TOA

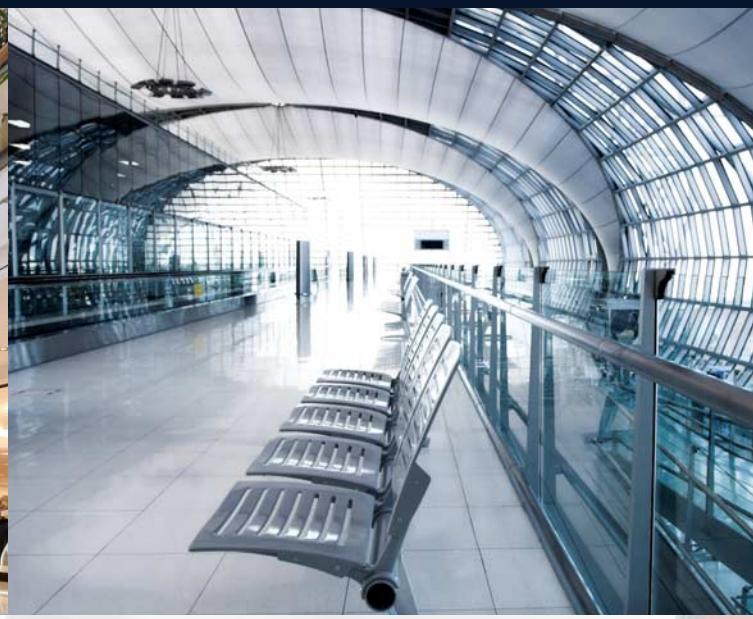
VM-3000 SERIES
INTEGRATED VOICE EVACUATION SYSTEM

Fully EN 54 certified All In One

Voice Alarm Emergency Evacuation system

with Audio PA, Paging and BGM

High-quality, compact public address system also features safety-enhancing emergency ev



SYSTEM FEATURES

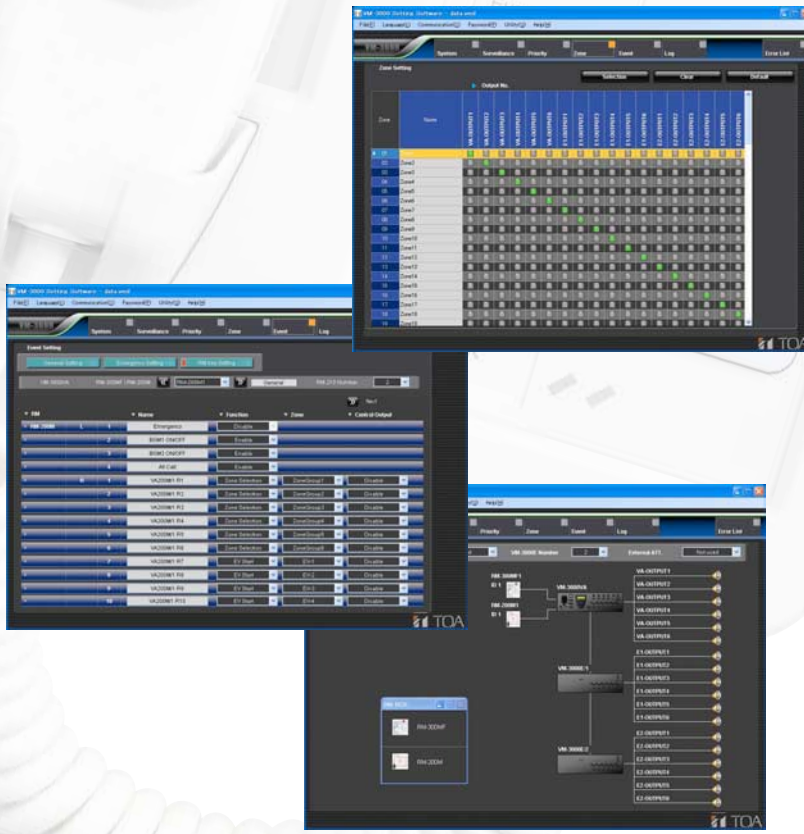
- **Max. 13 MIC/LINE Inputs (VM-3240VA/3360VA: 4 MIC/LINE Inputs, VM-3240E/3360E: 9 Local Inputs)**
- **2 BGM inputs**
- **Up to 4 Fireman's/Remote Microphones connectable (max. 2 Fireman's Microphones)**
- **Max. 60 assignable speaker zone outputs (6 outputs per amplifier)**
- **Volume setting possible for each zone**
- **Digital audio processed & controlled**
  - Full digital audio mixing (DSP)
  - Built-in high quality electronic voice message
- **Intuitive configuration**
  - Zone setting, priority setting, failure detection setting by dedicated PC software
  - LCD display of current status and configuration setting of system units

Emergency functions

- **Continuous speaker line monitoring without interruption of BGM distribution or paging announcements**
- **Complete fault detection and indication**
- **Off-site log check capability via LAN**
- **Built-in and remote Fireman's Microphones**
- **Built-in voice alarm message**
- **2-Phased voice alarm message (Alert and Evacuation) broadcasting**

Paging functions

- **2 Remote Microphone interface lines**
- **Paging (All zones/Group/Individual)**
- **2-channel broadcast with external amplifier (Paging/BGM)**



for small and medium venues
vacuation functions.

VenaS
Integrated Voice Evacuation System
VM-3000 series

TOA, which boasts 50 years' experience in the development of emergency broadcast systems worldwide, now introduces a system that fully integrates emergency and general-purpose broadcast functions. The TOA VM-3000 Series is an EN 54 Standard-compliant combined emergency voice alarm system and public address system that was developed as part of the Venas Integrated Voice Evacuation System family. TOA has developed and will continue to develop emergency broadcast systems, always ensuring that its products comply with the voice evacuation safety standards, established by the countries where those products are used.

The VM-3000 Series is ideal for small and medium-sized applications. It incorporates such emergency functions as continuous speaker line monitoring and a built-in voice alarm. This easy-to-install system also offers PA broadcasting, paging and BGM functions that ensure consistently high intelligibility.

The VM-3000 Series is digitally audio processed and controlled, and may be set up and operated directly by using the controls and LCD display on the front panel. A dedicated PC software configuration capability is also provided for establishing settings via LAN. The incorporation of wide-ranging functional capabilities, superb reliability and versatility make the VM-3000 a highly cost-effective emergency broadcast system.

for small and medium venues
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SPECIFICATIONS

*0dB = 1V

	VM-3240VA Voice Alarm System Amplifier	VM-3360VA Voice Alarm System Amplifier	VM-3240E VM Extension Amplifier	VM-3360E VM Extension Amplifier
Power Source	230V AC, 50/60 Hz			
Power Consumption	600W (with rated output signal), 260W (according to EN60065)	850W (with rated output signal), 380W (according to EN60065)	600W (with rated output signal), 260W (according to EN60065)	850W (with rated output signal), 380W (according to EN60065)
Rated Output	240W	360W	240W	360W
Frequency Response	50 – 20,000 Hz, ±3dB (at 1/3 rated output)			
Distortion	Under 0.7% (at rated output, 1kHz)			
S/N Ratio	Over 85dB			
Audio Input/Output Characteristic	Sampling frequency: 48kHz A/D D/A CONVERTER: 24bit		—	
Input	Input 1 – 3: -50dB* (MIC)/-10dB (LINE) (changeable) 600Ω, electronically balanced combined XLR connector (female)/phone jack Input 4: -50dB* (MIC)/-10 dB (LINE) (changeable) 600Ω, electronically balanced removable terminal block(14 pins) BGM 1 – 2 : -10 dB, 10kΩ unbalanced, RCA pin jack External amplifier Input: 100V Line removable terminal block(14 pins)		Local input: -50dB* (MIC)/-10dB* (LINE) External amplifier input: 100V line, removable terminal block (14 pins)	
Output	Speaker output 1 – 6: Total within 240W, removable terminal block (14 pins) Direct output : Direct output from internal or external amplifier, removable terminal block (16 pins) Recording output BGM / Paging: 0dB*, 10kΩ, unbalanced, RCA pin jack	Speaker output 1 – 6: Total within 360W, removable terminal block (14 pins) Direct output : Direct output from internal or external amplifier, removable terminal block (16 pins) Recording output BGM / Paging: 0dB*, 10kΩ, unbalanced, RCA pin jack	Speaker output 1 – 6: Total within 240W, removable terminal block (14 pins) Direct output : Direct output from internal or external amplifier, removable terminal block (16 pins)	Speaker output 1 – 6: Total within 360W, removable terminal block (14 pins) Direct output : Direct output from internal or external amplifier, removable terminal block (16 pins)
RM Link	Input 1 – 2: Connecting the RM-300MF/RM-200M Remote Microphone. RJ45 female connector Link cable: Category 5 Shielded Twisted-Pair straight cable (CAT5-STP)		—	
Network I/F	10 BASE-T/100 BASE-TX (selectable by automatic negotiation), RJ45 female connector Link cable: Category 5 Shielded Twisted-Pair straight cable (CAT5-STP)		—	
VM Link	Output: Connecting the VM-3240E or VM-3360E, RJ45 female connector Link cable: Category 5 Shielded Twisted-Pair straight cable (CAT5-STP)		Input: Connecting the VM-3240VA or VM-3360VA, RJ45 female connector Output: Connecting the VM-3240E or VM-3360E, RJ45 female connector Link cable: Category 5 Shielded Twisted-Pair straight cable (CAT5-STP)	
EXT PA Link	Connecting the VP-2421, RJ45 female connector Link cable: Category 5 Shielded Twisted-Pair straight cable (CAT5-STP)			
General Control	Input 1 – 8: No-Voltage make contact input, open voltage: 24V DC, short-circuit current: under 2mA, removable terminal block (14 pins) Output 1 – 8: Isolated open collector output, withstand voltage: 30V DC, operating current: under 10mA, removable terminal block (14 pins)			
Emergency Control	Input 1 – 5: No-Voltage make contact input, open voltage : 24V DC, short-circuit current: under 2mA, RJ45 female connector Input 6: Isolated voltage input: Inactive; -24V ±20%/Active; +24V ±20%, RJ45 female connector Status out: Relay contact output, withstand voltage: 40V DC, operating current: 2 – 300mA, RJ45 female connector			
ATT Control	Relay contact 1 – 6, 125V AC or 30V DC, total under 5A, removable terminal block (16 pins)			
Power Input/Output	Power in: Connecing the VX-2000DS (operating range: 20 - 40V DC) PS out: DC 28V/18A M4 Screw terminal distance between barriers 11 mm	Power in: Connecing the VX-2000DS (operating range: 20 - 40V DC) PS out: DC 28V/24A M4 Screw terminal distance between barriers 11 mm	Power in: Connecing the VX-2000DS (operating range: 20 - 40V DC) PS out: DC 28V/18A M4 Screw terminal distance between barriers 11 mm	Power in: Connecing the VX-2000DS (operating range: 20 - 40V DC) PS out: DC 28V/24A M4 Screw terminal distance between barriers 11 mm
DC24V Output	24V DC, Maximum feeding current 0.3A			
DS Link	Connecting the VX-2000DS, RJ45 female connector Link cable: Category 5 Shielded Twisted-Pair straight cable (CAT5-STP)			
Operating Temperature	–5°C to +45°C			
Operating Humidity	5% to 95%RH (no condensation)			
Dimensions	482 (W) × 132.6 (H) × 431.2 (D)mm		482 (W) × 132.6 (H) × 407 (D)mm	
Weight	16.5kg	19kg	16.5kg	19kg
Accessories	Power cable (2m) × 1, Setting software (CD) × 1, Link cable (3m) × 2, Plastic foot × 4, Plastic foot mounting screw × 4, Emergency microphone × 1, Removable terminal plug (14 pins) × 3, Removable terminal plug (16 pins) × 1		Power cable (2m) × 1, Link cable (3m) × 2, Plastic foot × 4, Plastic foot mounting screw × 4, Removable terminal plug (14 pins) × 3, Removable terminal plug (16 pins) × 1	
Option	Input transformer: IT-450		—	

VM-3240VA/3360VA

VM-3240E/3360E

	RM-300MF Fireman's Microphone	RM-320F Fireman's Microphone Extension
Power Source	24V DC (operating range: 15 – 40V DC, supplied from the VM-3000 system or VX-2000DS.)	—
Current Consumption	120mA (RM-300MF), 660mA (with 3 RM-320F connected)	180mA max. (RM-320F)
Frequency Response	200 – 15,000 Hz	—
Distortion	Under 1%	—
S/N Ratio	Over 55 dB	—
Microphone	Unidirectional dynamic microphone with talk key, compressor (on/off switchable)	—
Volume Control	Microphone volume control / Buzzer volume control	—
Connection Cable	Main line: shielded CPEV cable (each one pair of Audio line, Data line, Power supply line) or Category 5 Shielded Twisted-Pair cable for LAN (CAT5-STP), M3 screw terminal	—
No. of Connectable RM-320F	Max 3 units	—
No of Funtion Keys	—	20
Operation	Emergency key, Evacuate key, Alert key, Emergency reset key, CPU switch, Reset switch	—
Operating Temperature	–5°C to 45°C	—
Operating Humidity	5% to 95% RH (no condensation)	—
Finish	ABS resin, blueish gray	ABS resin, blueish gray
Dimensions	200(W) x 215(H) x 82.5(D) mm	175(W) x 215(H) x 70(D) mm
Weight	1.1kg (with wall mounting bracket unit)	700g
Accessories	Wall mounting bracket unit x 1, Wall mounting screw x 2, Electrical box mounting screw x 2	Wall mounting bracket x 1, Wall mounting screw x 2

	RM-200M Remote Microphone	RM-210 Remote Microphone Extension
Power Source	24V DC (operating range: 14 – 28V DC) Power input jack: Non-polarity type Usable power input plug*2: Outer diameter ø5.5mm, inner diameter: ø2.1mm, length: 9.5mm	—
Current Consumption	Under 100mA	20mA max. (in terms of RM-200M's DC power input)
Audio Output	0dB*: 600Ω, balanced	—
Frequency Response	100 – 20,000 Hz	—
Distortion	Under 1%	—
S/N Ratio	Over 60 dB	—
Microphone	Unidirectional electret condenser microphone	—
Volume Control	Microphone volume control	—
Connection Cable and Connection	Category 5 Shielded Twisted-Pair cable, RJ45 connector	—
No of Funtion Keys	10	10
Finish	ABS resin, blueish gray	ABS resin, blueish gray
Dimensions	190(W) x 76.5(H) x 215(D) mm (Gooseneck microphone excluded)	110(W) x 76.5(H) x 215(D) mm
Weight	750g	350g
Accessory	CATS cable x 1	CATS cable x 1
Option	Wall mounting bracket: WB-RM200	Wall mounting bracket: WB-RM200

* 0dB = 1V
*2 Use the AC adapter AD-246 or equivalent.

SYSTEM EQUIPMENT

VP-2241 (240 W × 1)
VP-2421 (420W × 1)

Power Amplifier

Power Amplifier uses the VP-200VX Power Amplifier Input Module per channel.

VX-2000DS

Emergency Power Supply

The VX-2000DS Emergency Power Supply Unit supplies the DC power to VP amplifiersteach equipment, the VM-3000 system by connecting the VM-3240VA/E/VM-3360VA/E and VX-200PS Power Supply Unit. (Optional)

VX-200PS

Power Supply Unit

The VX-200PS Power Supply Unit is mounted in the VX-2000PF Power Supply Frame when in used.

VX-2000PF

Power Supply Frame

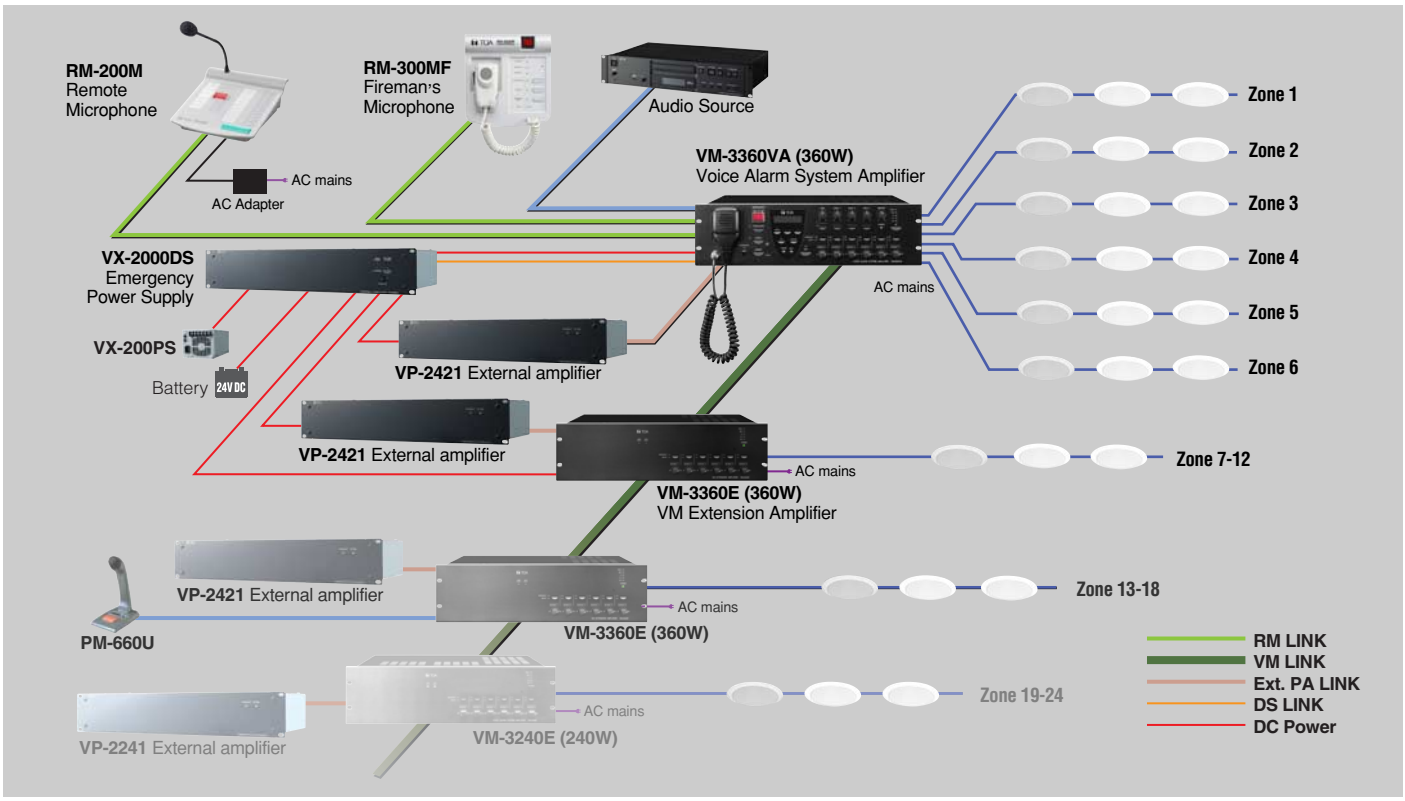
The VX-2000PF permits the VX-200PS Power Supply Unit to be mounted in an equipment rack. Up to 3 VX-200PS units can be installed in the unit.

VM-300SV

Pilot Tone Detection Module

Speaker line failure can be detected with high accuracy when a VM-300SV unit specifically designed for 100V speaker line is connected between the speaker line end and the emergency input terminal of the VM-3240VA, VM-3360VA, VM-3240E, or VM-3360E.

SYSTEM EXAMPLE

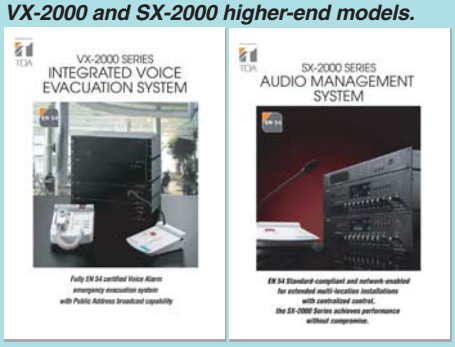


EN 54 is a standard of the European Union (EU) for fire alarm systems, ensuring high product quality and reliability, and enabling better integration of Voice Alarm (VA) and Public Address (PA). EN 54 plays a significant role in the market for voice evacuation equipment, as the member states of the European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

The VM-3000 system is certified on the European Norm EN 54-16 with **CPD number 1438-CPD-0180**.

The 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**.

The Venas Series also includes the VX-2000 and SX-2000 higher-end models.



System compliant with EN 54

Human Society with Security & Communication

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