

# 100 Watt Voice Evacuation Panel

## 4 Speaker Circuit (ZT-MNS-100BAS)



### Description

The Zeta ZT-MNS-100BAS is a modular, voice evacuation system ideally suited as an extension to an existing fire alarm system.

The ZT-MNS-100BAS accommodates virtually any host alarm system, integrating as quickly and easily as a single #primary connection to an alarm circuit output from the FACP.

Many of the pre-set configurations will provide a complete voice evacuation capability right out of the box. Additional activation is by a single supervised input from a dry contact closure.

Numerous audio inputs are provided for maximum control flexibility and system access. A supervised remote microphone input is provided for central placement for emergency personnel.

A high priority supervised audio input is provided that overrides lower priority activations. The system also provides a 25 VRMS speaker-level input to allow power booster operation.

An additional non-supervised audio input provided; this lowest- priority input can be used for paging or background music as application needs dictate.

A highly efficient, Class D, 100-Watt digital audio power amplifier drives four selectable power-limited speaker circuits in the standard configuration.

All speaker circuits are continuously supervised, even while activated. Each speaker can be configured for Class A or B wiring without loss of speaker circuits. Amplifier output voltage is 25 VRMS standard. An optional transformer can be configured for 70 VRMS output for longer speaker runs with low signal loss.

An audio power boost option is also available for additional output power in multiples of 100 Watts.

The ZT-MNS-100BAS provides simple field programming of a variety of its features. These can be as simple as its response to contact closure inputs, or to the setting of internal SIP switch banks.

The power supply, battery back-up and charger are provided internally to the ZT-MNS-100BAS.

LED indicators are provided for POWER (green), ACTIVE (red), and SYSTEM FAULT (yellow).



### Features

- 100 Watt, highly efficient Class D digital audio Amplifier
- 4 Speaker Circuits (Class A or B wiring)
- Reverse polarity supervised FACP-Sounder Circuit primary input
- Supervised dry contact primary activation input
- 2 Standard messages preloaded, ready to go
- Prioritise contact closure activation inputs
- Remote microphone input
- Aux audio inputs for paging, background music and Remote system control.

### Available Accessory Products

ZT-MNS-70V-XMFR	70 Volt Transformer Kit
ZT-MNS-3-REL	Common Alarm & Trouble Relay Card
ZT-MNS-100APB	Audio Power Booster
ZT-DVS-RM/B	Remote Microphone

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### Available Accessory Products

**70 VRMS Speaker Output**  
 Compensate for audio power loss due to long speaker runs by installing the ZT-MNS-70V-XFMR 70 Volt Transformer. The transformer is contained in a small external cabinet that connects to the ZT-MNS-100BAS.

All speaker circuits maintain active supervision and provide full output power.

(For more information, refer to the ZT-MNS-70V-XFMR data sheet.)

**Common Alarm and Trouble Relays**  
 The ZT-MNS-3-REL 3-Relay Card provides 3 x Form-C relay contact outputs to signal external devices in the system. The three outputs are typically used as Active and Trouble indicators, with the third used for other applications.

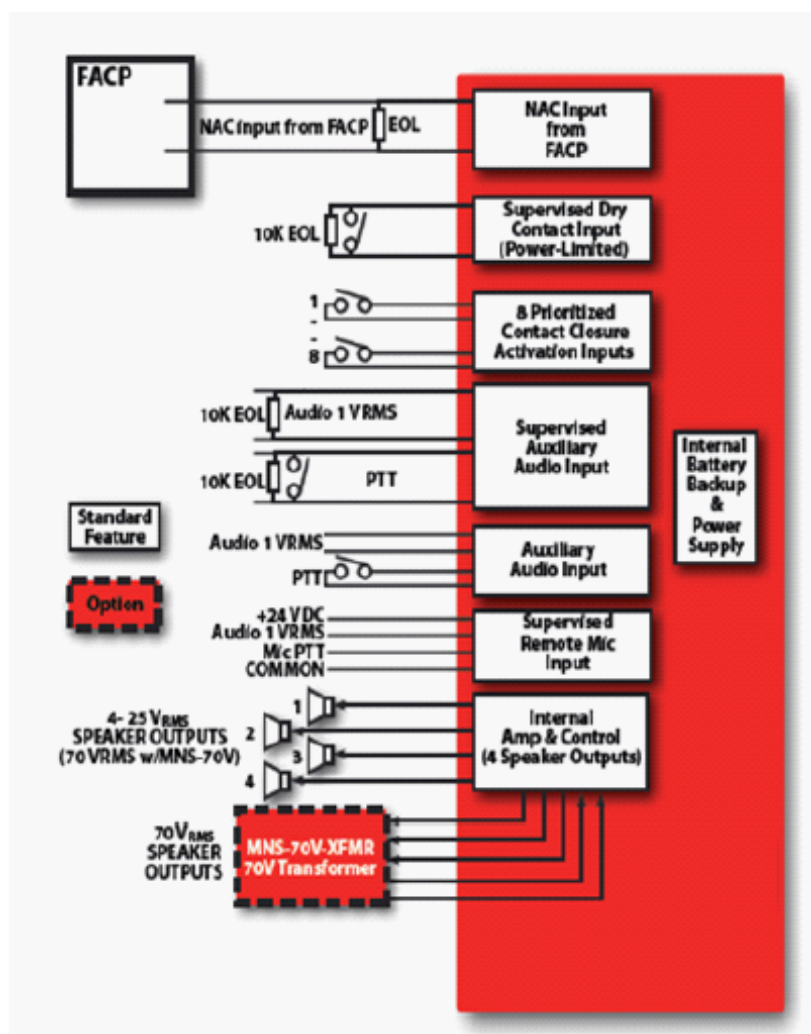
(For more information, refer to the ZT-MNS-3-REL data sheet.)

**Audio Power Booster**  
 Need more power?  
 The ZT-MNS-100APB Audio Power Booster panel can be added to act as a supervised remote 100-Watt power amplifier with its own 4 speaker outputs.

As many ZT-MNS-100APB cabinets may be connected to the ZT-MNS-100BAS as needed to provide full facility coverage. In this configuration, the supervised audio input accepts a 25 VRMS typical speaker-level input and broadcasts it to its speaker outputs.

(For more information, refer to the ZT-MNS-100APB data sheet.)

Panel Layout



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### Technical Specification

- Standard Configuration: no options installed.
- For specifications on options, please refer to individual data sheets.
- Specifications are subject to change without notice due to product improvements

#### Interface

##### Inputs

Primary Activation Supervised	1x reverse polarity NAC; 9-30VDC, 10mA; Non coded or 1x supervised dry contact closure rated for 24 VDC, 10mA
Secondary activation	8x dry contact closure rated for 24VDC, 10mA
Auxiliary Audio	600 to 3600 Hz freq. response 1x supervised with override priority (control station), 1x VRMS audio input 1x unsupervised, lowest priority (paging and background music) 1x VRMS audio input Audio
Remote Microphone	1 x VRMS audio input, power-limited 24VDC, 100 Ohms max line resistance

##### Outputs

Audio	100 Watt; 25 VRMS (70 VRMS Optional)
Speaker Circuits	1x power-limited to 60 Watt 3x power-limited to 25 Watt each  Total power not exceeding 100 W 10k Ohm EOLR continuously monitored

#### External Control / Comm.

RS-232 / RS-485	Selectable
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#### Indicators

LED	Power (Green) Active (Red) System fault (Yellow)
LED Bar Graph	Audio Level – Yellow 4- segment

#### Power Supply

Primary Power	120 VAC, 60 Hz, 5 A nominal
Internal Power	24 VDC regulated
External Power Supply	24 VDC regulated; listed for Fire Alarm Use

#### Internal Battery Backup

Capacity	10 A-Hr
Standby Mode	24 hours
Alarm Mode	15 minutes
Recharge Time	48 hours

#### Installation

General Mounting	Surface or semi-flush mount
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#### Dimensions

Enclosure	Indoor - 473mm H x 360mm W x 101mm D (painted steel)
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#### Operating Temperature

Range	0°C – 49°C
Humidity	90% maximum, non-condensing

#### Approvals

ETL	ETL listed for UL864 9 <sup>th</sup> Edition (Control units and accessories for fire alarm system)
UL	UL1711 4 <sup>th</sup> Edition (Amplifiers for fire protective systems)