

VOICE EVACUATION FRAME 8SS

VX-3008F

DESCRIPTION

The VX-3008F is a device designed to control the Voice evacuation announcements of TOA's VX-3000 Series rack—mount type voice evacuation system which is compliant with the European Standard EN54 for fire alarm systems. It has audio input terminals and can output the amplified audio signals to the speaker lines when the optional power amplifier modules are mounted. It is possible to make an Emergency Warning Broadcast assigned a higher priority than the Emergency broadcast.

Two patterns of the Emergency broadcast can be activated simultaneously.

Compatible with network, the system can be configured in distributed arrangement.

Features include the following functions: Digital signal processing function that enables appropriate acoustic adjustment for individual input sound sources and output amplifiers, Feedback suppressor function that automatically suppresses acoustic feedback when it occurs, VOX function that allows start/stop control of broadcast by way of an audio trigger, and ANC function that enables an ambient noise control. (The ANC function distinguishes between the unit's output sound and the ambient noise. The unit's output sound is not detected as noise.) Using the weekly program timer function permits the control of general broadcast to be activated at as noise.) Using the weekly program timer function permits the control of general broadcast to be activated at the preset time. Indicators that show such statuses as fault status and power amplifier signal status are provided. It has 8 speaker output channels.

A total of 3 power amplifier modules (2 for zone amplifier use and 1 for standby amplifier use) can be mounted. Equipped with a matrix output, the VX-3008F can be used as 2-bus speaker selector using 2 power amplifiers. Setting the matrix output destination makes 1-bus and 2-bus zones coexist.

Zones can be expanded by connecting the unit having amplifier module(s) and the one having no amplifier module. As the VX-3008F is equipped with Standby amplifier input/output terminal, the standby amplifier, when mounted, can be shared among VX-3000F units.

■ SPECIFICATIONS

| Power Source | 20 - 33 V DC, removable terminal block (4 pins) |
|----------------------|---|
| Power Consumption | 24 W (frame only) at 33 V DC input, 90 W (RS LINK: 2 A output) at 33 V DC input |
| LAN A, B | Number of Connectors: 2 (LAN A, LAN B) |
| | Network I/F: 100BASE-TX |
| | Network Protocol: TCP, UDP, ARP, ICMP, RTP, IGMP, FTP, HTTP, NTP |
| | Spanning tree Protocol: RSTP |
| | Audio Transmission System: TOA Packet Audio (*1) |
| | Audio Encoding Method: PCM |
| | Audio Sampling Frequency: 48 kHz |
| | Audio Quantifying Bit Number: 16 bits |
| | Connection Device: VX-3004F, VX-3008F, VX-3016F, NX-300, VX-3000PM, VX-3000CT, |
| | Switching HUB |
| | Connector: RJ45 connector |
| | Connection Cable: Category 5 twisted pair cable (CAT5) or greater |
| | Number of Stages of Cascade connection: UP to 7 |
| | Maximum Cable Distance: 100 m (328.08 ft) |
| RS Link A, B | Number of Connectors: 2 (RS LINK A, RS LINK B) |
| , _ | Audio input level: 0 dB (*2) |
| | Power feed: Max. 1 A per connector |
| | Connector: RJ45 connector |
| | Connection Cable: Shielded Category 5 twisted pair cable (CAT5—STP) or greater |
| | Maximum Cable Distance: 1200 m (3937.01 ft) |
| DS Link | Connection Device: DS LINK of Power supply units |
| | Connector: RJ45 connector |
| | Connection Cable: Shielded Category 5 twisted pair cable (CAT5—STP) or greater |
| | Maximum Cable Distance: 5 m (16.4 ft) |
| Analog Link | Number of Connectors: 1 input, 1 output |
| 3 | Connection Device: VX-3004F, VX-3008F, VX-3016F |
| | Connector: RJ45 connector |
| | Connection Cable: Shielded Category 5 twisted pair cable (CAT5-STP) or greater |
| | Maximum Cable Distance: 800 m (2624.67 ft) |
| Control Input 1, 2 | 16 inputs, no-voltage make contact input, open voltage: 24 V DC, |
| | short-circuit current: 2 mA |
| | Fault Detection System: Short circuit, Open circuit, Method: Voltage detect |
| | Connector: RJ45 connector |
| | Connection Cable: Shielded Category 5 twisted pair cable (CAT5—STP) or greater |
| Emergency Control IN | Input 2: Isolated voltage input, -24 to +24 V |
| | Connector: RJ45 connector |
| | Connection Cable: Category 5 twisted pair cable (CAT5) or greater |
| VOX Function | Threshold: -60 to 0 dB (1 dB steps) |
| | Hysteresis: 0 to +10 dB, Hold time: 10 ms - 10 s |
| | Settable for each audio input |
| Control Output 1, 2 | General outputs: 8 with CONTROL OUTPUT 1 |
| | Exclusive outputs: 3 with CONTROL OUTPUT 2 GENERAL FAULT, CPU FAULT, CPU OFF |
| | No-voltage make contact, electrical contact output, |
| | control current: 10 mA, withstand voltage: 28 V DC |
| | Connector: RJ45 connector |
| | Connection Cable: Shielded Category 5 twisted pair cable (CAT5—STP) or greater |



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| ATT/Control Output | 8 outputs, no-voltage make contact, relay contact (NC, NO, C), control current: 2 mA to 5 A, withstand voltage: 125 V AC, 40 V DC |
|--|--|
| Audio Input 1, 2, 3, 4 | Connector: Removable terminal block (12 pins) ···2 4 inputs |
| | Sensitivity: |
| | LINE: -20 dB (*2), MIC: -60 dB (*2) |
| | LINE/MIC/ANC Sensor (changeable with setting software) |
| | Gain Control: volume adjustable with volume control (internal front panel) —∞ to 0 dB |
| | Input Impedance: 47 k Ω , electronically—balanced |
| | Frequency Response: 40 Hz - 20 kHz ±1 dB (at DA CONTROL LINK, 0 dB output) |
| | Distortion: 1% or less (at DA CONTROL LINK, 0 dB output, 1 kHz) |
| | Signal to Noise Ratio: 60 dB or more (at DA CONTROL LINK, A—weighted) |
| | Phantom Power Supply: 24 V DC, can be set with setting software |
| 2: :I | Connector: Removable terminal block (6 pins)2 |
| Digital Signal Processing Feedback Suppression | 7 filters (auto), |
| Function (FBS) | Settable for each audio input and RS LINK (A/B) |
| gualizer/Filter | 3 bands for each audio input and RS LINK (A/B), |
| | 6 bands for each amplifier output |
| | Parametric equalizer: 20 Hz - 20 kHz, ±15 dB, Q: 0.267 - 69.249 |
| | Filtering: High-pass filter 20 Hz - 20 kHz, 6 dB/oct, 12 dB/oct |
| | Low-pass filter 20 Hz - 20 kHz, 6 dB/oct, 12 dB/oct |
| | High shelving filter 6 - 20 kHz, ±15 dB |
| | Low shelving filter 20 - 500 Hz, ±15 dB |
| | Notch filter (amplifier output only) 20 Hz — 20 kHz, Q: 8.651 — 69.249 All—pass filter (amplifier output only) 20 Hz — 20 kHz, Q: 0.267 — 69.249 |
| | Horn equalizer (amplifier output only) 20 kHz, 0 to +18 dB (0.5 dB steps) |
| Compressor | Threshold: -20 to 0 dB (1 dB steps) |
| 3011161 63301 | Ratio: 1:1, 1.1:1, 1.2:1, 1.3:1, 1.5:1, 1.7:1, 2:1, 2.3:1, 2.6:1, 3:1, 4:1, |
| | 5:1, 7:1, 8:1, 10:1, 12:1, 20:1, ∞:1 |
| | Attack time: 0.2 ms - 5 s, Release time: 10 ms - 5 s |
| | Gain: $-\infty$ to +10 dB, Knee type: hard knee, middle knee, soft knee |
| Delay | For each amplifier output, 0 - 2730 ms (0.021 ms steps) |
| ANC | Amplifier output level control, Automatic sensor input reference level measuring, |
| (Ambient Noise Control) | Sensor input reference level fine adjustment |
| | Maximum output signal level control: -15 to 0 dB Minimum output signal level control: -18 to -3 dB |
| | Sample time setting: 10 s, 20 s, 30 s, 1 min, 5 min |
| | Gain ratio setting: (Ambient noise: Output signal level) 6:3, 5:3, 4:3, 3:3, 3:4, 3:5, 3: |
| | Ambient noise measuring frequency setting: 20 Hz - 20 kHz, 3 points |
| | |
| Program Timer | Weekly program method |
| | Daily program: 50 events, 10 types |
| Time Adjustment | Holiday program: 50 types Control input, NTP |
| Speaker Line | 8 channels, 1 Earth terminal |
| Speaker Line | Maximum Voltage/Current: 100 Vrms, 5 Arms |
| | Connector: Removable terminal block (17 pins)1 |
| | Fault Detection System: Short circuit, Open circuit, Ground fault, |
| | Method: Impedance or End of line |
| Standby Amplifier | Input: 1, Output: 1 |
| Input/Output | Maximum Voltage/Current: 100 Vrms, 5 Arms |
| | Connector: Removable terminal block (2 pins)2 |
| Extension Amplifier | Input: 2, Output: 2 |
| Input/Output | Maximum Voltage/Current: 100 Vrms, 5 Arms Connector: Removable terminal block (2 pins) …4 |
| Module (*3) | Number of Modules: 3 (When the line output module is installed2) |
| Module (*3) | DA CONTROL LINK3, |
| | DA OUTPUT LINK3 (Used only when a power amplifier module is installed) |
| Indicators | POWER (green)1, RUN (green)1, EMERGENCY (red)1, CPU OFF (red)1, |
| Indicators | TOWER RECEIP 1, NOW RECEIP 1, EMERCENOT RECEIP 1, OF O OF RECEIP |
| Indicators | LAN A (green)1, LAN B (green)1, RS LINK A (green)1, RS LINK B (green)1 |
| Indicators | LAN A (green)1, LAN B (green)1, RS LINK A (green)1, RS LINK B (green)1 FAULT STATUS (yellow) |
| Indicators | LAN A (green)1, LAN B (green)1, RS LINK A (green)1, RS LINK B (green)1 FAULT STATUS (yellow) GENERAL1, UNIT1, NETWORK1, EMG MIC1, FUSE1, POWER1, CPU1, |
| Indicators | LAN A (green)1, LAN B (green)1, RS LINK A (green)1, RS LINK B (green)1 FAULT STATUS (yellow) GENERAL1, UNIT1, NETWORK1, EMG MIC1, FUSE1, POWER1, CPU1, ZONE8 |
| Indicators | LAN A (green)1, LAN B (green)1, RS LINK A (green)1, RS LINK B (green)1 FAULT STATUS (yellow) GENERAL1, UNIT1, NETWORK1, EMG MIC1, FUSE1, POWER1, CPU1, |



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■ SPECIFICATIONS

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|-----------------------|---|
| Operation | Fault Control Switch2 (ACK/RESET) |
| | Test Switch1 (LAMP TEST) |
| | Setting Switch: ID NUMBER, RESET, IMPEDANCE, Setting (internal front panel) |
| Operating Temperature | -5 °C to +45 °C (23 °F to 113 °F) |
| Operating Humidity | 90 %RH or less (no condensation) |
| Finish | Panel: Surface—treated steel plate, black, 30 % gloss, paint |
| Dimensions | 483 (W) × 132.6 (H) × 345 (D) mm (19.02" × 5.22" × 13.58") |
| Weight | 7.9 kg (17.42 lb) |
| Accessory | Rack mounting screw …4, Removable terminal plug (2 pins) …6, |
| - | Removable terminal plug (4 pins) …1, Removable terminal plug (6 pins) …2, |
| | Removable terminal plug (12 pins)2, Removable terminal plug (17 pins)1, |
| | CD (PC setting software) ···1, Ferrite clamp ···2 |

(*1) TOA's unique technology which makes it possible to transmit high-quality audio signals in real time over an

