

V series

VCS-8 | VWP-EU | VWP-US | VZX-8 | VZX-8-US



Table of contents

1	Safety	4
1.1	Safety information	4
1.2	FCC information	4
1.3	Disposal instructions	5
2	About this manual	6
2.1	Digital document	6
2.2	Intended audience	6
2.3	Copyright notice	6
2.4	Trademarks	6
2.5	Notice of liability	6
2.6	Short information	7
3	Product introduction	8
3.1	Features and functions	8
4	General installation procedures	9
4.1	Unpacking	9
4.2	Parts included	9
4.3	Dimensions	10
4.4	Mounting and ventilation	11
4.5	Mains power connection	13
5	Installation	14
5.1	Front panel	14
5.2	Rear panel	15
5.3	Connections	16
5.4	V series accessories	23
5.4.1	VCS-8 Call station	23
5.4.2	VWP Wall panel controller	24
5.5	Storage details	24
6	Configuration in VZX web app	26
6.1	Connect to VZX-8	26
6.2	Update firmware	28
6.3	Virtual mixer	28
7	Third party remote control	29
8	Faults	30
9	Troubleshooting	31
10	Maintenance	33
11	Technical data	34
12	VZX-8 Block diagram	35

1 Safety

1.1 Safety information

1. Read and keep these safety instructions. Follow all instructions and heed all warnings.
2. Download the latest version of the applicable installation manual from www.dynacord.com for installation instructions.



Information

Refer to the Installation Manual for instructions.

3. Follow all installation instructions and observe the following alert signs:



Notice! Containing additional information. Usually, not observing a notice does not result in damage to the equipment or personal injuries.



Caution! The equipment or the property can be damaged, or persons can be injured if the alert is not observed.



Warning! Risk of electric shock.

4. System installation and servicing by qualified personnel only, in accordance with applicable local codes. No user-serviceable parts inside.
5. System installation for emergency sound (except for call stations and call station extensions) in a Restricted Access Area only. Children may not get access to the system.
6. For rack-mounting of system devices, make sure that the equipment rack is of suitable quality to support the weight of the devices. Use caution when moving a rack to avoid injury from tip over.
7. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
8. Mains powered equipment shall be connected to a mains power outlet socket with a protective earthing connection. An external, readily operable, mains plug or all-pole mains switch shall be installed.
9. The protective ground connection of an apparatus shall be connected to protective ground before the apparatus is connected to a power supply.
10. This unit has an autoranging input circuitry suitable for 100-240 Vac.
11. To prevent hearing damage do not listen at high volume levels for long periods.

1.2 FCC information

FCC Supplier's Declaration of Conformity

F.01U.426.620	VZX-8	8-Zone Audio Processor
F.01U.426.621	VZX-8-US	8-Zone Audio Processor, US
F.01U.426.622	VCS-8	8-Zone Call Station
F.01U.426.623	VWP-EU	Wall Panel Controller
F.01U.426.625	VWP-US	Wall Panel Controller, US

Compliance statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible party

Bosch Security Systems, LLC
130 Perinton Parkway
14450 Fairport, NY, USA
www.boschsecurity.us

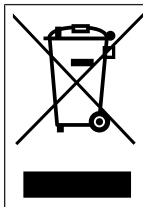
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

1.3

Disposal instructions

Old electrical and electronic equipment

This product and/or battery must be disposed of separately from household waste. Dispose such equipment according to local laws and regulations, to allow their reuse and/or recycling. This will help in conserving resources, and in protecting human health and the environment.

2 About this manual

The purpose of this manual is to provide information required for installing, configuring, operating and maintaining this product.

Read through this manual to familiarize yourself with the safety information, features, and applications before you use this product.

This is a professional product that should be installed, used and maintained by trained professionals only.

2.1 Digital document

This manual is available as a digital document in the Adobe Portable Document Format (PDF).

You can find information about Dynacord products on the product related information at www.dynacord.com.

2.2 Intended audience

This manual is intended for everyone who is authorized and professionally qualified to install and use this product.

2.3 Copyright notice

Unless otherwise indicated, this publication is the copyright of Dynacord. All rights are reserved.

2.4 Trademarks

Throughout this document trademark names may have been used. Rather than put a trademark symbol in every occurrence of a trademark name, Dynacord states that the names are used only in an editorial fashion and to the benefit of the trademark owner with no intention of infringement of the trademark.

2.5 Notice of liability

While every effort has been taken to ensure the accuracy of this document, neither Dynacord nor any of its official representatives shall have any liability to any person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly by the information contained in this document.

Dynacord reserves the right to make changes to features and specifications at any time without prior notification in the interest of ongoing product development and improvement.

IT security disclaimer

In order to offer maximum compatibility with all networked audio devices and to allow for fast and easy setup and maintenance, our OMNEO-enabled products:

- do not verify the authenticity of any Dante or OCA controllers (or any other node) on the network
- This means that these devices do not take any special precautions against malicious or accidental attacks via their network interfaces. Such attacks happen every day on the public internet. It is strongly recommended to set up the system in a safe, isolated network, meaning a network where all hardware components are known and physically owned and none of them is connected to the public internet.

Voice evacuation systems disclaimer

While capable of being used for announcements, this product has not been certified as component of voice evacuation systems according to EN54-16. Voice evacuation systems for life safety applications must not be designed and built using this product.

2.6

Short information

This manual describes the V Series Zone Audio Platform with the following commercial type numbers:

CTN	Description
VZX-8	8-Zone Audio Processor
VZX-8-US	8-Zone Audio Processor, US
VCS-8	8-Zone Call Station
VWP-EU	Wall Panel Controller
VWP-US	Wall Panel Controller, US

3 Product introduction

The **Dynacord V Series** is a scalable and flexible audio platform designed for commercial and professional installations requiring high-quality sound distribution across multiple zones. It is ideal for environments such as corporate buildings, educational institutions, hospitality venues, retail spaces, and public facilities. The system architecture is built around the **VZX-8 8-Zone Audio Processor**, which serves as the central hub for audio routing, signal processing, and zone control. Complementary components such as the **VCS-8 Call Station** and **VWP Wall Panel Controllers** provide intuitive user interfaces for paging, source selection, and volume control.



Figure 3.1: VZX-8 8 Zone audio processor front view

3.1 Features and functions

The **VZX-8 8-Zone Audio Processor** offers powerful signal processing and flexible zone control for commercial audio installations. Key features include:

- **20 processed input sources**, including 8 balanced Mic/Line inputs.
- **Full Matrix DSP**: input EQ, compression, AGC, Noise Gate, FX, room EQ, speaker EQ with FIR and more.
- **Virtual Mixer with Automixer (AMM)** and FX available for live mixing on any zone.
- **32 GB MicroSD card** included for storing music, messages and configuration files.
- Compatible with **SONICUE** speaker databases for EV Loudspeakers and more: maximize the performance of your system, instantly.
- **2 x RJ45 Accessory ports** work reliably with cable lengths up to **1640 feet (500 m)** per port, allowing **16 V Series devices** total.
- Add **VCS-8 Call stations** and **VWP wall panel controllers** with display for level, zone, source control to complete your system.

The **VCS-8 8-Zone Call Station** provides easy zone paging, message triggering, and system control. Key features include:

- 9 freely programmable buttons.
- Customizable priority and mutual exclusion busy indication support.
- Expandable with up to 8 call stations.
- LED light-ring busy indication.
- High-quality condenser microphone.
- Sleek, stylish design.

The **VWP wall panel controller** provides level, zone, source & media playback control with a full color TFT multilingual display.

- Easy to read 1.77" color TFT display.
- Unicode support for 150+ languages.
- Expandable up to 8 VWP per port, daisy chained.
- Flexible level, zone, source control, and media player control.
- Interchangeable front panel (white/black).
- Available for mounting in standard EU or US wall-mount boxes.

4 General installation procedures

Before starting the installation, ensure the following:

- You make use of manufacturer specified installation materials.
- No liquids can spill into or on the products.
- Installation is in a clean environment free of dust.
- The ventilation airflow of the 19" units is not obstructed.
- There is a mains power outlet of sufficient rating close to the intended location of the products.
- Sufficient free space and access at the rear of the 19" units for connectors and wiring.

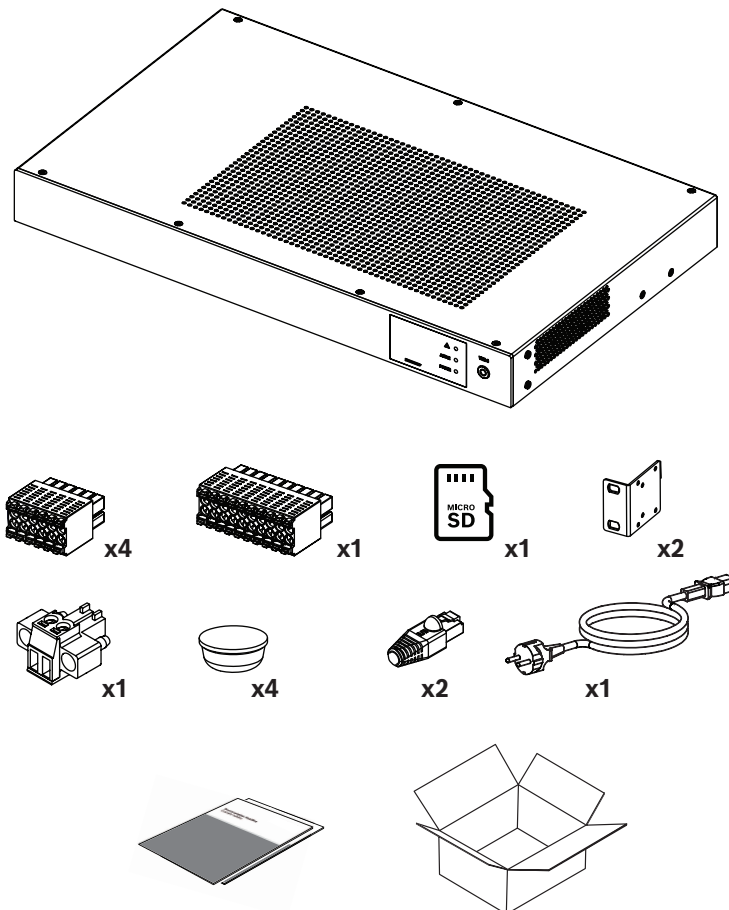
4.1 Unpacking

The product should be unpacked and handled with care. If an item appears to be damaged, notify the shipper immediately. If any items are missing, notify your Dynacord representative.

The original packaging is the safest container in which to transport products and can also be used to return products for service, if necessary.

4.2 Parts included

Make sure that all parts are included and not damaged. If the packaging or any parts are damaged, contact your shipper. If any parts are missing, contact your Sales or Customer Service Representative.



Quantity	Component
1	VZX-8 Audio Processor
1	Mains input AC power cable
4	12 position terminal block plug for inputs and outputs
1	20 position terminal block plug for GPIO
2	CAN-termination plugs
4	Rubber feet for table-top mounting
2	Rack ears
1	Quick installation guide
1	Safety and security information booklet

4.3 Dimensions

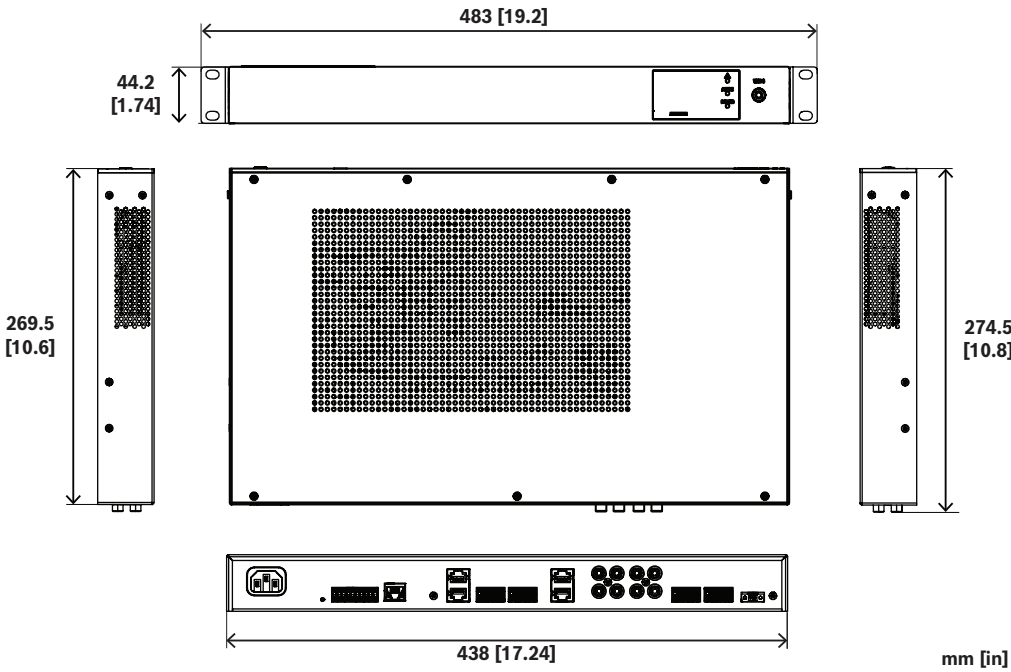


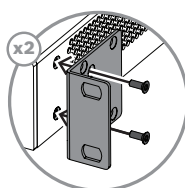
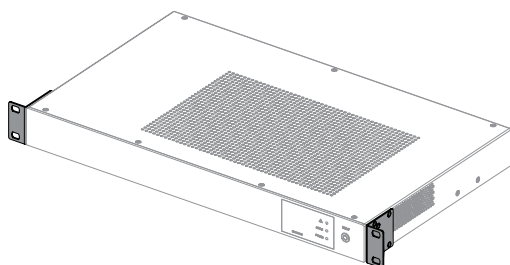
Figure 4.1: Dimensions with rack ears

4.4 Mounting and ventilation

The VZX-8 is designed for installation in common 19" racks or cases.

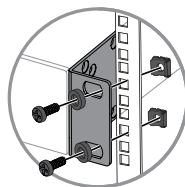
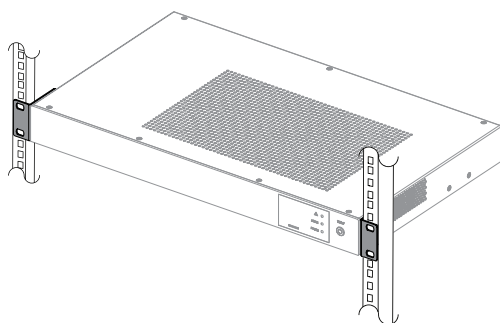
To attach the rack ears to the audio processor:

1. Remove the existing screws from the audio processor.
2. Position the rack ears to both sides of the audio processor.
3. Reinsert and tighten the screws to secure the rack ears in place.

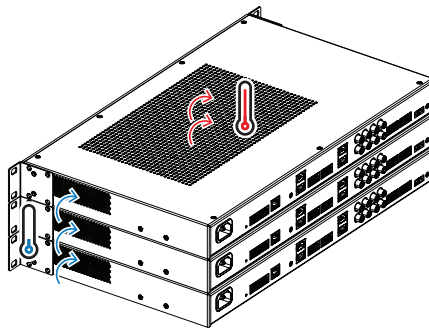


Place the audio processor into the rack.

Use 20 mm screws and washers (not included) to fix the audio processor to the rack.



Provide sufficient ventilation.



VZX-8 will often be installed in cases or racks with other equipment, such as amplifiers. Consider that those devices accumulate heat within the rack space. An air duct of at least 50 mm between the rear panel of the VZX-8 products and the inner wall of the cabinet or rack case is recommended. Make sure that the duct reaches up to the top ventilation louvers of the cabinets or the rack cases.

Since temperatures inside many cabinet/rack cases can easily rise up to 40 °C during operation, it is mandatory to bear in mind the maximum allowable ambient temperature for all other appliances installed in the same cabinet/rack case.

**Caution!**

Blocking/closing the device's ventilation louvers is not permissible.
Keep ventilation louvers free from dust to ensure unhindered airflow.

**Notice!**

Do not use the device in direct sunlight or near heat sources, like heater blowers, stoves, or any other heat radiating devices.

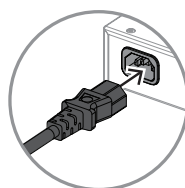
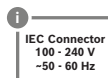
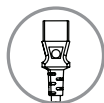
**Notice!**

Do not use the device in an environment where temperatures are below 5 °C (41 °F) or exceed +40 °C (104 °F).

For installation in a device control room that incorporates a central air-cooling system or air conditioners, calculating the maximum heat emission may be necessary.

4.5 Mains power connection

The VZX-8 receives the power supply via the IEC MAINS inlet connector that will accept voltages from 100 to 240 volts AC, 50-60 Hz. Only use the included AC cable or AC cables approved for your country of use. During installation, always separate the device from the mains. Connect the device only to a mains network once the device is ready for operation.



Caution!

This device does not have a power button. To disconnect it from mains power, the power plug must be physically removed. Ensure safe handling when performing this action.

5 Installation

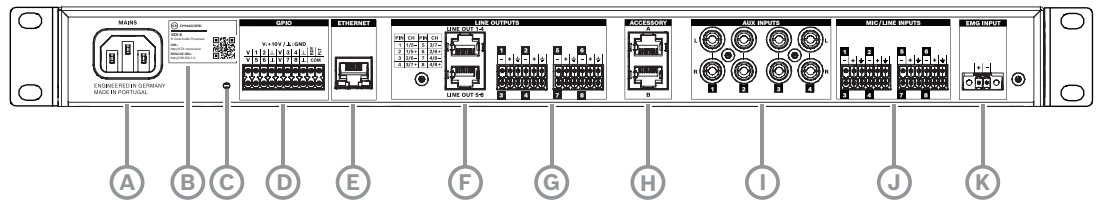
5.1 Front panel



A	MicroSD card slot
B	VZX-8 status information: POWER - Green (Flashing: Device is powering up; Solid: Device is initialized) ACTIVE - Yellow, Any call or EMG is active FAULT - Red, Any hardware/software fault
C	Multi-function button - Green/Blue (Assign the desired functionality in VZX Web App)
D	Rack ears (Not assembled upon delivery)

Note: Audio inputs/outputs metering available in VZX Web App.

5.2 Rear panel



A	Mains power connector
B	VZX URL sticker (Unique URL and QR code)
C	INIT button Hold for 3 seconds to soft reset the unit (preserves Username, Password, and configuration). Hold for >15 seconds to hard reset to factory settings (requires new setup; configuration may be recoverable from MicroSD).
D	Control ports (GPIO), READY/FAULT relay
E	Ethernet connection, use Shielded (STP) cable
F	2x RJ45 line outs for 8 channels of audio to V series amplifiers; Use Shielded (STP) cable
G	8x line outputs, terminal block; terminal block outputs are in parallel to the 2x RJ45 line outputs (8 channels)
H	Accessory ports, A, B
I	4x RCA input pairs, Mono-summed pairs
J	8x Mic/line inputs, terminal block, with 48 V phantom power; Use input 8 for line level EMG override when needed
K	EMG override input for 70/100 V signal. EMG input is routed to all 8 line outputs.

5.3 Connections

This section describes the available input, output, and control connections for the VZX system and associated devices.

Aux Inputs

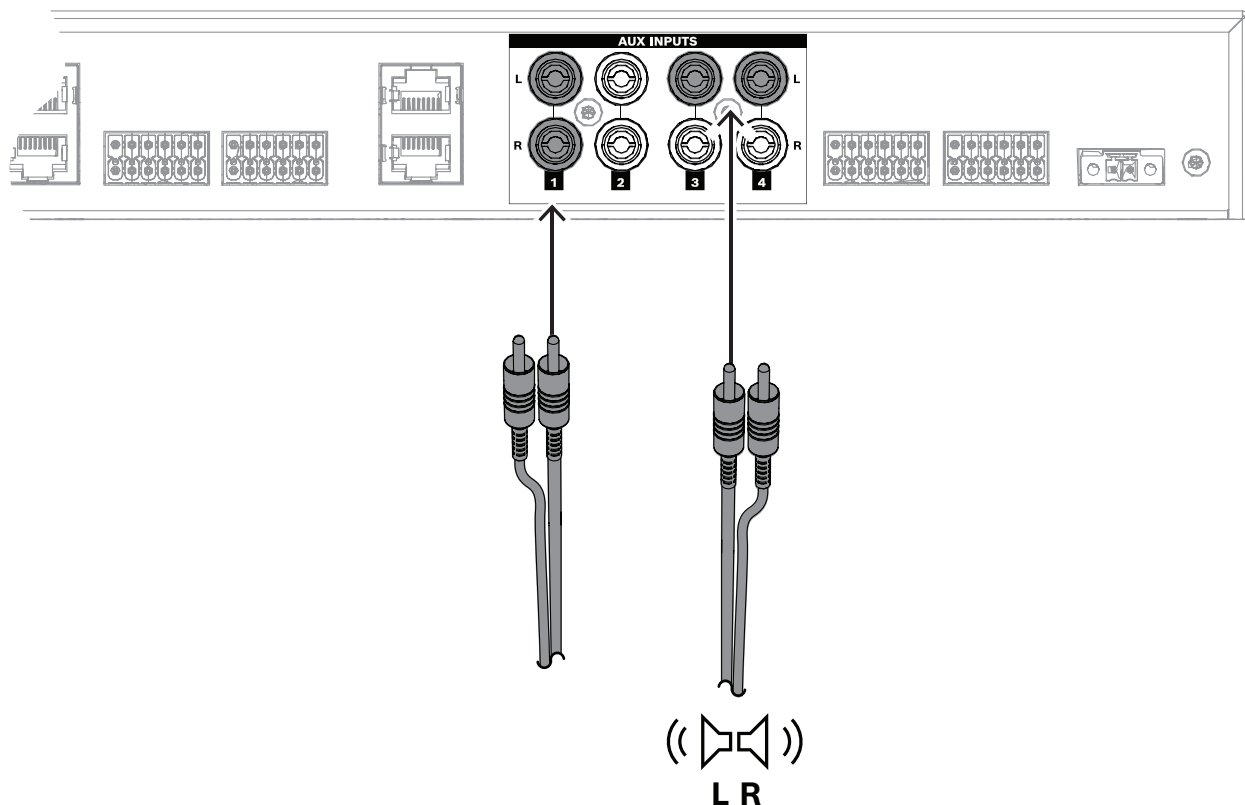
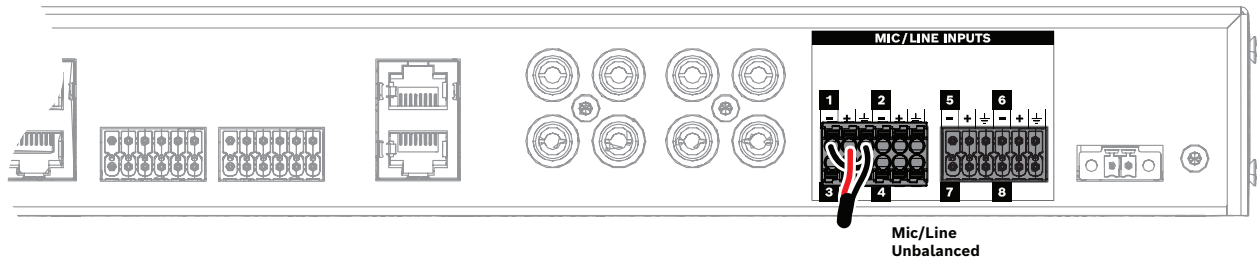


Figure 5.1: RCA connection

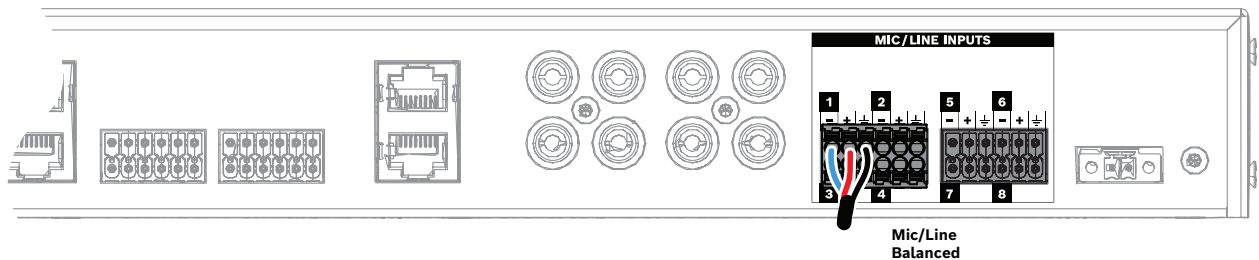
- Connect a RCA pair to Aux Input 1-4 to create a mono-summed source.
- To connect **stereo RCA sources**, wire the **left (L)** channel to one input and the **right (R)** channel to another input (e.g. Inputs 1 + 2 or 3 + 4).
- Link the inputs in the **VZX Web App** and define the **source type**.
Most RCA sources are configured as **BGM (Background Music)**.

Mic/Line Inputs

- To configure a stereo source using Mic/Line inputs, assign the left channel to one input and the right channel to another. Link both inputs in the VZX Web App and define the source type as stereo.
- For **unbalanced sources**, bridge the screen (shielding) and the - pin.



- For **balanced sources**, use all three terminals: -, +, and **ground**.



- Set **gain levels** and enable or disable **48 V phantom power** using the **VZX Web App**.

Emergency Override (EMG Input)

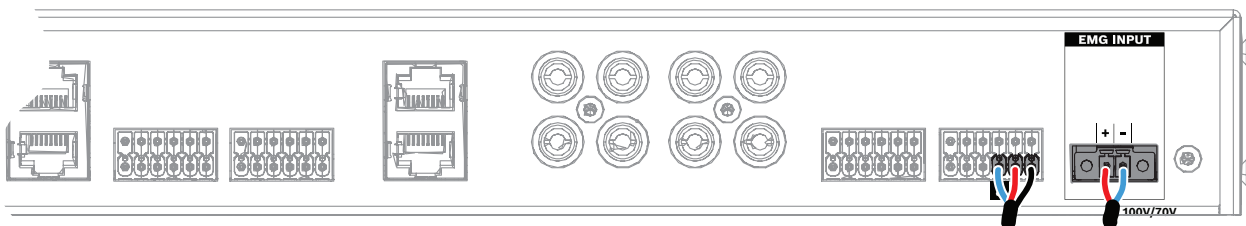


Figure 5.2: EMG connection

- Connect line-level override sources to Mic/Line Input 8.
- Connect 70/100 V override sources to the dedicated EMG Input.
- Select the appropriate **EMG input type** in the **VZX Web App**.
- When the threshold level is met, the EMG input overrides all audio outputs.
- The EMG input is routed to all 8 Line Outputs when triggered.

Line Output - RJ45

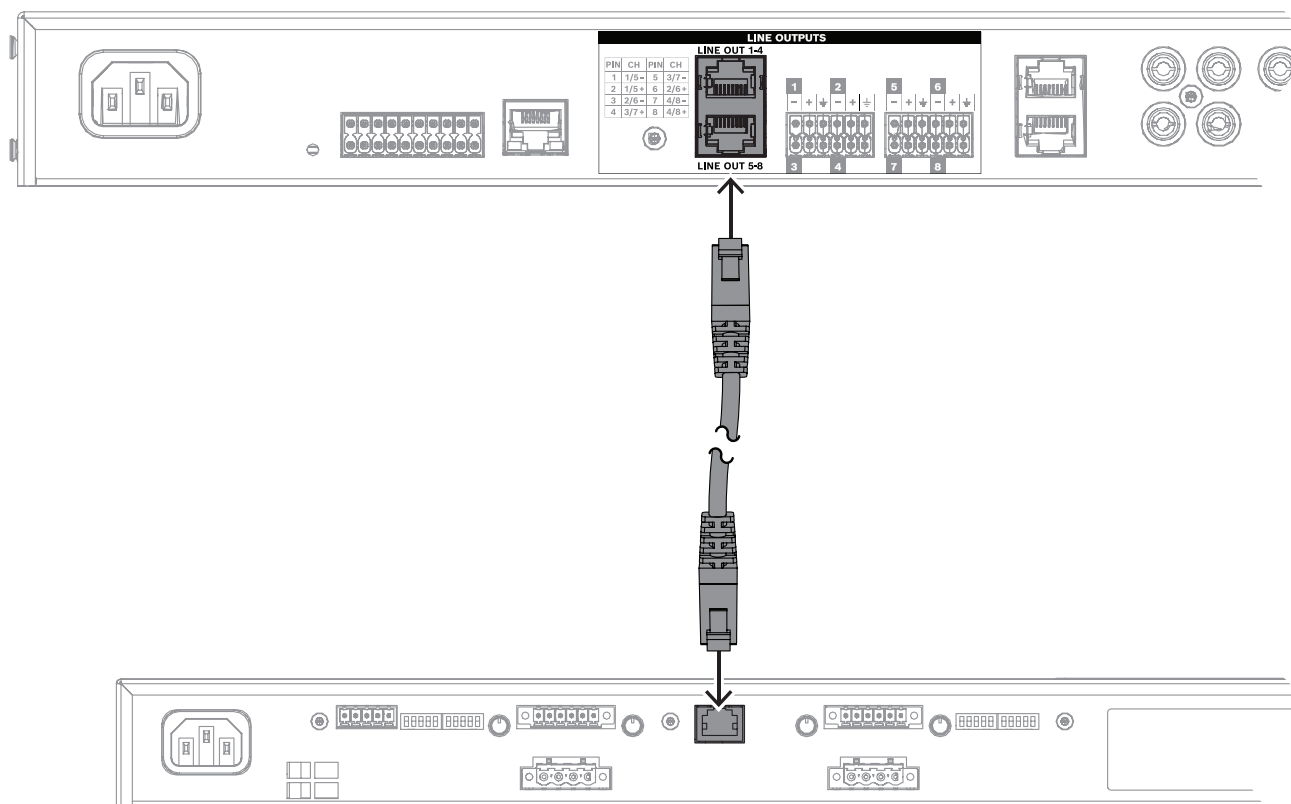


Figure 5.3: Line output RJ45 connection

- To configure stereo output, assign paired channels (e.g., CH1 & CH2) to left and right outputs respectively. Use the VZX Web App to group and route them as stereo zones.
- The RJ45 line output supports (via a single cable):
 - Four audio channels for V600:4
 - Two audio channels for V600:2
- When using **V600:2**, connect the remaining outputs (e.g. 3 + 4 or 7 + 8) via the Line Output connectors on the **VZX-8**.
- Use **shielded twisted pair (STP) cable** between VZX-8 and V-series amplifiers to maintain signal integrity.

Note: The RJ45 output follows the **AES72-1E standard** and is compatible with standard **CAT5e** or **CAT6** wiring.

**Caution!**

Do not connect the line output RJ45 with Ethernet, CAN bus, Call station, or even PoE powered slots. The device might not work as expected or even get damaged.

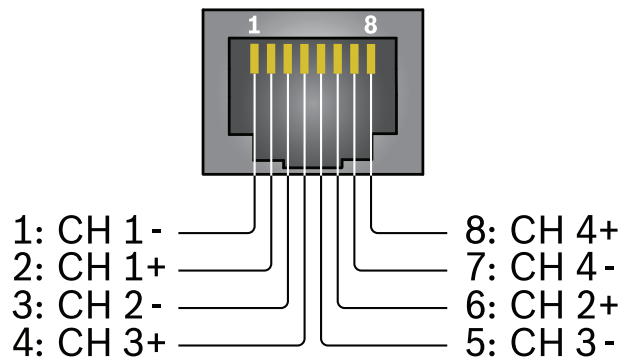
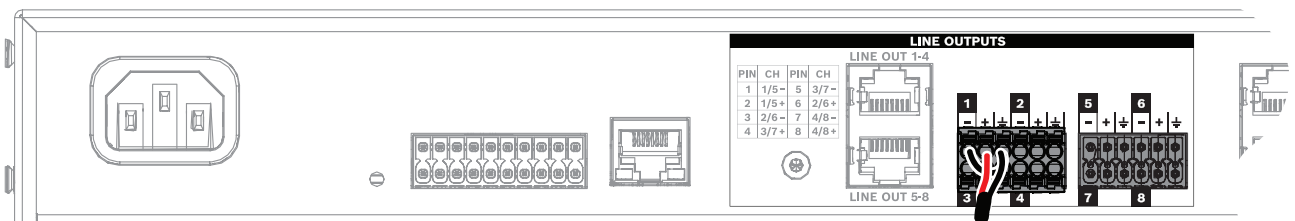


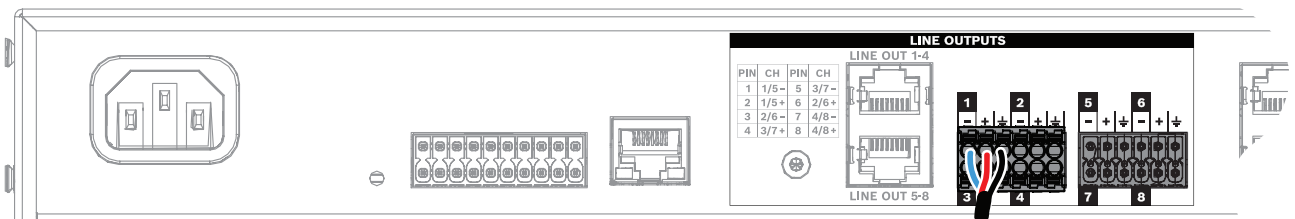
Figure 5.4: AES72-1E wiring

Line Outputs

- For unbalanced outputs, bridge the screen (shielding) and the - pin.



- For **balanced outputs**, use all three terminals: -, +, and **ground**.



Control Port - GPIOs

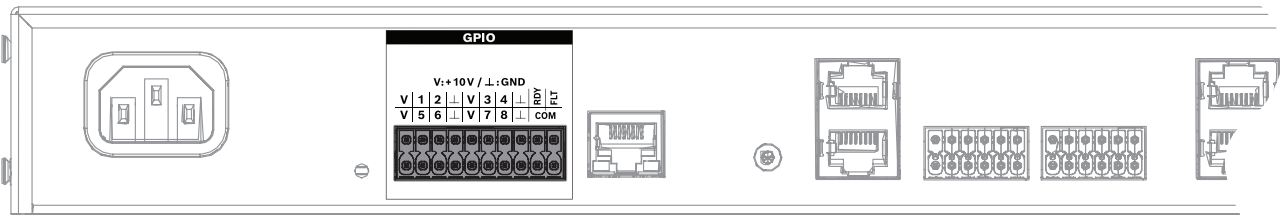
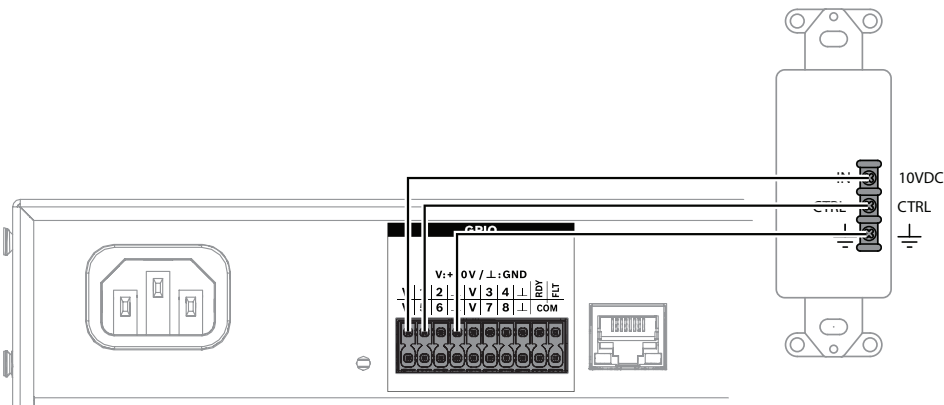


Figure 5.5: Control Port GPIO connection

- The control port includes:
 - **Eight GPIOs** (General Purpose Inputs/Outputs)
 - **READY/FAULT** relay contacts
 - **Ground** and **+10 V** reference pins
- The port uses a 20-position terminal block plug.
- GPIOs are configurable via the **VZX Web App**:
 - **Inputs** can trigger actions (e.g. mute output, play message).
 - **Inputs** can control zone levels.



- **Outputs** can send status or control signals to external devices.
- **READY/FAULT** contacts are potential-free relay contacts used for system status indication.

Accessory audio inputs

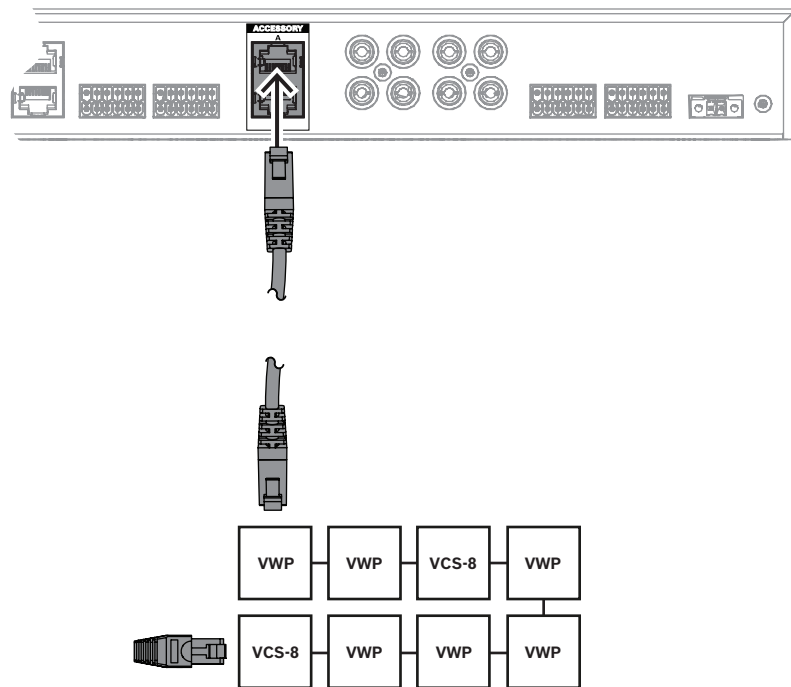


Figure 5.7: Accessories connection

- **VZX-8** has a section in **DSP > Inputs** called **Accessory** with 4 rows of accessory inputs to assign processing - including **Gate**, **HPF**, **4-band input PEQ** and **Trim**.
- These 4 processed Accessory audio inputs are in addition to the 20 other audio inputs (**8 Mic/Line**, **4 RCA Aux**, **8 Digital players**) and include the audio of VCS-8 paging audio during the paging event.
- 4x VCS-8 Call stations can page simultaneously when addressing different zones.
- You may connect 8x VCS-8 call stations maximum.
- You can choose which Accessory audio input is used on each call station per bus, and set priorities between these VCS-8 Call Stations.

5.4 V series accessories

The VZX-8 system supports a range of intelligent accessories designed to extend control and functionality across multiple zones. These accessories are plug-and-play devices powered directly by the VZX-8's accessory ports.

Accessory overview

Model	Description	Inputs	Maximum per VZX-8 processor
VCS-8	8-Zone Call Station	2 × RJ45 (In/Out)	8
VWP	Wall Panel Controller	2 × RJ45 (In/Out)	16
All accessories combined	-	-	16 (8 per port)

Connection Guidelines

- **Maximum of 16 accessories** can be connected to a single VZX-8 processor. Choose the combination that best suits your project needs.
- Accessories must be connected via **daisy-chain topology** using the **Accessory Ports A and B** on the VZX-8.
- **Do not connect accessories to a network switch.** They are not network devices and require direct connection to the VZX-8.
- Each accessory port supports a combined cable length of up to 500 meters (1640 feet).
- A **CAN termination plug** must be inserted into the unused RJ45 port of the **last accessory** in each daisy chain. These termination plugs are included with the VZX-8 processor.

NOTE: For best performance, accessories should be evenly distributed across both accessory ports (A and B).

5.4.1 VCS-8 Call station

The **VCS-8 8-Zone Call Station** is a robust and versatile paging device designed for seamless integration with the V Series Zone Audio Platform. It connects directly to the **VZX-8 accessory ports** using RJ45 cables.

Key features include:

- **9 programmable buttons** with LED indicators, assignable to zones or control functions.
- A **light ring indicator** around the microphone alerts users when the line is busy.
- A large **Push-To-Talk (PTT) button**, configurable as **latching or momentary**.
- The **VCS-8 Call station** can be fully configured via the **VZX Web App**.
- Plug-and-play operation with power supplied directly from the accessory port.

Up to **8 VCS-8 units** can be connected to a single VZX-8 processor, within the total accessory limit of 16.

5.4.2

VWP Wall panel controller

The **VWP Wall Panel Controller** provides intuitive control over audio zones, levels, sources, and media playback. It is designed for wall mounting and connects via RJ45 to the VZX-8 accessory ports. Key features include:

- Connect up to 16 VWP units per VZX-8 processor (8 per port).
- Supports **4-digit PIN lock** and **multiple user profiles** for access control.
- The **VWP Wall panel controller** can be fully configured via the **VZX Web App**.
- Plug-and-play operation with power supplied directly from the accessory port.

VWP panels are ideal for decentralized control in multi-zone environments such as conference rooms, classrooms, or hospitality venues.

5.5

Storage details

The VZX-8 includes onboard and expandable storage options.

Internal memory and messages

300 MB internal memory is included for storing chimes and pre-recorded messages.

- Messages are configured in the **VZX Web App** under **Media > Messages**. Each message can include settings such as:
 - Level
 - Zone selection
 - Pre-delay
 - Repeat count
- Messages can be triggered using **Actions**, which may be triggered using:
 - Call station buttons
 - GPIO inputs
 - OpenInterface commands
 - Other system triggers

Using messages

To enable message playback:

1. In **Inputs > Media Player**, assign at least one media player to **Mode: MSG**.
2. In **Media > Messages**, select the message player assignment.
3. In **DSP > Zones**, enable the message player as an input.

MicroSD card - Songs and automatic configuration backups

- The **VZX-8** features a **MicroSD card reader**, which supports:
 - Music playback, individual files or .m3u playlists,
 - Automatic configuration backups.
 - When a media player is set to **BGM** and playback starts:
 - Files or playlists default to **repeat mode**.

Notice! It is recommended to create **.m3u playlist files** for continuous music playback.
 - Media player BGM can be started by selecting the source from a **VWP Wall Panel Controller**.
 - Files (songs and playlists) can be transferred to the MicroSD card via the **VZX Web App**.
- Note:** The unit does **not** function as a USB mass storage device.
- During a hard reset (INIT button held for **15 seconds**), the system prompts to **import configuration from the MicroSD card**.

Configuration files

- To share configurations between units:
 - Use **Settings > Configuration** to **Export** and **Import** files.
 - Files must be temporarily stored on your PC/Mac/Tablet for transfer.

Included media

A **32 GB MicroSD card** is included for storing music files and playlists.

Supported media types

- **Card types:** microSD, microSDHC, microSDXC
- **File systems:** FAT32, exFAT (up to 2 TB)
- **Audio formats:** WAV (48 kHz), MP3, AAC
- **Playlist format:** .m3u

.WAV file requirements

If using WAV files with sample rates other than **48 kHz**, convert them to **48 kHz** before playback.

.m3u playlists management

Creating .m3u playlists using a plain-text editor:

1. Open a plain-text editor.
2. List each filename on its own line.
3. Save the file with a **.m3u** extension.

Example:

```
Monday.mp3
Tuesday.mp3
Wednesday.mp3
Thursday.wav
```

The playlist will play in the listed order from top to bottom.

Note: If you upload files with spaces, VZX-8 will add underscores (_) to the filename. You may need to include the underscores (_) in the playlist file. The filename must exactly match.

6 Configuration in VZX web app

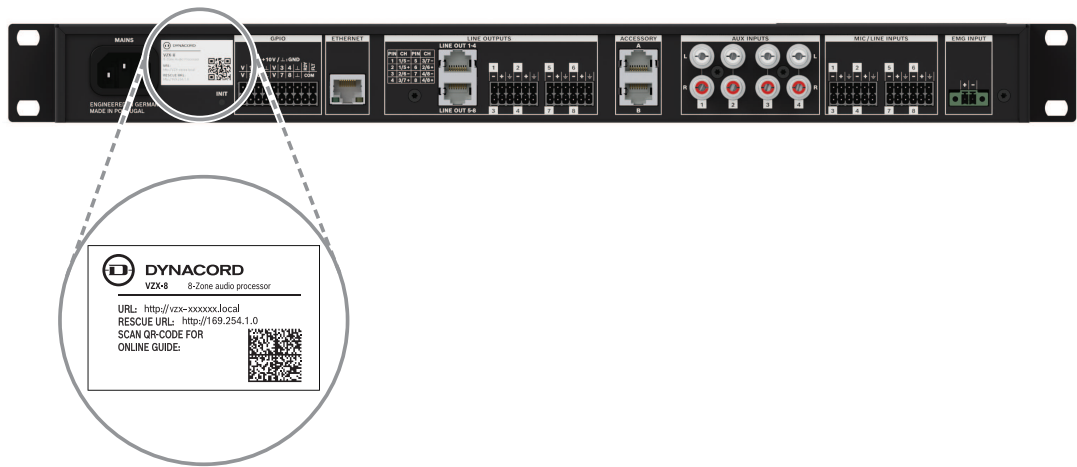
6.1 Connect to VZX-8

VZX-8 uses **Zero Configuration Networking (ZeroConf)**. This allows easy setup without apps, drivers, or software installers.

Each VZX-8 unit includes:

- A **rear panel sticker** with a unique URL and QR code for that unit alone, and a **QR code** for help getting connected.
- A **card in the box** with the same information.

The **unique URL** is based on the unit's MAC address and is added during manufacturing. A **Rescue IP address** is also available for direct connection.



Note: The QR code links to an online guide with connection instructions. It does not provide direct access to the unit.

Connection Methods

Method 1: Wi-Fi router / Router with DHCP server (recommended)

1. Connect VZX-8 to a DHCP-enabled router using a shielded (STP) RJ45 cable.
2. Enter the VZX URL in a browser or use the Rescue URL.
3. Bookmark the URL or set a custom IP address.

Connecting through wired or Wi-Fi DHCP-enabled router

If connecting through a wired or Wi-Fi DHCP-enabled router, some corporate Internet settings may block connection. The message **504 DNS look up failed** might pop up when you load the VZX address.

If connecting through a wired or Wi-Fi DHCP-enabled router:

- Use the latest firmware.
- Disconnect corporate Internet network connection during configuration (creating a dumb network).
- Contact your IT department for help.

PC/Mac network settings

- Use default settings.
- **IPv4:** Obtain IP and DNS automatically.
- **IPv6:** Configure automatically.

Method 2: Direct Ethernet Connection

1. Connect a PC or Mac directly to VZX-8 using an Ethernet cable. Ensure your PC/Mac IP settings are set to automatic (DHCP) to allow connection via the Rescue IP.
2. Use the VZX URL or the **Rescue IP address:** <http://169.254.1.0>.
3. This method can be used for recovery when the VZX URL or custom IP is lost.
4. You must still enter the assigned username and password.

Note: If connecting direct and the connection does not happen immediately, set your network card to a static IP address in the range **169.254.x.xx** while configuring the device.

Login and Security

On first use, the VZX Web App will ask you to create a **username and password**. Save this information securely or use a password manager.

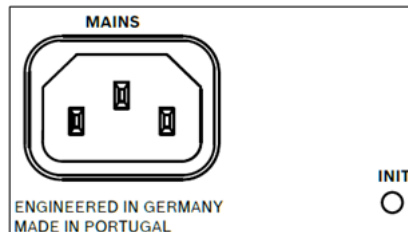
Multi-Purpose Button

The multi-purpose button on the front panel can be configured for the following functions:

- **Login using the button instead of a password**
(Enable or disable this setting in the VZX Web App).
- **Clear Sticky Faults**
Use the button to clear fault conditions after the underlying issue has been resolved.
Long press (3 seconds) is required to clear faults.

System Reset

1. Use the **INIT hard reset button** on the rear panel.



- Hold for **3 seconds** to soft reset the system.
This will preserve Username, Password and configuration data.
- Hold for **>15 seconds** to hard reset to factory settings.
This deletes all configuration data. After reset, create a new Username and Password.
During this step, you can re-import saved configurations from a MicroSD card or external file via **Settings > Import** in the VZX Web App.

6.2 Update firmware

To ensure full functionality, update the firmware when you first use VZX-8.

Steps to Update Firmware:

1. Go to <https://go.dynacord.com/vzx-8>.
2. Download the latest firmware for VZX-8.
3. Open the VZX Web App.
4. Go to **Settings > Firmware > Import** and follow the instructions.

For more help, refer to:

- Online resources at www.dynacord.com



Caution!

Do **not disconnect power** while a firmware update is in progress. Interrupting the update may render the device inoperable. Updates may take up to 15 minutes

If the device becomes unresponsive after an update attempt, download the **OMNEO Firmware Upload Tool** from dynacord.com and perform recovery using this tool. You will also need a different type of firmware file available on dynacord.com

You may need administrator rights on your PC to run the **OMNEO Firmware Upload Tool**.

6.3 Virtual mixer

The **Virtual Mixer** is a powerful feature of the VZX-8 system that enables live mixing across one or more zones. It is ideal for dynamic environments such as live music venues, houses of worship (HOW), fitness studios, and other applications requiring flexible, real-time audio control.

Each VZX-8 processor includes **one Virtual Mixer**, which has its own:

- FX bus
- FX send levels
- Unique level mix

Zones can be assigned to play the Virtual Mixer as an **optional source**, allowing seamless switching between background music (BGM) and live mixing without requiring a system installer to reconfigure the setup.

Key Features

- **Input Assignment:** Select which inputs are routed to the Virtual Mixer.
- **Automixer (AMM):** Enable AMM on one or more Mic/Line inputs to automatically manage levels.
- **Dynacord FX Suite:** Add professional-grade effects including Reverb, Delay, Echo, Chorus, and combinations.
- **Secure Access:** Each VZX-8 provides a dedicated Web App URL and QR code locked to the Virtual Mixer interface. This allows authorized users to access mixing controls without exposing the rest of the system to tampering.

7 Third party remote control

Control: API, Ethernet control, and Third-Party Plug-Ins

The **VZX-8** can be integrated with third-party AV control systems or building-automation platforms using its **API**, **Ethernet control**, or available **plug-ins**.

Control port - GPIOs

For details on **GPIO functionality** and wiring, see the **Connect to VZX-8**, page 26 section of this manual.

Third-Party Plug-Ins

Dynacord provides plug-ins for common AV control systems, along with setup instructions. These can be found in the Dynacord **Download** section under:

Software, Firmware & Design Tools > 3rd Party Plug-In.

Ethernet control with OpenInterface (TCP/IP, JSON-RPC)

To enable Ethernet control using **OpenInterface**:

1. Navigate to **VZX Web App > Settings > Security > OpenInterface**.
2. Enable **OpenInterface** to allow incoming **TCP/IP (JSON-RPC)** control commands over the Ethernet connection.

Documentation:

Within the same **Security > OpenInterface** menu, select **“Go to documentation”** to access:

- Full command list
- Syntax details
- Example code for integrating the VZX-8 with external control systems

8 Faults

Occasionally, faults may occur during operation. Most faults resolve automatically. For example, if the device temperature is high, the **FAULT LED** will illuminate and the issue will be logged. Once the temperature returns to normal, the LED turns off.

Temporary Faults

Conditions such as **CPU temperature high** typically clear over time. If needed, you can clear these faults by:

- Performing a **power cycle**, or
- Executing a soft reset by holding the INIT button for 3 seconds, or
- Clearing in Settings menu of VZX/fault log.

Persistent (“Sticky”) Faults

Faults such as a **triggered fuse (self resetting) on the external bus** will continue to illuminate the front panel **FAULT LED** even after a soft reset or power cycle. These must be cleared manually:

1. Resolve the underlying issue (e.g., correct cabling, remove shorts).
2. Hold the front panel multi-function button for 3 seconds until the red LED clears.

Fault Logging

All fault events are logged with **ON/OFF status information**. Access the fault log in the **Settings** menu of the VZX Web App.

Remote Monitoring

The **TCP/IP OpenInterface** can query the ON/OFF state of each fault for integration with third-party monitoring systems.

9 Troubleshooting

This section provides guidance for resolving common issues encountered during installation and operation of the VZX-8 system and its accessories.

Problem	Possible cause	Solution
VZX-8 Processor does not turn on and power LED is not illuminated.	Power plug disconnected or insufficient power from source.	Ensure power cord is securely connected to device and check the power from the mains.
No audio signal.	1) Audio input cable loose or improperly connected. 2) Input source not sending signal. 3) Input level turned down.	1) Check cables for damage and secure connections. 2) Ensure input is turned up in VZX Web App.
Audio sounds distorted.	1) Input level too high or low. 2) Input stage clipping. 3) Poor quality music source. 4) Output configuration may be mismatched or signal levels too high.	1) Adjust source and amplifier levels. 2) Check source quality. 3) Reduce output level in the VZX Web App or verify amplifier input sensitivity and zone routing settings.
Audio sounds muffled or lacks low frequencies.	Incorrect speaker settings (e.g., LP filter on full-range speaker).	Adjust speaker settings in VZX Web App to match speaker type.
Weak sound output, no fault indications.	Incorrectly wired input connectors.	Verify input cable polarity and wiring.
Hum and hiss noise.	Interference due to unbalanced cables or incorrect connections.	Use balanced input cable wiring.
Fault LED on front panel is solid red.	1) Configuration issue. 2) Shorted or damaged cable. 3) Disconnected accessory.	1) Check VZX-8 and accessory configuration in Web App. 2) Inspect cables for shorts or damage. 3) Reconnect accessory.
VWP or VCS-8 call station is frozen.	Various causes.	First, try disconnecting and reconnecting the frozen accessory. If the issue persists, perform soft reset: Hold INIT for 3 seconds. This preserves Username, Password, and configuration.
VWP stuck on loading screen on first use.	Firmware update in progress from VZX-8.	Wait for firmware update to complete.
Cannot login or connect to VZX-8.	Various causes.	1) Verify VZX URL, username, and password. 2) Check DHCP settings. 3) Use correct connection

Problem	Possible cause	Solution
		method (e.g., Rescue URL: http://169.254.1.0). 4) Power cycle the unit. 5) If unresolved, perform system reset.
Reconnect not possible after firmware update issued.	The device was powered down or lost power during the firmware update, causing the update process to fail and the device to become unresponsive.	1) Do not disconnect power during firmware updates to avoid this issue. 2) If the device is unresponsive, download the OMNEO Firmware Upload Tool from dynacord.com and perform recovery using this tool. 3) Ensure secure firmware update by registering a user named “user” and using the administrator password you have configured.
Lost username/password for VZX-8.	Credentials unavailable.	Hold INIT for >15 seconds to hard reset. This erases configuration and requires new setup. Configuration may be recoverable from MicroSD.

10

Maintenance

This product has been designed to operate without problems for a long period of time, with a minimum of maintenance.

In order to guarantee trouble-free operation periodically:

- Clean all units with a damp, lint-free cloth; never use water or chemicals.
- Vacuum the air vents to ensure good ventilation.
- Check all cable connections for corrosion and the screw terminals to make sure that they have not become loosened.
- Check the ground (PE) connection of the system components.

11

Technical data

For detailed specifications and engineering documents, go to www.dynacord.com, then open the **Downloads** section and select the **Engineering Data Sheet**.

12

VZX-8 Block diagram

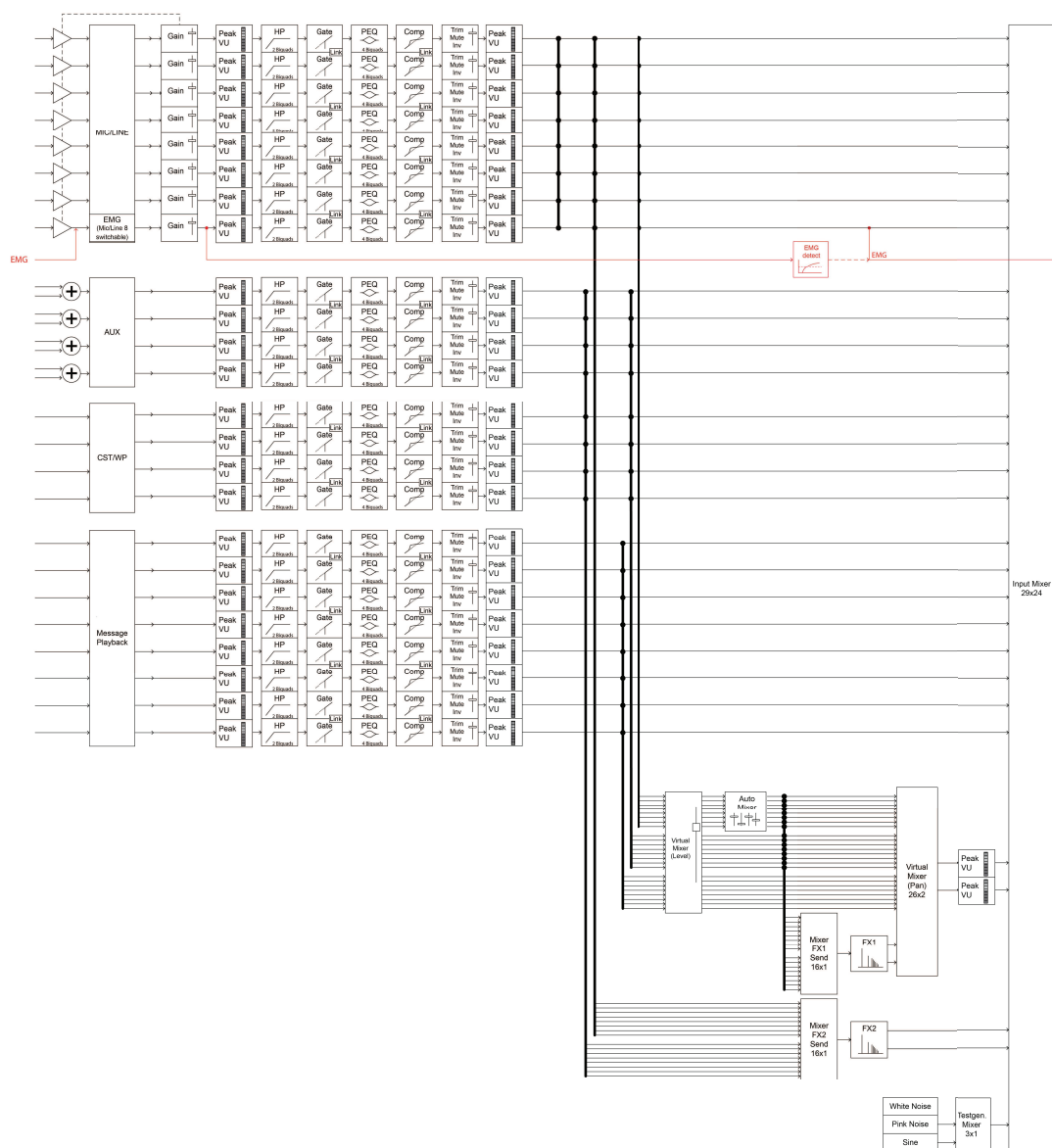


Figure 12.1: DSP inputs

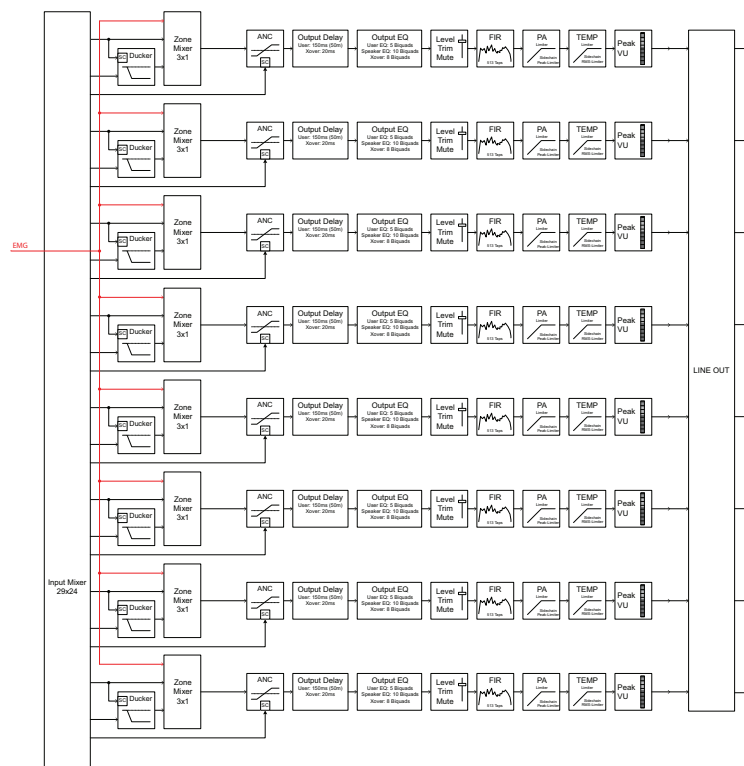
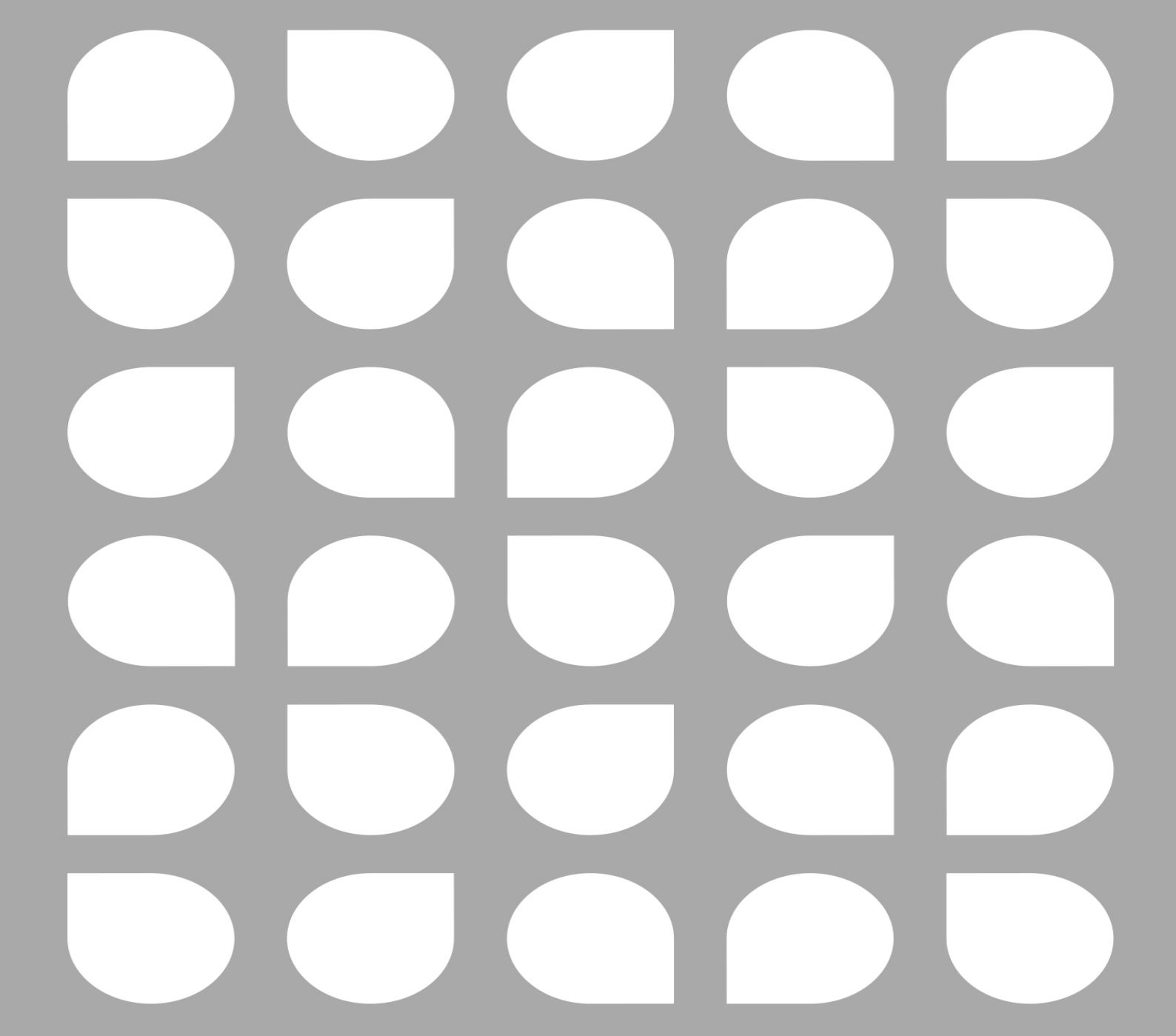


Figure 12.2: DSP Output



Bosch Security Systems, LLC

130 Perinton Parkway
Fairport, NY 14450
USA

www.dynacord.com

© Bosch Security Systems, LLC, 2025

EU importer:

Bosch Sicherheitssysteme GmbH

Robert-Bosch-Platz 1
70839 Gerlingen
Germany

© Bosch Sicherheitssysteme GmbH, 2025