



VM-3000 Series

Integrated Voice Evacuation System

The worlds first Voice Evacuation System complying with both American and Canadian standards
UL 2572 and CAN/ULC-S576 listings.



***Voice Alarm Emergency Evacuation System with
Audio PA, Paging and BGM***

High quality, compact public address system for small and medium venues featuring safety enhancing emergency evacuation functions.



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 a 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.

Already bearing the European EN 54-16 certification, the VM-3000 and its associated products, including power supplies now carries the UL 2572 and CAN/ULC-S576 certification, which complies with new NFPA 72 code governing Mass Notification Systems.

SYSTEM FEATURES

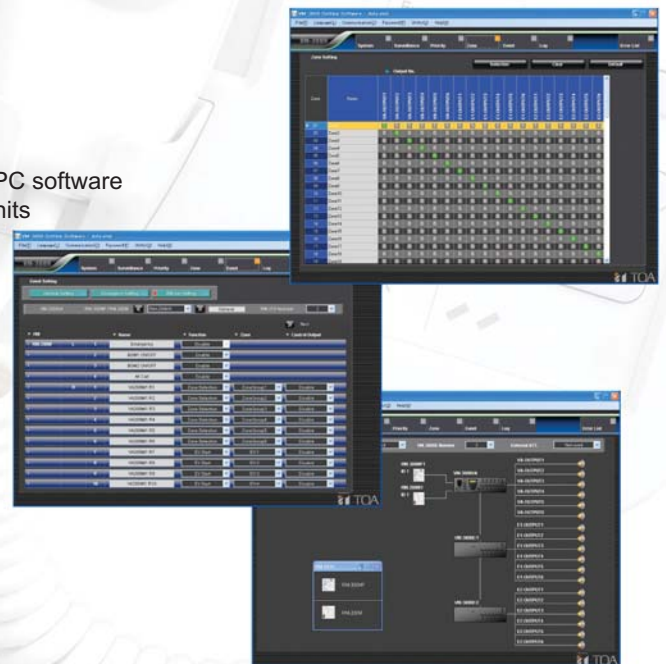
- Max. 13 MIC/LINE Inputs (Max system comprises 1x VM-3240VA: 4 MIC/LINE Inputs, 9x VM-3240E: 9 Local Inputs)
- 2 BGM inputs - VM-3240VA
- 1 Mic/Line input - VM-3240E
- Up to a combination of 4 Fireman's and remote Microphones (*max. 2 Fireman's Microphones*)
- Max. 60 assignable speaker zone outputs (6 outputs per amplifier)
- BGM 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

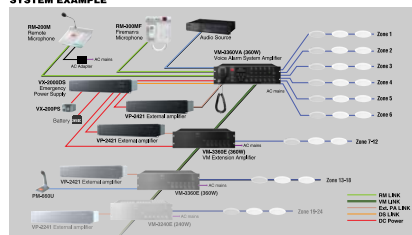
- 2 Remote Microphone interface lines
- Paging (All zones/Group/Individual)
- 2-channel broadcast with external amplifier (Paging/BGM), VP-2241 (240W x 1) Power Amplifier





SPECIFICATIONS	VM-3240VA Voice Alarm System Amplifier	VM-3240E VM Extention Amplifier
Power Source	120 V AC, 50/60 Hz	
Power Consumption	600 W (with rated output signals), 260 W (According to EN60065)	
Rated Output	240 W	
Frequency Response	50 - 20,000 Hz, ± 3 dB (at 1/3 rated output)	
Distortion	Under 0.7% (at rated output, 1 kHz)	
S/N Ratio	Over 85 dB	
Audio Input/Output Characteristic	Sampling frequency 48 kHz A/D D/A CONVERTER: 24 BIT	--
Input	Input 1 – 3: -50dB* (dB (LINE) (changeable) 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: 70V Line removable terminal block (14 pins)	600Ω, electronically balanced Local input: -50dB* (MIC)/-10dB* (LINE) External amplifier input: 70V line, removable terminal block (14 pins)
Output	70V, high impedance, 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 Input 1 – 2: Connecting the RM-300MF/RM-200M Remote Microphone.	70V, high impedance, 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)
RM Link	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, RJ45 female connector Link cable: Category 5 Shielded Twisted-Pair straight cable (CAT5-STP)	Input: Connecting the VM-3240VA, RJ45 female connector Output: Connecting the VM-3240E, 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: Connecting the VX-2000DS (operating range: 20 - 40V DC) PS out: DC 28V/18A 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 (18.98" × 5.22" × 16.98")	482 (W) × 132.6 (H) × 407 (D)mm (18.98" × 5.22" × 16.02")
Weight	16.5kg (36.38 lbs)	
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	--
UL Certified	UL 2572 and CAN/ULC-S576	

SYSTEM EXAMPLE



SPECIFICATIONS	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, 800m system max.	Connection to RM-300MF by dedicated cable
No. of Connectable RM-320F	Max 3 units	--
No. of Function Keys	--	20
Operation	Emergency key, Evacuate key, Alert key, Emergency reset key, CPU switch, Reset switch	--
Operating Temperature	-5°C to 45°C (23°F to 113°F)	--
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 (7.87" x 8.46" x 3.25")	175(W) x 215(H) x 70(D) mm (6.89" x 8.46" x 2.76")
Weight	1.1kg (2.43 lbs) (with wall mounting bracket unit)	700g (1.54 lb)
Accessories	Wall mounting bracket unit x 1, Wall mounting screw x 2,	Wall mounting bracket x 1, Wall mounting screw x 2



RM-300MF



RM-320F



RM-200M



RM-210

* 0 db = 1V; *2 Use the AC adapter AS-246 or equivalent.

SPECIFICATIONS	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, 800m system max.	Connection to RM-200M by dedicated cable
No. of Function Keys	10	10
Finish	ABS resin, blueish gray	ABS resin, blueish gray
Dimensions	190(W) x 76.5(H) x 215(D) mm (7.48" x 3.0" x 8.5") (Gooseneck microphone excluded)	110(W) x 76.5(H) x 215(D) (4.3" x 3.0" x 8.5") mm
Weight	750g (1.6 lbs)	350g (0.77 lbs)
Accessories	Link cable (3 m) x 1	Extension cable x 1, Linkage bracket A x 2, Linkage bracket B x 1, Screw for linkage bracket x 12
Option	Wall mounting bracket: WB-RM200	Wall mounting bracket: WB-RM200
UL Certified	UL 2572 and CAN/ULC-S576	--

SYSTEM EQUIPMENT



VP-2241 (240W x 1) Power Amplifier

Power amplifier uses the VP-200VX Power Input Module per channel



VP-200VX Power Amplifier Input Module

power Amplifier Input module designed to be used in conjunction with the VP-2241 power amplifier.



VX-2000DS Emergency Power Supply

The VX-2000DS Emergency Power Supply Unit supplies the DC power to VP-2241 amplifier and the VM-3000 system by connecting the VM-3240VA/E.

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Human Society with
Sound & Communication



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