



# VOICE ALARM SYSTEM AMPLIFIER 240W

VM-3240VA AMQ

## DESCRIPTION

The VM-3240VA is a voice alarm system controller with one 240W power amplifier. It can be mounted in an EIA-Standard equipment rack (3RU). The unit is equipped with analog audio inputs for music distribution, paging announcements or pre-recorded audio source playback. Its speaker output section has 6 individual zone selectors with corresponding volume controls. Up to 6 general messages/tones and 4 emergency messages/tones may be uploaded to and stored on the VM-3240VA. Non-emergency messages can be prioritized (7 levels) and triggered by an RM-200M paging microphone or external contact closures. Emergency broadcasts override all non-emergency operations and are triggered from the front panel or a contact closure. All emergency system connections are monitored. When installed per the manual, the VM-3240VA is fully compliant with NFPA72 requirements and listed to UL2572, ULC-S576 and UL864 for Mass Notification and Fire Voice applications.

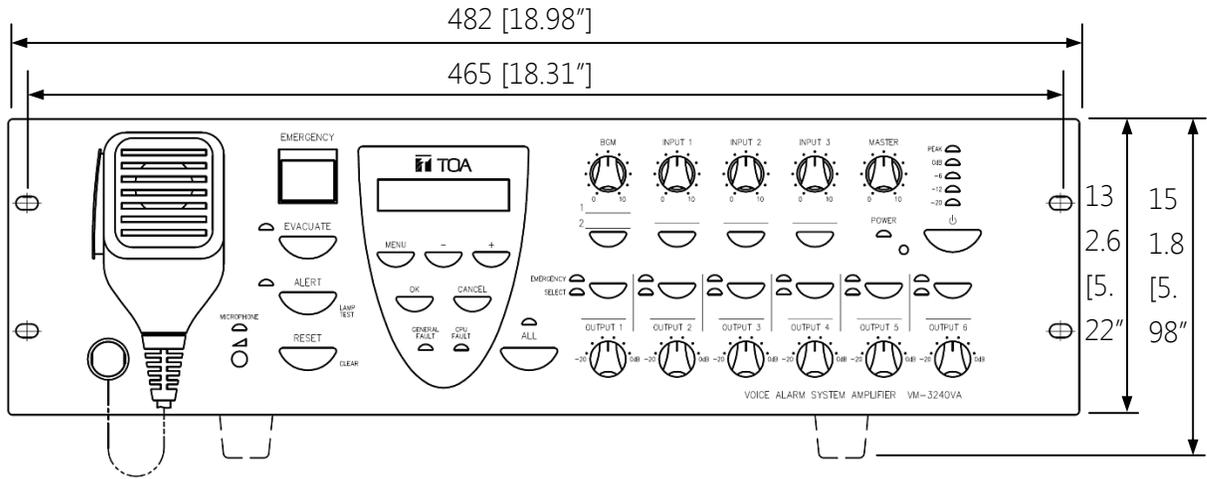
## SPECIFICATIONS

|                                   |  |
|-----------------------------------|--|
| Power Source                      | 120 V AC, 60Hz   |
| Power Consumption                 | 690 VA (at rated output), 260 W (according to UL60065), 63 W (at no signal)  |
| Rated Output                      | 240 W, 21 Ω (UL60065)<br>200 W, 25 Ω (UL2572)<br>200 W, 25 Ω (CAN/ULC-S576 with separate UPS)<br>100 W, 50 Ω (CAN/ULC-S576)<br>Total amplifier output (1-6 and Direct Output)  |
| Frequency Response                | 50 Hz – 20 kHz, ±3 dB (at 1/3 rated output), 800 Hz – 2.8 kHz (according to UL2572)<br>400 Hz – 4 kHz (according to CAN/ULC-S576)  |
| Distortion                        | 0.7% or less (at rated output, 1 kHz)  |
| S/N Ratio                         | 85 dB or more  |
| Audio Input/Output Characteristic | Sampling frequency: 48 kHz<br>A/D D/A converter: 24bit   |
| Input                             | Input 1 – 3: -50 dB* (MIC) / -10 dB* (LINE) (changeable), 600 Ω, electronically balanced, combined XLR connector (female) / phone jack<br>Input 4: -50 dB* (MIC) / -10 dB* (LINE) (changeable), 600 Ω, electronically balanced, removable terminal block (14 pins)<br>BGM 1- 2: -10 dB*, 10 kΩ, unbalanced, RCA pin jack<br>External AMP Input: 70 V line, removable terminal block (14 pins)  |
| Output                            | Speaker output 1 – 2: Max. (240W) per output<br>Speaker output 3 – 6: Max. (100W) per output<br>Speaker output 1 – 6: Total within rated output, removable terminal block (14 pins)<br>Recommended minimum load: 245 Ω (20 W) at 70 V line for speaker line failure detection<br>Direct output: Direct output from internal or external amplifier, Removable terminal block (16 pins)<br>Recording output BGM/Paging: 0 dB*, 10 kΩ, unbalanced, RCA pin jack<br>Ground fault detection: 0 Ω<br>Wire to wire fault detection: 0 Ω |
| RM Link                           | Input 1 – 2: Connection to RM-300MF/200M Remote Microphone, RJ45 female connector<br>Maximum distance: Total 800 m between this unit and remote microphones<br>Link cable: Category 5 Shielded Twisted-Pair straight cable (CAT5-STP)  |
| Network I/F                       | 10BASE-T/100BASE-TX (automatic negotiation), RJ45 female connector<br>Maximum distance: 100 m between this unit and a switching hub<br>Link cable: Category 5 Shielded Twisted-Pair straight cable (CAT5-STP)  |
| VM Link                           | Output: Audio and control link to a VM-3240E extension amplifier, RJ45 female connector<br>Link cable: Category 5 Shielded Twisted-Pair straight cable (CAT5-STP)  |
| General Control                   | Input 1 – 8: No-Voltage make contact input, open voltage: 24 V DC, Short-circuit current: 2 mA or less, removable terminal block (14 pins)<br>Output 1 – 8: Isolated open collector output, withstand voltage: 30 V DC, operating current: 10 mA or less, removable terminal block (14 pins)   |
| Emergency Control                 | Input 1 – 5: No-Voltage make contact input, open voltage: 24 V DC, Short-circuit current: 2 mA or less, RJ45 female connector<br>Input 6: Isolated voltage input, Inactive: -24 V±20%, Active: +24 V±20%, RJ45 female connector<br>Status out: Relay contact output, withstand voltage: 40 V DC, operating current: 2 – 300 mA, RJ45 female connector  |
| Power Input/Output                | Power in: From VX-2000DS only (operating range: 20 – 40 V DC)<br>PS out: 28 V DC / 18 A<br>M4 screw terminal, distance between barriers: 11 mm   |
| 22 V DC Output                    | 22 V DC Special Application, Maximum feeding current 0.3 A (for RM-200M only)  |
| DS Link                           | To local VX-2000DS, RJ45 female connector<br>Link cable: Category 5 Shielded Twisted-Pair straight cable (CAT5-STP)  |
| Operating Temperature             | 0 to 49°C (32 to 120°F)  |
| Operating Humidity                | 5% to 95% RH (no condensation)   |
| Finish                            | Panel: Aluminum, hair-line, black<br>Case: Surface-treated steel plate, black, paint   |
| Dimensions                        | 482 (w) x 132.6 (h) x 431.2 (d) mm (18.98" x 5.22" x 16.98")   |
| Weight                            | 16.5 kg (36.38 lb)   |

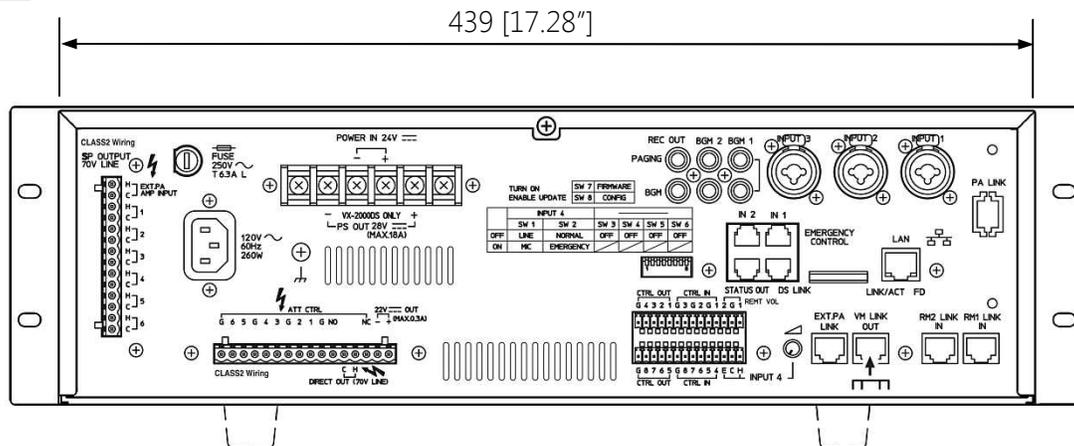
\*0 dB = 1 V

■ APPEARANCE

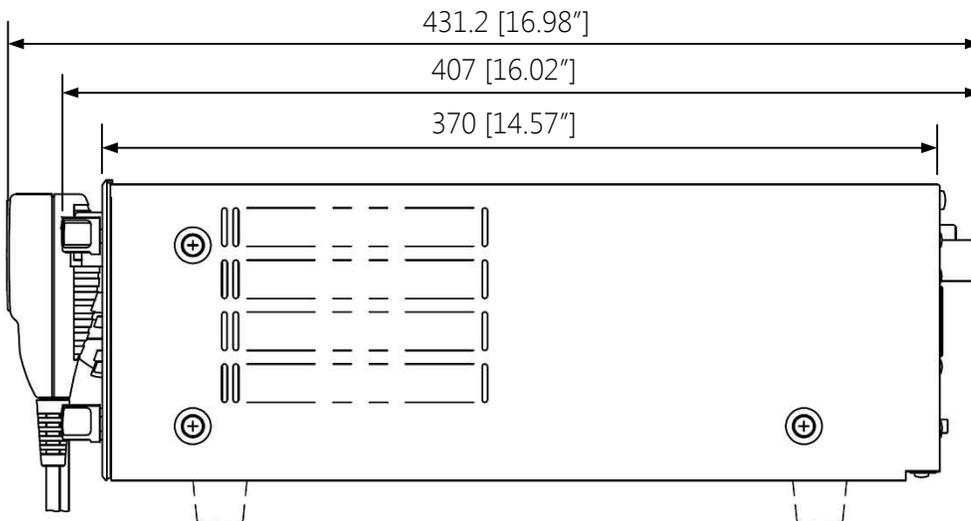
Front View



Rear View



Side View



UNIT: mm [inch]