TOA

Additional System Modules
VX-3000 Series
Line Output Module·Preamp Matrix Panel·Control Panel

Safety, superior sound quality and usability

Combined highly integrated voice evacuation, public address and BGM system.

Safety is an important issue more than ever.

Our VX-3000 is a reliable and energy-saving voice evacuation system certified on the European Standard EN54-16. It combines a lot of functions for PA/VE/BGM applicatons in one single VX-3000 Frame. The reduction in the number of components required allows for a non-complex design and a much quicker and easier installation together with space saving and a reduction in cable runs and complexity. This enables rapid system configuration and makes the VX-3000 a cost-effective system.

It includes low loss modular class D amplifiers with 3 different output ratings. These can easily be removed or mounted simply by unplugging them so there is no need for special tools. By using low loss modular class D amplifiers and modern power supply switching technology, the system becomes much more energy efficient and enables low operating costs.

Due to its flexible and scalable system architecture, the VX-3000 system can be used for both small and large applications, with up to 1280 remote microphones, 1,920 audio inputs and 2560 speaker zones. In addition, you can connect one audio source (e.g. music player) to each remote microphone and broadcast it. The system can be installed centralised as well as de-centralised, latter can reduce the cabling cost drastically.

The automatic emergency announcements (pre-recorded messages) can be arranged in three phases, for example broadcasting a coded message first, then a warning and at the end an evacuation message. A simultaneous broadcast of warning and evacuation messages is also possible and can be initiated by a single activation. Since version 5 the system allows the setting of a sequential evacuation with 30 phases which is required sometimes in a big building complex.

The two remote microphone models can be set for normal, emergency and both modes with a different setting for the talk button (implemented zone selection or not, PPT or lock mode).

In emergency mode, emergency messages can manually be assigned to broadcast areas. Built-in chimes or individually recorded chimes or tones can be set before and after paging, and different tones for normal and emergency broadcasts.

Different access levels (since version 5) restrict the access to the setting software according to the operator's education level. So the advanced user level allows the end user the setting of the built-in timer (since version 5) and changing audio files for general broadcasts, such as pause chimes in schools and factories, or general or advertisement announcements in shopping areas.

Also, the VX-3000 system passed the test on EN 50121-4 successfully. This standard covers the high EMC requirements for installations in railway stations.

The three new units were developed to enlarge the PA capability of the VX-3000 system. Therefore these units will not be certified on EN 54 but it will be approved by the certifier that they do not affect any emergency function.

The new devices require the firmware and software of version 5.10.

TOA's VX-3000 Series, IP-3000 Series and NX-300 got certified with EN 50121-4 (IEC62236-4), the electromagnetic standards which applies to a signaling and telecommunication apparatus installed in railway environment. Those systems can be utilized in railway applications where EN 50121-4 is required. Please contact us ahead of planning regarding additional measures.

EN 54-16 specifies requirements, test procedures and performance characteristics for voice alarm control and indication equipment installed in buildings where people are to be evacuated in case of a fire by spoken messages.
Certificate No: 1134-CPR-195 (VX-3000) and 1134-CPR-221 (VX-3308)

REMOTE MICROPHONES

RM-200SF

RM-320F

RM-300X

RM-210F

FRAMES

VX-3004F

VX-3008F

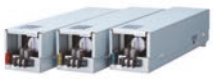
VX-3016F

PREAMP MATRIX PANEL

VX-3000PM

NOW AVAILABLE

AMPLIFIER MODULES



VX-015DA / VX-030DA
VX-050DA

LINE OUTPUT MODULE

VX-300LO

NOW AVAILABLE

WALL-MOUNT DEVICE WITH FRAME + POWER SUPPLY

VX-3308WM + VX-3065BB

CONTROL PANEL

VX-3000CT

NOW AVAILABLE

POWER SUPPLY

VX-3000DS / VX-3150DS

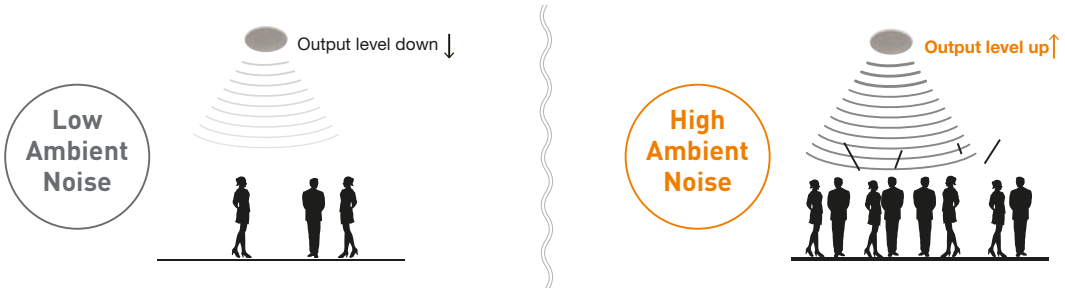
Flexible Broadcasting

Broadcast of many different audio signals to multiple zones simultaneously, flexible speaker driving

- Broadcast initiation: Remote microphone key operation, VX-3000CT key operation, internal timer, voice control, and more
- Selectable audio sources: audio inputs for microphones for paging or music players for BGM or FGM broadcast, pre-recorded messages, and more
- Broadcast priority setting with 1024 levels

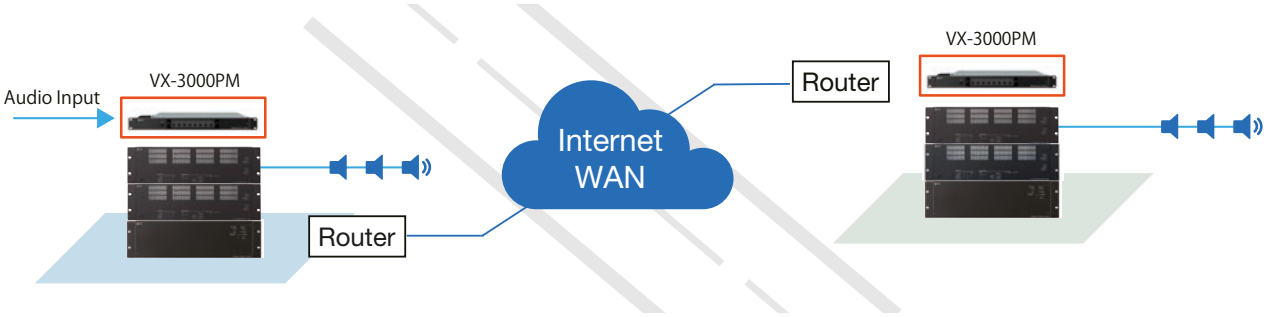
High Sound Quality & Intelligibility

- Comprehensive DSP functions for inputs and outputs including automatic feedback suppressor
- Automatic output volume adjustment depending on the ambient noise level (Ambient Noise Control function)



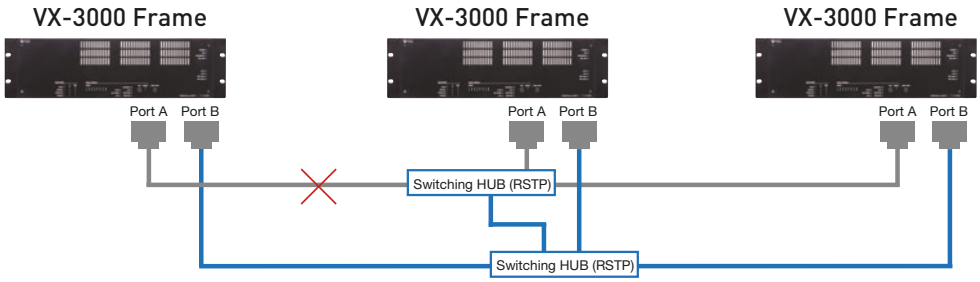
Audio Streaming over the WAN

VX-3000PM Preamp Matrix Panel enables unicast audio streaming via routers, which allows long distance broadcasts even between buildings across public roads.



Redundant network

Redundant LAN connection can be configured for more reliable system.



Integration

- Connectable with TOA's NX-300 Network Audio Adapter and IP-3000 Series IP Public Address System
- Remote Protocol enables VX-3000 to be controlled by external devices.
- Furthermore, VX-3000 can be controlled with the Modbus protocol.

VX-3000 Series /Line Output Module / **VX-300LO**

The VX-300LO provides more possibilities to distribute audio with the VX-3000 system e.g. for BGM. The line output module can be installed instead of an amplifier module. It provides a balanced line level audio signal that can be used for e.g. recording or driving external amplifiers and speaker lines that do not require surveillance.

Features

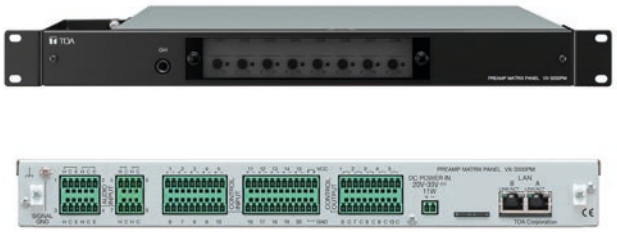
- Line output module to be mounted in the VX-3000 frame
- Outputs and audio signal at line level from the VX-3000 frame to an external device

Specifications

	VX-300LO
Applicable Model	VX-3004F, VX-3008F, VX-3016F
Power Source	Supplied from the VX-3000 frame (DA CONTROL LINK)
Current Consumption (*1)	Max. 2 mA (Current through DC POWER IN)
Input	DA CONTROL LINK: Connector (15 pins)
Audio Output (*1)	1 Channel Output signal level: 0 dBV Adjustable range of the volume control: -∞ to 0 dB Output method: 10 kΩ, transformer-balanced Applicable load impedence: 2 kΩ or more Frequency Response: 40 Hz - 20 kHz ±1 dB Distortion: 1 % or less (0 dB (*2) output, 1 kHz) Signal to Noise Ratio: 60 dB or more Removable terminal block (3 pins)
Finish	Surface-treated steel plate
Dimensions (W x H x D)	76 x 39 x 33.2 mm
Weight	56 g

VX-3000 Series / Preamp Matrix Panel / **VX-3000PM**

With the VX-3000PM audio streaming is possible between networks, e.g. via a router. The matrix panel comes in a 1U 19" housing for rack mounting and provides 8 additional audio inputs, 20 control inputs and 10 control outputs. A phone jack on the front allows connecting a microphone. One unit can be used per VX-3000F frame.



Features

- Preamplifier matrix panel enabling the additional audio inputs, control inputs and control outputs to the VX-3000 system
- Equipped with 8 audio inputs with volume controls, 20 control inputs and 10 control outputs
- Unicast audio streaming functionality among VX-3000PMs allows connection through other networks
- 1 unit can be connected per VX-3000 Frame and a maximum of 40 units can be configured per system

Specifications

	VX-3000CT
Power Source	20 – 33 V DC, removable terminal block (2 pins)
Current Consumption	0.33 A at 33 V DC input, 0.35 A at 24 V DC input
LAN A, B	Number of Connectors: 2 (LAN A, LAN B) Network I/F: 100BASE-TX Network Protocol: TCP, UDP, ARP, ICMP, RTP, IGMP, HTTP Spanning tree Protocol: RSTP Audio Transmission System: TOA Packet Audio (*1) Audio Encoding Method: PCM Audio Sampling Frequency: 48 kHz Audio Quantifying Bit Number: 16 bits Connection Device: VX-3004F, VX-3008F, VX-3016F, NX-300, VX-3000CT, VX-3000PM, Switching HUB Connector: RJ45 connector Connection Cable: Category 5 twisted pair cable (CAT5) or greater Maximum Cable distance: 100 m
Audio Input	8 inputs Input Level: Input 1 - 4: -60 dBV / -40 dBV / -20 dBV /0 dBV selectable, input impedance 600 Ω, transfomer-balanced Input 5, 6: -20 dBV, input impedance 10 kΩ, unbalanced Input 7, 8: 0 dBV, input impedance 10 kΩ, unbalanced Frequency Responce: -60 dBV): 200 Hz - 10 kHz, -2 dB ±3 dB -40 dBV / -20 dBV / 0dBV: 100 Hz - 15 kHz, -2 dB ±3 dB Distortion: 1% or less Signal to Noise Ratio: 60 dB or more Removable terminal block (6 pins x 2, 4 pins x 2) Only Input 1 is used in common with the front-mounted ø6.3 mm phone jack
Control Input	20 channels, no-voltage make contact input, open voltage: 30 V DC, short-circuit current: 2 -10 mA Connector: Removable terminal block (10 pins x 2, 12 pins x 2)
Control Output	Channels 1 - 5, relay (a contact), withstand voltage: 30 V DC, control current: 1 A Channels 6 - 10, open collector output (polarized), withstand voltage: 30 V DC control current 100 mA Connector: Removable terminal block (10 pins) x 2
Indicators	Signal Indicator (Green) x 8, Run (Green) x 1, LINK/ACT (Green) x 2
Volume Control	8 channels
Operation	Input level setting switch x 1, IP address setting switch x 1
Dimensions (W x H x D)	482 x 44 x 292.4 mm
Weight	3.2 kg

(*1) TOA's unique technology which makes it possible to transmit high-quality audio signal in real time over an IP network.

VX-3000 Series / Control Panel / **VX-3000CT**

With the VX-3000CT, audio control is transferred to the rack or any other place. The control panel comes in a 1U 19" housing for rack mounting and provides 9 function buttons and 8 volume controls. The buttons can freely be assigned to any PA function, for example they can be used to activate BGM or paging broadcasts. Each volume control can be assigned to any input or output according to the user's choice. This allows the user to adjust the volume of e.g. music sources or that of zones. In emergency mode the zone volumes will be overridden by the default settings to ensure a sufficient loudness as adjusted at the installation. A cover protects the volume controls against accidental changes. Up to two units can be used per VX-3000F frame.

With volume control section cover

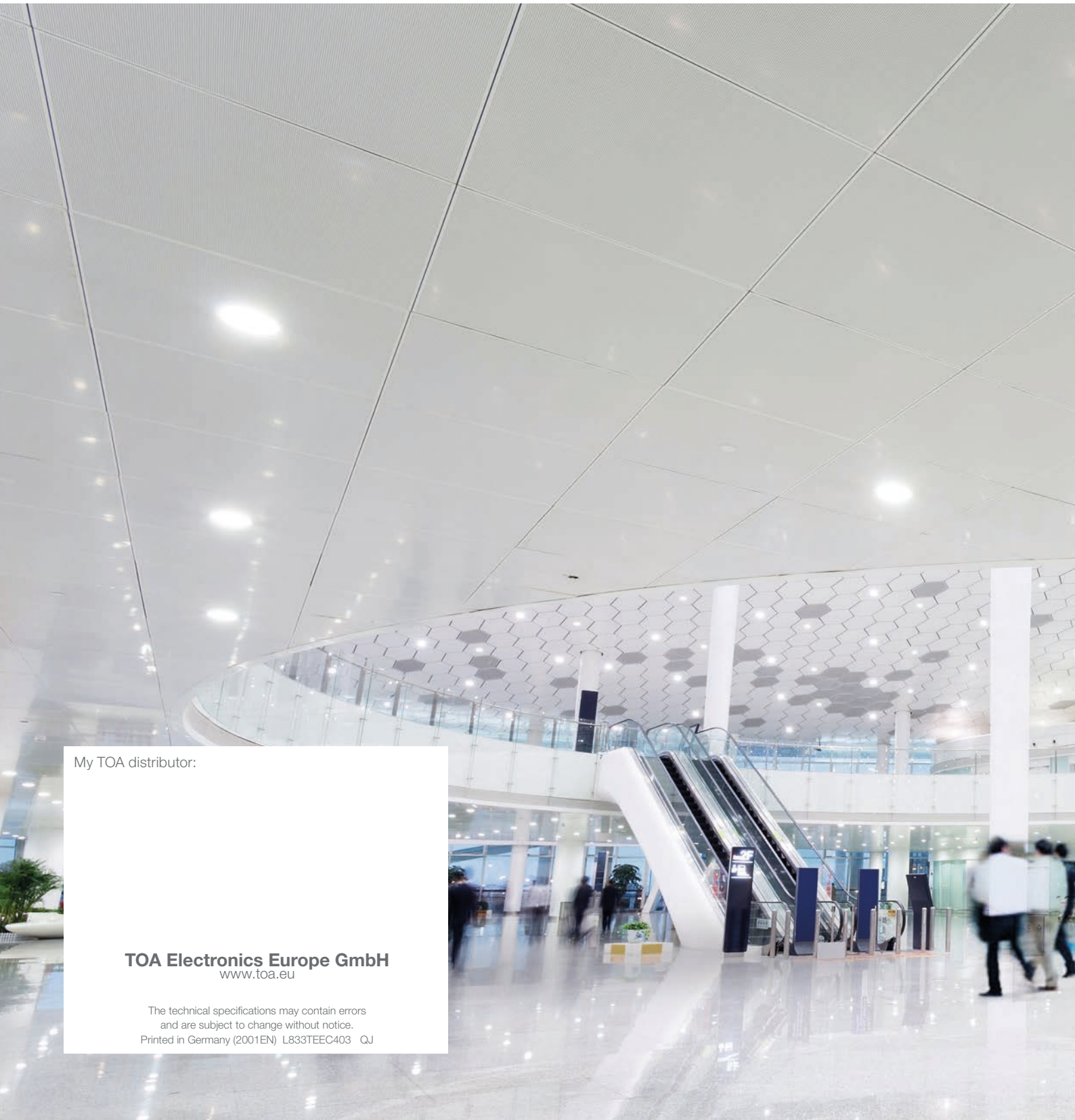
Features

- Control panel with 9 function keys and 8 volume control knobs for easy operation
- Function keys are used for public address operation such as the activation of general broadcast
- Volume controls allow volume level adjustment of the VX-3000 Frame's audio input or audio output (assignable)
- Up to 2 units can be connected per VX-3000 frame

Specifications

	VX-3000CT
Power Source	20 – 33 V DC, removable terminal block (4 pins)
Current Consumption	0.09 A at 33 V DC input, 0.11 A at 24 V DC input
LAN A, B	Number of Connectors: 2 (LAN A, LAN B) Network I/F: 100BASE-TX Network Protocol: TCP, ARP, ICMP, HTTP Connection Device: VX-3004F, VX-3008F, VX-3016F, NX-300, VX-3000CT, VX-3000PM, Switching HUB Connector: RJ45 connector Connection Cable: Category 5 twisted pair cable (CAT5) or greater Maximum cable distance: 100 m
Panel Indicator	Power (Green) x 1, Run (Green) x 1, Link/ACT (Green) x 2, Signal (Green) x 8, Fault (Yellow) x 1, Status (Green/Yellow) x 9, Select (Green) x 9
Volume Control	8 channels
Operation	Function key x 9, Reset Key x 1, IP address setting switch x 1
Dimensions (W x H x D)	482 x 44 x 315.2 mm
Weight	3 kg

We supply sound, not equipment.
www.toa.de



My TOA distributor:

TOA Electronics Europe GmbH
www.toa.eu

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