



# VX-3000

## Voice Evacuation System

Steps,  
noises,  
hustle and bustle...

... and yet you are still led out quickly and safely in an emergency.



## Description

The issue of security is more than ever important. Our VX-3000 is a reliable and energy-saving voice alarm system that combines all important functions for PAVA in one unit frame. The limited number of components makes the design and installation much easier, as well as saving space and reducing cable complexity. This enables rapid system configuration and makes the VX-3000 a cost effective system.

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

Thanks to its flexible and scalable system architecture the VX-3000 system can be used for both small and large applications, with up to 256 remote microphones and 128 audio sources.

## System Features

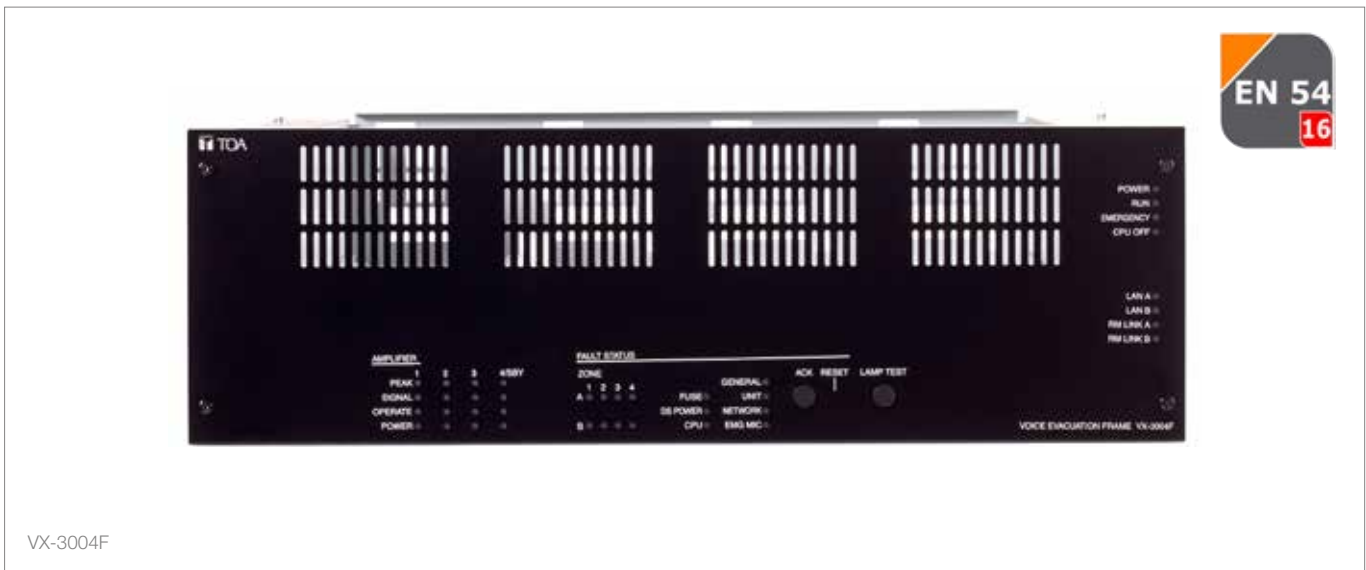
- > Compact: All functions, all inputs and outputs in one unit
- > Cost effective: Easy system configuration thanks to small number of system components
- > Flexible: Broadcast of many different audio signals simultaneously, flexible speaker driving from 1 zone per amplifier up to 64 zones per amplifier
- > Scalable: up to 256 remote microphones
- > Light-weight: Modern supply switching technology and digital amplifiers
- > Energy saving: Standby mode for low power consumption during battery backup reduces the required battery capacity
- > Decentralized: IP Network based
- > Advanced ambient noise control (ANC) (Q4)
- > Master-less system provides high security if one line fails (Q4)

### Maximum System Capacity

Output Power	64.000 W
Speaker Zones	512
Remote Mic connection	256



# VX-3000 series Frames



## VX-3004F / VX-3008F / VX-3016F

- VX-3004F: up to 4 amps (1-zone - 1 amp, 4 AB-zones or 3 AB zones + standby amp)
- VX-3008F: up to 3 amps (8 zones switching between 2 amps + standby amp or 8 zones freely assignable to 1 of 2 amps)
- VX-3016F: up to 2 amps (16 switched zones + standby amp or 2 x 8 switched zones)
- All mandatory indications by EN54-16
- Status indication for each speaker line
- Falut acknowledge and lamp test button
- Input DSP: flexible filtertypes and compressor (Q4)
- Output DSP: flexible filtertypes, compressor and delay up to 2.7 sec. (Q4)

Specifications	VX-3004F	VX-3008F	VX-3016F
Applicable Model	System VX-3000		
Power Source	31 VDC (operating range: 20 – 40V DC)		
Speaker Output	4 AB Zones	8	16
Power Amplifier	4	3	2
Audio input	4 (Line: -20 dBV / Mic: -60 dBV, phantom power selectable)		
RM Link	2 (max. 8 RM)		
LAN	2		
Control Input	16+2 (FDS)		
Control Output	8+3 (CPU OFF)		
ATT Control Output	8	8	16
Finish	Panel: Surface treated steel plate, black, 30% gloss, paint		
Dimensions (W x H x D)	483 x 132.6 x 345 mm (19", 3U)		
Weight	7.6kg		7.9kg

# VX-3000 series Amplifiers



VX-050DA

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

- > Low loss modular class D amplifiers
- > Modules to be mounted in the frame units
- > Three different power levels: 150W, 300W or 500W
- > Can easily be removed or replaced simply by unplugging them; no need for special tools
- > Dust filter, easy to clean
- > 100V Output without transformer resulting in light-weight units
- > Fuse easily accessible from rear

### Specifications

	VX-015DA	VX-030DA	VX-050DA
Applicable Model	VX-3004F, VX-3008F, VX-3016F		
Power Source	31VDC (operating range: 20 – 40VDC)		
Amplification System	Class D		
Rated Output Power	150W (100V)	300W (100V)	500W (100V)
Supported Loads	50V / 70V / 100V		
Frequency Response	40Hz – 16kHz ± 3dB		
Distortion	1% or less (at 100V line, A-weighted)		
Finish	Surface-treated steel plate		
Dimensions (W x H x D)	79 x 91 x 358.2mm		
Weight	1.4kg		



**RM-200SF / RM-320F**

- > For emergency broadcast
- > For activation of emergency mode, start and stop automatic broadcasts of emergency announcements, reset emergency signals, and live microphone announcements
- > CPU-switch for emergency broadcast to all zones even in case of a CPU error
- > Up to 4 RM-320F Remote Microphone Extension units can be used with each RM-200SF Remote Microphone

**Options**

- > RM-320F: Key extension unit
- > RM-210: Key extension unit
- > WB-RM200: Wall-mounting bracket

**Specifications**

	RM-200SF	RM-320F
Applicable Model	VX-3004F, VX-3008F, VX-3016F, RM-210, RM-320F, SX-200RM in SX-2100AI	RM-200SF, RM-300MF, RM-200XF, RM-200M
Power Requirement	24 VDC (operating range: 15 – 40VDC)	From remote microphone
Distortion	Under 1 %	-
Frequency Response	200Hz – 15kHz	-
Signal-to-Noise Ratio	Over 55 dB	-
Audio Output	0dBV, 600Ω, balanced	-
Microphone	Unidirectional dynamic microphone AGC	-
Volume Control	Microphone, speaker	-
Key Extension	Max. 4 RM-320F	20 keys, freely assignable
Finish	ABS resin, bluish gray (PANTONE 538 or its equivalent)	
Dimensions (W x H x D)	200 x 215 x 95 mm	175 x 215 x 70 mm
Weight	1.48kg	700g

# VX-3000 series Remote Microphone



## RM-300X/RM-210F

- > For both emergency and general purpose broadcast
- > Zone selection or all call
- > PC-programmable system software permits desired functions to be assigned to individual function keys (equipped with 2 LED indicators)
- > RM-210F: Key extension unit with 10 additional keys
- > Up to 7 RM-210F Remote Microphone Extension units can be used with each RM-300X Remote Microphone

## Options

- > AD-246: Power supply unit
- > WB-RM200: Wall-mounting bracket

## Specifications

	RM-300X	RM-210F
Applicable Model	VX-3004F, VX-3008F, VX-3016F	
Power Source	24VDC (operating range: 15 - 40VDC), supplied from the audio input unit or DC input power supply connector	From remote microphone
Current Consumption	Under 240mA	80mA max. (from remote microphone)
Audio Output	0dBV, 600Ω, balanced	-
External Microphone Input	-40dB, 2.2kΩ, unbalanced, mini jack, phantom powering	-
Frequency Response	100Hz – 20kHz	-
Distortion	Under 1%	-
Signal-to-noise Ratio	Over 60dB	-
Volume Control	Microphone volume control, Monitor speaker volume control	-
Key Extension	Max. 7 RM-210F	10 keys, freely assignable
Maximum Cable Distance	1,200m	-
Finish	ABS resin, black	
Dimensions (W x H x D)	190 x 76.5 x 215mm (gooseneck microphone excluded)	110 x 76.5 x 215mm
Weight	850g	350g

# VX-3000 series Power Supply



VX-3000DS

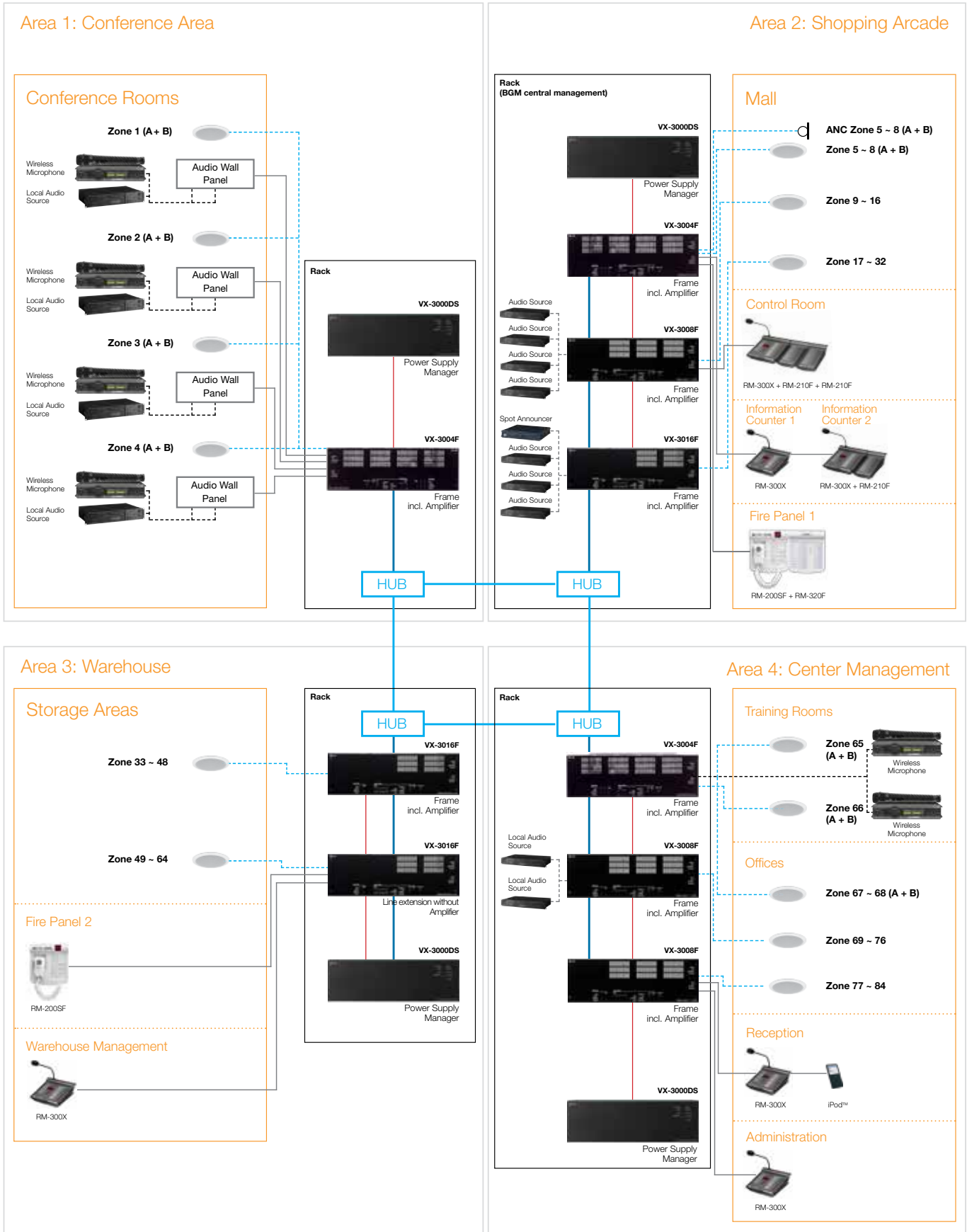
## VX-3000DS

- DC power supply to all system components
- Combination of two built-in power source units with a high-performance charger
- Automatical switch to auxiliary battery power if the AC power supply is down
- EN 54-4 certified, Certificate No: 1134-CPR-137

### Specifications

	VX-3000DS
Applicable Model	System VX-3000/VX-2000/SX-2000; all amplifiers
Power Source	220 – 230VAC, 50/60Hz
Power Consumption	2800W max in total (at rated output with charging), 350W max each (EN 60065)
DC Power Output (AC mode)	Rated output: 2300W (31V, 72.5A, total DC power output), Peak output: 2780W (29V, 96A, total DC power output)
DC Power Output	8 x 31V (19 – 33V) 25A max. each, M4 screw terminal, distance between barriers: 11 mm 3 x 31V (19 – 33V) 5A max. each, removable terminal block (3 x 2 pins) 1 x 24V (16 – 25V) 0.3A max., removable terminal block (1 x 2 pins)
Charging Method	Temperature compensated trickle charging
Charging Output Voltage	27.3V ±0.3V (at 25°C), Temperature correction coefficient: -40mV/°C
Battery Connection	One each positive and negative terminal, applicable cable diameter: AWG 6 – AWG 0 (AWG 1/0) (16mm <sup>2</sup> – 50mm <sup>2</sup> ) Line resistance within 4mΩ/ total
Control Connector DS LINK IN/OUT	RJ45 female connector for connecting the system and cascade connection, Shielded Twisted-pair straight cable (TIA/EIA-568A standard) Type of control signal: Battery check, AC power status, DC power status, charging circuit failure, battery failure, and communication
Panel Indicator	AC power IN 1, IN 2 (Green), Charging (Green), Battery power (Green), Battery connect (Green), Battery condition (Green)
Finish	Panel: Surface-treated steel plate, black, 30% gloss, paint
Dimensions (W x H x D)	482 x 132.6 x 400.5mm (19", 3U)
Weight	11.8kg

# VX-3000 series Application Example



TOA Electronics Pte Ltd

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Specifications are subject to change without notice.

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