, and **Compressor/AGC** as needed.

Input Modes

- **BGM**: Supported by Mic/Line, Aux, and Media Player inputs. Only one BGM source can be unmuted and selected at a time. Use this mode for background music.
- **MIX**: Supported by Mic/Line, Aux, and Accessory inputs. Multiple sources can be unmuted and active at the same time. You can create zone mixes with up to eight mixes, one per zone.
- **VOX**: Supported by Mic/Line, Aux, and Accessory inputs. VOX ducks other BGM and MIX sources. VOX Ducker settings are available in Zone settings and Output configuration. VOX Override can fully mute other inputs. Use VOX for announcements or speech applications (e.g. microphones connected to Mic/Line inputs for announcements or applications where reducing background music during speech is desired, but VOX can be used with Aux devices as well).

- **ANC**: Supported by Mic/Line inputs. When you select ANC, the input cannot be used as a normal source. It becomes an Ambient Input for outputs. ANC uses different types of microphones to measure the noise level in the room and adjusts the output level automatically by up to ±20 dB based on this noise. ANC settings and adjustments are available within each ANC block.
- **EMG**: Supported only on Mic/Line input 8. EMG has the highest priority input in the system. When DSP detects a signal above the threshold, it routes this signal to all zones immediately. The signal continues until it falls below the threshold plus the hold time you set. All other sources are muted during EMG events. You can select Line or 100 V/70 V input for EMG when you select Mic/Line 8 as EMG. Line listens to the Mic/Line 8 euroblock input. 100 V/70 V listens to the green EMG input on the far right of the rear panel. This is used to loop audio from the last speaker in an EVAC system to repeat emergency announcements over your zone audio system while muting any other audio.
- **MSG**: supported by Media Players only. When you select MSG, the Media Player is dedicated to playing messages. It will not be available for music playback from the SD card but only for messages triggered by Actions and Pre-Chimes triggered by VCS-8. Priority rules apply in case of conflicts, and the higher-priority action will interrupt playback of lower ones.

4.2.2 Outputs

Setting up Outputs

1. Select **DSP** > **Outputs**. Choose **Line Out 1** from the list. In row 1, select the label **Line Out 1**. Type a new label or delete the existing text and enter your own.
2. Select your speaker preset using **My Speaker**. You can download additional SONICUE databases from go.dynacord.com/vzx-8 if needed. If you use a third-party speaker that does not have a SONICUE database, select **Speaker Configuration** to create custom settings manually.
3. Set the amplifier gain. You can enter the value manually or select a preset such as **U120:1**, **U240:1**, **V600:2**, or **V600:4**. When you select a preset, the VZX-8 automatically sets the correct gain for that amplifier.
4. Enable and adjust **ANC**, **Delay**, and **PEQ** as required for your project.

4.2.3 Zones

Setting up Zones

1. Select **DSP** > **Zones**. The **All Zones** page shows a high-level overview. Use this page to adjust levels and mute zones quickly.
2. To configure a zone, select the zone name from the top menu, for example **Zone 1**. Enter a clear label for the zone.
3. Select **Source Selection**. Enable the inputs you want to play in this zone. When an input is enabled, it turns blue.

Signal Generator

1. To use the signal generator, select **DSP** > **Zones**.
2. Open **Source Selection** and select **Active** so it turns blue.
3. Choose the signal type: pink noise, white noise, or sine wave. For sine wave, enter the frequency value.

Control Constraints in Zones

1. Select **DSP** > **Zones** and choose a zone, for example **Zone 1**.
2. Select **Main Volume Control Constraints**. This setting limits the adjustable zone volume to a defined range. The range also applies to VWP Wall Panel controllers.
3. Select **Source Configuration Control Constraints**. This setting limits the adjustable input gain to a defined range. The range also applies to VWP Wall Panel controllers.

Changing outputs within Zones

1. Select **DSP** > **Zones** and choose a zone, for example **Zone 1**.
2. By default, Zone 1 is assigned to Output 1, Zone 2 to Output 2, and so on. You can change this configuration. To assign multiple outputs to one zone or reassign outputs, open **Output Selection**. Deselect the current output so it is no longer blue. It becomes available for other zones.
3. Repeat this process as needed. Use this feature for stereo configurations, bi-amp or tri-amp loudspeaker setups, or other custom routing. Remember that the system supports eight unique processed output paths.

4.2.4 Virtual Mixer

The Virtual Mixer is different from the eight zone mixes. It provides a live mixing interface with FX and an Automixer for the eight microphone inputs. Each VZX-8 has one Virtual Mixer, which works as a separate sub-mix. You can access the Virtual Mixer using its own IP address, QR code, and PIN code. This allows you to give users access to the mixer without giving access to the full zone configuration. You can assign the Virtual Mixer to one or more zones. This gives flexibility for live mixing and special applications.

Setting up the Virtual Mixer

1. To make the Virtual Mixer available in a zone, select **DSP** > **Zones**.
2. Open **Source Selection** and enable **Virtual Mixer L/R** so it turns blue. This adds the Virtual Mixer as a source for that zone. If the zone also has BGM sources, unmute the source you want to use. You can also select the Virtual Mixer source from the VWP Wall Panel controller.
3. Select **DSP** > **Virtual Mixer**. Enter a name for the Virtual Mixer in the **Name** box. Set a 4-digit PIN code to lock access. Select the inputs you want to include in the Virtual Mixer and enable them so they turn blue. If you enable **FX L/R**, the FX bus becomes active and you can use effects such as reverb.

Using FX with the Virtual Mixer

1. Select **DSP** > **Virtual Mixer** and open the Virtual Mixer by scanning the QR code or inserting the word **“Virtual Mixer”**.
2. Go to the **FX** tab (top right).
3. Select the FX type using the **Up/Down buttons** or the menu above **FX On**.
4. Toggle FX on/off with **FX On** and adjust **send levels** with the sliders to control how much signal each channel sends to the FX bus.

Using the Automixer (AMM) with the Virtual Mixer

1. Select **DSP** > **Virtual Mixer** and open the Virtual Mixer by scanning the QR code or inserting the word **“Virtual Mixer”**.
2. Automix (AMM) is available on **Mic/Line inputs 1-8**.
3. To enable Automix, select it so it turns **blue**.

The gain-sharing Automixer (AMM or Automatic Mic Mixer) automatically adjusts the level of each microphone based on how many inputs are active. It is typically used for speech reinforcement in boardrooms, conferencing, and churches where a sound engineer is not available.

AMM works by sharing the available system gain among all open microphones:

– Active microphones are turned up, while inactive ones are turned down.
– This prevents excessive system gain and eliminates acoustic feedback, even when multiple microphones are open.

With a conventional mixer, each open microphone adds gain until feedback occurs unless an operator manually controls levels. The Automixer solves this by continuously monitoring active microphones and intelligently adjusting the overall output level to maintain clarity and prevent feedback.

4.2.4.1 iOS recommended steps

1. **Scan the QR Code** using the iPad camera.
   – Open the Camera app, point it at the QR code, and tap the link that appears.
   – This is the recommended way to access the Virtual Mixer interface on iPad.
2. **Add the Virtual Mixer as a Web App**:
   – Tap the **Share** button in Safari.
   – Select **Add to Home Screen**.
   – Ensure **Open as Web App** is enabled. Optionally, enter a custom label for easy identification.
3. **Launch from Home Screen**:
   – The Virtual Mixer will now open in full-screen mode without browser navigation or an address bar.
   – This gives a near-native app-like experience for smooth control.

4.3 Media

Use the Media section to choose background music (BGM) sources for media players, set up scheduled or on-demand messages, and manage storage options. You can configure both the internal storage and an external microSD card to organize and play your media content efficiently.

4.3.1 Player

Media players assigned as BGM sources in the inputs appear in this section. To play content, select a song or a playlist file (**.m3u**) and press **Play/Pause**. Songs and playlists will automatically repeat until you stop playback.

4.3.2 Messages

Media players can be assigned as **Mode: MSG** to function as message players. At least one media player must be set to **MSG** mode to play any messages. A single message player can handle multiple messages and actions.

The **Messages** feature in VZX-8 is used for bells/chimes, and pre-recorded messages. It is recommended to clearly label messages as you create them. For example, a message labeled “Pre-chime” can be assigned to the **VCS-8 talk button**. When **Pre-chime** is enabled, pressing the Push-to-Talk button plays the chime first, then allows speech. You can change the pre-chime sound in the Messages page.

Another example: create a message called Door Chime using the file **Sine_1Tone-Long.mp3**. When a magnetic door sensor connected to **GPIO 1** is triggered, this chime can play in one or all zones. To trigger messages from VCS-8 call station buttons or GPIO inputs, create an **Action** that plays the message assigned to its name.

4.3.3 Storage

Use the Storage section to upload, download, and manage messages, songs, and playlists. Audio stored in **internal storage** can only be used for chimes and message alerts, while audio in **external storage** (microSD card) is reserved for media player content.

Dynacord preloaded messages can be deleted if needed. However, they can only be restored by performing a **hard reset (15-second INIT)**.

4.4 Accessories

Use the Accessories section to set up and configure **VWP wall panels** and **VCS-8 call stations**.

4.4.1 Wall Panels

1. Go to **Accessories** > **Wall Panels**.
2. Select a number from **1-16** in the top menu to set up your wall panel.
3. Assign the device (use **Identify** to flash it), add a label, and configure its settings.
4. Under **Menu Items**, choose which options appear on the wall panel and specify which require a **PIN lock**.

Wall Panel profiles

To set up profiles for users, go to **Accessories** > **Wall Panels** and select **Profiles** from the top menu. Add profiles for the space where the VWP is installed. For example:

- Create a profile called **Every User** and enable zone/group level access.
- Create another profile called **Store Manager**, then configure **Profile Authorizations** to include all menu items, such as selecting BGM sources.

After creating profiles, return to the wall panel settings and enable **PIN lock** for any menu items you want to restrict.

4.4.2 Call Stations

1. Go to **Accessories** > **Call Stations**.
2. From the top middle menu, select the call station (**CST1-CST8**) you want to configure.
3. Assign the device (use **Identify** to flash it, if needed), label it, and select the **Port (A or B)** and the **Accessory Input (1 or 2)** for the call station.
4. Each accessory port supports **two audio inputs**. To maximize the number of call stations that can perform unique pages simultaneously:
   - Assign two call stations to **Port A** using **Accessory Inputs 1 and 2**.
   - Assign two call stations to **Port B** using **Accessory Inputs 3 and 4**.

4.5 Control & Automation

Use this section to configure **GPIO functionality** and set up **Actions** that automate system behavior.

4.5.1 GPIO

Assign functionality to the eight freely assignable GPIO ports in **Control & Automation** > **GPIO**. Select the GPIO number, add a label, and choose the mode: **Input**, **Output**, or **Analog Input**.

- **Voltage level** displays the live voltage at each port in real time.
- **GPIO Outputs** include a **Test** button to help verify settings.
- Many GPIO configurations are linked to **Actions**, so ensure actions are set up for the desired functionality.
- Use **Analog Input** when connecting simple analog wall-mounted volume controls, such as 10k potentiometer-based VCA controllers.

4.5.2 Actions

Actions are system commands that perform specific functions, such as triggering a message, setting a GPIO output, or muting zones. Actions can be activated by **VCS-8 call station buttons** or **GPIO inputs**.

When you select the **Play Message** action type, the message list comes from what you configured in **Media** > **Messages**. Actions can be shared or repeated, meaning multiple GPIOs or buttons can trigger the same action, or you can create separate actions for different tasks.

4.6 My Profile

The **My Profile** menu allows you to manage personal settings for your user account. From here, you can adjust system **Settings**, toggle between **Light and Dark themes**, change the **Language**, and securely **Log Out** when finished.

4.6.1 Settings

The System Settings menu provides tools to manage your device configuration and system behavior:

- **Project Information**: Save project details, import or export configuration files (**Configurations**), and set clock parameters such as RTC and time zone (**Clock**).
- **Network**: Adjust networking modes, set a static IP address, and view your device's **VZX-XXXXXX.local** address.
- **Firmware**: Import and update VZX-8 firmware. Note that updating the VZX-8 firmware also updates the firmware of connected accessories.
- **Security**: Change your password, select HTTP/HTTPS access, enable API control via Ethernet using **OpenInterface**, view API documentation, and enable multi-function button device login.
- **Event Log & Fault Page**: View, filter, and sort recorded events, including faults, login attempts, and other system activities.

4.6.2 Toggle Theme

Use the **Toggle Theme** option to switch between **Light (Day)** mode and **Dark (Night) mode**.

4.6.3 Language

Use the **Language** option to select the display language for the VZX Web App, including all menu sections and description text. Note that changing the language for **VWP wall panels** is done by typing or pasting custom labels in your preferred language.

5 Labels

Labels identify items in the VZX Web App. You can edit labels for inputs, outputs, zones, messages, call stations, and wall panels. Labels appear in configuration pages and in wall panel menus.
Write clear and helpful labels. Use names that describe the function or location of the item. You can type or paste text in any Unicode-supported language. This allows you to use the wall panel and call station in your preferred language.
Labels have a limit of 15 characters. This ensures the label is readable on the wall panel display. For VCS-8 button labels, the limit is also 15 characters, but 5 characters or fewer are recommended.
Labels are used throughout the system for routing and control. They appear in menus, source selection lists, and accessory profiles.

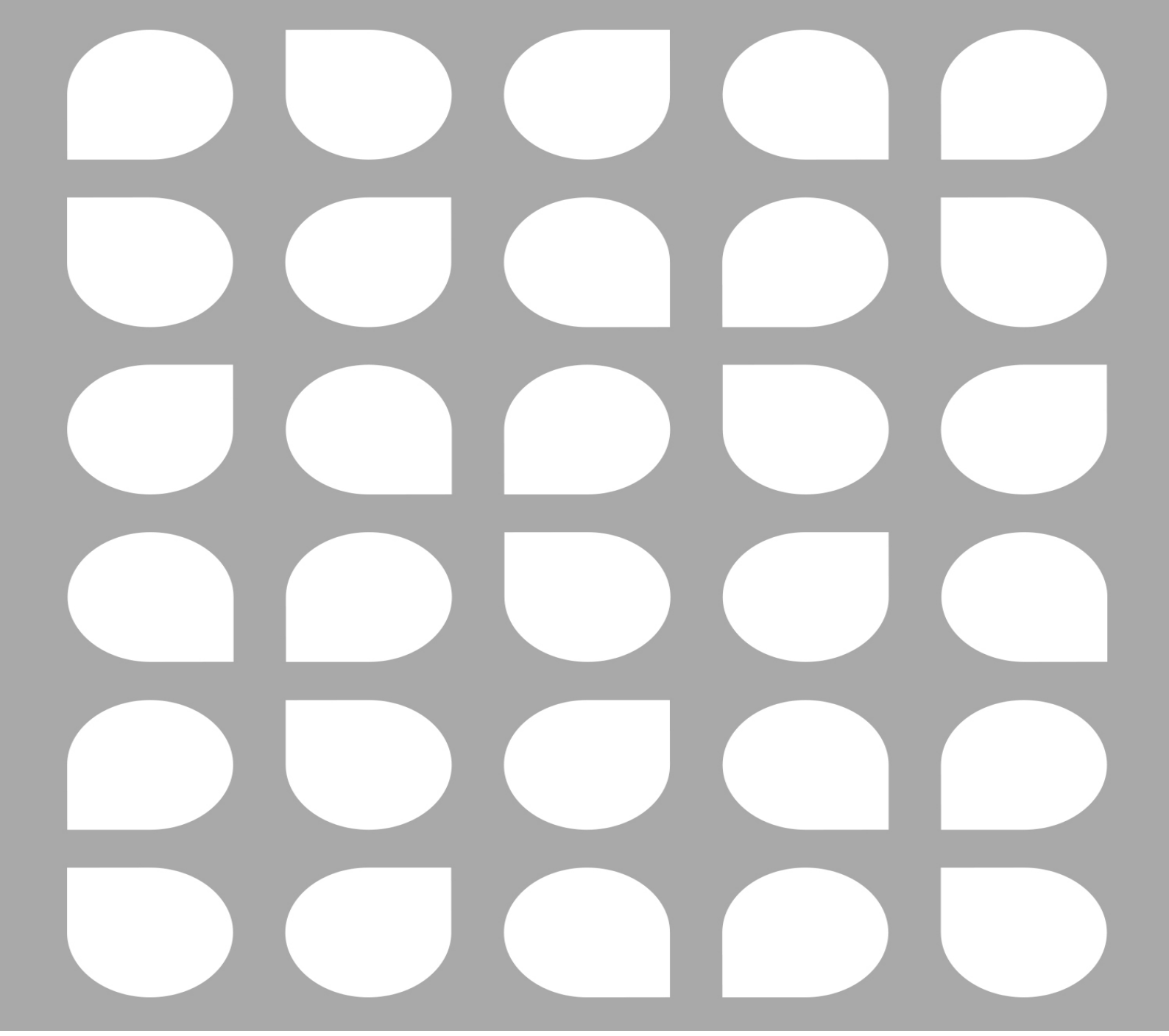
Module	Label usage	Example
Inputs	Name each input source for easy identification	Mic1
Outputs	Label speaker outputs or amplifier channels	Main L
Zones	Assign zone names for routing and control	Lobby
Wall panels	Set display names and button labels	Wall Ctrl
Call stations	Label buttons for announcements or messages	Call Btn

6 Troubleshooting

This section provides quick solutions for common issues encountered when using the VZX Web App. It helps you identify the cause of a problem and apply the correct fix without interrupting system operation. Use this guide to resolve connectivity, audio routing, media playback, and configuration problems efficiently.

Occurrence	Cause	Possible solution
Cannot access the Web App	Device not powered or network issue.	Check power and network connection; use IP or **VZXXXXXXX.local** address. Scan QR code on sticker or card for additional network connection help.
Login problems	Wrong credentials or Multi-Function button required.	Verify username/password; press Multi-Function button if enabled.
Audio not heard in zones	Zone muted or source not active.	Go to **DSP** > **Zones**, check for signal activity in zones screen. If needed, unmute zone, enable source (blue). VWP can also be used to change source.
Inputs not responding	Wrong input type or phantom power off.	Select correct input type; check gain settings, and enable **48 V phantom power** for condenser mics.
Media player issues	Wrong mode or storage problem.	If using .wav and distorted, only use .wav that are 48 khz. If the file won't play, ensure it is .mp3 .wav, .aac. If playlist won't play, check that it is .m3u and formatted correctly, and that the song names in storage match the names in the playlist, exactly. Watch for spaces and underlines.
EMG input not triggering	EMG not assigned or wiring incorrect.	Assign EMG Mode and type (line in or 70/100 V) to **Mic/Line 8**; check Line or 100 V/70 V wiring. Check Line In/70/100 V settings located left of the VU meters on **Mic Line 8**. It will only play EMG sound when source exceeds detection threshold settings.

Occurrence	Cause	Possible solution
Virtual Mixer access problems	Wrong WIFI network on device. Wrong IP or PIN.	Connect intended device to the same WIFI network as your VZX-8 (External Router required). Use QR code or IP; verify PIN; add as Web App on iOS for full-screen access. Ensure Virtual Mixer is assigned to a zone and currently the active source.
Configuration lost	Hard reset (15 sec on INIT button).	Insert MicroSD card; restore from saved configuration during user account creation.



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