



VX-2000 Series

Flexible public address and voice alarm system



sound without compromise

RELIABLE & FLEXIBLE



EN 54-16 certified
Certificate No: 1134-CPR-110
Fulfills the VDE 0833-4, EN 60849 / VDE 0828
EN 54-4 certified
Certificate No: 1134-CPR-083



A SYSTEM CONQUER THE WORLD

Continuously TOA brings the knowledge gained from years of experience in the development and production of sound and security systems, which is reflected in the high reliability of many installations worldwide.

The flexible system fulfills all requirements from simple to highly complex installations and ensures not only professional sound with superb audio quality but also a safe environment for the public.

Thus, the VX-2000 system can be used wherever a permanently installed sound system with voice evacuation is needed, such as in hospitals, train stations, hotels, schools and shopping centers.

CUSTOMIZED AND COST-EFFECTIVE

The digital VX-2000 system is composed of a System Manager, Surveillance Frame, Power Amplifiers, Power Supply, Emergency Power Supply, Fireman's Microphone and user-specified number of Remote Microphones. It's fully modular design allows maximum flexibility, so that systems can be customized to suit the needs from the outset and are also easy to expand. This makes the VX-2000 series a powerful and cost-effective platform for almost any application.

The system manager has 8 slots for input modules to fit the various sound sources. It manages up to 8 remote microphones – incl. 4 emergency remote microphones, different chime tones are also integrated. In addition, 2 memory modules for automatic voice announcements can be used.

Up to 80 speaker lines in A/B-wiring can be controlled. Furthermore, a remote access is possible, e.g. via telephone modem. For an easy remote maintenance all software functions are supported.

- Integrated system for public address and voice evacuation
- Fulfills all requirements of the applicable standards
- System status can be confirmed on the central indication panel and remote microphones
- Optional linkable central control units possible
- Simultaneous 2-channel recorded message broadcasts
- Continuous speaker line monitoring without interruption of BGM or paging announcements
- Event memory for efficient system maintenance

APPLICATION EXAMPLES



Department



Hotels



Schools



Exhibitions



Hospitals

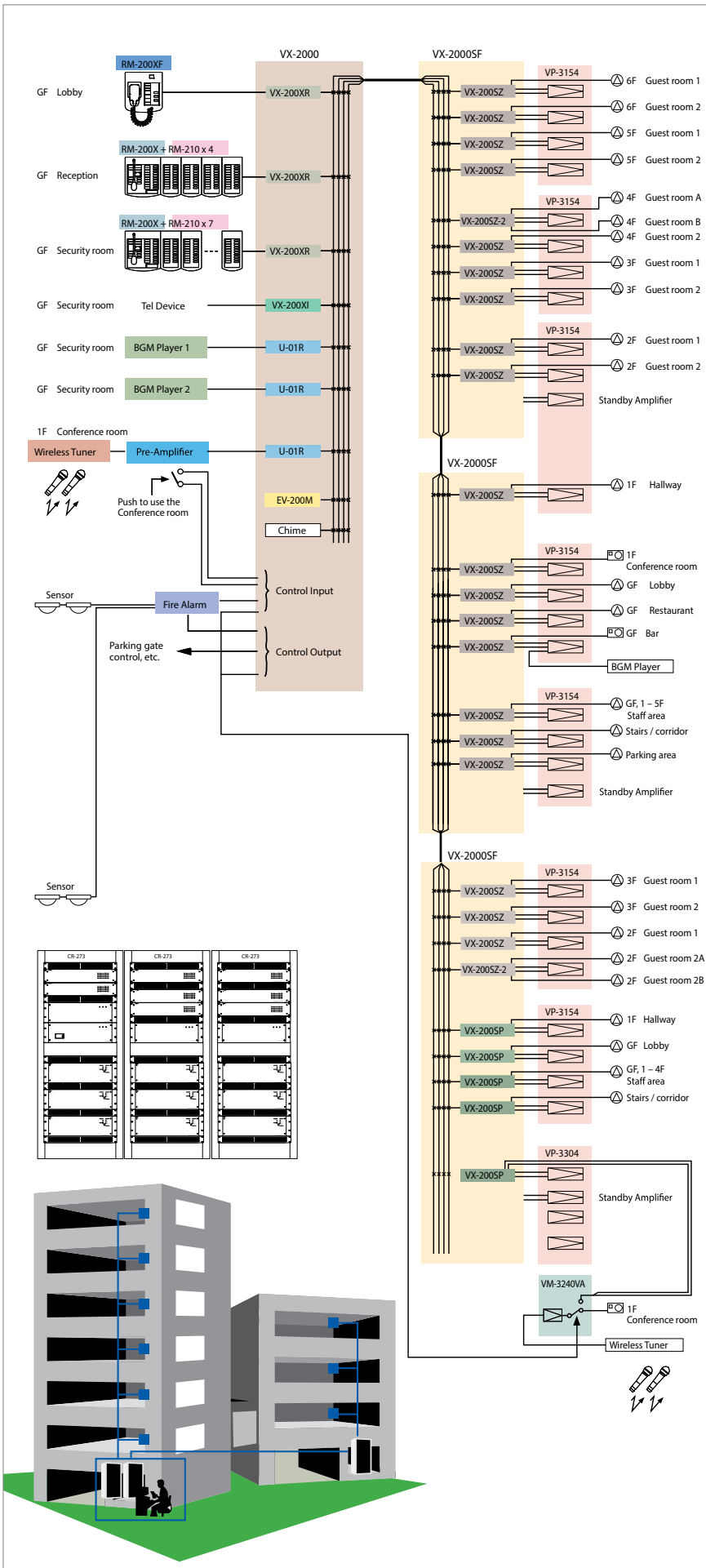


Retail- and supermar-



Train stations

SYSTEM CONFIGURATION



VX-2000 System Manager

An input matrix unit that assigns input signals to 4 audio buses, and functions as the VX-2000 system's main controller. A total of up to 8 units of the VX-200XI, VX-200XR, and other input modules can be mounted in a System Manager. The VX-2000 can control audio signal routing, priorities, and peripheral equipment, while system configuration settings are performed by PC setting software. Up to 2,000 system events and failures can also be recorded, and the log can be viewed from a PC.



VX-2000SF Surveillance Frame

The VX-2000SF Surveillance Frame is the output matrix section of the VX-2000 system that assigns audio signals to individual zones from 4 audio buses. It can be extended up to 8 units. A total of 10 units of output modules and control modules can be installed per VX-2000SF.

RM-200XF Fireman's Microphone

A dedicated microphone for the VX-2000 system, the RM-200XF is designed to be exclusively used for emergency broadcast, however it can be used for general purpose broadcast applications as well.



RM-200X Remote Microphone

The RM-200X is a dedicated unit for the VX-2000 system, permits emergency broadcast as well as general purpose broadcast. The PC-programmable system software permits desired functions to be assigned to individual function keys.



RM-210 Key Extension Unit

Extension unit for increasing the number of function keys of TOA's RM-200X and RM-200XF Remote Microphones.



WB-RM200 Wall Mounting Bracket

The WB-RM200 is to mount RM-200X and RM-210 on the wall.



VX-200XI Audio Input Module with Control Input

Audio Input Module with Control Input including low-cut and high-cut filter and gain control.



VX-200XR Remote Microphone Input Module

Remote Microphone Input Module for RM-200X and RM-200XF. Q-VX-200XR with repeater circuit.



General Input Modules

U-01R, U-03R, U-01F, for the line level input with different input connectors. M-01F, M-01T for the microphone level input.



VX-200SZ Impedance Detection Module

Audio signal output module with speaker line impedance detection. Detects speaker line short circuits, open circuits by comparing impedance and ground fault.



VX-200SZ-2 Impedance Detection Module

Audio signal output module with speaker line impedance detection. Detects speaker line short circuits, open circuits by comparing impedance and ground fault. Since the module is equipped with 2 speaker outputs (A and B), broadcasts can be maintained even if one of the two outputs fails.



VX-200SP Pilot Tone Detection Module

Audio signal output module with speaker line pilot tone detection. Detects speaker line short circuits, open circuits by monitoring for the presence of a pilot signal, and ground fault.



VX-200SP-2 Pilot Tone Detection Module

Audio signal output module with speaker line pilot tone detection. Detects speaker line short circuits, open circuits by monitoring for the presence of a pilot signal with end of line module, and ground fault.



VX-200SI Control Input Module

Used to increase the number of control inputs. It features 16 control inputs and is mounted in the VX-2000SF.



VX-200SO Control Output Module

Used to increase the number of control outputs. It features 16 control outputs and is mounted in the VX-2000SF.



VX-200SE Equaliser Card

A 9-band, 1-channel equaliser to be mounted on the circuit board of the VX-200SP/VX-200SP-2 Pilot Tone Detection module or VX-200SZ/VX-200SZ-2 Impedance Detection module.



EV-200M Voice Announcement Board

To playback pre-recorded texts and sounds. The audio signals are stored on optional Compact Flash



Digital Power Amplifier

- VP-3154 (4 x 150 W)
- VP-3304 (4 x 300 W)
- VP-3504 (4 x 500 W)

The digital amplifiers are compact, lightweight and energy efficient. Each channel has an independent power source for enhanced reliability, and BGM input ports support BGM broadcasting.



Power Amplifiers

- VP-2064 (4 x 60 W)
- VP-2122 (2 x 120 W)
- VP-2241 (1 x 240 W)
- VP-2421 (1 x 420 W)

Power amplifiers with built-in Power amplifier Input Module VP-200VX. All models are also available without built-in Module.

VP-200VX Power Amplifier Input Module

For transmission of status and audio signal between amplifier and control module.



VX-3000DS Power Supply Manager

Supplies DC power to all VX-2000 system components. It combines two built-in power source units with a high-performance charger. If the primary power supply is cut off, the VX-3000DS switches automatically to auxiliary battery power.



VX-2000DS Emergency Power Supply

Supplies the DC power to each equipment in the VX-2000 system by connecting the VX-200PS Power Supply Unit. It keeps the battery unit that contains 2 x 12 V sealed lead batteries charged. When the DC power supply from the VX-200PS stops, the VX-2000DS is automatically switched to the backup battery.

VX-200PS Power Supply Unit

2 DC output channels per unit. Use the VX-200PS in the number suited to the required total system power.



VX-2000PF Power Supply Frame

Up to three VX-200PS units can be installed in the unit.



SAFE & VERSATILE



HIGH RELIABILITY

For the case of failure there is a CPU cut-off switch right on the fireman's microphone which ensures the all-call function is still available. Of course, it is also equipped with standard-compliant self-test features including acoustic monitoring of the microphone capsule.

NON-INTERRUPTIVE SURVEILLANCE

To ensure continued safety the VX-2000 features different failure detection measures that constantly check components and speaker lines for any faults or abnormalities without interruption of BGM or paging announcements.

INDIVIDUAL ASSIGNMENT

The remote microphone keys are freely programmable for different functions and also come with a definite pressure point to obtain feedback on operation.

READABLE SYSTEM STATUS

The system status is displayed on each remote microphone and optionally on an indication panel at the system manager.

AUTOMATIC DUAL BROADCASTING

Simultaneous dual broadcasting is possible by using two voice announcement cards to allow different messages to be available at the same time such as alert and evacuation messages. Thus it ensures an orderly and rapid evacuation.

VERSATILE SOFTWARE

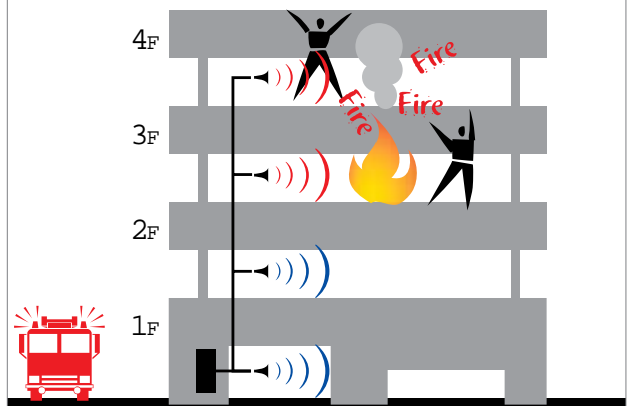
The software provided freely with the VX-2000 for easy system configuring and parameter setting has multilingual options for convenient use by personnel in any location.

DIGITAL AMPLIFIERS AND OPTIMIZED POWER SUPPLY

The expansion of the product line to digital Power Amplifiers and a digital Power Supply Manager offers significant advantages:

- significant reduction of cabinet size
- reduction in the weight
- less powerloss and heat loss
- short installation time
- space-saving, cheaper transport

Example of 2 simultaneous broadcasts with 2 EV-200M voice announcement cards installed in the VX-2000.



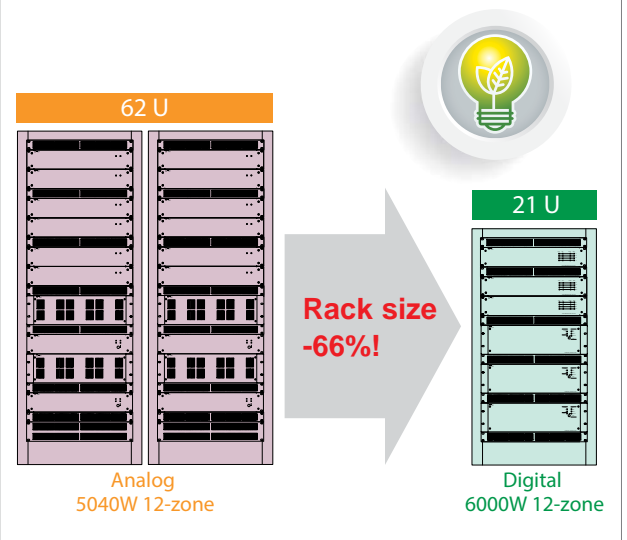
Red

In an emergency, the system automatically broadcasts one evacuation message to the buildings 3rd and 4th floors.

Blue

Along with the evacuation message, the system automatically broadcasts an alert message to the 1st and 2nd floors simultaneously.

Example of the use of digital amplifiers as opposed to analog.



Digital Class-D Power Amplifier, EN-54-16 certified



Digital Power Supply Manager, EN-54-4 certified

VX-2000 System

- Microprocessor-controlled 4 audio signals bus matrix system comprising System Manager VX-2000 for the input signal matrix and Surveillance Frame VX-2000SF for the output signal matrix.
- Max. 18 inputs {8 input slots, 8 Remote Microphones including Fireman's Mic, 2 EVs (Voice Announcement Board) and Chime} and 80 output zones (max. 8 Surveillance Frames) available.
- Two different emergency messages (Alert & Evacuation) simultaneously available if 2 EV-200M cards are installed.
- Surveillance function for the critical speech path from the microphone element of Fireman's Microphone(s) to each speaker line fully complies with the EN 54 standard.
- Speaker line surveillance method can be independently selected for each speaker line (Pilot tone detection, end of line detection or impedance comparison)
- Any surveillance function will not interrupt BGM distribution and paging announcements.
- PC software available for easy system configuring and parameter setting.
- Yearly program timer function for scheduled events. (10-Day Programs of 32 events each, 40 Holiday Programs, setting daylight saving time and adjusting time setting)
- Inspection mode can be activated on setting software for emergency operation without requiring actual broadcasting.
- Automatically reduces power consumption when using the battery power supply.
- A standby amplifier can be reserved for each Surveillance Frame
- All-call function still available at Fireman's Microphone (s) even with CPU failure
- All Remote Microphone (Fireman's Microphone) switches are assignable function switches.
- LEDs on the Remote Microphone (Fireman's Microphone) can be set as Fault Indicators.
- Remote Microphone (Fireman's Microphone) function switches with 2 LEDs can be expanded up to 105 per unit (with RM-210 Remote Microphone Extension Units).
- Software-driven logging function records the last 2000 events and downloads data to a PC.
- Printable software-driven Setting list and Block Diagram of Project
- System configuration and connection check function available during system installation.
- 9-band Graphic EQ card available for each output zone.
- DC power supply for whole system excluding BGM sources minimizes use of AC cables.
- System failures are automatically detected such as general power amplifier failures and faults as well as DC fuse failures and power amplifier thermal faults.
- Power amplifier standby function maximizes battery-powered operation time.
- Monitor bus system allows Remote Monitoring of the audio signal on output zones.
- Standard configuration of 16 control inputs and 16 control outputs can be expanded up to 128 inputs and outputs.



EN 54 is a standard of the European Union (EU) for fire alarm systems, ensuring high product quality and reliability, and enabling better integration of Voice Alarm (VA) and Public Address (PA). EN 54 will play a significant role in the market for voice evacuation equipment, as the member states of the European Union replace their local standards with the EN 54 standard. All emergency voice evacuation systems marketed in the member states of the European Union are required to be certified to this standard.

The VX-2000 system is certified on the European Norm EN 54-16 with CPD number 1134-CPD-110.

The VX-3000DS/VX-2000DS (ER/UK version) Power manager and VX-200PS (ER/UK version) power supply are certified on the European Norm EN 54-4 with CPD number 1134-CPD-083.



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